Date Posted: October 17, 2025

REQUEST FOR PROPOSALS

TO DESIGN AND CONSTRUCT

THE I-75 at BETHLEHEM ROAD INTERCHANGE PROJECT

HENRY COUNTY

THROUGH A

DESIGN-BUILD AGREEMENT

PROJECT NUMBER
P.I. No. 0017182

INSTRUCTIONS TO PROPOSERS

GEORGIA DEPARTMENT OF TRANSPORTATION

RFP Issued: June 12, 2025

Amendment #1: August 1, 2025

Amendment #2: August 29, 2025

Amendment #3: October 3, 2025

Amendment #4: October 17, 2025

Proposals Due: October 23, 2025 at 11:00 AM

Georgia Department of Transportation
One Georgia Center
600 West Peachtree Street, NW
Atlanta, Georgia 30308

TABLE OF CONTENTS

SECTION 1.0 INTRODUCTION AND GENERAL PROVISIONS 1-1
1.1 Introduction and Overview 1-1
1.2 RFP Documents 1-1
1.3 General Project Description 1-2
1.4 Procurement Schedule 1-2
1.5 General Provisions Regarding Proposals 1-3
1.6 Improper Conduct 1-5
1.7 Equal Employment Opportunity (EEO) 1-7
1.8 Reserved 1-7
1.9 Federal Funding and Requirements 1-7
1.10 Qualification of Construction and Design Firms; Registration with the State 1-7
1.11 Establishment of Single Purpose Entity(ies) 1-8
SECTION 2.0 PROCUREMENT 2-1
2.1 Method of Procurement 2-1
2.2 Communications between GDOT and Proposers 2-1
2.3 Questions and Responses Regarding the RFP Documents 2-3
2.4 Amendments 2-4
2.5 One-on-One Meetings 2-5
2.6 Due Diligence of the Existing Right of Way 2-6
2.7 Changes to Proposer's Organization 2-7
2.8 Open Records Laws 2-8
SECTION 3.0 ALTERNATIVE TECHNICAL CONCEPT(S) AND STIPULATED FEE 3-1
3.1 Overview and Purpose of ATCs 3-1
3.2 GDOT Review of Pre-Proposal Submission of ATCs 3-4
3.3 Incorporation of ATCs into the DBA 3-6
3.4 Disclosure of ATC Information 3-7
3.5 Third Party Approvals 3-7
3.6 GDOT's Right to Modify 3-7
3.7 Status of ATC Information 3-7
3.8 Stipulated Fee; Work Product 3-8
SECTION 4.0 PROPOSAL CONTENT AND SUBMITTAL REQUIREMENTS 4-1
4.1 Format 4-1
4.2 Contents and Organization 4-1

4.3 Submission of Proposals 4-2
4.4 Disclosure of Proposals 4-2
4.5 Validity of Proposals 4-3
4.6 Proposal Bond 4-3
4.7 Forfeiture of Proposal Bond 4-3
4.8 Cost of Preparing Proposal, Delivery into Escrow 4-4
4.9 Non-Responsive Proposal 4-4
4.10 Forms 4-4
SECTION 5.0 EVALUATION PROCESS AND CRITERIA 5-1
5.1 Responsiveness and Pass/Fail Evaluation 5-1
5.2 Proposal Evaluation Criteria 5-4
5.3 Guaranty 5-5
5.4 Requests for Clarification 5-6
SECTION 6.0 AGREEMENT AWARD AND EXECUTION 6-1
6.1 No Obligation to Award; Price Reasonableness; Proposal Schedule Reasonableness 6-1
6.2 Award and Execution 6-1
6.3 Debriefing of Unsuccessful Proposers 6-5
SECTION 7.0 NON-RESPONSIVE TECHNICAL PROPOSAL PROCEDURES 7-1
7.1 GDOT's Responsibilities 7-1
7.2 Proposer's Responsibilities 7-1
7.3 Technical Proposal Resolution 7-1
7.4 Time Frames 7-1
7.5 Costs and Damages 7-1
SECTION 8.0 GDOT'S RIGHTS AND DISCLAIMERS 8-1
8.1 GDOT Reserved Rights 8-1
8.2 Disclaimers 8-3

Exhibits:

Exhibit A Acronyms and Definitions
Exhibit B Administrative Information Submittal Requirements
Exhibit C Technical Proposal Submittal Requirements
Exhibit D Price Proposal and Proposal Bond Submittal Requirements
Exhibit E Evaluation Criteria
Exhibit F List of GDOT Project Team
Exhibit G Reserved
Exhibit H PDMS Use Instructions

Forms:

Form A Proposal Letter
Form B Non-Collusion Affidavit
Form C Bringdown Form of Statement of Disclosure (Conflict of Interest)
Form D Form of Proposal Bond
Form E Reserved
Form F Design-Build Price Proposal
Form G Form of Participating Members, Major Non-Participating Members, Contractors and Key Personnel Commitment
Form H Equal Employment Opportunity Certification
Form I Reserved
Form J Buy America and Build America, Buy America Certifications
Form J-1 Buy America Certificate
Form J-2 Build America, Buy America Certificate of Compliance for Construction Materials

Form K Use of Contract Funds for Lobbying Certification
Form L Debarment and Suspension Certification
Form M Closure Durations, Interim Completion, Substantial Completion, and Final Acceptance Proposal
Form N Grant and Assumption of Non-Exclusive Irrevocable License and Right to Use Work Product
Form O Form of Bringdown SOQ Certificate
Form P Approved ATCs
Form Q Georgia Security and Immigration Compliance Act Affidavit
Form R Opinion of Counsel
Form S Drug Free Workplace
Form T Certification of Compliance with the State of Georgia's Sexual Harassment Prevention Policy
Form U Bringdown Surety Certification and Acknowledgment
Form V Form of Escrow Agreement
Form W Form of Escrow Affidavit
Form X Form of Insurance Letter
Form Y Form of Guaranty
Form Z Bringdown Financial Capacity, Strength, and Ability Certificate
Form AA Indicative Proposal Quantities

SECTION 1.0 INTRODUCTION AND GENERAL PROVISIONS

1.1 Introduction and Overview

This Request for Proposals (or RFP) solicits competitive Proposals (as described in more detail in Section 1.5.1) from qualified Proposers to deliver the Project under the Design-Build Agreement (or DBA) between the Proposer selected pursuant to the terms of this RFP (as the Design-Builder) and GDOT. Under the DBA, the Design-Builder will be required to design and construct the Project during the Contract Time for the Contract Sum, in each case, as both may be adjusted pursuant to the terms, and subject to the conditions, of the DBA).

This RFP is the second step in a two-step Best Value procurement [of the Project. This RFP is issued in accordance with the provisions of O.C.G.A § 32-2-81 and Chapter 672-18 of the Rules and Regulations of the State of Georgia, and other applicable Laws and guidelines.

Following the release of the RFP, GDOT may opt to engage in a series of confidential meetings and discussions with the Proposers, all in accordance with the procedures set forth in the RFP. In response to feedback and input received from the Proposers and other stakeholders, GDOT may opt to issue amendments to the RFP (each an "**Amendment**"). If GDOT issues an Amendment to the RFP, the Amendment will supplement or replace the RFP in part or in whole.

Proposals will only be considered from those entities that are selected as the most qualified Proposers based on evaluation of their Statements of Qualifications (or SOQs) submitted in response to the RFQ. This ITP provides instructions to be followed by Proposers in their responses to the RFP.

Refer to Exhibit A for the meaning of capitalized terms and acronyms.

Unless otherwise specified, references to Sections, Exhibits and forms within this ITP shall mean Sections of the ITP and Exhibits and forms attached to the ITP.

1.2 RFP Documents

The "**RFP Documents**" consist of the items listed below, and any other documents that may be issued by Amendment, as such documents may be amended and supplemented:

(a) ITP (including the attached Exhibits and forms);

(b) The DBA (including attached Exhibits);

(c) The Technical Provisions; and

(d) The Reference Information Documents (or RIDs).

For avoidance of doubt, the RFP Documents are not the Design-Build Documents, as defined under the DBA. The ITP and the RIDs are not intended to be, contractual and

will not form a part of the Design-Build Documents unless specifically incorporated into the DBA.

Furthermore, GDOT directs Proposers' attention to Section 1.3 of the DBA, which provisions are applicable for purposes of this procurement. Generally, GDOT makes no representation or guarantee as to the accuracy, completeness, or fitness of the RIDs. GDOT does not take any responsibility for the RIDs, and Proposers are responsible for any conclusions they may draw from the RIDs. GDOT provides the RIDs to Proposers for the sole purpose of providing information in the possession of GDOT, regardless as to whether any such information within the RIDs is of any value.

1.3 General Project Description

The Project will deliver a new interchange along a new alignment at Interstate 75 and County Road (CR) 312/Bethlehem Road between Bill Gardner Parkway and SR 155. The Project is located in the City of Locust Grove and Henry County. The Work also includes constructing a new interchange along, a realignment, constructing roundabouts, and bridges. A more detailed description of the Project can be found within the Design-Build Documents.

Design-Builder will be responsible for the design and construction of the Project during the Contract Time.

1.4 Procurement Schedule

The procurement schedule is as follows:

	Activity	Date	Time
1.	Issue RFP	June 12, 2025	---------
2.	First date that Alternate Technical Concepts (ATCs) will be accepted under Section 3.1.2	June 27, 2025	12:00PM
3.	Deadline for Proposers to submit Questions regarding RFP – Round 1	July 10, 2025	2:00PM
4.	Deadline for Proposer One-on-One Meeting Agenda submissions	July 10, 2025	2:00PM
5.	One-on-One Meetings with Proposers regarding RFP and ATCs	July 15, 2025 – July 16, 2025	8:00AM – 5:00PM
6.	Deadline for Proposers to submit Questions regarding RFP – Round 2	August 11, 2025	2:00PM
7.	Deadline for Proposer One-on-One Meeting Agenda submissions	August 15, 2025	2:00PM

	Activity	Date	Time
8.	90- minute One-on-One meetings with Proposers regarding RFP and ATCs	August 20, 2025 – August 21, 2025	8:00AM – 5:00PM
9.	Setting Date[1]	September 2, 2025	---------
10.	Deadline for Proposers to submit Questions regarding RFP – Round 3	September 12, 2025	2:00PM
11.	Deadline for submission of proposed ATCs	September 19, 2025	2:00PM
12.	Deadline for submission of changes to Proposer's organization	October 3, 2025	12:00PM
13.	Base Index Value Date (see DBA Exhibit 21 (Material Indexation Adjustment)	October 16, 2025	
14.	**Proposal Due Date**	**October 23, 2025**	**11:00AM**
15.	Virtual Letting/Public Opening of Price Proposals (Selection of Apparent Successful Proposer)	November 12, 2025	11:00AM

All dates set forth above and in the RFP are subject to change in GDOT's sole discretion. All times indicated are prevailing times in Atlanta, Georgia. To the extent such dates are changed, GDOT will formally notify each Proposer through the PDMS described in Section 2.2 and issue an Amendment described in Section 2.4 below.

1.5 General Provisions Regarding Proposals

1.5.1 Proposal Contents; No Qualifications

As used in this procurement, the term "**Proposal**" means a Proposer's complete response to the RFP, including but not limited to the Proposer's:

(a) Administrative Information Submittal;

(b) Technical Proposal for the Project; and

(c) Price Proposal for the Project.

Detailed instructions regarding the Administrative Information Submittal, the Technical Proposal, and the Price Proposal are provided in Exhibit B, Exhibit C, and Exhibit D, respectively.

[1] The Setting Date will not change if the RFP is amended, unless the amendment expressly sets a new Setting Date.

Forms required for inclusion in the Proposals are attached to this ITP and are to be submitted as part of the Proposal in the locations prescribed in Exhibit B, Exhibit C, and Exhibit D, respectively.

Each Proposal component shall be clearly titled and identified.

Each Proposal component shall be submitted without reservations, qualifications, conditions, or assumptions with regard to the terms and conditions of this ITP and the DBA. GDOT will not be bound by or to any reservations, qualifications, conditions, or assumptions of any Proposal.

Any failure to provide all the information and all completed forms in the format specified by the ITP may result in GDOT's rejection of the Proposal or a lowered score depending on the nature of the omission, determined by GDOT at its sole discretion. All blank spaces in the Proposal forms must be filled in as noted. No change(s) should be made to the original text or structure of the Proposal forms apart from minor, non-substantive clerical and formatting changes. No additional information shall be submitted beyond that which is required for inclusion with the Proposal.

While not part of the Proposal, Detailed Cost and Pricing Data shall be delivered into escrow by the Apparent Successful Proposer as required under this ITP.

1.5.2 Inclusion of Proposal in Design-Build Documents

Portions of the successful Proposer's Proposal will become part of the Design-Build Documents, as applicable and to the extent specified in the DBA. All other information is for evaluation purposes only and will not become part of the Design-Build Documents.

1.5.3 Commitments in the Proposal

Each Proposal will be interpreted and evaluated based upon the commitments provided by the Proposer.

GDOT will give no consideration to tentative or qualified commitments in the Proposals. For example, GDOT will give no consideration to phrases such as "we may," "we are considering," "will endeavor to," or phrases of a similar nature in the evaluation process because they do not indicate a firm commitment.

Conversely, all commitments (including commitments that require the ultimate Design-Builder to acquire real property interests) in the Proposal will be deemed in the nature of an offer, and GDOT will document all such "Proposal Commitments" in the finalization of the Design-Build Documents as relates to the Apparent Successful Proposer.

1.5.4 Property of GDOT; License

Except for Detailed Cost and Pricing Data delivered into escrow under this ITP, all documents included in the Proposals submitted by Proposers in response to this RFP shall become the property of GDOT and will not be returned to the Proposer.

Additionally, if the Proposer elects to accept the Stipulated Fee (as described in Section 3.0), Proposer shall agree to the terms and conditions set forth in Form N, make the

submissions, and execute and deliver an agreement between GDOT and such Proposer substantially in the form set forth therein. Proposer further acknowledges and agrees that acceptance of the Stipulated Fee is valuable consideration for GDOT's right to use any ideas or information contained in the Proposal in connection with the DBA, or in connection with a subsequent procurement, without obligation to pay any additional compensation to the Proposers.

1.6 Improper Conduct

1.6.1 Prohibited Activities

If the Proposer, or anyone representing the Proposer, offers, gives, solicits, accepts, or receives, directly or indirectly, any advantage, gift, gratuity, discount, bribe, or loan of any sort to or from GDOT, the State Transportation Board, or officers, administrators, staff or consultants of GDOT, including agents or anyone representing the foregoing at any time during the Project procurement: (1) GDOT shall immediately disqualify the Proposer; (2) the Proposer shall forfeit its Proposal Bond; (3) GDOT may sue the Proposer for damages; and (4) the Proposer shall not be entitled to receive the Stipulated Fee.

If a Proposer modifies any text in the Forms included in its Proposal, except whereas expressly permitted under Sections 1.6.2 and 1.7 and Sections B.2.1.4 and B.2.1.12 of Exhibit B, relating to duplicating and modifying Form B, Form C, Form H and Form S as necessary, GDOT may immediately disqualify the Proposer.

1.6.2 Non-Collusion

The Proposer, and each entity delivering the Non-Collusion Affidavit (Form B) with the Proposal, shall not undertake any of the prohibited activities identified in the Non-Collusion Affidavit (Form B). Note that multiple parties are required to execute copies of Form B. Proposers are instructed to duplicate and to modify Form B as necessary to identify accurately the entity giving the affidavit and to ensure that is signed by Participating Members and Major Non-Participating Members.

To report bid rigging activities, call the US DOT toll-free "hotline" (1-800-424-9071) Monday through Friday, 8:00 AM to 5:00 PM, Eastern time. All information will be treated confidentially, and caller anonymity will be respected.

1.6.3 Organizational Conflicts of Interest

As noted in the RFQ, Proposers are advised that the Conflicts of Interest policy as referred to in the Design-Build Manual and the organizational Conflict of Interest rules found in 23 C.F.R. § 636.116, continue to apply to this procurement.

Each Proposer must include in its Proposal a Bringdown Form of Statement of Disclosure (Conflict of Interest) (Form C) from the deadline for submission of the SOQ to the Proposal Due Date confirming that there have been no changes or reporting the changes. For those Statements of Disclosure that require additional disclosure, or for added individual persons or entities to Proposer's proposed Design-Build Team, Proposer shall include revised (reflecting changes) or additional Statements of

Disclosure (in Form C). Form C must be submitted with the Administrative Information Submittal, as detailed more fully in Exhibit B.

The Proposer is prohibited from receiving any advice or discussing any aspect of the Project or the procurement of the Project with any person or entity with an organizational Conflict of Interest, including, but not limited to, the individual persons or entities listed in in Exhibit F and any parent, affiliate, or subsidiary of, or is under common ownership, control or management with any of the foregoing entities.

Following submission of a Proposal, Proposers have a continuing obligation to make an immediate and full written disclosure to GDOT, substantially in the form of Form C, of any organizational Conflict of Interest thereafter discovered or determined and with a description of the action that Proposer has taken or proposes to take to avoid or mitigate such Conflict of Interest(s). If the Apparent Successful Proposer was aware of an organizational Conflict of Interest prior to award of the DBA and did not disclose the conflict to GDOT, GDOT may elect, in its sole discretion to disqualify the Apparent Successful Proposer and to invoke any of the rights reserved to GDOT under Section 8.1.

1.6.4 Restrictions on Participation

Proposers continue to be restricted from submitting a Proposal that includes, and from having participated on a Proposer team as a Participating Member, Major Non-Participating Member, Contractor, Subcontractor or subconsultant, any of the individual persons or entities:

(a) any entity or individual listed in Exhibit F;

(b) any entity that is a parent, affiliate, or subsidiary of any of the entities listed in Exhibit F or that is under common ownership, control or management with any of the foregoing entities; and

(c) any contractor who is currently suspended, debarred or voluntarily excluded under 2 C.F.R. Part 180 or is otherwise determined to be ineligible to participate in the federal-aid highway program.

Proposers are advised to review the GDOT advisory team set forth in Exhibit F, which has changed since the list published in the RFQ.

1.6.5 No Participation on More Than One Proposer Team

As noted in the RFQ, except as expressly permitted in Section II.C thereof (incorporated herein by reference), Participating Members and Major Non-Participating Members of Proposer teams continue to be forbidden from participating, in any capacity, on another Proposer's team during the procurement (i.e., until the Effective Date of the DBA or the earlier cancellation of the procurement).

The foregoing prohibition extends to affiliated entities of Participating Members and Major Non-Participating Members. GDOT reserves the right to disqualify any Proposer that fails to comply with this prohibition.

Proposer shall include the written approval of GDOT for any participation on more than one Proposer team solicited pursuant to Section II.C of the RFQ.

1.7 Equal Employment Opportunity (EEO)

Proposers shall not, in connection with the RFP and the Design-Build Documents, discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, marital status, or disability. Proposers shall take affirmative action to ensure that applicants for employment and employees are not discriminated against because of their race, color, religion, sex, national origin, age, marital status, or disability. The areas requiring such affirmative action shall include, but not be limited to, the following: layoff or termination, rates of pay or other forms of compensation, employment, job assignment, promotion, demotion, transfer, recruitment and recruitment advertising, and selection for training, including apprenticeship, pre-apprenticeship, and on-the-job training.

Each Proposer must include in its Proposal an Equal Employment Opportunity Certification (Form H). Note that the Proposer, Participating Members, Major Non-Participating Members and proposed Contractors are required to execute copies of Form H. Proposers are instructed to duplicate Form H to identify accurately the entity making the certification and to ensure that is signed by Participating Members and Major Non-Participating Members.

Please see Attachment 5 to Exhibit 8 of the DBA for the federal equal employment opportunity provisions that apply to the Project.

1.8 Reserved

1.9 Federal Funding and Requirements

Proposers are advised that the Project will require the use of federal funds. Accordingly, applicable federal Law and Federal Highway Administration (FHWA) regulations will govern portions of the Project's procurement and the Design-Build Documents.

1.10 Qualification of Construction and Design Firms; Registration with the State

Proposers shall ensure that the entities identified in Sections 1.10.1 and 1.10.2 have satisfied the prequalification requirements set forth in this Section 1.10.

In addition, before commencing performance of any Work, all firms must be registered to do business in the State of Georgia. This can be accomplished by contacting the Georgia Secretary of State Corporations Division Office at (404) 656-2817 or visiting http://www.sos.ga.gov/corporations.

1.10.1 Required Prequalification for Contractors

Proposer shall submit a statement from the Lead Contractor (or the joint venture members of the Lead Contractor, if not a JV certified by GDOT prior to submission of the SOQ) that the Lead Contractor's (or such JV members') "Certificate(s) of Qualification" submitted with the SOQ by Proposer (as Respondent) have not changed from the deadline for submission of the SOQ to the Proposal Due Date.

Proposer shall likewise submit a statement from each Major subcontractor identified in its SOQ.

If there has been a change (e.g., new "Certificate of Qualification" obtained, or new (approved) entity that, under the terms of the RFQ would require submission of a "Certificate of Qualification"), then Proposer shall submit "Certificates of Qualification" for each such entity, current as of the Proposal Due Date. For avoidance of doubt, a new "Certificate of Qualification" and not merely a statement of the renewal, is to be included with the Proposal.

Nothing in this Section 1.10.1 limits the Proposer's obligations under Section 2.7 (relating to changes in Proposer's organization of the proposed Design-Build Team).

1.10.2 Required Prequalification for Engineering Consultants

Proposer shall only use engineering consultant entities that are prequalified in their respective disciplines as was presented in Proposer's (as Respondent's) SOQ.

Proposer shall submit a statement from each entity for which a "Notice of Professional Consultant Qualification" was provided under the SOQ (or a statement by Proposer's Authorized Representative, on behalf of all such entities) that each such entity remains prequalified under the "GDOT Prequalified Area Class" as set forth in the matrix submitted in Proposer's (as Respondent's) SOQ. For avoidance of doubt "remains prequalified" means the "Notice of Professional Consultant Qualification" is current as of the Proposal Due Date.

Prequalification information may be found at the weblinks identified in the RFQ.

If the Proposer's proposed design (and plan for design) for the Project includes Design Work outside the scope of the area classes set forth in the RFQ, at least one entity must be expressly identified as prequalified with GDOT in the appropriate area class to perform such Design Work, and "Notices of Professional Consultant Qualification" for each such entity submitted with the Proposal, current as of the Proposal Due Date.

Furthermore, if there has been a change (e.g., (approved) new or changed entity, or new prequalification of any existing member of Proposer's proposed Design-Build Team that, under the terms of the RFQ would require submission of a "Notice of Professional Consultant Qualification"), then Proposer shall submit "Notices of Professional Consultant Qualification" for each such entity, current as of the Proposal Due Date.

Proposer shall submit an updated matrix of Proposer's proposed Design-Build Team members' prequalifications, by "GDOT Prequalified Area Class", or submit a statement that the matrix submitted in Proposer's (as Respondent's) SOQ remains current.

Proposers are advised that all prequalifications must be current during the Term of the DBA.

1.11 Establishment of Single Purpose Entity(ies)

If the Apparent Successful Proposer contemplates the creation of a single purpose entity as the counterparty to GDOT under the DBA, the Apparent Successful Proposer shall

establish the single purpose entity and submit executed copies of the organizational documents to GDOT in accordance with Section 6.2.1. Proposers anticipating the creation of any such single purpose entity must include pro forma organizational documents in the Proposal, as described in Exhibit B. Failure to meet the requirements in this Section 1.11 will result in forfeiture of the Apparent Successful Proposer's Proposal Bond.

SECTION 2.0 PROCUREMENT

2.1 Method of Procurement

GDOT is issuing the RFP in accordance with the provisions of O.C.G.A. § 32-2- 81 and Chapter 672-18 of the Rules, and other applicable Laws and guidelines. GDOT intends to award the DBA to the Proposer that submits the Best Value Proposal Subject to Section 8.1, GDOT will base the evaluation of Proposals on information submitted in the Proposals, and will involve both pass/fail evaluation factors and an evaluation of administrative, technical, and price criteria, as further detailed in Section 5.0 and in the Exhibits to this ITP.

2.2 Communications between GDOT and Proposers

As noted in the RFQ, GDOT has provided each Proposer the use of a PDMS, for the continued purpose of receiving certain information pertaining to the Project, including the RFP, and for Proposers to upload and submit their Proposals. Each Proposer is required to check the PDMS regularly for Amendments to the RFP and for other procurement-related information.

2.2.1 Designated Point of Contact

The "**Contracting Officer**" for the Project is Elise Snider, who can be contacted at:

Georgia Department of Transportation

Attention: Elise Snider

P3 Division
One Georgia Center
600 West Peachtree Street, NW
Atlanta, Georgia 30308
Email**: I-75atBethlehemIC@dot.ga.gov**

From time to time during the procurement or during the Term of the DBA, GDOT may designate another point of contact to carry out some or all of the obligations pertaining to the Project.

When the ITP requires a submission or communication to be "in writing," except where otherwise noted specifically, or as may subsequently be directed by the Contracting Officer, electronic submission or correspondence is permitted.

2.2.2 Rules of Contact

Unless specifically authorized elsewhere in this ITP, the Contracting Officer, as may be changed in writing by GDOT, is the single contact and single source of information for this procurement.

The rules of contact set forth in this Section 2.2.2 shall apply during the Project procurement, commencing with the issuance of this RFP. These rules are designed to promote a fair, unbiased, and legally defensible procurement. Contact, as used herein,

includes face-to-face, telephone, electronic-mail (email), text or any other form of informal and formal written communication.

The specific rules of contact are as follows:

(a) Neither a Proposer nor any of its team members may communicate with another Proposer or members of another Proposer's team with regard to the RFP or either team's Proposal. This prohibition does not apply to (1) Proposer communication with a contractor that is on both its team and another Proposer's team, provided that the contractor shall not act as a conduit of information between the two Proposers; and (2) public discussion regarding the RFP at GDOT-sponsored informational meetings.

(b) Unless otherwise specifically noted in this ITP or authorized by the Contracting Officer, all Proposer communication with GDOT will be between Proposer's Authorized Representative and the Contracting Officer in writing (or via email at the address described in Section 2.2.1).

(c) Under normal circumstances, the Contracting Officer will contact a Proposer in writing through Proposer's Authorized Representative.

(d) Continuing until the earliest of (1) execution and delivery of the Design-Build Documents, (2) GDOT's rejection of all Proposals or (3) cancellation of the Project procurement, neither a Proposer nor its agents may have *ex parte* communications with GDOT employees, members of the Technical Review Committee, the Selection Review Committee, the Bid Review Committee, the State Transportation Board, any other person who will evaluate Proposals, or any person identified in Section 1.6.4 regarding the Project, except for communications expressly permitted in this ITP or through the process identified above. The foregoing restriction shall not, however, preclude or restrict communications regarding matters unrelated to the Project or from participating in public meetings or any public or Proposer workshop related to the Project. GDOT may, in its sole discretion, disqualify any Proposer engaging in such prohibited communications.

(e) Any contact by a Proposer determined by GDOT to be improper may result in disqualification of that Proposer.

(f) GDOT will not be responsible for or bound by, and Proposers may not rely on, (1) any oral communication, or (2) any other information or contact that occurs outside the official communication promulgated as specified herein, unless confirmed in writing by the Contracting Officer.

Any official information regarding the Project, the procurement, and the RFP Documents will be disseminated via the PDMS or otherwise in writing, on GDOT letterhead, and signed by the Contracting Officer (or designee).

2.2.3 Language and United States Dollar Requirements

All correspondence regarding the RFP, the Proposal, the Design-Build Documents and all other matters pertaining to this procurement is to be in the English language. If any

original documents required for the Proposal are in any other language, the Proposer shall provide a certified English translation, which shall take precedence in the event of conflict with the original language. The Proposer shall exclusively use United States dollars in its Proposal, except in pre-printed or reference materials. Unless otherwise specified, all references to monetary values shall be in United States dollars. In the evaluation of Proposals, GDOT may choose to disregard any financial figures provided by the Proposer in denominations other than United States dollars.

2.3 Questions and Responses Regarding the RFP Documents

Proposers shall be responsible for reviewing the RFP and any Amendments issued by GDOT prior to the Proposal Due Date, and for making comments, asking questions, requesting clarification or interpretation, or to propose correction of errata (typographical errors, incorrect cross references, internal inconsistencies, or other mistakes, discrepancies, ambiguities, errors, or omissions) through written correspondence to GDOT (each a "**Question**"). Proposers shall submit, and GDOT will respond to written Questions in accordance with this Section 2.3. Any responses by GDOT will not be considered part of the Design-Build Documents.

Proposers are advised that GDOT will not observe any annotation of a submitted Question as "confidential" or otherwise. Proposers should not identify in the body of any submitted Question the Proposer's (or any member of the proposed Design-Build Team's) identity nor include any information that Proposer (or any such member) believes to be confidential.

2.3.1 Form of Requests

Proposers shall submit Questions to GDOT via the PDMS using the template provided in the folder location within the PDMS described in Exhibit H. GDOT will only consider Questions made by Proposers' Authorized Representatives and will not consider telephone or other oral requests. Proposers are responsible for ensuring that written questions clearly indicate on the first page or in the subject line, as applicable, that the material relates to the Project.

Proposers will be limited to 30 Questions per round with respect to the RFP, excluding Questions that correct errata. GDOT will disregard Questions received in excess of this specified limit.

Questions shall be sequentially numbered, identifying the document as among the RFP Documents (e.g., ITP, DBA, etc.), identify the relevant section reference, or otherwise indicate that the Question is one of general application, exercising every effort to be as specific as possible and to minimize Questions of general application.

Proposers shall also identify each Question as among Category 1, 2, or 3, where:

- "Category 1" Questions are potential "go/no-go" issues that, if not resolved in a fashion acceptable to the submitting Proposer, may preclude submission of a Proposal;

- "Category 2" Questions present issues that, if likewise not resolved, will significantly affect value for money or, taken with the entirety of other issues, may preclude submission of a Proposal;

- "Category 3" Questions are minor in nature, seek a clarification, or offer a comment (to include identification of errata).

Proposers may deliver "redlines" with Category 3 Questions submitted identifying the correction, attached to or included with the Questions submission to the PDMS. Any redline delivered with a Category 1 or Category 2 Question, or otherwise that makes sweeping, wholesale, or structural changes to the RFP Documents will be summarily disregarded. This notwithstanding, commentary within the Questions form by way of brief, tailored illustrative excerpt to reflect sought language with an explanation is permitted.

If a Proposer is unsure whether a concept is consistent with the requirements of the RFP Documents, then Proposer may submit this as a question. Proposers are advised, however, that GDOT's response, if any, will be available to all Proposers.

Proposers shall limit Questions to no more than two subparts, each of which are considered a separate question. GDOT reserves the right to disregard the entire Question solely on the basis that it contains multiple subparts.

GDOT reserves the right not to consider Questions that otherwise do not meet the foregoing requirements and restrictions.

2.3.2 Timing of Requests

Proposers must submit any requests under this Section 2.3 prior to the deadline for such requests in Section 1.4.

2.3.3 Responses

GDOT intends, but reserves the right not to respond to Questions. GDOT's responses to Questions will be in writing (i.e., posted on the PDMS to all Proposers). GDOT may rephrase or consolidate Questions as it deems appropriate. GDOT may respond to Questions once received on a rolling basis. If subsequent responses to Proposer questions affect previously-posted responses to Questions, Proposers are advised to rely on the latest responses, rather than earlier iterations of the responses. GDOT reserves the right to revise such prior responses and to post such revised responses on the PDMS to all Proposers.

Further provisions regarding submission of Questions are set forth in **Exhibit H**.

2.4 Amendments

GDOT reserves the right, in its sole discretion, to revise, modify or change the RFP at any time before the Proposal Due Date. Any such revisions will be implemented through issuance of Amendments to the RFP. Amendments will be posted on the PDMS, and Proposers will be notified of the issuance of such Amendments. If any Amendment significantly impacts the RFP, as determined in GDOT's sole discretion, GDOT may

change the RFP schedule in Section 1.4, including the Proposal Due Date. The announcement of such schedule modification will be included in the Amendment. In addition, in GDOT's sole discretion, the Amendment will indicate the latest date for submission of any Questions, if any, concerning the Amendment.

GDOT will not be bound by, and the Proposer shall not rely on, any oral communication or representation regarding any of the RFP Documents, or any written communication except to the extent that it is contained in the RFP or in an Amendment to the RFP and is not superseded by a later Amendment to the RFP.

2.5 One-on-One Meetings

GDOT anticipates conducting one-on-one meetings with each Proposer within the dates specified in Section 1.4 and may hold additional one-on-one meetings as it deems necessary.

2.5.1 Subject Matter of One-on-One Meetings

The purpose of the one-on-one meetings is to discuss issues and clarifications regarding the RFP. The one-on-one meetings are subject to the following rules:

(a) The meetings are intended to provide Proposers with a better understanding of the RFP and its application to their specific Proposal.

(b) GDOT will not discuss with any Proposer any information submitted as part of this procurement other than its own.

(c) Proposers shall not seek to obtain commitments from GDOT in the meetings or otherwise seek to obtain an unfair competitive advantage over any other Proposer.

(d) GDOT will not guide the development of a Proposal or coach a Proposer on the development of its Proposal.

(e) No aspect of these meetings is intended to provide any Proposer with access to information that is not similarly available to other Proposers, and no part of the evaluation of Proposals will be based on the conduct or discussions that occur during these meetings.

(f) The discussions and any statements made by either GDOT or any of the Proposer's Design-Build Team will not be binding on the other.

(g) GDOT reserves the right to limit the subject matter of one-on-one meetings as it, in its sole discretion, deems appropriate.

(h) Each Proposer shall submit to GDOT in writing a proposed agenda, attendee list, and signed acknowledgement in accordance with Exhibit H prior to any scheduled one-on-one meeting and no later than the date specified in Section 1.4.

(i) Proposers shall not submit, and GDOT will not accept, any meeting minutes or notes of any kind from any prior meetings. Recording (including video recording) of the meetings is not allowed and a Proposer who does so may be subject to sanctions, including being barred from future one-on-one meetings, and the Proposer shall have no recourse.

2.5.2 Meeting Notice, Confirmation and Agreement

GDOT will notify each Proposer in writing of the scheduled time, place (to include online meetings), date, duration, and secure login information of any one-on-one meeting. Proposers shall confirm their attendance and identify all participants attending. Proposer shall provide an agenda and list of expected attendees consistent with the request in GDOT's notification. Proposer's Authorized Representative shall submit with its agenda, an express, signed acknowledgement, for him- or herself and on behalf of the Proposer, of his or her understanding and agreement to abide by the rules listed in Section 2.5.1, binding all attendees to the same.

2.5.3 Statements at One-on-One Meetings

Nothing stated at any one-on-one meeting will modify the ITP or the RFP. Any and all changes to the RFP will be made via an Amendment issued pursuant to Section 2.4.

2.5.4 GDOT Use of One-on-One Meeting Information

GDOT reserves the right to disclose to all Proposers any issues raised during the one-on-one meetings, except to the extent that GDOT determines, in its sole discretion, such disclosure would reveal a trade secret (see Section 2.8).

2.6 Due Diligence of the Existing Right of Way

GDOT will permit Proposers to access the Existing Right of Way to perform limited investigations prior to the Proposal Due Date. Prior to accessing any Existing Right of Way, Proposers must: (i) notify the Contracting Officer with the details, timing and personnel accessing the Site; and (ii) receive prior written consent from the District Engineer. Proposers must follow all applicable State Laws including erosion control, traffic control, and any other impositions, constraints, or requirements that GDOT, in its capacity as an agency of the State, may impose. Proposers are expected to carefully examine the Existing Right of Way before submitting a Proposal.

Each Proposer may contact applicable property and Utility Owners to seek any additional access to permit investigations, solely at the Proposer's cost and risk.

Each Proposer, solely at its own expense and risk, is responsible for conducting a Reasonable Investigation of the condition of existing facilities and site conditions, including hazardous substances and materials, sub-surface conditions, wetlands, temporary and permanent utility facilities, area populations and demographics, land use, and development and development-related infrastructure and traffic patterns.

Each Proposer shall, by submission of a Proposal, be deemed to have made such examination and to have satisfied itself as to the conditions to be encountered in performing the Work under the Design-Build Documents. Failure of a Proposer to so

examine and inform itself shall be at its sole risk, and GDOT will provide no relief for any error or omission.

For geotechnical borings and/or soils samples already collected by GDOT, contact the Contracting Officer to schedule inspection of the samples, if desired. During the inspection, no member of the Proposer team shall perform any destructive testing and shall return all materials inspected to its original location and condition. Proposers shall comply with all requirements imposed by or on behalf of the District Engineer as relates to the inspection of samples, to include, if required, obtaining any necessary permits. Proposers shall provide three dates for inspection and specific samples of interest (if known). GDOT will reply with the date available to inspect the samples. If the proposed dates are not available, then GDOT will request three additional dates

2.7 Changes to Proposer's Organization

As noted in the RFQ, Proposers are advised that, in order for a Proposer to remain qualified to submit a Proposal, a Proposer's organization as identified in the SOQ must remain intact for the duration of the procurement, unless otherwise approved in writing by GDOT. This restriction applies to any changes in the following:

(a) the Participating Members and Major Non-Participating Members of Proposer;

(b) any Key Personnel.

If a Proposer wishes to change the organization represented in its SOQ by adding, removing, or substituting any of the entities or individuals listed above, by changing the role of one of these entities or individuals, by changing or adding a Participating Member or Major Non-Participating Member to the Proposer team, or by changing the level of participation of one or more Participating Members of its team, the Proposer must submit to the Contracting Officer a written request to change its organization no later than the date specified in Section 1.4, via the PDMS in accordance with Exhibit H.

If a request is made to allow an addition to the team, including a new Participating Member or Major Non-Participating Member, the Proposer shall submit with its request the information required by the RFQ for the role (or position) the proposed entity (or individual) will fill. If a request is made to allow deletion of one of the entities or individuals listed above, the Proposer shall submit such information consistent with that required under the RFQ and otherwise as GDOT may require demonstration that the changed Proposer team, as a whole, is equal to or better than the team shortlisted by GDOT during the RFQ phase of this procurement.

GDOT will act reasonably in its determination, should any sought change be requested and arise directly out of the retirement, death, disability, incapacity, injury, or voluntary termination of employment of any individual person, or the insolvency, bankruptcy, or debarment/suspension, or any entity, in which case, Respondents seeking a change should include information both as to the proposed changed individual person or entity, but also evidence of the foregoing.

GDOT shall have sole discretion to grant or withhold approval of any requested change and to waive the requirement that Proposer submit such change no later than the date specified in Section 1.4.

2.8 Open Records Laws

Proposers should obtain and thoroughly familiarize themselves with the Open Records Laws applicable to public information and the requirements of this RFP with respect to the same. GDOT will not advise a Proposer as to the nature or content of documents or other records entitled to protection from disclosure under the Open Records Laws, as to the interpretation of such laws, or as to the definition of "trade secret." Each Proposer will be solely responsible for all determinations made by it under applicable laws. Each Proposer is advised to consult with legal counsel concerning the effect of applicable Open Records Laws to that Proposer's own circumstances.

All documents, papers, letters, maps, books, tapes, photographs, computer-based or generated information, data, data fields, or similar material prepared and maintained or received written correspondence, exhibits, tapes, photographs, computer-based or generated information, data, data fields, or similar material ("**Records**") submitted to GDOT during the procurement process, including any part of the SOQs, are the property of the State, will not be returned to the submitting parties, and are subject to the Open Records Laws.

Each Proposer will be responsible for clearly identifying and labeling any Records contained in its Proposal as a "trade secret" that the Proposer has reasonably determined meet the definition of "trade secret" under O.G.C.A. § 10-1-761(4) and that the Proposer wishes to be exempt from disclosure under O.G.C.A. § 50-18-72(a)(34) or any other applicable law. The Proposer must attach to such Records an affidavit affirmatively declaring that specific information in the Records constitutes trade secrets pursuant to Article 27 of Chapter 1 of Title 10 of the Georgia Code.

Proposers are advised that their designation as "trade secret" will not be binding on GDOT or determinative of any issue relating to whether such records are required to be released or not. GDOT will not accept blanket designations that do not clearly identify information and materials that are "trade secrets". GDOT may, in its sole discretion, and subject to compliance with the Open Records Laws and other applicable Law, treat the whole of the relevant section(s)/document(s) that are subject to such a blanket designation as subject to disclosure pursuant to the Open Records Laws.

In no event will the State, GDOT, or any of their Constituents be liable to a Proposer or any Major Team Member or any of their respective Constituents for the disclosure of all or a portion of a Proposal submitted in response to the RFP.

Nothing contained in this provision shall modify or amend requirements and obligations imposed on GDOT or any other State entity by the Open Records Laws or other applicable Law, and the provisions of the Open Records Laws or other laws shall control if there is a conflict between the procedures described above and the applicable Law.

SECTION 3.0 ALTERNATIVE TECHNICAL CONCEPT(S) AND STIPULATED FEE

3.1 Overview and Purpose of ATCs

Section 3.0 sets forth a process for pre-Proposal review of ATCs conflicting with the technical requirements for design and construction of the Project, requiring a modification of the Technical Provisions or which may not require such modification but, if implemented, would require further environmental evaluation of any portion of the Project.

This process is intended to allow, but not require, Proposers to incorporate innovation and creativity into their Proposals, in turn allowing GDOT to consider Proposer's ATC(s) in making the selection decision, to avoid delays and potential conflicts in the design associated with deferring of reviews of ATC(s) to the post-award period, and, ultimately, to obtain the best value for the public.

GDOT has sole discretion to allow or reject any ATC submitted. Any ATC that has been received and approved by GDOT pursuant to the process in this Section 3.0 may be included in the Proposal, subject to the conditions set forth herein. GDOT has the sole discretion to allow or reject any ATC submitted.

If GDOT revises the RFP (including through issuing an Amendment) after an ATC has been approved, the Proposer shall be solely responsible for reviewing the RFP and determining if the revised requirements of the RFP invalidate the conditions under which the ATC was approved. If necessary, the Proposer must submit a request for approval of all additional required deviations within 14 days after the revised RFP or Amendment (as applicable) is issued.

An ATC shall in no way take advantage of an error, ambiguity, omission, or other mistake in the Technical Provisions or other documents incorporated into the Technical Provisions by reference. If, at the sole discretion of GDOT, an ATC is deemed to take an advantage of any such error, ambiguity, omission, or other mistake in the Technical Provisions, or other documents incorporated into the Technical Provisions by reference, the RFP will be revised without regard to confidentiality of such ATC.

If, at any time, GDOT receives a question on the Project from another Proposer similar to a concept submitted in the form of an ATC, GDOT reserves the right to revise the RFP without regard to the confidentiality of such ATC.

Approval of any ATC in no way relieves a Proposer of its obligation to satisfy (a) other requirements of the Technical Provisions not specifically identified in the ATC submission, (b) any obligation that may arise under applicable Law or that is a condition of a Governmental Approval, and (c) all other conditions imposed by GDOT in connection with proposing (and implementing) any approved ATC.

3.1.1 Limitations on ATCs

ATCs eligible for consideration hereunder will be limited to deviations from the Technical Provisions that result in performance, safety, durability, quality, utility or reliability of the end product, as applicable, that is equal to or better than the performance, safety, durability, quality, utility or reliability of the end product, as applicable, on an overall basis without the proposed ATC, as determined by GDOT in its sole discretion.

Without limiting the above, GDOT, in its sole discretion, may reject any proposed ATC if the proposed ATC is premised upon, would require, or could result in any of the following:

(a) lower standards or a reduction in performance, safety, durability, quality, utility or reliability, as applicable;

(b) a reduction in the scope of the Project (including reduction in quantities without achieving equal or better safety, durability, quality, utility or reliability, as applicable);

(c) non-compliance with, or any change in, any applicable Law;

(d) the addition of a separate GDOT project (or other third-party contract) to the Project; or

(e) any delay to any Milestone Deadline beyond any "not-to-exceed" date listed in Exhibit 9 to the DBA, if any.

Proposers are advised that ATCs, if implemented, that would require further environmental evaluation of all or some of the Project may be allowed, provided that under the DBA, the Design-Builder will bear the schedule and cost risk associated with such additional environmental evaluation. If the Design-Builder is not able to obtain the approvals necessary to implement the ATC, the Design-Builder will be obligated to develop the Project in accordance with existing approvals without additional cost or extension of time.

If a Proposer is unsure whether a concept would be considered an ATC by GDOT, then GDOT recommends that Proposer submit the concept for review as an ATC.

3.1.2 Pre-Proposal Submission of ATCs

The Proposer may submit proposed ATCs for review to GDOT using the PDMS, until the date and time identified in Section 1.4. Proposers may resubmit or modify ATCs subject to the constraints identified in Section 3.2.1. All ATCs shall be submitted in writing as provided herein, with a cover sheet identifying the Proposer and stating **"I-75 at Bethlehem Road interchange Project – Confidential ATC(s)."** The Proposer shall clearly identify the submittal as a request for review of an ATC under this ITP. If the Proposer does not clearly designate its submittal as an ATC, the submission will not be treated as an ATC by GDOT.

ATC submittals shall be comprised of one electronic copy in PDF directly uploaded to the PDMS by the Proposer, with a narrative description of the ATC and technical information, including drawings, as described below. Paper copies of drawings or roll plots may be requested by GDOT, at its discretion.

Pre-Proposal submissions for ATCs shall include/observe the following:

(a) Electronic form: Be submitted in electronic form (PDF) via the PDMS;

(b) Labeling: In addition to the cover sheet and title above, assign a sequential ATC number identifying the Proposer and the ATC number (multi-part or multi-option ATCs shall be submitted as separate individual ATCs with unique sequential numbers);

(c) Description: A description and conceptual drawings of the configuration of the ATC or other appropriate descriptive information, including, if appropriate, product details and a traffic operational analysis;

(d) Usage: The location(s) where and an explanation of how the Proposer would use the ATC on the Project;

(e) Technical Provisions Changes: References to the TP requirements – including those as were modified by a prior accepted ATC submission for this Project (or any related conditions or requirements as may be identified in the GDOT response, if any) – that, in each case, are inconsistent with the proposed ATC, an explanation of the nature of the changes from the requirements and a request for approval of such changes. For clarity, the Proposer shall not propose a redline identifying changes to the TP requirements; instead, Proposers shall only provide the information identified in this Section 3.1.2(e). In doing so, it shall be the Proposer's sole responsibility to: (i) clearly identify any design exception required to implement the ATC for GDOT's approval; (ii) seek GDOT's approval for such proposed design exception and (iii) if approved by GDOT, seek approval from other governmental entities that must approve such design exception. Design-Builder acknowledges that FHWA also has or may have approval rights with respect to design exceptions. Furthermore, Design-Builder acknowledges and agrees that GDOT does not seek design exceptions for the Project, and notwithstanding any FHWA approval rights, GDOT may reject any request for design exceptions in its sole discretion;

(f) Justification: An analysis justifying the Proposer's use of the ATC and why GDOT should allow the deviation, if any, from the RFP requirements (including specifically how the ATC is equal or better in quality, utility, and performance than the requirements in the Technical Provisions);

(g) Impacts: A preliminary analysis of potential impacts on vehicular traffic (both during and after the Construction Work), environmental impacts (including environmental re-evaluations), construction schedule impacts (including, without limitation, on Milestone Deadlines), community impacts (including additional public involvement), safety and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance and operation, and real property impacts (i.e., impacts on the land or facilities of third parties (private owners, governmental entities, utility owners, railroads, as applicable);

(h) Cost Savings: An estimate and detailed breakdown of any savings that would accrue to GDOT as a result of the ATC;

(i) Time Savings: An estimate of any reduction in the time period necessary to design and construct the Project resulting from implementing the ATC, including a description of the methods the Proposer would use, as well as a schedule graphically showing how the ATC will reduce this time period;

(j) Risks: A description of added risks to GDOT or third parties associated with implementation of the ATC (including, without limitation, with respect to post-construction, operation, maintenance, and tolling, if applicable, of the Project);

(k) Quality: A description of how the ATC is equal to or better in quality and performance than the RFP requirements;

(l) Costs: An estimate of the ATC implementation costs to GDOT, the DB Team and third parties;

(m) Operations: Any changes in roadway or operation requirements associated with the ATC (including, without limitation, with respect to ease of operation);

(n) Maintenance: Any changes in the anticipated maintenance requirements (during and post construction) associated with the ATC, including ease of maintenance;

(o) Anticipated Life: Any changes in the anticipated life of the item comprising or affected by the ATC;

(p) Right-of-Way: Confirmation that no additional right-of-way is required to implement the ATC;

(q) Past Use: A description of other projects where the ATC has been used (if any), the success of such usage and names and contact information, including phone numbers and email addresses, for project owner representatives that can confirm such statements;

(r) Intellectual Property: A description of any intellectual property issues that may prevent the Proposer from selling the ATC as part of the Work Product to GDOT; and

(s) Stipulated Sum: A statement of whether the Proposer is prepared to license the ATC as part of the Work Product to GDOT in accordance with the terms of Section 3.8 (in the event that such the Proposer is not selected as the Apparent Successful Proposer).

3.2 GDOT Review of Pre-Proposal Submission of ATCs

3.2.1 General

GDOT may request additional information regarding proposed ATCs at any time and will, in each case, endeavor to respond to each Proposer regarding its ATCs within 14 days of receipt of the final submission of each individual, complete, and responsive ATC pursuant to Section 3.1.2.

For the purposes of determining the start of the GDOT review periods set out in *Section 3.2 (GDOT Review of Pre-Proposal Submission of ATCs)*, ATCs are deemed received once a week, on Friday (regardless of the actual day of the week received). ATCs received prior to 12:00 p.m. on Friday of each week shall be deemed received on that Friday, submittals received after this time shall be deemed received at the following Friday.

GDOT's responses will be limited to one of the following statements:

(a) the ATC, as submitted, is acceptable for inclusion in the Proposal (with such conditions or requirements as may be identified, if any, by GDOT in its response);

(b) the ATC is not acceptable for inclusion in the Proposal;

(c) the ATC is not acceptable in its present form for inclusion in the Proposal, but may be acceptable upon the satisfaction, in GDOT's sole discretion, of certain identified conditions, identified by GDOT in its response, all of which must be made through submittal of new ATCs and only if the original ATCs submittal was compliant within the deadline for submission of proposed ATCs identified in Section 1.4;

(d) the submittal does not qualify as an ATC but may be included in the Proposer's Proposal without an ATC because it appears to be within the requirements of the RFP; or

(e) the submittal does not qualify as an ATC and may not be included in the Proposal.

GDOT will make a determination on whether to approve an ATC for inclusion in the Project. GDOT's determination regarding any Proposer's ATC is conclusive as to the acceptability of an ATC for inclusion in the Proposal.

Approval of an ATC will constitute a change to specific requirements of the Technical Provisions associated with the approved ATC for that specific Proposer. Each Proposer is responsible for ensuring that its Proposal complies with the requirements of the RFP, as modified by GDOT's written determination with respect to any approved ATCs (including any conditions, modifications or other requirements identified by GDOT).

GDOT's rejection of a pre-Proposal submission of an ATC pursuant to this Section 3.2.1 will not entitle the Proposer to an extension of the Proposal Due Date or the date that the ATCs are due; provided, however, that the foregoing shall not limit GDOT's sole right to modify the Proposal Due Date or any other date in connection with this procurement.

If a Proposer wishes to resubmit or modify an ATC after a GDOT decision has been made, then if the ATC was not accepted under response (c) above, then Proposer shall resubmit the modified ATC with the same number, but annotating modification by attaching a letter to the ATC number (e.g., ATC 1, as modified is ATC 1A, then ATC 1B, etc., in alphabetical order). Resubmissions or modifications submitted after the date and time identified in Section 1.4 shall be limited to a maximum of up to two additional resubmissions.

If the ATC submittal was rejected under response (b) or GDOT stated that the submittal did not qualify as an ATC under responses (d) or (e), then Proposer shall submit a new ATC using a different ATC number no later than the date and time identified in Section 1.4.

Each Proposer, by submission of its Proposal, acknowledges that the opportunity to submit ATCs was offered to all Proposers, and waives any right to object to GDOT's determinations regarding acceptability of ATCs for its Proposal or the acceptability of any other ATCs submitted by any other Proposer.

Further provisions regarding submission of ATCs are set forth in Exhibit H**.**

3.2.2 ATC Proposal Package Process

Included with the Proposer's Technical Proposal, the Proposer will submit to GDOT a list of all approved ATCs that the Proposer has included in its Proposal ("**ATC Proposal Package**"); utilize Form P to list those GDOT-approved ATCs that are included in Proposer's Technical Proposal. The Proposer will not be allowed to include any ATC that has not been approved by GDOT.

ATCs must be shown on, and in relationship to, the Schematic Plans required by Exhibit C.

3.2.3 Duty to Verify

Any GDOT response that an ATC submission is acceptable for inclusion in the Proposal, and any conditions or requirements identified in such response, is particular to the submitted ATC. Proposers shall verify with GDOT, by subsequent notice, prior to the deadlines with respect to ATC submissions specified in Section 1.4 whether any subsequent response by GDOT to any new ATC (or response to a revised ATC regardless as to when submitted) that relies upon, contradicts, expands upon, makes assumptions or inferences with such new (or revised) ATC (or such conditions or requirements as GDOT had imposed on its use) as a result of the prior ATC, requires further clarification, restriction, constraint, or other modification of either or both ATCs as a further condition of acceptability of either or both ATCs for inclusion in the Proposal. For avoidance of doubt, it is Proposer's duty, and not GDOT's duty, to ensure that the Proposal, as incorporates the accepted ATCs, is responsive to the requirements of this RFP, and ATC approvals may not be used to justify deviations from the Technical Provisions that create, rather than resolve conflicts, ambiguities, or inconsistency among the Design-Build Documents.

3.3 Incorporation of ATCs into the DBA

Following selection of the Apparent Successful Proposer, the ATC Proposal Package that was incorporated in the Proposal by the Apparent Successful Proposer shall be incorporated into the Design-Build Documents. If GDOT has pre-approved any ATC by responding that the ATC was acceptable subject to certain conditions being met, including a condition of a GDOT Re-evaluation Period, those conditions will become part of the Design-Build Documents. The Design-Build Documents will be conformed after identification of the Apparent Successful Proposer, but prior to execution of the DBA, to reflect the ATCs contained in the ATC Proposal Package, including any GDOT conditions thereto.

Notwithstanding anything to the contrary herein, if the Apparent Successful Proposer does not comply with one or more GDOT conditions of pre-approval of an ATC in the ATC Proposal Package, including obtaining any necessary third-party approvals, the

Apparent Successful Proposer shall comply with the original requirements of the RFP without additional cost or extension of time as set forth in the DBA.

If an unsuccessful Proposer has indicated that it is prepared to sell an irrevocable license with respect to its ATCs to GDOT in accordance with the terms of Section 3.8 hereof, it is GDOT's intention to acquire such ATCs promptly after GDOT's selection of the Apparent Successful Proposer. Following such acquisition, such ATCs may, in GDOT's sole discretion, be presented to the Apparent Successful Proposer for possible inclusion in the Project as a Supplemental Agreement or as negotiated prior to award and execution of the DBA in accordance with Section 6.2. The Supplemental Agreement will document (i) any change in the Contract Sum relating to the ATC costs and (ii) any schedule adjustments including, without limitation, to the Project Schedule and/or Milestone Deadlines, as applicable (informed by the related estimated schedule impact as developed by the Apparent Successful Proposer and validated by GDOT).

3.4 Disclosure of ATC Information

The Proposer shall not make any public announcement or disclosure to third parties concerning any ATC until after pre-approval (including conditional pre-approval) has been obtained. Following pre-approval (including conditional pre-approval), if a Proposer wishes to make any such announcement or disclosure, it must first notify GDOT in writing of its intent to take such action, including details as to date and participants, and obtain GDOT's prior written consent, in GDOT's sole discretion, to do so.

3.5 Third Party Approvals

If implementation of an ATC will require approval by a third party (e.g., a governmental authority), other than Governmental Approvals required for a reevaluation of the environmental document, the Proposer will have full responsibility for, and bear the full risk of, obtaining any such approvals after award of the DBA and submission of data. If any required third-party approval is not subsequently granted with the result that the Proposer must comply with the requirements of the original RFP, the Proposer will not be entitled to any additional time or money.

3.6 GDOT's Right to Modify

If GDOT determines, based on a proposed ATC or otherwise, that the RFP contains an error, ambiguity or mistake, GDOT reserves the right to modify the RFP through an Amendment to correct the error, ambiguity or mistake, regardless of any impact on a proposed ATC.

3.7 Status of ATC Information

Pursuant to Section 4.3 and subject to Section 2.3.3 and Section 3.4, all information discussed and all materials submitted will be treated confidentially further to 23 C.F.R. § 636.209(b)(2) until the procurement of the Project has been completed, subject to Section 3.8 and Section 2.8.

3.8 Stipulated Fee; Work Product

3.8.1 Purchase of Right to Use Work Product

GDOT may, in accordance with this Section 3.8, make certain payments to Proposers in consideration for the transfer and assignment to GDOT the right to use certain proprietary information, trade secrets, techniques, concepts, analyses, approaches, ideas or other Intellectual Property or other work product furnished by Proposers to GDOT during the procurement hereunder (including, without limitation, ATCs) (collectively, "**Work Product**").

GDOT may offer (by way, under the terms, and subject to the conditions, of the "Grant and Assumption of Non-Exclusive Irrevocable License and Right to Use Work Product", Form N), if its offer is accepted, GDOT will make a payment to each unsuccessful Proposer to acquire the right to use the unsuccessful Proposer's Work Product. Proposers submitting non-responsive Proposals will not be paid the Stipulated Fee.

3.8.2 Payment Amount, Timing

Payments for purchase of Work Product will be according to the following:

(a) The purchase price to be paid by GDOT to a responsive Proposer under this Section 3.8 will be the Stipulated Fee amount as identified in Form N.

(b) If the Proposer is prepared to sell rights with respect to its Work Product to GDOT in accordance with the terms of Section 3.8.1, then the Proposer shall deliver to GDOT a duly completed and executed Grant and Assumption of Non-Exclusive Irrevocable License (in the form of Form N) reflecting the Stipulated Fee amount with the Administrative Information Submittal.

(c) Payments under this Section 3.8 will be made by GDOT to each eligible Proposer as follows:

1. in the case of any Work Product rights being acquired under Section 3.8.1, prior to or promptly after GDOT's selection of the Apparent Successful Proposer (in accordance with Section 5.0), if applicable, or exercise of any reserved right under this solicitation; provided that the Proposer has complied with Section 3.8.2(b); and

2. in any other case no later than the forty-fifth (45th) day after the Proposer and GDOT have each executed a completed Grant and Assumption of Non-Exclusive Irrevocable License (in the form of Form N) reflecting the Stipulated Fee.

(d) In the event that any Proposer that has received payment with respect to rights in its Work Product pursuant to Section 3.8.1 is subsequently awarded the Design-Build Document under Section 6.2.3, such Proposer shall, no later than the date of its execution of the DBA, reimburse GDOT in full for the purchase price paid by GDOT pursuant to Section 3.8.2(c).

3.8.3 Use of Work Product

Following the effective date of the "Grant and Assumption of Non-Exclusive Irrevocable License and Right to Use Work Product", in each case as relates to each Proposer that accepts the Stipulated Fee, GDOT shall have the rights described therein, which are intended to comport with those described in Section 1.5.4.

3.8.4 Foregoing of Payment by Proposer

Each Proposer has the option to forego Payment with respect to rights in its Work Product under this Section 3.8 and to retain all rights with respect to the relevant Work Product. In such an event, GDOT will have no right to use such Work Product.

3.8.5 Work Product Minimum Requirements

If a Proposer elects to be eligible to receive the Stipulated Fee, the Proposer must submit with its Technical Proposal all design files, concepts, ideas, technology, techniques, methods, processes, drawings, reports, plans and specifications embodying the Work Product, but including specifically (with respect to ATCs) only those ATCs that were included in the Proposer's ATC Proposal Package that were included in the Technical Proposal and used in the development of the Price Proposal and Technical Proposal. Submissions should be comprehensive, but multiple files (including "ZIP"/compressed files) will be accepted, file sizes not to exceed 2GB. Submissions of all such Work Product shall be via the PDMS in accordance with Exhibit H.

SECTION 4.0 PROPOSAL CONTENT AND SUBMITTAL REQUIREMENTS

4.1 Format

To facilitate the evaluation of Administrative Information Submittal, Technical Proposals, and Price Proposals and to help protect trade secrets, the Proposal submittal described in Sections 4.2 and 4.3 shall be submitted in three separate electronic packages to the PDMS as described in Section 2.2.

Unless otherwise specified in this ITP, all written submittals must be prepared in 8-1/2" x 11" portrait format, except as otherwise required (e.g., required forms in landscape format). Each section within each volume shall have sequentially numbered pages, shall be tabbed in the electronic submission, and shall be prepared using no smaller than 11-point font size, except for tables, which may be prepared using no smaller than 10-point font size. Font and pitch of forms are to remain as published in this RFP, and Proposer's responses should match the same. Some of the required documents have specified page limitations, as set forth in Exhibit B and Exhibit C. GDOT may disregard submissions not complying with these page limitations. Documents may be single-spaced. Proposers shall not include standard corporate brochures, awards, licenses and marketing materials and GDOT will not evaluate such materials. Individual electronic file sizes shall not exceed 2GB.

4.2 Contents and Organization

Proposers shall submit an index to their Proposals in the order set forth in this Section 4.2. Proposers may subdivide each volume as needed. The submittals shall be organized in the same manner as described in this Section 4.2, and shall use a searchable format with appropriate bookmarks.

4.2.1 Volume 1 - Administrative Information Submittal

Volume 1 of the Proposal will contain the Administrative Information that Proposer is required to submit under Exhibit B, separated, organized as directed under Exhibit B, and labeled as directed under Exhibit H.

4.2.2 Volume 2 - Technical Proposal

Volume 2 of the Proposal will contain the Technical Proposal. Each Technical Proposal will contain the components described in Exhibit C, separated, organized as directed under Exhibit C, and labeled as directed under Exhibit H.

In drafting the Technical Proposal, Proposers shall use the versions of any manuals, guidelines or specifications, including but not limited to those identified in the Technical Provisions, in effect as of the Setting Date, unless expressly provided otherwise.

4.2.3 Volume 3 – Price Proposal

Volume 3 of the Proposal will contain the Price Proposal. Each Price Proposal will contain the components described in Exhibit D, separated, organized as directed under Exhibit D, and labeled as directed under Exhibit H.

4.3 Submission of Proposals

4.3.1 Format

Each Proposer must submit three separate packages to GDOT that contain the contents described below:

(a) one electronic copy of the Administrative Information (Volume 1), divided into sections that are sequentially numbered in accordance with the numbering specified in Exhibit B, and uploaded to the PDMS in the relevant folder in accordance with, and with a file name in accordance, with the instructions in Exhibit H;

(b) one electronic copy of the Technical Proposal (Volume 2), divided into sections that are ordered and organized as specified in Exhibit C, and uploaded to the PDMS in the relevant folder in accordance with, and with a file name in accordance with, the instructions in Exhibit H; and

(c) one electronic copy of the Price Proposal (Volume 3), divided into sections that are ordered and organized as specified in Exhibit D, and uploaded to the PDMS in the relevant folder in accordance with, and with a file name in accordance with, the instructions in Exhibit H.

Proposers are required to submit an electronic version of their executed Proposal Bond as part of their Price Proposal in accordance with Section 4.6 and Exhibit D of the ITP. Within 3 days of Letting, the Apparent Successful Proposer shall provide GDOT with an original executed hard copy of the Proposal Bond as set forth under ITP Section 6.2.1.

Each Volume must be submitted in searchable PDF format and named according to the format specified in Exhibit H. Each file uploaded to the PDMS must not exceed 50 MB, unless GDOT indicates a larger file size is permitted.

If a Proposer submits an affidavit referred to in Section B.2.1.1 of Exhibit B, the Proposer must upload one separate electronic copy of its Proposal to the PDMS in the relevant folder in accordance with, and with a file name in accordance with, the instructions in Exhibit H.

Except for tables and organizational charts, which Proposers may prepare using a minimum of 10 point font size, Proposers must prepare the Proposal using a minimum of 11 point font size.

4.4 Disclosure of Proposals

No Proposal shall be made public until the procurement phase of the Project, including any evaluation, one-on-one meetings, negotiations, award and execution of the DBA, has been completed.

It is GDOT's intent to post to the GDOT Design-Build website (accessible at the following weblink: https://www.dot.ga.gov/GDOT/pages/DesignBuild.aspx) all Technical Proposals, upon the execution of the DBA and issuance of Notice to Proceed (NTP) 1.

4.5 Validity of Proposals

Proposals submitted and not withdrawn as of the Proposal Due Date shall be valid for a period of 90 days commencing on the Proposal Due Date. No Proposer shall withdraw its Proposal within the 90 day period, unless notified by GDOT that (i) the DBA will not be awarded by GDOT pursuant to the RFP, or (ii) GDOT has awarded the DBA to another Proposer, has received the executed DBA and other required documents, and does not intend to award the DBA to the Proposer that is requesting the withdrawal of the submitted Proposal, as notified by GDOT in writing (including electronic correspondence).

Any Proposer may elect, in its sole discretion, to extend the validity of its Proposal beyond the time periods set forth above.

4.6 Proposal Bond

Each Proposer shall submit a Proposal Bond with its Proposal, as described in Exhibit D and in the form provided in Form D.

4.7 Forfeiture of Proposal Bond

Each Proposer understands and agrees that if it has submitted and not withdrawn its Proposal as of the Proposal Due Date and thereafter (i) withdraws all or any part of its Proposal (without the prior written consent of GDOT) while the Proposal is valid, or (ii) if it is selected as the Apparent Successful Proposer pursuant to Section 6.2 or Section 6.2.2 should refuse or be unable to furnish any commitments made in its Proposal or to comply timely with its post-selection obligations under this RFP, GDOT shall be entitled to draw on the Proposal Bond in its entirety and the Proposer shall not be entitled to receive the Stipulated Fee.

The Proposer acknowledges that the forfeiture of the Proposal Bond constitutes liquidated damages and is not a penalty, and the amount forfeited is fair and reasonable. Such payment represents a reasonable estimate of fair compensation to GDOT for the work required to re-procure the Project and the reputational losses which may accrue.

Subject to Section 6.2.1, GDOT will retain the Proposal Bond for all Proposers until the earlier of (a) execution of the DBA by GDOT and the eventual Design-Builder, (b) GDOT's cancellation of the procurement (by canceling this RFP) and (c) the conclusion of the Proposal validity period described in Section 4.5; after which GDOT will return the Proposal Bond for each unsuccessful Proposer, except any Proposal Bond drawn upon by GDOT. Further, GDOT will return the Proposal Bond to the Apparent Successful Proposer within two Business Days after GDOT's receipt of the P&P Bonds.

The Proposer understands that any material alteration, as determined by GDOT in its sole discretion, of documents specified in this Section 4.0 including the Form of Proposal Bond (Form D), will render the Proposal non-responsive, unless such alteration was authorized by GDOT in writing prior to the Proposal Due Date.

4.8 Cost of Preparing Proposal, Delivery into Escrow

Subject to Section 3.8 and the terms of the agreement set forth in Form N, the cost of preparing the Proposal (including compilation of the Escrowed Documents) and any costs incurred at any time before or during the Proposal process shall be borne by the Proposer.

4.9 Non-Responsive Proposal

The Proposer shall submit a Proposal that provides all the information required by the ITP. If the Proposal does not fully comply with these requirements, GDOT may deem the Proposal non-responsive in which case the Proposer shall be disqualified from further consideration for award of the Project and the Stipulated Fee amount as identified in Form N will not be paid, but GDOT will not call upon the Proposer's Proposal Bond.

GDOT may also consider Proposals non-responsive and the Proposer disqualified from such further consideration for the following reasons:

(a) if the Proposal is not submitted in the format specified in this ITP, is not signed (as and where required), is illegible or is incomplete;

(b) if the Proposal contains multiple, conditional or alternate Proposals (except as contained in approved ATCs and including conditionally approved ATCs that have been revised to satisfy any conditions to approval) or, without limiting GDOT's rights under Section 8.1(p), contains any material omission, erasures, alterations, unauthorized additions or other irregularities of any kind;

(c) if the Proposal includes any unapproved ATCs (or ATCs that do not address all conditions with respect to any conditionally approved ATCs);

(d) if the Proposal otherwise includes any assumptions, qualifications, conditions, reservations, exceptions to, or deviations from, the requirements of the RFP Documents, including pricing assumptions not expressly required in the Price Proposal;

(e) if the Proposal otherwise, as determined in GDOT's sole discretion, includes any other item in an attempt to shift or otherwise modify the risk allocation in the DBA;

(f) if Proposer attempts to limit or modify the form of the Proposal Bond or if the Proposal Bond is not provided; or

(g) if the Proposer is in arrears in the payment of any obligation due and owing the State, including the payment of taxes and employee benefits.

4.10 Forms

Where a member of the proposed Design-Build Team, including Proposer, fills more than one role identified as requiring the entity filling that role to submit one or more forms required for a responsive Proposal, then such member need only submit one form,

noting on such form(s) all roles filled. For example, if the Proposer is also the Lead Contractor, then only one form – noting both roles – would be required.

SECTION 5.0 EVALUATION PROCESS AND CRITERIA

Upon GDOT's receipt of the Proposals, GDOT will proceed with the selection process as generally described in the Design-Build Manual, as further detailed in this Section 5.0.

5.1 Responsiveness and Pass/Fail Evaluation

5.1.1 Generally

Each Proposal will first be reviewed by GDOT's Responsiveness Committee for responsiveness to the requirements (e.g., submissions, content, completeness, etc.) under Section 4.9 of this RFP, and if responsive, then based on the pass/fail criteria set forth in this Section 5.1.

Each Proposer must submit a responsive Proposal and have satisfied each pass/fail requirement set forth in Sections 5.1.3 through 5.1.5 to be eligible for further qualitative consideration under the evaluation criteria and processes established in Exhibit E and thereafter GDOT consideration of the submitting Proposer's Price Proposal

5.1.2 Responsiveness

Without limiting GDOT's use of the clarifications process under Section 5.4, GDOT will exclude from substantive consideration and further participation in the procurement those Proposers that submit Proposals that GDOT determines are non-responsive as set forth in Section 4.9 and this Section 5.1and the Stipulated Fee amount as identified in Form N will not be paid], but GDOT will not call upon the Proposal Bond. Proposers will be advised by the Contracting Officer of a GDOT determination of non-responsiveness. For avoidance of doubt, a Proposal found to be non-responsive has not "failed" but instead has been determined not to be eligible for further consideration, as more fully set forth in Section 4.9 and this Section 5.1, and a Proposal found to have failed any pass/fail criterion is not "non-responsive." Responsiveness assessment of a Price Proposal will occur after the public opening and consist of verification of all items, as required to be presented and formatted under Exhibit D, and only responsive Price Proposals will be further evaluated under the pass/fail requirements under Section 5.1.5.

5.1.3 Pass/Fail Requirements with respect to portions of the Administrative Information Submittal

If the Proposal is responsive, then GDOT, through the Technical Review Committee (or such other subcommittee as it may deem appropriate) will review the Administrative Information Submittal on a pass/fail basis against the following criteria:

(a) The information provided in Form G as well as the other information pertaining to the business form of Proposer's proposed Design-Builder, and any Participating Members that will have joint and several liability under the DBA or that will provide a performance guaranty (including any joint venture agreement, partnership agreement, operating agreement, articles of incorporation, bylaws or equivalent documents) is consistent with the requirements of the Project and the Design-Build Documents and provides for continuation of Proposer in the event of bankruptcy or withdrawal of any of its Participating Members;

(b) The ownership of Design-Builder (as Proposer proposes) and the Participating Members and Major Non-Participating Members, have not changed since the Proposer's submission of its SOQ, or Proposer has previously sought and received GDOT's consent to a change, and the Proposal attaches a true and correct copy of GDOT's written consent;

(c) All Key Personnel identified in Proposer's SOQ have not changed since the Proposer's submission of its SOQ, or Proposer has previously sought and received GDOT's consent to a change, and the Proposal attaches a true and correct copy of GDOT's written consent;

(d) Proposer's Form C, on behalf of itself, each Participating Member, Major Non-Participating Member, proposed consultant and proposed subcontractor, and their respective chief executives, directors, and other key personnel for the Project, identifies no material and unresolvable conflicts, as determined in GDOT's sole discretion;

(e) The submitted Form U does not identify any material adverse information, as determined by GDOT in its sole discretion; and

(f) The letters provided pursuant to Form Z do not identify any material adverse information, as determined by GDOT in its sole discretion.

(g) The responses, information, certifications, signed statements and documents provided with the Administrative Information Submittal (including specifically any bringdown SOQ Certificate) does not otherwise identify any material adverse information, as determined by GDOT in its sole discretion.

For purposes of the qualitative evaluation under clauses (d), (e), (f) and (g) GDOT will evaluate each response under Section B.2.1 of Exhibit B using these pass/fail criteria:

Assessment	Criterion
Pass	The Administrative Information Submittal under clauses (d), (e), (f) and (g) above, as applicable, meets or exceeds the stated requirements and offers the required (or greater) level of quality.
Fail	The Administrative Information Submittal under clauses (d), (e), (f) and (g) above, as applicable, does not meet some or all of the stated requirements or does not offer the required level of quality.

5.1.4 Pass/Fail Requirements with respect to portions of the Technical Proposal

Either in parallel with review of the Administrative Information Submittal or after the Administrative Information Submittal is determined to have passed all pass/fail criteria, the Technical Proposal will be reviewed on a pass/fail basis against the following criteria:

(a) Proposer has submitted Notice(s) of Professional Consultant Qualification for the additional "GDOT Prequalified Area Classes" identified in Section 1.10.2;

(b) The date for completion of Milestones are no earlier or no later, as applicable to each Milestone, as required in the instructions pertaining to Form M, and Proposer's responses to Section C.3 of Exhibit C otherwise meets GDOT's minimum requirements for satisfactory approach to the Project; and

(c) The responses, information, certifications, signed statements and documents provided with the Technical Proposal otherwise meets GDOT's minimum requirements for satisfactory approach to the Project and do not identify any material adverse information, as determined by GDOT in its sole discretion.

For purposes of the qualitative evaluation under clauses (b) and (c), GDOT will evaluate each narrative response under Section[s C.3 and] C.1 of Exhibit C using these pass/fail criteria:

Assessment	Criterion
Pass	The Technical Proposal under clauses (b) and (c) above, as applicable, meets or exceeds the stated requirements and offers the required (or greater) level of quality.
Fail	The Technical Proposal under clauses (b) and (c) above, as applicable, does not meet some or all of the stated requirements or does not offer the required level of quality.

5.1.5 Pass/Fail Requirements with respect to portions of the Price Proposal

If the Price Proposal is responsive, portions of the Price Proposal will be reviewed on a pass/fail basis against the following criteria:

(a) The submitted Form X is completed in accordance with Section D.3.3. of Exhibit D by an insurer that meets the management and financial size category rating required in the DBA;

(b) The submitted Form D is properly executed and in the amount described in Form D; and

(c) The submitted Form F conforms with the constraints identified in the notes at the end of the form itself.

For purposes of the foregoing qualitative evaluations, GDOT will evaluate each response under Section D.3 of Exhibit D using these pass/fail criteria:

Assessment	Criterion
Pass	The Price Proposal submittals listed under clauses (a), (b), and (c) each meet or exceed the stated requirements and offers the required (or greater) level of quality.
Fail	The Price Proposal submittals listed under clauses (a), (b), and (c) do not meet some or all of the stated requirements or do not offer the required level of quality.

5.2 Proposal Evaluation Criteria

GDOT will evaluate and score each responsive Proposal that passes all pass/fail criteria in Section 5.1 according to the criteria set forth in Exhibit E. Once GDOT has scored the Proposals in accordance with Section 5.2.1, GDOT will determine which Proposal is the Apparent Successful Proposer in accordance with Section 5.2.2. The maximum score for a Proposal will be 1000 points, which will be allocated as described in Exhibit E.

5.2.1 Breakdown between Technical and Price Proposal Evaluations

(a) Technical Proposal Evaluation Process / Guidelines

GDOT will score each Proposal based on the evaluation criteria set forth in Exhibit E using an adjectival (qualitative/descriptive) ratings method, as follows:

Adjective Rating	Description
Excellent	The Proposal exceeds in a significant manner stated requirements in a beneficial way, providing advantages, benefits or added value to the Project, and provides an exceptional level of quality.
Very Good	The Proposal exceeds the stated requirements in a beneficial way, providing advantages, benefits or added value to the Project, and offers a significantly better than acceptable level of quality.
Good	The Proposal comfortably meets the stated requirements, provides some advantages, benefits or added value to the Project and offers a generally better than acceptable level of quality.
Fair	The Proposal meets the stated requirements and offers the required level of quality.
Poor	The Proposal does not meet some or all of the stated requirements or does not offer the required level of quality.

The sum of the Evaluation Score from Section E.1 of Exhibit E will make up the Technical Proposal Score.

(b) Price Proposal Evaluation Process / Guidelines

The Price Proposal will be evaluated pursuant to Exhibit E.

5.2.2 Best Value Determination and Selection of Apparent Successful Proposer

The determination of apparent best value shall be based on a 1000-point scale and will be computed using the formula provided in Section E.4 of Exhibit E.

5.3 Guaranty

5.3.1 Requirement in GDOT's sole discretion.

GDOT may require, in its sole discretion, a guaranty of Design-Builder's obligations under the DBA by a Guarantor, in the form of Form Y, under the following circumstances:

(a) GDOT advised Proposer, while Respondent, that a guaranty would be required as a condition to the shortlisting of Respondent;

(b) Proposer (ultimately as the Design-Builder) is a newly formed entity (e.g., corporation or a limited liability company);

(c) Proposer (ultimately as the Design-Builder (or a Participating Member of the Design-Builder)) is a partnership, joint venture or limited liability company that is not the ultimate parent entity in its organizational/corporate structure;

(d) The form of organization of Proposer changes after shortlisting, and GDOT determines, in its sole discretion, to require a guarantor as a condition to approving such change;

(e) Proposer's financial capability adversely changes between shortlisting and the Proposal Due Date, as determined by GDOT, in its sole discretion. In the event a guaranty is required, it must come from the ultimate parent or another entity acceptable to GDOT, in its sole discretion.

Unless a guaranty was previously required as a condition for shortlisting, if, after Proposals are received GDOT requires that a Proposer provide a guaranty, then GDOT will contact the Proposer's Authorized Representative to provide a guaranty in the form of Form Y. Proposer shall respond by submitting a completed Form Y to GDOT no later than 10 days after GDOT's request. If the request is made 10 days or fewer prior to the virtual Letting date, Proposer shall respond no later than 3 Business Days before the virtual Letting date as specified in Section 1.4.

5.3.2 Guaranty as Cure

If GDOT determines that a Proposer's current financial capability does not appear sufficient to fulfill its obligations under the DBA, GDOT may, in its sole discretion, offer

the Proposer the opportunity to meet the financial requirement through one or more Guarantors acceptable to GDOT.

5.4 Requests for Clarification

GDOT may, at any time, issue one or more requests for clarification to the individual Proposers, requesting additional information or clarification from a Proposer, or may request a Proposer to verify or certify certain aspects of its Proposal. Any requests for clarification shall be in writing to the Proposer's Authorized Representative and posted to the PDMS in the folder location described in Exhibit H. Proposers shall respond to any such requests within two Business Days (or such other time as is specified by GDOT) from receipt of the request. The scope, length and topics to be addressed in clarifications shall be prescribed by, and subject to the discretion of GDOT. Any responses to GDOT shall be uploaded to the PDMS to the same folder location within the PDMS. When the response to the request for clarification has been uploaded to the PDMS, notify the Contracting Officer via email.

Upon receipt of requested clarifications and additional information as described above, if any, the Proposal may be re-evaluated to factor in the clarifications and additional information.

SECTION 6.0 AGREEMENT AWARD AND EXECUTION

6.1 No Obligation to Award; Price Reasonableness; Proposal Schedule Reasonableness

GDOT shall be under no obligation to award the Project to any Proposer or to award the Project.

GDOT may, in its sole discretion, conduct a price reasonableness assessment of the Apparent Successful Proposer's Form F submission. GDOT's determination that the bid Contract Sum is not reasonable is likewise in GDOT's sole discretion. GDOT may also, in its sole discretion, conduct a reasonableness assessment of the Apparent Successful Proposer's Proposal Schedule submissions themselves, and GDOT's determination that the Proposal Schedule is not reasonable is likewise in GDOT's sole discretion.

Any such determination shall automatically afford GDOT the option to turn to the next highest scoring Proposer to consider for award and execution further to this Section 6.0.

6.2 Award and Execution

Without limiting GDOT's rights under Section 6.1, unless GDOT rejects all Proposals or cancels this procurement, GDOT shall select as the "**Apparent Successful Proposer**" the Proposer with the next highest Best Value Score Proposal, taking into consideration the evaluation criteria and procedures set forth in Section 5.0 and Exhibit E. GDOT's selection of Apparent Successful Proposer shall be deemed to have occurred upon public notification of such selection.

Following such selection of Apparent Successful Proposer, GDOT and the Apparent Successful Proposer shall finalize the executable versions of the Design-Build Documents, including approved ATCs, if applicable, filling in blanks and inserting information that the forms of the Design-Build Documents indicate is required from the Proposal. As part of the finalization process and pursuant to Section 3.8, GDOT may, in its sole discretion, elect to engage with the Apparent Successful Proposer regarding the incorporation of the unsuccessful Proposers' Work Product (including approved ATCs). By submitting its Proposal, each Proposer commits to enter into the form of Design-Build Documents included in the RFP, without variation, except as provided in this paragraph.

Notwithstanding selection of the Apparent Successful Proposer, the following are conditions to final award of the DBA:

(a) successful negotiation of the Design-Build Documents, as determined in GDOT's sole discretion;

(b) determination that the Proposer's proposed Contract Sum is reasonable;

(c) delivery of a guaranty of Design-Builder's obligations under the DBA by a Guarantor, in the form of Form Y;

(d) Concurrence in award by FHWA;

(e) receipt by GDOT of all documents and other information as required prior to execution of the DBA, as listed in Section 6.2.1;

(f) review and indexation of the Detailed Cost and Pricing Data in accordance with Section 6.2.2; and

(g) any other conditions as may be required, or processes for selection completed, under the Design-Build Manual.

Upon completion of all negotiations and execution of all Design-Build Documents and issuance of NTP1, GDOT intends to post the executed Design-Build Documents to the GDOT Design-Build webpage.

Proposers acknowledge that GDOT shall have the right to require Proposers to hold each of their respective Price Proposals for a period not to exceed 30 additional days (i.e., up to 120 days after the Proposal Due Date), by written notice to the Proposers prior to expiry of the original 90 day validity period.

6.2.1 Delivery of Drafts, Execution of Design-Build Documents; Executed Guaranty

(a) Within three Business Days following Letting, the Apparent Successful Proposer shall submit via the PDMS the following, unless otherwise expressly stated otherwise:

1. The Proposal Bond – Form D in accordance with Section D.3.4 of Exhibit D (hard copy original, to be submitted to the Contracting Officer at the address described in Section 2.2.1).

2. If required by GDOT pursuant to Section 5.3, the fully-executed Guaranty from the Guarantor as was previously submitted and approved by GDOT.

3. Evidence of the Apparent Successful Proposer's (and each Participating Member's, Major Non-Participating Member's, Major subcontractor's, and Major subconsultant's) authorization to transact business in the State.

4. Draft design-based agreement between the proposed Design-Builder and the affected Railroad(s).

(b) If applicable, within three Business Days following Letting, the Apparent Successful Proposer shall provide the Financial Statements and Other Financial Capacity Information via the PDMS in accordance with Section D.2 of Exhibit D.

(c) Within 10 days following the posting of the Notice of Award on the Georgia Procurement Registry, the Apparent Successful Proposer shall provide via the PDMS the following, unless expressly stated otherwise:

1. Executed Escrow Agreement and executed Escrow Affidavit, along with the Detailed Cost and Pricing Data, into escrow in a container suitable for sealing in accordance with the DBA (it being understood that hard copy and electronic copies of the Detailed Cost and Pricing Data are to be

delivered into escrow, and the same shall be personally examined by Proposer's Authorized Representative prior to delivery to ensure compliance with this requirement);

2. Executed binders (with specimen, compliant Insurance Policies as set forth in Section 16.1.2.4 of the DBA) or executed, compliant Insurance Policies required prior to commencement of the Design Work under the DBA for GDOT's review and approval (Proposers are advised that, under O.C.G.A. § 32-2-70 the DBA is not valid until all insurance policies required by GDOT are received);

3. Notification to GDOT in writing of the:

   a. name and email address of the officer of the company who will sign the contract;

   b. company E-Verify™ number;

   c. name of Proposer's Surety (if more than one Surety, submit all names and identify which is the controlling Surety); and

   d. name, email address and telephone number of Proposer's bonding agent who will execute as attorney in fact on behalf of the Surety/ies.

4. Evidence of the approval of the final form of Design-Build Documents and of due authorization, execution, delivery, and performance of the DBA by Design-Builder (by resolution of a company, corporation, general partnership (as certified by the appropriate officer, member, or partner, and if a joint venture, such a resolution from each member of the joint venture);

5. If the Apparent Successful Proposer is a joint venture, partnership, or single purpose entity, notification to GDOT of the name and address of the attorney that will provide the legal opinions set forth on Form R. Such opinion letter may be rendered by in-house or outside counsel, provided that (i) the organization/authorization/execution opinion shall be provided by an attorney licensed in the state of the formation/organization of the entity for which the opinion is rendered (i.e., Design-Builder, joint venture member, etc.), (ii) the qualification to do business in Georgia and the enforceability opinion shall be provided by an attorney licensed in the state of Georgia, provided, however, that the organization, authorization, or execution opinion for an entity formed or organized under the laws of the state of Delaware may be issued by an in-house or outside counsel duly licensed elsewhere;

   The opinion given shall not contain qualifications, exclusions, assumptions, presumptions, or other limitations, except as acceptable to GDOT in its sole discretion; and

(d) Within 15 Business Days following the posting of the Notice of Award on the Georgia Procurement Registry, and if the Apparent Successful Proposer is a joint venture, partnership, or single purpose entity, then the Apparent Successful Proposer shall submit via the PDMS the draft legal opinions (consistent with Form R) to GDOT for GDOT's review and approval, not to be unreasonably withheld.

(e) Within 45 days following the posting of the Notice of Award on the Georgia Procurement Registry, such Apparent Successful Proposer shall via the PDMS the following, unless otherwise expressly stated otherwise:

1. Notification to GDOT in writing of the Proposer's Federal Internal Revenue Service Employer Identification Number;

2. Notification to GDOT in writing of the name and address of its Georgia registered agent for service of legal process. The Proposer shall not change this authorized agent without prior written notice to GDOT;

3. Executed, compliant Insurance Policies required under the DBA for GDOT's review and approval, if not previously supplied;

4. If the Apparent Successful Proposer is a joint venture, partnership, or single purpose entity; then deliver concurrently with the Design-Builder's execution of the DBA the final opinion letter substantially in the form set forth on Form R. Prior to GDOT's execution of the DBA, the Design-Builder shall provide to GDOT the legal opinion in the form, and from the counsel, previously approved by GDOT;

5. If applicable, complete the establishment of the single purpose entity for the Project and submit certified copies of the single purpose entity-related documents to GDOT as described in Section 1.11; and

6. Any other requirements reasonably determined by GDOT during pre-award negotiations.

(f) Concurrent with the execution of the DBA, the Apparent Successful Proposer shall deliver fully executed, compliant hard copy P&P Bonds.

Should the Apparent Successful Proposer fail to comply with any of the requirements in this Section 6.2.1, GDOT may, in its sole discretion, call upon the Apparent Successful Proposer Proposal Bond in its entirety, provided that Proposer's time period to satisfy the requirements of this Section 6.2.1 shall be extended by the period of delay in the Proposer's ability to execute the DBA solely and directly caused by the issuance of a temporary restraining order or other form of injunction by a court with jurisdiction that prohibits prosecution of any portion of the Project.

If any hardcopies will be delivered to GDOT via overnight express service (e.g., FedEx, UPS, etc.), Proposer must notify the Contracting Officer with tracking information at the Project email listed in Section 2.2.1 the day the submittal is sent.

It is contemplated that GDOT will execute the DBA no later than 90days after the Proposal Due Date, if not extended under Section 6.2, following ultimate selection of the Apparent Successful Proposer, subject to such Apparent Successful Proposer's compliance with the terms of this Section 6.2.1.

GDOT will route the DBA and any other documents to be executed to the Apparent Successful Proposer for execution via DocuSign®. The Apparent Successful Proposer shall provide GDOT the P&P Bond Surety's Power of Attorney upon executing the DBA in DocuSign® with a hardcopy to follow within five Business Days.

6.2.2 Review of Detailed Cost and Pricing Data

GDOT (and any designee) shall be entitled to access and jointly review (with the Apparent Successful Proposer) the Detailed Cost and Pricing Data of the Apparent Successful Proposer following notification of award. GDOT's review shall be limited to assessing the completeness and accuracy of the Detailed Cost and Pricing Data and not to study the content of the Detailed Cost and Pricing Data itself. GDOT and the Apparent Successful Proposer will jointly develop and countersign a detailed index and catalogue of the contents of the Detailed Cost and Pricing Data.

If following initial review, GDOT determines that the Detailed Cost and Pricing Data is incomplete, then, GDOT may, as a condition to execution of the DBA, require the Apparent Successful Proposer to supply the missing information, and GDOT and the Apparent Successful Proposer will review the index and catalogue accordingly.

6.2.3 Initial Successful Proposer's Failure to Comply

If the initial Apparent Successful Proposer fails to comply with the requirements of Section 6.2.1, GDOT may (in its sole discretion) award the DBA to the Proposer whose Proposal was the next highest Best Value Score/ responsive proposal; cancel the procurement, re-advertise and complete the work under a different contract; cancel the Project; or pursue any other option it chooses.

6.3 Debriefing of Unsuccessful Proposers

GDOT will debrief unsuccessful Proposers upon their written request in accordance with the Design-Build Manual. Requests must be submitted to the Contracting Officer within 30 calendar days of GDOT's posting of the Notice of Award to the Georgia Procurement Registry. Email requests are considered acceptable.

SECTION 7.0 NON-RESPONSIVE TECHNICAL PROPOSAL PROCEDURES

7.1 GDOT's Responsibilities

In the event GDOT deems a Proposer's Technical Proposal non-responsive, GDOT shall, within two Business Days of such determination, provide each non-responsive Proposer a written explanation as to the reason(s) that their Technical Proposal was deemed non-responsive. An email is considered a proper written notification.

7.2 Proposer's Responsibilities

Upon receipt of GDOT's written explanation, the Proposer shall have five Business Days to request GDOT reconsider the non-responsiveness determination. The Proposer's request shall be in writing to the Contracting Officer; shall clearly state the reasons the Proposer believes that GDOT's determination is in error; and shall include supporting documentation as the Proposer deems appropriate.

7.3 Technical Proposal Resolution

Upon GDOT's receipt of a Proposer's written request for reconsideration of the non-responsiveness determination, GDOT will respond in writing within three Business Days with a final determination or an estimate of when a final determination will be made.

7.4 Time Frames

The time frames included are approximate and may be modified by GDOT.

7.5 Costs and Damages

All costs for requests for GDOT to reconsider the non-responsiveness determination shall be the responsibility of the Proposer and shall be undertaken at the Proposer's expense.

SECTION 8.0 GDOT'S RIGHTS AND DISCLAIMERS

8.1 GDOT Reserved Rights

In connection with this procurement, in addition to other rights expressly reserved in this ITP, GDOT reserves to itself all rights (which rights GDOT may exercise in its sole discretion) expressly stated herein (in addition to those stated in this Section 8.1) as well as those available to it under applicable Law, including without limitation, with or without cause, and with or without notice, the right at any time to:

(a) issue amendments, supplements, and modifications to this RFP;

(b) modify the procurement or documentation described in this RFP for any reason or no reason;

(c) develop the Project in any manner that it, in its sole discretion, deems necessary or desirable, including by modifying the scope of the Project;

(d) increase/add to or decrease/delete from Proposer responsibilities submission of information required under, this RFP, and to increase/add to, or decrease/delete the information contained in this RFP;

(e) increase, reduce, add or delete any requirement or other item in this solicitation as deemed necessary;

(f) cancel this RFP in whole or in part at any time prior to the execution by GDOT of the DBA when it is determined to be in the best interest of GDOT to do so, without incurring any cost obligations (except as otherwise expressly set forth in this RFP) or liabilities to the Proposer or any of the proposed Design-Build Team;

(g) issue a new request for proposals or request for qualifications after suspension, withdrawal, or cancellation of this RFP;

(h) not enter into a DBA; or otherwise not proceed with the procurement;

(i) change the dates and/or times indicated or projected in the procurement schedule in Section 1.4;

(j) seek or obtain information or data from any source that has the potential to improve the understanding and evaluation of the responses to this RFP;

(k) appoint bid, technical, responsiveness, and other evaluation committee(s) and subcommittee(s) to review Proposals, and seek the assistance of outside technical experts and consultants in Proposal evaluation;

(l) make independent calculations with respect to numbers and calculations submitted in a Proposal;

(m) require confirmation of information furnished by a Proposer, require additional information from a Proposer concerning its Proposal;

(n) further investigate the qualifications of any Proposer (or member of Proposer's team) under consideration; require additional evidence of qualifications to perform the Work;

(o) negotiate with a Proposer without GDOT being bound by any provision of a Proposer's (as Respondent) SOQ or Proposal;

(p) waive minor nonconformities, minor irregularities, technicalities, clerical mistakes that are unrelated to the substantive content of the Proposal and otherwise do not directly affect the ability to fairly evaluate the merits of the Proposal or omissions with any requirements of this RFP, deficiencies in a Proposal, permit clarifications or supplements to a Proposal, if deemed in the best interest of the State;

(q) disqualify the Apparent Successful Proposer and award the project to the next Shortlisted Proposal with the next highest Best Value Score, and so forth, in the event that errors, omissions, non-minor nonconformities, or non-minor irregularities in the initial Apparent Successful Proposer's Price Proposal exist;

(r) reject any and all submittals, responses, and Proposals, including for non-responsiveness to or non-compliance with the RFP requirements or for violation of Section 2.2.2;

(s) terminate evaluations of Proposals;

(t) disqualify any Proposer that changes its Proposal after submission without GDOT approval;

(u) disqualify any Respondent from the procurement for violating any rules or requirements of the procurement specified in this RFP, applicable Law, or any other communication from GDOT, including specifically investigating and declaring a Conflict of Interest, and to take all actions that GDOT deems appropriate as allowed under applicable Laws and GDOT policies (including the Design-Build Manual);

(v) adjust the terms of, or not pursue other financing or public funding for the Project;

(w) design, develop, or construct some or all of the Project itself or through another State or local government entity or entities, or with a third party of GDOT's choice;

(x) disagree with Proposer's assessment regarding a trade secret in the interest of maintaining a fair process or complying with applicable Law, including Section 2.8;

(y) disclose information submitted to GDOT as permitted by applicable Law or this RFP;

(z) exercise any other right reserved or afforded to GDOT under this RFP and applicable Law;

(aa) exercise its discretion in relation to the matters that are the subject of this RFP as it considers necessary or expedient in light of all circumstances prevailing at the time that GDOT considers to be relevant;

(bb) modify electronic document file names;

(cc) add to the shortlist of Proposers any Respondent that submitted a SOQ in order to replace a Shortlisted Proposer that withdraws or is disqualified from participation in this procurement;

(dd) regarding Respondent or Proposer information provided that becomes a basis for being among the Shortlisted Proposers, determine such information to be in the nature of a Proposal Commitment, eligible for inclusion among the terms of the DBA;

(ee) offer a Proposer the opportunity to cure any failure to meet required financial qualifications by providing a guaranty of the Design-Builder's obligations under the DBA by a third party;

(ff) perform a price and Proposal Schedule reasonableness assessment(s), including evaluation and judgement regarding the reasonableness of indicative quantity estimates in Form AA submitted by Proposer;

(gg) suspend or cancel the procurement at any time;

8.2 Disclaimers

The RFP does not commit GDOT to enter into the DBA or any other agreement or contract, nor does it obligate GDOT to pay for any costs incurred in preparation and submission of Proposals or in anticipation of the Design-Build Documents. By submitting a Proposal, a Proposer disclaims any right to be paid for such costs, except for payment of the Stipulated Fee, under the terms, and subject to the conditions, of this RFP.

In no event shall GDOT be bound by, or be liable for, any obligations regarding the Work or the Project until such time (if at all) as the Design-Build Documents have been executed, authorized and delivered.

In submitting a Proposal in response to the RFP, the Proposer is specifically acknowledging these disclaimers.

EXHIBIT A

ACRONYMS AND DEFINITIONS

Capitalized terms and acronyms used, but not defined in this Instructions to Proposers (including Exhibits), have the meanings given in DBA Exhibit 1. Capitalized terms and acronyms used within each ITP form have the meanings ascribed in the form. Capitalized terms and acronyms defined in this Instructions to Proposers (including Exhibits) have the meanings given herein, notwithstanding definition and use of the same term in DBA Exhibit 1, with some such definitions referring to the term as defined in the Design-Build Manual.

"***Administrative Information Submittal***" means that portion of the Proposal delivered pursuant to the requirements in Exhibit B.

"***Alternative Technical Concept***" or "***ATC***" is defined in Section 2.5 of the ITP.

"***Amendment***" is defined in Section 1.1 of the ITP.

"***Apparent Successful Proposer***" is defined in Section 6.2 of the ITP.

"***ATC Proposal Package***" is defined in Section 3.2.2 of the ITP. The ATC Proposal Package will be the ATC Supplement under the DBA, as finally determined

"***Authorized Representative***" means that individual person identified to GDOT in Proposer's (as Respondent's) Form A submission under the RFQ, or such subsequent individual person identified to GDOT pursuant to the terms, and subject to the conditions, of the RFQ. Upon submission of a Proposal, the "Authorized Representative" is the individual person identified in Form A submitted with the Proposal.

"***Best Value Evaluation Spreadsheet***" means that procurement document described in the Design-Build Manual used to calculate the Best Value Score.

"***Best Value Score***" means the combined numerical scores for the Technical Proposal and the Price Proposal, as further described in the Design-Build Manual and Exhibit E.

"***Bid Review Committee***" is defined in the Design-Build Manual.

"***Business Day***" means any day that is not a Saturday, a Sunday, a State of Georgia public holiday or a federal public holiday.

"***Category 1, 2, or 3 Questions***" are each defined in Section 2.3.1.

"***CFO***" is defined in Section D.3.2(d) of the ITP.

"***Completion Days***" shall mean the number of days between NTP1 and Substantial Completion, as set forth on (d)Form M.

"***Conflict of Interest***" is defined in the Design-Build Manual.

"***Contract Sum***" means the sum of General, Design Services, and Construction, as specified on the Proposal Schedule of Values on (d)Form F, submitted with the Price Proposal.

"***Contracting Officer***" is defined in Section 2.2.1 of the ITP.

"**Daily Rate Factor**" shall mean the coefficient determined by GDOT and set forth in Exhibit E.

"***DBA***" means the Design-Build Agreement of the Project and defined in Section 1.1.

"***Design-Build Manual***" means The State of Georgia, Department of Transportation, Design-Build Manual, as may be amended from time to time.

"***Design-Build Team***" or "***DB Team***" is defined in the Design-Build Manual.

"***Design-Builder***" means the counterparty to GDOT under the DBA, which is intended to be the Apparent Successful Proposer (or otherwise as determined under this RFP) and, with its Major Non-Participating Members, Contractors, and Subcontractors, comprises the "Design-Build Team" under Rule 672-18 and the Design-Build Manual.

"***District Engineer***" means the District Engineer for GDOT District 3.

"***Escrow Affidavit***" means the signed affidavit, substantially in the form of Form W, relating to the escrow arrangement with the escrow agent of the Detailed Cost and Pricing Data of the Apparent Successful Proposer.

"***Escrow Agreement***" means the executed agreement, substantially in the form of Form V, relating to the escrow arrangement with the escrow agent of the Detailed Cost and Pricing Data of the Apparent Successful Proposer.

"***FHWA***" means the Federal Highway Administration.

"***Financial Statements***" means the items listed in Section D.3.1.

"***GDOT***" means the Georgia Department of Transportation.

"***Guarantor(s)***" means the person or entity providing to GDOT a guaranty of Design-Builder**'**s obligations under the DBA, in the form of Form Y.

"***IFRS***" means the International Financial Reporting Standards.

"***JV***" means joint venture.

"***Lead Contractor***" means the Contractor identified as such in a Proposer's SOQ.

"***Lead Design Consultant***" means professional service-provided identified as such in a Proposer's SOQ.

"***Letting***" is defined in the Design-Build Manual; provided, however, that if the Apparent Successful Proposer is disqualified further to GDOT's exercise of a reserved right, then "Letting" is the day on which the subsequent "Apparent Successful Proposer" is identified.

"***Major***" means, in the context of classification of subcontractors or subconsultants, those subcontractors or subconsultants that will perform a substantial part (anticipated at 10% or more) of the Design-Build services. "Major Non-Participating Members" are not subcontractors or subconsultants.

"***Major Non-Participating Member***" means a Proposer's Lead Contractor and Lead Design Consultant. If either of these entities are a Participating Member, then that entity is not a Major Non-Participating Member. Major Non-Participating Members are part of the "Design-Build Team" under Rule 672-18.

"***Notice of Award***" means the notice prepared by GDOT and published identifying the ultimate Apparent Successful Proposer, to be (or its affiliate to be) the Design-Builder.

"***O.C.G.A.***" means the Official Code of Georgia Annotated.

"***Open Records Laws***" is defined in Section 2.8 of the ITP.

"***Organizational Chart***" has the meaning set forth in Section C.5.

"***Other Financial Capacity Information***" means the items listed in Section D.3.2.

"***Participating Member***" means (a) if the Proposer is a joint venture, partnership, or limited liability company, each member of the joint venture, partnership or limited liability company; or (b) if the Proposer is a corporation or other corporate entity, the Proposer.

"***PDMS***" means the RFP-484-04022025 – I-75 at Bethlehem Road Interchange document management system hosted by Trimble Unity Construct™.

"***Price Proposal***" means that portion of the Proposal delivered pursuant to the requirements in Exhibit D.

"***Proposal***" is defined in Section 1.5 of the ITP. Generally, the Proposal consists in the Administrative Information Submittal, the Technical Proposal, and the Price Proposal.

"***Proposal Bond***" is defined in Exhibit D and in the form provided in Form D.

"***Proposal Commitments***" is defined in Section 1.5.3 of the ITP.

"***Proposal Due Date***" is defined in Section 1.4 of the ITP.

"***Proposal Schedule of Values***" means the Proposal SOV, as defined under DBA Exhibit 1, set forth on a Proposer's submitted (d)Form F.

"***Questions***" is defined in Section 2.3 of the ITP.

"***Respondent***" means Proposer, in its legacy role as the entity (or joint venture, joint bidder, partnership, or other consortium, at the time), that submitted a SOQ.

"***Responsiveness Committee***" means a subcommittee of the TRC that determines whether a Proposal is responsive to the requirements of the RFP.

"***RFP Documents***" is defined in Section 1.2 of the ITP.

"***Schematic Plans***" means Design-Builder's Schematic Plan of Project, as defined in the DBA, as included in the Proposal.

"***SEC***" means the U.S. Securities and Exchange Commission.

"***Selection Review Committee***" is defined in the Design-Build Manual.

"***Shortlisted Proposer***" is defined in the advertised RFQ for this Project.

"***SOQ Certificate***" means the certificate in the form of (d)Form O to this ITP.

"***Statement of Disclosure***" means the Statement of Disclosure (Conflict of Interest), Form C to the RFQ, as delivered by each submitting entity with a Proposer's (as Respondent's) SOQ or the Bringdown of the RFP Form C disclosure in the form of Form C to this ITP, as context may require.

"***State***" means the state of Georgia.

"***State Transportation Board***" means the State Transportation Board of Georgia.

"***Stipulated Fee***" means the amount identified in Form N as relates to GDOT's right to use a Proposer's Work Product, as of the effective date of the Grant and Assumption of Non-Exclusive Irrevocable License and Right to Use Work Product executed by GDOT and such Proposer.

"***Technical Proposal***" means that portion of the Proposal delivered pursuant to the requirements in Exhibit C.

"***Technical Review Committee***" or "***TRC***" is defined in the Design-Build Manual.

"***Work Product***" is defined in Section 3.8.1 of the ITP.

EXHIBIT B

ADMINISTRATIVE INFORMATION SUBMITTAL REQUIREMENTS

B.1. General Instructions

This Exhibit B describes the required information and submission format regarding the Administrative Information Submittal, which generally is that component of the Proposal that contains all of the following submittals. Proposers shall submit the administrative information required by this Exhibit B, separated, organized as directed under Exhibit B, and labeled as directed under Exhibit H.

B.2. Contents of the Administrative Information Submittal

Proposers are to provide all information set out in this Exhibit B.

The Administrative Information Submittal shall consist in the Proposer information, certifications and documents (including required forms), as set forth in greater detail as follows.

B.2.1 Proposer Information, Certifications and Documents

B.2.1.1 List of Trade Secret Information

If deemed applicable by the Proposer, the Proposal shall include a page executed by the Proposer that sets forth the specific items the Proposer deems trade secrets protected from public disclosure under the Open Records Laws, in accordance with Section 2.8. Proposer's designation of such items as "trade secret" will not be binding on GDOT or determinative of any issue relating to whether such records are required to be released or not. In no event will the State, GDOT, or any of their Constituents be liable to a Proposer or Proposer's Authorized Representatives for the disclosure of all or a portion of the Proposal submitted in response to the RFP.

If the Proposer determines that it does not have any specific items it wishes to designate as "trade secret", the Proposer shall include a statement affirmatively declaring that it is not designating any "trade secret" information within the Proposal as part of its Administrative Information Submittal.

B.2.1.2 Proposal Letter – Form A

The Proposal shall include the Proposal Letter (Form A). The Proposer shall attach to the Proposal Letter evidence of authorization to execute and deliver the Proposal and the DBA, shall identify its post-submission Authorized Representative and shall include all necessary authorization documents (as requested in the Proposal Letter – Form A). Note that additional requirements applicable to single purpose entities and joint ventures are included in Form A.

B.2.1.3 Non-Collusion Affidavit – Form B

The Proposal shall include Form B, certifying that the Proposal is not the result of and has not been influenced by collusion. Note that multiple parties are required to execute

copies of Form B. Proposers are instructed to duplicate or modify Form B as necessary so that it accurately describes the entity making the Proposal and so that it is signed by Participating Members and Major Non-Participating Members.

B.2.1.4 Bringdown Statement of Disclosure (Conflict of Interest) – Form C

Pursuant to Section 1.6.3, the Proposal shall include a Bringdown Statement of Disclosure from the deadline for submission of the SOQ to the Proposal Due Date confirming that there have been no changes or making such additional disclosures, additional information, and certifications as required by Form C. Note that multiple parties are required to execute copies of Form C. Proposers are instructed to duplicate or modify Form C as necessary so that it accurately describes the entity making the disclosure and so that it is signed by Participating Members and Major Non-Participating Members, proposed consultants and proposed subcontractors.

Proposers are advised that any subconsultants or subcontractors that were identified by name in the SOQ or in the Proposal are responsible for providing Form C to GDOT.

B.2.1.5 Participating Members, Contractors and Key Personnel Commitment – Form G

(a) The Proposal shall include a completed Form G confirming the identity, current availability and commitment to the Project of the Participating Members, Major Non-Participating Members and Key Personnel that were listed by the Proposer in the SOQ.

(b) The Proposal shall include a completed Form G confirming the identity, current availability and commitment to the Project of the Participating Members, Major Non-Participating Members and Key Personnel per changes in accordance with Section 2.7 and the subsequent approval in writing by GDOT.

B.2.1.6 Equal Employment Opportunity Certification – Form H

The Proposal shall include an executed copy of Form H, regarding participation in contracts subject to federal equal employment opportunity requirements. Note that the Proposer, Participating Members, Major Non-Participating Members and proposed Contractors are required to execute copies of Form H.

B.2.1.7 Buy America Certification – Form J

The Proposal shall include an executed copy of Form J-1, regarding federal “Buy America” requirements and an executed copy of Form J-2, regarding “Build America, Buy America Certificate of Compliance for Construction Materials” requirements.

B.2.1.8 Use of Contract Funds for Lobbying Certification – (d)Form K

The Proposal shall include an executed copy of (d)Form K, regarding use of contract funds for lobbying.

B.2.1.9 Debarment and Suspension Certification – Form L

The Proposal shall include an executed copy of Form L, regarding debarment and suspension of contractors.

B.2.1.10 Grant and Assumption of Non-Exclusive Irrevocable License and Right to Use Work Product – Form N

If a Proposer has indicated that it is prepared to grant a license to GDOT with respect to submitted Work Product under Section 3.0 (if such Proposer is not selected as the Apparent Successful Proposer), such Proposer shall include a completed and executed copy of Form N in its Proposal.

B.2.1.11 Georgia Security and Immigration Compliance Act Affidavit – Form Q

The Proposal shall include an executed copy of Form Q, regarding participation in the Employment Eligibility Verification Program for the Lead Contractor.

B.2.1.12 Drug Free Workplace – Form S

The Proposal shall include an executed copy of Form S, regarding Drug Free Workplace. Note that multiple parties are required to execute copies of Form S. Proposers are instructed to duplicate or modify Form S as necessary so that it accurately describes the entity making the certification and so that it is signed by Participating Members and Major Non-Participating Members.

B.2.1.13 Certification of Compliance with the State of Georgia's Sexual Harassment Prevention Policy – Form T

The Proposal shall include an executed copy of Form T, regarding compliance with sexual harassment prevention.

B.2.1.14 Changes in Proposer's Organization; Approvals of Participation on More than One Proposer Team

(a) The Proposal shall include a copy of the letter(s) (if any) issued by GDOT approving changes to the composition of a Proposer's team (including additions to a Proposer team) or the percentage of equity participation of one or more Participating Members of a team that is a consortium, partnership or joint venture following GDOT's decision to shortlist a Proposer. Such approval is required under Section 2.7. If a Proposer includes any such letter(s), it shall also include a brief description (two-page maximum) of these changes.

(b) The Proposal shall include a copy of the letter(s) (if any) issued by GDOT approving participation of an individual or entity on more than one Proposer team. Such approval is required under Section II.C of the RFQ, incorporated by reference into the ITP. Proposer shall include with any such letter(s) the name of the other Proposer team and what, if any, steps were agreed to protect the integrity of the procurement.

B.2.1.15 Bringdown Surety Certification and Acknowledgment – Form U

The Proposal shall include a properly completed Form U pertaining to the bonding surety's activities and commitment to provide the P&P Bonds, with current, dated power of attorney for the signatory to sign on behalf of the surety.

B.2.1.16 Bringdown Financial Certifications - Form Z

The Proposal shall include all letters required under Form Z.

Proposers are advised that any subconsultants or subcontractors that were identified as Major in the SOQ or in the Proposal are responsible for providing Form Z to GDOT.

B.2.1.17 Draft Single Purpose Entity Corporate Formation Documents

If Proposer contemplates the creation of one or more single purpose entities as the party to execute the DBA, the Proposal shall include a statement acknowledging that the organizational documents for the single purpose entity(ies) will be provided in accordance with Section 6.2.1 and the Proposal shall include applicable draft documents for such entity.

B.2.1.18 Executed Copy of Partnering/Consortium Agreement

If the Proposer is a consortium, partnership or any other form of joint venture, the Proposal shall contain an executed teaming agreement or, if the entities making up the Proposer have not executed a teaming agreement, a summary of the key terms of the anticipated agreement.

B.2.1.19 Bringdown of SOQ Certificates - Form O

Proposer shall, and shall cause each Participating Member, as well as cause the Lead Contractor (or each of its joint venture or joint bidder members) and the Lead Design Consultant (or each of its joint venture or joint bidder members) to include in the Administrative Proposal a bringdown of the SOQ Certificates from the deadline for submission of the SOQ to the Proposal Due Date confirming that there have been no changes.

If Proposer (or any such Participating Member, the Lead Contractor, or the Lead Design Consultant), or any of their joint venture or joint bidder members, are unable to deliver a bringdown SOQ Certificate, then Proposer shall include, as part of the Proposal, and only as relates to any such entity that is unable to offer a bringdown SOQ Certificate, a statement describing the reason, citing specific factual information rendering such entity unable to offer the bringdown SOQ Certificate, with supporting documentation, if desired.

B.2.1.20 Prequalification; Certificates of Qualification

Proposer shall include, if applicable, any new "Certificate of Qualification" pursuant to Section 1.10.1.

Proposer shall also submit, if applicable, the statement(s) regarding entities remaining prequalified under the "GDOT Prequalified Area Class" as set forth in the matrix submitted in Proposer's (as Respondent's) SOQ pursuant to Section 1.10.2.

B.3. No Contract Sum Information

NO PART OF THE ADMINISTRATIVE INFORMATION SUBMITTAL (INCLUDING, WITHOUT LIMITATION, DELIVERABLES UNDER SECTIONS B.2.1.15, B.2.1.16, B.2.1.17, OR B.2.1.18) SHOULD CONTAIN THE PROPOSER'S PROPOSED CONTRACT SUM OR OTHER INFORMATION THAT WOULD ALLOW SUCH CONTRACT SUM TO BE CALCULATED.

EXHIBIT C

TECHNICAL PROPOSAL SUBMITTAL REQUIREMENTS

The Proposer shall submit the Technical Proposal in accordance with this Exhibit C. The Technical Proposal shall be separated, organized as directed under this Exhibit C, and labeled as directed under Exhibit H. Proposers shall not amend the order or change the section headings. The Technical Proposal shall be limited to an aggregate of fifteen (15) pages, including the technical approach and the narratives (i.e., the construction staging and traffic management narrative, project management approach narrative, and Proposal Schedule narrative), except those items that are expressly stated herein as not counted toward the page limit. Charts, graphs, figures and matrices may be submitted using 11x17-inch format. Such 11x17-inch sheets will be counted as one page. Multiple charts, graphs, figures or matrices may be provided on each 11x17-inch sheet. All other pages shall be on 8.5x11-inch sheets.

Appendices and exhibits containing graphs, any matrices and pertinent data, the Proposal Schedule (exclusive of the Proposal Schedule narrative), Schematic Plans, and Organizational Chart, and Work Product will not be counted as part of the page limit.

Dividing sheets/electronic tabs will not count toward the maximum page limit, provided they do not include any additional qualitative information for the Proposal.

C.1. Technical Proposal

GDOT values innovative strategies and thoughtful work planning that result in:

- acceleration of the achievement of substantial completion;
- a comprehensive and effective project approach;
- a comprehensive approach to construction staging and traffic management; and
- a comprehensive approach to providing a quality overall project.

GDOT encourages creative and innovative technical solutions, to optimize all aspects of the delivery of the Project, based on the value statements and weighting identified in this Exhibit C and Exhibit E.

The Technical Proposal shall provide the following:

C.1.1 Overall Project Completion

(a) The Proposer shall submit a Proposal Schedule as *Appendix A* to the Technical Proposal, and such Proposal Schedule shall comply with, and include as applicable, the following related requirements:

(i) the requirements for a NTP1 Baseline Project Schedule as prescribed in TP Attachment 2-5 (Project Schedule Technical Requirements), TP Attachment 2-6 (Project Schedule Software Requirements), and TP Attachment 2-8 (Project Schedule and Schedule of Values).

(ii) PDF format consistent with the Gantt chart exhibit requirements prescribed in TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements).

(iii) showing NTP1 as the initial activity, assuming that NTP1 occurs 90 days after Letting for purposes of the Proposal Schedule only.

The Proposal Schedule shall not be cost-loaded.

(b) The Proposal Schedule shall:

(i) reflect the Proposer's approach to perform all Work;

(ii) demonstrate consistency with the construction staging and traffic management narrative elements required in Section C.1.1;

(iii) identify a Substantial Completion Deadline and Interim Milestones, if applicable, in (d)Form M;

(iv) identify anticipated achievement of other dates identified in (d)Form M that, if required, are no later than the not-to-exceed date set forth therein;

(v) identify Critical Path activities to achieve all of the dates shown in (d)Form M; and

(vi) identify total Float values for all activities.

C.1.2 Overall Project Approach

(a) Proposer shall include a Proposal Schedule narrative that:

(i) achieves Substantial Completion Deadline and Interim Milestones, if applicable, in (d)Form M;

(ii) address items #2-5 prescribed for a Baseline Project Schedule Narrative in Section 2.4.1 of TP Attachment 2-8;

(iii) address how the Proposal Schedule accommodates design, construction, maintenance during construction, stakeholder involvement, public information, and public outreach. including identifying any major considerations that materially differ from the provided RIDs;

(iv) address in its narrative discussion the Proposer's approach to managing and mitigating identified Project risks; and

(v) The Proposer may include within its narrative discussion of the Proposer's reasoning behind the Organizational Chart as prescribed in Section C.5, but this narrative shall not be restricted to such discussion.

C.1.3 Construction Staging and Traffic Management

The Proposer shall provide a brief construction staging and traffic management-focused narrative addressing the approach to accommodate and minimize impacts to traffic during construction. The narrative shall discuss Proposer's approach to:

(a) accomplish construction phasing, identifying the most significant known and anticipated Project challenges (no more than five) to the construction phasing and how they will be addressed, and the overall traffic management and control and sequencing approach;

(b) minimize impacts and user distraction to the traveling public, public recreational users, and stakeholders from work areas, sequencing of work, and locations of lay down areas;

(c) reduce or eliminate detour durations and lane closures, including discussing efforts to minimize impacts to the traveling public; and

(d) engage, coordinate, and communicate with any adjacent project contractor(s).

The narrative will also discuss how Proposer's approach to design and construction of the Project differs materially from the design indicated in any of the RIDs.

C.1.4 Overall Approach to Quality

The Proposer shall submit a brief narrative addressing the Proposers approach to providing a quality end product for the Project, both during the delivery and following Final Acceptance. The narrative shall discuss the Proposer's approach to:

(a) successfully and effectively implementing the Quality Management Plans, including describing the management organization, QA/QC procedures, inspection protocols, and documentation practices;

(b) how the design will be guided by measurable performance outcomes (e.g. safety, durability, and operational efficiency, and can adapt to evolving project needs while still meeting or exceeding the requirements of the RFP);

(c) bringing innovation and associated value to deliver the project, including highlighting incorporated ATCs included in the Proposal;

(d) reducing long-term maintenance costs and extend the life of the infrastructure. Include considerations such as material selection, structural durability, and ease of access for future maintenance; and

(e) minimizing environmental impacts to the Project through thoughtful design and construction practices, including detailing any reduction to mitigation credits and the Proposers associated approach.

C.1.5 The Technical Proposal shall include Form AA, completed in accordance with the instructions therein. Form AA will not count toward the Technical Proposal page limit. The quantities identified in Form AA as relates to each of the Base Materials will be used in calculation of Material Indexation Adjustments under, and subject to the limitations within, DBA Exhibit 21 (Material Indexation Adjustments).

C.2. Project Differences from the Basic Configuration

The Proposer shall show how its approach to any of the design and construction of the Project, including the use of approved ATCs, and as depicted in its Schematic Plans, differs materially from the Basic Configuration.

If differences have been identified, the Proposer should include Schematic Plans of the Project with these differences clearly identified. Schematic Plans of the Project will not count towards the Proposal's page limit.

In addition to the Schematic Plans, also complete and include Form P, if applicable. Form P will not count towards the Technical Proposal page limit.

C.3. Closure Durations, Interim Completion, Substantial Completion, and Final Acceptance Proposal - Form M

Unless otherwise noted, state in Form M the duration as directed within such form, each Milestone Deadline. Form M will not count towards the Technical Proposal page limit.

C.4. Work Product Requirements

The Proposer shall include their Work Product in accordance with Section 3.8.5. The Work Product will not count towards the Technical Proposal page limit.

C.5. Organizational Chart

The Proposer shall include (a) the organization chart submitted with its SOQ (when Respondent), indicating that no changes have been made to such chart since the submission of the SOQ, or (b) an organizational chart indicating the proposed participating team member firms and identified personnel (including Key Personnel and their proposed role in the Project and reporting structures) and reflecting any granted approvals of requested changes by GDOT in accordance with Section 2.7 (either, the "Organizational Chart"). All Key Personnel must be identified by name and team member firm, and his/her function as indicated in the RFQ at Section V.B.I thereof. The Organizational Chart must be on one 11x17-inch sheet and will not count towards the Technical Proposal page limit.

C.6. No Contract Sum Information in Technical Proposal

NO PART OF THE TECHNICAL PROPOSAL, INCLUDING THE PROPOSAL SCHEDULE, SHOULD CONTAIN THE PROPOSER'S PROPOSED CONTRACT SUM OR OTHER INFORMATION THAT WOULD ALLOW SUCH CONTRACT SUM TO BE CALCULATED.

EXHIBIT D

PRICE PROPOSAL AND PROPOSAL BOND SUBMITTAL REQUIREMENTS

The Proposer shall submit the Price Proposal in accordance with this Exhibit D. The Price Proposal shall be separated, organized as directed under this Exhibit D, and labeled as directed under Exhibit H.

Provide electronic tabbing to separate any Financial Statements and the Other Financial Capacity Information (if required) from Form D, Form F, and (d)Form X.

D.1. General Instructions

This Exhibit D describes the required information and submission format for the Price Proposal.

The Proposer shall submit the information required by this Exhibit D in the format specified herein. The Proposer shall not amend the order or change the section headings. Each component of the Price Proposal shall be clearly titled and identified.

All forms named herein are attached to the ITP. All blank spaces in the Proposal forms must be filled in as appropriate. No change(s) should be made to the original text or structure of the Proposal forms apart from minor, non-substantive clerical and formatting changes.

D.2. Format of Price Proposal

All financial information provided in the Price Proposal shall be in U.S. Dollar currency only and all amounts shall be clearly identified as nominal dollars.

If there are any differences between the sum of the individual line amounts and totals, the individual line amounts will prevail.

If required due to the Proposer being a single purpose entity or joint venture, Financial Statements and Other Financial Capacity Information shall be submitted electronically in accordance with Section D.3.1 and Section D.3.2. Note that the Financial Statements and Other Financial Capacity Information, if applicable, shall be submitted within three Business Days following Letting in accordance with Section 6.2.1.

ALL REQUIREMENTS OF EXHIBIT D SHALL BE SUBMITTED IN A SEPARATE ELECTRONIC PACKAGE LABELED IN ACCORDANCE WITH THE DIRECTIONS UNDER EXHIBIT H.

NO OTHER PART OF THE PROPOSAL SHOULD CONTAIN THE PROPOSER'S PROPOSED CONTRACT SUM OR OTHER INFORMATION THAT WOULD ALLOW SUCH CONTRACT SUM TO BE CALCULATED.

D.3. Contents of Price Proposal

D.3.1 Financial Statements (For Single Purpose Entities, Joint Ventures, and Guarantor(s) Only)

Subject to Section D.3.2(b) below, the Price Proposal shall include electronic financial statements to the extent available for the Proposer, the Participating Members, any Guarantor(s), and, if applicable, any joint venturers that include Major Non-Participating Members, for all periods subsequent to those statements previously submitted to GDOT during the procurement.

These subsequent statements must be audited by a certified public accountant in accordance with U.S. Generally Accepted Accounting Standards (GAAP), International Financial Reporting Standards (IFRS) or accompanied by a letter in the form specified in paragraph (f) below.

Financial statements shall be provided in U.S. Dollars where practicable, but financial statements in other currencies will be allowed if the conversion rates for each exhibit are clearly stated and can be confirmed. If audited financial statements are not available for a Participating Member, Major Non-Participating Member, or Guarantor(s), the Price Proposal shall include unaudited financials for such member, certified as true, correct and complete by the chief financial officer or treasurer of the entity.

If audited financial statements are not available, the Price Proposal shall include unaudited financial statements for such entity, certified as true, correct and accurate by the chief financial officer or treasurer of the entity.

The financial statements, whether for the most recent completed fiscal year or for the period since the most recent completed fiscal year, must include the following:

(a) Opinion Letter (Auditor's Report).

(b) Balance Sheet.

(c) Income Statement.

(d) Statement of Changes in Cash Flow.

(e) Notes to the financial statements.

(f) If financial statements are prepared in accordance with principles other than U.S. GAAP or IFRS, a letter must be provided from the certified public accountant of the applicable entity, addressing the areas of the financial statements that would be affected by a conversion to U.S. GAAP or IFRS, and the financial impact thereof. A restatement of the financial information in U.S. GAAP or IFRS is not required.

D.3.2 Other Financial Capacity Information (For Single Purpose Entities, Joint Ventures, and Guarantor(s) Only)

(a) **Newly Formed Entity** - If the Proposer is a newly formed entity and does not have independent financial statements, financial statements for the Participating Members and Major Non-Participating Members (if any) and, if applicable, any joint ventures making up the Major Non-Participating Members, shall be sufficient (and the Proposer shall expressly state that the Proposer is a newly formed entity and does not have independent financial statements – but shall nonetheless provide sufficient background information on such entity – i.e., organizational, legal, ownership structure, initial funding, purpose, etc.).

(b) **SEC Filings** - If any entity is required under the terms of this RFP to submit financial information also files reports with the Securities and Exchange Commission (SEC), then such reports shall be provided through a copy of their annual report on Form 10-K. Also, for all subsequent quarters, provide a copy of any report filed on Form 10-Q or Form 8-K which has been filed since the latest filed 10-K. If any of these reports have previously been submitted to GDOT during the procurement, they are not required to be resubmitted.

(c) **Credit Ratings** - Credit ratings must be supplied for the Proposer, each Participating Members, each Major Non-Participating Members (if any), each joint venturer making up the Major Non-Participating Members (if applicable), and each Guarantor, to the extent such entities have credit ratings. If no credit ratings exist, include a statement specifying that no credit ratings exist for that entity. If the ratings have been submitted and not changed (and there has not been a change on the rating outlook either, i.e., positive, neutral or negative), there is no need to resubmit.

(d) **Material Changes in Financial Condition -** A letter from the chief financial officer ("**CFO**") or treasurer of the Proposer, each Participating Member, each Major Non-Participating Member (if any), each joint venturer making up the Major Non-Participating Members (if applicable) and each Guarantor, in each case providing information on any material changes in financial condition of such entity and, if applicable, its direct or indirect parent entities, since submission of the SOQs and those that are pending. Additionally, Proposers shall be required to provide updated financial information following the Proposal Due Date if the dissemination of such information is permitted by Law.

At the discretion of GDOT, any failure to disclose a prior or pending material change may result in disqualification from further participation in the selection process. In instances where a material change has occurred, or is anticipated, the affected entity shall provide a statement describing each material change in detail, the likelihood that the developments will continue during the period of performance of the project development, and the projected full extent of the changes likely to be experienced in the periods ahead. Estimates of the impact on revenues, expenses and the change in equity shall be provided separately for each material change as certified by the CFO or treasurer. References to the notes in the financial statements are not sufficient to address the requirement to discuss the impact of material changes. The affected entity shall also provide a discussion of measures that would be undertaken to insulate the project from any

recent material adverse changes, and those currently in progress or reasonably anticipated in the future. If the financial statements indicate that expenses and losses exceed income in the periods between submission of the SOQs and the most recent completed periods (even if there has not been a material change), the affected entity shall provide a discussion of measures that will be undertaken to make the entity profitable in the future and an estimate of when the entity will be profitable.

The following list identifies certain items that GDOT would consider a material change in financial condition. This list is intended to be indicative only.

List of Indicative Material Changes:

1. An event of default or bankruptcy involving the affected entity, a related business unit within the same corporation, or the parent corporation of the affected entity.

2. A downward change in tangible net worth of 10% of shareholder equity.

3. A sale, merger or acquisition exceeding 10% of the value of shareholder equity prior to the sale, merger or acquisition which in any way involves the affected entity, a related business unit, or parent corporation of the affected entity.

4. A downward change in credit rating for the affected entity, a related business unit, or parent corporation of the affected entity.

5. Non-payment of any debt service.

6. Inability to meet conditions of loan or debt covenants by the affected entity, a related business unit or parent corporation of the affected entity which has required or will require a waiver or modification of agreed loan stipulations, or additional credit support from shareholders or other third parties.

7. The affected entity, a related business unit in the same corporation, or the parent corporation of the affected entity either: (i) incurred a net operating loss; (ii) sustained charges exceeding 5% of the then shareholder equity due to claims, changes in accounting, write-offs or business restructuring; or (iii) implemented a restructuring/reduction in salaried personnel exceeding 200 positions or involving the disposition of assets exceeding 10% of the then shareholder equity.

8. Other events known to the affected entity, a related business unit or parent corporation of the affected entity which represents a material change in financial condition since submission of the SOQs or may be pending for the next reporting period.

(e) **Letter of Parent Company Support -** Where a Participating Member or Major Non-Participating Member of a Proposer team is a subsidiary of another company, provide a letter from the parent company, signed by a parent company officer,

confirming their intention to support the subsidiary's participation in the Project. This letter must clearly state that the parent company will provide the financial support and human resources needed by the subsidiary to successfully carry out the Project.

For avoidance of doubt, the letters of parent company support are not the guaranties, as may be required by GDOT pursuant to Section 5.3.

(f) **Off-Balance Sheet Liabilities** - A letter from the CFO, treasurer or certified public accountant for each entity for which financial information is submitted, identifying all material off balance sheet liabilities.

(g) **Non-recourse financing -** A letter from the CFO, treasurer or certified public accountant for each entity for which financial information is submitted, identifying the amount of non-recourse financing on the balance sheet.

The information required under this Section D.3.2 shall be packaged separately for each separate entity with a cover sheet identifying the name of the organization and its role in the Proposer's organization (i.e., Participating Member, Guarantor, etc.).

D.3.3 Insurance Letter – Form X

The Price Proposal shall include a letter from an insurer meeting the management and financial size category rating required in the DBA, dated no earlier than the Setting Date, substantially in the form of Form X.

D.3.4 Proposal Bond – Form D

In accordance with Section 4.6, the Price Proposal shall include a properly executed Proposal Bond in the amount described in the form provided in Form D. Note that a copy of Form D is to be submitted electronically, and the executed Form D shall be submitted within three Business Days following Letting in accordance with Section 6.2.1.

D.3.5 Reserved

D.3.6 Contract Sum Information - Form F

The Proposer shall indicate its proposed Proposal SOV and resulting Contract Sum on Form F.

D.3.7 Reserved

D.4. Verification

Each Proposer shall satisfy itself as to the costs and tax consequences of entering into the DBA. GDOT makes no representations or warranties, express or implied, and assumes no liability whatsoever, with respect to costs or the consequences of federal or state income tax treatment of Design-Builder, or any member of the Design-Build Team, under the DBA.

EXHIBIT E

EVALUATION CRITERIA AND WEIGHTING

The maximum score for a Proposal will be 1000 points. This will be split as 75% Price Proposal and 25% Technical Proposal. Breakdowns and calculations for the Price and Technical Proposal scoring are described below.

E.1. Technical Proposal Evaluation Criteria (Maximum 250 Points):

E.1.1 Technical Proposal Scoring Formula

The Maximum Technical Proposal Score = 250.

E.1.2 Technical Proposal Evaluation Sections:

Following are the areas and maximum available points for each area that will be evaluated as part of the Technical Proposal scoring.

Table E-1: Technical Section Available Points

Technical Section	Maximum Score
Overall Project Completion (Numerical)	100
Overall Project Approach (Adjectival)	50
Construction Staging and Traffic Management (Adjectival)	50
Overall Approach to Quality (Adjectival)	50
Total Score ("Technical Proposal Score")	250

E.1.3 Overall Project Completion (Numerical) – (Maximum 100 Points)

Achieving Substantial completion of the Project is of high importance to GDOT. Proposals will be scored as follows:

$$\text{Score} = \frac{(\text{Schedule Duration}_{\text{Max Allowable}} - \text{Schedule Duration}_{\text{Respective Proposer's}})}{(\text{Schedule Duration}_{\text{Max Allowable}} - \text{Schedule Duration}_{\text{Most Aggressive}})} \text{ X } \text{Maximum Available Points}$$

The Proposer with the shortest duration to achieve substantial completion and as identified on Form M will be awarded a maximum of 100 points. All other teams' scores will be prorated against the highest scoring team. This will be measured in days.

E.1.4 Overall Project Approach (Adjectival) – (Maximum 50 Points)

(a) The degree to which the Proposer has a well-defined approach to delivery of the Project, including coordinating work, minimizing impacts, addressing identified

risks and challenges with mitigation strategies, and successfully delivering the Project.

(b) The degree to which the Proposer credibly demonstrates an approach and plan to achieve Substantial Completion and Interim Milestones, if applicable.

(c) The degree to which the Proposer outlines a strategic approach for stakeholder involvement, effective interfaces with utility agency owners, and incorporates a detailed strategy that keeps the public informed and encompasses public outreach methods.

(d) The degree to which the Proposer demonstrates a thoughtful, effective (informal) dispute resolution and partnering process, clear lines of responsibility, appropriate and well-defined roles that provide clear communication and an efficient and effective interface between the Proposer, GDOT and its representatives, and adjacent project contractors.

See Section C1.1 and C.1.2 for details regarding the specific information required concerning this factor to be submitted as part of the Technical Proposal Submittal Requirements.

E.1.5 Construction Staging and Traffic Management (Adjectival) (Maximum 50 Points)

(a) The degree to which the Proposer's yard locations, work areas and work sequencing demonstrate the minimization of impacts to the traveling public (including to adjacent routes and potential further degradation of existing infrastructure);

(b) The extent to which safe ingress and egress to and from the Work zone during construction demonstrates minimizing impacts to the traveling public and the natural environment; and

(c) The degree to which the Proposer's preliminary Construction Staging and Traffic Management Plan utilizes safe, effective strategies to minimize the MOT impacts to corridor motorists and reduce any lane or shoulder closures, or detour routes, required.

See Section C.1.3 for details regarding the specific information required concerning this factor to be submitted as part of the Technical Proposal Submittal Requirements.

E.1.6 Overall Approach to Quality (Adjectival) – (Maximum 50 Points)

(a) The degree to which Proposer demonstrates how the design meets identified performance outcomes, including detailing how performance outcomes will be tracked and used to guide decision-making and implement improvements throughout the project.

(b) The degree to which the Proposer demonstrates innovative and thoughtful solutions and considerations to achieving the Project, including identifying any non-standard

methods, technologies, or design elements, and any other items that improve safety, construction efficiency, or project delivery.

(c) The extent to which the Proposers addresses how the design and construction approach considers the full life cycle of the infrastructure, with a focus on minimizing long-term maintenance costs for GDOT.

(d) The extent to which the Proposer's plan minimizes environmental impacts through thoughtful design and construction practices, including detailing how to reduce the need for mitigation credits by avoiding sensitive areas, using sustainable materials, or applying low-impact construction methods.

See Section C.1.4 for details regarding the specific information required concerning this factor to be submitted as part of the Technical Proposal Submittal Requirements.

E.2. Public Opening of Price Proposals

If a Proposer's Administrative Information Submittal and a Technical Proposal are each responsive and also pass all of their respective pass/fail criteria, then the Proposer's Price Proposal will be part of the public opening of all such Price Proposals.

E.3. Price Proposal (Form F) (Maximum 750 Points)

GDOT will score the Contract Sum in accordance with the following formula:

Price Proposal Score = [(Lowest Price Proposal submitted) ÷ (Respective Proposer's Price Proposal)] x Maximum Price Proposal Score

Where:

Maximum Price Proposal Score = 750

E.4. Best Value Score (Maximum 1000 Points)

GDOT will combine the Technical Proposal and Price Proposal Scores using the following formula:

Best Value Score = Technical Proposal Score + Price Proposal Score

GDOT will enter the Technical Proposal Scores and Price Proposal Scores for each responsive Proposal passing all pass/fail criteria (Administrative Information Submittal and Technical Proposal) into the Best Value Evaluation Spreadsheet for purposes of calculating the Best Value Scores.

The Proposer with the highest Best Value Score will be the Apparent Successful Proposer.

E.5. Pass/Fail; Price Reasonableness

If responsive under Section 5.1.2, the Price Proposal of the Apparent Successful Proposal will then be evaluated on a pass/fail basis under Section 5.1.5, and thereafter,

if so elected by GDOT in its sole discretion, undergo a price reasonableness assessment under Section 6.1.

EXHIBIT F

LIST OF GDOT PROJECT TEAM

A list of restricted firms (including any affiliates) include:

- ARCADIS U.S., Inc.
- AtlasTechnical Consultants, Inc.
- Blue Cypress Consulting, LLC
- Corblu Ecology group, LLC
- Dranref LLC, d/b/a Business Transformation Group
- EGSci
- Grice Consulting Group, LLC
- Gude Management Group
- HNTB Corporation
- JAT Consulting Services, Inc.
- Kristine Fallon Associates, Inc.
- Lucie Content
- Lumenor Consulting
- Luster National, Inc.
- New South Associates
- Platinum Geomatics, LLC
- RKUA, LLC
- Rohadfox Construction Controls Services Corporation
- Southeastern Engineering, Inc.

EXHIBIT G

RESERVED

EXHIBIT H

PDMS USE INSTRUCTIONS

GDOT will use a PDMS for the purpose of exchanging certain information pertaining to the procurement. Instructions for obtaining access to the PDMS were previously provided to Proposers under the preceding RFQ. This Exhibit H includes instructions related to the use of the PDMS. GDOT reserves the right to modify its use of the PDMS during the procurement. In such an event, GDOT will notify Proposers of any change to the required use.

GDOT will use the PDMS for the following activities:

- issuing notices related to the Project to all Proposers;
- issuing the RFP and any Amendment or update thereto;
- providing Project Standards on the Setting Date;
- providing Reference Information Documents;
- responding to Proposer Questions;
- responding to ATCs; and
- issuing requests for clarification.

Proposers shall use the PDMS for the following activities:

- viewing the RFP and other Project information provided by GDOT;
- submitting agendas and other Project communications to GDOT;
- submitting requests to change proposer's organization;
- submitting ATCs;
- submitting Proposer Questions;
- submitting the Proposal;
- responding to requests for clarification; and
- if the for Apparent Successful Proposer, submitting all documents listed in Section 6.2.1.

1. NAMING CONVENTION

Proposers shall name all files using only standard English (United States) alphabet characters, Arabic numerals, underscore, or dashes. File names shall not exceed 100 characters and shall not include spaces or other special characters. As a general guide "_" should be used as a subject separator and "-" should be used as a separator between each word. Proposers can shorten or abbreviate the Proposer's name, as may be required, to keep to the 100 character limit for all submissions where the file name is prescribed within this Instructions to Proposers. Below is a legend of the naming convention prescribed in this Exhibit H.

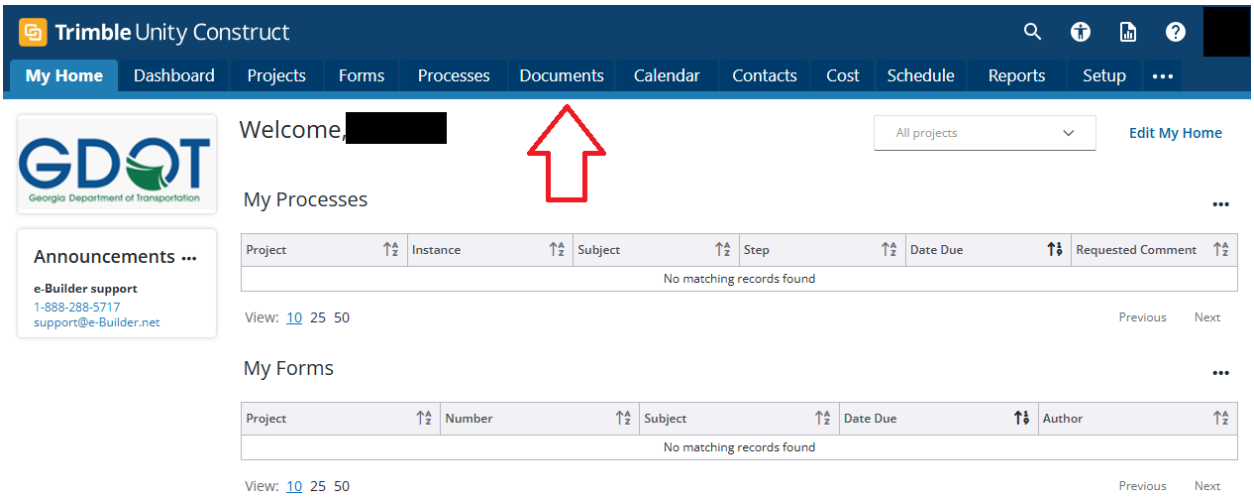
Prescribed Value	Proposer Entered Value	Notes:
YYYY	4 digit year (ex. 2022)	For correspondence, ATC, and other submittals, this should be the date submitted. For agendas, this should be the date of the meeting.
MM	2 digit month (ex. 02 for February)	
DD	2 digit day	
###	3 digit number (ex. 001, 002, … 333)	Utilize 3 digits for all values, even for 099 and under.

2. ACCESSING THE PDMS FOLDERS

To access the PDMS follow the steps below:

(a) Enter the username and password and select the login button on the login page. This will take you to the homepage.

(b) Click on the "Documents" tab in the ribbon at the top of the page.

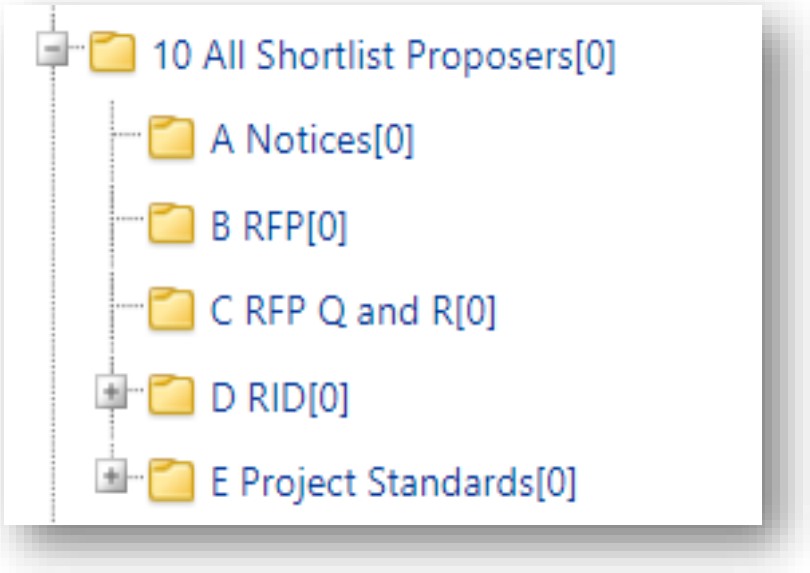


(c) After clicking the "Documents" tab, the project identification number and name of the Project will appear as an available project.

(d) Select the Project to view available folders and documents for the Project.

3. VIEWING THE RFP AND OTHER PROJECT INFORMATION

Once you have selected the Project, the Project folders will appear as shown in the image below.



A. NOTICES

GDOT will provide notices and other correspondence for all Proposers to the "// A Notices /" folder.

B. RFP

GDOT will upload the Request for Proposals and Amendment(s) thereto to the "// B RFP /" folder.

C. RFP QUESTIONS AND RESPONSES

GDOT will provide responses to RFP questions for all Proposers to the "// C RFP Q and R /" folder.

D. RID

GDOT will provide RIDs for all Proposers to the subfolders located within the "// D RID /" folder.

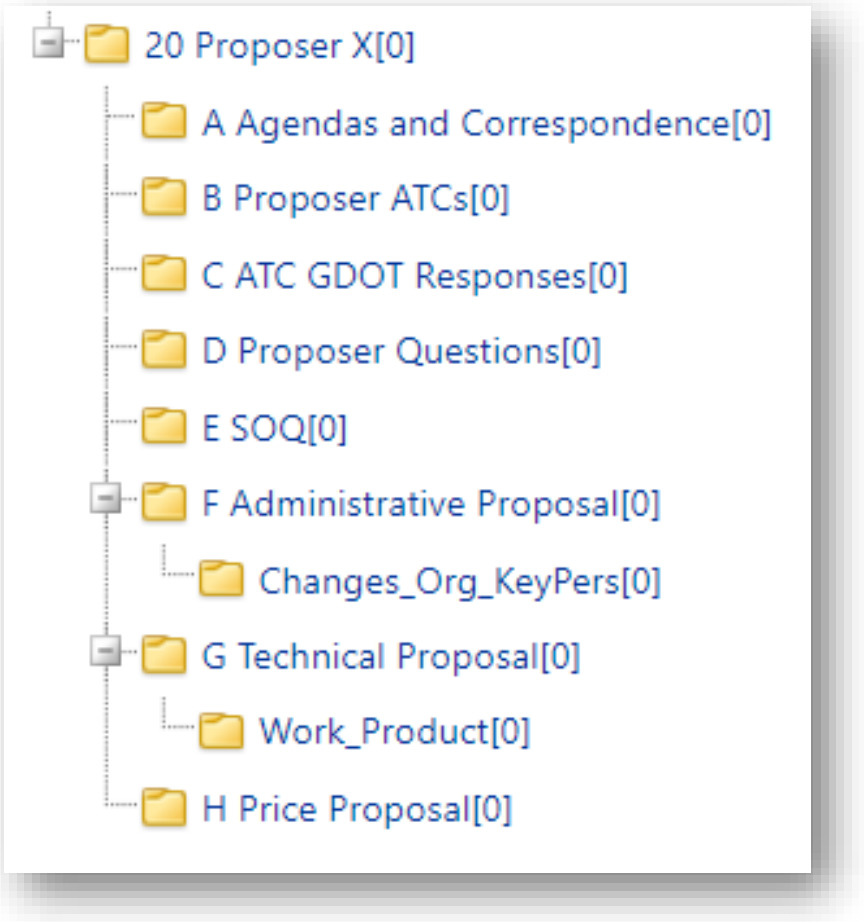
E. PROJECT STANDARDS

GDOT will provide Project Standards on the Setting Date, as stated in TP Attachment 1-4 (Project Standards), to the respective subfolders located within "// E Project Standards /" folder.

4. PROPOSER FOLDERS

All information that is submitted by Proposers and directly to Proposers shall be uploaded to a folder within the Proposer folder. In the image in below, this is shown as "// 20 Proposer X /". This folder has been renamed for each Proposer in accordance with the distinct name provided

by the affiliated Respondent in the PDMS Access Request. Permissions have been set so that information in the individual Proposer folder is only viewable by that Proposer.



A. AGENDAS AND CORRESPONDENCE

Correspondence, agendas, requests for clarification (and responses), and other project communication shall be uploaded to the "// A Agendas and Correspondence /" folder.

(a) Correspondence shall be named using the following naming convention: "[Project identification number]_[Project name]_[YYYYMMDD]_COR-[Description]_[Proposer Name or Acronym]".

(b) Agendas shall be named using the following naming convention: "[Project identification number]_[Project name]_[YYYYMMDD]_AGENDA-[Description]_[Proposer Name or Acronym]"

(c) Responses to requests for clarification shall be named using the following naming convention: "[Project identification number]_[YYYYMMDD]_RFC[###]-Response_[Description]_[Proposer Name or Acronym]".

B. PROPOSER ATCS

ATCs shall be uploaded to the "// B Proposer ATCs /" folder. GDOT will download the ATC from this folder to develop a response to the ATC. See Section 3.0 for additional requirements.

Proposers have permission to create sub-folders within this folder; each new ATC shall have its own subfolder. Name each subsequent ATC subfolder with sequential numbering. (For example, name the first ATC subfolder "ATC_001" and the second ATC subfolder "ATC_002"). If an ATC requires a resubmittal from GDOT's ATC response, place the resubmittal within the same folder as the initial ATC submittal. Files uploaded to the ATC subfolders shall be named using the following naming convention:

"[Project identification number]_[YYYYMMDD]_ATC[###]_Formal_[Description]_[Proposer Name or Acronym]"

For resubmitted ATCs place an "A", "B", "C", etc. after the "ATC[###]" in alphabetical order for each resubmittal as it pertains to that particular ATC.

C. ATC GDOT RESPONSES

GDOT will upload ATC responses to the "C ATC GDOT Responses" folder. The ATC responses are only able to be viewed and downloaded by the Proposer that submitted the corresponding ATC.

D. PROPOSER QUESTIONS

Questions for submission by the Proposer shall be uploaded to the "// D Proposer Questions /" folder and shall be named "[Project identification number]_[Project name] _[YYYYMMDD]_RFP-[###-###]_[Proposer Name or Acronym]. See Section 2.3 for additional requirements.

E. SOQ

This is the SOQ files submitted by the Proposer during the RFQ phase of the Project. These files can only be viewed and downloaded by the Proposer and cannot be edited.

F. ADMINISTRATIVE INFORMATION SUBMITTAL

The Administrative Information Submittal shall be uploaded to the "// F Administrative Proposal /" folder and shall be named:

"[Project identification number]_[Proposer Name or Acronym]_Admin-Vol1"

If [trade secrets are provided in the Administrative Information Submittal, the Proposer shall upload a separate Submittal in accordance with Section 4.2 to the "// F Administrative Proposal /" folder and shall be named:

"[Project identification number]_[Proposer Name or Acronym]_Admin-Vol1_ TRADE-SECRET-REDACTED"

Regarding Changes in Proposer's Organization and Key Personnel for submission by the Proposer shall be uploaded to the "// F Administrative Proposal / Changes_Org_KeyPers /" folder.

(a) The Changes in the the Proposer's Organization submittal shall be named "[Project identification number]_[Project name]_[YYYYMMDD]_CPO-[short description of change]_[Proposer Name or Acronym]"

(b) The Changes in Key Personnel submittal shall be named "[Project identification number]_[Project name] _[YYYYMMDD]_CKP-[short description of change]_[Proposer Name or Acronym]"

Regarding all other Submittals in Exhibit B, submissions shall be named "[Project identification number]_[Project name]_[YYYYMMDD]_[title of submittal]_[Proposer Name or Acronym]" and uploaded to the "// F Administrative Proposal /" folder.

G. TECHNICAL PROPOSAL

The Technical Proposal submittal shall be uploaded to the "// G Technical Proposal /" folder and shall be named:

"[Project identification number]_[Proposer Name or Acronym]_Tech-Vol2"

If trade secrets are provided in the Technical Proposal submittal the Proposer shall upload a separate Proposal in accordance with Section 4.2 to the "// G Technical Proposal /" folder and shall be named:

"[Project identification number]_[Proposer Name or Acronym]_Tech-Vol2_TRADE-SECRET-REDACTED"

[Work Product for submission by the Proposer shall be uploaded to the "// G Technical Proposal / Work_Product /" folder. The submittal shall be named:

"[Project identification number]_[YYYYMMDD]_WP-[short description of work product]_[Proposer Name or Acronym]".]

H. PRICE PROPOSAL

The Price Proposal submittal shall be uploaded to the "// H Price Proposal /" folder and shall be named:

"[Project identification number]_[Proposer Name or Acronym]_Price-Vol3"

Regarding all other Submittals in Exhibit D, submissions shall be named "[Project identification number]_[Project name]_[YYYYMMDD]_[Form number/letter]_[title of submittal]_[Proposer Name or Acronym]" and uploaded to the "// H Price Proposal /" folder.

5. TRAINING

GDOT will provide training for use of the PDMS upon Proposer request. To request training, contact the GDOT Contracting Officer.

FORM A
PROPOSAL LETTER

PROPOSER:

Proposal Date: _____, 20__

Georgia Department of Transportation
One Georgia Center
600 West Peachtree Street, NW
Atlanta, Georgia 30308

The undersigned (the **"Proposer"**) submits this proposal (this **"Proposal"**) in response to that certain Request for Proposals (the "**RFP**") issued by the Georgia Department of Transportation (**"GDOT"**), an agency of the State of Georgia, dated June 12, 2025, as amended, to develop the I-75 at Bethlehem Road Interchange Project (the "**Project**"), as more specifically described herein and in the documents provided with the RFP. Initially capitalized terms not otherwise defined herein shall have the meanings set forth in the RFP.

In consideration for GDOT supplying us, at our request, with the RFP and agreeing to examine and consider this Proposal, the undersigned undertakes [jointly and severally] ***[if the Proposer is a joint venture or association other than a corporation, limited liability company or a partnership, leave in the words "jointly and severally," otherwise delete]***:

(a) to keep this Proposal open for acceptance for a period of 90 calendar days without unilaterally varying or amending its terms and without any member or partner withdrawing or any other change being made in the composition of the partnership/joint venture/limited liability company/consortium on whose behalf this Proposal is submitted, without first obtaining the prior written consent of GDOT, in GDOT's sole discretion; and

(b) to provide security (including bonds and insurance) for the due performance of the Design-Build Agreement (the "**DBA**") as stipulated therein.

If selected by GDOT, the Proposer agrees to: (a) enter into the DBA and satisfy all other conditions to execute the DBA as set forth in Section 6.0 of the Instructions to Proposers (as amended, if applicable, the **"ITP"**) included in the RFP; and (b) perform its obligations as set forth in the Design-Build Documents, including compliance with all commitments contained in this Proposal.

The following individual person is authorized to communicate with, to send and receive correspondence from, and to enter into negotiations with GDOT, in each case on behalf of Proposer and the proposed Design-Build Team in connection with this RFP, the Project, and the DBA:

_____, who shall be Proposer's (and the proposed Design-Build Team's) "**Authorized Representative**".

Enclosed, and by this reference incorporated herein and made a part of this Proposal, are the following Proposal components:

- Administrative Information Submittal;
- Technical Proposal; and
- Price Proposal.

The Proposer acknowledges receipt, understanding and full consideration of the following:

- ***[list any amendments to the RFP]***

The Proposer certifies the following:

1. the Proposal is submitted without reservation, qualification, assumptions or conditions;

2. the Proposer has carefully examined and is fully familiar with all of the RFP Documents and is satisfied that the RFP Documents provide sufficient detail regarding the Design-Builder's obligations and do not contain internal inconsistencies, errors, or omissions;

3. the Proposer has requested clarification or interpretation with respect to any perceived deficiency in or omission from the RFP Documents;

4. the Proposer has carefully checked all the words, figures and statements in the Proposal;

5. the Proposer has received a notice from GDOT dated [_____]**[Proposer to enter date of GDOT notice]** setting forth the base index values for the Base Materials, and the Proposer concurs with the values that have been provided as the base index values in completing Proposer's Form AA submission;

6. the Proposer has conducted such other field investigations and additional design development as is prudent and reasonable in preparing this Proposal; and

7. the Proposer has notified GDOT of any unusual site conditions observed prior to the date hereof.

By signature below and submittal of Form F with the attached Proposal Schedule and Form M with the Technical Proposal, the Proposer hereby certifies it has reviewed its Proposal Schedule and Proposal estimates for the Project and that all Work, including Early Portions of the Work, can be completed within the Milestone Deadlines, including all Interim Milestone Deadlines, Substantial Completion Deadline and Final Acceptance Deadline.

Proposer represents that all statements made in the Statement of Qualifications previously delivered to GDOT by the Proposer are true, correct and accurate as of the date hereof, except as otherwise specified in the enclosed Proposal and Proposal forms. The Proposer agrees that such Statement of Qualifications, except as modified by the enclosed Proposal and Proposal forms, is incorporated as if fully set forth herein.

The Proposer understands that GDOT is not bound to award the DBA to the Proposer submitting the Proposal with the lowest proposed bid, the highest scoring Proposal, or any Proposal GDOT may receive.

Except for any Stipulated Fee that may be paid to the Proposer in accordance with the ITP, the Proposer further understands that all costs and expenses incurred by it in preparing this Proposal and participating in the RFP process will be borne solely by the Proposer.

The Proposer acknowledges they have read and understand DBA Exhibit 17 and the Liquidated Damages and Nonrefundable Deductions which may be imposed. The amounts of Liquidated Damages and Nonrefundable Deductions represent good faith estimates as to the actual potential damages that GDOT would incur as a result for failure to meet requirements of the DBA with associated Liquidated Damages and Nonrefundable Deductions.

The Proposer agrees that GDOT will not be responsible for any errors, omissions, inaccuracies or incomplete statements in the Proposal.

The Proposal is valid for the duration of the period described in Section 4.5 of the ITP.

The Proposal shall be governed by and construed in all respects according to the laws of the State of Georgia.

Proposer's business address:

_____
(No.) (Street) (Floor or Suite)

_____
(City) (State or Province) (ZIP or Postal Code) (Country)

State or Country of Incorporation/Formation/Organization: _____

[insert appropriate signature block from following pages]

1. Sample signature block for corporation or limited liability company:

[Insert the Proposer's name]

By: _____

Print Name: _____

Title: _____

2. Sample signature block for partnership or joint venture:

[Insert the Proposer's name]

By: *[Insert general partner's or member's name]*

By: _____

Print Name: _____

Title: _____

[Add signatures of additional general partners or members as appropriate]

3. Sample signature block for attorney in fact:

[Insert the Proposer's name]

By: _____

Print Name: _____

Attorney in Fact

[insert appropriate signature block from this page including additional requirements]

ADDITIONAL REQUIREMENTS FOR SINGLE PURPOSE ENTITIES AND JOINT VENTURES ONLY:[1]

Describe in detail the legal and organizational structures of the entity (corporation, partnership, joint venture or limited liability company) making the Proposal. Include the following as applicable:

(a) Provide a table or tables showing the legal and organizational structure of the anticipated Design-Build Team and any Major Non-Participating Members entity. This table shall describe the role of all Participating Members, Major Non-Participating Members, and Contractors.

[1] Please note that clauses (b) and (c) of these "additional requirements" do not apply if the Proposer is a yet-to-be-formed entity.

(b) Provide the following as noted for corporation, partnership, joint venture or limited liability company.

1. If the Proposer (or any member, partner or joint venturer of the Proposer) is a **corporation** or includes a corporation as a joint venturer, partner or member, provide the following:

   A. the state or country of incorporation in addition to the business address;

   B. articles of incorporation and bylaws for the Proposer and each corporation certified by an appropriate individual; and

   C. with respect to authorization of execution and delivery of the Proposal and validity thereof, provide evidence in the form of a resolution of its governing body certified by an appropriate officer of the corporation.

2. If the Proposer (or any member, partner or joint venturer of the Proposer) is a **partnership** or includes a partnership as a joint venturer, partner or member, provide the following:

   A. the state or country of formation;

   B. the full names and addresses of all partners and the equity ownership interest of each entity, provide the incorporation, formation and organizational documentation for the Proposer and each general partner (partnership agreement and certificate of partnership for a partnership, articles of incorporation and bylaws for a corporation, operating agreement for a limited liability company and joint venture agreement for a joint venture) certified by an appropriate individual; and

   C. with respect to authorization of execution and delivery of the Proposal and validity thereof, provide evidence in the form of a partnership resolution and a general partner resolution (as to each general partner) providing such authorization, in each case, certified by an appropriate officer of the general partner.

3. If the Proposer (or any member, partner or joint venturer of the Proposer) is a **joint venture** or includes a joint venture as a joint venturer, partner or member, provide the following:

   A. the state or country of organization;

   B. the full names and addresses of all joint venturers and the equity ownership interest of each entity, provide the incorporation, formation and organizational documentation for the Proposer and each joint venturer (partnership agreement and certificate of partnership for a partnership, articles of incorporation and bylaws for a corporation, operating agreement for a limited liability

company and joint venture agreement for a joint venture) certified by an appropriate individual; and

C. with respect to authorization or execution and delivery of the Proposal and validity thereof, provide evidence in the form of a resolution of each joint venturer, certified by an appropriate officer of such joint venturer. If the Proposer is a joint venture or a partnership, the Proposal must be executed by all joint venture members or all general partners, as applicable.

4. If the Proposer (or any member, partner or joint venturer of the Proposer) is a **limited liability company** or includes a limited liability company as a joint venturer, partner or member, provide the following:

A. the state or country of organization;

B. the full names and addresses of all members and the equity ownership interest of each entity, provide the incorporation, formation and organizational documentation for the Proposer and each member (partnership agreement and certificate of partnership for a partnership, articles of incorporation and bylaws for a corporation, operating agreement for a limited liability company and joint venture) certified by an appropriate individual;

C. with respect to authorization of execution and delivery of the Proposal and validity thereof, provide evidence in the form of a limited liability company resolution and a managing member(s) resolution providing such authorization, certified by an appropriate officer of the managing member(s). If there is no managing member, each member shall provide the foregoing information; and

D. attach evidence to the Proposal and to each letter that the person signing has authority to do so.

(c) GDOT reserves the right to be provided and to review and evaluate the Proposer's[2] partnership agreement, limited liability company operating agreement, and joint venture agreement, as applicable, which in any case must include an express provision satisfactory to GDOT, in its sole discretion, stating that, in the event of a dispute between or among joint venturers, partners or members, as applicable, no joint venturer, partner or member, as applicable, shall be entitled to stop, hinder or delay work on the Project. If required by GDOT, Proposers shall submit the applicable agreement to GDOT and identify on a cover page where in the agreement the provision can be found.

[2] Please note that clauses (b) and (c) of these "additional requirements" do not apply if the Proposer is a yet-to-be-formed entity.

FORM B
NON-COLLUSION AFFIDAVIT*

STATE OF _____)

)SS:

COUNTY OF _____)

Each of the undersigned, being first duly sworn, deposes and says that:

A. _____ [name] is the

_____ [title] of

_____[firm] and

_____[name] is the

_____[title] of

_____[firm], which

entity(ies) are the _____[relationship to Proposer]

of _____, the entity making the

foregoing Proposal.

B. The Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, joint venture, limited liability company or corporation; the Proposal is genuine and not collusive or a sham; the Proposer has not directly or indirectly induced or solicited any other Proposer to put in a false or sham Proposal, and has not directly or indirectly colluded, conspired, connived or agreed with any Proposer or anyone else to put in a sham Proposal or refrained from proposing; the Proposer has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the prices of the Proposer or any other Proposer, or to fix any overhead, profit or cost element included in the Proposal, or of that of any other Proposer, or to secure any advantage against GDOT or anyone interested in the proposed DBA; all statements contained in the Proposal are true; and, further, the Proposer has not, directly or indirectly, submitted its prices or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, joint venture, limited liability company, organization, Proposal depository or any member, partner, joint venture member or agent thereof to effectuate a collusive or sham Proposal.

C. The Proposer will not, directly or indirectly, divulge information or data regarding the price or other terms of its Proposal to any other Proposer, or seek to obtain information

or data regarding the price or other terms of any other Proposal, until after award of the DBA or rejection of all Proposals and cancellation of the Request for Proposals.

* Initially capitalized terms not otherwise defined herein shall have the meanings ascribed thereto pursuant to the Instructions to Proposers within the Request for Proposals for the Project.

[*signature page follows*]

_____
(Signature) (Seal)[1]

_____
(Name Printed)

_____
(Title)

Subscribed and sworn to before me this ___ day of _____, 20__.

_____
Notary Public in and for
said County and State

[Notary Stamp]

My commission expires: _____.

_____
(Signature) (Seal)

_____
(Name Printed)

_____
(Title)

Subscribed and sworn to before me this ___ day of _____, 20__.

_____
Notary Public in and for
said County and State

[Notary Stamp]

My commission expires: _____.

[Proposers shall duplicate or modify this form as necessary so that it accurately describes the entity making the Proposal and so that it is signed by Participating Members and Major Non-Participating Members. All signatures must be individually notarized. For separate notarizations, reproduce this notarization language.]

[1] Reproduce as necessary to ensure all required signatories are identified, sign, and signatures are sealed.

FORM C
BRINGDOWN FORM OF STATEMENT OF DISCLOSURE (CONFLICT OF INTEREST)

Proposer's Name: _____
("**Proposer**")

The Proposer's attention is directed to Section 1.6.3 regarding organizational conflicts of interest and the restrictions applicable to such conflicts. Proposers are advised that certain firms will not be allowed to participate on any Proposer's proposed Design-Build Team for the I-75 at Bethlehem Road Interchange Project because of their work with GDOT in connection with the Project procurement.*

* Capitalized terms not otherwise defined herein have the meanings given in the Instructions to Proposers for the Project.

[check the appropriate of the two boxes below]

☐ This Bringdown Form of Statement of Disclosure (Conflict of Interest) confirms that there have been **no changes** to the Respondent's SOQ Form C Statement of Disclosure (Conflict of Interest) with respect to the proposed Lead Contractor, Lead Design Consultant, all Major subcontractors, and all Major subconsultants from the deadline for submission of the SOQ to the Proposal Due Date.

This representation of no changes takes into account assessment of potential organizational conflicts of interest in connection with this RFP as relates to Participating Members, Major Non-Participating Members, proposed consultants and proposed subcontractors, and their respective chief executives, directors, and other Key Personnel for the project.

[skip to section 3]

☐ The changes and/or additions to Respondent's SOQ Form C Statement of Disclosure (Conflict of Interest) from the deadline for submission of the SOQ to the Proposal Due Date are as disclosed below.

1. Required Disclosure of Conflicts

In the space provided below, and on supplemental sheets as necessary, identify all relevant facts relating to past, present, or planned interest(s) of the Proposer, Participating Members, Major Non-Participating Members, proposed consultants and proposed subcontractors, and their respective chief executives, directors, and other Key Personnel for the project) which may result, or could be viewed as, an organizational conflict of interest in connection with this RFP. Refer to Section II.A and Section II.B of the RFQ and to Section 1.6.3 and Section 1.6.4 of the Instructions to Proposers for further information.

For avoidance of doubt, "relevant facts" means, at a minimum disclosure of (a) any current contractual relationships with GDOT, (b) any past, present, or planned contractual or employment relationships with any officer or employee of GDOT, and (c) any other circumstances that might be considered to create a financial interest in the DBA by any Georgia State Transportation Board member, or any GDOT officer or employee, officer, or employee, if the Proposer is awarded the DBA.

The Proposer shall also disclose matters such as ownership of 10% or more of the stock of, or having directors in common with, any of the individuals or entities involved in preparing the RFP.

The Proposer shall also disclose contractual relationships (i.e., joint ventures) with any of the individuals or entities involved in preparing the RFP, including those identified in Exhibit F, as well as relationships wherein such individual or entity is a contractor or consultant (or subcontractor or subconsultant) to the Proposer or a member of the Proposer's team. The foregoing is provided by way of example, and shall not constitute a limitation on the disclosure obligations.

_____

_____

_____

2. Explanation

In the space provided below, and on supplemental sheets as necessary, identify steps the Proposer or other entities have taken or will take to avoid, neutralize, or mitigate any organizational conflicts of interest described herein.

_____

_____

_____

3. Certification

The undersigned hereby certifies that, to the best of his or her knowledge and belief, no interest exists that is required to be disclosed in this Bringdown Form of Statement of Disclosure (Conflict of Interest), other than as disclosed above.

_____

Signature

_____

Name

_____

Title

_____

Company Name

_____, 20__

Date

[Proposers shall duplicate or modify this form as necessary so that it accurately describes the entity making the Proposal and so that it is signed by Participating Members and Major Non-Participating Members, proposed consultants and proposed subcontractors.]

FORM D
FORM OF PROPOSAL BOND

Bond No. _____

KNOW ALL PERSONS BY THESE PRESENTS, that the _____, as Principal and _____, as Surety or as Co-Sureties, each a corporation duly organized under the laws of the State indicated on the attached page, having its principal place of business at the address listed on the attached page, in the State indicated on the attached page, and authorized as a surety in the State of Georgia, are hereby jointly and severally held and firmly bound unto the Georgia Department of Transportation ("**GDOT**") in the sum of five percent (5%) of the Price Proposal (the "**Bonded Sum**"), the payment of which we each bind ourselves, and our heirs, executors, administrators, representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is herewith submitting its Proposal to design and build I-75 at Bethlehem Road Interchange (the "**Project**"), which Proposal is incorporated herein by this reference and has been submitted pursuant to GDOT's Request for Proposals dated as June 12, 2025 (as amended or supplemented, the "**RFP**");

NOW, THEREFORE, the condition of this bond is such that, upon occurrence of any of the events set forth below in subsections (a)-(c), then this obligation shall be null and void; otherwise it shall remain in full force and effect, and the Bonded Sum will be forfeited to GDOT as Liquidated Damages and not as a penalty, upon receipt by the Principal and Surety or by the Principal and Sureties listed on the attached page (the "**Co-Sureties**") of notice of such forfeiture from GDOT:

(a) The Principal's receipt of written notice from GDOT that either (i) GDOT will not award the DBA for the Project pursuant to the RFP, or (ii) GDOT has awarded the DBA for the Project, has received the executed DBA and other required documents and does not intend to award the DBA to the Principal;

(b) The Principal's performance of all of its obligations under the RFP in connection with award of the DBA; or

(c) Failure of GDOT to award the DBA to the Principal within 120 calendar days after the Proposal Due Date.

If the Principal shall (i) fail to promptly and properly fully satisfy on a timely basis the conditions for release set forth in (b) above or (ii) withdraw its Proposal in a manner that is not permitted by the ITP, the Principal and the Surety or Co-Sureties hereby agree to pay to GDOT the full Bonded Sum herein above set forth, as Liquidated Damages and not as a penalty, within 10 days after such failure.

In accordance with Section 4.6, GDOT shall return this Proposal Bond to the Principal following GDOT's receipt from Principal of conforming P&P Bonds.

The following terms and conditions shall apply with respect to this bond:

1. If suit is brought on this bond by GDOT and judgment is recovered, the Principal and Surety or Co-Sureties shall pay all costs incurred by GDOT in bringing such

suit, including, without limitation, reasonable attorneys' fees and costs as determined by the court.

2. Any extension(s) of the time for award of the DBA that the Principal may be granted in accordance with the ITP or otherwise, shall be subject to the reasonable approval of Surety or Co-Sureties.

3. The Co-Sureties agree to empower a single representative with authority to act on behalf of all of the Co-Sureties with respect to this Bond, so that GDOT will have no obligation to deal with multiple sureties hereunder. All correspondence from GDOT to the Co-Sureties and all claims under this Bond shall be sent to such designated representative. The Co-Sureties also agree to designate a single agent for service of process with respect to any actions on this Bond, which agent shall either be (a) a natural person or (b) a corporation qualified to act as an agent for service of process under Georgia law. The designated representative and agent for service of process may be changed only by delivery of written notice (by personal delivery or by certified mail, return receipt requested) to GDOT designating a single new representative and/or agent, signed by all of the Co-Sureties. The initial representative shall be:

_____

_____

_____
[name and address]

and the initial agent for service of process shall be:

_____

_____

_____
[name and address]

SIGNED and SEALED this _____ day of _____, 20__

_____ ***[seal]***
Principal

By: _____

_____ ***[seal]***
Co-Surety

By: _____
Attorney in Fact Date

_____ ***[seal]***
Co-Surety

By: _____
Attorney in Fact Date

_____ ***[seal]***
Co-Surety

By: _____
Attorney in Fact Date

[ADD APPROPRIATE SURETY ACKNOWLEDGMENTS, POWERS OF ATTORNEY]

CO-SURETIES

SURETY NAME	SURETY ADDRESS	INCORPORATED IN

FORM E
RESERVED

FORM F
DESIGN-BUILD PRICE PROPOSAL

Proposer Name: _____

The Proposer shall complete the required fields of Section A below. See Exhibit D for additional explanation and requirements.

The Proposer shall indicate its proposed Contract Sum on this Form F.

A. Proposal Schedule of Values (or Proposal SOV)

All items shall be provided as "lump sum" amounts. If there are any differences between the sum of the individual line amounts and totals, the individual line amounts will prevail.

Proposers are advised to note that the form of this Form F *is* ***two pages long*** and total and subtotal *calculations must conform and must take into account the constraints identified in the notes at the end of the form itself.*

SOV Line Item Description	Scheduled Value
A. GENERAL	
1. Insurance & Bonds	$
2. Project Office Facilities, Equipment, and Supplies	$
3. General Conditions and Administration	
a. Project Management and Coordination	$
b. Home Office Overhead & Support	$
c. Project Management Plan (see Note 6)	$
d. Project Schedule and SOV	$
e. Project Reporting	$
f. Public Information and Communications	$
4. Design-Builder-Led Environmental Permit Approval Services	$
5. Environmental Mitigation Costs	$
6. Design-Builder Quality Management	$
7. Mobilization (see Note 1)	$
Subtotal A. GENERAL (see Note 2)	$
B. DESIGN SERVICES	
1. Engineering Design Services & Support	
a. Design Documents (excluding Record Design Documents)	$
b. Design-Builder Support to Provided Environmental Approval Reevaluation	$
c. ROW Acquisition Services	$
d. Utility Design	$
Sub-Subtotal B.1. Engineering Design Services & Support (see Note 3)	$
2. Design Support During Construction & Record Design Documents (see Note 4)	$
Subtotal B. DESIGN SERVICES	$
C. CONSTRUCTION (see Note 7)	
1. Construction Cost and Support	
a. Earthwork	$
b. Paving	$
c. Subgrade	
d. Barrier & Roadside Treatment	$
e. Noise Barrier	$
f. Structural Walls	$
g. Bridges	$
h. Removal & Demo	$
i. Pavement Markings	$
j. Overhead Sign Structures	$
k. Lighting	$
l. Traffic Signals	$
m. ITS Infrastructure	$
n. Drainage	$
o. Erosion Control	$
p. Landscaping	$
q. Signage	$
r. Maintenance During Construction	$
s. Traffic Control	$
t. Utility Adjustment Work (construction only)	$
u. Railroad Coordination	$

Sub-Subtotal C.1. Construction Cost and Support	$
2. Training Hours (29,000 hours)	$ 23,200.00
3. Punch List, Final Close-out, and Demobilization (see Note 5)	$
Subtotal C. CONSTRUCTION	$
Contract Sum (Subtotal A. GENERAL + Subtotal B. DESIGN SERVICES + Subtotal C. CONSTRUCTION)	$

NOTES

1. "A.7. Mobilization" value shall include miscellaneous startup activities and expenditures not otherwise captured in the other SOV Line Items. Value shall not exceed 2.5% of the sum of the "Sub-Subtotal C.1. Construction Cost and Support" plus "Sub-Subtotal B.1 Engineering Design Services & Support" values.
2. "Subtotal A. GENERAL" value shall not exceed 25% of "Contract Sum" value.
3. "Sub-Subtotal B.1. Engineering Design Services & Support" value shall not exceed 10% of "Contract Sum" value.
4. "B.2. Design Support During Construction & Record Design Documents" value shall not be less than 2.0% of "Contract Sum" value.
5. "C.3. Punch List, Final Close-out, and Demobilization" shall not be less than 1.0% and no more than 3.0% of the sum of the "Sub-Subtotal C.1. Construction Cost and Support" plus "Sub-Subtotal B.1 Engineering Design Services & Support" values.
6. "A.3.c. Project Management Plan" value shall include the price for all Submittals required by TP Section 2.3 (Project Management Plan) including all required component Submittals, versions, and updates, such as the Basis of D&C (which includes the Schematic Plan of Project).
7. Scheduled values notated with $0 are outside the scope of the Work for the Project. .

BY SIGNATURE BELOW AND SUBMITTAL OF THIS FORM F WITH THE PROPOSAL SCHEDULE, THE PROPOSER HEREBY CERTIFIES IT HAS REVIEWED ITS PROPOSAL SCHEDULE AND ALL SUBCONTRACTOR AND VENDOR INFORMATION FOR THE PROJECT AND THAT ALL WORK, INCLUDING EARLY PORTIONS OF THE WORK, CAN BE COMPLETED WITHIN THE MILESTONE DEADLINES, INCLUDING ANY INTERIM COMPLETION DEADLINES, THE SUBSTANTIAL COMPLETION DEADLINE AND THE FINAL ACCEPTANCE DEADLINE, AND FOR THE CONTRACT SUM INDICATED ON THIS PROPOSAL FORM F.

Date:

Signature: _____

Design-Build Team: _____

FORM G
FORM OF PARTICIPATING MEMBERS, MAJOR NON-PARTICIPATING MEMBERS, CONTRACTORS AND KEY PERSONNEL COMMITMENT

Proposer's Name: _____

The Proposer hereby commits that, if awarded the I-75 at Bethlehem Road Interchange Project, the Proposer will use the entities and individuals listed below for their stated positions and that, to the extent within the Proposer's control, such entities and individuals will be available to fulfill their Project-related responsibilities, in each case consistent with the Design-Build Documents.

Participating Member(s): _____

Lead Contractor: _____

Lead Design Consultant: _____

Key Personnel (Participating Members and Major Non-Participating Members, as appropriate):

- **Lead Contractor Project Manager**: _____
- **Lead Design Consultant Project Manager (GA P.E. required)**: _____
- **Engineer of Record (GA P.E. required)**: _____
- **Construction Manager**: _____

Signed: _____

Printed Name: _____

Title: _____

Date: _____

FORM H
EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

To be duplicated and executed by each of the Proposer, Participating Members, Major Non-Participating Members and proposed Contractors

The undersigned certifies on behalf of _____, that:
(Name of entity making certification)

[check one of the following boxes]

☐ It has developed and has on file at each establishment affirmative action programs pursuant to 41 C.F.R. Part 60-2 (Affirmative Action Programs).

☐ It is not subject to the requirements to develop an affirmative action program under 41 C.F.R. Part 60-2 (Affirmative Action Programs).

[check one of the following boxes]

☐ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.

☐ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Signature: _____

Title: _____

Date: _____

If not the Proposer, relationship to the Proposer: _____

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 C.F.R. 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 C.F.R. 60-1.5. (Generally, only contracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Participating Members, Major Non-Participating Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports shall note that 41 C.F.R. 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such

other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

FORM I
RESERVED

FORM J
BUY AMERICA AND BUILD AMERICA, BUY AMERICA CERTIFICATIONS

The Project is subject to the requirements of 23 U.S.C. § 313, as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021), and the federal regulations under 23 C.F.R. § 635.410, 2 C.F.R. § 200.322(c) and 2 C.F.R. § 184, which permits federal financial assistance in the Design-Build Agreement only if (a) all iron and steel used in the Project be produced in the United States (i.e., all manufacturing processes, from the initial melting stage through the application of coatings, to occur in the United States); (b) all manufactured products[1] used in the Project are produced in the United States (i.e., the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product[2], unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation); and (c) all construction materials[3] are manufactured in the United States (i.e., all manufacturing processes for the construction material occurred in the United States and satisfy the material-specific requirements set forth in 2 C.F.R. § 184.6); provided, however, that the following exceptions shall apply:[3]

(i) iron and steel where all manufacturing processes did not occur in the United States may be used so long as the cumulative cost of such steel and iron materials as they are delivered to the Project does not exceed 0.1% of the total contract amount, or $2,500, whichever is greater;

(ii) construction materials and manufactured products[4] not meeting the requirements set forth in subsections (b) and (c) above may be used so long as no more than the lesser of (A) $1,000,000, or (B) 5% of total applicable costs for the Project (defined as the total cost of iron and steel, manufactured products, and construction materials used in the Project, whether or not within the scope of an existing waiver); and

(iii) no domestic preference requirements under the statutes and regulations covered by this certification shall be applicable where the total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site

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1 "Manufactured products" is as defined in 2 C.F.R. § 184.3.

2 To be calculated in accordance with 2 C.F.R. § 184.5.

3 "Construction materials" is defined in 2 C.F.R. § 184.3 (as affected by section 70917(c)(1) of the Infrastructure Investment and Jobs Act).

3 A waiver is currently in place for steel, iron, manufactured products, and construction materials in electric vehicle chargers manufactured prior to July 1, 2024 (see: FHWA "Waiver of Buy America Requirements for Electric Vehicle Chargers": **https://www.federalregister.gov/documents/2023/02/21/2023-03498/waiver-of-buy-america-requirements-for-electric-vehicle-chargers**).

4 A nationwide Buy America waiver that supersedes Build America, Buy America requirements is currently in effect for manufactured products. Manufactured products that are not predominantly steel or iron fall under this waiver and are allowable for use without regard to country of origin. "Predominantly steel or iron" is defined as greater than or equal to 50 percent of the total cost of the manufactured product.

and removed at or before the completion of the infrastructure Project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure Project, but are not an integral part of the structure or permanently affixed to the infrastructure Project.

Proposers shall complete and submit, to GDOT a Buy America Certificate (Form J-1) and a Build America, Buy America Certificate of Compliance for Construction Materials (Form J-2), each in the format below.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. Should the Design-Build Agreement be investigated, certifying Proposers, as Design-Builder, bears the burden of proof to establish that it is in compliance.

Capitalized terms used, but not otherwise defined in this certificate have the meanings ascribed in Exhibit 1 to the Design-Build Agreement.

FORM J-1
BUY AMERICA CERTIFICATE

The undersigned Proposer hereby certifies on behalf of itself and all contractors at all tiers (collectively herein, "Proposer") the following:

(a) The Proposer shall comply with the requirements of 23 U.S.C. § 313 as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021), and the Federal regulations under 23 C.F.R. § 635.410, 2 C.F.R. § 200.322(c), and 2 C.F.R. § 184 for this Project.

(b) Proposer further certifies that if awarded the Design-Build Agreement, it will maintain all records and documents pertinent to the Buy America requirement, for not less than 3 years from the date of Final Acceptance. These files will be available for inspection and verification by the GDOT and/or FHWA.

Date:_____

Signature:_____

Title: _____

Proposer's Name: _____

Subscribed and sworn to before me this __day of _____, _____.

_____ My Commission Expires: _____
Notary Public/Justice of the Peace

FORM J-2
BUILD AMERICA, BUY AMERICA CERTIFICATE OF COMPLIANCE FOR CONSTRUCTION MATERIALS

The Undersigned hereby certifies, on behalf of itself and all contractors at all tiers (collectively herein, "Proposer"), that Proposer will comply with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the Project will have been produced in the United States of America.

The Undersigned further certifies, on behalf of Proposer, that as required, if awarded the Project Agreement, it will maintain all records and documents pertinent to the BABA requirement, for not less than 3 years from the date of Final Acceptance. These files will be available for inspection and verification by GDOT and/or FHWA.

Date:_____

Signature:_____

Title: _____

Proposer's Name: _____

Subscribed and sworn to before me this __day of _____, _____.

_____ My Commission Expires: _____
Notary Public/Justice of the Peace

FORM K
CERTIFICATION REGARDING LOBBYING

The undersigned Proposer certifies on behalf of itself and all contractors (at all tiers) the following:

The undersigned certifies, to the best of his or her knowledge and belief, on behalf of, and with the authorization of, Proposer and all Contractors, Subcontractors at all tiers, that:

(a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The Proposer shall require that the language of this certification be included in all lower tier subcontracts which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Date: _____

Proposer: _____

Signature: _____

Title: _____

FORM L
DEBARMENT AND SUSPENSION CERTIFICATION

The undersigned certifier, to the best of his or her knowledge and belief, and that of the principals of Proposer (on behalf of Proposer, and all Participating Members, Major Non-Participating Members, Contractors, and Subcontractors identified by Proposer), as of the date hereof, certifies that Proposer, all Participating Members, Major Non-Participating Members, Contractors, and all such identified Subcontractors:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;

(b) have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for: (i) commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) or private agreement or transaction; (ii) violation of federal or state antitrust statutes (including those proscribing price fixing between competitors, allocation of customers between competitors, and bid rigging); (iii) commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, or obstruction of justice; or (iv) commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects its present responsibility;

(c) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, State or local) with commission of any of the offenses enumerated in section (b) of this certification;

(d) have not within a 3-year period preceding this application/proposal had one or more public transactions (federal, State or local) terminated for cause or default;

(e) if a corporation, have not been convicted of a felony violation under any Federal law within the two-year period preceding this proposal; and

(f) if a corporation, does not have any unpaid federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

Where the Proposer is unable to certify to any of the statements in this certification, it shall attach a certification to its proposal or bid stating that it is unable to provide the certification and explaining the reasons for such inability.

Date: _____

Proposer: _____

Signature: _____

Title: _____

FORM M
CLOSURE DURATIONS, INTERIM COMPLETION, SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE PROPOSAL

Proposer Name: _____

The Proposer shall complete the fields below for each portion (segment) of the Work for which the Proposer will commit to the Milestone Deadlines as set forth below. All days are calendar days.

Table M-1: Milestone Deadlines

Milestones	Deadlines
Interim Milestone Deadlines	
Substantial Completion Deadline	[_____] Days after the date GDOT issues NTP1 (not to exceed 1125 Days)
Final Acceptance Deadline	90 Days after the Substantial Completion Date

Date: _____

Proposer: _____

Signature: _____

Title: _____

FORM N
GRANT AND ASSUMPTION OF NON-EXCLUSIVE IRREVOCABLE LICENSE AND RIGHT TO USE WORK PRODUCT

INSTRUCTIONS:

1. If the Proposer, in accordance with Section 3.8 (*Stipulated Fee; Work Product*), elects to accept the Stipulated Fee on the basis that the Proposer is prepared to sell rights with respect to its Work Product to GDOT in accordance with the terms of Section 3.8 (*Stipulated Fee; Work Product*), submit one copy of this Form N completed by the Proposer.

2. The Proposer shall include as attachments to this Form N:

(i) a completed Internal Revenue Service Form W-9 in the form set out in Attachment 1 to this Form N, dated no earlier than 1 month prior to the Proposal Due Date; and

(ii) a completed Vendor Management Form in the form set out in Attachment 2 to this Form N.

3. This Form N must be submitted in searchable PDF format.

THIS GRANT AND ASSUMPTION OF NON-EXCLUSIVE IRREVOCABLE LICENSE AND RIGHT TO USE WORK PRODUCT AGREEMENT (this "**Agreement**") is made and entered into as of this [___] day of [_____], 20[___] ***[INSTRUCTION NOTE: Proposer, Do Not Enter Date; Date Will Be Populated Upon Signature by GDOT]*** by and between the Georgia Department of Transportation, an agency of the State of Georgia ("**GDOT**"), and [_____] (the "**Proposer**").*

* Initially capitalized terms not otherwise defined herein shall have the meanings ascribed thereto pursuant to the Instructions to Proposers within the Request for Proposals for the Project.

WITNESSETH

WHEREAS, the Proposer was invited to submit a detailed proposal in response to the RFP for the I-75 at Bethlehem Road Interchange Project (the "**Project**"); and

WHEREAS, in connection with the submittal of such detailed proposal, the Proposer provided GDOT with proprietary information, trade secrets, techniques, concepts, analyses, approaches, ideas or other Intellectual Property or other work product furnished by Proposers to GDOT during the procurement hereunder (including, without limitation, alternative technical concepts ("ATCs"), if applicable) (collectively, the "**Work Product**"); and

WHEREAS, GDOT desires to make payment for the non-exclusive, irrevocable right to use the Proposer's Work Product; and

WHEREAS, the Proposer has elected to receive the Stipulated Fee in the amount of $400,000, hereto (the "**Work Product Payment**");

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement and other good and valuable consideration, the receipt and adequacy of which are acknowledged by the parties, the parties agree as follows:

1. GDOT's Rights to and in Proposer's Work Product. Subject to Section 2 below, the Proposer hereby conveys to GDOT a non-exclusive, irrevocable license and right to use the Proposer's Work Product hereto, which conveyance includes, without restriction or limitation, the right of GDOT to use (or permit others to so use on its behalf) such Work Product (including, without limitation, in connection with any contract (including the DBA) awarded for the Project, any subsequent procurement with respect to the Project or any other GDOT project), with no obligation to pay additional compensation to the Proposer in connection with such Work Product. Such use may, at GDOT's sole and exclusive discretion, include the disclosure of such Work Product to the Apparent Successful Proposer, if applicable. In receiving such non-exclusive, irrevocable license and right to use the Proposer's Work Product, GDOT is deemed to similarly be entitled to a non-exclusive, irrevocable license and right to use all Work Product rights, copyrights, patents, trade secrets, trademarks, and service marks in the Proposer's Work Product, and the Proposer agrees that it will, at the request of GDOT, execute all papers and perform all other acts that may be necessary to ensure that GDOT's rights, title and interest in the Proposer's Work Product are protected. The rights conferred herein to GDOT include, without limitation, GDOT's ability to use the Proposer's Work Product without the obligation to notify or seek permission from the Proposer.

2. Proposer Waiver and Release. Proposer hereby represents and warrants that it has been duly authorized by all Participating Members, Major Non-Participating Members, Contractors, Key Personnel, and any other persons or entities comprising the Proposer's team to make the following waivers and releases, and hereby, for itself and the foregoing entities (a) fully, unconditionally, and irrevocably waives all rights to protest any aspect of the procurement of the Project (including award) and the procurement of the Project itself; and (b) fully, unconditionally, and irrevocably releases and waives all claims against GDOT arising out of or relating to (i) the use of Proposer's Work Product, consistent with that set forth in Section **1** of this Agreement, (ii) the procurement of the Project.

3. Condition to Effectiveness. The rights and obligations of GDOT and the Proposer under this Agreement, shall irrevocably vest upon the date that the Work Product Payment is made by GDOT to the Proposer.

4. Indemnity. Subject to the limitation contained below in this Section **4**, the Proposer will, at its own expense, indemnify, protect and hold harmless GDOT and its respective agents, directors, officers, employees, representatives and contractors from all claims, costs, expenses, liabilities, demands, or suits at law or equity ("**claims**") of, by or in favor of or awarded to any third party arising in whole or in part from: (a) any intellectual property infringement claim or other challenge to the rights of GDOT or its assignees to use the Work Product or (b) any breach of any of the Proposer's obligations under this Agreement. This indemnity will not apply with respect to any claims caused by or resulting from the sole negligence or willful misconduct of GDOT or its respective agents, directors, officers, employees, representatives or contractors.

GDOT recognizes that the Work Product licensed pursuant to this Agreement is preliminary in nature and that any third party making subsequent use of such Work Product likely will need to modify, developed and advance such Work Product. The indemnity provided in the preceding

paragraph of this Section **4** shall not extend to any such third-party modification, development or advancement, but shall rather be limited to the rights in the Work Product granted hereunder.

5. Assignment. The Proposer will not assign this Agreement without GDOT's prior written consent, which consent may be given or withheld in GDOT's sole discretion. Any assignment of this Agreement without such consent will be null and void.

6. Authority to Enter into this Agreement. By executing this Agreement, the Proposer specifically represents and warrants that it has the authority to convey to GDOT a non-exclusive, irrevocable license and right to use the Proposer's Work Product, including, but not limited to, any rights that might have been vested in team members, subcontractors, consultants or anyone else who may have contributed to the development of the Proposer's Work Product, free and clear of all liens, claims and encumbrances.

7. Miscellaneous.

7.1. The Proposer and GDOT agree that the Proposer, its team members, and their respective employees are not agents of GDOT as a result of this Agreement.

7.2. This Agreement embodies the entire agreement of the parties with respect to the subject matter hereof. There are no promises, terms, conditions, or obligations other than those contained herein, and this Agreement will supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto.

7.3. It is understood and agreed by the parties hereto that if any part, term, or provision of this Agreement is by the courts held to be illegal or in conflict with any law of the State of Georgia, validity of the remaining portions or provisions will not be affected, and the rights and obligations of the parties will be construed and enforced as if the Agreement did not contain the particular part, term, or provisions to be invalid.

7.4. This Agreement will be governed by and construed in accordance with the laws of the State of Georgia.

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the day and year first above written.

[_____]***[NTD: insert Proposer's name]***	GEORGIA DEPARTMENT OF TRANSPORTATION
By:_____***[seal]***	By: _____***[seal]***
Name: _____	Name: Russell McMurry
Title: _____	Title: Commissioner
Attested by:	Attested by:

By:_____ By:_____

Name: _____ Name: Angela Whitworth

Title: _____ Title: Treasurer

[Insert Firm Name and Address to whom payment of the Stipulated Fee is to be made]

Name:_____

Address:_____

_____

_____

FORM N ATTACHMENT 1
INTERNAL REVENUE SERVICE FORM W-9

INSTRUCTIONS:

1. Download and complete one copy of the "Form W-9" PDF from the following web address: **https://www.irs.gov/forms-pubs/about-form-w-9**

2. Submit the completed form in searchable PDF format.

FORM N ATTACHMENT 2
VENDOR MANAGEMENT FORM

INSTRUCTIONS:

1. Download and complete one copy of the "Vendor management form" PDF in accordance with the "Vendor management form instructions" PDF.

The following is the web address for the "Vendor management form":

https://www.dot.ga.gov/PartnerSmart/Business/Prequalification/Documents/Maintenance/VMF.pdf

The following is the web address for the "Vendor management form instructions" PDF:

https://sao.georgia.gov/document/document/supplierinstructionsfinalpdf/

2. Submit the completed form in searchable PDF format.

FORM O
BRINGDOWN SOQ CERTIFICATE

I, _____, being duly sworn, state that I am _____(title) of _____ (name of firm, joint venture member, joint bidder, or other entity) ("**Entity**"), have been authorized to make the following acknowledgments and certifications for myself and on behalf of the Entity, and hereby acknowledge and certify as follows:

1. I certify that I have read and understand the information presented in the submitted Proposal and any enclosure and exhibits thereto, in each case as pertains to the Entity, and such understanding and my review imputes constructive knowledge of the Entity of the information contained within the Proposal.

2. I further certify that:

    a. the information given in the SOQ, as well as any response to GDOT inquiries in connection with procurement of the Project identified under the Request for Qualifications (RFQ 484-04022025DB (RFQ), in each case as pertains to the Entity, was then, and remains, full, complete and truthful; and

    b. the information given in the Proposal, as well as any response to GDOT inquiries in connection with procurement of the Project identified under the Request for Proposals, in each case as pertains to the Entity, is full, complete and truthful.

3. I further certify that the Entity, any of its affiliates[1], and any principal employee of the Entity or any affiliate has not, since submission of the SOQ:

    a. been indicted, convicted, pled *nolo contendere*, or received probation before judgment (under Georgia or any other federal, state, or municipal law) of bid (i.e., fraud, bribery, collusion, conspiracy, antitrust, etc.) or other contract related crimes or violations (including attempt and conspiracy) or any other felony or misdemeanor;

    b. been disqualified, removed, debarred, suspended from performing work for, or found to be a non-responsible bidder by, the federal government, any state or local government, or any foreign governmental entity;

    c. sought protection under any provision of any bankruptcy act;

    d. been found liable in a civil suit or found guilty in a criminal action for bid fixing, any deceptive show of competition, or otherwise taken any action in restraint of free competitive bidding in connection with any contract for which an accompanying statement of qualifications, proposal, bid, or offer is submitted; or

    e. been found liable in a civil suit or found guilty in a criminal action for making any false claim or other material misrepresentation to a public entity.

[1] As defined in the footnote within Exhibit II to the RFQ.

4. I further certify that neither the Entity nor any affiliate is now under consideration for disqualification, removal, debarment, or suspension by the federal government, any state or local government, or any foreign governmental entity.

5. I further certify that neither the Entity nor any of its affiliates, to the extent not already certified above, is a party to any proceeding, claim, matter, suit, indictment, etc. currently pending against such firm, member, bidder, or affiliate that could result in the Entity (or affiliate) being found liable, guilty in any civil suit or criminal action or subject to debarment, suspension, removal or disqualification by the federal government, any state or local government, or any foreign governmental entity.

6. I further certify that the Entity and its affiliates have not, since submission of the SOQ, been determined, pursuant to a final determination in a court of law, arbitration proceeding, or other dispute resolution proceeding, to have defaulted in any federal, state or local government agency contract and further, that the Entity (or affiliate) is not now under any notice of intent to default on any such contract.

7. I further certify that the Entity and its affiliates have not, since submission of the SOQ, been found, adjudicated or determined by any federal or state court or agency (including, but not limited to, the Equal Employment Opportunity Commission, the Office of Federal Contract Compliance Programs and any applicable Georgia governmental agency) to have violated any laws or Executive Orders relating to employment discrimination or affirmative action, including but not limited to Title VII of the Civil Rights Act of 1964, as amended (42 U.S.C. Sections 2000 *et seq.*); the Equal Pay Act (29 U.S.C. Section 206(d)); and any applicable or similar Georgia law.

8. I further certify that the Entity and its affiliates have not, since submission of the SOQ, been found, adjudicated, or determined by any state court, state administrative agency, including, but not limited to, the Georgia Department of Labor (or its equivalent), federal court or federal agency, to have violated or failed to comply with any law or regulation of the United States or any state governing prevailing wages (including but not limited to payment for health and welfare, pension, vacation, travel time, subsistence, apprenticeship or other training, or other fringe benefits) or overtime compensation.

9. I further certify that the Entity and its affiliates have not, since submission of the SOQ, had its surety complete any work on its or its affiliate's behalf on a public infrastructure project.

10. I further certify that the Entity and its affiliates have not, since submission of the SOQ, had any license, credential, or registration revoked or suspended.

11. I further certify that the Entity and its affiliates have not, since submission of the SOQ, been removed from a similar contract or failed to complete an assigned contract.

12. ***[Include only if the certifying Entity is the Lead Design Consultant; otherwise indicate that this certification (under this clause 12) is "not applicable"]***[I further certify that in regard to audit and accounting system requirements, that the Lead Design Consultant:

    I. Has an accounting system in place to meet requirements of 48 CFR Part 31 and, in the case of nonprofit organizations, OMB Circular A-122.

II. Has submitted its yearly Certified Public Accountant (CPA) overhead audit if it currently has an aggregate contract amount exceeding $250,000.

III. Has no significant outstanding deficient audit findings from previous contracts with GDOT that have not been resolved.

IV. Is responsible for being reasonably assured that all subconsultant(s) presented as a part of the proposed team are similarly in compliance with the above requirements.]

I acknowledge, agree and authorize, and certify that the Entity acknowledges, agrees, and authorizes that GDOT may, by means that either deems appropriate, determine the accuracy and truth of the information provided hereby, on behalf of the Entity and that GDOT may contact any person or firm, joint venture member, or joint bidder named in the Statement of Qualifications for the purpose of verifying the information supplied therein.

I acknowledge and agree on behalf of the Entity that, as between the Entity and GDOT, all costs and expenses incurred by or on behalf of the Entity in preparing this Proposal and participating in this procurement will be borne solely by the Entity and not by GDOT, except and solely to the extent, of any payment expressly stated as due or contingently due (upon meeting of the relevant contingency) by GDOT to Respondent.

I, the undersigned, certify that all organizational authorizations by, or on behalf of, the Entity have been received both for me to sign on their collective behalf and for them to be bound hereby.

Capitalized terms used, but not defined, have the meanings given in the RFQ.

Sworn and subscribed before me

_____

This _____ day of _____, 20__. Signature

_____
NOTARY PUBLIC

_____

NOTARY SEAL

My Commission Expires:_____

FORM P
APPROVED ATCS

List all ATCs approved by GDOT that are included in Proposal:

ATC Number	ATC title/name	

FORM Q
GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

Contract No. and Name:

Design-Build Agreement for the I-75 at Bethlehem Road Interchange Project (the "**Project**")

Name of Contracting Entity:_____

By executing this affidavit, the undersigned person or entity verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Georgia Department of Transportation has registered with, is authorized to participate in, and is participating in the federal work authorization program commonly known as E-Verify™,[1] in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned person or entity further agrees that it will continue to use the federal work authorization program throughout the contract period, and it will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the undersigned with the information required by O.C.G.A. § 13-10-91(b).

The undersigned person or entity further agrees to maintain records of such compliance and provide a copy of each such verification to the Georgia Department of Transportation at the time the subcontractor(s) is retained to perform such service.

_____ _____
EEV/E-Verify™ User Identification Number Date of Authorization

_____ _____
BY: Authorized Officer or Agent Date
(Name of Person or Entity)

_____ _____
Title of Authorized Officer or Agent Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE
____ DAY OF _____ 20__

_____ [NOTARY SEAL]
Notary Public
My Commission Expires: _____

[1] or any subsequent replacement operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify Information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603.

FORM R
OPINION OF COUNSEL

Letterhead of independent law firm or in-house counsel – See Section 6.2.1

Annette Simelaro, Esq.
Georgia Department of Transportation
One Georgia Center
600 West Peachtree Street, NW
Atlanta, Georgia 30308

Re: Design-Build Agreement for the I-75 at Bethlehem Road Interchange Project (the "**Project**")

Dear Ms. Simelaro**,**

This letter is provided with regard to the Design-Build Agreement dated as of _____, 20__ (the "**DBA**"), by and between the Georgia Department of Transportation (**"GDOT"**), an agency of the State of Georgia, and _____ (the "**Design-Build Team**") for the I-75 at Bethlehem Road Interchange Project (the "**Project**").

[Describe relationship to Design-Build Team and its joint venture members, general partners, members, as applicable, and any other entities whose approval is required in order to authorize execution of the DBA.]

This letter is provided to you pursuant to Section 6.2.1 of the Instructions to Proposers of that certain Request for Proposals issued by GDOT on June 12, 2025, as amended.

In giving this opinion, we have examined _____. We have also considered such questions of law and we have examined such documents and instruments and certificates of public officials and individuals who participated in the procurement as we have deemed necessary or advisable. *[if a certificate is used/obtained from Design-Build Team, such certificate shall also run in favor of GDOT, and shall be attached to the opinion]*

In giving this opinion, we have assumed that all items submitted to us or reviewed by us are genuine, accurate and complete, and if not originals, are true and correct copies of originals, and that all signatures on such items are genuine.

Subject to the foregoing, we are of the opinion that:

1. [opinion regarding organization/formation and existence of the Design-Build Team and that the Design-Build Team has corporate power to own its properties and assets, carry on its business, enter into the DBA and to perform its obligations under the DBA] *[if Design-Build Team is a partnership/joint venture, these opinions are also required for each of its joint venture members and general partners]*

2. [opinion regarding good standing and qualification to do business in the state of Georgia for Design-Build Team] [*if Design-Build Team is a partnership/joint venture, these opinions are also required for each of its joint venture members and general partners*]

3. [opinion that the DBA has been duly authorized by all necessary corporate action on the part of Design-Build Team and the DBA has been duly executed and delivered by Design-Build Team] *[if Design-Build Team is a partnership/joint venture, add: "and its joint venture members/general partners" after the first and second "Design-Build Team"]*

4. [opinion that the DBA constitutes a legal, valid and binding obligation of Design-Build Team enforceable against Design-Build Team in accordance with its terms] *[if Design-Build Team is a partnership/joint venture, add: "and its joint venture members/general partners" after the second "Design-Build Team"]*

5. [opinion that all required approvals have been obtained with respect to execution, delivery and performance of the DBA; and that the DBA do not conflict with any agreements to which Design-Build Team is a party] *[if Design-Build Team is a partnership/joint venture, add: "and its joint venture members/general partners are a party"] [*or with any orders, judgments or decrees by which Design-Build Team is bound] *[if Design-Build Team is a partnership/joint venture, add: "and its joint venture members/general partners are bound"]*

6. [opinion that execution, delivery and performance of all obligations by Design-Build Team under the DBA do not conflict with, and are authorized by, the articles of incorporation and bylaws of Design-Build Team] *[if Design-Build Team is a partnership, replace "articles of incorporation and bylaws" with "partnership agreement and (if applicable) certificate of limited partnership"; if Design-Build Team is a joint venture, replace "articles of incorporation and bylaws" with "joint venture agreement"; if Design-Build Team is a limited liability company, replace "articles of incorporation and bylaws" with "operating agreement and certificate of formation"]*

7. [opinion that execution and delivery by Design-Build Team of the DBA do not, and Design-Build Team's performance of its obligations under the DBA will not, violate any current statute, rule or regulation applicable to Design-Build Team or to transactions of the type contemplated by the DBA]

8. [opinion that the Design-Build Team Agreements (as applicable) have been duly authorized by all necessary corporate action on the part of Design-Build Team and such agreements have been duly executed and delivered by Design-Build Team] *[if Design-Build Team is a partnership/joint venture, add: "and its joint venture members/general partners" after the first and second "Design-Build Team"]*

9. [opinion that the Design-Build Team Agreements constitute legal, valid and binding obligations of Design-Build Team enforceable against Design-Build Team in accordance with their terms] *[if Design-Build Team is a partnership/joint venture, add: "and its joint venture members/general partners" after the second "Design-Build Team"]*

FORM S
DRUG FREE WORKPLACE

STATE OF _____)

)SS:

COUNTY OF _____)

Each of the undersigned, being first duly sworn, deposes and says that:

_____ is the _____ of _____ and _____ is the _____ of _____, which entity(ies) are the _____ of _____, the entity making the foregoing Proposal.

The undersigned certifies that the provisions of Code Sections 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the "Drug-free Workplace Act", have been complied with in full.

The undersigned further certifies that:

(1) a drug-free workplace will be provided for the Contractor's employees during the performance of the contract; and

(2) each contractor who hires a subcontractor to work in a drug-free workplace shall secure from that subcontractor the following written certification:

> "As part of the subcontracting agreement with (contractor's name)_____,_____ (subcontractor's name)_____ certifies to the contractor that a drug free workplace will be provided for the subcontractor's employees during the performance of this Contract pursuant to paragraph (7) of subsection (b) of Code Section 50-24-3."

Also, the undersigned further certifies that he/she will not engage in the unlawful manufacture, sale distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the work.

[*signature page follows*]

_____

(Signature)

_____

(Name Printed)

_____

(Title)

Subscribed and sworn to before me this _____ day of _____, 20__.

Notary Public in and for said County and State

[Seal]

My commission expires: _____.

[Proposers shall duplicate or modify this form as necessary so that it accurately describes the entity making the Proposal and so that it is signed by Participating Members and Major Non-Participating Members.]

FORM T
CERTIFICATION OF COMPLIANCE WITH THE STATE OF GEORGIA'S SEXUAL HARASSMENT PREVENTION POLICY

The State of Georgia promotes respect and dignity and does not tolerate sexual harassment in the workplace. The State is committed to providing a workplace and environment free from sexual harassment for its employees and for all persons who interact with state government. All State of Georgia employees are expected and required to interact with all persons including other employees, contractors, and customers in a professional manner that contributes to a respectful work environment free from sexual harassment. Furthermore, the State of Georgia maintains an expectation that its contractors and their employees and subcontractors will interact with entities of the State of Georgia, their customers, and other contractors of the State in a professional manner that contributes to a respectful work environment free from sexual harassment.

Pursuant to the State of Georgia's Statewide Sexual Harassment Prevention Policy (the "**Policy**"), all contractors who are regularly on State premises or who regularly interact with State personnel must complete sexual harassment prevention training on an annual basis.

A contractor, including its employees and subcontractors, who have violated the Policy, including but not limited to engaging in sexual harassment and/or retaliation may be subject to appropriate corrective action. Such action may include, but is not limited to, notification to the employer, removal from State premises, restricted access to State premises and/or personnel, termination of contract, and/or other corrective action(s) deemed necessary by the State.

(i) If Contractor is an individual who is regularly on State premises or who will regularly interact with State personnel, Contractor certifies that:

(a) Contractor has received, reviewed, and agreed to comply with the State of Georgia's Statewide Sexual Harassment Prevention Policy located at http://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy;

(b) Contractor has completed sexual harassment prevention training in the last year; or will complete the Georgia Department of Administrative Services' sexual harassment prevention training located at http://doas.ga.gov/human-resources-administration/sexual-harassment-prevention/hr-professionals/employee-training (scroll down to section for entities without a LMS section) or this direct link https://www.youtube.com/embed/NjVt0DDnc2s?rel=0 prior to accessing State premises and prior to interacting with State employees; and on an annual basis thereafter; and,

(c) upon request by the State, Contractor will provide documentation substantiating the completion of sexual harassment training.

(ii) If Contractor has employees and subcontractors that are regularly on State premises or who will regularly interact with State personnel, Contractor certifies that:

(a) Contractor will ensure that such employees and subcontractors have received, reviewed, and agreed to comply with the State of Georgia's Statewide Sexual Harassment Prevention Policy located at http://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy;

(b) Contractor has provided sexual harassment prevention training in the last year to such employees and subcontractors and will continue to do so on an annual basis; or Contractor will ensure that such employees and subcontractors complete the Georgia Department of Administrative Services' sexual harassment prevention training located at http://doas.ga.gov/human-resources-administration/sexual-harassment-prevention/hr-professionals/employee-training (scroll down to section for entities without a LMS section) or this direct link https://www.youtube.com/embed/NjVt0DDnc2s?rel=0 prior to accessing State premises and prior to interacting with State employees; and on an annual basis thereafter; and

(c) upon request of the State of the Georgia Department of Transportation, Contractor will provide documentation substantiating such employees and subcontractors' acknowledgment of the State of Georgia's Statewide Sexual Harassment Prevention Policy and annual completion of sexual harassment prevention training.

Date: _____

Proposer: _____

Signature: _____

Title: _____

FORM U
BRINGDOWN SURETY CERTIFICATION AND ACKNOWLEDGEMENT

[Name of Surety/Insurance company] ("**SURETY**") HEREBY CERTIFIES[1] TO GDOT, AS OF THIS [_____][insert date] THAT:

(a) The Surety is a licensed bonding surety, currently authorized to conduct business in the State of Georgia;

(b) The Surety is listed on the U.S. Department of the Treasury's "Listing and Approved Sureties" (accessible at the following weblink: https://fiscal.treasury.gov/surety-bonds/list-approved-sureties.html;

(c) The Surety's rating is [_____], and rated by [_____][and [_____]][2];

(d) The Surety has reviewed the Request for Proposals ("**RFP**"), P.I. No. 0017182, Henry County, GA, and amendments, dated June 12, 2025 and [_____]];

(e) The Surety has evaluated [Proposer's][Lead Contractor's][other entity's] financial statements and capability, backlog and work-in-progress in determining its bonding capacity; [and]

(f) [Proposer][Lead Contractor][other entity] is capable of obtaining both a payment bond and a performance bond, each in an aggregate stated amount of $[___] million; [and]

(g) [[Name of entity], a [type of entity], is capable of obtaining [both] [a payment bond] [and] [a performance bond], [each] in an amount of [$[___] million]***[NTD: for separate letters, input specific portion of $[___] million amount]***/[$[___] million]***[NTD: for a single letter covering all members of the Respondent team]***[, as evidence of [entity's] bonding capacity.]***[NTD: Delete if inapplicable]***; and

(h) ***[NTD: insert if applicable]***[*certification regarding analysis of the factors surrounding any proposed or anticipated material changes in the financial condition of the entity on behalf of which this Certificate and Acknowledgment is given, identifying any special conditions that may be imposed before issuance of surety bonds for the Project.*]

Capitalized terms used but not defined herein shall have the meanings set forth in the RFP.

IN WITNESS WHEREOF, the undersigned is the [_____]***[NTD: insert title]*** of the Surety, to which this Certificate and Acknowledgment relates, and has duly executed this Certificate and Acknowledgment as of the date first written above.

By:_____ Print Name:_____

Title:_____

[1] Surety to adjust this form as necessary to identify the entity for which this certification and acknowledgment is offered and for which P&P Bonds will be issued.
[2] Please refer to rating requirements in the DBA.

FORM V
FORM OF ESCROW AGREEMENT

THIS ESCROW AGREEMENT is made and entered into this __ day of _____, 20__, (this "**Escrow Agreement**") by and among the Georgia Department of Transportation; an agency of the State of Georgia, hereinafter called the "**Department**"; and _____; hereinafter called the "**Company**"; and _____, hereinafter called the "**Escrow Agent**".

WHEREAS, the Department selected the Company as Apparent Successful Proposer for the I-75 at Bethlehem Interchange Project (the "**Project**") based on its Proposal submitted pursuant to a Request for Proposals dated June 12,, 2025 (the "**RFP**"). Capitalized terms used but not defined herein shall have the meaning assigned to such term in the RFP;

WHEREAS, the Department and Company are entering into this Escrow Agreement, to provide for specific contingencies governing the escrow and control of the Escrowed Documents; and

WHEREAS, the Department and Company desire the Escrow Agent to hold the Escrowed documents of the Company;

NOW THEREFORE, for and in consideration of the mutual covenants contained herein, it is agreed by and between the parties hereto that:

ARTICLE I
ESCROW BID DOCUMENTATION

The parties hereto agree to the establishment of the escrow of the Escrowed Documents. It is the understanding of the parties hereto that the Department shall pay the Escrow Agent, as determined by separate agreement, for the escrow of the Escrowed Documents submitted to the Escrow Agent under the terms of this Escrow Agreement.

ARTICLE II
ACKNOWLEDGMENT

By its signature below, the Escrow Agent hereby acknowledges receipt from the Department and Company of a sealed container bearing the Company's name, address and Project Number assigned by the Department and containing, as specified by the affidavit of the Company, the Escrowed Documents.

ARTICLE III
DEPOSIT OF ESCROWED DOCUMENTS

The Escrowed Documents shall remain on deposit with the Escrow Agent until those conditions of release, as specified in ARTICLE IV are met. As long as the Escrowed Documents remain in escrow with the Escrow Agent, the Escrow Agent shall not allow any person access, to gain possession, or to in any way interfere with the sealed Escrowed Documents container.

ARTICLE IV
RELEASE FROM ESCROW

Upon being presented by the Department with a Company-signed final standard release form for the Project, the Escrow Agent shall deliver to the Company the sealed container bearing the

Company's name and address and project number on it. The Escrow Agent is also authorized to release the Escrowed Documents sealed container to the Department without the Company's signed consent subject to the following conditions:

1. The Company has provided written notification to the Department of the Company's intention to file a claim related to the Project Agreement; or

2. The Company has initiated litigation against the Department relating to the Project Agreement.

Prior to any release from escrow to the Department, the Escrow Agent shall verify that either condition of release to the Department, as stated above, has been met by providing written notice to the Company of the Escrow Agent's intention to release the Escrowed Documents to the Department. Such written notice from the Escrow Agent shall be sent by certified mail no less than ten calendar days prior to release to the Department.

ARTICLE V
INDEMNITY

The Company agrees to indemnify and hold the Escrow Agent harmless against any loss, claim, damage, liability or expenses incurred in connection with any action, suit, proceeding, claim or alleged liability arising from this Escrow Agreement, provided, however, that the Escrow Agent shall not be so indemnified or held harmless for its negligence or acts of bad faith by it or any of its agents or employees.

ARTICLE VI
NOTICES

All notices and other communication shall be in writing and shall be deemed to have been duly given and delivered if mailed by certified mail, return receipt requested, postage prepaid to the addresses stated herein:

Department:

Georgia Department of Transportation
ATTN: General Counsel
600 West Peachtree Street
Atlanta, Georgia 30308

Company:

[Company name]
[Attention: name]
[Address 1]
[Address 2]

Escrow Agent:

NCC Group Software Resilience (NA) LLC
ATTN: David Jones
11675 Rainwater Drive
Alpharetta, GA 30009

ARTICLE VII
DUTIES OF ESCROW AGENT

The duties and responsibilities of the Escrow Agent shall be limited to those expressly set forth herein and the Escrow Agent shall act only in accordance with this Escrow Agreement.

Notwithstanding specific provisions hereunder, the Escrow Agent shall at all times act upon and in accordance with the joint written instructions of the Department and Company.

ARTICLE VIII
LAWS

This Escrow Agreement shall be deemed to have been executed in Fulton County, Georgia and the laws of the State of Georgia shall apply.

ARTICLE IX
ASSIGNMENT

This Escrow Agreement shall not be assigned without the written consent of all the parties hereto.

ARTICLE X
SURVIVAL OF CONTRACT

Except as may be expressly modified, all terms and conditions of this Escrow Agreement remain in full force and effect. The establishment of this Escrow Agreement is limited solely by the contingency of release of the Escrowed Documents by the Company to the Department, as established by ARTICLE IV. Nothing contained herein shall alter the rights of the parties hereto.

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

[Remainder of this Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereunto set their hands and seals the day above first written.

Company:

By:_____(Seal)

Name:_____

Title:_____

_____

WITNESS

Escrow Agent:

By:_____(Seal)

Name:_____

Title:_____

_____

WITNESS

Department:

By:_____(Seal)

Name:_____

Title:_____

_____

WITNESS

ESCROW CONTAINER SEAL NUMBERS:

FORM W
FORM OF ESCROW AFFIDAVIT

State of Georgia

County of Fulton

COMES NOW (Name), (Title) of (Company Name) who, after having been duly sworn, on oath, state and depose as follows:

1. This Affidavit is based upon the personal knowledge of the Affiant.

2. (Company Name) submitted a Proposal with respect to the Georgia Department of Transportation ("**GDOT**") I-75 at Bethlehem Road Interchange Project P.I. No. 0017182 (the "**Project**") and the Company has been named the Apparent Successful Proposer for the Project.

3. This Affidavit is given in compliance with the provisions of the Request for Proposals for the Project.

4. The Affiant attests that, in such Affiant's capacity for (Company Name), such Affiant is personally aware of the Detailed Cost and Pricing Data which was used by the Company in determining, formulating and submitting its Proposal for the Project.

5. The Affiant further states that (s)he has examined the Detailed Cost and Pricing Data which has been placed in a sealed container marked "Detailed Cost and Pricing Data", and that all such Detailed Cost and Pricing Data utilized by the Company in determining, formulating, and submitting its bid is contained in the sealed container so marked.

6. The Detailed Cost and Pricing Data is listed in Exhibit A hereto, which is attached hereto and incorporated herein as fully as if included in this Affidavit at this paragraph 6.

[SIGNATURE ON NEXT PAGE]

Further Affiant sayeth not.

_____
(Company Name)

By: _____
(Signature)

_____
(Print Name)

Its: _____
(Title)

Sworn to and subscribed before me this _____ day of _____

_____, 20_____.

_____
NOTARY PUBLIC

[NOTARY SEAL]

My Commission expires:

_____

EXHIBIT A
DETAILED COST AND PRICING DATA

FORM X
FORM OF INSURANCE LETTER

[letterhead of company]

[DATE]***[No earlier than the Setting Date]***

Georgia Department of Transportation
One Georgia Center
600 West Peachtree Street, NW
Atlanta, Georgia 30308
Attn: Contracting Officer, P.I. No. 0017182 – I-75 at Bethlehem Road Interchange Design-Build Project

To whom it may concern:

Reference is made to that certain Request for Proposals to Design and Construct the I-75 at Bethlehem Road Interchange Project (Henry County) through a Design-Build Agreement, Project Number P.I. No. 0017182 – I-75 at Bethlehem Road Interchange Design-Build, issued on June 12, 2025 (as amended, the "**RFP**" and its "**Instructions to Proposers**," the "**ITP**") Initially capitalized terms used, but not defined, have the meanings given in the Design-Build Agreement ("**DBA**"), to be entered into between the Apparent Successful Proposer and the Georgia Department of Transportation ("**GDOT**") in accordance with the RFP.

As part of its Proposal submitted by [PROPOSER NAME], we hereby confirm the following, as of the date of this letter:

(a) [COMPANY] have read the Design-Build Documents (including specifically the insurance requirements);

(b) the Proposer, as Design-Builder, for itself or through a Participating Member or Major Non-Participating Member, and as permitted by the DBA, is capable of obtaining, and will be able to obtain and maintain, insurance, of the types and in the amounts required by the Design-Build Documents, and can do so under the terms, and subject to the conditions, of the DBA;

(c) the Proposal (with respect to insurance placements) conforms to the requirements of the DBA; and

(d) the amount proposed by Proposer in its Price Proposal for the premiums and costs of such insurance reflects the current, fair market cost of providing all such insurance coverage, collectively and as to each individually.

[I am a licensed insurance broker in the State of Georgia. I have been retained by or on behalf of Proposer to serve as its broker with respect to the Project and for the purposes of this confirming letter to GDOT. I have been duly authorized by Proposer and by [COMPANY] to make these confirmations and to deliver this letter to GDOT, on behalf of Proposer and [COMPANY], and not in my individual capacity, acknowledging that GDOT will rely on this letter and its conformations in evaluating Proposer's Proposal for potential selection as the Apparent Successful Proposer.]

Respectfully,

_____
[TITLE]
on behalf of [COMPANY]
and [PROPOSER]

FORM Y
FORM OF GUARANTY

GUARANTY

This Guaranty (the "Guaranty") is made by [_____], [a [_____] organized under the laws of [_____]] ("Guarantor"), in favor of the Georgia Department of Transportation, a body corporate and politic and an instrumentality and public corporation of the State of Georgia ("GDOT").

WHEREAS, [_____], as Design-Builder (the "Design-Builder"), and GDOT are parties to that certain Design-Build Agreement for the [_____] Project (the "Design-Build Agreement") pursuant to which the Design-Builder has agreed to develop, design, and construct the Project. Unless the context otherwise requires, capitalized terms used but not separately defined in this Guaranty will have the meaning given to them in the Design-Build Agreement.

To induce GDOT to (a) enter into the Design-Build Agreement; and (b) consummate the transactions contemplated thereby, Guarantor has agreed to enter into this Guaranty.

The execution of the Design-Build Agreement by GDOT and the consummation of the transactions contemplated by the Design-Build Agreement will materially benefit Guarantor. Without this Guaranty, GDOT would not have entered into the Design-Build Agreement with Design-Builder. In consideration of GDOT's execution of the Design-Build Agreement and consummation of the transactions contemplated by the Design-Build Agreement, Guarantor has agreed to execute this Guaranty.

NOW, THEREFORE, in consideration of the foregoing recitals, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Guarantor agrees as follows:

1. Guaranty.

1.1. Guarantor, as primary obligor and not as surety, unconditionally and absolutely, guarantees to GDOT, and its successors and assigns, the full and prompt payment and performance when due (whether at maturity, upon a default, upon resolution of a dispute, by acceleration, or otherwise under the Design-Build Agreement) of all of the obligations of the Design-Builder arising out of, in connection with, under or related to the Design-Build Documents (including, without limitation, the Design-Builder's obligation to make payment to GDOT for: Liquidated Damages, Nonrefundable Deductions, stipulated damages, indemnity, Warranty, and other costs incurred by GDOT with respect to which Design-Builder is obligated to repay under the Design-Build Agreement to repay GDOT). The obligations guaranteed pursuant to this Guaranty are collectively referred to in this Guaranty as the "Guaranteed Obligations."

1.2. Guarantor covenants to GDOT that if at any time the Design-Builder should default in the performance when due of, observance when due of, or should commit a breach of, any of the Guaranteed Obligations, Guarantor shall promptly, upon written notice by GDOT, perform or pay the Guaranteed Obligations or cause the performance or payment of the Guaranteed Obligations.

1.3. Guarantor agrees that, to the extent Guarantor's obligations under this Guaranty relate to obligations of the Design-Builder which require performance other than the payment of money, GDOT may proceed against Guarantor to effect specific performance of such obligations (to the extent that such relief is available). Guarantor agrees at GDOT's direction to assume or to procure the assumption of the Design-Build Agreement, and to perform or to procure the performance of all of the terms and conditions under the Design-Build Agreement should the Design-Build Agreement be disaffirmed or rejected by a trustee or court in a bankruptcy proceeding involving the Design-Builder, or, at the option of GDOT, Guarantor shall, in the event of the Design-Builder's bankruptcy, make and enter into or have made and entered into, by one or more entities reasonably satisfactory to GDOT, new contract documents for the balance of the term of the Design-Build Agreement, which new contract documents shall be in form and substance identical to the replaced Design-Build Agreement.

1.4. This Guaranty shall become effective as of the date hereof and shall remain effective through the end of the Warranty Period (as such term is defined under the Design-Build Agreement). Guarantor agrees that Final Acceptance shall not prevent GDOT from recovering from Guarantor in regard to any: (a) overpayment sustained for failure of Design-Builder to fulfill the obligations under the Design-Build Documents; and/or (b) continuing or surviving obligations of the Design-Builder under the Design-Build Agreement, including any Warranty obligations. Guarantor agrees that termination of the Design-Build Agreement shall not relieve Guarantor of its obligations in regard to any claims arising prior to such termination.

2. Unconditional Obligations. This Guaranty is a guaranty of payment and performance and not of collection. Except as provided in Section 23, this Guaranty is an absolute, unconditional and irrevocable guarantee of the full and prompt payment and performance when due of all of the Guaranteed Obligations, whether or not from time to time reduced or extinguished or hereafter increased or incurred, and whether or not enforceable against the Design-Builder. If any payment made by the Design-Builder or any other Person and applied to the Guaranteed Obligations is at any time annulled, set aside, rescinded, invalidated, declared to be fraudulent or preferential or otherwise required to be repaid or refunded, then, to the extent of such payment or repayment, the liability of Guarantor will be and remain in full force and effect as fully as if such payment had never been made. Guarantor covenants that this Guaranty will not be fulfilled or discharged, except by the complete payment and performance of the Guaranteed Obligations, whether by the primary obligor or Guarantor under this Guaranty. Without limiting the generality of the foregoing, Guarantor's obligations under this Guaranty will not be released, discharged or otherwise affected by:

2.1. except as to applicable statutes of limitation, failure, omission, delay, waiver or refusal by Design-Builder to exercise, in whole or in part, any right or remedy held by Design-Builder with respect to the Design-Build Agreement or any transaction under the Design-Build Agreement;

2.2. any change in the Design-Build Agreement or the obligations under the Design-Build Agreement, any change in the existence, structure or ownership of Guarantor or the Design-Builder, or any dissolution, winding up, liquidation, insolvency, bankruptcy, reorganization or similar proceeding affecting the Design-Builder, Guarantor or their respective assets or any defense that may arise in connection with or as a result of such dissolution, winding up, liquidation, insolvency, bankruptcy, reorganization or other proceeding;

2.3. the existence of any claim or set-off which the Design-Builder has or Guarantor may have against GDOT, whether in connection with this Guaranty or any unrelated transaction,

provided that nothing in this Guaranty will be deemed a waiver by Guarantor of any claim or prevent the assertion of any claim by separate suit;

2.4. any release or discharge by operation of law of Design-Builder from any liability with respect to the Design-Build Agreement;

2.5. any failure of consideration or lack of authority of the Design-Builder, any lack of validity or enforceability, illegality or defect or deficiency, or any other defense to formation of the Design-Build Agreement (or any term, condition or covenant thereof);

2.6. any change in the time, manner, terms, place of payment of, or any other term of all or any of the Guaranteed Obligations, or any other amendment, extension, waiver of, or any consent to departure from any Design-Build Agreement executed in connection therewith;

2.7. the incapacity or lack of power or authority of, or dissolution or change in, the members or shareholders of the Design-Builder;

2.8. any release or subordination of any collateral then held by GDOT as security for the performance by Design-Builder of the Guaranteed Obligations; or

2.9. any other circumstance that might otherwise constitute a defense available to, or a discharge of, Guarantor with respect to the Guaranteed Obligations, other than performance or payment in full of the Guaranteed Obligations.

This Guaranty will in all respects be a continuing, absolute, and unconditional guaranty irrespective of the genuineness, validity, regularity or enforceability of the Design-Build Agreement, Guaranteed Obligations or any part thereof or any instrument or agreement evidencing any of the Guaranteed Obligations or relating thereto, or the existence, validity, enforceability, perfection, or extent of any collateral therefor or any other circumstances relating to the Guaranteed Obligations, except as provided in Section 23, which applies to all of the subsections in this Section 2.

3. Independent Obligations. Guarantor agrees that the Guaranteed Obligations are independent of the obligations of the Design-Builder and if any default occurs under this Guaranty, a separate action or actions may be brought and prosecuted against Guarantor whether or not the Design-Builder is joined therein. GDOT may maintain successive actions for other defaults of Guarantor. GDOT's rights under this Guaranty will not be exhausted by the exercise of any of its rights or remedies or by any such action or by any number of successive actions until and unless all Guaranteed Obligations have been indefeasibly paid and fully performed.

3.1. Guarantor agrees that GDOT may enforce this Guaranty, at any time and from time to time, without the necessity of resorting to or exhausting any security or collateral and without the necessity of proceeding against the Design-Builder. Guarantor waives the right to require GDOT to proceed against the Design-Builder, to exercise any right or remedy under any of the Design-Build Agreement or to pursue any other remedy or to enforce any other right.

3.2. Guarantor will continue to be subject to this Guaranty notwithstanding: (a) any modification, agreement or stipulation between the Design-Builder and GDOT or their respective successors and assigns, with respect to any of the Design-Build Agreement or the Guaranteed Obligations; (b) any waiver of or failure to enforce the Guaranteed Obligations or

any of the terms, covenants or conditions contained in any of the Design-Build Agreement or any modification thereof; (c) subject to Section 23, any release of the Design-Builder from any liability with respect to any of the Design-Build Agreement; or (d) any release or subordination of any collateral then held by GDOT as security for the performance by the Design-Builder of the Guaranteed Obligations.

3.3. The Guaranteed Obligations are not conditional or contingent upon the genuineness, validity, regularity or enforceability of any of the Design-Build Agreement or the pursuit by GDOT of any remedies which GDOT either now has or may hereafter have with respect thereto under any of the Design-Build Agreement.

3.4. Design-Builder and Guarantor acknowledge and agree that Guarantor's obligations and undertakings under this Guaranty are derivative of, and not in excess of, the Guaranteed Obligations and Guarantor shall be entitled to all rights and defenses of Design-Builder except as previously waived or disclaimed in this Guaranty. Notwithstanding any other term or provision of this Guaranty, in the event that the Design-Builder's obligations have been changed by any modification, agreement or stipulation between Design-Builder and GDOT or their respective successors or assigns, the term "Guaranteed Obligations" as used in this Guaranty shall mean the Guaranteed Obligations as so changed, except that the Guaranteed Obligations shall be determined without regard to the effect of any such modification, agreement or stipulation in the context of a bankruptcy or insolvency proceeding in which Design-Builder is the debtor, unless otherwise specified in the modification, agreement or stipulation.

4. Liability of Guarantor.

4.1. GDOT may enforce this Guaranty upon the occurrence of a breach by the Design-Builder of any of the Guaranteed Obligations, notwithstanding the existence of any dispute between GDOT and the Design-Builder with respect to the existence of such a breach.

4.2. Guarantor's performance of some, but not all, of the Guaranteed Obligations will in no way limit, affect, modify or abridge Guarantor's liability for those Guaranteed Obligations that have not been performed.

4.3. GDOT, upon such terms as it deems appropriate, without notice or demand and without affecting the validity or enforceability of this Guaranty or giving rise to any reduction, limitation, impairment, discharge or termination of Guarantor's liability under this Guaranty, from time to time may (a) with respect to the financial obligations of the Design-Builder, if and as permitted by the Design-Build Agreement, renew, extend, accelerate, increase the rate of interest on, or otherwise change the time, place, manner or terms of payment of financial obligations that are Guaranteed Obligations, and/or subordinate the payment of the same to the payment of any other obligations, (b) settle, compromise, release or discharge, or accept or refuse any offer of performance with respect to, or substitutions for, the Guaranteed Obligations or any agreement relating thereto, (c) request and accept other guarantees of the Guaranteed Obligations and take and hold security for the payment and performance of this Guaranty or the Guaranteed Obligations, (d) release, surrender, exchange, substitute, compromise, settle, rescind, waive, alter, subordinate or modify, with or without consideration, any security for performance of the Guaranteed Obligations, any other guarantees of the Guaranteed Obligations, or any other obligation of any Person with respect to the Guaranteed Obligations, (e) enforce and apply any security hereafter held by or for the benefit of GDOT in respect of this Guaranty or the Guaranteed Obligations and direct the order or manner of sale thereof, or exercise any other right or remedy

that GDOT may have against any such security, as GDOT in its discretion may determine, and (f) exercise any other rights available to it under the Design-Build Agreement.

4.4. This Guaranty and the obligations of Guarantor under this Guaranty will be valid and enforceable and will not be subject to any reduction, limitation, impairment, discharge or termination for any reason (other than indefeasible performance in full of the Guaranteed Obligations), including without limitation the occurrence of any of the following, whether or not Guarantor will have had notice or knowledge of any of them: (a) any failure or omission to assert or enforce an agreement or election not to assert or enforce, or the stay or enjoining, by order of court, by operation of law or otherwise, of the exercise or enforcement of, any claim or demand or any right, power or remedy (whether arising under the Design-Build Agreement, at law, in equity or otherwise) with respect to the Guaranteed Obligations or any agreement or instrument relating thereto; (b) any rescission, waiver, amendment or modification of, or any consent to departure from, any of the terms or provisions (including without limitation provisions relating to events of default) of the Design-Build Agreement or any agreement or instrument executed pursuant thereto; (c) GDOT's knowledge of or consent to the change, reorganization or termination of the corporate structure or existence of the Design-Builder; (d) any defenses, set-offs or counterclaims that the Design-Builder may allege or assert against GDOT in respect of the Guaranteed Obligations, except as provided in Section 23; and (e) as pertains to each individual Person comprising the Guarantor, the acts or omissions of any other Person(s) comprising the Guarantor (other than complete payment and performance of the Guaranteed Obligations).

5. Waivers. To the fullest extent permitted by law, Guarantor hereby waives and agrees not to assert or take advantage of:

5.1. any right to require GDOT to proceed against the Design-Builder or any other Person or to proceed against or exhaust any security held by GDOT at any time or to pursue any right or remedy under any of the Design-Build Agreement or any other remedy in GDOT's power before proceeding against Guarantor;

5.2. any defense that may arise by reason of the incapacity, lack of authority, death or disability of, or revocation hereby by Guarantor, the Design-Builder or any other Person or the failure of GDOT to file or enforce a claim against the estate (either in administration, bankruptcy or any other proceeding) of any such Person;

5.3. any defense that may arise by reason of any presentment, demand for payment or performance or otherwise, protest or notice of any other kind or lack thereof;

5.4. any defense that may arise by reason of statute of limitations, *res judicata*, statute of frauds, fraud, minority, usury, or unenforceability;

5.5. any right or defense arising out of an election of remedies by GDOT even though the election of remedies, such as non-judicial foreclosure with respect to any security for the Guaranteed Obligations, has destroyed the Guarantor's rights of subrogation and reimbursement against the Design-Builder;

5.6. all defenses that may arise relating to notices to and confirmation by the Guarantor or to any other Person, including, but not limited to, notices of the acceptance of this Guaranty or the creation, renewal, extension, modification, accrual of any of the obligations of the Design-Builder under any of the Design-Build Agreement, or of default in the payment or performance of

any such obligations, enforcement of any right or remedy with respect thereto or notice of any other matters relating thereto;

5.7. any defense based upon any act or omission of GDOT which directly or indirectly results in or aids the discharge or release of the Design-Builder, Guarantor or any security given or held by GDOT in connection with the Guaranteed Obligations;

5.8. any duty on the part of GDOT to disclose to Guarantor any facts GDOT may now or hereafter know about the Design-Builder, regardless of whether GDOT has reason to believe that any such facts materially increase the risk beyond that which Guarantor intends to assume, has reason to believe that such facts are unknown to Guarantor, or has a reasonable opportunity to communicate such facts to Guarantor. Guarantor acknowledges that it is fully responsible for being and keeping informed of the financial condition of the Design-Builder and of all circumstances bearing on the risk of non-payment of any Guaranteed Obligations;

5.9. [the fact that Guarantor may at any time in the future dispose of all or part of its direct or indirect ownership or economic interests in the Design-Builder]; and

5.10. any and all suretyship defenses under applicable law.

6. Waiver of Subrogation and Rights of Reimbursement. Until the Guaranteed Obligations have been indefeasibly paid in full, Guarantor waives any claim, right or remedy which it may now have or may hereafter acquire against the Design-Builder that arises from the performance of Guarantor under this Guaranty, including, without limitation, any claim, right or remedy of subrogation, reimbursement, exoneration, contribution, or indemnification, or participation in any claim, right or remedy of GDOT against the Design-Builder, or any other security or collateral that GDOT now has or hereafter acquires, whether or not such claim, right or remedy arises in equity, under contract, by statute, under common law or otherwise. All existing or future indebtedness of the Design-Builder or any shareholders, partners, members, joint venturers of the Design-Builder to Guarantor is subordinated to all of the Guaranteed Obligations until such time as all Guaranteed Obligations shall have been indefeasibly paid in full. Whenever and for so long as the Design-Builder shall be in default in the performance of a Guaranteed Obligation, no payments with respect to any such indebtedness shall be made by the Design-Builder or any shareholders, partners, members, joint venturers of the Design-Builder to Guarantor without the prior written consent of GDOT. Any payment by the Design-Builder or any shareholders, partners, members, joint venturers of the Design-Builder to Guarantor in violation of this provision shall be deemed to have been received by Guarantor as trustee for GDOT.

7. Cumulative Rights. All rights, powers and remedies of GDOT under this Guaranty will be in addition to and not in lieu of all other rights, powers and remedies given to GDOT, whether at law, in equity or otherwise.

8. Representations and Warranties. In addition to the representations and warranties with respect to solvency set forth in Section 20, Guarantor represents and warrants that:

8.1. it is a [_____] duly organized, validly existing, and in good standing under the laws of the State of [_____] and qualified to do business and is in good standing under the laws of the State of Georgia;

8.2. it has all requisite organizational power, right, and authority to execute, deliver and perform this Guaranty;

8.3. the execution, delivery, and performance by Guarantor of this Guaranty have been duly authorized by all necessary corporate action on the part of Guarantor and proof of such authorization will be provided with the execution of this Guaranty;

8.4. this Guaranty has been duly executed and delivered and constitutes the legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms;

8.5. neither the execution nor delivery of this Guaranty nor compliance with or fulfillment of the terms, conditions, and provisions hereof, will conflict with, result in a material breach or violation of the terms, conditions, or provisions of, or constitute a material default, an event of default, or an event creating rights of acceleration, termination, or cancellation, or a loss of rights under: (a) the certificate of incorporation or by-laws of Guarantor, (b) any judgment, decree, order, contract, agreement, indenture, instrument, note, mortgage, lease, governmental permit, or other authorization, right, restriction, or obligation to which Guarantor is a party or any of its property is subject or by which Guarantor is bound, or (c) any federal, state, or local law, statute, ordinance, rule or regulation applicable to Guarantor;

8.6. it now has and will continue to have full and complete access to any and all information concerning the transactions contemplated by the Design-Build Agreement or referred to therein, the financial status of the Design-Builder and the ability of the Design-Builder to pay and perform the Guaranteed Obligations;

8.7. it has reviewed and approved copies of the Design-Build Agreement and is fully informed of the remedies GDOT may pursue, with or without notice to the Design-Builder or any other Person, in the event of default of any of the Guaranteed Obligations;

8.8. it has made and so long as the Guaranteed Obligations (or any portion thereof) remain unsatisfied, it will make its own credit analysis of the Design-Builder and will keep itself fully informed as to all aspects of the financial condition of the Design-Builder, the performance of the Guaranteed Obligations and of all circumstances bearing upon the risk of nonpayment or nonperformance of the Guaranteed Obligations. Guarantor hereby waives and relinquishes any duty on the part of GDOT to disclose any matter, fact or thing relating to the business, operations or conditions of the Design-Builder now known or hereafter known by GDOT;

8.9. no consent, authorization, approval, order, license, certificate, or permit or act of or from, or declaration or filing with, any governmental authority or any party to any contract, agreement, instrument, lease, or license to which Guarantor is a party or by which Guarantor is bound, is required for the execution, delivery, or compliance with the terms hereof by Guarantor, except as have been obtained prior to the date of this Guaranty;

8.10. there is no pending or, to the best of its knowledge, threatened action, suit, proceeding, arbitration, litigation, or investigation of or before any Governmental Entity which challenges the validity or enforceability of this Guaranty;

8.11. it is not subject to any outstanding judgment, rule, writ, injunction or decree of any Governmental Entity that adversely affects its ability to perform its obligations under this Guaranty; and

8.12. it derives a substantial direct or indirect economic benefit from the Design-Build Agreement and the transaction(s) consummated thereunder.

9. Net Worth/Liquidity

9.1. Commencing as of the date hereof and through the end of the Warranty Period, Guarantor shall at all times [in aggregate][1] maintain a Net Worth of at least $[____N/A_____].00.***[NTD: the amount specified should be at least equal to the Contract Sum; however, this amount may be adjusted based upon the complexity of the Project]*** "Net Worth" means tangible net worth, calculated and determined in accordance with GAAP (or such other accounting basis reasonably acceptable to GDOT), which shall be exclusive of Guarantor's interest in Design-Builder and the Project. Failure to maintain such a Net Worth shall constitute a Design-Builder Default under the Design-Build Agreement that, subject to the cure periods thereunder, entitles the Guaranteed Parties to exercise all of their remedies thereunder. Commencing as of the date hereof and through the end of the Warranty Period, Guarantor shall at all times [in aggregate][2] maintain Liquidity of at least $[____N/A_____].00.***[NTD: the amount specified should be at least equal to the Contract Sum; however, this amount may be adjusted based upon the complexity of the Project]*** As used herein, the term "Liquidity" shall mean the amount of liquid assets held by Guarantor, calculated and determined in accordance with GAAP (or such other accounting basis reasonably acceptable to GDOT), which shall be exclusive of Guarantor's interest in Design-Builder and the Project. Failure to maintain such a Liquidity shall constitute a Design-Builder Default under the Design-Build Agreement that, subject to the cure periods thereunder, entitles the Guaranteed Parties to exercise all of their remedies thereunder. The Net Worth and Liquidity specified in this Section 9.1 shall be subject to review, adjustment, and approval of GDOT in its sole discretion.

9.2. A Design-Builder Default under Section 9.1 of this Guaranty shall be deemed cured following: (a) Guarantor's satisfaction the Net Worth and Liquidity requirements set forth in Section 9.1 within 30 days of receipt of notice from GDOT of such Design-Builder Default; or (b) Design-Builder or Guarantor's furnishing of a letter of credit or payment to GDOT for the benefit of the Project, in the amount of the reasonably estimated maximum liability of the Guarantor under this Guaranty; provided, however, that diligent efforts to furnish such a letter of credit or make such payments commence within 10 days of receipt of notice from GDOT of such Design-Builder Default, and such cure is effected within 30 days.

9.3. As of the date of this Guaranty, Guarantor has entered into and continues to serve as the guarantor of its subsidiary or affiliate's payment and/or performance under [__] guaranties other than this Guaranty (such other outstanding guarantees, the "Separate Guaranties"). The total aggregate amount Guarantor is guaranteeing under such outstanding Separate Guaranties is $[_____]. Guarantor shall notify GDOT in writing promptly after entering into a Separate Guaranty following the date of this guaranty.

10. Financial Reporting; Audit.

10.1. Guarantor hereby warrants and represents unto GDOT that any and all balance sheets, net worth statements and other financial data which may hereafter be given to GDOT with respect to Guarantor will at the time of such delivery fairly and accurately present the financial condition of Guarantor.

---

1. Add if there is more than one guarantor.

2. Add if there is more than one guarantor.

10.2. Guarantor shall furnish to GDOT, 30 days after any request by GDOT, a financial statement for the calendar year (including, but not limited to, income, expenses, and cash flows), certified as true, complete, and accurate in all material respects, in such form and with such detail as GDOT may reasonably require.

10.3. Guarantor acknowledges and agrees that GDOT is authorized once in any 12 month period, or at any time during an ongoing Design-Builder Default under the Design-Build Agreement or default by Guarantor hereunder, to obtain a credit report on Guarantor, the cost of which shall be paid for by Guarantor.

11. Governing Law. The validity, interpretation and effect of this Guaranty are governed by and will be construed in accordance with the laws of the State of Georgia applicable to contracts made and performed in such State and without regard to conflicts of law doctrines except to the extent that certain matters are preempted by federal law. The Guarantor consents to the jurisdiction of the State of Georgia with regard to this Guaranty. The venue for any action regarding this Guaranty shall be the Superior Court of Fulton County, Georgia.

12. Entire Agreement. This Guaranty contains the entire agreement of the Guarantor with respect to the transactions contemplated hereby, and supersedes all negotiations, representations, warranties, commitments, offers, contracts and writings prior to the date hereof, written or oral, with respect to the subject matter hereof. No waiver, modification or amendment of any provision of this Guaranty is effective unless made in writing and duly signed by GDOT referring specifically to this Guaranty, and then only to the specific purpose, extent and interest so provided.

13. Amendments. No amendment of this Guaranty shall be effective unless in writing and signed by Guarantor and GDOT. No waiver of any provision of this Guaranty nor consent to any departure by Guarantor therefrom shall in any event be effective unless such waiver shall be in writing and signed by GDOT. Any such waiver shall be effective only in the specific instance and for the specific purpose for which it was given.

14. Severability. If any provision of this Guaranty is determined to be unenforceable for any reason by a court of competent jurisdiction, it will be adjusted rather than voided, to achieve the intent of the parties and all of the provisions not deemed unenforceable will be deemed valid and enforceable to the greatest extent possible.

15. Notices. Any communication, notice or demand of any kind whatsoever under this Guaranty shall be in writing and: (a) delivered personally; (b) sent by certified mail, return receipt requested; (c) sent by a recognized overnight mail or courier service, with delivery receipt requested; or (d) sent by email communication followed by a hard copy and with receipt confirmed by telephone, to the following addresses (or to such other address as may from time to time be specified in writing by such Person):

If to GDOT:

Georgia Department of Transportation
Office of the Chief Engineer
600 West Peachtree Street, NW
Atlanta, Georgia 30308
Telephone: (404) 631-1004
Email: mpirkle@dot.ga.gov

With copies to:

Georgia Department of Transportation
Division of General Counsel/Administration
600 West Peachtree Street, Suite 2300
Atlanta, Georgia 30308
Telephone: (404) 631-1496
Email: ols@dot.ga.gov

Georgia Department of Transportation
Office of Legal Services
600 West Peachtree Street, Suite 2300
Atlanta, Georgia 30308
Attention: Deputy General Counsel
Telephone: (404) 631-1437
Email: ols@dot.ga.gov

If to Guarantor:

[_____]

Attention:
Telephone:
Email:

Either Guarantor or GDOT may from time to time change its address for the purpose of notices by a similar notice specifying a new address, but no such change is effective until it is actually received by the party sought to be charged with its contents.

All notices and other communications required or permitted under this Guaranty which are addressed as provided in this Section 15 shall be deemed received when actually received in the office of the addressee (or by the addressee if personally delivered) or when delivery is refused, as shown on the receipt of the U.S. Postal Service, private courier, or other Person making the delivery. Notwithstanding the foregoing, all notices and other communications received after 5:00 p.m. shall be deemed received on the first Business Day following delivery. For avoidance of doubt, the date of delivery of any notice or communication under this Guaranty initially dispatched by electronic communication will be considered to be the date of the email notification during the regular business hours of 8:00 a.m. to 4:00 p.m. to the appropriate GDOT personnel. GDOT will not accept facsimile communication of any notice or communication under this Guaranty.

16. Captions. The captions of the various Sections of this Guaranty have been inserted only for convenience of reference and do not modify, explain, enlarge or restrict any of the provisions of this Guaranty.

17. Assignability. This Guaranty is binding upon and inures to the benefit of the successors and assigns of Guarantor and GDOT, but is not assignable by Guarantor without the prior written consent of GDOT, which consent may be granted or withheld in GDOT's sole discretion. Any assignment by Guarantor effected in accordance with this Section 17 will not relieve Guarantor of its obligations and liabilities under this Guaranty. GDOT may assign all or any portion of its rights, title and interests in and to this Guaranty in accordance with Section 19.3 (Assignment by GDOT) of the Design-Build Agreement.

18. Construction of Agreement. Ambiguities or uncertainties in the wording of this Guaranty will not be construed for or against any party, but will be construed in the manner that most accurately reflects the parties' intent as of the date hereof.

19. No Waiver. Any forbearance or failure to exercise, and any delay by GDOT in exercising, any right, power or remedy under this Guaranty will not impair any such right, power or remedy or be construed to be a waiver thereof, nor will it preclude the further exercise of any such right, power or remedy.

20. Bankruptcy; Post-Petition Interest; Solvency.

20.1. The obligations of Guarantor under this Guaranty will not be reduced, limited, impaired, discharged, deferred, suspended or terminated by any proceeding, voluntary or involuntary, involving the bankruptcy, insolvency, receivership, reorganization, liquidation or arrangement of the Design-Builder or by any defense which the Design-Builder may have by reason of the order, decree or decision of any court or administrative body resulting from any such proceeding. GDOT is not obligated to file any claim relating to the Guaranteed Obligations if the Design-Builder becomes subject to a bankruptcy, reorganization, or similar proceeding, and the failure of GDOT so to file will not affect Guarantor's obligations under this Guaranty.

20.2. Guarantor acknowledges and agrees that any interest on any portion of the Guaranteed Obligations which accrues after the commencement of any proceeding referred to in Section 20.1 above (or, if interest on any portion of the Guaranteed Obligations ceases to accrue by operation of law by reason of the commencement of said proceeding, such interest as would have accrued on such portion of the Guaranteed Obligations if said proceedings had not been commenced) will be included in the Guaranteed Obligations, because it is the intention of Guarantor and GDOT that the Guaranteed Obligations should be determined without regard to any rule of law or order which may relieve the Design-Builder of any portion of such Guaranteed Obligations. Guarantor will permit any trustee in bankruptcy, receiver, debtor in possession, assignee for the benefit of creditors or any similar person to pay GDOT, or allow the claim of GDOT in respect of, any such interest accruing after the date on which such proceeding is commenced.

21. Attorneys' Fees. Guarantor agrees to pay to GDOT without demand reasonable attorneys' fees and all costs and other expenses (whether by lawsuit or otherwise, and including such fees and costs of litigation, arbitration and bankruptcy, and including appeals) incurred by GDOT in enforcing, collecting or compromising any Guaranteed Obligation or enforcing or collecting this Guaranty against Guarantor or in attempting to do any or all of the foregoing.

22. Joint and Several Liability. If the Guarantor is comprised of more than one individual and/or entity, such individuals and/or entities, as applicable, shall be jointly and severally liable for the Guaranteed Obligations. If more than one guaranty is executed with respect to the Design-Builder and the Project, each guarantor under such a guaranty shall be jointly and severally liable with the other guarantors with respect to the obligations guaranteed under such guaranties. GDOT may in its sole discretion: (a) bring suit against Guarantor, or any one or more of the Persons constituting Guarantor, and any other guarantor, jointly and severally, or against any one or more of them; (b) compromise or settle with any one or more of the Person(s) constituting Guarantor, or any other guarantor, for such consideration as GDOT may deem proper; and (c) discharge or release one or more of the Person(s) constituting Guarantor, or any other guarantor, from liability or agree not to sue such Person, none of which shall in any way affect the obligations

hereunder of any other Person(s) constituting the Guarantor, or otherwise affect or impair the rights of GDOT hereunder with respect to such other Person(s) constituting the Guarantor.

23. Defenses. Notwithstanding any other provision to the contrary, Guarantor shall be entitled to the benefit of all defenses, protections, and rights of notice, enforcement and collection available to the Design-Builder under the Design-Build Agreement except for the following (with respect to which, for the avoidance of doubt, Guarantor shall under no circumstances be entitled): (a) those expressly waived in this Guaranty, (b) failure of consideration, lack of authority of the Design-Builder and any other defense to formation of the Design-Build Agreement, (c) defenses available to the Design-Builder under any federal or state law respecting bankruptcy, arrangement, reorganization or similar relief of debtors. Action against Guarantor under this Guaranty shall be subject to no prior notice or demand.

24. Additional Guarantor Waivers and Acknowledgements.

24.1. Guarantor hereby waives any and all defenses it might have that Liquidated Damages, or Nonrefundable Deductions and other stipulated damages, constitute a penalty or that they do not bear a reasonable relation to the actual damages.

24.2. GUARANTOR ACKNOWLEDGES HAVING READ ALL OF THE PROVISIONS OF THIS GUARANTY AND AGREES TO ITS TERMS. IN ADDITION, GUARANTOR UNDERSTANDS THAT THIS GUARANTY IS EFFECTIVE UPON EXECUTION OF THIS GUARANTY. NO FORMAL ACCEPTANCE BY GDOT IS NECESSARY TO MAKE THIS GUARANTY EFFECTIVE. THIS GUARANTY IS EFFECTIVE AS OF THE DATE HEREOF.

24.3. Guarantor hereby waives any benefit of O.C.G.A. § 10-7-24.

[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, Guarantor has caused this Guaranty to be duly executed and delivered by its duly authorized officer effective as of this [_____] day of [_____] 20__.

[_____]

By:_____

Name: _____

Title: _____

Attested:

By:_____

Name: _____

Title: _____

FORM Z
BRINGDOWN FINANCIAL CAPACITY, STRENGTH, AND ABILITY CERTIFICATE

FOR PROPOSER, PARTICIPATING MEMBERS OF PROPOSER, MAJOR NON-PARTICIPATING MEMBERS AND ANY MAJOR SUBCONTRACTORS AND/OR MAJOR SUBCONSULTANTS [3] (AS APPLICABLE)

Proposer shall provide the following certificate(s), **IN LETTER FORM ON COMPANY LETTERHEAD FOR PROPOSER, PARTICIPATING MEMBERS OF PROPOSER, MAJOR NON-PARTICIPATING MEMBERS AND ANY MAJOR SUBCONTRACTORS AND/OR MAJOR SUBCONSULTANTS (AS APPLICABLE), WITH THE LANGUAGE IN BOLD VERBATIM** as follows:

(a) With respect to Proposer (from each of its Participating Members, as may be applicable), the Major Non-Participating Members (if not the Proposer) and each Major subcontractor and Major subconsultant, a letter, signed by each from the President, Chief Executive Officer, Chief Financial Officer, Treasurer, or equivalent position, in each case authorized and empowered to certify on behalf of its company, dated no earlier than 14 calendar days prior to the Proposal Due Date, certifying that:

In respect of the Proposer, the Lead Contractor (if not the Proposer), the Lead Design Consultant (if not the Proposer), and Major subcontractors and Major subconsultants:

(i) no material change has occurred in the respective entity's financial position since the deadline for submission of the SOQ;

(ii) no voluntary or involuntary bankruptcy, insolvency, liquidation, restructuring, suspension of payments, scheme or arrangement, appointment of provisional liquidated, receiver, or administrative receiver, resolution or petition for winding-up or similar proceeding, under any applicable law, in any jurisdiction, is imminent or threatened; and

(iii) its respective entity's financial position does not reflect any material contingent liabilities (including off-balance sheet liabilities), unusual forward or long-term commitments, in each case that arose since the deadline for submission of the SOQ; and

(iv) that, if ultimately selected as the Apparent Successful Proposer (with its then-identified DB Team), the entity has sufficient financial capacity, strength, and ability to carry out the Project responsibilities for the Project.

FORM AA
INDICATIVE PROPOSAL QUANTITIES

INSTRUCTIONS:

(a) Submit one completed copy of Form AA for the Proposer.

(b) Populate the Indicative Proposal Quantity column for each Base Material item on the unit basis indicated. If electing to opt out of participating in Indicative Proposal Quantity, Proposer shall insert 'N/A' in lieu of a quantity.

Base Material	Indicative Proposal Quantity	Unit
Asphalt Cement		Ton
Fuel (Regular)		Gallon
Fuel (Diesel)		Gallon
Steel (Reinforcing Bars)		CWT
Steel (Hot-Rolled Carbon-Steel Plate)		CWT
Steel (Steel Piling (H-Pile))		CWT
Portland Cement		Ton

Indicative Proposal Quantities shall be true estimates based on the Proposer's design and construction plan. They shall be supported by calculations attached to this form showing how the amounts are derived from the Proposer's design and construction plan and assumptions.

EXHIBIT AA-1

SUPPORTING CALCULATIONS FOR INDICATIVE PROPOSAL QUANTITIES[1]

[insert/attach]

[1] If Proposer elects to designate its provided supporting calculations as "trade secret" or proprietary, then Proposer shall comply with the requirements set forth in Section 2.8 and Section B.2.1.1 of the ITP.

Date Posted: October 17, 2025

DESIGN-BUILD AGREEMENT

between

the Georgia Department of Transportation

and

[_____]*[NTD: insert contractor counterparty's legal name]*

P.I. NO. 0017182

HENRY COUNTY

I-75 AT BETHLEHEM ROAD INTERCHANGE PROJECT

Dated Advertisement: June 12, 2025

Amendment #1: August 1, 2025

Amendment #2: August 29, 2025

Amendment #3: October 3, 2025

Amendment #4: October 17, 2025

Letting Date: November 12, 2025

TABLE OF CONTENTS

Page

Article 1 DEFINITIONS; DESIGN-BUILD DOCUMENTS; ORDER OF PRECEDENCE 3

1.1 Definitions 3
1.2 Design-Build Documents; Order of Precedence 3
1.3 Reference Information Documents 5
1.4 Formal Communications; Time Periods 6
1.5 Standards Relating to GDOT Discretion 7
1.6 Interpretive Engineering Decisions 7

Article 2 GRANT OF GDOT AND RIGHT OF WAY 8

2.1 Grant of Authority for Undertaking 8
2.2 Right of Way; Property Ownership 8
2.3 Existing Right of Way 9
2.4 State Proposed/State Acquired Right of Way 9
2.5 State Proposed/Design-Builder Acquired Right of Way 11
2.6 Design-Builder Proposed/Design-Builder Acquired Right of Way 14
2.7 Design-Builder Proposed/State Acquired Right of Way 17
2.8 Access to Certain Parcels within the Project Limits 19
2.9 Temporary Interests 20
2.10 Access and Inspection Rights for GDOT and Other Persons 20
2.11 Nature of Rights/Interests 21

Article 3 CONTRACT TIME 23

3.1 Term 23
3.2 Timely Performance; Time is of the Essence 23
3.3 Contract Time, Date of Commencement, and Notice to Proceed 25
3.4 Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work. 29
3.5 Float 31
3.6 Project Schedule Updates; SOV Updates 31
3.7 Estoppel for Acceptance of Project Schedule Submittals 31
3.8 Use of Project Schedule Updates 32

Article 4 RESERVED 33

Article 5 CONTRACT SUM, PROJECT PAYMENTS, AND PUBLIC FUNDS 34

5.1 Payment of Contract Sum 34
5.2 Project Payments 34
5.3 GDOT Monetary Obligations and Overall GDOT Limitation of Liability 34
5.4 Material Indexing 34
5.5 Reserved 34

Article 6 PROJECT PLANNING AND APPROVALS; PROJECT ADMINISTRATION, REVIEW AND OVERSIGHT; PUBLIC INFORMATION 35

6.1 Preliminary Planning and Engineering Activities; Site Conditions 35
6.2 Governmental Approvals and Third Party Agreements 35
6.3 Submittal Review; GDOT Oversight; Quality Posture 39
6.4 Community Outreach and Public Information 44
6.5 Cooperation with Governmental Entities 45
6.6 Encroachment Permits 45
6.7 Certain Third Party Agreements 46
6.8 Assignment of Certain Causes of Action 46

Article 7 DEVELOPMENT OF THE PROJECT 48

7.1 General Obligations of Design-Builder 48
7.2 Performance, Design and Construction Standards; Deviations; Design Exceptions 49
7.3 Design-Builder Responsibility for Nonconforming Work 51
7.4 Design Implementation and Submittals 54
7.5 Utility Adjustments 54
7.6 Completion of Interim Milestones 66
7.7 Substantial Completion, Punch List, Final Acceptance 67
7.8 Hazardous Materials Management 74
7.9 Environmental Compliance 76
7.10 Railroad-Highway Matters 76
7.11 Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work 77
7.12 UAS Requirements 79
7.13 Maintenance During Construction Work 80
7.14 Impact of ATCs on the Project 81
7.15 Title; Risk of Loss 81
7.16 Existing Improvements and Latent Defects 82
7.17 Value Engineering 82
7.18 Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data 86

Article 8 SECURITY AND INCIDENT RESPONSE 89

Article 9 MANAGEMENT SYSTEMS AND OVERSIGHT 90

9.1 Project Management Plan 90
9.2 Quality Related 90
9.3 Traffic Management 90

Article 10 CONTRACTING AND LABOR PRACTICES 92

10.1 Disclosure of Contracts and Contractors 92
10.2 Responsibility for Work, Contractors and Employees 92
10.3 Key Contracts; Contractor Qualifications 93
10.4 Key Personnel; Required Personnel 95
10.5 Contracts with Affiliates 97
10.6 Labor Standards 98

10.7 Ethical Standards 99
10.8 Non-Discrimination; Equal Employment Opportunity 100
10.9 Reserved 101
10.10 Job Training Program 101
10.11 OJT Goal 101
10.12 Prevailing Wages 102
10.13 No Retainage; Prompt Payment to Contractors and Pay When Paid Provisions 102
10.14 Suspension and Debarment 103
10.15 Design-Builder Team Identification 103
10.16 Boycott of Israel 103

Article 11 RELATED AND OTHER FACILITIES 104

11.1 Integration with Related Transportation Facilities 104
11.2 Reserved 104

Article 12 SAFETY 105

Article 13 RELIEF EVENTS; COMPENSATION EVENTS 106

13.1 Notices 106
13.2 Relief Event and Compensation Event Determinations 113
13.3 Relief Events Constraints 115
13.4 Compensation Events Principles 115
13.5 Burden of Proof 123

Article 14 GDOT CHANGES; DESIGN-BUILDER CHANGES; DIRECTIVE LETTERS 124

14.1 GDOT Changes 124
14.2 Design-Builder Changes 126
14.3 Directive Letters 126
14.4 Reductions in the Contract Sum 127
14.5 Final Relief Event and Compensation Event Determinations 127
14.6 Specific Change-Related Matters 128

Article 15 REPRESENTATIONS AND COVENANTS 131

15.1 Design-Builder Representations and Covenants 131

Article 16 INSURANCE; PERFORMANCE SECURITY; INDEMNITY 134

16.1 Insurance 134
16.2 Performance and Payment Security 140
16.3 Guaranties 141
16.4 Indemnity by Design-Builder 142
16.5 Defense and Indemnification Procedures 144

Article 17 DEFAULT; REMEDIES; OTHER GDOT RIGHTS; DISPUTE RESOLUTION 148

17.1 Default by Design-Builder; Cure Periods 148
17.2 Warning Notices 151

17.3 Remedies for Design-Builder Default 152
17.4 Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions 159
17.5 Default by GDOT; Cure Periods 164
17.6 Design-Builder Remedies for GDOT Default 165
17.7 Suspension for GDOT's Convenience; Suspensions for Safety 167
17.8 Dispute Resolution Procedures 168
17.9 Partnering 170

Article 18 TERMINATION 171

18.1 Termination for Convenience 171
18.2 Termination for Design-Builder Default 171
18.3 Termination for GDOT Default, Suspension of Work or Materially Delayed NTP2 172
18.4 Termination Procedures and Duties 173
18.5 Contracts and Agreements 175
18.6 Liability After Termination; Final Release 176
18.7 Exclusive Termination Rights 176
18.8 Access to Information 176
18.9 Termination by Court Ruling 176

Article 19 ASSIGNMENT AND TRANSFER 178

19.1 Restrictions on Assignment, Subletting and Other Transfers 178
19.2 Standards and Procedures for Certain GDOT Approvals 178
19.3 Assignment by GDOT 178
19.4 Notice and Assumption 179
19.5 Change of Organization or Name 179

Article 20 RECORDS AND AUDITS; INTELLECTUAL PROPERTY 180

20.1 Maintenance and Inspection of Books and Records 180
20.2 Audits 180
20.3 Open Records Act and Freedom of Information Act 182
20.4 Proprietary Intellectual Property 183
20.5 Intellectual Property 185
20.6 Escrowed Documents 186
20.7 Subcontractor Pricing Documents. 189

Article 21 FEDERAL REQUIREMENTS 190

21.1 Compliance with Federal Requirements 190
21.2 Role of and Cooperation with FHWA 190
21.3 Special Provision Regarding Waiver of Buy America Requirements 190

Article 22 MISCELLANEOUS 191

22.1 Taxes 191
22.2 Amendments 191
22.3 Waiver 191
22.4 Independent Contractor 192

22.5 Successors and Assigns 192
22.6 Designation of Representatives; Cooperation with Representatives 192
22.7 Survival 193
22.8 Limitation on Third Party Beneficiaries 193
22.9 No Personal Liability of GDOT's Constituents; No Tort Liability 193
22.10 Governing Law 194
22.11 Notices and other Formal Communications 194
22.12 Integration of Design-Build Documents 196
22.13 Severability 196
22.14 Headings 196
22.15 Construction and Interpretation of the Design-Build Documents 196
22.16 Computation of Periods 198
22.17 Usury Savings 198
22.18 Further Assurances 199
22.19 Entire Agreement 199
22.20 GDOT to Bind Design-Builder 199
22.21 Counterparts 199

LIST OF EXHIBITS

Exhibit 1 Acronyms, Abbreviations, and Definitions

Exhibit 2 Proposal Commitments

Exhibit 3 Other Proposal Submissions

Exhibit 4 Parcel Acquisition Table

Exhibit 5 Terms for Termination Compensation

Exhibit 6 Modifications to Equipment Watch Equipment Rates

Exhibit 7 Contract Sum and Payment Terms

Exhibit 8 Other Legal Requirements

Exhibit 9 Milestone Schedule

Exhibit 10 Hazardous Materials Risk Allocation Terms

Exhibit 11 Initial Designation of Authorized Representatives

Exhibit 12 Lane Closure Deductions

Exhibit 13 Reserved

Exhibit 14 OJT Requirements

Exhibit 15 Required State Certifications

Exhibit 16 Insurance Coverage Requirements

Exhibit 17 Measures of Liquidated Damages and Nonrefundable Deductions

Exhibit 18 ATC Supplement

Exhibit 19 Forms of P&P Bonds, Warranty Bond

Exhibit 20 Material Indexation Adjustments

Exhibit 21 Reserved

Exhibit 22 Form of Certificate Regarding Relief Event and Compensation Event

DESIGN-BUILD AGREEMENT FOR THE I-75 AT BETHLEHEM ROAD INTERCHANGE PROJECT

This Design-Build Agreement for the I-75 at Bethlehem Road Interchange Project (this "Design-Build Agreement") is entered into and effective as of [_____] (the "Effective Date"), by and between the Georgia Department of Transportation, a body corporate and politic and an instrumentality and public corporation of the State of Georgia, ("GDOT"), and [_____]***[name]***, a[n] [_____]***[form/jurisdiction]*** ("Design-Builder").

R E C I T A L S

A. Pursuant to the O.C.G.A. § 32-2-81(c), GDOT is authorized to "combine any or all of the environmental services, utility relocation services, right of way services, design services, and construction phases of a public road or other transportation purpose project into a single contract using a design-build procedure."

B. Pursuant to O.C.G.A. § 32-2-81, "the term 'design-build procedure' means a method of contracting under which GDOT contracts with another party for the party to both design and build the structures, facilities, systems, and other items specified in the contract." GDOT "may use the design-build procedure for buildings, bridges and approaches, rail corridors, technology deployments, and limited or controlled access projects or projects that may be constructed within existing rights of way where the scope of work can be clearly defined or when a significant savings in the project delivery time can be attained."

C. Pursuant to the provisions of O.C.G.A. above, and Chapter 672-18 of the Rules of the State Department of Transportation (the "Rules"), GDOT issued a Request for Qualifications ("Request for Qualifications" or "RFQ") on April 2, 2025, as amended May 6, 2025, requesting submittals of Statements of Qualifications ("SOQs") from respondents desiring to develop Bethlehem Road Interchange (the "Project") through a design-build agreement.

D. GDOT received five (5) responsive statements of qualification by May 15, 2025, and subsequently shortlisted or qualified five (5) responsive proposers.

E. On June 12, 2025, GDOT issued to the shortlisted proposers a Request for Proposals to develop, design, and construct the Bethlehem Road Interchange Project through a Design-Build Agreement, Project P.I. No. 0017182 issued June 12, 2025 the "Request for Proposals" or "RFP").

F. On [_____]***[NTD: date]***, GDOT received responses to the RFP, including the response of [_____]***[NTD: insert selected proposer]*** [on behalf of Design-Builder]***[NTD: include only if the selected proposer was not the actual design-build entity entering into this DBA]*** (the "Proposal").

G. As part of the RFP, GDOT required that shortlisted or qualified proposers commit to entering into a Design-Build Agreement with GDOT for the development, design, and construction of the Project.

H. GDOT determined that the proposer [that formed Design-Builder]***[NTD: include if the proposer is not the design-build entity entering into this DBA]*** was the "Apparent Successful Proposer" (as defined in the RFP).***[NTD: reflect whether the proposer is the Design-Builder or formed a company to be the Design-Builder]***

NOW, THEREFORE, in consideration of the Work to be performed by Design-Builder, the foregoing premises and the covenants and agreements set forth herein, the Parties hereby agree as follows:

Article 1 DEFINITIONS; DESIGN-BUILD DOCUMENTS; ORDER OF PRECEDENCE

1.1 Definitions

Definitions for certain terms used in this Design-Build Agreement and the other Design-Build Documents are contained in DBA Exhibit 1 (*Acronyms, Abbreviations, and Definitions*).

1.2 Design-Build Documents; Order of Precedence

Each of the "Design-Build Documents" (listed in DBA Section 1.2.1 (Design-Build Documents; Order of Precedence)), including specifically the Electronic Portions, is an essential part of the agreement between the Parties. The Design-Build Documents are intended to be complementary and to be read together with this Design-Build Agreement, as a complete agreement. Each of the Design-Build Documents (other than this Design-Build Agreement) is hereby expressly incorporated herein by reference.

1.2.1 Subject to DBA Section 1.2.2 (*Design-Build Documents; Order of Precedence*), without limiting DBA Section 1.2.3, DBA Section 1.2.4, and DBA Section 1.2.5 (*Design-Build Documents; Order of Precedence*), and except in those circumstances expressly stated specific to particular provisions (e.g., DBA Section 6.3.1.2 (*Submittal Review; GDOT Oversight; Quality Posture*) and DBA Section 21.1 (*Compliance with Federal Requirements*, in the event of any conflict, ambiguity, or inconsistency among the Design-Build Documents, the order of precedence, from highest to lowest, shall be as follows:

1.2.1.1 Supplemental Agreements, and all exhibits, riders, and attachments thereto;

1.2.1.2 the body of this Design-Build Agreement and DBA Exhibit 1 (*Acronyms, Abbreviations, and Definitions*);

1.2.1.3 all exhibits (other than DBA Exhibit 1 (*Acronyms, Abbreviations, and Definitions*) and DBA Exhibit 2 (*Proposal Commitments*));

1.2.1.4 subject to DBA Section 1.2.5 and DBA Section 1.2.6(*Design-Build Documents; Order of Precedence*), amendments to the Technical Provisions (including Interpretive Engineering Decisions, but excluding the Project Standards, except when expressly referenced in a Technical Provision, as amended);

1.2.1.5 subject to DBA Section 1.2.5 and DBA Section 1.2.6 (*Design-Build Documents; Order of Precedence*), the Technical Provisions (excluding Interpretive Engineering Decisions and the Project Standards, except when expressly referenced in a Technical Provision);

1.2.1.6 exhibits and attachments to the amended Technical Provisions;

1.2.1.7 exhibits and attachments to the unamended Technical Provisions;

1.2.1.8 Project Standards;

1.2.1.9 Design-Builder's Proposal Commitments set forth in DBA Exhibit 2 (*Proposal Commitments*); and

1.2.1.10 the accepted and then-current Project Management Plan, excluding GDOT obligations thereunder.

1.2.2 Without limiting DBA Section 1.2.3, DBA Section 1.2.4, and DBA Section 1.2.5 (*Design-Build Documents; Order of Precedence*), as among the Technical Provisions, in the event of any conflict, ambiguity or inconsistency among the Technical Provisions, the order of precedence, from highest to lowest, shall be as follows:

1.2.2.1 Design Exceptions;

1.2.2.2 Design Variances;

1.2.2.3 design criteria expressly stated in the Technical Provisions;

1.2.2.4 design criteria referred to, but not expressly stated, in the Technical Provisions (and as between Georgia-specific and non-Georgia-specific references, Georgia-specific references take precedence);

1.2.2.5 Design-Builder-Provided Specifications;

1.2.2.6 Special Provisions; and

1.2.2.7 Standard Specifications (defined term). For avoidance of doubt, the (defined term) "Standard Specifications" does not mean the entirety of the GDOT Standard Specifications, but instead those portions included in the Technical Provisions as described.

1.2.3 If the Design-Build Documents contain any conflict, ambiguity, or inconsistency between or among provisions, then the provisions that establish the higher quality, manner, or method of performing the Work, exceed Good Industry Practice, or use more stringent standards will prevail. Additional details in a lower priority Design-Build Document shall be given effect except to the extent they irreconcilably conflict with requirements, provisions and practices contained in the higher priority Design-Build Document. If the Design-Build Documents contain any conflict, ambiguity, or inconsistency between or among provisions that cannot be reconciled by applying the foregoing rules, then the provisions (whether setting forth performance or prescriptive requirements) contained in the document of higher order of precedence shall prevail over the provisions (whether setting forth performance or prescriptive requirements) contained in the document of lower order of precedence.

1.2.4 Where there is an irreconcilable conflict among any standards, criteria, requirements, conditions, procedures, specifications or other provisions applicable to the Project set forth in any manual(s) or publication(s) referenced within a Design-Build Document or set of Design-Build Documents with the same order of priority (including within documents referenced therein), then the standard, criterion, requirement, condition, procedure, specification or other provision offering higher quality, manner, or method of performance will apply, unless GDOT in its sole discretion approves otherwise in writing. If there is an irreconcilable conflict between manuals or publications referenced in a Design-Build Document of differing priorities, the order of precedence set forth in DBA Section 1.2.1 (*Design-Build Documents; Order of Precedence*) will apply. If either Party becomes aware of any such conflict, it shall promptly notify the other Party of the conflict in writing. GDOT will issue a written determination respecting which of the conflicting items is to apply promptly after it becomes aware of any such conflict.

1.2.5 Without limiting the foregoing, with respect to any conflict, ambiguity, or inconsistency between or among provisions of the same order of precedence, text documents prescribing specifications, standards, criteria, requirements, and conditions have precedence over drawings or other non-text Design Documents.

1.2.6 The ATCs set forth in the ATC Supplement attached in DBA Exhibit 18 (*ATC Supplement*) (the "ATC Supplement") are hereby incorporated into the Project and the Work. The terms and conditions of the ATC Supplement shall supplement and otherwise amend the identified requirements of the Technical Provisions, except as otherwise stated in the Design-Build Documents (e.g., DBA Section 7.14 (*Impact of ATCs on the Project*).

1.2.7 The Parties acknowledge that:

1.2.7.1 [_____];

1.2.7.2 [_____]; and

1.2.7.3 [_____]

(collectively, the "Electronic Portions") are provided via Project-specific website at https://[_____], established as of the Effective Date. The Parties agree that the Electronic Portions posted to such website form an integral part of the Design-Build Documents, and by executing the Design-Build Agreement, the Parties acknowledge that the Electronic Portions, as posted, are true and accurate and reflects the agreement of the Parties.

1.3 Reference Information Documents

1.3.1 Design-Builder acknowledges that GDOT has provided and disclosed to Design-Builder the Reference Information Documents. The Reference Information Documents are not mandatory or binding on Design-Builder. Except with respect to the Design-Builder's right to draw any amount under DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) with respect to Unexpected Subsurface Conditions, Design-Builder is not entitled to rely on the Reference Information Documents as presenting development, design, engineering, or construction solutions or other direction, means or methods for complying with the requirements of the Design-Build Documents, Governmental Approvals or Law.

1.3.2 Except as expressly set forth herein, Design-Builder acknowledges that neither GDOT nor any GDOT-Related Entity represents, warrants, or guarantees that the information contained in the Reference Information Documents is complete or accurate or that such information conforms with the requirements of the Design-Build Documents, Governmental Approvals or Laws, and neither GDOT nor any GDOT-Related Entity shall have any liability to Design-Builder or any Design-Builder-Related Entity, nor shall Design-Builder have any right to claim any extension of time, relief from obligations, or compensation with respect to:

1.3.2.1 any inaccuracy, omission, lack of fitness for any purpose or inadequacy of any kind whatsoever in the Reference Information Documents;

1.3.2.2 any failure to make available to Design-Builder any materials, documents, drawings, plans, or other information relating to the Project as part of the Reference Information Documents; or

1.3.2.3 any causes of action, claims or Losses whatsoever suffered by Design Builder or any Design-Builder-Related Entity by reason of any use of information contained in, or any action taken or forbearance made in reliance on, the Reference Information Documents.

1.3.3 GDOT represents that, as of the Effective Date, GDOT has not intentionally withheld material information in its possession relevant to conditions of the Property, and to the extent not included in the Property as of the Effective Date, the Existing Right of Way.

1.3.4 Design-Builder acknowledges and agrees that it is obligated to conduct any and all studies, analyses, and investigations as it deems advisable to verify and supplement information in the Reference Information Documents or otherwise as may be required to perform the Work. Any use of information in the Reference Information Documents in performance of the Work, without verification or supplement, is entirely at Design-Builder's own risk. If Design-Builder or any Design-Builder-Related Entity uses any of the information in Reference Information Documents in any way, then such use is made on the basis that Design-Builder, not GDOT, has approved and is responsible for the information.

1.3.5 The Parties acknowledge and agree that general industry or general government manuals and publications that are part of the Reference Information Documents may be revised, changed, added to, or replaced from time to time by the agencies or organizations that issue such manuals and publications. GDOT shall have no obligation to notify Design-Builder regarding any such revisions, changes, additions or replacements. Design-Builder shall independently maintain awareness of such changes as they are published or made public.

1.4 Formal Communications; Time Periods

1.4.1 Whenever the Parties communicate by Formal Communication, and such Formal Communication requires or requests an action or response by the other Party, then except where time periods are expressly stated elsewhere in the Design-Build Documents (e.g., DBA Section 19.2 (*Standards and Procedures for Certain GDOT Approvals*), the receiving Party will take such action or offer such response promptly and in any event within 20 days, after the date of receipt.

1.4.2 The time periods for action and/or response shall apply to and restart with all subsequent Formal Communication reasonably relating to the original Formal Communication, except as may otherwise be agreed by the Parties (or determined pursuant to Dispute Resolution Procedures).

1.4.3 Notwithstanding the foregoing in DBA Section 1.4.1 (*Formal Communications; Time Periods*) and DBA Section 1.4.2 (*Formal Communications; Time Periods*), the time periods with respect to GDOT's action or response (as applicable) shall be subject to equitable adjustment, generally in keeping with time period adjustments for Submittals as provided in TP Section 2.8.4 (*Time Periods for GDOT Review*) for multiple concurrent Notices, and GDOT will undertake commercially reasonable efforts to respond promptly.

1.4.4 Notwithstanding anything to the contrary in the Design-Build Documents, GDOT reserves the right, in its sole discretion, to determine whether any submission by, or on behalf of, Design-Builder, and regardless as to title, is a Formal Communication or Submittal, and in each instance, whether (a) the Formal Communication presents a particular type of Notice or (b) a Submittal presents a particular type of Submittal, and, in either case, will act or respond as if such submission is such Formal Communication (or Notice) or Submittal in compliance with the terms, and in particular the time periods, with respect thereto. For avoidance of doubt, GDOT's interpretation as to the nature of any submission that purports to be a "draft", is incomplete, or presents any information or communicates any intention of Design-Builder that GDOT, regardless as to title, otherwise determines to frustrate or exploit the Formal Communication and Submittal processes and time periods, shall be final and not subject to Dispute Resolution Procedures.

1.4.5 Refer to DBA Section 22.11 (*Notices and other Formal Communications*) for additional provisions regarding Formal Communications.

1.5 Standards Relating to GDOT Discretion

1.5.1 **Reasonableness Standard**. In all cases, where approvals, consents, determinations, acceptance, decisions, or other actions are required to be provided or made by GDOT under the Design-Build Documents, including with respect to Submittals, such approvals, consents, determinations, acceptance, decisions, or other action shall not be withheld unreasonably except in cases where a different standard is specified in the Design-Build Documents.

1.5.2 **Good Faith Standard**. If any approval, consent, determination, acceptance, decision, or other action is subject to the good faith discretion of GDOT, then such approval, consent, determination, acceptance, decision, or other action by GDOT shall be binding, unless a final order is issued by a court of competent jurisdiction that GDOT's action was arbitrary or capricious.

1.5.3 **Sole Discretion Standard**. In cases where sole discretion is specified, the decision shall not be subject to the Dispute Resolution Procedures or other legal challenge.

1.5.4 **Failure to Act**. In all cases where GDOT approvals, consents, determinations, acceptance, decisions, or other actions are required (regardless as to whether subject to the reasonableness, good faith, or sole discretion standards) and GDOT fails to act, such failure to act shall constitute a disapproval, lack of consent, rejection, or equivalent.

1.6 Interpretive Engineering Decisions

1.6.1 Design-Builder may apply in writing to GDOT for, or for approval of, an interpretive engineering decision concerning the meaning, scope, interpretation, and application of the Technical Provisions (each an "Interpretive Engineering Decision"). GDOT may issue a written approval of Design-Builder's proposed Interpretive Engineering Decision, may issue its own Interpretive Engineering Decision, or may disapprove any Interpretive Engineering Decision that Design-Builder proposes.

1.6.2 Design-Builder's request for resolution of an Interpretive Engineering Decision is a Formal Communication. GDOT will respond, and in its response, will provide its written determination including explanation for any disapproval of such application or any differing interpretation. No presumption of approval or disapproval shall arise by reason of GDOT's delay in issuing its written determination. If Design-Builder Disputes GDOT's disposition of Design-Builder's application, such dispute shall be subject to resolution in accordance with the Dispute Resolution Procedures.

1.6.3 Accepted Interpretive Engineering Decisions shall constitute provisions of the Technical Provisions and shall not constitute a GDOT Change or entitle Design-Builder to assert a Relief Event or Compensation Event.

Article 2 GRANT OF GDOT AND RIGHT OF WAY

2.1 Grant of Authority for Undertaking

GDOT grants to Design-Builder the exclusive right (revocable only in accordance with this Design-Build Agreement), and Design-Builder accepts such right and acknowledges its obligation, to design and construct the Project, and to perform the remainder of the Work, all in accordance with the Design-Build Documents.

2.2 Right of Way; Property Ownership

2.2.1 Design-Builder is required to construct the Project on and within the property identified in the NEPA Approval (the "Property") but without limiting Design-Builder's rights and obligations under DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*), DBA Section 2.6.6 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), and DBA Section 2.7 (*Design-Builder Proposed/State Acquired Right of Way*).

2.2.2 GDOT will provide Design-Builder with access rights to the Project Limits in accordance with this DBA Article 2 (*Grant of GDOT and Right of Way*) and TP Section 6 (Right of Way).

2.2.3 Design-Builder acknowledges and agrees that:

2.2.3.1 on and from the date GDOT acquires the fee title or acquires rights to each Parcel in the Project Limits, GDOT is and shall remain throughout the Term, the sole owner of the fee title or such rights as are granted to GDOT to such Parcels; and

2.2.3.2 the Project and, without limiting DBA Section 7.15 (*Title; Risk of Loss*), all Permanent Works located on the Project Limits from time to time shall be and remain the property of:

(a) GDOT, to the extent of its interests of record or as it may otherwise agree from time to time; or

(b) to the extent GDOT has otherwise agreed, a Governmental Entity or Utility Owner.

2.2.3.3 notwithstanding anything to the contrary in the Design-Build Documents, Design-Builder's access right to the Project Limits provided, and subject to the terms and conditions under this DBA Article 2 (*Grant of GDOT and Right of Way*) and TP Section 6 (Right of Way), may, in each case where applicable, be restricted:

(a) to those portions of Parcels that are not within the "do not disturb" areas, or are not otherwise constrained regarding certain restricted activities or placement of certain structures, as identified in TP Attachment 6-4 (ROW Commitments) and TP Attachment 6-3 (State Proposed ROW Plans), if any. If so restricted, Design-Builder shall, as part of the Work, observe, and cause each Design-Builder-Related Entity to observe, all such restrictions; and

(b) should GDOT not have, or have elected not to have, fee title to a Parcel, in which case Design-Builder shall, as part of the Work, observe, and cause each Design-Builder-Related Entity to observe, any restrictions placed on access or use (or both) of each such Parcel, it being understood and agreed that GDOT may, in its sole discretion, afford Design-Builder access to easements or other non-fee interests in real property that GDOT obtains for, or in relation to, the Project or Design-Builder's work.

Any such Parcels not to be held in fee by GDOT will be annotated in DBA Exhibit 4 (*Parcel Acquisition Table*).

2.2.4 GDOT hereby reserves the right to enter upon, possess, control, and utilize the Project Limits without payment of compensation to Design-Builder in accordance with and subject to the terms of this Design-Build Agreement.

2.2.5 Design-Builder acknowledges that GDOT has granted, and hereby reserves the right to grant, to other parties, utility and other permits (including Encroachment Permits) and easements, and modifications thereto, and rights of use to the Project Limits, subject to the limitations of this Design-Build Agreement.

2.2.6 Design-Builder shall perform Acquisition Services, as may be applicable, and comply with the requirements set forth in TP Section 6 (Right of Way) with respect to all State Proposed/State Acquired Right of Way, State Proposed/Design-Builder Acquired Right of Way, Design-Builder Proposed/Design-Builder Acquired Right of Way, and Design-Builder Proposed/State Acquired Right of Way (if any).

2.2.7 Design-Builder shall prepare and submit the ROW Acquisition Plan in accordance with TP Section 6.3.1 (ROW Acquisition Plan).

2.3 Existing Right of Way

GDOT grants to Design-Builder, as of the date of issuance of NTP1 and until the Termination Date:

2.3.1 a non-exclusive right of access, ingress and egress to all real property comprising the Existing Right of Way; and

2.3.2 the right to grant to Design-Builder-Related Entities a non-exclusive right of access, ingress and egress to all real property comprising the Existing Right of Way, for the sole purpose of performing its obligations and exercising its rights under this Design-Build Agreement.

2.4 State Proposed/State Acquired Right of Way

2.4.1 The Parties acknowledge that as of the date of this Design-Build Agreement:

2.4.1.1 GDOT has acquired, or caused to be acquired, a right of access to, or interest in, each State Proposed/State Acquired Right of Way for which the Parcel Availability Date is on or prior to the Effective Date; and

2.4.1.2 GDOT has not acquired a right of access to, or interest in, the State Proposed/State Acquired Right of Way for which the Parcel Availability Date is after the Effective Date.

2.4.2 At any time from the Effective Date, but prior to the date of issuance of NTP3, and as a condition to NTP3, Design-Builder shall notify GDOT with respect to each Parcel of State Proposed/State Acquired Right of Way (Design Contingent) whether the acquisition of such Parcel, or a portion of such Parcel, is required for the Project. If Design-Builder notifies GDOT that:

2.4.2.1 a whole Parcel of State Proposed/State Acquired Right of Way (Design Contingent) is not required for the Project, such Parcel shall be removed from DBA Exhibit 4 (*Parcel Acquisition Table*) and shall no longer constitute State Proposed/State Acquired Right of Way;

2.4.2.2 a whole Parcel of State Proposed/State Acquired Right of Way (Design Contingent) is required for the Project, the Parcel Availability Date with respect to such Parcel shall be the later of:

(a) the date specified in DBA Exhibit 4 (*Parcel Acquisition Table*) with respect to such Parcel; and

(b) the date that is 24 months after GDOT's receipt of Design-Builder's notice under this DBA Section 2.4.2 (*State Proposed/State Acquired Right of Way*); or

2.4.2.3 only a portion of a Parcel of State Proposed/State Acquired ROW (Design Contingent) is required for the Project:

(a) the Design-Builder shall provide the new proposed ROW linework in CADD for the remaining portion of such Parcel and the portion of such Parcel which is not required shall no longer constitute State Proposed/State Acquired ROW; and

(b) the Parcel Availability Date in respect of the remaining portion of such Parcel shall be the date specified in DBA Exhibit 4 (*Parcel Acquisition Table*), calculated from GDOT's receipt of Design-Builder's notice under this DBA Section 2.4.2 (*State Proposed/State Acquired Right of Way*).

2.4.3 Subject to DBA Section 2.4.4 (*State Proposed/State Acquired Right of Way*), if Design-Builder notifies GDOT that some or all of a Parcel of State Proposed/State Acquired Right of Way (Design Contingent) is required in accordance with DBA Section 2.4.2 (*State Proposed/State Acquired Right of Way*) and, based on the RFC Design Documents, such Parcel (or identified portion) is not required for the Project, then to the fullest extent permitted by applicable Law, Design-Builder shall release, protect, defend, indemnify, and hold harmless GDOT and each GDOT-Related Entity on demand from and against any and all Losses that GDOT (or any such GDOT-Related Entity) incurs as a result of the filing of an inverse condemnation of such Parcel. Design-Builder shall pay to GDOT the amount of such Losses within 10 Business Days following receipt of GDOT's invoice and, in the event of any non-payment, GDOT may deduct any unpaid amount from the next applicable Project Payment in accordance with DBA Section 17.3.3.2 (*Damages; Offset*).

2.4.3.1 This DBA Section 2.4.3 (*State Proposed/State Acquired Right of Way*) shall not apply to the extent the Parcel (or identified portion) of State Proposed/State Acquired Right of Way (Design Contingent) is not required due to a GDOT-Caused Delay or a GDOT Change, which in either case is documented in a Supplemental Agreement.

2.4.3.2 GDOT will provide Design-Builder with updated information on the State Proposed/State Acquired Right of Way referred to in DBA Section 2.4.1.2 (*State Proposed/State Acquired Right of Way*) as such information becomes available and confirm once GDOT has acquired each Parcel (or identified portion).

2.4.3.3 Design-Builder shall perform the Post-Acquisition Services for the State Proposed/State Acquired Right of Way in accordance with TP Section 6.5 (Post-Acquisition Services).

2.4.4 GDOT will be responsible for, and shall not have a right to claim from Design-Builder any payment or reimbursement for, all costs and expenses associated with acquiring each Parcel of State Proposed/State Acquired Right of Way, including:

2.4.4.1 the purchase prices, court awards or judgments, for all Parcels required for the Project or the Work;

2.4.4.2 the cost of condemnation proceedings required by the Office of the Attorney General, through jury trials and appeals, including attorneys' and expert witness fees, and all fees and expenses for exhibits, transcripts, photos and other documents and materials production;

2.4.4.3 closing costs associated with Parcel purchases, including applicable property taxes, in accordance with the Uniform Act and GDOT policies; and

2.4.4.4 relocation assistance payments and costs, in accordance with the Uniform Act.

2.5 State Proposed/Design-Builder Acquired Right of Way

2.5.1 This DBA Section 2.5 (*State Proposed/Design-Builder Acquired Right of Way*) applies to all State Proposed/Design-Builder Acquired Right of Way but without limiting Design-Builder's rights and obligations under DBA Section 2.5.8 (*State Proposed/Design-Builder Acquired Right of Way*), DBA Section 2.6.4.1 *(Design-Builder Proposed/Design-Builder Acquired Right of Way*), and DBA Section 2.6.4.2 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*).

2.5.2 The Parties acknowledge that, as of the date of this Design-Build Agreement, neither Design-Builder nor any Design-Builder-Related Entity has acquired a right of access to, or interest in, any State Proposed/Design-Builder Acquired Right of Way, and GDOT has not acquired any right of access to or interest in any State Proposed/Design-Builder Acquired Right of Way for the purposes of this Project. Design-Builder acknowledges that the State's Attorney General has exclusive authority to represent and defend GDOT, and often does so through an appointed Special Assistant to the Attorney General ("SAAG"). Design-Builder acknowledges that in the SAAG's role as attorney for GDOT, the SAAG has the responsibilities identified in TP Section 6.1.3 (Responsibilities of the Office of Attorney General), including specifically responsibilities pertaining to both acquisitions and condemnations, and that the costs and expenses incurred by the SAAG are costs and expenses to Design-Builder's account. For avoidance of doubt, the State's Attorney General, and not Design-Builder, select and appoint the SAAG, and the SAAG's duties are to GDOT, and the State and not to Design-Builder.

2.5.3 With respect to each Parcel of State Proposed/Design-Builder Acquired Right of Way that Design-Builder requires in accordance with its ROW Acquisition Plan, Design-Builder shall:

2.5.3.1 perform Acquisition Services in accordance with applicable provisions of TP Section 6 (Right of Way); and

2.5.3.2 ensure that all State Proposed/Design-Builder Acquired Right of Way are acquired in the name of the "Georgia Department of Transportation".

2.5.4 Design-Builder shall perform the Pre-Acquisition Services for each Parcel in accordance with TP Section 6.3 (Pre-Acquisition Services).

2.5.5 Following the project field review scheduled by Design-Builder under TP Section 6.3.3 (Project Field Review and Inspection Checklist) for each Parcel, GDOT will procure the preparation of a project inspection checklist for each Parcel in accordance with Chapter 4 of GDOT ROW Manual and shall provide a copy to Design-Builder (the "Project Inspection Checklist").

2.5.6 Following completion of the Pre-Acquisition Services for each Parcel, Design-Builder shall perform the remaining Acquisition Services for each Parcel.

2.5.7 If a FMV Offer has been accepted by the Parcel Owner or a Counter Offer for a Parcel has been accepted by GDOT in accordance with TP Section 6.4.3.3 (*Offers and Counter Offers*) and DBA Section 6.3 (*Submittal Review, GDOT Oversight; Quality Posture*), GDOT will enter into an option agreement (each, an "Option Agreement") within 10 days after acceptance of the FMV Offer or Counter Offer (as applicable). Following execution of the Option Agreement, GDOT will conduct the closing for the Parcel in accordance with TP Section 6.1.3 (Responsibilities of the Office of Attorney General).

2.5.8 Where Design-Builder:

2.5.8.1 has used diligent efforts to perform the Pre-Acquisition Services and Parcel Acquisition Services to acquire a Parcel without the use of administrative review or GDOT's condemnation powers; and

2.5.8.2 is unable, after 90 days from acceptance by GDOT of the ROW Acquisition Plan, to acquire such Parcel due to:

(a) a failure to reach an agreement with the Parcel Owner during negotiations; or

(b) a failure to obtain GDOT's (via GDOT) acceptance of a Counter Offer,

Design-Builder may submit a request to GDOT to commence administrative review with respect to such Parcel. Such request shall include such information and other evidence as reasonably necessary to support Design-Builder's request and demonstrate that Design-Builder has met the requirements set forth in this DBA Section 2.5.8 (*State Proposed/Design-Builder Acquired Right of Way*).

2.5.9 Within 10 days after receipt of a request under DBA Section 2.5.8 (*State Proposed/Design-Builder Acquired Right of Way*), GDOT will notify Design-Builder whether Design-Builder has met the requirements set forth in DBA Section 2.5.8 (*State Proposed/Design-Builder Acquired Right of Way*).

2.5.10 If GDOT determines under DBA Section 2.5.9 (*State Proposed/Design-Builder Acquired Right of Way*) that Design-Builder has met the requirements set forth in DBA Section 2.5.8 (*State Proposed/Design-Builder Acquired Right of Way*) with respect to a Parcel, Design-Builder shall perform the Parcel Acquisition Services set forth in TP Section 6.4.4 (Administrative Review Request) with respect to the Parcel and shall, mail the Parcel Owner a 10-day administrative review letter ("Administrative Review Letter") and submit to GDOT the Administrative Review Package in accordance with TP Section 6.4.4.2 (Parcel Owner Administrative Review Request).

2.5.11 If following receipt of Design-Builder's Administrative Review Letter under DBA Section 2.5.10 (*State Proposed/Design-Builder Acquired Right of Way*) a Parcel Owner requests administrative review, then GDOT will, within 45 days after GDOT's acceptance of the Administrative Review Package:

2.5.11.1 mail to the Parcel Owner an acknowledgement letter confirming receipt of the administrative review request;

2.5.11.2 provide a copy to Design-Builder of the administrative review request from the Parcel Owner;

2.5.11.3 complete the administrative review in accordance with Section 6 (General Office Administrative Review Unit) of GDOT ROW Manual and applicable Law;

2.5.11.4 determine (in its sole discretion) whether to accept any settlement proposal from the Parcel Owner received during the administrative review; and

2.5.11.5 if GDOT accepts a settlement proposal received from a Parcel Owner during the administrative review, then GDOT will:

(a) notify Design-Builder in writing within 10 Business Days; and

(b) execute an Option Agreement within 10 days after such notification.

2.5.12 If:

2.5.12.1 Design-Builder has submitted an Administrative Review Letter under DBA Section 2.5.8 (*State Proposed/Design-Builder Acquired Right of Way*);

2.5.12.2 the Parcel Owner:

(a) does not request administrative review within 20 days after receiving the Administrative Review Letter; or

(b) requests administrative review within 20 days after receiving the Administrative Review Letter and GDOT is unable to conclude a settlement to acquire, or cause to be acquired, a Parcel pursuant to the administrative review described in DBA Section 2.5 (*State Proposed/Design-Builder Acquired Right of Way*); and

2.5.12.3 Design-Builder has submitted a Condemnation Package to GDOT in accordance with TP Section 6.4.7.1 (Condemnation Request) and GDOT has accepted such Condemnation Package in accordance with DBA Section 6.3 (*Submittal Review, GDOT Oversight; Quality Posture*), GDOT will prepare and procure the filing of a petition for condemnation of the relevant Parcel and exercise GDOT's condemnation powers in accordance with applicable Law, and within 60 days after GDOT's acceptance of the Condemnation Package. Design-Builder shall perform the Parcel Acquisition Services set forth in TP Section 6.4.7.2 (Condemnation Support).

2.5.13 Design-Builder acknowledges and agrees that Design-Builder is not permitted to commence any condemnation action through the statutory declaration of taking on behalf of GDOT.

2.5.14 Following completion of the Parcel Acquisition Services for each Parcel, Design-Builder shall perform the Post-Acquisition Services for each Parcel in accordance with TP Section 6.5 (Post-Acquisition Services).

2.5.15 GDOT will be responsible for, and shall not have a right to claim any payment or reimbursement from Design-Builder for, the following costs and expenses associated with acquiring each Parcel of State Proposed/Design-Builder Acquired Right of Way:

2.5.15.1 the purchase prices, court awards or judgments, for each Parcel;

2.5.15.2 the cost of any condemnation proceedings required by the Office of the Attorney General, through jury trials and appeals, including attorneys' and expert witness fees, and all fees and expenses for exhibits, transcripts, photos and other documents and materials production;

2.5.15.3 closing costs associated with Parcel purchases, including applicable property taxes, in accordance with the Uniform Act and GDOT policies; and

2.5.15.4 relocation assistance payments and costs, in accordance with the Uniform Act.

2.5.16 Design-Builder will be responsible for, and shall not have a right to claim any payment or reimbursement from GDOT for, all costs and expenses not identified in DBA Section 2.5.15 (*State Proposed/Design-Builder Acquired Right of Way*) associated with acquiring each Parcel of State Proposed/Design-Builder Acquired Right of Way, including the cost of the Acquisition Services and document preparation in connection with Acquisition Services.

2.5.17 If GDOT incurs any reasonable, out-of-pocket, and documented costs and expenses for which Design-Builder is responsible in accordance with DBA Section 2.5.16 (*State Proposed/Design-Builder Acquired Right of Way*), Design-Builder shall pay to GDOT the amount of such costs and expenses within 10 Business Days following receipt of GDOT's invoice or demand and, in the event of any non-payment, GDOT may deduct any unpaid amount from the next applicable payment due and owing to Design-Builder in accordance with DBA Exhibit 7 (*Contract Sum and Payment Terms*).

2.6 Design-Builder Proposed/Design-Builder Acquired Right of Way

2.6.1 This DBA Section 2.6 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*) applies to all Design-Builder Proposed/Design-Builder Acquired Right of Way.

2.6.2 The Parties acknowledge that, as of the date of this Design-Build Agreement:

2.6.2.1 GDOT has not acquired a right of access to, or interest in, any Design-Builder Proposed/Design-Builder Acquired Right of Way for the purposes of this Project; and

2.6.2.2 [Design-Builder has proposed in its Proposal Commitment that it proposes to acquire [_____] and GDOT has approved the acquisition of such Design-Builder Proposed/Design-Builder Acquired Right of Way]***[NTD: modify according to Proposal]***.

2.6.3 Except with respect to Parcels referred to in DBA Section 2.6.2.2 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), if Design-Builder determines in its ROW Acquisition Plan that the acquisition of a Parcel will be beneficial for the purposes of the Project or Design-Builder performing its obligations under this Design-Build Agreement (and it is not a Parcel proposed under DBA Section 2.7 (*Design-Builder Proposed/State Acquired Right of Way*)), then Design-Builder shall provide a written request to GDOT to acquire such Parcel, detailing the legal description of the Parcel.

2.6.4 GDOT will evaluate Design-Builder's request, taking into account all relevant issues, including whether:

2.6.4.1 The Parcel is already within the Project Limits;

2.6.4.2 the acquisition of the Parcel would require any amendment to any Governmental Approval;

2.6.4.3 the acquisition of the Parcel will interfere in an adverse manner with the relationship of GDOT with third parties; and

2.6.4.4 the acquisition of the Parcel will be beneficial for the purposes of the Project or Design-Builder performing its obligations under this Design-Build Agreement.

2.6.5 Within 30 Business Days after receiving a request with respect to the Parcel, GDOT will either accept or reject the request, in its sole discretion. With respect to each Parcel that GDOT accepts, the Parcel shall be Design-Builder Proposed/Design-Builder Acquired Right of Way.

2.6.6 With respect to any Parcels referred to in DBA Section 2.6.2.2 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*) or accepted by GDOT in accordance with DBA Section 2.6.5 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), Design-Builder shall be responsible for acquiring such Design-Builder Proposed/Design-Builder Acquired Right of Way and shall:

2.6.6.1 perform Acquisition Services;

2.6.6.2 ensure that any Design-Builder Proposed/Design-Builder Acquired Right of Way is acquired in the name of the "Georgia Department of Transportation";

2.6.6.3 be responsible for obtaining any application, revision, modification, amendment, supplement, renewal or extension of any Governmental Approvals required in connection with Design-Builder Proposed/Design-Builder Acquired Right of Way, including any re-evaluation, revisions, modifications, amendments, supplements, renewals or extensions in connection with Provided Environmental Approvals (refer to DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*); and

2.6.6.4 bear the risk of any time and cost impacts to the Work related to the acquisition of Design-Builder Proposed/Design-Builder Acquired Right of Way.

2.6.7 Subject to DBA Section 2.6.8 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), with respect to any Parcels [referred to in DBA Section 2.6.2.2 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*) or accepted by GDOT in accordance with DBA Section 2.6.5 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), DBA Section 2.5.4, DBA Section 2.5.5, DBA Section 2.5.6, and DBA Section 2.5.7 (*State Proposed/Design-Builder Acquired Right of Way*) shall apply to such Design-Builder Proposed/Design-Builder Acquired Right of Way.

2.6.8 If GDOT identified in its acceptance under DBA Section 2.6.5 (*Design-Builder Proposed/Design-Builder-Acquired Right of Way*) that GDOT will not undertake administrative review or exercise its condemnation powers, Design-Builder shall not be required to perform the Parcel Acquisition Services for such Design-Builder Proposed/Design-Builder Acquired Right of Way set forth in TP Section 6.4.4 (Administrative Review Request) and TP Section 6.4.7.2 (Condemnation Support).

2.6.9 Where GDOT has stated in its acceptance under DBA Section 2.6.5 (*Design-Builder Proposed/Design-Builder-Acquired Right of Way*) that GDOT will undertake administrative review and exercise its condemnation powers with respect to a Parcel and Design-Builder:

2.6.9.1 has used diligent efforts to perform the Pre-Acquisition Services and Parcel Acquisition Services to acquire Design-Builder Proposed/Design-Builder Acquired Right of Way without the use of administrative review or GDOT's condemnation powers; and

2.6.9.2 is unable, in the case of the Parcels referred to in DBA Section 2.6.2.2 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), after 90 days from acceptance by GDOT of the ROW Acquisition Plan, or in the case of those Parcels accepted under DBA Section 2.6.5 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), 90 days after such acceptance by GDOT, to acquire Design-Builder Proposed/Design-Builder Acquired Right of Way due to:

(a) a failure to reach an agreement with the Parcel Owner of the relevant Parcel; or

(b) a failure to obtain GDOT's (via GDOT's) acceptance of a Counter Offer,

Design-Builder may submit a request to GDOT to commence administrative review of the Parcel. Such request shall include such information and other evidence as reasonably necessary to support Design-Builder's request and to demonstrate that Design-Builder has met the requirements set forth in this DBA Section 2.6.9 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*).

2.6.10 Following a request received under DBA Section 2.5.9, the following DBA sections: DBA Section 2.5.10, DBA Section 2.5.11, and DBA Section 2.5.12 (*State Proposed/Design-Builder Acquired Right of Way*) shall apply with respect to such Parcel.

2.6.11 Design-Builder acknowledges and agrees that Design-Builder is not permitted to commence any condemnation action through the statutory declaration of taking on behalf of GDOT.

2.6.12 Following completion of the applicable Parcel Acquisition Services for each Parcel, Design-Builder shall perform Post-Acquisition Services for such Parcel of Design-Builder Proposed/Design-Builder Acquired Right of Way in accordance with TP Section 6.5 (Post-Acquisition Services).

2.6.13 Design-Builder shall be responsible for, and shall not have a right to claim any payment or reimbursement from GDOT for, all costs and expenses associated with acquiring each Parcel of Design-Builder Proposed/Design-Builder Acquired Right of Way, including:

2.6.13.1 the cost of the Acquisition Services and document preparation in connection with Acquisition Services;

2.6.13.2 the purchase prices for all Parcels required for the Project or the Work;

2.6.13.3 all costs and expenses GDOT incurs in undertaking administrative review of the Parcel or exercising its condemnation powers, including the cost of condemnation proceedings required by the Office of the Attorney General, through jury trials and appeals, including attorneys' and expert witness fees, and all court awards, judgments, fees and expenses for exhibits, transcripts, photos, and other documents and materials production;

2.6.13.4 the cost of obtaining any application, revision, modification, amendment, supplement, renewal or extension of any Governmental Approvals required in connection with Design-Builder Proposed/Design-Builder Acquired Right of Way, including any re-evaluation, revisions, modifications, amendments, supplements, renewals or extensions in connection with Provided Environmental Approvals;

2.6.13.5 closing costs associated with Parcel purchases, including applicable property taxes, in accordance with the Uniform Act and GDOT policies; and

2.6.13.6 relocation assistance payments and costs, in accordance with the Uniform Act.

2.6.14 If GDOT incurs any reasonable, out-of-pocket, and documented costs and expenses for which Design-Builder is responsible in accordance with DBA Section 2.6.13 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), Design-Builder shall pay to GDOT the amount of such costs and expenses within 10 Business Days following receipt of GDOT's invoice and, in the event of any non-payment, GDOT may deduct any unpaid amount from the next applicable Invoice Amount as described in DBA Exhibit 7 (*Contract Sum and Payment Terms*) in accordance with DBA Section 17.3.3.2 (*Damages; Offset*).

2.7 Design-Builder Proposed/State Acquired Right of Way

2.7.1 GDOT may also acquire, or cause to be acquired, certain other Parcels (or portions of Parcels) identified by Design-Builder to GDOT by Formal Communication, if

2.7.1.1 the Parcel (or portion of the Parcel) is intended for Permanent Works;

2.7.1.2 the Parcel (or portion of the Parcel) is the minimum additional property necessary for accommodation of such Permanent Works;

2.7.1.3 either:

(a) the Parcel (or portion of the Parcel) is not identified in DBA Exhibit 4 (*Parcel Acquisition Table*); or

(b) the Parcel is required due to a Necessary Basic Configuration Change; and

2.7.1.4 acquisition of the Parcel (or portion of the Parcel) is otherwise consistent with applicable Laws and applicable Governmental Approvals (each such Parcel (or portion of the Parcel) "Design-Builder Proposed/State Acquired Right of Way").

2.7.2 In its Formal Communication, Design-Builder shall identify the Parcel (or portion of the Parcel) by legal description, include an analysis identifying alternative approaches, if any, that could be adopted to avoid the need for the acquisition (including design modifications), and request GDOT to acquire such Parcel (or portion of the Parcel) of Design-Builder Proposed/State Acquired Right of Way.

2.7.3 Within 30 Business Days after receipt of Design-Builder's Formal Communication under DBA Section 2.7.1 (*Design-Builder Proposed/State Acquired Right of Way*), GDOT will provide Notice to the Design-Builder whether it (a) accepts or rejects that such Parcel is Design-Builder Proposed/State Acquired Right of Way or (b) proceed with a Request for Change Proposal under DBA Section 14.1.2 (*Request for Change Proposal*) as relates to any such alternative approach, if presented by Design-Builder under DBA Section 2.7.2 (*Design-Builder Proposed/State Acquired Right of Way*) or otherwise, so as to avoid any need to acquire the Parcel.

2.7.4 If rejected, Design-Builder may elect to deliver a Change Request under DBA Section 14.2 (*Design-Builder Changes*) or Dispute GDOT's rejection that the Parcel is Design-Builder Proposed/State Acquired Right of Way.

2.7.5 If the Parcel is accepted as Design-Builder Proposed/State Acquired Right of Way, in whole or in part, GDOT will specify in its Notice to Design-Builder given under DBA Section 2.7.3 (*Design-Builder Proposed/State Acquired Right of Way*) the availability date for the Parcel, not to exceed

24 months after the date of GDOT's acceptance Notice, and DBA Exhibit 4 (*Parcel Acquisition Table*) shall be updated, without further action of the Parties, to reflect such date as the "Parcel Availability Date" with respect to such Design-Builder Proposed/State Acquired Right of Way.

2.7.6 Except as may be specified otherwise in GDOT's Notice given under DBA Section 2.7.3 (*Design-Builder Proposed/State Acquired Right of Way*), Design-Builder shall perform all obligations with respect to such Parcel (or portion of such Parcel) as if such Parcel (or portion) were State Proposed/Design-Builder Acquired Right of Way under DBA Section 2.5.3 to DBA Section 2.5.17 (*State Proposed/Design-Builder Acquired Right of Way*), inclusive.

2.7.7 Without limiting the obligations under the definition of "Compensation Event," and only if not addressed by either the Supplemental Agreement that results from an accepted Change Request submitted or the results of the Dispute resolution under DBA Section 2.7.4 (*Design-Builder Proposed/State Acquired Right of Way*), and in any event in accordance with DBA Article 13 (*Relief Events; Compensation Events*) and without double counting, Design-Builder shall have a right to seek relief and compensation:

2.7.7.1 further to clause (o) of the definition of "Compensation Event" and clause (r) of the definition of "Relief Event";

2.7.7.2 any re-evaluation (or assessment for amendment or supplement) conducted pursuant to DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*) with respect to, or on account of, such Parcel (or portion of such Parcel) of Design-Builder Proposed/State Acquired Right of Way; and

2.7.7.3 without duplication of any relief obtained under DBA Section 2.7.7.1 (*Design-Builder Proposed/State Acquired Right of Way*), if GDOT fails to acquire, or cause to be acquired, a right of access to, or interest in, a Parcel that is Design-Builder Proposed/State Acquired Right of Way by the date agreed under DBA Section 2.7.2 (*Design-Builder Proposed/State Acquired Right of Way*).

2.7.8 Notwithstanding the foregoing in this DBA Section 2.7.2 (*Design-Builder Proposed/State Acquired Right of Way*), but without limiting DBA Section 2.7.9 (*Design-Builder Proposed/State Acquired Right of Way*), Design-Builder shall identify all Design-Builder Proposed/State Acquired Right of Way no later than the date of initial submission of the ROW Acquisition Plan to GDOT; provided, however, that Design-Builder may identify Design-Builder Proposed/State Acquired Right of Way in its response to a Request for Change Proposal asserting a GDOT Change; provided, further, however that any such ROW Acquisition Plan for Design-Builder Proposed/State Right of Way shall be required only if new Parcels are proposed. Failure to identify timely or to assert in Dispute Resolution Procedures (or to so assert timely) that a Parcel is Design-Builder Proposed/State Acquired Right of Way shall be deemed to be an irrevocable waiver and release by Design-Builder of any claim to relief, costs, performance relief, and additional time to perform the Work arising out of, relating to, or resulting from the Parcel(s) of Design-Builder Proposed/State Acquired Right of Way (including costs or additional time to perform the services associated with acquisition of the Design-Builder Proposed/State Acquired Right of Way under DBA Section 2.7.6 (*Design-Builder Proposed/State Acquired Right of Way*).

2.7.9 GDOT will be responsible for, and shall not have a right to claim from Design-Builder any payment or reimbursement for, all costs and expenses associated with acquiring each Parcel of Design-Builder Proposed/State Acquired Right of Way, including:

2.7.9.1 the purchase prices, court awards or judgments, for all Parcels of Design-Builder Proposed/State Acquired Right of Way required for the Project or the Work;

2.7.9.2 the cost of condemnation proceedings required by the Office of the Attorney General, through jury trials and appeals, including attorneys' and expert witness fees, and all fees and expenses for exhibits, transcripts, photos, and other documents and materials production;

2.7.9.3 closing costs associated with Parcel purchases, including applicable property taxes, of Design-Builder Proposed/State Acquired Right of Way, in accordance with the Uniform Act and GDOT policies; and

2.7.9.4 relocation assistance payments and costs, in accordance with the Uniform Act.

2.8 Access to Certain Parcels within the Project Limits

2.8.1 This DBA Section 2.8 (*Access to Certain Parcels within the Project Limits*) shall apply with respect to State Proposed/State Acquired Right of Way, State Proposed/Design-Builder Acquired Right of Way and Design-Builder Proposed/Design-Builder Acquired Right of Way.

2.8.2 If the conditions listed in TP Section 6.5.3.1 (Request for Parcel Certification Release) have been met, then Design-Builder may submit a Request for Parcel Certification Release in accordance with TP Section 6.5.3.1 (Request for Parcel Certification Release).

2.8.3 If Design-Builder submits a Request for Parcel Certification Release, then the Parcel Access Date for the Parcels that are the subject of the request shall be the date GDOT accepts the Request for Parcel Certification Release in accordance with DBA Section 6.3 (*Submittal Review, GDOT Oversight; Quality Posture*).

2.8.4 Subject to DBA Section 2.8.5 (*Access to Certain Parcels within the Project Limits*), no later than the Parcel Access Date for a Parcel, GDOT will grant to Design-Builder until the Termination Date:

2.8.4.1 a non-exclusive right of access, ingress and egress to such Parcel; and

2.8.4.2 the right to grant to Design-Builder-Related Entities a non-exclusive right of access, ingress and egress) to all real property comprising each Parcel, for the sole purpose of performing its obligations and exercising its rights under this Design-Build Agreement.

2.8.5 If a set aside motion is filed pursuant to O.C.G.A. § 32-3-11 with respect to a Parcel, then Design-Builder's right to access to such Parcel is deferred until the motion is resolved.

2.8.6 Prior to the Parcel Access Date, Design-Builder may submit a request to GDOT to access a Parcel of:

2.8.6.1 State Proposed/State Acquired Right of Way, provided the Parcel Availability Date has passed with respect to such Parcel; or

2.8.6.2 State Proposed/Design-Builder Acquired Right of Way; provided such Parcel has been acquired in accordance with DBA Section 2.5 (*State Proposed/Design-Builder Acquired Right of Way*),

and such request shall specify the activities that Design-Builder seeks to perform on the relevant Parcel if access is granted, and shall be limited to activities in any event that Design-Builder is obligated or entitled to perform prior to issuance of NTP3.

2.8.7 Within 10 Business Days after receiving a request under DBA Section 2.8.6 (*Access to Certain Parcels within the Project Limits*), GDOT will notify Design-Builder whether it accepts or rejects the request (not to be unreasonably withheld).

2.8.8 If GDOT accepts Design-Builder's request under DBA Section 2.8.7 (*Access to Certain Parcels within the Project Limits*), GDOT will grant to Design-Builder until the date specified in GDOT's notice under DBA Section 2.8.7 (*Access to Certain Parcels within the Project Limits*):

2.8.8.1 a non-exclusive right of access, ingress and egress to such Parcel; and

2.8.8.2 the right to grant to Design-Builder-Related Entities a non-exclusive right of access, ingress and egress) to all real property comprising such Parcel, for the sole purpose of Design-Builder performing, subject to any conditions specified in GDOT's notice under DBA Section 2.8.7 (*Access to Certain Parcels within the Project Limits*), the activities described in Design-Builder's request and permitted under DBA Section 2.8.6 (*Access to Certain Parcels within the Project Limits*).

2.9 Temporary Interests

2.9.1 The Parties acknowledge that as of the date of this Design-Build Agreement, GDOT has not acquired, or caused to be acquired, a right of access to, or interest in, any Temporary Interests for the purposes of this Project.

2.9.2 Design-Builder shall notify GDOT of any Temporary Interest that it proposes to acquire a right of access to, or other interest in.

2.9.3 Design-Builder shall be responsible for:

2.9.3.1 all acquisitions of a right of access to, or interest in, any Temporary Interests;

2.9.3.2 compliance with all applicable Laws with respect to the Temporary Interests;

2.9.3.3 obtaining and complying with any Governmental Approvals required with respect to the Temporary Interests; and

2.9.3.4 any costs and expenses associated with acquiring any rights or interests in any Temporary Interest and shall not have a right to claim from GDOT any payment or reimbursement for such costs and expenses.

2.9.4 GDOT will not:

2.9.4.1 exercise its condemnation power in connection with Design-Builder's acquisition of any Temporary Interest; or

2.9.4.2 have any obligations or responsibilities with respect to Design-Builder's acquisition, maintenance, or disposition of any Temporary Interest.

2.10 Access and Inspection Rights for GDOT and Other Persons

2.10.1 Design-Builder shall, in the performance of the Work on the Site:

2.10.1.1 coordinate with any third parties that may from time to time have access rights to the Site, including the parties to Third Party Agreements, and Utility Owners, and their respective relevant Constituents; and

2.10.1.2 coordinate with all Related Transportation Facilities in accordance with TP Section 1.3 (Related Transportation Facilities).

2.10.2 Design-Builder acknowledges that GDOT and each GDOT-Related Entity, acting within its delegated or legal authority, may (a) at reasonable times, and (b) if Work is ongoing at the location to be entered, enter the Site and any other location where the Work is being carried out for the purpose of:

2.10.2.1 exercising GDOT's (or FHWA's, or any other applicable federal agency's) oversight functions as provided for hereunder;

2.10.2.2 monitoring compliance by Design-Builder with its obligations under this Design-Build Agreement, Governmental Approvals, and all applicable Laws; or

2.10.2.3 exercising any right or performing any obligation that such party has under this Design-Build Agreement, any Utility MOU, any other Third Party Agreement, any Governmental Approval or any applicable Law; or

2.10.3 When exercising any rights under DBA Section 2.10.2 (*Access and Inspection Rights for GDOT and Other Persons*), GDOT will do so (and shall ensure that each such GDOT-Related Entity does so) in a manner that:

2.10.3.1 does not unreasonably interfere with Design-Builder's or its Contractors' performance of the Work or exercise of its rights and obligations under this Design-Build Agreement; and

2.10.3.2 complies with Design-Builder's reasonable site access policies and procedures and Design-Builder's Safety Plan.

2.10.4 Design-Builder shall use reasonable efforts to:

2.10.4.1 coordinate its Work so it does not interfere with the exercise by GDOT and any such GDOT-Related Entity of their respective rights of entry; and

2.10.4.2 provide GDOT and any such GDOT-Related Entity with every reasonable facility and other assistance necessary for exercising such parties rights under DBA Section 2.10.2 (*Access and Inspection Rights for GDOT and Other Persons*).

2.10.5 Design-Builder shall afford GDOT and each such GDOT-Related Entity access during normal business hours to the Project Office and other operations buildings.

2.11 Nature of Rights/Interests

2.11.1 The Parties acknowledge and agree that this Design-Build Agreement will in no way be deemed to constitute:

2.11.1.1 a lease to Design-Builder (whether an operating lease or a financing lease); or

2.11.1.2 a grant (regardless of the characterization of such grant, including by way of easement, purchase option, conveyance, or Lien),

2.11.1.3 in each case, of any right, title, interest or estate in the Project or Project Limits, or of any assets incorporated into, or appurtenant to, the Project, other than as set forth in DBA Section 2.1 (*Grant of GDOT for Undertaking*) and DBA Section 2.2.1 (*Right of Way; Property Ownership*) and the rights of access granted under DBA Section 2.3 (*Existing Right of Way*), DBA Section 2.4 (*State Proposed/State Acquired Right of Way*), DBA Section 2.5 (*State Proposed/Design-Builder Acquired Right of Way*), DBA Section 2.6 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), and DBA Section 2.7 (*Design-Builder Proposed/State Acquired Right of Way*).

2.11.2 The Parties acknowledge and agree that Design-Builder will not be treated as or deemed to be the legal or equitable owner of the Project Limits for any purpose under this Design-Build Agreement.

2.11.3 Design-Builder's rights under this Design-Build Agreement are derived solely from its status as a Design-Builder and independent contractor as described in this Design-Build Agreement, and not as a tenant, lessee, easement holder, optionee, lienor, mortgagee, purchaser or owner of any other interest in real property.

Article 3 CONTRACT TIME

3.1 Term

This Design-Build Agreement shall take effect on the Effective Date and will remain in effect until the earlier of (a) Final Acceptance, and (b) earlier termination in accordance with the terms of the Design-Build Documents, in each case as may be extended by the survival of all such obligations as expressly provided herein (the "Term").

3.2 Timely Performance; Time is of the Essence

3.2.1 As a material consideration for entering into this Design-Build Agreement, Design-Builder hereby commits, and GDOT is relying upon Design-Builder's commitment, to develop, design, and construct the entire Project, meeting each of the milestones in the Baseline Project Schedule (including all Milestones), and performing such portions of the Work required with particular time periods, in each case as set forth in the Design-Build Documents, as such milestones or time periods may be adjusted pursuant to this Design-Build Agreement.

3.2.2 Without limiting the generality of DBA Section 3.2.1 (*Timely Performance; Time is of the Essence*), and in each case subject to time adjustment when and as applicable pursuant to the Design-Build Agreement, Design-Builder shall:

3.2.2.1 prepare and deliver each Baseline Project Schedule, consistent with the Milestones identified in DBA Exhibit 9 (*Milestone Schedule*), in form and substance as and when required under TP Section 2 (Project Management), including specifically the Submittal Requirements Database, which for avoidance of doubt includes Design-Builder's obligations to:

(a) prepare and deliver to GDOT the Preconstruction Baseline Project Schedule, consistent with the Milestones set forth in DBA Exhibit 9 (*Milestone Schedule*) by the earlier of (i) the time required under TP Attachment 2-10 (Submittal Requirements Database), and (ii) thirty days after issuance of NTP1;

(b) prepare and deliver to GDOT the Construction Baseline Project Schedule by the time identified in the Preconstruction Baseline Project Schedule or, failing that, the Milestones set forth in DBA Exhibit 9 (*Milestone Schedule*), or failing that, prior to commencement of Construction Work; and

(c) prepare and deliver to GDOT the Revised Baseline Project Schedule by the time required in any Directive Letter, Supplemental Agreement, or other time as determined pursuant to TP Section 2.4.2.4 (Revised Baseline Project Schedule) and, as applicable, DBA Section 3.2.5 (*Revised Baseline Project Schedule*);

3.2.2.2 without limiting the other specific obligations under this DBA Section 3.2.2 (*Timely Performance; Time is of the Essence*), perform the Work in accordance with the Baseline Project Schedule;

3.2.2.3 perform the Work so as to achieve each Milestone by its respective Milestone Deadline, in accordance with the Milestone Schedule;

3.2.2.4 perform the Work so as to achieve the Milestones identified in DBA Exhibit 9 (*Milestone Schedule*), until such time as the Preconstruction Baseline Project Schedule is accepted by GDOT and thereafter, perform the Work in accordance with such Preconstruction Baseline Project

Schedule, until such time as the Construction Baseline Project Schedule is accepted by GDOT and thereafter, perform the Work in accordance with such Construction Baseline Project Schedule, in each case as may be revised under a Revised Baseline Project Schedule;

3.2.2.5 prepare and deliver to GDOT each Baseline Schedule of Values, consistent with the Proposal and the proposed Contract Sum, and in each case prior to Design-Builder's submission of each proposed Baseline Project Schedule, as each of the Baseline Schedule of Values and Contract Sum may be adjusted under the terms, and subject to the conditions, of this Design-Build Agreement;

3.2.2.6 prepare and deliver to GDOT each proposed Baseline Project Schedule corresponding to the associated Baseline Schedule of Values, in each case consistent with the Proposal, the Milestones set forth in DBA Exhibit 9 (*Milestone Schedule*), and the proposed Contract Sum, as each of the Baseline Project Schedule and Baseline Schedule of Values may be adjusted under the terms, and subject to the conditions, of this Design-Build Agreement;

3.2.2.7 satisfy all conditions to commencement of Design Work, Construction Work, and Utility Adjustment Work, as applicable, under DBA Section 3.4 (*Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work*), and commence such Design Work, Construction Work, and Utility Adjustment Work, when such respective conditions have been satisfied, with diligence and continuity, by the deadlines therefor set forth in Milestone Schedule attached as DBA Exhibit 9 (*Milestone Schedule*), as applicable, and Baseline Project Schedule, all as may be extended pursuant to this Design-Build Agreement; and

3.2.2.8 achieve each Interim Milestone on or before the corresponding Interim Milestone Deadline, Substantial Completion on or before the Substantial Completion Deadline, and Final Acceptance on or before the Final Acceptance Deadline;

3.2.3 Time is of the essence with respect to (i) the time periods and limitations with respect to Formal Communications and Submittals and (ii) the time periods, limitations, and milestones (including Milestone Deadlines) in the Baseline Project Schedule or otherwise identified under the Design-Build Documents, and in each case, except where this Design-Build Agreement expressly provides for extension of time due to a Relief Event or allows delay subject to payment of Liquidated Damages, Nonrefundable Deductions, Lane Closure Deductions, or other compensation to GDOT, Design-Builder hereby waives any right at law or in equity to tender or complete delivery, response, or performance, as applicable, beyond the applicable time period, or to require GDOT to accept such delivery, response, or performance.

3.2.4 Notwithstanding any provision to the contrary in this DBA, nor issuance of any Notice to Proceed, nor satisfaction of any of the conditions to commencement of portions of the Work under DBA Article 3 (*Contract Time*), Design-Builder shall not perform, nor be obligated to perform, any portion of the Work prior to issuance of the NEPA Approval, except for Work authorized under 23 C.F.R. § 636.109 and directed by GDOT.

3.2.5 Revised Baseline Project Schedule.

3.2.5.1 Design-Builder shall submit a Revised Baseline Project Schedule to GDOT for GDOT's acceptance when any of the following occurs:

(a) Except as expressly stated to the contrary in any Relief Event Determination, when the scope of the Work has changed significantly, whether due to a Compensation Event, Relief Event, or other Supplemental Agreement, or when changes are made to the Work itself, in either case that affect the sequence or timing of the Work.

(b) When the Design-Builder identifies and intends to implement substantial changes to the Design-Builder's plan and approach to perform the Work (e.g., revisions to the Basis of D&C; modifying the project staging, etc.) relative to the latest accepted Baseline Project Schedule

(c) When (i) a Project Schedule Update forecasts a delay in achieving any Milestone Deadline, for a period that exceeds either (A) 60 days or (B) the number of days equal to 5 percent of the days remaining until any Milestone Deadline, or (ii) a Relief Event is expected to delay to the then-existing Critical Path by more than 14 Days, except as GDOT may otherwise direct.

(d) When GDOT, in its sole discretion, determines that either a Project Schedule Update is insufficient or unreasonable, or that the Design-Builder's execution of the current plan as depicted in the latest accepted Baseline Project Schedule is insufficient and unlikely to achieve the successful completion of the relevant Work by any Milestone Deadline.

3.2.5.2 Design-Builder shall submit a Revised Baseline Project Schedule to GDOT for GDOT's acceptance when directed pursuant to any Relief Event Determination, or as thereafter directed pursuant to the Dispute Resolution Procedures.

3.3 Contract Time, Date of Commencement, and Notice to Proceed

3.3.1 Design-Builder's time period for completion of the Work is the period from and including the date of NTP1 through the Final Acceptance Deadline (the "Contract Time"), as the Contract Time may be extended pursuant to this Design-Build Agreement. Notwithstanding the foregoing, but without limiting DBA Section 3.4.1 (*Conditions to GDOT Obligations with Respect to Submittals*), Design-Builder may, but is not obligated to, commence to prepare the Project Management Plan in accordance with the TP Section 2 (Project Management).

3.3.2 Notice to Proceed 1

3.3.2.1 GDOT anticipates issuing NTP1 promptly following the Effective Date. As a condition to issuance of NTP1, the Design-Builder shall deliver the P&P Bonds to GDOT, which P&P Bonds shall be in full force and effect;

3.3.2.2 Within 30 Days after issuance of NTP1, Design-Builder shall cause to be developed and delivered to GDOT, each in accordance with TP Section 2 (Project Management), the Project Management Plan.

3.3.2.3 Within 60 Days after issuance of NTP1, Design-Builder shall:

(a) (i) have received, paid all associated fees for, and (if applicable) achieved or satisfied all conditions under, all applicable Governmental Approvals and other applicable third party approvals that Design-Builder is obligated to obtain and maintain prior to commencement and performance of any non-Construction Work, (ii) all such Governmental Approvals and third party approvals are not subject to appeal; (iii) there exists no uncured material violation of the terms and conditions of any such Governmental Approval or such third party approvals, and (iv) Design-Builder has furnished to GDOT fully executed copies of all such Governmental Approvals and such third party approvals;

(b) have ensured, in coordination with GDOT, that all required real property rights (e.g., rights of entry) necessary for commencement of any portion of the Work are in place;

(c) have delivered to GDOT the Guaranty/ies, if any, as required under DBA Section 16.3 (*Guaranties*), and each such Guaranty/ies continue(s) to be in full force and effect;

(d) have provided to GDOT any other documents, materials, or assurances required by the Design-Build Documents as a condition to issuance of NTP1, if any;

(e) certify to GDOT, or otherwise satisfy GDOT, in its reasonable discretion, that there exists no uncured Design-Builder Default for which Design-Builder has received Notice from GDOT, unless Design-Builder has a right to cure and is diligently pursuing cure within the applicable cure period.

(f) have delivered to GDOT a fully-executed copy of each Railroad Agreement required as a condition to the Design-Builder's performance of non-preliminary Design Work in respect of the Railroad Work

3.3.2.4 Within 90 Days after issuance of NTP1, Design-Builder shall:

(a) have adopted written policies establishing ethical standards of conduct for all Design-Builder-Related Entities, including Design-Builder's supervisory and management personnel, in dealing with (i) GDOT, and (ii) employment relations, in accordance with DBA Section 10.7.1 (*Ethical Standards*);

(b) have obtained GDOT's acceptance of the Basis of D&C, the Preconstruction Baseline SOV and thereafter the Preconstruction Baseline Project Schedule, each in accordance with TP Section 2 (Project Management); and

(c) have obtained GDOT's acceptance of the Project Management Plan.

3.3.2.5 Without limiting the additional conditions to commencement of certain portions of the Work under DBA Section 3.4 (*Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work*), issuance of NTP1, and satisfaction (as and when applicable of the conditions at 30, 60, and 90 Days thereafter under this DBA Section 3.3.2 (*Notice to Proceed 1*)), authorizes Design-Builder to:

(a) support any Provided Environmental Approval re-evaluation, amendment, or supplement, as may be required;

(b) without limiting DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*) and DBA Section 3.4.2 (*Conditions to Commencement of Design Work*) specifically, perform design activities with respect to Utility Adjustments that Design-Builder is permitted to perform prior to NTP2 and thereafter, NTP3, in accordance with DBA Section 7.5 (*Utility Adjustments*) and TP Section 7 (Utility Adjustments);

(c) perform coordination activities with respect to Utility Adjustments that Design-Builder is permitted to perform prior to NTP2in accordance with DBA Section 7.5 (*Utility Adjustments*) and TP Section 7 (Utility Adjustments);

(d) without limiting DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*) and DBA Section 3.4.2 (*Conditions to Commencement of Design Work*) specifically, engage in the activities necessary to satisfy the conditions to issuance of NTP3 under DBA Section 3.3.3 (*Notice to Proceed 3*);

(e) without limiting DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*) and DBA Section 3.4.2 (*Conditions to Commencement of Design Work*) specifically, commence and submit Invoices for Design Work (including development and submission of Design Documents to GDOT);

(f) without limiting DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*) and DBA Section 3.4.2 (*Conditions to Commencement of Design Work*) specifically, perform the activities necessary to obtain any Governmental Approvals not then obtained (or to maintain obtained Governmental Approvals), and to support any Provided Environmental Approval(s) re-evaluation(s), amendment(s), or supplement(s), as may be required;

(g) perform all Acquisition Services that Design-Builder is permitted to perform prior to NTP3, in accordance with DBA Article 2 (*Grant of GDOT and Right of Way*) and TP Section 6 (Right of Way); and

(h) perform such other non-Construction Work and non-Design-Work (including specifically project Administrative Work) as is expressly permitted to be performed prior to NTP3 under the Technical Provisions.

3.3.3 Notice to Proceed 2

3.3.3.1 Provided that GDOT has issued NTP1, GDOT will issue NTP2 within five Business Days after Design-Builder's satisfaction of the following conditions:

(a) GDOT's receipt of the NEPA Approval;

(b) Design-Builder has submitted to GDOT the Basis of D&C, the Preconstruction Baseline SOV and thereafter the Preconstruction Baseline Project Schedule, each in accordance with TP Section 2 (Project Management);

(c) GDOT has accepted the Project Management Plan;

(d) Design-Builder has made available the Key Personnel and Required Personnel required, and at the place(s) (if and as required under the Technical Provisions), as of commencement of any portion of the Work, excluding Utility Adjustments and Construction Work, and those Key Personnel and Required Personnel that were required, and at the place(s), to be available as of the date of NTP1 remain available and at such place(s), except and only to the extent approved otherwise by GDOT; and

(e) all Insurance Policies required under the Design-Build Documents for the Design Work and non-Construction Work have been obtained, are in full force and effect, and Design-Builder has delivered to GDOT verification thereof as required under DBA Section 16.1.2.4 (*Verification of Coverage*) as well as separate Formal Communication of those Insurance Policies with, and the value of, SIRs; and

3.3.3.2 Without limiting the additional conditions to commencement of certain portions of the Work under DBA Section 3.4.1 (*Conditions to GDOT Obligations with Respect to Submittals*) and DBA Section 3.4.2 (*Conditions to Commencement of Design Work*), issuance of NTP2 authorizes Design-Builder to:

(a) engage in the activities necessary to satisfy the conditions to issuance of NTP3 under DBA Section 3.3.4 (*Notice to Proceed 3*);

(b) proceed in development of the Project's design beyond "preliminary design", as such term is construed under 23 C.F.R. §§ 636.109(a)(5) and (b)(1); and

(c) submit Invoices and seek payments under DBA Article 5 (*Contract Sum, Project Payments, and Public Funds*) for Preliminary Design Documents.

3.3.4 Notice to Proceed 3

3.3.4.1 GDOT will issue NTP3 within five Business Days after Design-Builder's satisfaction of the following conditions:

(a) NTP2 has been issued;

(b) all Insurance Policies required under the Design-Build Documents for the Work have been obtained, are in full force and effect, and Design-Builder has delivered to GDOT verification thereof as required under DBA Section 16.1.2.4 (*Verification of Coverage*) as well as separate Formal Communication of those Insurance Policies with, and the value of, SIRs;

(c) Design-Builder has submitted to GDOT, and GDOT has accepted, the Construction Baseline SOV and the Construction Baseline Project Schedule, in accordance with TP Section 2 (Project Management);

(d) Design-Builder has made available the Required Personnel required, and at the place(s), to be available as of the date of NTP3, and the Key Personnel and Required Personnel that were required, and at the place(s), to be available as of the dates of NTP1 remain available and at such place(s), except and only to the extent approved otherwise by GDOT;

(e) (i) Design-Builder has received, paid all associated fees for, and (if applicable) achieved or satisfied all conditions under, all applicable Governmental Approvals and other applicable third party approvals that Design-Builder is obligated to obtain and maintain prior to commencement and performance of the remaining Work, (ii) all such Governmental Approvals and third party approvals are not subject to appeal, (iii) there exists no uncured material violation of the terms and conditions of any Governmental Approval or third party approval, and (iv) Design-Builder has furnished to GDOT fully executed copies of all such Governmental Approvals and third party approvals required to be obtained and/or maintained by Design-Builder under the Design-Build Documents;

(f) Design-Builder has submitted to GDOT, and GDOT has accepted, the OJT Plan;

(g) Design-Builder has established the Project Office in accordance with TP Section 1.6 (Offices);

(h) all required Existing Rights of Way necessary for commencement of any Construction Work, if applicable, are in place and all required Utility Adjustments have been identified;

(i) Design-Builder has satisfied all applicable pre-construction requirements required to be performed by Design-Builder under the Design-Build Documents that are contained in applicable Governmental Approvals;

(j) Design-Builder has provided to GDOT any other documents, materials, or assurances required by the Design-Build Documents as a condition to issuance of NTP3;

(k) there exists no uncured Design-Builder Default for which Design-Builder has received Notice from GDOT, unless Design-Builder has a right to cure and is diligently pursuing cure within the applicable cure period; and

(l) Design-Builder has provided to GDOT at least 14 days advance Notice of the date Design-Builder determines that it will satisfy all of the conditions set forth in this DBA Section 3.3.4 (*Notice to Proceed 3*).

3.3.4.2 Without limiting the additional conditions to commencement of certain portions of the Work under DBA Section 3.4 (*Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work*), issuance of NTP3 authorizes Design-Builder to perform all other Work and activities pertaining to the Project, subject to any requirements to obtain acceptance of certain Submittals as may be related to commencement of Work on portions of the Project Limits or certain types or portions of the Construction Work. For avoidance of doubt, Design-Builder may not proceed to commence any Construction Work prior to issuance of NTP3, except as authorized pursuant to a Released for Construction Design Document for such Construction Work and as may be allowed under applicable Law.

3.3.4.3 Notwithstanding the foregoing, GDOT may, in its sole discretion, issue one or more limited notice(s) to proceed prior to one or more of the foregoing conditions to NTP3 being met, under such terms and subject to such conditions as GDOT requires within such limited notice(s) to proceed (e.g., geographic limitations, time of year restrictions, insurance requirements, etc.). Except to the extent specifically addressed otherwise in the limited notice to proceed itself, issuance of any limited notice to proceed shall not abrogate any requirements under DBA Section 3.4 (*Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work*). Any work or services performed, or equipment or materials obtained, under any such limited notice to proceed shall be Work, and Design-Builder shall, and shall be deemed to be required to, comply with all terms and conditions imposed in the written limited notice(s) to proceed as part of the Work.

3.4 Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work.

3.4.1 Conditions to GDOT Obligations with Respect to Submittals. Without limiting the provision of DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*), and except as otherwise expressly set forth in the Design-Build Documents as excluded from the following conditions, the following are conditions to commencement of any GDOT obligation with respect to Submittals under DBA Section 6.3.1 (*Submittal Review, Comment and Acceptance Terms and Procedures*) to DBA Section 6.3.7 (*GDOT Oversight*), inclusive:

3.4.1.1 GDOT has issued NTP1;

3.4.1.2 GDOT has received reasonable assurance from the Design-Builder of those Project-specific safety-related arrangements to ensure, consistent with Good Industry Practices, safe execution of those components of the Work on or near the Site authorized by NTP1 (e.g., field investigations);

3.4.1.3 Reserved;

3.4.1.4 Design-Builder has certified to GDOT that all Design-Builder Constituents performing any part of the Design Work hold all necessary or required registrations, permits, or approvals, and valid licenses to practice, as are necessary for performance of such part(s) of the Design Work or are otherwise necessary to comply with the Technical Provisions; and

3.4.1.5 all Governmental Approvals and other applicable third party approvals that Design-Builder is obligated to obtain and maintain prior to commencement and performance of any Design Work or other non-Construction Work have been obtained and are in full force and effect;

3.4.2 Conditions to Commencement of Design Work. Without limiting the provision of DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*) and the condition with respect to Submittals under DBA Section 3.4.1 (*Conditions to GDOT Obligations with Respect to Submittals*), the following are conditions to commencement of any Design Work:

3.4.2.1 GDOT has issued NTP1 for Design Work up to "preliminary design", as such term is construed under 23 C.F.R. § 636.109;

3.4.2.2 GDOT has issued NTP2 for Design Work beyond "preliminary design", as such term is construed under 23 C.F.R. § 636.109;

3.4.2.3 all Governmental Approvals and other applicable third party approvals that Design-Builder is obligated to obtain and maintain prior to commencement and performance of any Design Work or other non-Construction Work have been obtained and are in full force and effect; [and]

3.4.2.4 Design-Builder has otherwise satisfied all other conditions to commencement of Design Work in the Technical Provisions ;

provided, however, if prior to satisfaction of the issuance of NTP2 the Design-Builder desires to commence Design Work early, Design-Builder shall request and may receive prior authorization from GDOT (which may or may not be granted in its sole discretion) to commence certain Design Work prior to the issuance of NTP2. Such request from Design-Builder shall be sufficiently detailed enough for GDOT to review and assess the request. If granted, GDOT's authorization may specifically detail, in its sole discretion, the Design Work allowed to commence early

3.4.3 Conditions to Commencement of Construction Work. Without limiting the provision of DBA Section 3.2.4 (*Timely Performance; Time is of the Essence*), the following are conditions to commencement of any Construction Work:

3.4.3.1 GDOT has issued NTP3;

3.4.3.2 Design-Builder has certified to GDOT that all Design-Builder Constituents performing any part of the Construction Work hold all necessary or required registrations, permits, or approvals, and valid licenses to practice, as are necessary for performance of such part(s) of the Construction Work or are otherwise necessary to comply with the Technical Provisions;

3.4.3.3 Reserved;

3.4.3.4 GDOT has reviewed (and accepted, where applicable and so identified under the Submittal Requirements Database) all Submittals required for commencement of Construction Work, including specifically all Released for Construction Design Documents, in the form and content required by the Technical Provisions; for avoidance of doubt, Design-Builder may not proceed to commence any Construction Work except as authorized pursuant to an RFC Design Document;

3.4.3.5 all Governmental Approvals and other applicable third party approvals that Design-Builder is obligated to obtain and maintain prior to commencement and performance of any Construction Work have been obtained and are in full force and effect;

3.4.3.6 all Provided Environmental Approvals have been issued in final form and are not subject to appeal (it being understood and agreed that this condition to commencement of Construction Work is met despite any re-evaluation of any final, non-appealable NEPA Approval under DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*);

3.4.3.7 all rights of access necessary for commencement of Construction Work on the applicable portions of the Project Limits have been obtained;

3.4.3.8 Design-Builder has otherwise satisfied all other conditions to commencement of Construction Work in the Technical Provisions.

3.4.4 Conditions to Commencement of Utility Adjustment Work. Refer to DBA Section 7.5.12 (*Conditions to Commencement of Utility Adjustments*).

3.5 Float

All Float contained in the Baseline Project Schedule shall be considered a jointly owned and shared resource by Design-Builder and GDOT, available to the Project, and shall not be considered as time for the exclusive use or benefit of either GDOT or Design-Builder. All Float shall be shown as such in the Baseline Project Schedule on each affected schedule path. GDOT will have the right to examine the identification of (or failure to identify) Float on the Baseline Project Schedule in determining whether to accept any Baseline Project Schedule. Once identified, Design-Builder shall monitor and account for Float in accordance with the Critical Path Method.

3.6 Project Schedule Updates; SOV Updates

Design-Builder shall prepare and deliver each Project Schedule Update and SOV Update as and when required under the Technical Provisions. For avoidance of doubt, (a) Project Schedule Updates do not serve to revise or amend, nor shall be deemed to revise or amend, the Baseline Project Schedule, and (b) SOV Updates do not serve to revise or amend, nor shall be deemed to revise or amend, any corresponding Baseline Schedule of Values.

3.7 Estoppel for Acceptance of Project Schedule Submittals

Without limiting DBA Section 6.3.11 (*Limitations on Design-Builder's Right to Rely*), Design-Builder's obligations under DBA Section 3.2 (*Timely Performance; Time is of the Essence*), and, with respect to any claim for additional time or costs in performance of the work, including specifically DBA Article 13 (*Relief Events; Compensation Events*) or otherwise under the Design-Build Documents, any review and acceptance by GDOT of any Project Schedule is solely for the purposes of monitoring and tracking the Work and to review for compliance with the Design-Build Documents, including TP Section 2.4 (*Project Schedule and Schedule of Values*). Any acceptance of a Project Schedule by GDOT does not endorse or certify the validity or accuracy of any activity durations or sequence of the Work, and shall not be construed to, bind GDOT to any improper logic, improper activity durations, or errors in the expression of the Critical Path, or otherwise be used as a defense by or on behalf of Design-Builder in any Dispute hereunder. Without limiting Design-Builder's other obligations under the Design-Build Documents, Design-Builder shall correct any improper logic, improper activity durations, or errors in its next Project Schedule Submittal.

3.8 Use of Project Schedule Updates

For avoidance of doubt, the Baseline Project Schedule only (and not any Project Schedule Update) is relevant to measuring the duration of any delay hereunder; provided, however, that Project Schedule Updates (a) may be relevant to determining whether Design-Builder mitigated any such delay, and (b) may be relevant in determining whether a portion of the Work identified on the Baseline Project Schedule was completed.

Article 4 RESERVED

Article 5 CONTRACT SUM, PROJECT PAYMENTS, AND PUBLIC FUNDS

5.1 Payment of Contract Sum

5.1.1 GDOT will pay Design-Builder the Contract Sum on account of Work properly performed in accordance with, and as may be further adjusted by, the terms and conditions set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*). Design-Builder's rights to receive payment of the Contract Sum, as may be adjusted, as compensation for Work performed, are set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

5.1.2 Design-Builder, in consideration for all Work performed in accordance with the Design-Build Documents, shall be entitled to receive the Contract Sum, as adjusted, which amount is inclusive of any and all fees, overhead, profit, insurance and surety bond premiums, labor and material costs, installations, delivery, warehouse and handling charges, Taxes, and other assessments.

5.2 Project Payments

5.2.1 Project Payments made by GDOT will not, in any way, prevent later rejection when Nonconforming Work or material is discovered, or constitute acceptance by GDOT of such Nonconforming Work or improper materials.

5.2.2 Design-Builder agrees that any payment made in accordance with this DBA Section 5.2 (*Project Payments*) shall constitute a complete discharge of GDOT's relevant payment obligations under this Design-Build Agreement.

5.3 GDOT Monetary Obligations and Overall GDOT Limitation of Liability

Notwithstanding anything to the contrary in the Design-Build Documents, but without limiting DBA Section 5.3 (*GDOT Monetary Obligations and Overall GDOT Limitation of Liability*), in no event shall GDOT's outstanding liability to Design-Builder or any Design-Builder-Related Entity exceed the value of Termination Compensation calculated under DBA Exhibit 5 (*Terms for Termination Compensation*) for a termination under DBA Section 18.1 (*Termination for Convenience*).

5.4 Material Indexing

Without limiting DBA Section 5.3 (*GDOT Monetary Obligations and Overall GDOT Limitation of Liability*), Design-Builder may be entitled to recover up to $4,000,000for increases in the cost of certain materials during the Term, as specified and in accordance with the procedures set forth in DBA Exhibit 20 (*Material Indexation Adjustments*). Any amounts paid under this DBA Section 5.4 (*Material Indexing*) will be paid by Supplemental Agreement.

5.5 Reserved

Article 6 PROJECT PLANNING AND APPROVALS; PROJECT ADMINISTRATION, REVIEW AND OVERSIGHT; PUBLIC INFORMATION

6.1 Preliminary Planning and Engineering Activities; Site Conditions

6.1.1 Design-Builder shall perform or cause to be performed all Design Work, in accordance with the Design-Build Documents and Good Industry Practice, including conducting (a) technical studies and analyses; (b) geotechnical, seismic, flooding, and biological investigations; (c) right-of-way mapping, surveying, and appraisals; (d) Utility investigations (including subsurface and SUE investigations) and mapping; (e) Hazardous Materials investigations; and (f) design and construction surveys.

6.1.2 Except to the extent that Design-Builder is entitled to a Relief Event and/or a Compensation Event under this Design-Build Agreement, Design-Builder shall bear the risk of any incorrect or incomplete review, examination and investigation by it of the Site or the Existing Improvements and surrounding locations, and of any incorrect or incomplete information resulting from preliminary engineering activities conducted by or on behalf of Design-Builder.

6.1.3 Except (i) to the extent that Design-Builder is entitled to a Relief Event and/or a Compensation Event under this Design-Build Agreement, (ii) as relates to Hazardous Materials only, subject to GDOT's obligations regarding Hazardous Materials under DBA Section 7.8 (*Hazardous Materials Management*) and DBA Exhibit 10 (*Hazardous Materials Risk Allocation Terms*), but subject to DBA Section 14.6.5 (*Pre-Existing Hazardous Materials*), and (iii) as relates to Unexpected Subsurface Conditions under DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), in each case as may be applicable to a particular of the following risks (where, generally, GDOT assumes or shares in such risk, as set forth in the foregoing references), Design-Builder shall bear the risk of all conditions occurring on, under or at the Site and the Existing Improvements (if any), including those conditions set forth in DBA Section 13.4.6.4 (*General Provisions, Obligations Relating to Relief Events, Compensation Events*).

6.2 Governmental Approvals and Third Party Agreements

6.2.1 GDOT shall retain responsibility for obtaining all Provided Environmental Approvals based on the Basic Configuration. GDOT will deliver to Design-Builder true and complete copies of all Provided Environmental Approvals. Design-Builder shall obtain and maintain all other Governmental Approvals and, except for Provided Environmental Approvals (for which GDOT is responsible to obtain, but Design-Builder is responsible to maintain), all third party approvals and agreements required in connection with the Project or the Work, including any modifications, renewals and extensions of the Provided Environmental Approvals (including those required in connection with a Compensation Event). Design-Builder shall deliver to GDOT true and complete copies of all new or amended Governmental Approvals and third party approvals and agreements. Except as otherwise set forth in DBA Section 2.7.7.2 (*Design-Builder Proposed/State Acquired Right of Way*), generally as it relates to Design-Builder's right to seek relief and compensation for re-evaluations, amendments, or supplements of Provided Environmental Approvals, itself as it relates to Parcels of Design-Builder Proposed/State Acquired Right of Way, GDOT shall be neither responsible nor liable for any delays in obtaining Provided Environmental Approvals to the extent such delays are caused by differences between the schematic contained in the NEPA Approvals and Design-Builder's Design, unless such differences are due to a GDOT Change or are a Necessary Basic Configuration Change.

6.2.2 Prior to submitting to a Governmental Entity any application for a Governmental Approval (or any proposed modification, renewal, extension or waiver of a Governmental Approval or provision

thereof), Design-Builder shall submit the same, together with any supporting environmental studies, data and analyses, to GDOT for GDOT's disposition, as specified in the Submittal Requirements Database.

6.2.3 Except as expressly set forth in this Design-Build Agreement to the contrary (including specifically with respect to Design-Builder Proposed/State Acquired Right of Way), in the event Design-Builder's Design differs from the Basic Configuration (upon which the Provided Environmental Approvals were based), as between GDOT and Design-Builder, Design-Builder shall be fully responsible for all necessary actions, and shall bear all risk of delay and all risk of increased cost, resulting from or arising out of any associated change in the Project location and design, including (a) supporting GDOT and its designee(s) in conducting of all necessary environmental studies and preparing all necessary environmental documents in compliance with applicable Environmental Laws, (b) obtaining and complying with all necessary new Governmental Approvals (including any modifications, renewals and extensions of the Provided Environmental Approvals, and other existing Governmental Approvals), and (c) bearing all risk and cost of litigation. GDOT and FHWA will independently evaluate all environmental studies and documents and fulfill the other responsibilities assigned to them by 23 C.F.R. Part 771.

6.2.4 Subject to clause (g) and clause (k) of the definition of Compensation Event and clause (l) and clause (m) of the definition of Relief Event, and except to the extent required under the Technical Provisions, in the event Design-Builder is unable to obtain necessary Governmental Approvals (or re-evaluation, amendment, or supplement to any Governmental Approval, including the Provided Environmental Approvals) for any design that differs from the Basic Configuration, then Design-Builder shall be obligated to design and construct the Project according to a design in compliance with the requirements of the Provided Environmental Approvals, and no such circumstance shall constitute a Relief Event, Compensation Event or other basis for any claim at law or in equity.

6.2.5 At Design-Builder's request, GDOT will reasonably assist and cooperate with Design-Builder in obtaining from Governmental Entities the Governmental Approvals (including any modifications, renewals and extensions of existing Governmental Approvals from Governmental Entities) required to be obtained by Design-Builder under the Design-Build Documents.

6.2.5.1 GDOT and Design-Builder shall work jointly to establish a scope of work and budget for GDOT Recoverable Costs related to the assistance and cooperation GDOT will provide as contemplated herein, subject to any rights of Design-Builder in the case of a Compensation Event.

6.2.5.2 Such costs and expenses shall be subject to the limitations for GDOT Recoverable Costs provided however that, notwithstanding the limitations of clause (a) in the definition of GDOT Recoverable Costs, such reimbursable amounts shall expressly include costs and expenses incurred to conduct further or supplemental environmental studies as a result of (i) any Design-Builder Proposed/Design-Builder Acquired Right of Way, (ii) subject to DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*), changes by Design-Builder including those requiring Provided Environmental Approval re-evaluations and permitting, or (iii) Design-Builder Hazardous Materials Release(s).

6.2.6 Design-Builder shall comply with all conditions imposed by and undertake all actions required by and all actions necessary to maintain in full force and effect all Governmental Approvals, including performance of all environmental mitigation measures required by the Design-Build Documents or Governmental Approvals, except to the extent that responsibility for performance of such measures is expressly assigned to GDOT in the Design-Build Documents.

6.2.7 In the event that any Governmental Approvals required to be obtained by Design-Builder must formally be issued in GDOT's name, Design-Builder shall undertake necessary efforts to obtain such

approvals subject to GDOT's reasonable cooperation with Design-Builder, as the case may be, at Design-Builder's expense (except in connection with a Compensation Event and provided that GDOT will seek reimbursement for routine and customary internal administration), including execution and delivery of appropriate applications and other documentation in form approved by GDOT. Refer to TP Section 5.3.6 (Design-Builder-Led Environmental Approvals) for more specific provisions on applications in GDOT's name for Environmental Approvals.

6.2.8 In the event that GDOT or FHWA must act as the lead agency and directly coordinate with a Governmental Entity in connection with obtaining Governmental Approvals that are the responsibility of Design-Builder, Design-Builder shall provide all necessary support to facilitate the approval, mitigation, or compliance process. Such support shall include conducting necessary field investigations, surveys, and preparation of any required reports, documents, and applications.

6.2.9 Design-Builder shall solely be responsible for compliance with all applicable Laws in relation to Temporary Interests and for obtaining any Environmental Approval or other Governmental Approval required in connection with Temporary Interests.

6.2.10 Design-Builder shall not enter into any agreement with any Governmental Entity, Utility Owner, Railroad, property owner, or other third party having regulatory jurisdiction over any aspect of the Project or Work or having any property interest affected by the Project or the Work that in any way purports to obligate GDOT, or the State or an agency or department thereof, or states or implies that GDOT has an obligation, to the third party to carry out any installation, design, construction, maintenance, repair, operation, control, supervision, regulation or other activity after the end of the Term, unless GDOT otherwise approves in writing in its sole discretion. Design-Builder has no power or authority to enter into any such agreement with a third party in the name or on behalf of GDOT.

6.2.11 Provided Environmental Approval Re-evaluation.

6.2.11.1 GDOT will, in consultation with the applicable Governmental Entity, conduct an assessment to determine whether a Provided Environmental Approval requires re-evaluation, amendment, or supplement in the event that:

(a) any part of the design or the construction means and methods included in the Design Documents and Plans differ from the assumptions included in the Basic Configuration in a manner that may result in a different environmental impact compared to the impact assessed in the Provided Environmental Approvals

(b) Design-Builder is performing any Work in a manner that does not comply with the assumptions, means, and methods in the Provided Environmental Approvals; or

(c) a Change in Law occurs that may require re-evaluation, amendment, or supplement of a Provided Environmental Approval.

GDOT will consult with Design-Builder with respect to the foregoing, as and when GDOT determines it is necessary or desirable to do so, and Design-Builder, if solicited, will cooperate with GDOT as part of the Work (or the Site, or both); provided, however, that determinations whether to consult and whether Provided Environmental Approvals require re-evaluation, amendment, or supplement are each in GDOT's sole discretion.

6.2.11.2 GDOT will make the determination described in DBA Section 6.2.11.1 (*Provided Environmental Approval Re-evaluation*) within 10 Business Days after the date that is the later of:

(a) the date Design-Builder has complied with the requirements set forth in TP Section 5.3.4.2 (Determining Scope of Re-evaluation); and

(b) with respect to the Design Documents and Plans that are necessary to determine whether a re-evaluation, amendment, or supplement of a Provided Environmental Approval is required, the date GDOT has accepted all such Design Documents and Plans.

6.2.11.3 GDOT's determination under DBA Section 6.2.11.2 (*Provided Environmental Approval Re-evaluation*) shall set forth whether the Project will be re-evaluated or otherwise assessed for amendment or supplement in a localized area or in total for additional or reduced environmental impacts due to the event described such DBA Section 6.2.11.2 (*Provided Environmental Approval Re-evaluation*).

6.2.11.4 If GDOT determines under DBA Section 6.2.11.2 (*Provided Environmental Approval Re-evaluation*) that a re-evaluation, amendment or supplement, of a Provided Environmental Approval is required due to an event under DBA Section 6.2.11.1(a) or DBA Section 6.2.11.1(b) (*Provided Environmental Approval Re-evaluation*), but without limiting DBA Section 6.2.11.6 (*Provided Environmental Approval Re-evaluation*), Design-Builder will be fully responsible for all necessary actions, and will bear all risk of delay and all risk of increased cost, resulting from or arising out of any such re-evaluation, amendment, or supplement, including:

(a) complying with the requirements set forth in TP Section 5.3.4 (Amendments to Provided Environmental Approvals);

(b) supporting GDOT in its conducting of all necessary environmental studies and preparing all necessary environmental documents in compliance with applicable Environmental Laws;

(c) obtaining and complying with all necessary new Governmental Approvals;

(d) obtaining and complying with all modifications, renewals, and extensions of the Provided Environmental Approvals; and

(e) bearing all risk and cost of litigation.

6.2.11.5 If GDOT determines under DBA Section 6.2.11.2 (*Provided Environmental Approval Re-evaluation*) that a re-evaluation, amendment, or supplement of a Provided Environmental Approval is required due to an event under DBA Section 6.2.11.1(c), then the provisions of this Design-Build Agreement pertaining to Relief Events and Compensation Events shall apply.

6.2.11.6 Notwithstanding DBA Section 6.2.11.5 (*Provided Environmental Approval Re-evaluation*), GDOT will bear, and Design-Builder shall not be responsible for, GDOT's Recoverable Costs with respect to the first instance where Design-Builder's Work requires any Provided Environmental Approval re-evaluation, amendment, or supplement, excluding, however, GDOT's Recoverable Costs arising out of or relating to the conduct of or supplemental environmental studies arising out of, relating to, or resulting from (i) acquisition of any Design-Builder Proposed/Design-Builder Acquired Right of Way, (ii) Design-Builder Hazardous Materials Release(s), or (iii) negligence, reckless or willful misconduct, violation of Law and other illegal activities (or inaction), violation or breach of Governmental Approval or contract, criminal conduct, bad faith, intentional misconduct (which excludes intentional Design-Builder

Default), arbitrary or capricious acts, or fraud under or relating to this Design-Build Agreement on the part of Design-Builder or any Design-Builder-Related Entity.

6.3 Submittal Review; GDOT Oversight; Quality Posture

6.3.1 Submittal Review, Comment and Acceptance Terms and Procedures

6.3.1.1 This DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*), TP Section 2.9 (Submittals), and the Submittal Requirements Database set forth the terms and procedures that shall govern all Submittals pursuant to this Design-Build Agreement.

6.3.1.2 If there is any irreconcilable conflict between the provisions of this DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*) and any other provisions of this Design-Build Agreement concerning submission, review, comment, rejection, and acceptance procedures, this DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*) shall exclusively govern and control.

6.3.1.3 Without limiting DBA Section 22.11.3 (*Notices and Other Formal Communications*), Design-Builder shall include the submission and timing requirements for all submissions to GDOT that are, in each case, not Formal Communications in performing its obligations under TP Section 2.9 (Submittals).

6.3.1.4 Notwithstanding anything to the contrary in this DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*), GDOT may reject any Submittal that is incomplete, or otherwise does not provide the content or information required under the Design-Build Documents.

6.3.2 Time Periods

6.3.2.1 Whenever GDOT has a right to review, comment on, reject, or accept a Submittal, GDOT will review, comment on, reject, or accept (as applicable) such Submittal: (a) where a period is specified in the Submittal Requirements Database or any other provision in this Design-Build Agreement, within such period; or (b) where no period is specified in this Design-Build Agreement, promptly and in any event within 15 Business Days, in either case after the date GDOT receives a complete Submittal in conformance with this Design-Build Agreement.

6.3.2.2 The time periods set forth in this Design-Build Agreement and in the Submittal Requirements Database, in each case for GDOT's review, comment, rejection, or acceptance (as applicable) of Submittals, shall:

(a) apply to and restart with all Submittals that Design-Builder may be required to resubmit under this Design-Build Agreement;

(b) be subject to adjustment as provided in TP Section 2.9.4 (Time Periods for GDOT Review) for multiple concurrent Submittals within a Discipline Group; and

(c) with respect to Type 2 Submittals, be subject to the notification and additional response time as provided in DBA Section 6.3.4 (*Type 2 Submittal*).

6.3.2.3 Design-Builder shall schedule and coordinate all Submittals to allow an efficient and orderly Submittals process in accordance with TP Section 2.9.3 (Coordination and Discipline Groups).

6.3.2.4 During any time that GDOT has a right under this Design-Build Agreement to carry out increased monitoring of the Project and Design-Builder's compliance with its obligations under this Design-Build Agreement, the applicable period for GDOT to act on any Submittal received during such time, shall automatically be extended by 10 Business Days.

6.3.3 Type 3 Submittal

6.3.3.1 Design-Builder shall not commence or permit the commencement of any Work that is the subject of, governed by or dependent upon a Type 3 Submittal until it has submitted the Type 3 Submittal to GDOT has provided its acceptance (at its sole discretion) of such Type 3 Submittal.

6.3.3.2 If GDOT does not respond to a Type 3 Submittal within the time period specified in DBA Section 6.3.2 (*Time Periods*), then the Type 3 Submittal shall be deemed rejected. GDOT may, but is under no obligation to, provide its rationale for rejection. If Design-Builder wishes to proceed with the subject matter of the rejected (or deemed rejected) Type 3 Submittal, Design-Builder shall amend and resubmit the amended Type 3 Submittal to GDOT, and DBA Section 6.3.2 (*Time Periods*) and this Section 6.3.3 (*Type 3 Submittal*) shall re-apply.

6.3.4 Type 2 Submittal

6.3.4.1 Design-Builder shall not commence or permit the commencement of any Work that is the subject of, governed by or dependent upon a Type 2 Submittal until it has submitted the Type 2 Submittal to GDOT, and:

(a) GDOT has accepted the Type 2 Submittal; and either

(b) a. if GDOT makes a Comment on the Type 2 Submittal, any re-submission of the Type 2 Submittal addresses GDOT's Comment and GDOT accepts the re-submitted Type 2 Submittal or the basis for the Comment in the Type 2 Submittal is resolved in accordance with DBA Section 6.3.6 (*Submittals Disputes*); provided, however, in each case that Design-Builder shall use commercially reasonable efforts to accommodate GDOT's Comments where accommodation does not materially increase the time or cost (or both) for Design-Builder's performance of the Work with respect to such Type 2 Submittal; or

(i) if GDOT rejects the Type 2 Submittal (and provided a Basis of Rejection), the re-submitted Type 2 Submittal fully remedies the Basis of Rejection and GDOT accepts the re-submitted Type 2 Submittal, or the Basis of Rejection is otherwise resolved in accordance with DBA Section 6.3.6 (*Submittals Disputes*).

6.3.4.2 If GDOT does not respond to a Type 2 Submittal within the response period determined in accordance with DBA Section 6.3.2 (*Time Periods*), then the Type 2 Submittal shall be deemed rejected. GDOT may, but is under no obligation to, provide its rationale for rejection; provided, however, that so long as Design-Builder meets the requirements within the definition of Compensation Event or Relief Event (or both), then Design-Builder may seek relief and compensation with respect to the Work that is the subject of, governed by, or dependent upon, the Type 2 Submittal in accordance with DBA Article 13 (*Relief Events; Compensation Events*); provided, further, however, that Design-Builder shall nevertheless submit a Submittal with or without amendments, as Design-Builder determines, as an additional condition to entitlement to any relief.

6.3.5 Type 1 Submittal

6.3.5.1 Design-Builder may commence or permit the commencement of any Work that is the subject of, governed by or dependent upon any Type 1 Submittal at or after submission to GDOT; provided that Design-Builder shall bear all risk and cost associated with any requirement to resubmit or to remedy any Nonconforming Work (or both) following any Comment on the Type 1 Submittal, in accordance with this DBA Section 6.3.5 (*Type 1 Submittal*) and DBA Section 6.3.6 (*Submittals Disputes*).

6.3.5.2 GDOT may make Comments on the Type 1 Submittal and Design-Builder shall use commercially reasonable efforts to accommodate GDOT's Comments where accommodation does not materially increase the time or cost (or both) for Design-Builder's performance of the Work with respect to such Type 1 Submittal.

6.3.6 Submittals Disputes

6.3.6.1 Design-Builder acknowledges and agrees that (a) Design-Builder may not dispute any rejection of a Type 3 Submittal by GDOT under this DBA Section 6.3.6 (*Submittals Disputes*), and (b) Design-Builder may not bring a Dispute regarding any Type 3 Submittal under the Dispute Resolution Procedures.

6.3.6.2 In each case where Design-Builder is entitled to seek, and seeks, relief under this DBA Section 6.3.6 (*Submittals Disputes*), Design-Builder shall provide Notice to GDOT that it either (a) will not accommodate a GDOT Comment to a Submittal (on the basis that accommodation materially increases the time or cost (or both) of Design-Builder's performance of the Work with respect to the relevant Submittal), or (b) disputes GDOT's Basis of Rejection, in each case as applicable to GDOT's disposition of a Submittal. For avoidance of doubt, Design-Builder's recourse to resolution of Submittals disputes is conditioned upon affirmative Notice to GDOT of the Submittals dispute.

6.3.6.3 If Design-Builder:

(a) does not accommodate a GDOT Comment (on the basis described in DBA Section 6.3.6.2 (*Submittals Disputes*) with respect to the relevant Submittal) and GDOT asserted initially and reasonably continues to believe that such Comment can, by Design-Builder's exercise of commercially reasonable efforts, be accommodated without material increase in time or cost (or both); or

(b) disputes GDOT's Basis of Rejection, then, in either case, GDOT will provide Notice to Design-Builder within five Business Days after receipt of Design-Builder's Notice (provided under DBA Section 6.3.6.2 (*Submittals Disputes*)) that GDOT continues to reasonably believe: (i) that GDOT's Comment can, by Design-Builder's exercise of commercially reasonable efforts, be accommodated without material increase in time or cost (or both) or (ii) the Basis of Rejection.

6.3.6.4 Following such Notice by GDOT under DBA Section 6.3.6.3 (*Submittals Disputes*), the Parties shall conduct discussions and negotiations in good faith in accordance with TP Section 3 (Design-Builder Quality Program) to resolve the basis for the Submittals dispute. If the Parties fail to reach agreement within 10 Business Days after expiry of such good faith negotiations, as determined by either Party in its reasonable discretion, then either Party may refer the matter for determination in accordance with the Dispute Resolution Procedures.

6.3.7 GDOT Oversight

At all times during the Term, GDOT will have the right to conduct monitoring, reviewing, inspection, testing, reporting, auditing and other oversight functions, including:

6.3.7.1 monitoring and auditing Design-Builder and Key Contractors and their respective books, records, systems, manuals and plans to determine compliance with this Design-Build Agreement;

6.3.7.2 monitoring and auditing Design-Builder Quality Program and Design-Builder's compliance with its obligations under TP Section 3 (Design-Builder Quality Program);

6.3.7.3 administering a design review program, including review of all Submittals of Design Documents;

6.3.7.4 administering a GDOT verification program, including:

(a) field monitoring, inspections on an audit basis and sampling, measurement, investigations, and testing to validate the quality of the Work;

(b) attending and witnessing Design-Builder's tests and inspections including in connection with GDOT's certification of Substantial Completion and Final Acceptance;

6.3.7.5 conducting Over-the-Shoulder reviews of Design Documents or other Submittals, as they may deem necessary or appropriate, provided that they shall not have any obligation to conduct such reviews nor assume any responsibility for Design-Builder's Work, regardless of whether or not electing to perform or performing any such reviews;

6.3.7.6 oversight of the correction of any Nonconforming Work and Design-Builder's compliance with its obligations under DBA Section 7.11 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*), and TP Section 3.6 (Nonconforming Work);

6.3.7.7 oversight of Design-Builder's implementation of its Safety Plan;

6.3.7.8 Reserved; and

6.3.7.9 oversight of Design-Builder's compliance with the OJT Plan in accordance with DBA Section 10.10 (*Job Training Program*) and DBA Exhibit 14 (*OJT Requirements*).

6.3.8 Oversight by GDOT for FHWA and Federal Compliance

6.3.8.1 In addition to GDOT's rights under DBA Section 6.3.7 (*GDOT Oversight*), GDOT and FHWA shall also have the right at all times to monitor, inspect, sample, measure, attend, observe, or conduct tests and investigations, and conduct any other oversight respecting any part or aspect of the Project or the Work, to the extent necessary or advisable to comply with FHWA and any other applicable federal agency requirements.

6.3.8.2 GDOT and FHWA may conduct additional reviews of Design Documents except to the extent necessary or advisable to comply with FHWA or other applicable federal agency requirements, provided that the aforementioned shall not limit GDOT's rights pursuant to DBA Section

6.3.1 (*Submittal Review, Comment and Acceptance Terms and Procedures*) to DBA Section 6.3.7 (*GDOT Oversight*).

6.3.8.3 GDOT and FHWA shall have the right at all times to verify Design-Builder's compliance with the Design-Build Documents and Project Management Plan, to include specifically performing periodic review of Design-Builder's performance of quality control for the Project and conducting Over-the-Shoulder reviews of the Design-Build Documents or other Submittals, in each case, at such times, and with respect to such matters, as GDOT determines necessary in its sole discretion; provided that GDOT shall not have any obligation to conduct such reviews nor assume any responsibility for Design-Builder's Work, regardless of whether or not electing to perform or performing any such reviews.

6.3.8.4 Nothing in this Design-Build Agreement shall preclude, or be construed to preclude, and Design-Builder shall not interfere with, any review, audit or oversight of Submittals, Work, Books and Records, or other documents, materials, or information that the FHWA may desire to conduct.

6.3.9 Cooperation in Relation to GDOT, FHWA Oversight; Effect of Oversight; No Estoppel

Design-Builder shall, and shall cause each Design-Builder-Related Entity to, coordinate and cooperate with GDOT and each GDOT-Related Entity to facilitate the full, efficient, effective, and timely performance of all monitoring, reviewing, inspection, testing, reporting, auditing, and other oversight functions. Design-Builder shall, and shall cause Design-Builder-Related Entities to, be available at all reasonable times for consultation with GDOT and each GDOT-Related Entity.

6.3.10 Quality Control, Inspection and Quality Control Testing

6.3.10.1 GDOT Rights and Responsibilities

As between GDOT and Design-Builder, GDOT will perform materials and equipment acceptance testing as described in the Project Standards as and when agreed in the accepted Baseline Project Schedule.

6.3.10.2 Design-Builder Responsibilities

(a) Design-Builder shall perform all quality control necessary or desirable to meet its obligations under the Design-Build Documents.

(b) Design-Builder shall perform any quality control inspection, sampling, measurement, testing, investigations, and other quality control activities in accordance with the accepted Project Management Plan and otherwise with the Design-Build Documents.

(c) At all times where any of GDOT, FHWA, or relevant Governmental Entities are (i) required to conduct, or afforded a specific right to conduct, specific inspections, or approvals or (ii) are afforded control points, hold points, or other similar points on the Project Schedule, in each case under the Design-Build Documents or Project Management Plan, Design-Builder shall not proceed beyond such point until GDOT, FHWA, or such relevant Governmental Entity (or all of them, as may be required) have made such inspection or approval, or have waived their respective rights to inspect or approve (which waiver shall be in writing), or have otherwise authorized Design-Builder to proceed (which authorization shall likewise be in writing).

(d) If any Utility Owner, Railroad or third party is to accept or pay for a portion of the value of the Work, pursuant to a separate Standard Utility Agreement, Railroad Agreement or Third Party Agreement, as applicable, its respective representatives shall have the right to oversee, inspect and test the relevant portion of the Work.

(e) Design-Builder shall provide to GDOT all quality control test results and reports (which may be provided in electronic format in accordance with the Technical Provisions) promptly and in any event within five Business Days after Design-Builder receives such results or prepares such reports (as applicable) or such other period as specified in the Technical Provisions.

(f) Design-Builder hereby irrevocably consents to the monitoring, reviewing, inspection, testing, reporting, auditing, and other oversight functions afforded GDOT, FHWA, Utility Owners, Railroads, third parties, and any other Governmental Entity under the Design-Build Documents.

6.3.11 Limitations on Design-Builder's Right to Rely

6.3.11.1 Nothing in DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*) or any act or omission of GDOT or any GDOT-Related Entity pursuant to such provisions shall:

(a) relieve Design-Builder from the performance of its obligations under this Design-Build Agreement;

(b) constitute acceptance by GDOT that the Work satisfies the requirements of this Design-Build Agreement;

(c) prevent GDOT from raising an objection or comment on a subsequent Submittal in accordance with this DBA Section 6.3.1 (*Submittal Review, Comment and Acceptance Terms and Procedures*) if the same objection or comment was not made by GDOT on a previous Submittal;

(d) prevent GDOT from identifying any Nonconforming Work in accordance with DBA Section 7.11 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*); or

(e) transfer, or be deemed to transfer, any or all responsibility or liability for the Design Work, or be construed as a directive by GDOT to Design-Builder with respect to any aspect of the Design Work, apart from a general directive to comply with requirements of the Design-Build Documents.

6.3.11.2 Any review, recommendation, acceptance, inspection, response, act or omission of GDOT or a GDOT-Related Entity with respect to the Project or the Work shall be pursuant to, and solely in furtherance of the inspection powers as set forth in O.C.G.A. § 50-21-24(8).

6.4 Community Outreach and Public Information

Refer to TP Section 2.8 (Public Information and Communications), wherein, generally, GDOT reserves the right to lead public information efforts with respect to the Project. Design-Builder shall provide on-going information to the public concerning the development of the Project, in accordance with the Public Information and Communications requirements set forth in TP Attachment 2-3 (Public Information and Communications).

6.5 Cooperation with Governmental Entities

Design-Builder shall cooperate and coordinate the Work with GDOT and any Governmental Entity, regardless as to whether such Governmental Entity issues or has rights pursuant to any Governmental Approval, where such Governmental Entity is or may be affected by the Work.

6.6 Encroachment Permits

6.6.1 Design-Builder acknowledges that there are no existing Encroachment Permits identified in the Technical Provisions. If GDOT identifies, or becomes aware of, any additional information relating to existing Encroachment Permits, then GDOT will promptly provide such information to Design-Builder.

6.6.2 It is anticipated that from time to time during the Term certain Persons will apply for special Encroachment Permits to grade, landscape or otherwise conduct roadside encroachment activity within the Project Limits (each, an "Encroachment Applicant").

6.6.3 For all Encroachment Permit applications referred to in DBA Section 6.6.2 (*Encroachment Permits*), Design-Builder shall:

6.6.3.1 provide each Encroachment Applicant reasonable assistance by providing information regarding the proposed grading, landscaping, or other roadside encroachment activity; and

6.6.3.2 assist GDOT and its Constituents (including any GDOT district representative) in deciding whether to approve the Encroachment Permit application.

6.6.4 Within 10 Business Days after being notified by GDOT that GDOT has received an Encroachment Permit application from an Encroachment Applicant, Design-Builder shall analyze each application and, subject to DBA Section 6.6.5 (*Encroachment Permits*), provide to GDOT a recommendation (together with supporting analysis) as to whether the Encroachment Permit application should be approved, denied, or approved subject to conditions.

6.6.5 Design-Builder may only recommend the denial of an Encroachment Permit application or that a condition be included on the Encroachment Permit if such denial or condition (as applicable) is required due to the impact the proposed Encroachment Permit has on Design-Builder's performance of the Work.

6.6.6 If Design-Builder recommends against issuance of an Encroachment Permit and GDOT determines, in its good faith discretion, that issuance is appropriate, required, or requires the imposition of different conditions, then GDOT's determination shall control.

6.6.7 Design-Builder shall use reasonable efforts to:

6.6.7.1 monitor the activities of Encroachment Permit Holders on the Project Limits for compliance with applicable Encroachment Permits and applicable Law;

6.6.7.2 coordinate with the activities of any Encroachment Permit Holders on the Project Limits; and

6.6.7.3 obtain the cooperation of each Encroachment Permit Holder with an Encroachment Permit on the Project Limits.

6.6.8 If Design-Builder reasonably believes that any Encroachment Permit Holder is not complying with the terms of an Encroachment Permit within the Project Limits; or the Encroachment Permit Holder is not reasonably cooperating with Design-Builder, then Design-Builder shall notify GDOT, and GDOT either:

6.6.8.1 cause the Encroachment Permit Holder to comply with the Encroachment Permit or cooperate with Design-Builder (as applicable); or

6.6.8.2 determine that the Permit Holder is in compliance with the Encroachment Permit or is reasonably cooperating with Design-Builder (or both); or

6.6.8.3 revoke the Encroachment Permit.

6.7 Certain Third Party Agreements

6.7.1 Third Party Agreements

6.7.1.1 Design-Builder acknowledges that GDOT has entered into the Third Party Agreements as set forth in TP Attachment 23-1 (Third Party Agreements) and that Design-Builder has reviewed all such Third Party Agreements and taken all costs, schedule impacts, and obligations that arise thereunder, whether directly or indirectly, into account (and made adequate allowance therefor) in the Contract Sum, as revised.

6.7.1.2 Design-Builder shall comply with the requirements set forth in TP Section 23 (Third Party) in relation to the Third Party Agreements, and Design-Builder bears the full risk of carrying out all of the obligations under this DBA Section 6.7.1 (*Third Party Agreements*), as well as the impacts of any acts or omissions of the parties to the Third Party Agreements or any of its or their Constituents, except for those expressly stated in TP Section 23 (Third Party), as reserved to GDOT.

6.7.1.3 Design-Builder acknowledges and agrees that it has no right to make, and none of GDOT (or its Constituents) will be, or deemed to be, liable upon, any claim arising out of, relating to, caused by, or resulting from the risks described in DBA Section 6.7.1.1 (*Third Party Agreements*).

6.7.2 Third Party Disputes

6.7.2.1 Design-Builder shall use reasonable efforts to cooperate and coordinate with GDOT, including through assisting as may be reasonably requested by GDOT, if a Dispute arises between GDOT and any party to a Third Party Agreement in relation to the Work.

6.7.2.2 Design-Builder shall use reasonable efforts to cooperate and coordinate with GDOT and each party to a Third Party Agreement, including reasonably assisting when requested by such Persons, if a claim or other action is filed against any such Person by another Person (i.e., a Person other than GDOT, a GDOT-Related Entity, or Design-Builder) in relation to the Work.

6.7.2.3 Design-Builder shall use reasonable efforts to mitigate the delay, cost, and any other consequences of the Dispute contemplated in DBA Section 6.7.2.2 (*Third Party Disputes*).

6.8 Assignment of Certain Causes of Action

Design-Builder agrees to assign to GDOT all rights, title, and interest in and to all causes of action Design-Builder may have under Section 4 of the Clayton Act (15 USC § 15) or under comparable State

Law, arising from purchases of goods, services or materials pursuant to this Design-Build Agreement. This assignment shall be made and become effective automatically upon tender of the first Project Payment (with adjustments and deductions as permitted under this Design-Build Agreement), without further acknowledgment by the Parties.

Article 7 DEVELOPMENT OF THE PROJECT

7.1 General Obligations of Design-Builder

7.1.1 Design-Builder, in addition to performing all other requirements of the Design-Build Documents, shall:

7.1.1.1 expeditiously and diligently progress performance of the Work, to include furnishing all design, engineering, and other services, providing construction management and all other Work, furnishing all materials, equipment, labor, and installations, and undertaking all efforts necessary or appropriate (excluding only those materials, services and efforts that the Design-Build Documents expressly specify will be undertaken by GDOT or other Persons, if any) to deliver the Project and maintain it during construction, so as to achieve Substantial Completion and Final Acceptance by the applicable Milestone Deadlines;

7.1.1.2 at all times required under the Design-Build Documents provide all Key Personnel and all Required Personnel, each of which are to be present (or his/her designee approved by GDOT will be present) at the place(s) (if and as required under the Technical Provisions);

7.1.1.3 comply with, and require that all Contractors comply with, all applicable Laws and Governmental Approvals;

7.1.1.4 ensure labor harmony on the Site during the Term, including taking appropriate steps to prevent strikes, walkouts, work stoppages, work slowdowns, work curtailments, cessations or interruptions of production due to labor disputes or other labor-related matters;

7.1.1.5 observe, and require that all Contractors observe, Good Industry Practice;

7.1.1.6 cooperate with GDOT and Governmental Entities with jurisdiction in all matters relating to the applicable portions of the Work, including their review, inspection and oversight of the design and construction;

7.1.1.7 ensure the Site is kept in a neat, clean, and orderly condition at all times;

7.1.1.8 timely submit all Submittals, and ensure that all such Submittals are accurate, compliant, and complete when submitted;

7.1.1.9 use commercially reasonable efforts to mitigate delay to design and construction of the Project and mitigate damages due to delay and any other consequences of any Relief Event or other basis for claim hereunder, acting in accordance with Good Industry Practice, in all circumstances, to the extent possible, including by re-sequencing, reallocating, or redeploying Design-Builder's and its Contractors' forces to other portions of the Work, as appropriate; and

7.1.1.10 otherwise perform the Work so as to ensure that the Project satisfied each of the purposes, objectives, functions, uses, and requirements set forth in or reasonably inferred from the Design-Build Documents.

7.1.2 Except as otherwise expressly provided in the Design-Build Documents (including specifically any Relief Event, Compensation Event, or other basis for relief), Design-Builder:

7.1.2.1 acknowledges and accepts all risks, responsibilities, obligations, and liabilities in connection with performance of the Work and delivery of the Project; and

7.1.2.2 is not entitled to make any claim under the Design-Build Documents, at law, or in equity against GDOT or the State for any Losses in connection with the Project, the Work, or the Design-Build Documents.

7.1.3 Design-Builder shall design, create, and maintain all of Design-Builder-maintained information systems, at such times (no later than NTP1), and in accordance with the requirements of, TP Section 2.6 (Design-Builder-Maintained Information Systems).

7.1.4 When any act, omission, or other action of Design-Builder occurs that violates the requirements, conditions, or terms of the Design-Build Documents, or affects the health, safety, or welfare of the public or natural resources, GDOT will have the right, but not the obligation, to require and direct Design-Builder shall promptly commence and diligently pursue action to replace, repair, or restore such damage, injury or condition within a time frame established by GDOT, at Design-Builder's sole cost and expense, and without entitlement to a Relief Event or Compensation Event. Without limiting the foregoing in this DBA Section 7.1.4 (*General Obligations of Design-Builder*), Design-Builder shall take prompt action to replace, repair, or restore any damage to the property at or on a site adjacent to the Site, whether owned by Design-Builder or any other Person, that is not part of the Work, as planned or required, within a time frame established by GDOT, at Design-Builder's sole cost and expense and without entitlement to a Relief Event or Compensation Event, except as GDOT may otherwise direct in its sole discretion.

7.2 Performance, Design and Construction Standards; Deviations; Design Exceptions

7.2.1 Design Work. Without limiting DBA Section 7.11.6 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) and the Warranty itself, Design-Builder shall furnish all aspects of the Design Work and all Design Documents in accordance with Good Industry Practice in such a manner that the Project is constructible as designed.

7.2.2 Construction Work. Without limiting DBA Section 7.11.6 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) and the Warranty itself, Design-Builder shall construct the Project and perform the Construction Work as designed (in accordance with the Design-Build Documents and as reflected in the Design Documents), free from Defects, and in accordance with Good Industry Practice.

7.2.3 All Work. Design-Builder shall perform the Work (including the Design Work and the Construction Work) in accordance with (a) the requirements, terms and conditions set forth in the Design-Build Documents, (b) the Baseline Project Schedule, (c) all Laws, (d) the requirements, terms and conditions set forth in all Governmental Approvals, (e) the Proposal Commitments, and (f) the Project Management Plan prepared or to be prepared thereunder, in each case taking into account the Project Limits and constraints affecting it and the Project.

7.2.4 Design-Builder may apply, in writing, for GDOT approval of any deviation, change, modification, alteration, or exception from applicable Technical Provisions regarding design or construction. All applications shall be in writing. Design-Builder may not proceed to perform any Work in reliance upon the approval of any such deviation, etc., before the approval is received. Where Design-Builder requests a deviation, change, modification, alteration or exception from applicable Technical Provisions regarding design or construction as part of the submittal of the Project Management Plan, or the Baseline Project Schedule, Design-Builder shall specifically and conspicuously identify and label such proposed deviation, etc. GDOT will consider in its sole discretion, but have no obligation to approve, any

such application. Without limiting such discretion, Design-Builder shall bear the burden of persuading GDOT that the sought deviation, change, modification, alteration, or exception from applicable Technical Provisions regarding design or construction constitutes sound and safe engineering consistent with Good Industry Practice and achieves or substantially achieves GDOT's technical criteria. No deviation, change, modification, alteration, or exception from applicable Technical Provisions regarding design or construction shall be deemed approved or be effective unless and until stated in writing signed by GDOT's Authorized Representative. GDOT's lack of issuance of a written response to any such application within 14 days after GDOT's receipt thereof in writing shall be deemed a disapproval of such application. GDOT's denial or disapproval of a requested deviation, change, modification, alteration, or exception from applicable Technical Provisions regarding design or construction shall be final and not subject to the Dispute Resolution Procedures. GDOT may elect to process the application as a Change Request under DBA Section 14.2 (*Design-Builder Changes*) rather than as an application for a deviation, change, modification, alteration, or exception from applicable Technical Provisions regarding design or construction. Design-Builder acknowledges that all review and actions by GDOT with respect to any such requests pursuant hereto shall be subject to DBA Section 6.3.11 (*Limitations on Design-Builder's Right to Rely*).

7.2.5 References in the Technical Provisions to manuals or other publications governing the Design Work or Construction Work prior to the Substantial Completion Date shall mean the most recent editions in effect as of the Effective Date, unless expressly provided otherwise. Any changes to the Technical Provisions respecting Design Work or Construction Work prior to the Substantial Completion Date shall be subject to the Supplemental Agreement process for a GDOT Change in accordance with DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*).

7.2.6 The Parties anticipate that from time to time after the Effective Date, GDOT will adopt, through revisions to existing manuals and publications or new manuals and publications, changed, added, or replacement standards, criteria, requirements, conditions, procedures, specifications, and other provisions relating to Design Work and Construction Work. GDOT will have the right, but not the obligation, to add such changed, added, or replacement standards, criteria, requirements, conditions, procedures, specifications, and other provisions to the Technical Provisions by notice to Design-Builder, whereupon they shall constitute amendments to and become part of, the Technical Provisions, and, subject to the preambles to the definitions of "Compensation Event" and "Relief Event," respectively, as well as this DBA Section 7.2.6 (*Performance, Design and Construction Standards; Deviations; Design Exceptions*) may, but not necessarily, constitute(s) a GDOT Change. If such changed, added, or replacement Technical Provisions encompass matters that are addressed in the Technical Provisions as of the Effective Date, they may, upon inclusion into to the Technical Provisions, replace and supersede inconsistent Technical Provisions to the extent designated by GDOT in its sole discretion. GDOT will identify the superseded provisions in its notice to Design-Builder. Notwithstanding the foregoing, in the absence of a GDOT Change, if GDOT adopts the changed, added, or replacement standards, criteria, requirements, conditions, procedures, specifications, and other provisions, including changed, added, or replacement Project Standards, prior to the Final Acceptance Date, Design-Builder shall not be obligated to (but may) incorporate the same into its design and construction of the Project prior to the Final Acceptance Date. Refer to DBA Section 14.6.1 (*Project Standards Changes*) for provisions relating to changes to the Project Standards not raised by GDOT to Design-Builder.

7.2.7 Notwithstanding the foregoing in this DBA Section 7.2 (*Performance, Design and Construction Standards; Deviations; Design Exceptions*), Design-Builder acknowledges that FHWA also has or may have approval rights with respect to Design Exceptions not previously approved and listed in TP Section 11.3.10 (Allowable Design Exceptions, Variances, and Deviations) and TP Attachment 11-2 (Design Exceptions and Variances) Furthermore, Design-Builder acknowledges and agrees that GDOT does not seek additional Design Exceptions or Design Variances for the Project, and notwithstanding any

FHWA approval rights, GDOT may reject any request for additional Design Exceptions or Design Variances in its sole discretion. In addition, Design-Builder shall not be responsible for seeking any Design Exception or Design Variance for any portion of the Project Limits outside of the Pavement Limits.

7.3 Design-Builder Responsibility for Nonconforming Work

7.3.1 Generally

7.3.1.1 If Nonconforming Work is discovered by Design-Builder or GDOT prior to the Substantial Completion Date (or, in the case of any FA Punch List items, prior to the Final Acceptance Date), Design-Builder shall:

(a) correct all Nonconforming Work in accordance with and subject to DBA Section 7.11.6 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) and TP Section 3.6 (Nonconforming Work); and

(b) promptly take all necessary action to prevent similar Nonconforming Work from occurring.

7.3.1.2 Design-Builder may not claim any relief or compensation with respect to the correction of any Nonconforming Work, except to the extent that it is entitled to claim any relief or compensation pursuant to DBA Article 13 *(Relief Events; Compensation Events*).

7.3.2 Discovery of Nonconforming Work

7.3.2.1 Design-Builder shall notify GDOT if Design-Builder discovers any Nonconforming Work within the timeframe and in the manner required under TP Section 3.6 (Nonconforming Work).

7.3.2.2 If GDOT discovers any Nonconforming Work, GDOT may notify Design-Builder including by use of the PMCS, specifying the relevant Nonconforming Work.

7.3.3 Correction of Nonconforming Work

7.3.3.1 Design-Builder shall replace, re-work, or repair all Nonconforming Work expeditiously and diligently in accordance with the appropriate NCR disposition accepted by GDOT pursuant to TP Section 3.6.5 (NCR Disposition Options).

7.3.3.2 Design-Builder shall notify GDOT that the Nonconforming Work has been corrected promptly (and in any event within five Business Days) after its correction.

7.3.3.3 If Design-Builder has requested a NCR disposition of "accept-as-is", then prior to GDOT accepting such disposition, the Parties shall agree:

(a) an amount to be paid by Design-Builder to GDOT to reimburse GDOT for the relevant completed Work not meeting all the requirements of the Design-Build Agreement, taking into account any additional costs which may be incurred by GDOT or any GDOT-Related Entity as a result of such failure including any long-term maintenance costs that might arise in the future as a result of the Nonconforming Work, and Design-Builder's cost savings as compared to implementing a "rework" NCR disposition; and

(b) any other consequences under the Design-Build Agreement arising from the relevant completed Work not meeting all of the requirements.

7.3.3.4 If Design-Builder has requested a NCR disposition of "replace", "repair", or "re-work", then prior to GDOT accepting such disposition, the Parties shall agree upon any other consequences under the Design-Build Agreement arising from the relevant completed Work not meeting all of the requirements (notwithstanding eventual replacement, repair, or re-work).

7.3.3.5 Following agreement of the matters referred to in this DBA Section 7.3.3 (*Correction of Nonconforming Work*) and GDOT's acceptance of the NCR disposition, Design-Builder shall pay to GDOT the amount agreed, if any, under this DBA Section 7.3.3 (*Correction of Nonconforming Work*) within 10 Business Days. GDOT may deduct any unpaid amount from the next applicable Project Payment as an offset made further to GDOT's rights under DBA Section 7.3.3.2 (*Damages; Offset*) in accordance with DBA Article 5 (*Contract Sum, Project Payments, and Public Funds*) and DBA Exhibit 7 (*Contract Sum and Payment Terms*).

7.3.4 Right to Uncover

7.3.4.1 Design-Builder shall ensure that GDOT is provided with reasonable advance Notice of, and the opportunity to witness, all inspection and test activity with respect to the D&C Work in accordance with the Design-Build Agreement.

7.3.4.2 If Design-Builder does not provide GDOT with the Notice and opportunity pursuant to DBA Section 7.3.4.1 (*Right to Uncover*), Design-Builder shall, at the request of GDOT, uncover any relevant part of the D&C Work that has been covered up or otherwise put out of view to permit GDOT to inspect the relevant D&C Work. Design-Builder shall bear all costs of any uncovering or removal, regardless of whether or not any Defect or Nonconforming Work is discovered in the relevant D&C Work.

7.3.4.3 In addition to its rights under DBA Section 7.3.4.2 (*Right to Uncover*), GDOT may give Notice to Design-Builder requiring Design-Builder to uncover and inspect (or to allow GDOT to inspect) any part or parts of the D&C Work, or to test any part or parts of the D&C Work, if GDOT believes that:

(a) such part or parts of the D&C Work contains Defects or Nonconforming Work; or

(b) Design-Builder has failed to comply with the requirements of the Design-Build Agreement relevant to such part or parts of the D&C Work.

Such notice must include reasonably detailed reasons for the required uncovering, inspection or tests.

7.3.4.4 Design-Builder shall comply with any Notice delivered under DBA Section 7.3.4.3 (*Right to Uncover*).

7.3.4.5 If any inspection or test carried out pursuant to DBA Section 7.3.4.3 (*Right to Uncover*) and DBA Section 7.3.4.4 (*Right to Uncover*) shows that:

(a) the relevant part or parts of the D&C Work contains Defects or Nonconforming Work; or

(b) Design-Builder has failed to comply with the requirements of the Design-Build Agreement relevant to such part or parts of the D&C Work,

then Design-Builder:

(i) shall diligently correct all such Defects, Nonconforming Work, or non-compliance at no cost to GDOT; and

(ii) Design-Builder will not have a right to claim any compensation, relief or extensions of time with respect to the exercise by GDOT of its right under DBA Section 7.3.4.3 (*Right to Uncover*).

(c) If any inspection or test carried out pursuant to DBA Section 7.3.4.3 (*Right to Uncover*) and DBA Section 7.3.4.4 (*Right to Uncover*) shows that:

(i) the relevant part or parts of the D&C Work is/are not Defective (or otherwise do(es) not constitute Nonconforming Work); and

(ii) Design-Builder has complied with the requirements of this Design-Build Agreement relevant to such part or parts of the D&C Work,

then, the exercise by GDOT of its right under DBA Section 7.3.4.2 and DBA Section 7.3.4.3 (*Right to Uncover*) will constitute a Compensation Event and a Relief Event, as and to the extent provided in the respective clauses of the definitions thereof, if applicable.

(d) Regardless as to whether the exercise of GDOT's right under DBA Section 7.3.4 (*Right to Uncover*), constitutes a Compensation Event or a Relief Event, following inspection by GDOT (and, if a Defect or Nonconforming Work, correction thereof), Design-Builder shall restore the Work to the standard required by the Design-Build Documents.

7.3.5 Failure to Implement Corrective/Preventative Action Report

7.3.5.1 If Design-Builder is required to submit a Corrective/Preventative Action Report in accordance with TP Section 3.6.8 (Corrective/Preventative Action Report) and fails to submit such report or to diligently implement such Corrective/Preventative Action Report, then GDOT may serve a Notice on Design-Builder giving reasonable details of the relevant failure.

7.3.5.2 If (a) Design-Builder has not submitted the Corrective/Preventative Action Report within 10 Business Days after receipt of a notification under DBA Section 7.3.2 (*Discovery of Nonconforming Work*) or DBA Section 7.3.3.2 (*Correction of Nonconforming Work*), or (b) Design-Builder has not corrected the failure to the reasonable satisfaction of GDOT by expiry of the period identified in GDOT-accepted Corrective/Preventative Action Report (or such longer period as may be agreed to by GDOT, in its sole discretion, prior to expiration of such initially-identified period), then, in either case, a Design-Builder Default will occur under DBA Section 17.1.1 (*Design-Builder Default*). Nothing in this DBA Section 7.3.5.2 (*Failure to Implement Corrective/Preventative Action Report*) shall limit GDOT's right to assess Nonrefundable Deductions for Design-Builder failures under clause (a).

7.3.6 No Limitation

7.3.6.1 Nothing contained in the Design-Build Agreement in any way limits the right of GDOT to assert claims for damages resulting from defects in the Work for the period of limitations

prescribed by applicable Law, and the obligations of Design-Builder under this DBA Section 7.3 (*Design-Builder Responsibility for Nonconforming Work*) are in addition to any other rights or remedies GDOT may have under the Design-Build Agreement or under applicable Law.

7.4 Design Implementation and Submittals

7.4.1 Design-Builder, through the appropriately qualified and licensed design professionals, shall prepare all designs, plans, and specifications in accordance with the Design-Build Documents. Design-Builder shall cause the Engineer of Record with respect to each relevant discipline to sign and seal all respective Released for Construction Design Documents in accordance with TP Section 3 (Design-Builder Quality Program) and TP Section 4 (Design Documents).

7.4.2 Design-Builder shall deliver to GDOT accurate and complete Design Documents (including the Record Design Documents), Plans, and Construction Documents within the time and in the form required by the Technical Provisions.

7.4.3 The Engineer of Record with respect to each relevant discipline shall initiate and the Lead Design Consultant Project Manager shall sign and dispatch to GDOT all requests for information prior to the requests being submitted to GDOT.

7.5 Utility Adjustments

7.5.1 Utility MOUs.

7.5.1.1 Design-Builder acknowledges that:

(a) GDOT has entered into the Utility MOUs with Utility Owners as relates to this Project, and Design-Builder represents and warrants that it has reviewed all such Utility MOUs, is familiar with, and has satisfied itself as to, the terms and conditions in all Utility MOUs.

(b) If the Utility Owner has claimed a prior right and has elected to self-perform the design or construction services (or both) in the Utility MOU, then GDOT and the Utility Owner are parties to a Standard Utility Agreement, the terms and conditions of which may impose requirements, conditions, constraints, or other obligations that inform Design-Builder's obligations under DBA Section 7.5.3.4 (*Utility MOUs*).

7.5.1.2 For each Utility requiring Adjustment, the Design-Builder will refer to the relevant Utility MOU to discern which entity/ies the Utility Owner has elected to perform design or construction services (or both) for the Adjustment and the allocation of costs for such services.

7.5.1.3 Design-Builder shall perform all Utility Adjustments that are identified in any Utility MOU as to be performed by Design-Builder.

7.5.1.4 Design-Builder shall cause to be performed all Utility Adjustments that are identified as to be performed by Contractors identified in the applicable Utility MOU, for which the Design-Builder is responsible to have performed.

7.5.1.5 Design-Builder shall otherwise cooperate with Utility Owners self-performing the Utility Adjustment Work and timely pursue processes, remedies, and recourse available to GDOT (delegated to Design-Builder) or to the Design-Builder directly under GDOT UAM.

7.5.2 Design-Builder's General Responsibilities. Design-Builder shall:

7.5.2.1 in accordance with, and to the extent delegated or otherwise allocated to Design-Builder under, the Utility MOU and TP Section 7 (Utility Adjustments), coordinate, facilitate, and, as applicable, cause (pursuant to DBA Section 7.5.1.3, Section 7.5.1.4, and Section 7.5.1.5 (*Utility MOUs*)), all Utility Adjustments necessary:

(a) to accommodate the Project in accordance with the Project Schedule; and

(b) in order to comply with its other obligations under this Design-Build Agreement, including DBA Section 7.5.1 (*Utility MOUs*) and TP Section 7 (Utility Adjustments);

7.5.2.2 comply, in all respects, with GDOT UAM, abide by the results of the processes implemented pursuant to GDOT UAM, and otherwise coordinate, monitor, and otherwise undertake the necessary efforts to coordinate with Utility Owners performing Utility Adjustment Work, in coordination with the Work and in compliance with the standards of design and construction, Good Industry Practice, and other applicable requirements specified in this Design-Build Agreement, under any applicable Law, any Governmental Approval, any applicable Utility MOU and any applicable Standard Utility Agreement;

7.5.2.3 ensure that all Utility Adjustment Work that Design-Builder performs complies with this Design-Build Agreement, applicable Law, all Governmental Approvals, and any applicable Utility MOU;

7.5.2.4 perform Utility Adjustment Work (and Betterments, as applicable) only with and through Contractors or Subcontractors that, where required (e.g., water and sewer work), are preapproved and identified under the Utility MOU, it being understood that as between GDOT and Design-Builder, Design-Builder bears all of the risk of noncompliant, nonconforming, or non-performance of Utility Adjustment Work (and Betterments, as applicable);

7.5.2.5 use reasonable efforts to provide any assistance that GDOT reasonably requires to perform GDOT's obligations under any Utility MOU;

7.5.2.6 perform its obligations under this Design-Build Agreement in a manner that does not cause GDOT to breach (directly or indirectly) the provisions of any Utility MOU; and

7.5.2.7 comply with all requirements of Georgia 811 during performance of the Work.

7.5.3 Utility Adjustments Required.

7.5.3.1 If a Utility Adjustment is required for the Project, then, if and as required under the relevant Utility MOU, Design-Builder shall perform the Utility Adjustment Work or cause the Utility Owner to perform the Utility Adjustment Work in accordance with this DBA Section 7.5 (*Utility Adjustments*).

7.5.3.2 Any GDOT acceptance of Utility Adjustments, if any, will be addressed in accordance with this DBA Section 7.5 (*Utility Adjustments*) and TP Section 7 (Utility Adjustments), including through the Utility Adjustment Plan accepted by GDOT, the relevant Utility Work Plan, and through GDOT's executed Standard Utility Agreement(s) (and subsequent amendments).

7.5.3.3 Design-Builder shall coordinate with all applicable Governmental Entities and other Persons and shall procure and maintain all Governmental Approvals required for any Utility

Adjustments in accordance with DBA Section 6.2 (*Governmental Approvals and Third Party Agreements*). GDOT shall act reasonably to assist the Design-Builder in performing the foregoing coordination obligation.

7.5.3.4 Regardless of any arrangements made with the Utility Owners, Design-Builder shall continue to be the responsible party to GDOT for timely performance of all Utility Adjustment Work so that, upon the Substantial Completion Date, all Utilities that impact or might be impacted by the Project are compatible with the Project.

7.5.4 Utility Adjustment Costs

7.5.4.1 Subject to DBA Section 7.5.4.2 (*Utility Adjustment Costs*) through DBA Section 7.5.4.7 (*Utility Adjustment Costs*), inclusive, and DBA Section 7.5.5 (*Utility Existing Interests*), as between GDOT and Design-Builder, Design-Builder shall be responsible for all costs of the Utility Adjustment Work, whether incurred by Design-Builder or by the Utility Owner, except to the extent such costs:

(a) are attributable to Betterments and agreed between the Parties as Utility Owner's responsibility in accordance with DBA Section 7.5.7 (*Betterments*), in each case without limiting DBA Section 7.5.7.4(d) (*Betterments*); or

(b) are the Utility Owner's responsibility under the applicable Standard Utility Agreement, the applicable Utility MOU or applicable Law (including any delay costs the Utility Owner may be liable for under O.C.G.A. § 32-6-171).

7.5.4.2 Design-Builder shall collect directly from the Utility Owner any amounts due to Design-Builder with respect to costs for which Utility Owner is responsible.

7.5.4.3 Any failure by a Utility Owner to pay any or all such costs is not the basis for any relief (whether as a Relief Event or a Compensation Event) hereunder from GDOT at law or in equity. Design-Builder further acknowledges and agrees that if for any reason Design-Builder is unable to collect any amounts due to Design-Builder under DBA Section 7.5.4.2 (*Utility Adjustment Costs*), then:

(a) GDOT shall have no liability for such amounts;

(b) Design-Builder shall have no right to collect such amounts from GDOT or to offset such amounts against amounts otherwise owing from Design-Builder to GDOT; and

(c) Design-Builder shall have no right to stop Work or to exercise any other remedies against GDOT on account of such failure to pay.

(d) Design-Builder's sole remedy under the Design-Build Documents for the Utility Owner's failure to pay any or all such costs shall be to seek to enforce the Utility Owner's obligations under the applicable Utility Agreement, the applicable Utility MOU, or applicable Law; GDOT shall cooperate with Design-Builder to the extent reasonably required to assist Design-Builder in enforcing such Utility's obligations; provided, however, that GDOT shall not be required to institute any legal action or incur any out-of-pocket expenses in order to provide such reasonable cooperation and assistance.

7.5.4.4 With respect to each Utility Adjustment, Design-Builder is responsible for establishing any costs due from Design-Builder to the Utility Owner, any credits due from the Utility Owner

to Design-Builder against the costs described in DBA Section 7.5.4.1 (*Utility Agreements*) and any costs attributable to any Betterment due from the Utility Owner to Design-Builder.

7.5.4.5 If any other Governmental Entity is participating in any portion of Utility Adjustment costs, Design-Builder shall coordinate with GDOT and such local Governmental Entity regarding accounting for and approval of such costs, it being understood that GDOT will pursue Governmental Entities actively for such costs so long as Design-Builder provides reasonable prior Notice to GDOT seeking such active assistance and that no such assistance will be required for those costs pertaining to Betterments, unless GDOT otherwise agrees in its sole discretion.

7.5.4.6 Design-Builder shall maintain a complete set of records for the costs of each Utility Adjustment (whether incurred by Design-Builder or by the Utility Owner), in a format compatible with the estimate attached to the relevant Utility MOU and, in all cases, in sufficient detail for analysis. Such records shall:

(a) show the totals for each cost category in such manner as to permit comparison with the categories stated on the estimate;

(b) identify the source of funds used for each Utility Adjustment; and

(c) comply with the record keeping and audit requirements of this Design-Build Agreement and GDOT UAM.

7.5.4.7 Under no circumstances will Design-Builder have a right to assert a claim for any additional compensation, time extension, or relief from its obligations under this Design-Build Agreement as the result of any Utility Adjustment, whether performed by Design-Builder or by the Utility Owner, except as provided in DBA Article 13 (*Relief Events; Compensation Events*) and, further provided that Design-Builder has, where applicable, complied with its obligations to pursue an appropriate remedy from the Utility Owner through the Utility Escalation and Mediation Process. For avoidance of doubt, the "starting date" under DBA Section 13.1.2 (*Relief Event Notice*) occurs upon conclusion of the Utility Escalation and Mediation Process.

7.5.5 Utility Existing Interests

7.5.5.1 The Parties acknowledge and agree that, as between GDOT and Design-Builder, Design-Builder bears the risk relating to any Utility Owner claiming an Existing Interest with respect to a Utility Adjustment.

7.5.5.2 Design-Builder shall include the documentation of any Utility Owner Existing Interest (including that which a Utility Owner may provide in accordance with the relevant Utility MOU, applicable Law, or the GDOT UAM, in each purporting to establish and substantiate the Existing Interest) in the Utility Work Plan for the relevant Utility Adjustment.

7.5.5.3 Where GDOT has accepted the Utility Work Plan that includes an Existing Interest, Design-Builder shall be responsible for procuring that the Utility Owner relinquish its Existing Interest in accordance with TP Section 7.2.8.1 (Documentation of Existing Interests - Affidavits).

7.5.5.4 If it is determined in accordance with TP Section 7.2.8 (Real Property Matters) that the Utility Owner is entitled to a New Interest that is within the Project Limits:

(a) Design-Builder shall comply with the requirements set forth in such TP Section 7.2.8 (Real Property Matters); and

(b) GDOT grant the New Interest to the Utility Owner.

7.5.5.5 If it is determined in accordance with TP Section 7.2.8 (Real Property Matters) that the Utility Owner requires a New Interest that is outside the Project Limits, then:

(a) if the Utility Owner is responsible for acquiring the New Interest, then Design-Builder shall comply with the applicable requirements set forth in TP Section 7.2.8 (Real Property Matters); or

(b) if Design-Builder is responsible for acquiring the New Interest, then Design-Builder shall comply with the applicable requirements set forth in TP Section 7.2.8 (Real Property Matters).

7.5.5.6 Where GDOT has accepted a Utility Work Plan that includes an Existing Interest and the Utility Owner relinquishes such interest, and if such relinquishment is required due to any part of the design or construction means and methods included among the Design Documents and Plans differing from the assumptions included in the Basic Configuration in a manner that results in a different environmental impact compared to the impact assessed, then, to the extent GDOT would be required to do so under applicable Law:

(a) Design-Builder shall be responsible for: (i) where a New Interest is acquired outside of the State Proposed Right of Way, all costs and expenses in acquiring the New Interest, whether the acquisition is performed by Design-Builder or the Utility Owner; or (ii) where a New Interest is not acquired, compensating the Utility Owner for the fair market value of the relinquished Existing Interest; or

(b) If such relinquishment is required for any other reason, GDOT will be responsible for (i) where a New Interest is acquired outside of the State Proposed Right of Way, all costs and expenses in acquiring the New Interest, whether the acquisition is performed by Design-Builder or the Utility Owner; or (ii) where a New Interest is not acquired, compensating the Utility Owner for the fair market value of the relinquished Existing Interest.

7.5.6 FHWA Utility Requirements

7.5.6.1 The Project is subject to, and Design-Builder shall comply with, 23 C.F.R. §§ 645.101 *et seq.* (including its requirements as to plans, specifications, estimates, charges, tracking of costs, credits, billings, records retention, and audit) and FHWA's associated policies.

7.5.6.2 Design-Builder shall comply (and shall require the Utility Owners to comply) with 23 C.F.R. §§ 645.101 *et seq.* and 23 C.F.R. §§ 645.201 *et seq.* as necessary for any Utility Adjustment costs to be eligible for FHWA reimbursement (or for any other federal financing or funding).

7.5.6.3 Design-Builder acknowledges and agrees that, regardless of whether compliance with DBA Section 7.5.6.2 (*FHWA Utility Requirements*) is required:

(a) it is not anticipated that Design-Builder will be eligible for FHWA reimbursement of any Utility Adjustment outlays; and

(b) Design-Builder will not have any share in any reimbursement from FHWA or other federal financing or funding that GDOT may receive on account of Utility Adjustments.

7.5.7 Betterments

7.5.7.1 Design-Builder shall be responsible for addressing any requests by Utility Owners that Design-Builder design and/or construct a Betterment.

7.5.7.2 Design-Builder shall not invoice GDOT for, and neither GDOT nor any of its Constituents will have any obligation to pay for or facilitate, any Betterment. Design-Builder will be responsible for negotiating and agreeing to any Betterment request directly with the Utility Owner. Design-Builder represents and warrants that no Betterment for any Utility Owner is included in the Contract Sum.

7.5.7.3 Subject to DBA Section 7.5.7.4 (*Betterments*), if Design-Builder and the Utility Owner agree for Design-Builder to undertake a Betterment and GDOT agrees (prior to undertaking) that the proposed work constitutes a "Betterment", Design-Builder shall undertake such Betterment in accordance with DBA Section 7.1 (*General Obligations of Design-Builder*).

7.5.7.4 If any Betterment is performed as part of a Utility Adjustment, whether by Design-Builder or by the Utility Owner:

(a) such Betterment must be addressed in the appropriate Utility MOU;

(b) such Betterment will be subject to the same standards and requirements as if it were a necessary Utility Adjustment;

(c) if not paid by Design-Builder under Section 10.2 of the GDOT UAM, Design-Builder shall invoice the Utility Owner for all costs relating to such Betterment pursuant to the applicable Utility MOU. Any failure by a Utility Owner to pay any or all such costs is not the basis for any relief (whether as a Relief Event or a Compensation Event) hereunder from GDOT at law or in equity;

(d) Design-Builder acknowledges and agrees that if for any reason Design-Builder is unable to collect any amounts due to Design-Builder under DBA Section 7.5.7.4 (*Betterments*), then:

(i) GDOT shall have no liability for such amounts;

(ii) Design-Builder shall have no right to collect such amounts from GDOT or to offset such amounts against amounts otherwise owing from Design-Builder to GDOT; and

(iii) Design-Builder shall have no right to stop Work or to exercise any other remedies against GDOT on account of such failure to pay.

7.5.7.5 Under no circumstances shall Design-Builder proceed with any Betterment that is incompatible with the Project or is not in compliance with applicable Laws, Governmental Approvals, or the Design-Build Documents, including all Milestone Deadlines. Design-Builder shall provide GDOT with such information, analyses, and certificates as GDOT may require in order for GDOT to determine compliance with this DBA Section 7.5.7.5 (*Betterments*).

7.5.7.6 If Design-Builder asserts any Betterment as Utility Adjustment Work, then as between Design-Builder and GDOT, GDOT's determination as to whether the work performed was or was not a Betterment is final and not subject to Dispute Resolution Procedures.

7.5.8 Failure of Utility Owners to Cooperate

7.5.8.1 Design-Builder shall use diligent efforts to obtain the cooperation of each Utility Owner as necessary for Utility Adjustments.

7.5.8.2 Design-Builder acknowledges and agrees that, if a dispute arises between Design-Builder and the Utility Owner, Design-Builder shall comply with the Utility Escalation and Mediation Process.

7.5.8.3 Design-Builder shall notify GDOT promptly if:

(a) Design-Builder reasonably believes for any other reason that any Utility Owner will not undertake or permit a Utility Adjustment in a manner consistent with the timely completion of the Project;

(b) Design-Builder becomes aware that any Utility Owner is not cooperating in a timely manner to provide agreed-upon work, approvals or permits;

(c) Design-Builder reasonably believes that any Utility Owner is in breach of the relevant Utility Agreement;

(d) there exists an unreasonable withholding by any Utility Owner with relevant jurisdiction of the issuance or renewal of any Governmental Approval necessary for performance of the Work; or

(e) any other dispute arises between Design-Builder and a Utility Owner with respect to the Project (including an unreasonable request by a Utility Owner that, in connection with any Utility Adjustment Work, a Betterment be completed that would materially delay the Project Schedule), despite Design-Builder's diligent efforts to obtain such Utility Owner's cooperation or otherwise resolve such dispute,

(each, a "Notice of Utility Failure to Cooperate").

7.5.8.4 Design-Builder may, in the Notice of Utility Failure to Cooperate, include a request that GDOT assist in resolving a dispute with the Utility Owner or in otherwise obtaining the Utility Owner's timely cooperation.

7.5.8.5 Following issuance of the Notice of Utility Failure to Cooperate, Design-Builder shall provide GDOT with such information as GDOT requests regarding the Utility Owner's failure to cooperate and the effect of any resulting delay on the Baseline Project Schedule.

7.5.8.6 After delivering to GDOT the Notice of Utility Failure to Cooperate, Design-Builder shall continue to use diligent efforts to pursue the Utility Owner's cooperation or resolve any disputes with Utility Owners.

7.5.8.7 If Design-Builder requests GDOT's assistance pursuant to a Notice of Utility Failure to Cooperate, Design-Builder shall provide evidence reasonably satisfactory to GDOT that:

(a) the subject Utility Adjustment is necessary;

(b) the time for completion of the Utility Adjustment in the Baseline Project Schedule was, in its inception, a reasonable amount of time for completion of such work;

(c) Design-Builder's position in the dispute is otherwise reasonable;

(d) Design-Builder has complied with DBA Section 7.5.8.2 (*Failure of Utility Owners to Cooperate*);

(e) Design-Builder has made diligent efforts to obtain the Utility Owner's cooperation, as evidenced by documentation of written correspondence between Design-Builder (or a Design-Builder-Related Entity) and the Utility Owner; and

(f) the Utility Owner is not cooperating,

(clause (a) through clause (f), collectively, the "Conditions to Assistance").

7.5.8.8 Promptly, but no later than five Business Days after receipt of all requested information under DBA Section 7.5.8.7 (*Failure of Utility Owners to Cooperate*), GDOT will either accept or object to any such request for assistance from Design-Builder.

7.5.8.9 If GDOT objects, by Formal Communication, to a request for assistance pursuant to DBA Section 7.5.8.4 (*Failure of Utility Owners to Cooperate*) based on Design-Builder's failure to satisfy one or more of the Conditions to Assistance:

(a) described in DBA Section 7.5.8.7(a) to DBA Section 7.5.8.7(d) (*Failure of Utility Owners to Cooperate*), inclusive, then Design-Builder shall take such action as is appropriate to satisfy the condition(s) and shall then have the right to submit another request for assistance on the same subject matter; or

(b) described in DBA Section 7.5.8.7(e) or DBA Section 7.5.8.7(f) (*Failure of Utility Owners to Cooperate*), inclusive, then Design-Builder shall take diligent efforts, documented in writing, during the next succeeding 10 Business Days in order to obtain the Utility Owner's cooperation, and, if not resolved, Design-Builder shall then have the right to submit another request for assistance on the same subject matter.

7.5.8.10 Once Design-Builder has satisfied the Conditions to Assistance, GDOT will within 20 Business Days thereafter take such reasonable steps as GDOT reasonably determines necessary to obtain the cooperation of the Utility Owner or resolve the dispute, to include, in accordance with DBA Section 7.5.8.11 (*Failure of Utility Owners to Cooperate*) exercising remedies available to GDOT under existing contracts or, failing that, applicable Law; provided however, that GDOT shall have no obligation to prosecute eminent domain or other legal proceedings (except to the extent GDOT is otherwise required to do so under this Design-Build Agreement).

7.5.8.11 If GDOT holds contractual rights that might be used to enforce a Utility Owner's obligation to cooperate, then GDOT may elect, their its sole discretion, to exercise those rights on behalf of the Project.

7.5.8.12 In no event shall GDOT's obligations under this DBA Section 7.5.8 (*Failure of Utility Owners to Cooperate*) require GDOT to:

(a) take a position that it believes to be inconsistent with: (i) this Design-Build Agreement; (ii) the Project Management Plan; (iii) applicable Law; (iv) applicable Governmental Approval(s); (v) Good Industry Practice; (vi) the Utility MOU; or (vii) GDOT's existing policy (including GDOT UAM, however excluding any policies to the extent inconsistent with the express obligations of GDOT under this Design-Build Agreement); or

(b) refrain from taking a position concurring with that of a Utility Owner, if GDOT believes that position to be correct.

7.5.8.13 If Design-Builder has a right to pursue resolution, including where applicable to pursue damages and delay costs under the Utility Escalation and Mediation Process in relation to a Utility Owner's failure to cooperate, which is the subject of a Notice of a Utility Owner Failure to Cooperate (including where applicable if a Utility Owner fails to provide a Utility Work Plan or fails to complete the identified Adjustment of its facilities in accordance with the Utility Work Plan), then Design-Builder shall pursue such right under the Utility Escalation and Mediation Process.

7.5.8.14 If Design-Builder has a right to pursue damages and delay costs under the Utility Escalation and Mediation Process described in DBA Section 7.5.8.13 (*Failure of Utility Owners to Cooperate*), then:

(a) Design-Builder shall pursue directly against the Utility Owner compensation for such damages and delay costs in accordance with such Utility Escalation and Mediation Process, and Design-Builder shall keep GDOT copied on all correspondence with respect to such process;

(b) GDOT will participate in the Utility Escalation and Mediation Process to the extent required under GDOT UAM; and

(c) within five Business Days after a final determination under the Utility Escalation and Mediation Process (or any other settlement between the Utility Owner and Design-Builder with respect to such matter), Design-Builder shall notify GDOT of the outcome of such determination or settlement, including such details and documentation of any amounts to be paid by either the Utility Owner or Design-Builder.

7.5.8.15 To the extent that:

(a) a Utility Owner fails to cooperate with Design-Builder in relation to a Utility Adjustment;

(b) such failure (or such delay) continues for a period of not less than 30 days following Design-Builder's request for GDOT's assistance pursuant to this DBA Section 7.5.8 (*Failure of Utility Owners to Cooperate*) and satisfaction of the Conditions to Assistance;

(c) Design-Builder has continued to satisfy the Conditions to Assistance for the duration of such failure to cooperate (or such delay) by the Utility Owner; and

(d) where applicable, Design-Builder has pursued damages and delay costs under the Utility Escalation and Mediation Process, and a final determination or early settlement has occurred,

then, subject to DBA Section 7.5.8.16 (*Failure of Utility Owners to Cooperate*), Design-Builder shall have a right to assert a claim for relief as a Relief Event in accordance with DBA Article 13 (*Relief Events; Compensation Events*).

7.5.8.16 In certain cases where a Utility Owner is not cooperating with Design-Builder, GDOT may, in its sole discretion and where applicable Law authorizes GDOT to take unilateral action, direct Design-Builder to proceed with a Utility Adjustment without an agreement or other written consent by the Utility Owner.

7.5.8.17 If GDOT directs Design-Builder to perform work pursuant to DBA Section 7.5.8.16 (*Failure of Utility Owners to Cooperate*), then Design-Builder shall, at its own cost (except as otherwise expressly stated herein) perform such work in accordance with the requirements of this Design-Build Agreement otherwise applicable to Design-Builder's performance of Utility Adjustment Work.

7.5.8.18 In the event it is determined that applicable Law:

(a) authorizes GDOT to take unilateral action and GDOT directs Design-Builder to perform such work pursuant to DBA Section 7.5.8.16 (*Failure of Utility Owners to Cooperate*) and DBA Section 7.5.8.17 (*Failure of Utility Owners to Cooperate*), Design-Builder shall proceed and perform the work described in DBA Section 7.5.8.16 (*Failure of Utility Owners to Cooperate*) and DBA Section 7.5.8.17 (*Failure of Utility Owners to Cooperate*) without cost to GDOT; or

(b) does not authorize GDOT to take unilateral action as described in DBA Section 7.5.8.16 (*Failure of Utility Owners to Cooperate*) and the relevant work has been performed, then GDOT's direction under DBA Section 7.5.8 (*Failure of Utility Owners to Cooperate*) will constitute a Directive Letter and Design-Builder shall have a right to assert a claim for compensation and relief in accordance with DBA Section 14.3 (*Directive Letters*).

7.5.8.19 For avoidance of doubt, the foregoing provisions relating to Utility Owner failure to cooperate pertain to Utility Adjustments and not to Betterments. GDOT may, but shall not be obligated to, offer assistance (and be entitled to payments for such assistance) generally in the form of this DBA Section 7.5.8 (*Failure of Utility Owners to Cooperate*), in each case only after Design-Builder has met the applicable Conditions to Assistance. If GDOT declines to assist or to continue to assist Design-Builder with respect to any Betterment generally under this DBA Section 7.5.8 (*Failure of Utility Owners to Cooperate*), such declination or cessation of assistance shall not be the basis for any Relief Event or Compensation Event hereunder, nor shall GDOT's decision be subject to Dispute Resolution Procedures.

7.5.9 Applications for Utility Permits (GPAS Permits)

7.5.9.1 The Parties anticipate that, from time to time during the Term, Utility Owners will apply to GDOT for GPAS Permits to install new Utilities that would cross or longitudinally occupy the Project Limits, or to modify, upgrade, repair, relocate or expand existing Utilities within the Project Limits for reasons other than accommodation of the Project.

7.5.9.2 For all such GPAS Permit applications referred to in DBA Section 7.5.9.1 (*Applications for Utility Permits*), Design-Builder shall:

(a) furnish the most recent Record Design Documents, as applicable, to the applicants; and

(b) assist each applicant with information regarding the location of other proposed and existing Utilities.

7.5.9.3 Design-Builder shall assist GDOT in deciding whether to approve a GPAS Permit application described in DBA Section 7.5.9.1 (*Applications for Utility Permits*).

7.5.9.4 Within 10 Business Days (or such longer period as Design-Builder reasonably requires, as agreed by Formal Communication from GDOT) of receiving a GPAS Permit application from a Utility Owner, Design-Builder shall analyze each application having regard to the impact the work contemplated by the sought GPAS Permit will have on Design-Builder's performance of the Work and whether GDOT is legally entitled to approve or deny the application or to impose conditions in its approval (in accordance with the grounds communicated by GDOT to Design-Builder from time to time); and provide to GDOT a recommendation (together with supporting analysis) as to whether the GPAS Permit should be approved, denied, or approved subject to conditions.

7.5.9.5 Within five Business Days after GDOT receives Design-Builder's recommendation under DBA Section 7.5.9.1 (*Applications for Utility Permits*), the Parties shall meet and discuss such recommendation.

7.5.9.6 If GDOT issues a GPAS Permit and such permit relates to:

(a) emergency repairs to the Utility Owner's facilities, then Design-Builder shall have a right to assert a claim for relief in accordance with DBA Article 13 (*Relief Events; Compensation Events*); or

(b) any other grounds referred to in DBA Section 7.5.9.1 (*Applications for Utility Permits*) and results in material damage or material interruption to the Project or the Work, to the extent GDOT issues such permit or limits conditions on such permit contrary to Design-Builder's recommendation under DBA Section 7.5.9.1 (*Applications for Utility Permits*), Design-Builder shall have a right to assert a claim for relief and compensation in accordance with DBA Article 13 (*Relief Events; Compensation Events*).

7.5.9.7 Notwithstanding the foregoing, it is the intent of the Parties that Design-Builder use commercially reasonable efforts to accommodate Utility Owners seeking GPAS Permits to perform work within the Project Limits, and if the recommendation made under DBA Section 7.5.9.4 (Applications for Utility Permits) are generally agreed by GDOT, and Utility Owner complies with the material terms and conditions of its permit, then Design-Builder may not assert a Relief Event or Compensation Event hereunder for such Utility Owner's presence and work within the Project Limits. Furthermore, in the event of an Emergency necessitating permission of the Utility Owner onto the Project Limits, the Parties shall use commercially reasonable efforts to expedite the process described in this DBA Section 7.5.9 (*Applications for Utility Permits*), and only those interferences that directly affect Construction Work on the Critical Path shall be eligible for assertion of a Relief Event under clause (o) of its definition.

7.5.9.8 Design-Builder shall notify GDOT if Design-Builder reasonably believes that any Utility Owner is not complying with the terms of its utility permit.

7.5.10 Unexpected Utility Adjustments

7.5.10.1 Within 120 days after issuance of NTP1, Design-Builder shall verify the Utility Plans and conduct an investigation for any Unidentified Utility Facility in accordance with TP Section 7.3.2 (Verification of Utility Plans and SUE Investigations), including through consultation and requests for information from the Utility Owners.

7.5.10.2 Subject to DBA Section 7.5.10.3 (*Unexpected Utility Adjustments*), if Design-Builder:

(a) identifies an Unidentified Utility Facility within the time period set forth in DBA Section 7.5.10.1 (*Unexpected Utility Adjustments*), or

(b) identifies an Unidentified Utility Facility following the time period set forth in DBA Section 7.5.10.1 (*Unexpected Utility Adjustments*), but prior to the Substantial Completion Date due to constraints imposed on Design-Builder by GDOT (including that the Parcel Availability Date occurs after the date that is 120 days after issuance of NTP1), in each case, so long as such Unidentified Utility Facility could not have been reasonably discovered within the time period set forth in DBA Section 7.5.10.1 (*Unexpected Utility Adjustments*) by a Reasonable Investigation),

then Design-Builder shall have a right to assert a claim for relief or compensation in accordance with DBA Article 13 (*Relief Events; Compensation Events*).

7.5.10.3 Design-Builder may not assert a Compensation Event or a Relief Event:

(a) if a Utility is shown in TP Attachment 7-3 (Utility Plans) and is not impacted by Design-Builder's Design, but is later identified by Design-Builder as needing to be Adjusted, unless the need to Adjust is due to a Relief Event or Compensation Event;

(b) for any Utility whose location, size and dimensions were reasonably accurate and shown on TP Attachment 7-3 (Utility Plans); or

(c) if a Utility Adjustment is not required with respect to the Unidentified Utility Facility.

7.5.10.4 Reserved

7.5.11 Utility Services Costs

7.5.11.1 Design-Builder shall be responsible for all metered consumption costs charged by utilities in connection with the Work, including specifically all electric service recurring costs required for the ITS Sites until the Substantial Completion Date. With respect to natural gas, Design-Builder shall also be responsible for providing a connection to a natural gas utility, as and where required to perform the Work, to include all associated piping, controls, incidental items, and connection fees.

7.5.11.2 Design-Builder shall ensure that those portions of the Project for which for metered consumption is Design-Builder's responsibility are separately metered from those other portions of the Project for which GDOT or any Governmental Entities is responsible.

7.5.12 Conditions to Commencement of Utility Adjustments. Design-Builder shall not commence or permit or suffer commencement of construction of a Utility Adjustment included in the Construction Work until all of the following requirements have been satisfied:

7.5.12.1 except as otherwise approved by GDOT, in its sole discretion, GDOT issues NTP2;

7.5.12.2 Design-Builder has received the "Post-Let Utility Certification" (and an approved Utility Work Plan) with respect to a Utility Adjustment;

7.5.12.3 all of the conditions set forth in DBA Section 3.3.4 (*Notice to Proceed 3*) that are applicable to the Utility Adjustment (reading such conditions as if they referred to the Utility Adjustment) have been satisfied; and

7.5.12.4 all conditions set forth in DBA Section 3.4 (*Conditions to Submittals, Invoices, Commencement of Certain Portions of the Work*) that are applicable to the Utility Adjustment (reading such conditions as if they referred to the Utility Adjustment) have been satisfied.

7.5.13 Highway Service Systems. Notwithstanding anything to the contrary in the Design-Build Documents, and in particular this DBA Section 7.5 (*Utility Adjustments*), as Highway Service Systems are not Utilities, the Work includes, and Design-Builder shall locate all Highway Service Systems that affect the Work or the Project, and shall perform or cause to be performed, all relocations (temporary or permanent), abandonments and/or dormancies, Protection in Place (as such concept applies to Highway Service Systems, were such Highway Service Systems "Utilities"), removals (of previously abandoned or dormant Highway Service Systems as well as of newly-abandoned or dormant Highway Service Systems), replacements, reinstallations, Adjustments (as such concept applies to Highway Service Systems, were such Highway Service Systems "Utilities") and/or modifications of existing Highway Service Systems, as and to the extent, necessary to accommodate the Work or the Project.

7.6 Completion of Interim Milestones. GDOT will issue a written certificate of "Completion of Interim Milestone – [_____]***[insert name of Interim Milestone]***" with respect to each Interim Milestone at such time as Design-Builder has achieved each respective Interim Milestone.

7.6.2 An Interim Milestone shall be, and shall be deemed to be, achieved, and the corresponding Work completed, upon satisfaction (or waiver, by GDOT, in its sole discretion) of each of the following criteria:

(a) when all SOV Line Items corresponding to the relevant Related Project Configuration Work or Early Opening, as applicable, are completed in accordance with the Design-Build Documents, and the relevant Related Project Configuration Work or Early Opening, as applicable, can be used for its intended purpose;

(b) either, as applicable:

(i) that portion of the Project Limits on which the relevant Related Project Configuration Work was completed is neat, clean, and in an orderly condition, and Design-Builder, and all Contractors and Subcontractors, have removed all debris and waste materials except as otherwise approved by GDOT in writing; or

(ii) the Early Opening is Ready to Open to Traffic;

(c) all commitments related to either (i) the relevant Related Project Configuration Work, if any, or (ii) the Early Opening, in either case as required pursuant to any Provided Environmental Approvals, if any, have been completed in accordance therewith and the Design-Build Documents;

(d) all NCRs issued with respect to either the Related Project Configuration Work or the Early Opening, as applicable, and if any, have been closed pursuant to TP Section 3.6.7 (NCR Workflow States);

(e) Design-Builder, Utility Owner, and GDOT has each executed a Utility Facility Relocation Acceptance Form in accordance with TP Section 7 (Utility Adjustments), with respect to each

Utility Adjustment effected with respect to (i) the relevant Related Project Configuration Work or (ii) that portion of the Project subject to the Early Opening;

(f) all Submittals required by the Design-Build Documents to be submitted to GDOT prior to achievement of the relevant Interim Milestone have been submitted to and accepted by GDOT, in each case in accordance with the Submittal Requirements Database; and

(g) Design-Builder has satisfied any other requirements or conditions for the Interim Milestone set forth in the Design-Build Agreement.

7.6.2.2 Design-Builder shall provide GDOT with not less than 30 days' prior Notice of the date Design-Builder determines it will achieve each Interim Milestone five days' prior Notice for any Early Opening). During such period, Design-Builder and GDOT shall meet and confer and exchange information on a regular cooperative basis (no less frequently than twice per week, except as relates to Early Openings) with the goal being GDOT's orderly, timely inspection and review of the Project and the applicable RFC Design Documents, Shop Drawings, and Construction Documents, and GDOT's issuance of a written certificate of "Completion of Interim Milestone – [_____]***[insert name of Interim Milestone]***".

7.6.2.3 During the period identified in DBA Section 7.6.2.2 (*Completion of Interim Milestone*), GDOT will conduct an inspection of the relevant Related Project Configuration Work or Early Opening, as applicable, a review of the applicable RFC Design Documents, Construction Documents, and conduct such other investigation and review of reports, data, and documentation as may be necessary or desirable, in GDOT's sole discretion, to evaluate whether all conditions to achievement of the relevant Interim Milestone have been satisfied.

7.6.3 GDOT will deliver a written report of findings and recommendations to GDOT and Design-Builder following such inspection, review and investigation and within five days after the end of the 30-day period. GDOT will then either (a) issue the written certificate of "Completion of Interim Milestone – [_____]***[insert name of Interim Milestone]***", or (b) notify Design-Builder in writing setting forth, as applicable, why the Project has not achieved the relevant Interim Milestone. Except as set forth in DBA Section 7.6.4 (*Completion of Interim Milestones*), if GDOT and Design-Builder cannot agree as to the date of achievement of the relevant Interim Milestone, then such Dispute shall be resolved according to the Dispute Resolution Procedures.

7.6.4 Solely with respect to Early Openings, GDOT's determination as to Ready to Open to Traffic is final and not subject to Dispute Resolution Procedures, and as relates to such Interim Milestone, Design-Builder shall not open such Early Opening portion of the Project to traffic, except as may be permitted or directed by GDOT, given in its sole discretion. Any such permission, however, shall not be, nor be deemed to be, a determination of Ready to Open to Traffic with respect to such Early Opening.

7.7 Substantial Completion, Punch List, Final Acceptance

7.7.1 Substantial Completion

7.7.1.1 GDOT will issue a written certificate of Substantial Completion at such time as Substantial Completion occurs that shall be subject to the terms and conditions of this DBA Section 7.7.1 (*Substantial Completion*).

7.7.1.2 Substantial Completion shall occur upon satisfaction of the following criteria:

(a) the D&C Work is completed in accordance with the Design-Build Documents, including specifically all finished pavement and bridge surfaces, traffic ramps, entry and exit points, noise/sound walls (if any), retaining walls, lanes, curbs, shoulders, guard rails, guard rail transitions, permanent striping and delineations, concreted traffic barriers, bridge railings, metal beam guard fences, safety end treatments, terminal anchor sections, and crash attenuators;

(b) all SC List items have been completed in accordance with the requirements of the Design-Build Documents, and delivered to the satisfaction of GDOT;

(c) all systems and Project equipment (including specifically all Drainage Systems/facilities, fire safety systems, cable safety systems, illumination, signs, signals, other safety features, ITS (and associated safety features and components)) are (i) installed, functional, operational, and functioning and compliant with the requirements of the Design-Build Documents, and (ii) have passed all inspections and tests required under the Design-Build Documents;

(d) all systems and Project equipment complies, in all respects, with all applicable Laws (including specifically all systems, signs, signals, other safety features, Project equipment, and any sidewalks or other permanent features of the Project completed or installed satisfy all requirements of the ADA);

(e) all lanes of traffic (including ramps, interchanges, collector/distributor lanes, auxiliary lanes, overpasses, underpasses, other crossings) set forth in the RFC Design Documents are in their final configuration and available for normal and safe use and operation;

(f) all commitments related to the Work as required pursuant to all Provided Environmental Approvals have been completed in accordance therewith and the Design-Build Documents;

(g) the FA Punch List has been prepared and agreed between the Parties;

(h) the Project is sufficiently complete, can be used for its intended purpose, and in a condition that can be opened for normal and safe vehicular travel in all lanes and at all points of entry and exit, as determined by GDOT in its reasonable discretion, subject only to FA Punch List items;

(i) Design-Builder, Utility Owner, and GDOT has each executed a Utility Facility Relocation Acceptance Form with respect to each Utility Adjustment in accordance with TP Section 7 (Utility Adjustments);

(j) Reserved;

(k) Design-Builder has conducted all required training sessions with GDOT personnel as required pursuant to the Technical Provisions and has delivered to GDOT all records and course completion certificates issued to each of the subject personnel;

(l) all Submittals required by the Design-Build Documents to be submitted to GDOT prior to Substantial Completion (including all reports, data (including Project Data, as applicable) and documentation relating to any tests) have been submitted to and accepted by GDOT, in each case in accordance with the Submittal Requirements Database;

(m) all comments from the Georgia Environmental Protection Division of the Georgia Department of Natural Resources on the "Post-Construction Stormwater Report" have been addressed by Design-Builder in accordance with TP Section 12 (Drainage), and the Georgia Environmental Protection Division's 60-day "Post-Construction Stormwater Report" disapproval period has expired;

(n) ITS Batch Acceptance has been achieved for all ITS Sites; and

(o) Design-Builder has satisfied any other requirements or conditions for Substantial Completion set forth in the Design-Build Agreement.

7.7.1.3 Design-Builder shall provide GDOT with not less than 30 days' prior Notice of the date Design-Builder determines it will achieve Substantial Completion. During such period, Design-Builder and GDOT shall meet and confer and exchange information on a regular cooperative basis (no less frequently than twice per week) with the goal being GDOT's orderly, timely inspection and review of the Project and the applicable RFC Design Documents, Shop Drawings, and Construction Documents.

7.7.1.4 During the period identified in DBA Section 7.7.1.3 (*Substantial Completion*), GDOT will conduct an inspection of the Project and its components, a review of the applicable RFC Design Documents, Construction Documents, and conduct such other investigation and review of reports, data, and documentation as may be necessary or desirable, in GDOT's sole discretion, to evaluate whether all conditions to achievement of Substantial Completion have been satisfied.

7.7.1.5 GDOT will deliver a written report of findings supporting rejection of any element of Substantial Completion to the Design-Builder following such inspection, review, and investigation by the end of the 30-day period. If GDOT and Design-Builder cannot agree as to the date of Substantial Completion, such Dispute shall be resolved according to the Dispute Resolution Procedures.

7.7.1.6 If GDOT determines that Substantial Completion has been achieved, GDOT will issue a written certificate of Substantial Completion

7.7.2 SC List; FA Punch List

7.7.2.1 Design-Builder shall propose, for GDOT's approval, procedures and schedules for preparing the SC List and the FA Punch List and completing Work as set forth therein. Such procedures and schedules shall conform to the following provisions:

(a) The schedule for preparation of the SC List and FA Punch List shall be consistent and coordinated with the inspections regarding Substantial Completion and Final Acceptance.

(b) Design-Builder shall prepare and maintain the SC List and the FA Punch List.

(c) Design-Builder shall deliver to GDOT a true and complete copy of the SC List and the FA Punch List, and each modification thereto, as soon as it is prepared.

(d) Each Party shall have the right to add items to either the SC List or the FA Punch List, and neither Party shall have a right to remove any item added by the other Party without the other Party's express permission.

(e) If Design-Builder objects to the addition of an item by GDOT, the item shall be noted as included under protest, and if the Parties thereafter are unable to reconcile the protest, the Dispute shall be resolved according to the Dispute Resolution Procedures.

(f) Design-Builder shall deliver to GDOT not less than five days' prior Notice stating the date when Design-Builder will commence any SC List or FA Punch List field inspections.

(g) Design-Builder shall promptly commence work on the SC List (prior to, and in anticipation of Substantial Completion) and FA Punch List items (prior to Substantial Completion but also thereafter, but prior to Final Acceptance), and diligently prosecute such work to completion, consistent with the Design-Build Documents, within the time period as agreed by GDOT and otherwise as consistent with the Project Management Plan.

(h) In any case, Design-Builder shall (i) complete the SC List as a condition to Substantial Completion and in no case later than the Substantial Completion Deadline; and (ii) complete the FA Punch List as a condition to Final Acceptance and in no case later than the Final Acceptance Deadline.

7.7.3 Final Acceptance

7.7.3.1 Promptly after achieving Substantial Completion, Design-Builder shall perform all remaining Work (including specifically Construction Work) for the Project in accordance with the Design-Build Documents.

7.7.3.2 GDOT will issue the written certificate of Final Acceptance at such time as all of the following have occurred for the Project:

(a) all requirements for Substantial Completion have been and remain satisfied;

(b) all FA Punch List items have been completed in accordance with the requirements of the Design-Build Documents, and delivered to the satisfaction of GDOT;

(c) all special tools, equipment, furnishings, and supplies purchased and/or used by Design-Builder as provided in the Design-Build Documents have been delivered to GDOT, and all replacement spare parts, if any, have been purchased and delivered to GDOT free and clear of any Liens;

(d) all non-structural aesthetic and landscaping features (other than vegetative ground cover landscaping) have been completed in accordance with TP Section 15 (Landscape and Hardscape Enhancements) and the Submittals and other Plans prepared in accordance therewith;

(e) Design-Builder is in compliance with the agreed timetable for planting and establishing vegetative ground cover landscaping;

(f) GDOT has received a complete set of the Record Design Documents;

(g) GDOT has received a complete set of bound field notes, topographic mapping, and as-built surveys for the Project in form and substance required by TP Section 9 (Surveying and Mapping);

(h) if any Governmental Entity with jurisdiction requires any form of certification of design, engineering, or construction with respect to the Project or any portion thereof, including any certifications from the Engineer of Record with respect to a certain engineering discipline for the Project, Design-Builder has caused such certificates to be executed and delivered and has concurrently issued identical certificates to GDOT;

(i) all Submittals required under TP Section 2 (Project Management) or otherwise under the Design-Build Documents to be submitted to GDOT as a condition, or prior, to Final Acceptance have been submitted, in the form and content required by the Project Management Plan or Design-Build Documents, and for those requiring GDOT acceptance, all such Submittals have been accepted by GDOT in accordance with DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*);

(j) Design-Builder has delivered to GDOT all warranties, manuals and other documents and deliverables as required pursuant to the Technical Provisions;

(k) GDOT has received the final Project Schedule Update in form and substance required by TP Section 2 (Project Management);

(l) all Utility Adjustment Work and other work that Design-Builder is obligated to perform for or on behalf of third parties has been accepted by such third parties, and Design-Builder has paid for all work by third parties that Design-Builder is obligated to pay for, other than disputed amounts;

(m) Design-Builder has made all deposits to GDOT required at or prior to Final Acceptance;

(n) Design-Builder has paid in full all amounts due and owing to GDOT pursuant to the Design-Build Documents (including, if applicable, Liquidated Damages, Nonrefundable Deductions, and Lane Closure Deductions) that, in each case, are not in Dispute, and has provided to GDOT security reasonably acceptable to GDOT for the full amount of Deductions that may then be the subject of an unresolved Dispute;

(o) there exist no uncured Design-Builder Defaults that are the subject of a Warning Notice, or with the giving of notice or passage of time, or both, could become the subject of a Warning Notice (except any Design-Builder Default for which Final Acceptance will affect its cure);

(p) Design-Builder has received, and paid all associated fees for, all applicable Governmental Approvals and other applicable third party approvals required pursuant to the Design-Build Documents, and there exists no uncured material violation of the terms and conditions of any such Governmental Approval or other third party approvals;

(q) Reserved;

(r) Design-Builder has delivered to GDOT the Warranty Bond (or evidence of a reduced performance and indemnity surety bond) and, if applicable, new payment surety bond replacing the payment surety bond initially placed with the P&P Bonds;

(s) Design-Builder has delivered to GDOT, in accordance with DBA Section 16.1.2.4 (*Verification of Coverage*), verification of all Insurance Policies required under this Design-Build Documents; and

(t) Design-Builder has satisfied any other requirements or conditions for Final Acceptance set forth in the Design-Build Agreement.

7.7.3.3 Design-Builder shall provide GDOT with not less than 30 days' prior Notice of the date Design-Builder anticipates achieving Final Acceptance. During such 30-day period following receipt of such Notice, Design-Builder and GDOT shall meet and confer and exchange information on a regular cooperative basis (no less frequently than twice per week) with the goal being GDOT's orderly,

timely inspection, and review of the Project and the Record Design Documents and GDOT's issuance of the certificate of Final Acceptance.

7.7.3.4 During such 30-day period, GDOT shall conduct an inspection of the FA Punch List items, a review of the Record Design Documents and such other investigation as may be necessary or desirable, in GDOT's sole discretion, to evaluate whether the conditions to Final Acceptance have been satisfied.

7.7.3.5 GDOT will ensure that GDOT will deliver a written report of findings and recommendations to GDOT and Design-Builder following such inspection, review, and investigation, and in any case by the end of such 30-day period.

7.7.3.6 GDOT will then will either (a) issue the certificate of Final Acceptance, or (b) notify Design-Builder in writing setting forth, as applicable, why the Project has not reached Final Acceptance. If GDOT and Design-Builder cannot agree as to the date of Final Acceptance, such Dispute shall be resolved according to the Dispute Resolution Procedures.

7.7.3.7 Final Acceptance will not prevent GDOT from correcting any measurement, estimate, or certificate made before or after completion of the Work, nor shall it prevent GDOT from recovering from Design-Builder, any Guarantor (if any), the surety(ies) issuing the P&P Bonds, or other provider of performance security or any combination of the foregoing, overpayment sustained for failure of Design-Builder to fulfill the obligations under the Design-Build Documents. Final Acceptance shall not relieve Design-Builder from any of its continuing or surviving obligations hereunder, including Warranty obligations.

7.7.4 Early Open to Traffic

7.7.4.1 Early Openings

(a) Certain sections of the Project may be required to be opened to traffic when specified in the Design-Build Documents (such sections of the Project each an "Early Opening"). Each Early Opening shall be completed by its corresponding Interim Milestone Deadline.

(b) Design-Builder shall identify the Early Openings and the corresponding Interim Milestone Deadlines on the Baseline Project Schedule.

(c) When each Early Opening has been achieved, Design-Builder shall thereafter perform the remainder of any Work so as to cause the least obstruction to traffic.

(d) Any Early Opening shall not constitute acceptance of the Work or any part thereof or a waiver of any provision of the Design-Build Documents. For avoidance of doubt, and except as may otherwise have been agreed by GDOT in writing, Design-Builder shall remain obligated to perform maintenance during construction obligations on the Early Opening. Furthermore, no Early Opening shall commence, or be deemed to commence, the Warranty Period.

(e) If Design-Builder fails to complete any Early Opening by its corresponding Interim Milestone Deadline identified in DBA Exhibit 9 (*Milestone Schedule and Project Schedule Milestones*), then Liquidated Damages will be assessed against Design-Builder in accordance with DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

7.7.4.2 Additional Early Open to Traffic Circumstances

(a) GDOT may request that Design-Builder expedite certain sections of the Project, and Design-Builder shall accommodate such requests to the extent that it can do so in consideration of safety to the public and construction personnel and without significant disruption to the Baseline Project Schedule or a significant increase in Design-Builder's costs. If, after consultation with GDOT, Design-Builder determines that it cannot accommodate GDOT's request without significant disruption to the Baseline Project Schedule or a significant increase in Design-Builder's costs (or both), Design-Builder shall, within five Business Days after receiving GDOT's initial request, prepare and deliver for GDOT's review, a proposed Supplemental Agreement, with sufficiently detailed breakdown of the necessary changes to the Baseline Project Schedule and any change to the Contract Sum that would be required to accommodate GDOT's request, including data and documents supporting the Design-Builder's evaluation. If, after reviewing Design-Builder's written evaluation GDOT still wishes to pursue the request for early opening, then GDOT may initiate the change through the procedure in DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*).

(b) When such expedited sections of the Project are Ready to Open to Traffic and actually opened, Design-Builder shall thereafter perform the remainder of the Work so as to cause the least obstruction to traffic.

(c) The opening of any such expedited sections of the Project shall not constitute acceptance of the Work or any part thereof or a waiver of any provision of the Design-Build Documents.

7.7.4.3 Ready to Open to Traffic Process

At any time under the Design-Build Documents where Design-Builder may open certain portions of the Project to traffic, Design-Builder shall:

(a) Provide Notice to GDOT, no later than 10 Business Days in advance of the sought early opening, identifying that portion of the Work that Design-Builder seeks to open, stating specifically that:

(i) such portion is (or will, on such date be) Ready to Open to Traffic; and

(ii) the Engineer of Record represents to GDOT, in writing, that such portion is Ready to Open to Traffic, it being understood that this representation may occur immediately prior to any GDOT acceptance that such portion of the Project is Ready to Open to Traffic.

(b) Promptly following receipt of the Notice dispatched under DBA Section 7.7.4.3(a) (*Ready to Open to Traffic Process*), but in no case later than five Business Days, GDOT will identify a time and place to jointly inspect the subject portion of the Work to assess whether it is Ready to Open to Traffic.

(c) If GDOT agrees that such portion of the Work is Ready to Open to Traffic, then GDOT will indicate its acceptance by Notice to Design-Builder. If GDOT does not agree, then GDOT will provide a list of items that GDOT determines, in its reasonable discretion, require correction or completion before accepting that such portion of the Work is Ready to Open to Traffic. Design-Builder shall, as part of the Work, diligently pursue correction or completion (or both), and the Notice process shall continue until such time as GDOT agrees that such portion of the Work is Ready to Open to Traffic.

(d) GDOT's final determination as to whether such portion of the work is Ready to Open to Traffic is in its sole discretion and not subject to Dispute.

7.8 Hazardous Materials Management

7.8.1 Without limiting Design-Builder's obligations as set forth pursuant to DBA Section 7.9 (*Environmental Compliance*), the parties shall undertake Hazardous Materials Management for Hazardous Materials pursuant to DBA Exhibit 10 (*Hazardous Materials Risk Allocation Terms*) or otherwise pursuant to a Supplemental Agreement or Directive Letter in accordance with DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*).

7.8.1.1 If Design-Builder encounters Hazardous Materials or a Recognized Environmental Condition in connection with the Project or Work, Design-Builder shall:

(a) promptly notify GDOT in writing and advise GDOT of any obligation to notify State or federal agencies under applicable Law;

(b) notify any such State or federal agencies required to be notified under applicable Law; and

(c) take reasonable steps, including design modifications and/or construction techniques, to avoid excavation or dewatering in areas with Hazardous Materials or Recognized Environmental Conditions.

7.8.1.2 If during the Term, GDOT discovers Hazardous Materials or a Recognized Environmental Condition in connection with the Project or Work, GDOT will promptly notify Design-Builder in writing of such fact.

7.8.1.3 Where excavation or dewatering of Hazardous Materials or Recognized Environmental Conditions is unavoidable or is required by applicable Law, Design-Builder shall, subject to this DBA Section 7.8.1 (*Hazardous Materials Management*), DBA Section 7.9 (*Environmental Compliance*), and DBA Exhibit 10 (*Hazardous Materials Risk Allocation Terms*), utilize appropriately trained Contractors or personnel to conduct the Hazardous Materials Management activities. Wherever feasible and consistent with applicable Law and Good Industry Practice, Design-Builder shall not dispose of contaminated soil and groundwater off-site.

7.8.2 The right of one Party to step in to carry out remedial action obligations of the other Party are as follows:

7.8.2.1 If, within a reasonable time after discovery of Hazardous Materials or a Recognized Environmental Condition, taking into consideration the nature and extent of the contamination, the type and extent of remedial action required and the potential impact upon the Baseline Project Schedule, Design-Builder has not undertaken remedial action required of it under DBA Section 7.8.1 (*Hazardous Materials Management*), GDOT may provide Design-Builder with Notice that it will undertake the remedial action itself. GDOT thereafter may undertake action to remediate in compliance with a remediation plan approved by applicable Governmental Entities and in compliance with applicable Laws. Design-Builder shall reimburse to GDOT on a current basis the reasonable costs, including GDOT Recoverable Costs, GDOT incurs in carrying out such remediation plan.

7.8.2.2 Notwithstanding the foregoing, if either Party notifies the other that it desires to preserve claims against other potentially responsible parties, then the Party undertaking the remedial act shall take all commercially reasonable efforts to preserve such claims consistently with State regulations and standards; and a reasonable period of time for Design-Builder or GDOT, as the case may be, to perform

the remedial work shall include a sufficient period for Design-Builder or GDOT, as the case may be, to comply with the National Contingency Plan or such comparable State regulations and standards.

7.8.3 Design-Builder shall not be entitled to any compensation due to increased costs or delays associated with the discovery, handling, storage, removal, remediation, transport, treatment, or disposal of Hazardous Materials discovered or encountered in construction of the Project or Utility Adjustments except (a) for any GDOT Hazardous Materials Release, (b) for Pre-existing Hazardous Materials under clause (e) of the definition of "Compensation Event" (subject, in either case and as applicable, to DBA Section 14.6.5 (*Pre-Existing Hazardous Materials*) and (b) otherwise as expressly provided in this DBA Section 7.8 (*Hazardous Materials Management*) or DBA Exhibit 10 (*Hazardous Materials Risk Allocation Terms*).

7.8.4 Generator, Arranger

7.8.4.1 Except as set forth in DBA Section 7.8.4.2 (*Generator, Arranger*), as between GDOT and Design-Builder, Design-Builder will be deemed the sole generator and arranger under 40 C.F.R. Part 262 with respect to any Hazardous Materials on the Site (other than GDOT Hazardous Materials Release(s)). Except as set forth in DBA Section 7.8.4.2 (*Generator, Arranger*), Design-Builder agrees that it shall be identified as the sole generator and arranger of such Hazardous Materials on waste manifests and any other documentation submitted to transporters, disposal facilities and any Governmental Entity. Design-Builder will retain and be responsible for all liability and responsibility (including all claims related thereto) relating to any Design-Builder Hazardous Materials Release.

7.8.4.2 As between GDOT and Design-Builder, Design-Builder will not be deemed, nor designated by the Parties as, the sole generator and arranger under 40 C.F.R. Part 262 with respect to any Pre-existing Hazardous Materials, those Third-Party Hazardous Materials Releases identified under clause (i) of the definition of "Relief Event," and any GDOT Hazardous Materials Release(s). GDOT agrees to be identified as the sole generator and arranger of such Hazardous Materials on waste manifests and any other documentation submitted to transporters, disposal facilities and any Governmental Entity. To the extent permitted by Law, and except as provided in DBA Section 7.8.4.3 (*Generator, Arranger*), GDOT will retain and be responsible for, as between GDOT and Design-Builder, all liability and responsibility (including all claims related thereto, but excluding the responsibility for Hazardous Materials Management with respect to any such Hazardous Materials) directly resulting from Pre-existing Hazardous Materials, those Third-Party Hazardous Materials Releases identified under clause (i) of the definition of "Relief Event," and any GDOT Hazardous Materials Release(s), provided that the aforementioned shall not imply nor be construed as an obligation of GDOT or the State to provide any indemnification to Design-Builder or any other party.

7.8.4.3 Notwithstanding DBA Section 7.8.4.2 (*Generator, Arranger*), if Design-Builder has contributed to any liability or responsibility with respect to such Pre-existing Hazardous Materials, then with respect to those Third-Party Hazardous Materials Release identified under clause (i) of the definition of "Relief Event," or any other Hazardous Materials Release, including any GDOT Hazardous Materials Release, GDOT will not be responsible for the portion of any liability or responsibility determined to be caused by Design-Builder, whether determined judicially or pursuant to Dispute Resolution Procedures.

7.8.4.4 Nothing herein shall be construed as limiting GDOT's or Design-Builder's rights to seek contribution or payment from (or otherwise take action against) any Person (other than the other Party) that may be responsible (in whole or in part) with respect to any liability or responsibility retained or suffered by GDOT or Design-Builder, respectively, with respect to Hazardous Materials, Hazardous Materials Releases, or Hazardous Materials Management. The foregoing rights include the right to seek contribution or payment from any such Person or such Person's insurers.

7.8.5 Costs Associated with Hazardous Materials

Except for any GDOT Hazardous Materials Release(s), any Compensation Events under clause (e) of its definition, subject, as applicable, to DBA Section 14.6.5 (*Pre-Existing Hazardous Materials*); or otherwise as expressly provided in this DBA Section 7.8 (*Hazardous Materials Management*) or DBA Exhibit 10 (*Hazardous Materials Risk Allocation Terms*), as between GDOT and Design-Builder, all costs associated with any Hazardous Materials, including Hazardous Materials Management, shall be borne by Design-Builder.

7.9 Environmental Compliance

Design-Builder's Work shall comply with all Environmental laws, Environmental Approvals, and in performing the Work, otherwise take into account, be coordinated to allow for, and perform the Work in accordance with all such Environmental Laws, Environmental Approvals, and all environmental mitigation measures required under the Environmental Laws and the Environmental Approvals. Design-Builder shall comply all conditions and requirements of the Environmental Approvals in accordance with TP Section 5.3.3 (Provided Environmental Approvals).

7.10 Railroad-Highway Matters

7.10.1 Design-Builder shall comply with all requirements set forth in Standard Specification Section 107.08 (as "Contractor" thereunder) and TP Section 14 (Railroad) as relates to railroad-highway matters.

7.10.2 Without limiting the foregoing, Design-Builder acknowledges and agrees that Design-Builder shall:

7.10.2.1 ensure, unless otherwise specified, that all Railroad Work shall be included in the Contract Sum, whether incurred by the Design-Builder or by the Railroad, including:

(a) the cost to negotiate, execute, and perform the Railroad Agreements with the Railroads;

(b) reimbursement to Railroads for any personnel costs related to a Railroad's execution of the Railroad Work;

(c) protective services as pertains to Railroad Work;

(d) the cost to the Design-Builder for locating Utilities owned by third parties as required by the Railroad Agreements;

(e) the costs of satisfying any insurance requirements referenced under DBA Section 7.10.2.3 (*Railroad Highway Matters*);

(f) performance of all other obligations in the Railroad Agreements, including any amendments, change orders, or force account work under such Railroad Agreements;

(g) all costs for ascertaining and obtaining all required approvals, permits, agreements and amendment to agreements for performance of any Railroad Work; and

(h) costs of acquiring Railroad property interests or rights and costs with respect to relinquishment or acquisition of existing Railroad property interests or rights.

7.10.2.2 not invoice GDOT for, and GDOT will not have any obligation to pay for or facilitate, any Railroad Work;

7.10.2.3 not have any right to obtain any increase in the Contract Sum to compensate Design-Builder for any delay damages or other damages arising from a failure of the Railroad to perform under any Railroad Agreement or otherwise cooperate as may be necessary to complete the Work, nor shall any such failure of the Railroad be compensable as a Compensation Event or Relief Event;

7.10.2.4 comply in all respects with the Railroad insurance requirements set forth in Section 10 (*Railroad Protective Liability*) of DBA Exhibit 16 (*Insurance Coverage Requirements*), TP Section 14 (Railroad), and each Railroad Agreement; and

7.10.2.5 comply in all respects with all requirements set forth in each Railroad Agreement, and if incorporated or referenced into, or absent a Railroad Agreement, the Railroad Manual, which requirement, for the avoidance of doubt, shall extend to those Railroad Agreements to which Design-Builder is not party.

7.10.3 No time extensions will be granted to the Design-Builder for Railroad Work.

7.11 Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work

7.11.1 In addition to any other express warranties provided elsewhere in the Design-Build Documents, Design-Builder warrants that:

7.11.1.1 all Design Work furnished pursuant to the Design-Build Documents shall conform to all professional engineering principles generally accepted as standards of the industry in the State, in no case less than Good Industry Practice;

7.11.1.2 all goods, consumables, and materials used or supplied as part of the Work, or otherwise in connection with the Project are (a) of good quality and unless otherwise expressly stated, new when installed; are available to ensure compliance with the requirements of the Design-Build Documents, under normal conditions and reasonably anticipated abnormal conditions, and (b) fit for the purposes, objectives, functions, uses, and requirements set forth in or reasonably inferred from the Design-Build Documents;

7.11.1.3 all equipment furnished by or on behalf of Design-Builder or any Design-Builder-Related Entity is of modern design and in good working condition;

7.11.1.4 (a) the Construction Work is free of Defects, (b) the Project is free of deviations, changes, modifications, alterations or exceptions from applicable Technical Provisions that have not been approved, in writing, by GDOT; and (c) the Work otherwise conforms to those requirements set forth with respect to the Design Work, Construction Work, and all Work, as set forth in DBA Section 7.2.1, DBA Section 7.2.2, and DBA Section 7.2.3 (*Performance, Design and Construction Standards; Deviations; Design Exceptions*); and

7.11.1.5 the Work otherwise meets all of the requirements of the Design-Build Documents (collectively, the "Warranty").

The Warranty, and all other warranties expressly provided elsewhere in the Design-Build Documents, run to the benefit of GDOT.

7.11.2 Design-Builder covenants to respond to any Warranty claim by or on behalf of GDOT and otherwise to correct any Defects or Work that does not conform to the requirements of the Design-Build Documents or the accepted Construction Documents during the Term and until a period of two years from the date of Final Acceptance of the entirety of the Work, and thereafter for such longer periods as required with respect to certain other portions of the Work as expressly set forth in the Design-Build Documents (e.g., vegetation establishment) (collectively, the "Warranty Period"). Design-Builder shall commence corrective Work as may be required within 30 days after any notice from GDOT or otherwise within such time as GDOT may approve or provide in writing, and shall diligently and continuously prosecute all such corrective Work so as to complete same within 30 days after commencement thereof, except where such Work cannot reasonably be completed within such time. The aforementioned obligation to correct Defects is not intended to constitute a period of limitations for any other rights or remedies that GDOT may have with respect to Design-Builder's obligations under the Design-Build Documents.

7.11.3 Design-Builder shall obtain customary and reasonable warranties from all Contractors with respect to design, materials, workmanship, installations, equipment, tools, supplies, software or services, all of which Design-Builder shall cause to be expressly extended and assigned to GDOT, or its designee; provided that the foregoing requirement shall not apply to standard, pre-specified manufacturer warranties of mass-marketed materials, products (including software products), equipment or supplies where the warranty cannot be extended to GDOT using commercially reasonable efforts. To the extent that any Contractor warranty would be voided by reason of Design-Builder's negligence in incorporating material or equipment into the Work, Design-Builder shall be responsible for correcting such defect.

7.11.4 Design-Builder's Warranty and the Contractor warranties (if any) are in addition to all rights and remedies available under the Design-Build Documents or applicable Law or in equity, and shall not limit Design-Builder's liability or responsibility imposed by the Design-Build Documents or applicable Law or in equity with respect to the Work.

7.11.5 When, during the Warranty Period, any act, omission, or other action of Design-Builder occurs that violates the requirements, conditions, or terms of the Design-Build Documents, or affects the health, safety, or welfare of the public or natural resources, GDOT will have the right, but not the obligation, to require and direct Design-Builder to take prompt action to replace, repair, or restore such damage, injury or condition within a time frame established by GDOT, at Design-Builder's sole cost and expense and without entitlement to a Relief Event or Compensation Event.

7.11.6 For avoidance of doubt, and without limiting Design-Builder's obligations to correct Nonconforming Work as set forth under DBA Section 7.3 (*Design-Builder Responsibility for Nonconforming Work*), Design-Builder's obligations under this DBA Section 7.11 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) include replacement, re-work, repair, or otherwise correction of all Defects as and when discovered (by any Person) during the Term, and to take all necessary action promptly to prevent similar Defects from occurring.

7.11.7 If Design-Builder fails to comply with its obligations under DBA Section 7.11.2 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*), GDOT shall be entitled to take action to investigate, repair, replace or otherwise correct and fully remedy any Defect in the Project and any other breach of the Warranty. If GDOT incurs any costs and expenses in connection with taking such action, Design-Builder shall pay to GDOT the amount of such costs and expenses within 10 Business Days following receipt of GDOT's invoice or demand.

7.11.8 Design-Builder acknowledges and agrees that GDOT, and any other GDOT-Related Entity may perform work on any part of the Project during the Warranty Period without voiding the Warranty and without voiding Design-Builder's obligation to correct any Defect, provided that Design-Builder shall not be liable for any defect or any other breach of the Warranty obligations to the extent caused or exacerbated by such work.

7.11.9 To the extent that any warranty provided by a Contractor or Subcontractor is voided by reason of Design-Builder's negligence in incorporating material or equipment into the Project or any breach of the Warranty-related obligations, Design-Builder shall be responsible for procuring a replacement warranty for GDOT.

7.11.10 Nothing in this DBA Section 7.11 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) limits GDOT's right to assert claims for damages arising out of, relating to, caused by, or resulting from Defects, nor shall this DBA Section 7.11 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) be construed to waive any other rights or remedies that GDOT may have under this Design-Build Agreement, at law, or in equity.

7.12 UAS Requirements

7.12.1 Authorization to Use UASs for the Project. Design-Builder may use a drone, classified as a Small Unmanned Aircraft System ("UAS") as defined in 14 C.F.R., Part 107 in performing the Work, subject to the terms and conditions set forth in this DBA Section 7.12.1 (*UAS Requirements*). TP Attachment 1-3 (UAS Requirements) also sets out certain of Design-Builder's obligations with respect to UASs. For avoidance of doubt, nothing in this DBA Section 7.12 (*UAS Requirements*) authorizes, nor shall be deemed or construed to authorize, Design-Builder or any Design-Builder-Related Entity to use a UAS under any existing GDOT Part 107 "Operational Waiver" or other FAA authorization relating to use of UASs.

7.12.2 UAS Use and Flight Planning.

7.12.2.1 Design-Builder shall submit UAS use plans for the Project to GDOT as a condition to the first instance of UAS operations within the airspace of the Project Limits. Design-Builder shall obtain GDOT's prior, written authorization to deviate from the UAS use plan submitted. Acceptance of the UAS use plan, as may be thereafter amended, authorizes UAS operations within the airspace of the Existing Right of Way, subject to the restrictions (if any) as may apply to a Parcel (as annotated in, or by reference within, DBA Exhibit 4 (*Parcel Acquisition Table*)).

7.12.2.2 Design-Builder shall file all flight and related plans with the FAA prior to any UAS operations.

7.12.2.3 Except as and when authorized by GDOT under DBA Section 7.12.2.1 (*UAS Use and Flight Planning*), prior to each and every use of any UAS, and to the extent authorized under a submitted UAS use plan and FAA flight plan:

(a) Design-Builder shall provide written notice to each Person with real property interests over which the UAS is to operate in connection with the Work.

(b) If and to the extent required under applicable Law, Design-Builder shall also obtain written authorization by the aforementioned Persons prior to each and every use of any UAS that transits over the Parcel subject to such Person's real property interests.

(c) Design-Builder shall coordinate directly with any Separate Contractor or other Encroachment Permit-holder on the Project Limits.

7.12.3 Compliance with Law; Governmental Approvals; Other Third Party Approvals. Design-Builder shall comply with all applicable Laws relating to ownership, use, and operation of UASs. Design-Builder shall obtain, maintain, and comply with all such additional Governmental Approvals (including Encroachment Permits) that are required for UAS operations by or on behalf of Design-Builder.

7.12.4 UAS Risks, Liabilities, Culpability. As between Design-Builder and GDOT, Design-Builder bears all risks relating to UAS operations, including specifically any civil liabilities or culpabilities in tort and criminal liabilities that may result (e.g., battery, trespass).

7.12.5 UAS Safety. Design-Builder shall conduct a preflight inspection, to include specific aircraft and control station systems checks, to ensure the UAS is in a condition for safe operation pursuant to 14 C.F.R. Part 107. Design-Builder shall comply with all clearances given and as may be conditioned or restricted in the airspace. Notwithstanding the foregoing, and only to the extent not expressly directed otherwise by the FAA air traffic controllers during any UAS operations, Design-Builder shall not, nor shall Design-Builder permit, UAS operations (a) higher than 400 feet, (b) within 25 feet of pedestrians, moving vehicles, or public infrastructure, (c) at or within specific "No Drone Zone" or similarly-identified locations, and (d) as otherwise restricted under the Technical Provisions.

7.12.6 Damage or Loss of a UAS. Design-Builder shall report any potential or actual loss of any UAS promptly to GDOT and to such other Governmental Entities as may be required under applicable Law. To the extent possible, Design-Builder shall comply with any requirements resulting from report, including recovery of the damaged UAS.

7.12.7 UAS-involved Damages. In addition to other requirements under applicable Law and pursuant to insurance requirements, Design-Builder shall report to the FAA (with a copy of such report delivered concurrently to GDOT) within 10 days after any operation of a UAS that results in at least serious injury, loss of consciousness, or property damage of at least $500.

7.12.8 Intellectual Property and Books and Records Matters. All information, materials (including electronic materials), and other work product (including maps, computations, computer discs, printouts, flight logs, and other data (including Project Data)) prepared by, or for Design-Builder or any Design-Builder-Related Entity under the terms of this Design-Build Agreement arising out of, relating to, or resulting from the use of the UAS are Books and Records and any Intellectual Property disclosed or embodied within is Owner Intellectual Property and not Proprietary Intellectual Property. In addition to GDOT's rights under DBA Article 20 (*Records and Audits; Intellectual Property*), Design-Builder shall also make available to the FAA, upon request, the UAS itself for inspection or testing, as well as maintain and provide to the FAA any related Books and Records.

7.13 Maintenance During Construction Work

7.13.1 GDOT will be responsible for the operation and maintenance of the Existing Right of Way and any acquired right or interest in any State Proposed/State Acquired Right of Way until the earlier of NTP3 and any limited NTP3 under DBA Section 3.3.4.3 (*Notice to Proceed 3*) (as to that portion of the Project Limits the pre-NTP3 Work is authorized to commence). Upon NTP3 (or, if earlier, NTP3 as to such portion of the Project Limits identified therein only), Design-Builder shall assume full responsibility for maintenance of the Project, as and when constructed, and all of the Work, within the Site in accordance with the requirements of the Design-Build Documents, including specifically TP Section 19 (Maintenance).

7.13.2 Upon Final Acceptance, GDOT will assume responsibility for the operation and maintenance of the entire Project; provided, however, that where a portion or portions of the Project has/have been accepted by GDOT as Ready to Open to Traffic, as set forth under DBA Section 7.7.4.3 (*Ready to Open to Traffic Process*), prior to Final Acceptance, GDOT may, in its sole discretion, then assume responsibility for the operations and maintenance, in whole or part, of such portion or portions of the Project at such earlier time; provided, further, that nothing contained herein shall otherwise limit any warranty obligations of Design-Builder with respect to any Nonconforming Work or Defect, and provided further that GDOT assumption of responsibility excludes any responsibilities on or pertaining to any Temporary Interests.

7.14 Impact of ATCs on the Project

7.14.1 If implementation of an ATC forming part of the Project requires the approval or consent of any Government Entity (other than GDOT), or other third party, to include pursuit and granting of any Design Exceptions, then in addition to all other conditions on implementation within the ATC approval (a) Design-Builder will have full responsibility for, and bear the full risk of, obtaining any such approval or consent, and (b) if such approval or consent is not granted, or there is an unreasonable and unjustified delay in obtaining such approval or consent (subject to DBA Article 14 (GDOT Changes; Design-Builder Changes; Directive Letters)) Design-Builder (i) shall perform the Work as if such ATC had never formed part of the Project, and (ii) shall not be entitled to any additional time or compensation as a result thereof.

7.14.2 If implementation of an ATC forming part of the Project requires additional real property rights for the Project, then the Parties shall proceed in accordance with DBA Section 2.6.6, *et seq.* (*Design-Builder Proposed/Design-Builder Acquired Right of Way*), with GDOT being deemed to have approved Design-Builder to so proceed by virtue of the approval of the ATC; provided, however, that nothing in this DBA Section 7.14.2 (*Impact of ATCs on the Project*) shall limit or abrogate DBA Section 7.14.3 (*Impact of ATCs on the Project*); provided, further, that if GDOT does not elect to pursue condemnation, if there is an unreasonable and unjustified delay in obtaining such additional real property rights, or Design-Builder is otherwise unable to obtain any such additional real property rights, then Design-Builder (i) shall perform the Work as if such ATC had never formed part of the Project, and (ii) shall not be entitled to any additional time or compensation as a result thereof.

7.14.3 If implementation of an ATC forming part of the Project results in a Necessary Basic Configuration Change, then, regardless as to whether previously approved for inclusion in the Project, Design-Builder (i) shall perform the Work as if such ATC had never formed part of the Project, and (ii) shall not be entitled to any additional time or compensation as a result thereof.

7.15 Title; Risk of Loss

Design-Builder warrants that it owns, or will own, and has, or will have, good and marketable title to all materials, equipment, tools, and supplies furnished, or to be furnished, by it and its Contractors, Subcontractors, and Suppliers that become part of the Project or are purchased for GDOT, on behalf of the State, for the operation, maintenance or repair thereof, free and clear of all Liens. Title to all of such materials, equipment, tools, and supplies that shall have been delivered to the Site shall pass to GDOT free and clear of all Liens, upon the sooner of (a) incorporation into the Project, or (b) payment by GDOT to Design-Builder of invoiced amounts pertaining (and specifically identified as such) thereto. Notwithstanding any such passage of title, Design-Builder shall retain risk of loss and sole care, custody, and control of such materials, equipment, tools, and supplies and shall exercise due care with respect thereto until Final Acceptance or until Design-Builder is removed from the Project.

7.16 Existing Improvements and Latent Defects

7.16.1 Except as set forth in this Design-Build Agreement and in this DBA Section 7.16 (*Existing Improvements and Latent Defects*), Design-Builder accepts the Existing Improvements on the Right of Way as is, with all faults, known and unknown, suspected and unsuspected, and without any GDOT obligation to reconstruct, rehabilitate, renew, replace, renovate, or repair any Existing Improvement. Furthermore, and except as set forth in this Design-Build Agreement and in this DBA Section 7.16 (*Existing Improvements and Latent Defects*), Design-Builder assumes all responsibility and liability associated with Existing Improvements to the extent affected or impacted by the Work, including any improvements constructed by GDOT, or any third parties, any impacts upon initial design and construction, and defects affecting operations, maintenance, renewal and replacement requirements. Design-Builder shall be responsible for all work and, except as set forth in this Design-Build Agreement and in this DBA Section 7.16 (*Existing Improvements and Latent Defects*), all costs associated with a Latent Defect in Existing Improvements. GDOT does not provide, and hereby expressly disclaims, any and all warranties of any kind, whether express or implied, with respect to the Existing Improvements.

7.16.2 Notwithstanding the foregoing in DBA Section 7.16.1 (*Existing Improvements and Latent Defect*s), inasmuch as GDOT is delivering to Design-Builder, in support of Design-Builder's Work, (a) the Existing Right of Way, and (b) State Proposed/State Acquired Right of Way and inasmuch as GDOT is responsible, to the extent set forth herein, for certain conditions pertaining with respect to (i) State Proposed/Design-Builder Acquired Right of Way and (ii) Design-Builder Proposed/State Acquired Right of Way, as to each Parcel of any of the foregoing, as of the effective date of NTP2, Design-Builder shall be entitled to seek relief under clause (w) of the definition of "Relief Event" and clause (r) of the definition of "Compensation Event" for the impacts of any Latent Defects discovered in the Existing Improvements on any Parcels in the foregoing clauses (a) and (b) of this DBA Section 7.16.2 (*Existing Improvements and Latent Defects*) as and to the extent materially and adversely affecting the completion of Work, within the relevant value(s) assigned in the Baseline SOV. In the event that Design-Builder encounters a condition impacting the Work that it suspects may be attributable to a Latent Defect, upon Design-Builder's written request, appropriate representatives of GDOT shall meet and confer with Design-Builder to discuss what historical information and records may be available to inform Design-Builder's investigation and conclusions.

7.16.3 Nothing in this DBA Section 7.16 (*Existing Improvements and Latent Defects*) shall be construed to abrogate Design-Builder's general obligation to mitigate damages under DBA Section 7.1 (*General Obligations of Design-Builder*).

7.17 Value Engineering

7.17.1 Generally

7.17.1.1 This DBA Section 7.17 (*Value Engineering*) sets forth the requirements applicable to preparation, review, and approval of Value Engineering Change Proposals.

7.17.1.2 The Parties intend that the provisions of this DBA Section 7.17 (*Value Engineering*) are for the purpose of enabling Design-Builder and GDOT to take advantage of potential further cost savings or provide potential further improvements to the Work through changes in the requirements relating to the Work not otherwise evident at submission of the Proposals or that arise out of advancing the Project's design.

7.17.1.3 Design-Builder is encouraged to submit VECPs whenever it identifies potential savings or improvements for the Project. GDOT may also request Design-Builder to develop and

submit a specific VECP ("GDOT-Initiated VECP"); provided, however, that, without limiting GDOT's rights under DBA Section 14.3 (*Directive Letters*), Design-Builder may refuse to consider such GDOT-Initiated VECP.

7.17.1.4 A VECP shall not be required for any deviations sought under DBA Section 7.2.4 (*Performance, Design and Construction Standards; Deviations; Design Exceptions*), and any such deviation accommodated thereunder shall not be eligible for adjustments to the Contract Sum under DBA Section 7.17.5 (*Contract Sum Adjustment*).

7.17.1.5 No VECP, excluding GDOT-Initiated VECPs, may extend a Milestone Deadline.

7.17.2 VECP Information. At a minimum, the following information shall be submitted by Design-Builder with each VECP:

7.17.2.1 A statement that the submission is a VECP, and a brief, narrative description of the proposed change;

7.17.2.2 Description and discussion of the differences between existing requirements in the Design-Build Documents and the proposed change, together with advantages and disadvantages of each changed item;

7.17.2.3 Itemization of citations to the requirements of the Design-Build Documents that must be changed if the VECP is approved (e.g., document sections, drawing numbers, and specifications);

7.17.2.4 A complete cost analysis including: (i) Design-Builder's cost estimate for performing the subject Work in accordance with the Design-Build Documents compared to Design-Builder's cost estimate for performing the subject Work in accordance with the proposed changes, to include specifically any additional Governmental Approvals, real property rights; (ii) an estimate of additional costs that will be incurred by GDOT, including estimated impact on future maintenance costs; and (iii) costs of development and implementation of the VECP itself by Design-Builder;

7.17.2.5 Justification for changes in function or characteristics of each item, and the effect of the change on the performance of the end item, as well as on the meeting of requirements contained in the Design-Build Documents, including environmental compliance and requirements contained in Governmental Approvals;

7.17.2.6 If available, a description of any previous use or tests of the VECP and the conditions and results (i) within the State and (ii) in other jurisdictions, in each case, in projects similar to the Project as and when relevant (but not at the exclusion of other analogous applications);

7.17.2.7 Date or time by which a Supplemental Agreement adopting the VECP must be issued in order to obtain the maximum cost reduction, noting any effect on the Project Schedule;

7.17.2.8 The discussion, if applicable, of avoided real property acquisitions under DBA Section 7.17.5.3 (*Contract Sum Adjustment*); and

7.17.2.9 The discussion and analysis, if applicable, of any impacts on Utility Owners and, in particular, any cost savings relating to Utility Adjustments under DBA Section 7.17.5.4 (*Contract Sum Adjustment*).

Any additional information requested by GDOT shall be provided in a timely manner. Additional information could include results of field investigations and surveys, design computations, and field change sheets.

7.17.3 Review of VECPs

7.17.3.1 Design-Builder shall submit VECPs directly to GDOT. Each VECP shall be prepared in a form acceptable to GDOT, and shall meet all applicable requirements of this DBA Section 7.17 (*Value Engineering*).

7.17.3.2 GDOT will determine, in its sole discretion, whether a VECP qualifies for consideration and evaluation as well as whether, in its sole discretion, GDOT will consider and evaluate any VECP.

7.17.3.3 Design-Builder may withdraw all or part of any VECP at any time prior to approval by GDOT.

7.17.4 Acceptance of VECPs

7.17.4.1 VECPs are Type 3 Submittals, and GDOT may accept, in its sole discretion, any VECP in whole or in part; provided, however, that GDOT will affirmatively accept or reject any submitted VECP by Formal Communication, delivered in accordance with DBA Section 6.3.2 (*Time Periods*).

7.17.4.2 Accepted VECPs will be documented by Supplemental Agreement.

7.17.4.3 If accepted, Design-Builder shall proceed to prepare Design Documents (or modify existing Design Documents) consistent with the approved VECP.

7.17.4.4 Until execution and delivery by the Parties of a Supplemental Agreement pertaining to the approved VECP, Design-Builder shall remain obligated to perform the Work in accordance with the Released for Construction Documents and other Design-Build Documents. Unless Design-Builder has received specific written permission from GDOT to proceed with VECP Work pending acceptance of a VECP, Design-Builder shall not have the right to proceed, and shall not proceed, with any such Work.

7.17.5 Contract Sum Adjustment.

7.17.5.1 If GDOT accepts a VECP, subject to DBA Section 7.17.5.2, DBA Section 7.17.5.3, and DBA Section 7.17.5.4 (*Contract Sum Adjustment*), the Contract Sum shall be reduced by an amount equal to the sum of (a) 100% of any additional costs incurred by GDOT resulting from the VECP plus (b) 50% of estimated net savings; provided, however, that Design-Builder's profit shall not be reduced by application of the VECP.

The term "estimated net savings" as used herein shall mean (a) the difference between the cost of performing the Work according to the Design-Build Documents and the actual cost to perform it according to the proposed change, less (b) the reasonable costs of studying and preparing the VECP as established by Design-Builder and agreed by GDOT, in its reasonable discretion, less (c) any additional costs incurred or to be incurred by GDOT resulting from the VECP, including the cost of review by GDOT of the VECP and implementation and maintenance costs associated therewith. Design-Builder's profit shall not be considered part of the cost.

7.17.5.2 Design-Builder is not entitled to share in either collateral or future contract savings as a result of any accepted VECP.

The term "collateral savings" means additional revenues that may arise as a result of the VECP and those measurable net reductions in costs of GDOT resulting from the VECP, including operations and maintenance costs and cost of property furnished by GDOT.

The term "future contract savings" means reductions in the cost of performance of future construction contracts for essentially the same item resulting from a VECP submitted by Design-Builder.

7.17.5.3 If a Design-Builder-proposed VECP includes an adjustment to the planned acquisition of real property listed in DBA Exhibit 4 (*Parcel Acquisition Table*) that results in an overall cost savings to the Project, the VECP shall compare, as applicable to the proposed adjustment: (i) the incremental reduction in costs for the Work, and (ii) the costs involved in adjusting the real property limits or Governmental Approvals, or shall compare (1) the incremental reduction in costs (if any) for not acquiring the unnecessary real property, and (2) the additional construction costs to be incurred.

The estimated net savings shall be shared equally between GDOT and Design-Builder.

7.17.5.4 Reimbursements for Utility Adjustment expenses, as compared to the Design-Builder's expected expenses with respect to the Utility Adjustment detailed in the Proposal, and ultimately determined when the Utility Adjustment is completed shall be addressed in calculating the net savings, which will be shared equally between GDOT and Design-Builder pursuant to the payment process in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

7.17.6 Costs Relating to Preparation, Consideration of VECPs

7.17.6.1 Subject to DBA Section 7.17.6.3 (*Costs Relating to Preparation, Consideration of VECPs*), each Party shall bear its own costs in connection with preparation and review of VECPs.

7.17.6.2 Design-Builder shall have no right to assert any costs or other relief (including delays to the Work) resulting from the rejection of a VECP initiated by Design-Builder.

7.17.6.3 GDOT will reimburse Design-Builder for direct costs actually incurred by Design-Builder in developing a GDOT-Initiated VECP under DBA Section 7.17.1.3 (*Value Engineering, Generally*) for which GDOT thereafter notifies Design-Builder that GDOT will not consider or evaluate.

7.17.7 Payments Relating to VECPs

Design-Builder's share of any VECP cost savings shall be payable at such time as payments would have been made for the Work which is the subject of the VECP had the VECP not been implemented.

7.17.8 Use of VECPs by GDOT

Upon submission, but subject to DBA Section 7.17.9 (*Open Records Act; Proprietary Intellectual Property*), all VECPs, whether accepted or rejected by GDOT, are Owner Intellectual Property.

7.17.9 Open Records Act; Proprietary Intellectual Property

If Design-Builder proposes any VECP that incorporates Proprietary Intellectual Property developed prior to the Effective Date, or developed by Design-Builder after the Effective Date (provided that Design-Builder establishes to the satisfaction of GDOT that it was developed apart from, and in isolation from, this DBA), Design-Builder may identify such data and information included in the VECP as a "trade secret," in which event the provisions of DBA Section 20.3 (*Open Records Act and Freedom of Information Act*) and DBA Section 20.4 (*Proprietary Intellectual Property*) shall be applicable.]

7.18 Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data

7.18.1 The Parties acknowledge and agree that:

7.18.1.1 GDOT has allocated an allowance amount of $3,000,000 ("Unexpected Subsurface Conditions Allowance") with respect to the discovery of Unexpected Subsurface Conditions, which sum will be funded by GDOT and made available to GDOT to pay amounts that Design-Builder has a right to draw from the Unexpected Subsurface Conditions Allowance in accordance with the terms of this Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*);

7.18.1.2 Except to the extent set forth in DBA Section 7.18.1.3 (*Discovery of Unexpected Subsurface Conditions*), the aggregate of any amounts that Design-Builder shall have a right to draw under this DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) shall not exceed the Unexpected Subsurface Conditions Allowance; and

7.18.1.3 Design-Builder's right to draw from the Unexpected Subsurface Conditions Allowance under this DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) is separate from Design-Builder's right to claim any compensation or relief under clause (f) of the definition of "GDOT-Caused Delay", clause (e), clause (j), clause (m), [or clause (s)], of the definition of "Compensation Event", or clause (g), clause (h), clause (q), clause (t), or clause (x) of the definition of "Relief Event" in accordance with DBA Article 13 (*Relief Events; Compensation Events*).

7.18.2 If during the performance of the Work Design-Builder becomes aware of an Unexpected Subsurface Condition, Design-Builder shall promptly (and in any event within 15 Business Days) provide Notice of the Unexpected Subsurface Condition to GDOT.

7.18.3 Within 40 Business Days after Design-Builder's Notice under DBA Section 7.18.2 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), Design-Builder shall deliver to GDOT a detailed proposal ("Detailed Unexpected Subsurface Condition Proposal"):

7.18.3.1 setting out the applicable information in DBA Section 14.1.3 (*GDOT Changes*) with respect to the Unexpected Subsurface Condition provided that with respect to any estimate of costs to be incurred with respect to those portions of the Work described in DBA Section 7.18.3.2 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), such amounts shall not exceed the amount remaining in the Unexpected Subsurface Conditions Allowance;

7.18.3.2 demonstrating that

(a) the condition is materially different from a condition described in clause (a), clause (b), or clause (c) of the definition of "Unexpected Subsurface Condition"; and

(b) demonstrating that the Unexpected Subsurface Condition is the direct cause of Design-Builder incurring additional costs with respect to D&C Work for bridge and structure foundations, sound barrier foundations, retaining walls, or earthwork, as applicable; and

(c) demonstrating that the Design-Builder has used all reasonable efforts to mitigate any adverse consequences of the Unexpected Subsurface Condition, acting in accordance with Good Industry Practice (including by re-sequencing, reallocating or redeploying its forces to other portions of the Work).

7.18.4 Promptly, and in any event within 15 Business Days, after GDOT receives a Detailed Unexpected Subsurface Condition Proposal, Design-Builder shall meet with GDOT to review, discuss and seek to agree upon the Detailed Unexpected Subsurface Condition Proposal.

7.18.5 During such discussions, GDOT may request further information from Design-Builder as GDOT determines, in its reasonable discretion, is necessary for GDOT to evaluate the Detailed Unexpected Subsurface Condition Proposal.

7.18.6 Within 15 Business Days after the later of the conclusion of the meetings referred to in DBA Section 7.18.4 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) or the date additional information is received pursuant to DBA Section 7.18.5 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), as applicable, GDOT will either:

7.18.6.1 subject to DBA Section 7.18.1 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), accept the Detailed Unexpected Subsurface Condition Proposal by issuing a notice to Design-Builder (an "Unexpected Subsurface Condition Order"); or

7.18.6.2 dispute the Detailed Unexpected Subsurface Condition Proposal or whether an Unexpected Subsurface Condition exists, in which case either Party may refer the matter for determination in accordance with the Dispute Resolution Procedures.

7.18.7 If an Unexpected Subsurface Condition Order is issued, Design-Builder may submit to GDOT for payment the additional costs actually incurred under DBA Section 7.18.3.2 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), not to exceed the total approved amount specified in the Unexpected Subsurface Condition Order and, in no case, the balance of the Unexpected Subsurface Conditions Allowance as of the date of such order. Invoices for payments from the Unexpected Subsurface Conditions Allowance with respect to an Unexpected Subsurface Condition Order shall be included with the next draft Invoice submitted by Design-Builder pursuant to DBA Exhibit 7 (*Contract Sum and Payment Terms*), and the Invoice Support Package shall include evidence that Design-Builder actually has incurred the relevant costs. GDOT shall remit payment of the amount with the remainder of the Invoice pursuant to DBA Exhibit 7 (*Contract Sum and Payment Terms*); provided that the aggregate of such payments shall not exceed the amount remaining in the Unexpected Subsurface Conditions Allowance, after taking into account any previous payment in accordance with this DBA Section 7.18.7 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

7.18.8 Design-Builder shall not suspend performance of the Work during the negotiation of any Detailed Unexpected Subsurface Condition Proposal, except to the extent that such suspensions are otherwise expressly permitted under the terms of this Project Agreement.

7.18.9 Design-Builder bears the burden of proving both the existence of an Unexpected Subsurface Condition and the resulting direct and adverse impacts on Design-Builder, including specifically costs actually incurred.

7.18.10 Time is of the essence with respect to Design-Builder's delivery of the notices required under this DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*). If for any reason Design-Builder fails to deliver the initial Notice in strict accordance with the requirements of DBA Section 7.18.2 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT*

Boring Data) or a Detailed Unexpected Subsurface Condition Proposal in strict accordance with the requirements of DBA Section 7.18.3 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), then Design-Builder will be deemed to have irrevocably and forever waived and released any right to draw payment under this DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) with respect to such Unexpected Subsurface Condition.

7.18.11 Design-Builder shall locate all existing GDOT ITS within the Project Limits in accordance with TP Section 17.4.6 (ITS Locates) and ensure existing GDOT ITS are protected from damage in accordance with TP Section 17.4.4 (Protection of Existing ITS-Infrastructure). The existence or discovery of GDOT ITS within the Project Limits shall not constitute an Unexpected Subsurface Condition. Damage caused by Design-Builder to GDOT ITS due to failure to locate any existing or installed GDOT ITS within the Project Limits shall be the responsibility of Design-Builder, and Design-Builder shall not be entitled to relief or compensation with respect to the existence or discovery of GDOT ITS within the Project Limits.

7.18.12 If, at the Final Acceptance Date, the total value of authorization letters from GDOT with respect to all agreed Unexpected Subsurface Condition Orders does not exceed the Unexpected Subsurface Conditions Allowance, then Design-Builder shall not be entitled to the balance of the Unexpected Subsurface Conditions Allowance.

7.18.13 The Parties acknowledge and agree that on or prior to the Setting Date GDOT provided to the Design-Builder GDOT Boring Data. If during the performance of the Work the Design-Builder discovers any material error in GDOT Boring Data, then the Design-Builder shall have a right to claim relief and compensation in accordance with DBA Article 13 (*Relief Events; Compensation Events*). Design-Builder acknowledges and agrees that, without limiting its rights under DBA Section 7.18.1 through DBA Section 7.18.12 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*), the discovery of Subsurface Conditions near to or within a particular radius from the location of a boring or core sample for which GDOT has provided GDOT Boring Data will not constitute a material error in the relevant GDOT Boring Data under this DBA Section 7.18.13 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) unless the Design-Builder demonstrates that the conditions encountered are such that there is no reasonable explanation for the difference between the conditions encountered and GDOT Boring Data other than that the boring or core sample was incorrectly logged as part of the Data included in TP Attachment 8-5 (Preliminary Borings).

Article 8 SECURITY AND INCIDENT RESPONSE

Design-Builder is responsible for the security of the Site and the workers and public thereon during the performance of the Work. Design-Builder shall take all reasonable precautions and provide protection to prevent damage, injury, vandalism, theft, or loss to the Work and materials and equipment to be incorporated thereon, as well as all other property at or on and adjacent to the Site, whether owned by Design-Builder or any other Person. Design-Builder shall perform and comply with the Technical Provisions concerning Incident response, safety, and security.

Article 9 MANAGEMENT SYSTEMS AND OVERSIGHT

9.1 Project Management Plan

9.1.1 Design-Builder shall develop at such times set forth in the Design-Build Documents, utilize, and maintain a Project Management Plan that meets, at a minimum, the requirements of, TP Section 2 (Project Management) and Good Industry Practice.

9.1.2 Design-Builder shall submit the Project Management Plan to at or before the times set forth in the Submittal Requirements Database and in accordance with the procedures described in DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*), as well as any proposed changes or additions to or revisions thereof.

9.1.3 The Project Management Plan and each proposed change or addition to or revision of any portion thereof shall constitute a separate Submittal for purposes of DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*).

9.1.4 If the Project Management Plan refers to, relies on or incorporates any manual, plan, procedure or like document that is not already part of the Design-Build Documents, then all such referenced or incorporated materials shall be submitted to GDOT for approval for inclusion within the Project Management Plan in its good faith discretion at or prior to the time that the Project Management Plan or change, addition or revision to the Project Management Plan is submitted to GDOT, conspicuously noting within the submitted Project Management Plan that such manual, plan, procedure, or like document is submitted for GDOT approval.

9.2 Quality Related

9.2.1 Design-Builder shall perform all obligations with respect to quality control of the Work and otherwise for the Project under TP Section 3 (Design-Builder Quality Program) and that otherwise meets Good Industry Practice.

9.2.2 Design-Builder's obligations with respect to quality matters is not limited to its obligations under DBA Section 9.2.1 (*Quality Related*), and without limiting the provisions of DBA Section 6.3.10 (*Quality Control, Inspection and Testing*). For avoidance of doubt, Design-Builder is responsible for all quality control (but not quality assurance) activities necessary to manage the Work.

9.3 Traffic Management

9.3.1 During the Construction Period, or commencing at such earlier date as may be agreed by the Parties or directed by GDOT, Design-Builder shall be responsible for the general management of traffic on the applicable portion of the Project under the control of any Design-Builder-Related Entity. Design-Builder shall manage traffic so as to preserve and protect safety of traffic on such portions and Related Transportation Facilities and, to the maximum extent practicable, to avoid disruption, interruption or other adverse effects on traffic flow, throughput, or other conditions, if any, as set forth in the Technical Provisions on the Related Transportation Facilities. Design-Builder shall conduct and carry out traffic management in accordance with the Transportation Management Plan and all other applicable Technical Provisions, Laws, and Governmental Approvals, as well as any further actions as may be required pursuant to DBA Article 8 (*Security and Incident Response*).

9.3.2 GDOT will have at all times, without obligation or liability to Design-Builder, the right to:

9.3.2.1 issue a Directive Letter to Design-Builder regarding traffic management and control (with which Design-Builder shall comply), or directly assume traffic management and control, of the Project during any period that (a) GDOT designates the Project or portion of the Project for immediate use as an emergency evacuation route or a route to respond to a disaster proclaimed by the Governor of Georgia, the President of the United States, or by any other federal or State agency, or any of the respective designees of the aforementioned, including reversing the direction of traffic flow during such period, (b) GDOT designates the Project or a portion of the Project for use as an alternate route for diversion of traffic from any interstate or Highway temporarily closed to all lanes in one or both directions due to any Incident or Emergency, or (c) the Commissioner determines such action will be in the public interest as a result of an Emergency or natural disaster; and

9.3.2.2 provide on the Site, via message signs or other means consistent with Good Industry Practice, traveler and driver information, and other public information (e.g., amber alerts), provided that the means to disseminate such information does not materially interfere with the Work.

Article 10 CONTRACTING AND LABOR PRACTICES

10.1 Disclosure of Contracts and Contractors

10.1.1 Design-Builder shall provide GDOT a monthly report listing (a) all Key Contracts in effect, (b) all Contracts in effect, identifying specifically those Contracts to which Design-Builder is a party and (c) where Design-Builder is a party to a Contract in effect with an Affiliate, all Contracts in effect to which such Affiliate is a party and under which all or a substantial portion of the Affiliate's responsibilities or obligations under its Contract with Design-Builder are delegated to the Contractor. Design-Builder also shall list in the quarterly report the Contractors under all Contracts, guaranties of Key Contracts in effect and the guarantors thereunder. Design-Builder shall allow GDOT ready access to all Contracts and records regarding Contracts, including amendments and supplements to Contracts and guaranties thereof.

10.1.2 No later than five days after Contract execution, Design-Builder shall notify GDOT in writing of the name, address, phone number and authorized representative of such Contractor.

10.2 Responsibility for Work, Contractors and Employees

10.2.1 Except with respect to Utility Adjustment Work as set forth under DBA Section 7.5.2.4 (*Utility Adjustments*), which is subject to its own labor-related requirements, Design-Builder shall retain or require Contractors to retain only Contractors that are prequalified (and remain prequalified for the duration they are performing the Work), as and when required under the Technical Provisions, and are otherwise qualified, experienced, and capable in the performance of the portion of the Work assigned. Design-Builder shall require that each Contractor has at the time of execution of the Contract, and maintains at all times during performance of the assigned Work, all licenses required by applicable Laws. Design-Builder shall require all Contractors to adhere to the requirements herein with respect to Subcontractors.

10.2.2 The retention of Contractors by Design-Builder will not relieve Design-Builder of its responsibilities under the Design-Build Documents or for the quality of the Work or materials or services provided by it.

10.2.3 Each Contract shall include terms and conditions sufficient to ensure compliance by all Contractors and Subcontractors, all parties performing any Work on behalf thereof, with the requirements of the Design-Build Documents, and shall include those terms that are specifically required by the Design-Build Documents to be included therein, including, to the extent applicable, those set forth in DBA Exhibit 8 (*Other Legal Requirements*) and any other applicable federal requirements.

10.2.4 Nothing in the Design-Build Documents will create any contractual relationship between GDOT and any Contractor or Subcontractor. No Contract entered into by or under Design-Builder shall impose any obligation or liability upon GDOT to any Contractor, Subcontractor, or any of their respective employees. All Contracts entered into by or under Design-Builder shall include the following provision verbatim (filling in blanks, removing brackets, and only such other changes as required to reflect properly the identity of the parties):

> Nothing contained herein shall be deemed to create any privity of contract between the Georgia Department of Transportation ("GDOT") and [_____]***[insert legal name of Contractor, Subcontractor, or Supplier]*** ("Contractor"), nor does it create any duties, obligations, or liabilities on the part of GDOT to Contractor, except those that may be specified under applicable Georgia state law, if any. In the event of any claim or dispute arising under this [_____]***[insert formal name of Contract or Subcontract, or defined term thereunder]*** (the "Contract") or [_____]***[insert legal name of Design-***

Builder] (the "Design-Builder" under its agreement with GDOT), Contractor shall look only to Design-Builder for any payment, redress, relief, or other satisfaction. Contractor hereby waives any claim or cause of action against GDOT arising out of, relating to, or resulting from the Contract or otherwise arising out of, relating to, or resulting from Contractor's scope of work or services under the Contract.

10.2.5 Design-Builder shall supervise and be fully responsible for the actions, omissions, negligence, willful misconduct, or breach of applicable Law or contract by any Contractor or Design-Builder-Related Entity, or their respective individual person Constituents, as though Design-Builder directly employed all such individuals.

10.2.6 Design-Builder may subcontract a portion of the Work, but shall perform either (a) with its own organization or (b) through the Lead Construction Contractor and the Lead Design Consultant, work amounting to not less than 30% of the Contract Sum allocated by percentage to the Construction Work and the Design Work, respectively.

10.3 Key Contracts; Contractor Qualifications

10.3.1 Use of and Change in Key Contractors

Design-Builder shall retain, employ, and utilize the firms and organizations in the Proposal and otherwise as specifically listed in the Project Management Plan to fill the corresponding Key Contractor positions listed therein. Design-Builder shall not terminate any Key Contract with a Key Contractor, or permit or suffer any substitution or replacement (by way of assignment of the Key Contract, transfer to another of any material portion of the scope of work, or otherwise) of such Key Contractor, except: (a) in the case of subcontracting portions of the Work by such Key Contractor, (b) in the case of material default by the Key Contractor; or (c) with GDOT's prior written approval in its good faith discretion. For Key Contractors not known as of the Effective Date, Design-Builder's selection thereof shall be subject to GDOT's prior written approval in GDOT's good faith discretion.

10.3.2 Key Contract Provisions

Each Key Contract shall:

10.3.2.1 expressly include the requirements and provisions set forth in this Design-Build Agreement or other Design-Build Documents applicable to Contractors regarding Intellectual Property rights and licenses, and OJT Requirements, as well as any other requirements and provisions expressly required to apply to Contractors (at each tier);

10.3.2.2 expressly require the Key Contractor to participate, at Design-Builder's request, in meetings between Design-Builder and GDOT concerning matters pertaining to such Key Contractor, its work or the coordination of its work with other Contractors, provided that all direction to such Key Contractor shall be provided by Design-Builder, and provided further that nothing in this Section shall limit the authority of GDOT to give such direction or take such action as in its opinion is necessary;

10.3.2.3 include an agreement by the Key Contractor to give evidence in any Dispute resolution proceeding pursuant to DBA Section 17.8 (*Dispute Resolution Procedures*), if such participation is requested by either GDOT or Design-Builder;

10.3.2.4 without cost to Design-Builder or GDOT, expressly permit assignment to GDOT or its successor, assign, or designee of all Design-Builder's rights under the Key Contract,

contingent only upon delivery of written request from GDOT following termination or expiration of this Design-Build Agreement, allowing GDOT or its successor, assign or designee to assume the benefit of Design-Builder's rights with liability only for those remaining obligations of Design-Builder accruing after the date of assumption, such assignment to include the benefit of all Key Contractor warranties, indemnities, guaranties and professional responsibility;

10.3.2.5 expressly state that any acceptance of assignment of the Key Contract to GDOT or its successor, assign or designee shall not operate to make the assignee responsible or liable for any breach of the Key Contract by Design-Builder or for any amounts due and owing under the Key Contract for work or services rendered prior to assumption (but without restriction on the Key Contractor's rights to suspend work, demobilize, or terminate due to Design-Builder's uncured breach);

10.3.2.6 expressly include a covenant to recognize and attorn to GDOT upon receipt of Notice from GDOT that it has exercised step-in rights under this Design-Build Agreement, without necessity for consent or approval from Design-Builder or to determine whether GDOT validly exercised its step-in rights, and Design-Builder's covenant to waive and release any claim or cause of action against the Key Contractor arising out of or relating to its recognition and attornment in reliance on any such Notice;

10.3.2.7 expressly include a covenant, expressly stated to survive termination of the Key Contract, to promptly execute and deliver to GDOT a new contract between the Key Contractor and GDOT on the same terms and conditions as the Key Contract, in the event (a) the Key Contract is rejected by Design-Builder in bankruptcy or otherwise wrongfully terminated by Design-Builder and (b) GDOT delivers written request for such new contract following termination or expiration of this Design-Build Agreement. The Key Contract also shall include a covenant, expressly stated to survive termination of the Key Contract, to the effect that if the Key Contractor was a party to an escrow agreement and Design-Builder terminates it, then the Key Contractor also shall execute and deliver to GDOT, concurrently with such new contract, a new escrow agreement on the same terms and conditions as the terminated escrow agreement, and shall concurrently make the same deposits pursuant to the new escrow agreement as made or provided under the terminated escrow agreement. This Section shall not apply to Key Contracts with GDOT or Governmental Entities;

10.3.2.8 expressly include requirements that: the Key Contractor (a) will maintain usual and customary Books and Records for the type and scope of operations of business in which it is engaged (e.g., constructor, equipment Supplier, designer, service provider), in no case, however, fewer or other than, at a minimum, those required under applicable Law or Governmental Approval, including as may be required of Design-Builder hereunder, where Design-Builder is obligated to compel the Key Contractor to maintain such Books and Records, (b) permit audit thereof with respect to the Project or Work by each of Design-Builder, GDOT in accordance with DBA Section 20.2 (Audits) and (c) provide progress reports to Design-Builder appropriate for the type of work it is performing sufficient to enable Design-Builder to provide the reports it is required to furnish GDOT under this Design-Build Agreement;

10.3.2.9 include the right of Design-Builder, and correspondingly Contractor, to terminate the Key Contract in whole or in part upon any Termination for Convenience of this Design-Build Agreement or GDOT Default, in each case without liability of Design-Builder, GDOT for the Key Contractor's lost profits or business opportunity;

10.3.2.10 include prompt payment obligations so as to comply with, and require Subcontractors at all tiers to comply with of DBA Exhibit 7 (*Contract Sum and Payment Terms*); and

10.3.2.11 expressly provide that any purported amendment with respect to any of the foregoing matters without the prior written consent of GDOT will be null and void.

10.3.3 Additional Requirements for Certain Contracts

Each Contract shall:

10.3.3.1 expressly require all Contractors (or each lower-tier Subcontractors) to sign and submit to its Contract (or Subcontract) counterparty (be it Design-Builder, a Contractor, or any Subcontractor), with a certified copy delivered by Design-Builder to GDOT on or before the earlier of NTP2 and 15 days prior commencement of any portion of the Work, the "Debarment and Suspension Certificate" attached as Attachment 7 to DBA Exhibit 8 (*Other Legal Requirements*).

10.3.3.2 For those Contracts valued at over $100,000, all Contractors (or each lower-tier Subcontractors) to sign and submit to its Contract (or Subcontract) counterparty (be it Design-Builder, a Contractor, or any Subcontractor), with a certified copy delivered by Design-Builder to GDOT on or before the earlier of NTP2 and 15 days prior commencement of any portion of the Work, the "Certificate Regarding Use of Contract Funds for Lobbying" attached as Attachment 8 to DBA Exhibit 8 (*Other Legal Requirements*).

10.3.3.3 For those Contracts valued at over $100,000 and for which a Contractor (or a Subcontractor) is paid $100,000 or more, all Contractors (or each lower-tier Subcontractors) to sign and submit to its Contract counterparty (be it Design-Builder, a Contractor, or any Subcontractor), with a certified copy delivered by Design-Builder to GDOT on or before the earlier of NTP2 and 15 days prior commencement of any portion of the Work, the Standard Form-LLL (found, as of the Effective Date, at https://www.gsa.gov/forms-library/disclosure-lobbying-activities) referenced in Attachment 8 to DBA Exhibit 8 (*Other Legal Requirements*).

10.4 Key Personnel; Required Personnel

10.4.1 Key Personnel

10.4.1.1 Design-Builder shall retain, employ, and utilize the individuals specifically listed in DBA Exhibit 2 (*Proposal Commitments*) to fill the corresponding Key Personnel positions listed therein. Design-Builder shall not change or substitute any such individuals except due to retirement, death, disability, incapacity, or voluntary or involuntary termination of employment, or as otherwise approved by GDOT pursuant to DBA Section 10.4.1.2 (*Key Personnel; Required Personnel*). In such circumstances, Design-Builder shall promptly propose a replacement for such position for approval by GDOT in its good faith discretion consistent with this DBA Section 10.4.1.1 (*Key Personnel*) and DBA Section 10.4.1.2 (*Key Personnel*).

10.4.1.2 Design-Builder shall notify GDOT in writing of any proposed replacement for any Key Personnel position. GDOT will have the right to review the qualifications and character of each individual to be appointed to a Key Personnel position (including personnel employed by Contractors to fill any such position) and to approve or disapprove use of such individual in such position prior to the commencement of any Work by such individual in its sole discretion. In no case shall Design-Builder propose a replacement Key Personnel that does not meet all of the Minimum Qualifications (Key Personnel) with respect to such Key Personnel position.

10.4.1.3 Design-Builder shall cause each individual filling a Key Personnel position to dedicate the full amount of time necessary for the proper prosecution and performance of the Work, in no case less than those described in the Role (Key Personnel) for each such Key Personnel position.

10.4.1.4 Design-Builder shall provide to GDOT, phone numbers, and email addresses for all Key Personnel. GDOT requires the ability to contact Key Personnel 24 hours per day, seven days per week.

10.4.1.5 Subject to DBA Section 10.4 (*Key Personnel; Required Personnel*), if Design-Builder fails either (a) to cause each individual filling a Key Personnel position to be available, as is required under DBA Section 10.4.1.3 (*Key Personnel*) or (b) to provide a proposed replacement under DBA Section 10.4.1.2 (*Key Personnel*) that meets or exceeds the Minimum Qualifications (Key Personnel) to GDOT within 30 days after notifying GDOT of a proposed replacement for any Key Personnel position, then either such failure shall be subject to Liquidated Damages in accordance with DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) and DBA Section 17.4.4 (*Liquidated Damages for Personnel-related Matters*).

10.4.1.6 Design-Builder is not liable for Liquidated Damages under DBA Section 10.4.1.5 (*Key Personnel*) if:

(a) Design-Builder removes or replaces such individual at the direction of GDOT; or

(b) such individual is unavailable, under DBA Section 10.4.1.1 (*Key Personnel*) due to retirement, death, disability, incapacity, injury, or voluntary or involuntary termination of employment by Design-Builder or with the applicable Design-Builder-Related Entity, as applicable, (provided that moving to an Affiliate of Design-Builder, a Contractor, or a Subcontractor is not considered grounds for avoiding Liquidated Damages).

10.4.1.7 Upon approval of any Key Personnel replacement by GDOT, the new individual shall be considered a Key Personnel for all purposes under the Design-Build Documents.

10.4.2 Required Personnel

10.4.2.1 Design-Builder shall retain, make available, and utilize the individuals to fill the Required Personnel positions listed in the Technical Provisions in accordance with the requirements set forth in the Technical Provisions.

10.4.2.2 Each of the Required Personnel shall fulfill the Roles (Required Personnel) and satisfy or exceed the Minimum Qualifications (Required Personnel) of such Required Personnel position.

10.4.2.3 Design-Builder shall cause each individual filling a Required Personnel position to dedicate no less than the amount of time described in the Role (Key Personnel) for each such Key Personnel position.

10.4.2.4 Design-Builder shall ensure, and cause any Contractor employing a Required Personnel to ensure, that each Required Personnel has the authority to fulfill the Roles (Required Personnel). If Design-Builder intends to replace any Required Personnel, Design-Builder shall:

(a) prior to replacement of any Required Personnel, notify GDOT in writing of any replacement for such Required Personnel position; and

(b) ensure that any replacement satisfies or exceeds the Minimum Qualifications (Required Personnel) for that position.

10.4.2.5 If GDOT reasonably believes that the replacement proposed by Design-Builder under DBA Section 10.4.2.3 (*Key Personnel; Required Personnel*) does not have the qualifications, capability and experience that satisfy the Minimum Qualifications (Required Personnel), GDOT may notify Design-Builder and Design-Builder shall provide a replacement that is sufficiently qualified.

10.4.2.6 Subject to DBA Section 10.4 (*Key Personnel; Required Personnel*), if Design-Builder fails either (a) to cause each individual filling the identified Required Personnel positions in DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) to be available, as is required under DBA Section 10.4.2.3 (*Required Personnel*), or (b) to provide a proposed replacement under DBA Section 10.4.2.7 (*Required Personnel*) that meets or exceeds the corresponding Minimum Qualifications (Required Personnel) to GDOT within 30 days after notifying GDOT of a proposed replacement for any such Required Personnel position, then either such failure shall be subject to Liquidated Damages in accordance with DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) and DBA Section 17.4.4 (*Liquidated Damages for Personnel-related Matters*).

10.4.2.7 Design-Builder is not liable for Liquidated Damages under DBA Section 10.4.2.6 (*Required Personnel*) if:

(a) Design-Builder removes or replaces such individual at the direction of GDOT; or

(b) such individual is unavailable due to retirement, death, disability, incapacity, injury, or voluntary or involuntary termination of employment by Design-Builder or with the applicable Design-Builder-Related Entity, as applicable, (provided that moving to an Affiliate of Design-Builder, a Contractor, or a Subcontractor is not considered grounds for avoiding Liquidated Damages).

10.4.2.8 Upon approval of any Required Personnel replacement by GDOT, the new individual shall be considered a Required Personnel for all purposes under the Design-Build Documents.

10.5 Contracts with Affiliates

10.5.1 Design-Builder shall have the right to have Work performed by Affiliates only under the following terms and conditions:

10.5.1.1 Design-Builder shall execute a written Contract with the Affiliate;

10.5.1.2 the Contract shall comply with all applicable provisions of this DBA Article 10 (*Contracting and Labor Practices*), be consistent with the Design-Build Documents and Good Industry Practice, and be in form and substance substantially similar to Contracts then being used by Design-Builder or Affiliates for similar Work with unaffiliated Contractors;

10.5.1.3 the Contract shall set forth the scope of Work and all the pricing, terms, and conditions with respect thereto;

10.5.1.4 the pricing, scheduling, and other terms and conditions of the Contract shall be no less favorable to Design-Builder than those that Design-Builder could reasonably obtain in an arms' length, competitive transaction with an unaffiliated Contractor. Design-Builder shall bear the burden of proving that the same are no less favorable to Design-Builder; and

10.5.1.5 no Affiliate shall be engaged to perform any Work that any Design-Build Documents or the Project Management Plan or any component part, plan or other documentation thereunder indicates are to be performed by an independent or unaffiliated party. No Affiliate shall be engaged to

perform any Work that would be inconsistent with the requirements of the Design-Build Documents or Good Industry Practice.

10.5.2 Before entering into a written Contract with an Affiliate or any supplement or amendment thereto, Design-Builder shall submit a true and complete copy of the proposed Contract to GDOT for review and comment, with a cover memorandum orienting GDOT to all pricing terms, including demobilization and Contract breakage terms and amounts. GDOT will have 20 days after receipt to deliver its comments to Design-Builder. If the Contract with the Affiliate is a Key Contract and such Affiliate's selection as a Key Contractor is not known as of the Effective Date, the Affiliate shall be subject to GDOT's approval as provided in DBA Section 10.3.1 (*Key Contracts; Contractor Qualifications*).

10.5.3 Design-Builder shall make no payments to Affiliates for Work in advance of performance thereof, except for reasonable mobilization payments or other payments consistent with arm's length, competitive transactions of similar scope. Advance payments in violation of this provision shall be excluded from the calculation of Termination Compensation.

10.6 Labor Standards

10.6.1 In the performance of its obligations under the Design-Build Documents, Design-Builder at all times shall comply, and require by contract that all Contractors and vendors comply, with all applicable federal and State labor, occupational safety and health laws, standards, rules, regulations, and federal and State orders.

10.6.2 All individuals performing the Work shall have the skill and experience and any licenses or certifications required to perform the Work assigned to them.

10.6.3 If any individual employed by Design-Builder or any Contractor is not performing the Work in a proper, safe, and skillful manner, then Design-Builder shall, or shall cause such Contractor to, remove such individual and such individual shall not be re-employed on the Work. If, after notice and reasonable opportunity to cure, such individual is not removed or if Design-Builder fails to ensure that skilled and experienced personnel are furnished for the proper performance of the Work, then GDOT may suspend the affected portion of the Work by delivering to Design-Builder Notice of such suspension. Such suspension shall in no way relieve Design-Builder of any obligation contained in the Design-Build Documents or entitle Design-Builder to any additional compensation or time extension hereunder.

10.6.4 Certain Certifications; Compliance with Certain Laws.

10.6.4.1 Design-Builder, its Contractors, and all Subcontractors shall comply with the Georgia Immigration & Compliance Act ("Immigration Act"), O.C.G.A. § 13-10-90 *et seq.* Design-Builder must deliver the affidavit certifying compliance with the Immigration Act using the form attached as DBA Exhibit 15, Part A (Required State Certifications, Part A Georgia Security and Immigration Compliance Act Affidavit). Design-Builder's Form R, delivered with its Proposal, is deemed delivered as of the Effective Date. Design-Builder, its Contractors, and all Subcontractors must certify compliance with State of Georgia's Sexual Harassment Prevention Policy using the form attached as DBA Exhibit 15, Part B (*Required State Certifications, Part B Certification of Compliance with the State of Georgia's Sexual Harassment Prevention Policy*). Design-Builder's Form U, delivered with its Proposal, is deemed delivered as of the Effective Date.

10.6.5 Design-Builder, its Contractors, and all Subcontractors must certify compliance with the Drug-free Workplace Act, O.C.G.A. § 50-24-1 *et seq.* using the form attached as DBA Exhibit 15, Part C (*Required State Certifications, Part C Drug Free Workplace*). Design-Builder's Form T, delivered with

its Proposal, is deemed delivered as of the Effective Date. The required certificates and affidavits obtained by or for Design-Builder under this DBA Section 10.6.4 (*Certain Certifications; Compliance with Certain Laws*) must be filed with GDOT and copies maintained by Design-Builder and each Contractor as of the Effective Date, as well as any recertifications or other actions necessary to maintain the veracity of such certificates and affidavits (as may be required by other Governmental Entities or otherwise to comply with applicable Law). State officials, including officials of the Georgia Department of Labor, GDOT, retain the right to inspect and audit the Project and employment records of Design-Builder and all Contractors without notice during normal working hours until the Work under the applicable Contract is complete, and as otherwise specified by Law.

10.7 Ethical Standards

10.7.1 Within 90 days after the Effective Date, Design-Builder shall adopt written policies establishing ethical standards of conduct for Design-Builder and all Design-Builder-Related Entities, including Design-Builder's supervisory and management personnel, in dealing with (a) GDOT, and (b) employment relations. Such policy shall be subject to review and comment by GDOT prior to adoption. Such policy shall include standards of ethical conduct concerning the following:

10.7.1.1 restrictions on gifts and contributions to, and lobbying of, GDOT, the State Transportation Board, and any of their respective Constituents;

10.7.1.2 protection of employees from unethical practices in selection, use, hiring, compensation, or other terms and conditions of employment, or in firing, promotion, and termination of employees;

10.7.1.3 protection of employees from retaliatory actions (including discharge, demotion, suspension, threat, harassment, pay reduction, or other discrimination in the terms and conditions of employment) in response to reporting of illegal (including the making of a false claim), unethical or unsafe actions or failures to act by Design-Builder or any Design-Builder-Related Entity;

10.7.1.4 restrictions on directors, members, officers, or supervisory or management personnel of Design-Builder or any Design-Builder-Related Entity engaging in any transaction or activity, including receiving or offering a financial incentive, benefit, loan, or other financial interest, that is, or to a reasonable person appears to be, in conflict with or incompatible with the proper discharge of duties or independence of judgment or action in the performance of duties, or adverse to the interests of the Project or employees;

10.7.1.5 restrictions on use of office or job position for a purpose that is, or would to a reasonable person appear to be, primarily for the private benefit of a director, member, officer, or supervisory or management person, rather than primarily for the benefit of Design-Builder or the Project, or primarily to achieve a private gain or an exemption from duty or responsibility for a director, member, officer, or supervisory or management person; and

10.7.1.6 restrictions on directors, members, officers, or employees of Design-Builder or any Design-Builder-Related Entity performing any of the Work if the performance of such services would be prohibited under GDOT's published conflict of interest rules and policies applicable to GDOT's design-build program.

10.7.2 Design-Builder shall cause its Constituents, and require those Constituents of all other Design-Builder-Related Entities, to adhere to and enforce the adopted policies on ethical standards of

conduct. Design-Builder shall establish reasonable systems and procedures to promote and monitor compliance with the policies.

10.7.3 Design-Builder shall furnish copies of such adopted policies on ethical standards of conduct to GDOT upon GDOT's request.

10.8 Non-Discrimination; Equal Employment Opportunity

10.8.1 Design-Builder shall not, and shall cause the Contractors to not, discriminate on the basis of race, color, national origin, sex, age, religion, or handicap in the performance of the Work under the Design-Build Documents. Design-Builder shall carry out, and shall cause the Contractors to carry out, applicable requirements in accordance with federal contract provisions. Failure by Design-Builder or Contractor to carry out these requirements is a material breach of this Design-Build Agreement, which may result in a Default Termination Event and the termination of this Design-Build Agreement or such other remedy permitted hereunder as GDOT deems appropriate (subject to Design-Builder's rights to notice and opportunity to cure set forth in this Design-Build Agreement), but is not limited to (a) withholding processing of invoices from Design-Builder under DBA Exhibit 7 (*Contract Sum and Payment Terms*) for any Work performed until corrective action is taken (but not payments pursuant to approved invoices); (b) assessing sanctions; (c) Liquidated Damages and other Deductions; and/or (d) disqualifying Design-Builder or the Contractor from future bidding as non-responsible.

10.8.2 Design-Builder shall include the following provisions, verbatim (filling in blanks, removing brackets, and only such other changes as required to reflect properly the identity of the parties), in every Contract (including purchase orders and in every Contract of Design-Builder or any Design-Builder-Related Entity for Work), and shall require that they be included in all Contracts at lower tiers, so that such provisions will be binding upon each Contractor and Subcontractor:

> [_____]***[insert formal name of Contractor, Subcontractor, or Supplier]*** ("Contractor") shall not, and shall cause its contractors, subcontractors, suppliers, and other vendors to not, discriminate on the basis of race, color, national origin, or sex, age, religion, or handicap in the performance of the "Work" as defined under that certain Design-Build Agreement for the [_____] Project, dated as of [_____]***[insert effective date of the Design-Build Agreement]***, by and between the Georgia Department of Transportation ("GDOT") and [_____]***[Design-Builder's name]*** ("Design-Builder, and such agreement, the "Design-Build Agreement").
>
> Contractor shall carry out, and shall cause its contractors, subcontractors, suppliers, and other vendors to carry out, applicable requirements under its [contract with Design-Builder]/[subcontractor with the Design-Builder's contractor]***[use appropriate bracketed language and delete other bracketed language depending upon whether a contractor to the Design-Builder or a subcontractor to such a contractor]*** in accordance with federal contract provisions identified, referenced, or otherwise applicable under the Design-Build Agreement. Contractor acknowledges that failure by Contractor to carry out these requirements is a material breach by the Design-Builder of the Design-Build Agreement, which may result in termination or exercise of other remedies by GDOT.

10.8.3 Design-Builder confirms for itself and all Contractors that Design-Builder and each Contractor has an equal employment opportunity policy ensuring equal employment opportunity without regard to race, color, national origin, sex, age, religion, or handicap; and that Design-Builder and each Contractor maintains no employee facilities segregated on the basis of race, color, national origin, sex, age, religion, or handicap. Design-Builder shall comply with all applicable Equal Employment Opportunity and

nondiscrimination provisions, including those set forth in DBA Exhibit 8 (*Other Legal Requirements*), and shall require its Contractors to comply with such provisions.

10.9 Reserved

10.10 Job Training Program

10.10.1 Design-Builder shall provide on-the-job training, and Design-Builder shall submit to GDOT for review and acceptance an OJT Plan meeting all requirements set forth in the OJT Requirements.

10.10.2 Design-Builder may include provisions to implement the OJT Plan in each Contract to which it is a party and may require that such provisions be included in all Contracts at lower tiers so that such provisions will be binding upon each Contractor.

10.10.3 Design-Builder shall comply with 23 C.F.R. § 230.111. Design-Builder acknowledges that Design-Builder's OJT Plan is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

10.10.4 This DBA Section 10.10 (*Job Training Program*) shall not apply to Contracts with Governmental Entities, if any.

10.11 OJT Goal

10.11.1 The OJT Goal is set forth in Section 2.1 (*OJT Goal and Requirements*) of the OJT Requirements.

10.11.2 Following issuance of NTP2, Design-Builder shall submit, in accordance with TP Section 2.9 (Submittals) and the Submittal Requirements Database, the OJT Progress Report as required under Section 2.1 (*OJT Goal and Requirements*) of the OJT Requirements.

10.11.3 Design-Builder shall notify GDOT within 10 Business Days after the termination of employment or engagement (for any reason) of a trainee under Design-Builder's OJT Plan with respect to the Project.

10.11.4 Design-Builder shall exercise good faith efforts to achieve the OJT Goal through implementation of Design-Builder's accepted OJT Plan, and Design-Builder (or its Contractors) shall document such good faith efforts undertaken by Design-Builder or the Contractor. If GDOT requests documentation of Design-Builder's or Contractor's good faith efforts, Design-Builder shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of Design-Builder or Contractor, and GDOT will provide a written determination stating whether or not good faith efforts have been demonstrated, as determined in GDOT sole discretion.

10.11.5 If Design-Builder fails to submit an OJT Progress Report in accordance with Section 2.1 (*OJT Goal and Requirements*) of the OJT Requirements or otherwise fails to comply with the requirements set forth in the OJT Requirements, Nonrefundable Deductions will be assessed against Design-Builder in accordance with DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

10.11.6 Design-Builder acknowledges and agrees that GDOT shall have the right to conduct monitoring, reviewing, inspection, and other oversight functions in relation to Design-Builder's compliance with the OJT Plan and Design-Builder's exercise of good faith efforts to achieve the OJT Goal in accordance with TP Section 3 (Design-Builder Quality Program).

10.12 Prevailing Wages

10.12.1 Design-Builder shall pay or cause to be paid to all applicable workers employed by it or its Contractors or Subcontractors to perform the Work not less than the prevailing rates of wages, as provided in the statutes and regulations applicable to public work contracts, including the Davis-Bacon Act, and as provided in DBA Exhibit 8 (*Other Legal Requirements*). Design-Builder shall comply and cause its Contractors to comply with all Laws pertaining to prevailing wages. For the purpose of applying such Laws, the Project shall be treated as a public work paid for in whole or in part with public funds (regardless of whether public funds are actually used to pay for the Project). The foregoing shall not apply to Contracts at any tier with Governmental Entities.

10.12.2 It is Design-Builder's sole responsibility to determine the wage rates required to be paid. In the event rates of wages and benefits change while this Design-Build Agreement is in effect, Design-Builder shall bear the cost of such changes and shall have no basis for any claim against GDOT at law or in equity on account of such changes (including on the basis of Design-Builder's lack of knowledge or a misunderstanding of any such requirements).

10.12.3 Design-Builder shall comply and require its Contractors, other than GDOT or Governmental Entities acting as Contractors, to comply with all Laws regarding notice and posting of intent to pay prevailing wages, of prevailing wage requirements and of prevailing wage rates.

10.13 No Retainage; Prompt Payment to Contractors and Pay When Paid Provisions

10.13.1 Upon receipt of payment from or on behalf of GDOT, Design-Builder shall pay each Contractor for satisfactory performance of their contracted portion of the Work no later than 10 calendar days from receipt of each payment made by or on behalf of GDOT to Design-Builder. Any delay or postponement of any payment from Design-Builder to a Contractor may take place only for good cause with prior written approval from GDOT. Noncompliance with the foregoing payment obligation constitutes a breach of this Design-Build Agreement, and GDOT may withhold further payments to (or processing of Invoices from) Design-Builder for any Work performed until corrective action is taken. If corrective action is not taken, it may result in termination of this Design-Build Agreement. Without limiting Design-Builder's other obligations under the Design-Build Documents, Design-Builder shall maintain records and documents of payments to Contractors, for a minimum of three years after the Final Acceptance Date. These records and documents shall be made available for inspection upon request by GDOT and the U.S. Department of Transportation, or any of their designated representatives. Design-Builder shall require these requirements to be included in all Contracts at each tier.

10.13.2 GDOT shall have no obligation to pay or to see to the payment of money to the Contractors or Subcontractors, except as may otherwise be required by Law, provided however, that GDOT reserves the right to make payments to Design-Builder and jointly payable to any such parties where Design-Builder has failed to remit payments properly due and as required.

10.13.3 For avoidance of doubt, "prompt payment" under this DBA Section 10.13 (*No Retainage; Prompt Payment to Contractors and Pay When Paid Provisions*) includes the "prompt payment" obligations under GDOT Contract Special Provision – Prompt Payment, first use 2021, dated April 16, 2021, and as may be updated from time to time).

10.13.4 Further, neither Design-Builder, any Contractor, nor any Subcontractor shall impose retainage upon any consultant, laborer, subcontractor, vendor, materialman or supplier with whom any of them have contracted.

10.13.5 Design-Builder shall provide GDOT with details regarding the withholding of any payments to Contractors or Subcontractors, including specificity as to amounts and the basis for such withholding.

10.14 Suspension and Debarment

In addition to those certificates provided under DBA Section 10.3.3.1 (*Additional Requirements for Certain Contracts*), DBA Section 19.2.2 (*Standards and Procedures for Certain GDOT Approvals*), and under Attachment 2 to DBA Exhibit 8 (*Other Legal Requirements*), Design-Builder shall deliver to GDOT, no more frequently than annually, and upon GDOT's request, signed certifications regarding suspension, debarment, ineligibility, voluntary exclusion, convictions, and civil judgments from Design-Builder, from each affiliate of Design-Builder (as "affiliate" is defined in 29 C.F.R. § 98.905 or successor regulation of similar import), and from each Contractor whose Contract amount equals or exceeds $100,000. The certification shall be substantially in the form of paragraphs 1.a through 1.d of Attachment 7 to DBA Exhibit 8 (*Other Legal Requirements*). Nothing in this DBA Section 10.13 (*Suspension and Debarment*) shall limit or abrogate DBA Section 17.1.1.9 (*Design-Builder Default*).

10.15 Design-Builder Team Identification

Any uniforms, badges, logos, and other identification worn by personnel of Design-Builder or Design-Builder-Related Entities or on Design-Builder team vehicles used to access the Site or otherwise to perform the Work shall bear colors, lettering, design, or other features (a) so as to be clearly visible from a distance, and (b) to assure clear differentiation from those of GDOT and its employees.

10.16 Boycott of Israel

Pursuant to O.C.G.A. Sec. 50-5-85, Design-Builder certifies that it is not currently engaged in, and agrees that for the duration of the Project, it will not engage in a boycott of Israel.

Article 11 RELATED AND OTHER FACILITIES

11.1 Integration with Related Transportation Facilities

11.1.1 Design-Builder shall locate, configure, design, and construct the termini, interchanges, entrances, and exits of the Project so that the Project will be compatible and integrated with the location, configuration, design, operation and maintenance of, and provide a smooth, safe transition of traffic to and from, Related Transportation Facilities, as set forth in TP Section 1.3 (Related Transportation Facilities). The design for the Project shall include and provide for such compatibility, integration, and transition. The design and construction of the Project shall satisfy all of the Technical Provisions and provisions of the Project Management Plan relating to compatibility, integration, and transition with or at Related Transportation Facilities, including those concerning signage, signaling, and communications with Users.

11.1.2 Without limiting the foregoing, Design-Builder shall cooperate and coordinate with GDOT and any third party that owns, constructs, manages, operates, or maintains a Related Transportation Facilities with regard to the construction, maintenance, and repair programs and schedules for such Related Transportation Facilities, in order to minimize disruption to the operation thereof.

11.1.3 To assist Design-Builder, and in each case to the extent GDOT has the legal right to do so and any of the following are reasonably accessible by or available to GDOT, GDOT will provide to Design-Builder during normal working hours, reasonable access to plans, surveys, drawings, as-built drawings, specifications, reports, and other documents and information in the possession of GDOT or its contractors and consultants pertaining to Related Transportation Facilities. Design-Builder, at its expense, shall have the right to make copies of the same. Design-Builder, at its expense, shall conduct such other inspections, investigations, document searches, surveys, and other work as may be necessary to achieve compatibility, integration and transition with those Related Transportation Facilities identified in TP Section 1.3 (Related Transportation Facilities).

11.1.4 GDOT will provide reasonable assistance to Design-Builder, upon its request and at its expense, in obtaining cooperation and coordination from third parties that own, manage, operate, or maintain Related Transportation Facilities and in enforcing rights, remedies, and warranties that Design-Builder may have against any such third parties. Such assistance may include GDOT's participation in meetings and discussions. In no event shall GDOT be required to bring any legal action or proceeding against any such third party.

11.1.5 GDOT will have at all times, without obligation or liability to Design-Builder, the right to conduct traffic management activities on GDOT's Related Transportation Facilities and all other facilities of the State transportation network in the area of the Project in accordance with its standard traffic management practices and procedures in effect from time to time.

11.2 Reserved

Article 12 SAFETY

12.1.1 Design-Builder is responsible for the safety of the workers and public on the Site during the arising out of, relating to, or resulting from performance of the Work.

12.1.2 Design-Builder shall take all reasonable precautions and provide protection against any and all unsafe, or potentially unsafe, conditions, as well as such other conditions that are inconsistent with Good Industry Practice or give rise to a threat to the health and safety of the public or workers (or both), or that would be inconsistent with applicable Laws.

12.1.3 Design-Builder shall, and shall cause all Design-Builder-Related Entities to, perform the Work in such a proper, safe, and skillful manner so as to diminish or eliminate any and all unsafe, or potentially unsafe, conditions, as well as such other conditions that are inconsistent with Good Industry Practice or give rise to a threat to health and safety of the public or workers (or both) or that would be inconsistent with applicable Laws, that, in each case, pose, or could reasonably be determined to pose, a threat to the health and safety of the public or to workers (or both). The obligation under this DBA Section 12 (Safety) includes making any and all improvements, repairs, reconstructions, rehabilitations, restorations, renewals, replacements, and changes in configuration or procedures respecting the Project as may be necessary to correct a specific safety condition or risk of the Project.

12.1.4 In performing the Work, Design-Builder shall, and shall cause all Design-Builder-Related Entities to, take such action as in its reasonable opinion is necessary to remove any immediate and present threat to the safety of life or property.

12.1.5 Refer to the accepted Project Management Plan, TP Attachment 2-4 (Safety Requirements) and TP Attachment 1-5 (Project Office Facilities and Equipment) for further safety-related obligations of Design-Builder hereunder. Design-Builder shall implement the safety-related requirements and obligations as developed further to Project Management Plan, TP Attachment 2-4 (Safety Requirements) and TP Attachment 1-5 (Project Office Facilities and Equipment).

Article 13 RELIEF EVENTS; COMPENSATION EVENTS

13.1 Notices

13.1.1 General Notice Requirements

13.1.1.1 Except as otherwise expressly provided in this Design-Build Agreement, in order to request relief, in the form of an extension of time, relief from obligations, or relief from any rights of GDOT under DBA Section 18.2 (*Termination for Design-Builder Default*) (as applicable), or compensation pursuant to this DBA Article 13 (*Relief Events; Compensation Events*), Design-Builder shall submit:

(a) with respect to each Relief Event, an Initial Relief Event Notice followed by a Detailed Relief Event Notice;

(b) with respect to each Compensation Event, an Initial Compensation Event Notice followed by a Detailed Compensation Event Notice; and

(c) with respect to a precipitating event that is both a Relief Event and a Compensation Event, both an Initial Relief Event Notice and an Initial Compensation Event Notice, followed by the applicable detailed notices, to GDOT, all in accordance with this DBA Section 13.1 (*Notices*).

13.1.1.2 The first Initial Relief Event Notice shall be labeled "Initial Relief Event Notice No. 1" and the first Detailed Relief Event Notice with respect to Initial Relief Event Notice No. 1 shall be labeled "Detailed Relief Event Notice No. 1," with subsequent Relief Event Notices numbered sequentially.

13.1.1.3 The first Initial Compensation Event Notice shall be labeled "Initial Compensation Event Notice No. 1" and the first Detailed Compensation Event Notice with respect to Initial Compensation Event Notice No.1 shall be labeled "Detailed Compensation Event Notice No. 1," with subsequent Compensation Event Notices numbered sequentially.

13.1.1.4 Time is of the essence in Design-Builder's delivery of its Relief Event Notice or Compensation Event Notice. Accordingly, if for any reason Design-Builder fails to deliver a Relief Event Notice or Compensation Event Notice (or both) in strict accordance with DBA Section 13.1.2 (*Relief Event Notice*) or DBA Section 13.1.3 (*Compensation Event Notice*), then Design-Builder shall be deemed to have irrevocably and forever waived the right to assert a Relief Event or Compensation Event, or both, as applicable, with respect to the precipitating event.

13.1.1.5 From and after the Starting Date, Design-Builder shall

(a) maintain daily records of claimed delays, in accordance with TP Section 2.5 (Project Management Controls System) and shall show such claimed delays including description of the asserted delay in accordance with TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements) ("Relief Event Records"), and

(b) maintain daily records of compensable amounts in accordance with DBA Section 13.4 (*Compensation Events Principles*) and TP Section 2.5 (Project Management Controls System), including actual equipment, labor and materials costs incurred, actual cost savings, and mitigation measures taken ("Compensation Event Records").

13.1.1.6 If any Relief Event Notice or Compensation Event Notice concerns any Hazardous Materials, then Design-Builder shall be deemed to have waived the right to collect any and all costs incurred in connection therewith to the extent that GDOT is not afforded the opportunity to inspect such material or condition before it is disturbed; provided, however, that, without limiting GDOT's actions under Exhibit 10 (*Hazardous Materials Risk Allocation Terms*), under a TRIP response, and where Design-Builder complies with corresponding requirements under TP Section 19 (Maintenance), no action by Design-Builder to stabilize or minimize any Hazardous Materials Release (including any such action required by applicable Law) shall be deemed to waive Design-Builder's right to collect any costs incurred in connection with any such Relief Event or Compensation Event, except and to the extent any such action to stabilize or minimize any Hazardous Materials Release exacerbates an existing release or condition.

13.1.2 Relief Event Notice

13.1.2.1 Initial Relief Event Notices. Design-Builder shall deliver Initial Relief Event Notices within 15 Business Days following the date of the precipitating event ("Starting Date"). An Initial Relief Event Notice shall include:

(a) a statement that it is an Initial Relief Event Notice under this DBA Section 13.2 (*Relief Event Notice*);

(b) a description of the relevant Relief Event (and citation to the corresponding clause in the definition of "Relief Event") upon which the delay or inability to perform is based, including its nature, the reasons why Design-Builder believes additional time will or may be due, and the Starting Date, and its actual (or if it has not concluded, its anticipated) duration, all in reasonable detail based upon the information then available to Design-Builder, having made reasonable inquiry;

(c) a statement as to Design-Builder's intention to claim an extension of time, relief from obligations and/or relief from any rights of GDOT under DBA Section 18.2 (*Termination for Design-Builder Default*) (as applicable) under this DBA Article 13 (*Relief Events; Compensation Events*); and

(d) all Relief Event Records available as of the date of the Initial Relief Event Notice.

13.1.2.2 Detailed Relief Event Notices. Following submission of an Initial Relief Event Notice, Design-Builder shall submit a notice that complies with this DBA Section 13.1.2.2 (a "Detailed Relief Event Notice") to GDOT as soon as practicable (and in any event within 40 Business Days after submission of the Initial Relief Event Notice or such longer period as the Parties agree in writing). A Detailed Relief Event Notice shall include:

(a) a statement that it is a Detailed Relief Event Notice under this Section 13.1.2 (*Relief Event Notice*);

(b) full details of the relevant Relief Event with reasonable specificity (as available to Design-Builder having made reasonable inquiries), including:

(i) the nature of the Relief Event;

(ii) the Starting Date and duration of the Relief Event (to the extent the Relief Event has ceased) or estimated duration of the Relief Event (to the extent the Relief Event has not ceased);

(iii) the location and items of the Work or other obligations affected;

(iv) any Persons involved, including Design-Builder or any Design-Builder-Related Entity, Utility Owner, and Governmental Entity; and

(v) the contractual basis for the Relief Event claim, including citation to the relevant clause of the definition of "Relief Event" and the relevant Section of this Design-Build Agreement, including under the Technical Provisions;

(c) the effect of the Relief Event on Design-Builder's ability to perform any of its obligations under the Design-Build Documents, including details of the relevant obligations claimed or reasonably likely to be claimed (as applicable) under this DBA Article 13 (*Relief Events; Compensation Events*) as materially and adversely affected;

(d) a Time Impact Analysis in accordance with TP Section 2.4.5 (Time Impact Analysis) demonstrating that the relevant Relief Event will result in an identifiable and measurable disruption to the Work, that

(i) will impact a Critical Path activity; or

(ii) consume all the Float with respect to a non-Critical Path activity, such that in either case the Critical Path of the preceding statused Baseline Project Schedule is altered, and the time required to achieve a Milestone will be extended, after taking into account any reduction to the period of disruption due to a concurrent delay in accordance with DBA Section 13.3.2 (*Limitations on Time Extensions*);

(e) an explanation of the measures that Design-Builder has taken or proposes to undertake to mitigate all or some of the delay and other consequences of the Relief Event; and

(f) a Relief Event Package meeting the requirements specified in DBA Section 13.1.4 (*Compensation Event Packages and Relief Event Packages*).

13.1.2.3 Continuing Relief Event; Additional Event(s).

(a) From and after delivery of the Initial Relief Event Notice, Design-Builder shall report the status of the Relief Event, including any Relief Event Records recorded after the date of the immediately preceding report, to GDOT on a monthly basis, concurrent with the monthly Project Schedule Update Submittal in accordance with TP Section 2.3.3 (Project Schedule Updates).

(b) If, following delivery of a Detailed Relief Event Notice, while the asserted Relief Event is ongoing (i.e., the event has not concluded), Design-Builder receives or becomes aware of any further information relating to the asserted Relief Event, but subject to DBA Section 13.1.2.3(c) (*Continuing Relief Event; Additional Event(s)*), Design-Builder shall amend its original Detailed Relief Event Notice (labeling as, for example, "Amendment 1 to Detailed Relief Event Notice No. 1") and deliver such amended Notice to GDOT not later than five Business Days after Design-Builder's receipt or knowledge of the additional information. GDOT may request from Design-Builder any further information that GDOT may reasonably require, and Design-Builder shall supply the same within a reasonable period but not later than five Business Days after such GDOT request. Within five Business Days after the conclusion of an asserted Relief Event, Design-Builder shall update (or further update), by amendment, its Detailed Relief Event Notice (or if Design-Builder has not yet delivered the Detailed Relief Event Notice and the time for delivery of the Detailed Relief Event Notice has not lapsed, Design-builder shall amend its Initial Relief Event Notice)with the date of its actual or estimated conclusion. It is the intent of the Parties that the original Relief Event Notice meet all of the requirements of DBA Section 13.1.2.1 (*Initial Relief*

Event Notice) and DBA Section 13.1.2.2 (*Detailed Relief Event Notice*) and not allow the Design-Builder to present cursory or pro forma information to GDOT, so as to rely on this DBA Section 13.1.2.3 (*Continuing Relief Event; Additional Event(s)*) to provide information then-available at a later date, and GDOT may, and shall be deemed to have reasonably, reject(ed) any purported amendment to the original Relief Event Notice offering such information.

(c) Any additional event asserted after delivery of the Detailed Relief Event Notice by Design-Builder as either a Compensation Event or a Relief Event may not be included in the amended Relief Event Notice(s) delivered pursuant to DBA Section 13.1.2.3(b) (*Continuing Relief Event; Additional Event(s)*), as Design-Builder's assertion of an entitlement to relief or compensation as a result of such additional events shall be handled separately as Compensation Event Notices or Relief Event Notices, as applicable, to proceed according to this DBA Article 13 (*Relief Events; Compensation Events*).

13.1.3 Compensation Event Notice

13.1.3.1 Initial Compensation Event Notices. Design-Builder shall deliver Initial Compensation Events Notices within 15 Business Days following the Starting Date of the precipitating event. An Initial Compensation Event Notice shall include:

(a) a statement that it is an Initial Compensation Event Notice under this DBA Section 13.1.3;

(b) a description of the relevant Compensation Event (and citation to the corresponding clause in the definition of "Compensation Event") upon which Design-Builder's asserted entitlement to additional monetary compensation is based, including its nature, the reasons why Design-Builder believes additional costs will or may be due, the Starting Date and its actual (or if it has not concluded, its anticipated) duration, and the portion of the Project affected, all in reasonable detail based upon information then available to Design-Builder, having made reasonable inquiry;

(c) a statement as to Design-Builder's intention to claim compensation under DBA Article 13 (*Relief Events; Compensation Events*); and

(d) all Compensation Event Records available as of the date of the Compensation Event Notice.

13.1.3.2 Detailed Compensation Event Notices. Following submission of an Initial Compensation Event Notice, Design-Builder shall submit a notice that complies with this DBA Section 13.1.3.2 (a "Detailed Compensation Event Notice"), as soon as practicable (and in any event within 40 Business Days of submission of the Initial Compensation Event Notice or such longer period as the Parties agree in writing). A detailed Compensation Event Notice shall include:

(a) a statement that it is a Detailed Compensation Event Notice under this DBA Section 13.1.3.2;

(b) full details of the relevant Compensation Event with reasonable specificity (as available to Design-Builder having made reasonable inquiries), including:

(i) the nature of the Compensation Event;

(ii) the Starting Date and duration of the Compensation Event (to the extent the Compensation Event has ceased) or estimated duration of the Compensation Event (to the extent the Compensation Event has not ceased);

(iii) the location and items of the Work or other obligations affected;

(iv) any entities involved, including Design-Builder or any Design-Builder-Related Entity, Utility Owner, and Governmental Entity; and

(v) the contractual basis for the Compensation Event claim, including citation to the relevant clause of the definition of "Compensation Event" and the relevant Section of this Design-Build Agreement, including under the Technical Provisions;

(c) subject to clause (g) of this DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*), a statement of the basis that any asserted additional work or costs are not already included in the Work;

(d) identification of particular elements of performance for which additional compensation may be sought;

(e) an explanation of the measures that Design-Builder has taken or proposes to undertake to mitigate all or some of the costs and other consequences of the Compensation Event;

(f) a narrative of the Design-Builder's proposed mitigation efforts, including cost impacts with respect thereto:

(g) Without limiting DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), Design-Builder's actual costs, whether incurred or to be incurred (with substantiating information as part of the Compensation Event Records) directly resulting from the Compensation Event, and in each case, subject to the constraints and other requirements, if any, pertaining thereto.

(i) Notwithstanding the preamble of this clause (g) of this DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*), GDOT may elect, in its sole discretion, to accept estimated costs in lieu of actual costs, as to some or all of that which results from the Compensation Event. Estimate costs, if permitted, shall be set forth in such a way and in sufficient detail, to afford GDOT a fair evaluation of such estimates given the circumstances of the asserted Compensation Event.

(ii) Without limiting DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), if estimated costs are so elected, then the Design-Builder shall periodically update the Detailed Compensation Event Notice with actual costs, as and when incurred, correcting the corresponding estimate.

(iii) Without limiting DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), the Design-Builder shall likewise periodically update the Detailed Compensation Event Notice accounting for the beneficial effects or cost savings of the Compensation Event on the Project.

(iv) GDOT may, as part of a Compensation Event Determination, require, in its sole discretion, a subsequent accounting of actual costs (with substantiating information), and condition agreement on any Supplemental Agreement to a revised Compensation Event Package resulting therefrom; and

(h) a Compensation Event Package meeting the requirements specified in DBA Section 13.1.4 (*Compensation Event Packages and Relief Event Packages*) and, as may be agreed by GDOT, under clause (g) of this DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*).

13.1.4 Compensation Event Packages and Relief Event Packages

13.1.4.1 Design-Builder shall deliver to GDOT as soon as practicable and in any event no later than concurrent with the Detailed Compensation Event Notice for any asserted Compensation Event, and concurrent with the Detailed Relief Event Notice for any asserted Relief Event, a Relief Event Package, if arising out of the same event or occurrence.

13.1.4.2 If Design-Builder promptly requests that GDOT consent to provide Design-Builder with additional time to provide certain information required for a Compensation Event Package or Relief Event Package, and Design-Builder provides with its request reasonable evidence demonstrating that Design-Builder is unable to provide such information within the required time and a specific schedule indicating when the Design-Builder will provide the relevant information, then GDOT may elect, in its sole discretion, to grant a longer time period, specified by GDOT in its sole discretion, for Design-Builder to provide such currently unavailable information to GDOT.

13.1.4.3 Each Compensation Event Package and Relief Event Package shall at a minimum include:

(a) (for asserted Relief Events only) a scope of work describing in detail satisfactory to GDOT all activities associated with the asserted Relief Event;

(b) (for asserted Compensation Events only) a total costs (based upon actual costs incurred from the Starting Date until the date of the Detailed Compensation Event Notice as evidenced by the Compensation Event Records, except as GDOT may agree otherwise under clause (g) of DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*)). Design-Builder shall indicate whether it intends that the Work is to be performed by Contractors (and potentially Subcontractors), and if the work is sufficiently defined to obtain Contractor and Subcontractor quotes, Design-Builder shall obtain quotes (with breakdowns showing cost of labor, materials, equipment, overhead and profit) on the relevant Contractor's and Subcontractor's stationery and shall include such quotes as back-up for Design-Builder's cost calculation. If Design-Builder intends to perform the Work with internal forces or Affiliates, Design-Builder shall provide back-up for its costs on an Open Book Basis in accordance with DBA Section 13.4.1.6 (*Determining Compensation Amounts*);

(c) if Design-Builder claims that a Relief Event has occurred concurrently that adversely affecting the Critical Path, the Time Impact Analysis provided for in DBA Section 13.1.2.2(d) (*Detailed Relief Event Notice*);

(d) a narrative justification detailing all causes of the asserted Relief Event or Compensation Event (or both), citing to the applicable provisions of the Design-Build Documents (including specifically the relevant clause of the definition(s) of Relief Event or Compensation Event), and describing the data and documents that establish the necessity of (in the case of Relief Events), any asserted relief and/or (in the case of Compensation Events) any asserted additional compensation;

(e) all Relief Event Records available as of the date of the Detailed Relief Event Notice, and all Compensation Event Records available as of the date of the Detailed Compensation Event Notice, it being the Parties' intent that for those Relief Events and Compensation Events that are asserted concurrently, these dates shall be the same date;

(f) a description of all insurance that is actually carried by or insuring Design-Builder under policies solely with respect to the Project and the Work, regardless of whether required to be carried pursuant to DBA Section 16.1 (*Insurance*), and that provides coverage to pay, reimburse or provide for any cost impacts attributable to the Compensation Event; and

(g) a sworn certification in the form provided in DBA Exhibit 22 (*Form of Certificate Regarding Relief Event and Compensation Event*) of Design-Builder (and Contractor(s) and Subcontractor(s), as applicable, if involved in the Work or event/occurrence).

13.1.4.4 Notwithstanding the absence of any agreement or direction under clause (g) of DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*)), Design-Builder shall amend the cost estimate in its Compensation Event Package to provide additional information replacing estimated costs with actual costs incurred as of the date of the amendment, in accordance with the process for amendments set forth in DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), and on a schedule to be aligned with Project Schedule Updates.

13.1.5 Requests for Further Information. Following Design-Builder's submission of a Relief Event Notice or Compensation Event Notice and prior to GDOT's Relief Event Determination or Compensation Event Determination, or if disputed, its final determination pursuant to Dispute Resolution Procedures pursuant DBA Section 17.8 (*Dispute Resolution Procedures*): GDOT may request from Design-Builder any further information that GDOT may reasonably require in order to evaluate Design-Builder's request for relief or compensation, and Design-Builder must supply such information within 5 Business Days after such request.

13.1.6 Continuing Compensation Event; Additional Event(s).

(a) From and after delivery of the Initial Compensation Event Notice, Design-Builder shall report the status of the Compensation Event including any Compensation Event Records recorded after the date of the immediately preceding report, to GDOT on a monthly basis, on a schedule to be aligned with Project Schedule Updates.

(b) If, following delivery of a Detailed Compensation Event Notice, while the asserted Compensation Event is ongoing (i.e., the event has not concluded), Design-Builder receives or becomes aware of any further information relating to the asserted Compensation Event, then Design-Builder shall amend its original Detailed Compensation Event Notice (labeling as, for example, "Amendment 1 to Detailed Compensation Event Notice No. 1") and deliver such amended Notice to GDOT not later than five Business Days after Design-Builder's receipt or knowledge of the additional information. Any such amendment shall be in addition to the monthly amendment updating the cost estimate with additional actual costs incurred through the date of the amendment, as required pursuant to DBA Section 13.1.4.3(b) (*Compensation Event Packages and Relief Event Packages*), GDOT may request from Design-Builder any further information that GDOT may reasonably require, and Design-Builder shall supply the same within a reasonable period but not later than five Business Days after such GDOT request. Within five Business Days after the conclusion of an asserted Compensation Event, Design-Builder shall update (or further update), by amendment, its Detailed Compensation Event Notice (or if Design-Builder has not yet delivered the Detailed Compensation Event Notice and the time for delivery of the Detailed Compensation Event Notice has not lapsed, Design-Builder shall amend its Initial Compensation Event Notice) with the date of its actual or estimated, where permitted hereunder, conclusion. It is the intent of the Parties that the original Compensation Event Notice meet all of the requirements of DBA Section 13.1.3.1 (*Initial Compensation Event Notices*) and DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*) and not present cursory or *pro forma* information to GDOT, so as to rely on this DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*) to provide information then-available at a later date, and GDOT may, and shall

be deemed to have reasonably, reject(ed) any purported amendment to the original Compensation Event Notice offering such *pro forma* information.

(c) Any additional event asserted after delivery of the Detailed Compensation Event Notice by Design-Builder as a Compensation Event shall not be included in the amended Compensation Event Notice(s) delivered pursuant to DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), as Design-Builder's assertion of an entitlement to relief or compensation as a result of such additional events shall be handled separately as Compensation Event Notices or Relief Event Notices, as applicable, to proceed according to this DBA Article 13 (*Relief Events; Compensation Events).*

13.2 Relief Event and Compensation Event Determinations

13.2.1 No later 40 Business Days after receiving the Relief Event Package and any additional information pursuant to DBA Section 13.1.5 (*Requests for Further Information*) or DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), or such longer period of time to which the Parties may mutually agree in writing, GDOT will issue a Relief Event Determination. GDOT will specify in the Relief Event Determination;

(a) the relevant obligations for which relief is given or denied;

(b) the period of time set forth in the Baseline Project Schedule that will be extended, if any, based on the number of days of delay affecting a Critical Path, after consumption of Float available pursuant to DBA Section 3.5 (*Float*), that is directly attributable to the Relief Event and that cannot be avoided through reasonable mitigation measures;

(c) if applicable, the period of time, if any, that any Milestone Deadline and the Contract Time will be extended; and

(d) without limiting DBA Section 3.2.5.1(a) (*Revised Baseline Project Schedule*), if directed, pursuant to DBA Section 3.2.5 (*Revised Baseline Project Schedule*), to produce, for GDOT's acceptance, a Revised Baseline Project Schedule consistent with the foregoing clauses (a), (b), and (c) of this DBA Section 13.2.1 (*Relief Event and Compensation Event Determinations*).

13.2.1.1 Design-Builder shall be relieved from the performance of obligations to the extent specified in the Relief Event Determination and documented in a Supplemental Agreement in accordance with DBA Section 13.2.4 (*Relief Event and Compensation Event Determinations*).

13.2.1.2 If GDOT is obligated to but does not provide a Relief Event Determination within such 40 Business Day period or such longer period of time to which the Parties may mutually agree in writing, GDOT's failure to respond shall be deemed a denial of Design-Builder's claim.

13.2.2 No later than 40 Business Days after receiving the Compensation Event Package and any additional information pursuant to DBA Section 13.1.5 (*Requests for Further Information*) and DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*), or such longer period of time to which the Parties may mutually agree in writing, GDOT will issue a Compensation Event Determination. GDOT will specify in the Compensation Event Determination:

(a) the specific obligations for which relief from performance is given or denied, if applicable,

(b) subject to DBA Section 13.2.2.2 (*Relief Event and Compensation Event Determinations*) and DBA Section 13.2.2.3 (*Relief Event and Compensation Event Determinations*), and

without limiting clause (g) of DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*), the modification of the Contract Sum.

13.2.2.1 Design-Builder shall be relieved from performance only to the extent set forth in the Compensation Event Determination and documented in a Supplemental Agreement in accordance with DBA Section 13.2.4 (*Relief Event and Compensation Event Determinations*).

13.2.2.2 GDOT may issue a Compensation Event Determination setting forth no compensation owed to the Design-Builder but nevertheless authorizing the Design-Builder to proceed with a scope of work due to the Compensation Event, accounting for costs under "force account" principles and procedures, pursuant to DBA Section 13.4.5.3 (*Force Account*), reported by monthly amendment, as required pursuant to DBA Section 13.1.4.3(b) (*Compensation Event Packages and Relief Event Packages*) if the Parties agree that the Design-Builder to so proceed, or if GDOT elects, in its sole discretion, to require the Design-Builder to so proceed.

13.2.2.3 Without limiting DBA Section 13.1.3.2(g) (*Detailed Compensation Event Notices*), for any Compensation Event where Design-Builder presented actual costs without estimates, the cost component of a Compensation Event Determination shall be premised entirely upon actual costs incurred from the Starting Date until the date of the Detailed Compensation Event Notice as evidenced by the Compensation Event Records and nothing else.

13.2.3 If Design-Builder disagrees with the Relief Event Determination issued pursuant to DBA Section 13.2.1 (*Relief Event and Compensation Event Determinations*), or any portion thereof, or the Compensation Event Determination issued pursuant to DBA Section 13.2.2 (*Relief Event and Compensation Event Determinations*), or any portion thereof, then Design-Builder may refer the matter for determination pursuant to the Dispute Resolution Procedures.

13.2.4 Any Relief Event Determination or final Compensation Event Determination not Disputed by Design-Builder (or, if disputed, determined pursuant to Dispute Resolution Procedures) shall be set forth in a Supplemental Agreement in accordance with DBA Section 13.2 (*Relief Event and Compensation Event Determinations*). GDOT will draft a Supplemental Agreement and provide it to Design-Builder. Such Supplemental Agreement shall provide for modification of the Contract Time and the Baseline Project Schedule, including to the extent so established by such Relief Event Determination, the Milestone Deadlines, or modification of the Contract Sum pursuant to any such Compensation Event Determination, as the case may be.

13.2.5 Design-Builder and GDOT shall make diligent, good faith efforts to finalize the Supplemental Agreement promptly, and upon finalization will execute and deliver the Supplemental Agreement. Except and solely to the extent as expressly set forth in any directive Notice from GDOT pertaining to updating cost estimates, pursuant to DBA Section 13.1.3.2(g)(iv) (*Detailed Compensation Event Notices*), the execution of a Supplemental Agreement shall constitute Design-Builder's full settlement and release of GDOT with respect to any claims arising out of or related to the subject matter of the Supplemental Agreement, and Design-Builder shall not be entitled to any additional compensation or time whether deriving from or related to a Supplemental Agreement, it being the Parties' intent with respect to estimated costs that subsequent clarification in light of actual costs shall be document by subsequent Supplemental Agreement.

13.3 Relief Events Constraints

13.3.1 Extensions of Time for Relief Events

13.3.1.1 Design-Builder shall not be excused from compliance with applicable Laws, Governmental Approvals, or other portions of the Design-Build Documents due to the occurrence of a Relief Event, except temporary inability to comply as a direct result of a Relief Event or as finally accounted for under the Supplemental Agreement pursuant to any Relief Event Determination.

13.3.1.2 Without limiting Design-Builder's rights with respect to monetary relief for Compensation Events as set forth in this Design-Build Agreement, the extensions of time as provided, if any, pursuant to this DBA Section 13.3 (*Relief Events Constraints*) are Design-Builder's sole remedy for a Relief Event.

13.3.2 Limitations on Time Extensions

13.3.2.1 Design-Builder shall be required to demonstrate to GDOT's satisfaction that the change in the Work or other event or situation that is being asserted as a Relief Event will result in or has caused an identifiable and measurable delay of the Work that will impact or has impacted the Critical Path affecting any Milestone Deadline.

13.3.2.2 Any extension of any Milestone Deadline allowed hereunder shall exclude any delay to the extent that it did not impact the Critical Path affecting any Milestone Deadline or was a concurrent delay with any other delay for which Design-Builder is not entitled to an extension.

13.3.2.3 The extent that any extension of any Milestone Deadline is as a result of a precipitating event that is the subject of both a Relief Event Determination and a Compensation Event Determination under this DBA Article 13 (*Relief Events; Compensation Events*), then, for the avoidance of doubt, any entitlement to additional costs shall exclude costs associated with any delay that did not impact the Critical Path affecting the Milestone Deadline or was concurrent with any other delay for which Design-Builder is not entitled to an extension.

13.4 Compensation Events Principles

13.4.1 Determining Compensation Amounts

13.4.1.1 Without limiting DBA Section 13.3.2 (*Limitations on Time Extensions*) and DBA Section 14.5 (*Final Relief Event and Compensation Event Determinations*), the Compensation Amount, if any, for any Compensation Event shall be determined by applying the following provisions. The calculation of the Compensation Amount will be based on the difference between the estimated increased costs after taking into account the impact of the Compensation Event (without limiting DBA Section 13.1.3.2(g) (*Detailed Compensation Event Notices*), based upon documented actual costs as evidenced by the Compensation Event Records, and as specified in an Amendment to the Detailed Compensation Event Notice pursuant to DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*) and, in each case where permitted by GDOT, projected costs immediately prior to the Starting Date, plus estimated additional costs that Design-Builder expects to incur following the date of the Compensation Event Determination, if any, as specified in the Detailed Compensation Event Notice, as amended). Notwithstanding the foregoing, and without limiting GDOT's right to issue a Directive Letter, directing payments pursuant to "force account" principles and procedures under DBA Section 13.4.5.3

(*Force Account*), GDOT may instead, in its sole discretion, elect to negotiate the value of the Compensation Amount prior to commencement of any additional Work arising out of the Compensation Event.

In all cases, cost impacts shall:

(a) exclude:

(i) third-party entertainment costs, lobbying and political activity costs, costs of alcoholic beverages, costs for first class travel in excess of prevailing economy travel costs, and costs of club memberships, in each case to the extent that such costs would not be reimbursed to an employee of GDOT in the regular course of business, and (ii) unallowable costs under the following provisions of the federal Contract Cost Principles, 48 C.F.R. § 31.205, § 31.205-8 (contributions or donations), § 31.205-13 (employee morale, health, welfare, food service, and dormitory costs and credits), § 31.205-14 (entertainment costs), § 31.205-15 (fines, penalties, and mischarging costs), § 31.205-27 (organization costs), § 31.205-34 (recruitment costs), § 31.205-35 (relocation costs), § 31.205-43 (trade, business, technical and professional activity costs), § 31.205-44 (training and education costs), and § 31.205-47 (costs related to legal and other proceedings);

(ii) exclude amounts paid or to be paid to Affiliates in excess of the pricing Design-Builder could reasonably obtain in an arms' length, competitive transaction with an unaffiliated Contractor;

(b) exclude those costs incurred in asserting, pursuing, or enforcing any Compensation Event, Relief Event, or Dispute;

(c) be reduced by any savings in costs resulting from the Compensation Event;

(d) exclude costs for any rejected Work that failed to meet the requirements of the Design-Build Documents and any necessary remedial Work;

(e) exclude any amount for overhead and profit in excess of a total of 15% of the total of additional costs incurred by Design-Builder for labor, materials, and equipment;

(f) exclude costs for equipment at a rate in excess of 70 percent of those determined utilizing the Rental Rate Blue Book;

(g) exclude loss of profit;

(h) exclude consequential damages and indirect costs and expenses of any nature, including but not limited to loss of bonding capacity, loss of bidding opportunities and insolvency, and amounts for risk and contingency;

(i) exclude attorney's fees, claims preparation expenses and costs of litigation; and

(j) to the extent not further restricted pursuant to the foregoing, otherwise be allowable, allocable, and reasonable in accordance with the cost principles and procedures of 48 C.F.R. Part 31.

13.4.1.2 Compensation Amounts shall be required to be, consistent and not exceed such amounts as set forth in the Technical Provisions, as may be applicable.

13.4.1.3 In all cases, the Compensation Amount shall be net of

(a) the greater of:

(i) the proceeds received from insurance that Design-Builder is required to carry pursuant to DBA Section 16.1 (*Insurance*) (or if Design-Builder has failed to carry such insurance, the proceeds that would have been received if Design-Builder had not so failed) and provides coverage to pay, reimburse or provide for any of cost impacts attributable to the Compensation Event, or

(ii) the proceeds received from insurance that is actually carried by or insuring Design-Builder under policies solely with respect to the Project and the Work, regardless of whether required to be carried pursuant to DBA Section 16.1 (*Insurance*), and that provides coverage to pay, reimburse or provide for any cost impacts attributable to the Compensation Event; and

(b) deductibles and insured amounts deemed to be self-insured by Design-Builder under DBA Article 16 (*Insurance;* Performance *Security; Indemnity*), with respect to cost impacts of the Compensation Event.

13.4.1.4 The Compensation Amount shall not include any amount on account of federal, State, or local income taxes. Further and notwithstanding anything to the contrary herein, the Compensation Amount shall not include, under any circumstances, costs incurred by Design-Builder or any Contractors on account of charges or expenses due to (a) the business organization existence or maintenance of the Design-Builder's or any Contactor's business or the business of any Design-Builder-Related Entity or (b) labor or employment matters as a result of any Change in Law (other than recovery of costs for additional labor hours required directly as a result of a Change in Law).

13.4.1.5 If the Compensation Event is under clause (f) of the definition of "Compensation Event", then the Compensation Amount shall be limited to the incremental increase in costs of initial design and construction due to delay and disruption directly attributable to the court order.

13.4.1.6 Design-Builder shall share with GDOT all data, documents, and information pertaining to bids for any work that is the subject of a Compensation Amount, including the Compensation Event Records, and all of the aforementioned shall be on an Open Book Basis.

13.4.1.7 Any Dispute resolution body(ies) shall apply the provisions of this DBA Section 13.4 (*Compensation Events Constraints*) in determining the Compensation Amount.

13.4.1.8 Without limiting DBA Section 13.4.5.4 (*Payment Options*), following a determination of the Compensation Amount by mutual agreement or the Dispute Resolution Procedures, GDOT will pay such Compensation Amount (a) through periodic payments of the Compensation Amount in accordance with a written payment schedule determined by mutual agreement or through such concluded Dispute Resolution Procedures, (b) in a lump sum, payable as determined by mutual agreement or through the Dispute Resolution Procedures, (c) via "force account" principles and procedures, pursuant to DBA Section 13.4.5.3 (*Force Account*), or (d) in such other manner as agreed upon by the Parties. Subject to DBA Section 14.5 (*Final Relief Event and Compensation Event Determinations*), GDOT, in its sole discretion, shall be entitled to select one or any combination of the foregoing methods of compensation.

13.4.1.9 Without limiting Design-Builder's rights with respect to non-monetary relief for Relief Events as set forth in this Design-Build Agreement, the Compensation Amount shall represent the sole right to compensation and damages for the adverse financial effects of a Compensation Event.

13.4.2 Limitations on Acceleration Costs

13.4.2.1 Acceleration costs shall be compensable hereunder only with express, written direction by GDOT to Design-Builder to accelerate its efforts pursuant to DBA Section 14.3.1 (*Directive Letters*).

13.4.2.2 Acceleration costs are those fully documented increased costs reasonably incurred by Design-Builder (i.e., costs over and above what Design-Builder would otherwise have incurred) that are directly attributable to increasing the performance level of the Work in an attempt to complete necessary activities of the Work earlier than otherwise anticipated, such as for additional equipment, additional crews, overtime and shift premiums, increased supervision, and any unexpected movement of materials, equipment, or crews necessary for resequencing in connection with acceleration efforts. Acceleration costs shall not include any costs for disruption damages as described below in DBA Section 13.4.3 (*No Disruption Damages*).

13.4.3 No Disruption Damages

Disruption damages, whether from a single event or continual, multiple or repetitive events, are not allowed or recoverable under the Design-Build Agreement. Disruption damages include costs of (i) rearranging Design-Builder's Work plan not associated with an extension of any Milestone Deadline, and (ii) loss of efficiency, momentum, or productivity.

13.4.4 Limitations on Delay Damages

13.4.4.1 Delay damages with respect to and directly attributable to a Compensation Event are limited to the following items:

(a) additional direct hourly rates paid to employees for job site labor, including payroll taxes, welfare, insurance, benefits and all other labor burdens, directly attributable to the Compensation Event,

(b) documented additional costs for materials,

(c) documented idle equipment costs, based on the actual experienced cost for each piece of equipment. These rates shall be supported by equipment cost records furnished by the Contractor. In no case will equipment rates be allowed in excess of 70 percent of those determined utilizing the Rental Rate Blue Book,

(d) documented costs of extended job-site overhead,

(e) documented additional P&P Bond and insurance costs, and

(f) Subcontractor costs, as determined by, and limited to, those items identified as payable under the foregoing clauses (a) to (e), inclusive.

13.4.4.2 Before Design-Builder may obtain any increase in the Contract Sum to compensate for any delay damages or acceleration costs, Design-Builder shall have demonstrated to GDOT's satisfaction that:

(a) Immediately prior to the Starting Date, the Baseline Project Schedule in fact sets forth a reasonable method for completion of the Work but for the occurrence of the relevant Compensation Event;

(b) the change in the Work or other event or situation that is the subject of the requested Supplemental Agreement has caused or will result in an identifiable and measurable delay of the Work and impact the Critical Path affecting Milestones listed in DBA Exhibit 9 (*Milestone Schedule*);

(c) the delay damage was not due to any breach of contract or fault or negligence, or act or failure to act of Design-Builder or any Design-Builder-Related Entity, and could not reasonably have been avoided by Design-Builder, including by resequencing, reallocating, or redeploying its forces to other portions of the Work (subject to reimbursement for additional costs reasonably incurred in connection with such reallocation or redeployment) or other activities unrelated to the Work; and

(d) Design-Builder has suffered or will suffer actual costs due to such delay, each of which costs shall be justified and documented in a manner satisfactory to GDOT.

13.4.4.3 Nothing in this DBA Section 13.4.4 (*Limitation on Delay Damages*) shall be construed to abrogate the limitations set forth in DBA Section 13.3.2 (*Limitations on Time Extensions*).

13.4.5 Payment Options

13.4.5.1 The method and sources of payment for Compensation Amounts for a Compensation Event shall be set forth in a Supplemental Agreement.

13.4.5.2 The preferred approach by both Parties is that Supplemental Agreements will be paid on a lump sum basis. Lump sum prices shall be based on Compensation Event Records and on the original allocations of the Contract Sum to comparable activities. The Supplemental Agreement shall set forth the Parties' agreed one time lump sum payment amount or alternative payment schedule or method.

13.4.5.3 Force Account.

(a) *GDOT Right to Direct Force Account Pricing*. If the Parties cannot agree on any payment amount (estimated or actual), schedule or method, then, at any time, and at any point in the process outlined in this DBA Article 13 (*Relief Events; Compensation Events*), GDOT may elect, in its sole discretion, to issue a Directive Letter under DBA Section 14.3 (*Directive Letters*) for payments, where payment for any Compensation Event is anticipated, under "force account" principles and procedures set forth in this DBA Section 13.4.5.3 (*Force Account*).

(b) *Force Account Estimating*. Promptly following a Directive Letter from GDOT to the Design-Builder, but in no case later than five Business Days after dispatch, the Design-Builder shall prepare a "force Account estimate" that identifies all anticipated costs resulting directly from the subject Compensation Event. The "force account estimate" shall be prepared on forms provided by GDOT to the Design-Builder with the Directive Letter.

(c) *Eligible Payments*.

(i) **Labor**. For all labor, equipment operators and supervisors, excluding superintendents, in direct charge of the specific operations, the Design-Builder shall receive the rate of wage agreed upon in writing before beginning work for each and every hour that said labor, equipment operators and supervisors are actually engaged in such work. The Design-Builder shall receive the actual costs paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare

benefits, pension fund benefits, or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the Work. An amount equal to 15% of the sum of the above items will also be paid the Design-Builder.

(ii) **Bond, Insurance, and Tax**. For additional property, liability, and worker's compensation insurance premiums, unemployment insurance contributions, and Social Security taxes on the Work performed under "force account," the Design-Builder shall receive the actual cost, to which cost no percentage will be added. The Design-Builder shall furnish satisfactory evidence of the rate or rates paid for such bond, insurance, and Social Security tax amounts.

(iii) **Materials**. For materials accepted by GDOT and used, the Design-Builder shall receive the actual cost of such material incorporated into the Project, including Design-Builder paid transportation charges (exclusive of machinery rentals, as addressed in clause (iv) below), to which cost 10% will be added. Absent agreement, or direction by GDOT, to the contrary, actual costs under this clause (iii) shall be determined generally in accordance with Section 109.01 of the Standard Specifications.

(iv) **Equipment**. For any machinery or special equipment (other than small tools) including fuel and lubricant, plus transportation costs, the use of which has been authorized by GDOT, the Design-Builder shall receive the rental rates, determined under this clause (iv), for the actual time that such equipment is in operation with respect to the Work or the time, also determined under this clause (iv), the equipment is directed to stand by. Equipment rates shall be based on the latest edition of the Rental Rate Blue Book for Construction Equipment or Rental Rate Blue Book for Older Construction Equipment, whichever applies, as published by EquipmentWatch using all instructions and adjustments contained therein, with the modifications set forth in DBA Exhibit 6 (*Modifications to EquipmentWatch Equipment Rates*).

(v) **Miscellaneous**. No additional amount will be eligible for payment for general superintendence, the use of small tools, or other costs for which no specific and express eligibility under this DBA Section 13.4.5.3(c) (*Eligible Payments)* is provided.

(d) *Authorization to Proceed with Force Account Work*. When the "force account estimate" is provided and approved, in writing, by GDOT, on such forms and in compliance with this DBA Section 13.4.5.3 (*Force Account*), the Design-Builder may commence Work directly resulting from the Compensation Event, and the Design-Builder may include "force account" amounts, with supporting documentation within the Invoice Support Package in subsequent Invoices. When all subject Work is completed, the Parties shall execute a Supplemental Agreement memorializing payment of all eligible costs.

(e) *Compensation***.** The Authorized Representatives shall compare records and agree on the cost of work done as directed to be performed under the "force account" principles set forth in this DBA Section 13.4.5.3 (*Force Account*) at the end of each day, on an Open Book Basis, on forms provided by GDOT to the Design-Builder. For avoidance of doubt, notwithstanding approval by GDOT of the "force account estimate," payment for Work with respect to a Directive Letter arising out of a Compensation Event, directed to be performed under "force account" principles and procedures, will be for actual costs incurred.

(f) *Subcontract Force Account Work***.**

(i) For work performed by an approved Subcontractor, all provisions of this DBA Section 13.4.5.3 (*Force Account*) that apply to the Design-Builder in respect to labor, materials and equipment shall govern.

(ii) The Design-Builder will be allowed an amount to cover administrative cost equal to 5% of the Subcontractor's amount earned, but not to exceed $5,000.00 per first-tier Subcontractor. The Design-Builder may not charge a markup for second-tier or lower Subcontractor work.

(g) *Invoice Support Package – Force Account***.** That portion of any Invoice delivered under DBA Exhibit 7 (*Contract Sum and Payment Terms*) for Directive Letter Work under "force account" principles shall include the following as among the Invoice Support Package:

(i) Name, classification, date, daily hours, total hours, rate, and extension for each laborer, equipment operator, and supervisor, excluding superintendents.

(ii) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

(iii) Quantities of materials, prices, and extensions.

(iv) Transportation of materials.

(v) Cost of property damage, liability, and worker's compensation insurance premiums, unemployment insurance contributions, and Social Security tax.

That portion of any Invoice Support Packages substantiating Work performed under "force account" principles and procedures shall include and be supported by invoices for all materials used and transportation charges. However, if materials used for Work performed under "force account" are not purchased specifically for such work but are taken from the Design-Builder's stock, then, in lieu of the invoices, the Design-Builder shall furnish an affidavit certifying that such materials were taken from his stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Design-Builder.

(h) *Accord and Satisfaction*. Payments made pursuant to the Supplemental Agreement memorializing payment of eligible costs with respect to the subject Compensation Event under "force account" principles and procedures shall, and shall be deemed to, constitute full payment and settlement of all additional costs and expenses, of any kind, caused by, arising from or associated with the Work performed.

13.4.5.4 If the Parties can neither agree on payment amount, schedule or method, and if GDOT has not issued a Directive Letter directing payment under "force account" principles and procedures under DBA Section 13.4.5.3 (*Force Account*), then payment amounts, schedule, method, and other terms and conditions will be determined pursuant to Dispute Resolution Procedures; provided, however, that the Dispute resolver may not abrogate any of the constraints set forth under this DBA Section 13.4 (*Compensation Event Constraints*). For avoidance of doubt, the Design-Builder may not Dispute GDOT's election to direct the Design-Builder to proceed under such "force account" principles and procedures.

13.4.6 General Provisions, Obligations Relating to Relief Events, Compensation Events

13.4.6.1 Design-Builder shall, and shall cause all Contractors, Subcontractors, and Suppliers to, ensure that all activities are undertaken in a manner that will minimize any adverse effects (including adverse monetary and non-monetary impacts) of any Relief Event or Compensation Event on the Project, as well as any adverse effect on surrounding property and to the public, in each case, consistent with Good Industry Practice.

13.4.6.2 Notwithstanding anything to the contrary in the Design-Build Documents, the occurrence of any Relief Event or Compensation Event shall not excuse Design-Builder from any liability or obligation that arose before such occurrence or that occurs concurrently.

13.4.6.3 Design-Builder shall not be entitled to assert a Relief Event or Compensation Event with respect to the consequences of any violation of Law or Governmental Approval, or negligence, recklessness, willful misconduct, fault, breach of contract, fraud, or other noncompliance with the requirements of the Design-Build Documents by Design-Builder or any of Design-Builder-Related Entity.

13.4.6.4 Design-Builder acknowledges and agrees that no compensation, increase to the Contract Sum, or extension of any Milestone Deadline is available except in the specific circumstances expressly provided for in this Design-Build Agreement, including specifically the identified Relief Events and Compensation Events, and that Design-Builder shall bear full responsibility for the consequences of all other conditions, events, and circumstances. A non-exhaustive list of matters that are Design-Builder's exclusive responsibility include the following:

(a) errors in the Design Documents or Construction Documents (including Errors traceable to Errors in the Basic Configuration) that do not amount to a Necessary Basic Configuration Change;

(b) any disposition by or on behalf of GDOT requiring resubmittal or constituting rejection of a Type 3 Submittal or with a Basis of Rejection for a Type 2 Submittal;

(c) defective or incorrect schedules for the Work or changes in the planned sequence of performance of the Work;

(d) action or inaction by (i) any adjoining property owner, agent, representative, or contractor, (b) Design-Builder or any Design-Builder-Related Entity;

(e) untimely or non-delivery of equipment or materials; unavailability or defective materials; increases in costs for equipment or materials (regardless as to whether specified by the Technical Provisions); , except as provided in DBA Section 5.4 (*Material Indexing*)

(f) assessment, remediation, and correction of Nonconforming Work;

(g) any suspensions, terminations, interruptions, denials, non-renewals of, or delays in issuance of any Governmental Approval (that is not a Provided Environmental Approval);

(h) delays not to the Critical Path;

(i) any Design-Builder Default;

(j) all other events beyond the control of GDOT for which GDOT has not expressly agreed to assume liability hereunder;

(k) any general "weather delay" or other weather-related basis that is not an express Force Majeure Event;

(l) claims relying on any purported materials allowance or other allowance in GDOT Standard Specifications, any legacy versions of such GDOT Standard Specifications, or as any of them may

be amended, except, and only to the extent, a materials allowance is expressly included in the Technical Provisions;

(m) costs relating to any materials not used in accordance with its manufacturer's specifications or recommendation; and

(n) time impacts, performance failures, and costs and expenses incurred reliant upon a Time Impact Analysis that was reasonably not accepted by GDOT or is under Dispute.

13.5 Burden of Proof

Design-Builder bears the burden of proving both the occurrence of a Relief Event or Compensation Event (or both, in any case, as applicable) and the resulting direct and adverse impacts on Design-Builder.

Article 14 GDOT CHANGES; DESIGN-BUILDER CHANGES; DIRECTIVE LETTERS

This DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*) sets forth the requirements for obtaining all Supplemental Agreements under this Design-Build Agreement. Design-Builder hereby acknowledges and agrees that no Supplemental Agreement is agreed, or deemed agreed, until accepted and executed by GDOT and Design-Builder. Furthermore, Design-Builder hereby acknowledges and agrees that the Contract Sum is full and adequate compensation for performance of all of the Work, subject only to those exceptions specified in DBA Article 13 (*Relief Events; Compensation Events*) and this DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*). Design-Builder absolutely, unconditionally, and irrevocably waives the right to any claim under the Design-Build Documents, at law, or in equity for any monetary compensation or other relief in addition to that specifically provided under the terms of this Design-Build Agreement, except in accordance with DBA Article 13 (*Relief Events; Compensation Events*) and this DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*). The foregoing waiver encompasses all theories of liability, whether in contract, tort (including negligence), equity, *quantum meruit* or otherwise, and encompasses all theories to extinguish contractual obligations, including impracticability, mutual mistake and frustration of purpose. Nothing in the Technical Provisions shall have the intent or effect or shall be construed to create any right of Design-Builder to any Supplemental Agreement or other claim at law or in equity for additional monetary compensation or other relief, any of the Technical Provisions to the contrary notwithstanding.

14.1 GDOT Changes

14.1.1 GDOT's Right to Issue a Supplemental Agreement and Directive Letter

GDOT may, at any time and from time to time, without notice to any Surety, authorize, cause or require, pursuant to a Supplemental Agreement or Directive Letter, changes in the Work, including additions or deletions, or in terms and conditions of the Technical Provisions (including changes in the standards applicable to the Work). For any GDOT Request for Change Proposal or Directive Letter, Design-Builder may only refuse to effect the requested or directed change to the extent such change to the Work or the Project would violate applicable Law.

14.1.2 Request for Change Proposal

14.1.2.1 If GDOT desires to initiate a GDOT Change or to evaluate whether to initiate such a change, then GDOT may, at its discretion, issue a Request for Change Proposal. The Request for Change Proposal shall set forth the nature, extent and details of the proposed GDOT Change.

14.1.2.2 Within five Business Days after Design-Builder receives a Request for Change Proposal, or such longer period to which the Parties may mutually agree, GDOT and Design-Builder shall consult to define the proposed scope of the change. Within three Business Days after the initial consultation, or such longer period to which the Parties may mutually agree, GDOT and Design-Builder shall consult concerning the estimated financial and schedule impacts.

14.1.3 Within 40 Business Days following GDOT's delivery to Design-Builder of the Request for Change Proposal, Design-Builder shall provide GDOT with a written response as to whether, in Design-Builder's opinion, the proposed change constitutes a GDOT Change, will impact Design-Builder's costs, and/or will impact Design-Builder's schedule, and if so, a detailed assessment of the cost and schedule impact of the proposed GDOT Change, including the following:

14.1.3.1 Design-Builder's detailed estimate of the impacts on costs of carrying out the proposed GDOT Change;

14.1.3.2 the effect of the proposed GDOT Change on the Baseline Project Schedule, demonstrated by a Time Impact Analysis pursuant to TP Section 2.4.5 (Time Impact Analysis), including achievement of the Milestone Deadlines, taking into consideration Design-Builder's duty to mitigate any delay to the extent reasonably practicable; and

14.1.3.3 any other relevant information related to carrying out the proposed GDOT Change.

14.1.4 GDOT will be entitled, but not required, to obtain, from a qualified independent consultant of GDOT's choosing, a report prepared in accordance with Good Industry Practice as to the proposed GDOT Change related to the Design Work or the Construction Work, including recommendations and comments concerning Design-Builder's estimate of the cost impacts and projected impact on the Baseline Project Schedule and Milestone Deadlines. GDOT will pay for the work of any such consultant.

14.1.5 GDOT and Design-Builder, giving due consideration to any report described in DBA Section 14.1.4 (*GDOT Changes*) and any study as may be commissioned by GDOT, and without limiting DBA Section 14.4 (*Reductions in the Contract Sum*), shall exercise good faith efforts to negotiate a mutually acceptable Supplemental Agreement, including adjustment of the Baseline Project Schedule and Milestone Deadlines, any Compensation Amount to which Design-Builder is entitled, and the timing and method for payment of any Compensation Amount, in accordance with DBA Article 13 (*Relief Events; Compensation Events*).

14.1.6 If GDOT and Design-Builder are unable to reach agreement on a Supplemental Agreement, GDOT may, in its sole discretion, deliver to Design-Builder a Directive Letter pursuant to DBA Section 14.3.1 (*Directive Letters*) directing Design-Builder to proceed with the performance of the Work in question notwithstanding such disagreement. Upon receipt of such Directive Letter, pending final resolution of the relevant Supplemental Agreement according to the Dispute Resolution Procedures, (a) Design-Builder shall implement and perform the Work in question as directed by GDOT, and (b) GDOT will make interim payment(s) to Design-Builder on a monthly basis for the reasonable documented costs of the Work in question, subject to DBA Exhibit 7 (*Contract Sum and Payment Terms*), subject to subsequent adjustment through the Dispute Resolution Procedures, which as applicable, shall give effect to DBA Section 14.4 (*Reductions in the Contract Sum*).

14.1.7 GDOT will be responsible for payment of the Compensation Amount agreed upon (without limiting DBA Section 14.4 (*Reductions in the Contract Sum*)) or determined through the Dispute Resolution Procedures, which, as applicable, shall give effect to Section 14.4 (*Reductions in the Contract Sum*), through one of the payment mechanisms set forth in DBA Article 13 (*Relief Events; Compensation Events*), and the Baseline Project Schedule and Milestone Deadlines shall be adjusted as agreed upon or determined through the Dispute Resolution Procedures, and in accordance with DBA Article 13 (*Relief Events; Compensation Events*), to reflect the effects of the Supplemental Agreement.

14.1.8 GDOT will be entitled to the full benefit of the net cost savings, if any, allocated to GDOT under Section 14.4 (*Reductions in the Contract Sum*) and attributable to GDOT Change agreed upon or determined through the Dispute Resolution Procedures, and the Baseline Project Schedule and Milestone Deadlines shall be adjusted as agreed upon or determined through the Dispute Resolution Procedures, and in accordance with DBA Article 13 (Relief Events; Compensation Events), to reflect the effects of the Supplemental Agreement.

14.2 Design-Builder Changes

14.2.1 Design-Builder may request GDOT to approve modifications to the Technical Provisions by submittal of a written Change Request using a form approved by GDOT. The Change Request shall set forth Design-Builder's detailed estimate of impacts on costs and schedule attributable to the requested change, demonstrated by a Time Impact Analysis pursuant to TP Section 2.4.5 (*Time Impact Analysis*).

14.2.2 GDOT, in its sole discretion, may accept or reject any Change Request proposed by Design-Builder, provided that GDOT will accept a Change Request necessary to bring the Technical Provisions into compliance with applicable Law.

14.2.3 Design-Builder shall be solely responsible for the payment of any increased costs and for any Baseline Project Schedule delays or other impacts resulting from a Design-Builder proposed Change Request, other than on account of a Compensation Event or Relief Event accepted by GDOT. If the Change Request results in a decrease in the costs of designing or constructing the Project, the savings in costs shall be allocated between Design-Builder and GDOT further to DBA Section 14.4 (*Reductions in the Contract Sum*), to be set forth in the Supplemental Agreement.

14.2.4 Design-Builder may implement and permit a Utility Owner to implement, without a Change Request or Supplemental Agreement, changes to a Utility Adjustment design that do not vary from the Technical Provisions, but such changes are subject either to GDOT's approval as part of a Utility Work Plan as provided in TP Section 7.3.7 (Utility Work Plan), or, if the changes are Utility Adjustment Field Modifications, to GDOT's review and comment as provided in TP Section 7.4.4 (Utility Adjustment Field Modification Procedures).

14.2.5 No Change Request shall be required to implement any change to the Work that is not a deviation, change, modification, alteration or exception from applicable Technical Provisions regarding design or construction and is not specifically regulated or addressed by the Design-Build Documents or applicable Law.

14.2.6 Certain minor changes without significant cost savings may be approved in writing by GDOT as deviation, change, modification, alteration, or exception from applicable Technical Provisions regarding design or construction, as described in DBA Section 7.2.4 (*Performance, Design and Construction Standards; Deviations; Design Exceptions*), and in such event shall not require a Supplemental Agreement. Any other change in the requirements of the Design-Build Documents shall require a Supplemental Agreement.

14.2.7 Notwithstanding anything to the contrary in this DBA Section 14.2 (*Design-Builder Changes*), Design-Builder shall not submit any Change Request the proposes any modifications to the Technical Provisions that would (a) not be compliant with, or requires a change to, any applicable Law, (b) add a separate GDOT project (or other third-party contract) to the Project, or (c) delay any Milestone Deadline beyond any "not-to-exceed" date listed in DBA Exhibit 9 (*Milestone Schedule*).

14.3 Directive Letters

14.3.1 GDOT may at any time issue a Directive Letter to Design-Builder regarding any matter for which a Supplemental Agreement can be issued or in the event of any Dispute regarding the scope of the Work or whether Design-Builder has performed in accordance with the requirements of the Design-Build Documents. The Directive Letter will state that it is issued under this DBA Section 14.3 (*Directive Letters*), will describe the Work in question and will state the basis for determining compensation, if any. Subject

to DBA Section 14.1.6 (*GDOT Changes*), Design-Builder shall proceed promptly as directed in the Directive Letter, pending the execution of a formal Supplemental Agreement (or, if the Directive Letter states that the Work is within Design-Builder's original scope of Work or is necessary to comply with the requirements of the Design-Build Documents, Design-Builder shall proceed with the Work as directed but shall have the right to assert that a GDOT Change has occurred). If Design-Builder asserts that a GDOT Change has occurred, then Design-Builder shall maintain Relief Event Records and Compensation Event Records with respect thereto, as applicable, and shall provide such records to GDOT on a monthly basis in accordance with DBA Section 13.1.2.3 (*Continuing Relief Event; Additional Event(s)*) and DBA Section 13.1.6 (*Continuing Compensation Event; Additional Event(s)*).

14.3.2 The fact that a Directive Letter was issued by GDOT will not be considered evidence that in fact a GDOT Change occurred. The determination whether a GDOT Change in fact occurred shall be based on an analysis of the original requirements of the Design-Build Documents and a determination as to whether the Directive Letter in fact constituted a change in those requirements. For avoidance of doubt, a directive issued via Formal Communication from GDOT to Design-Builder to perform the Work is not a Directive Letter.

14.4 Reductions in the Contract Sum

14.4.1 If a Request for Change Proposal results in a net decrease in the cost of any of the Work, then any payment due from GDOT to Design-Builder under this Design-Build Agreement may be adjusted downwards (or a credit may be owed in the future) in accordance with DBA Exhibit 7 (*Contract Sum and Payment Terms*) to reflect that GDOT shall take the benefit of 75% of such net decrease or such net savings, and GDOT shall take the benefit of 100% of the effect, if any, on the Baseline Project Schedule and Milestone Deadlines resulting from such Request for Change Proposal; provided, however, that alterations or changes in the Work resulting from GDOT Requests for Change Proposal shall not reduce the scope of the Work by more than 10% of the Contract Sum in the aggregate.

14.4.2 If a Change Request results in a net decrease in the cost of any of the Work, then GDOT may condition its approval of a Change Request such that any payment due from GDOT to the Design-Builder under this Design-Build Agreement may be adjusted downwards (or a credit may be owed in the future) to reflect the sharing in GDOT's 50% share of the net decrease in costs and such net savings (or estimated net decrease in costs or net savings, or both) attributable to the proposed change. Where applicable, GDOT shall also take the benefit of 100% of the effect, if any, on the Baseline Project Schedule and Milestone Deadlines resulting from such approved Change Request.

14.4.3 Notwithstanding Section 14.4.2 (*Reductions in the Contract Sum*), GDOT shall receive the full benefit of the net cost savings, if any, attributable to any Change Request that consists in a reduction in (a) performance, safety, durability, quality, utility or reliability, as applicable, of the Work or the Project or (b) in a reduction in the scope of the Project (including reductions in quantities without achieving equal or better safety, durability, quality, utility or reliability, as applicable), in each case, as determined by GDOT in its sole discretion. If GDOT accepts such change, Design-Builder shall execute a Supplemental Agreement and shall implement such change in accordance with this Design-Build Agreement, the Supplemental Agreement, applicable Technical Provisions, the Project Management Plan, Good Industry Practice, and all applicable Laws.

14.5 Final Relief Event and Compensation Event Determinations

Any final Relief Event Determination that Design-Builder is entitled to relief and/or any final Compensation Event Determination that Design-Builder is entitled to compensation, in each case, as issued by GDOT and that has not been subject to Dispute within 10 days, or, if disputed, finally determined

pursuant to Dispute Resolution Procedures, shall be set forth in a Supplemental Agreement. Such Supplemental Agreement shall provide for modification of the Contract Time, the Baseline Project Schedule and the Milestone Deadlines (pursuant to any such Relief Event Determination) and any modification of the Contract Sum (pursuant to any such Compensation Event Determination), as the case may be.

14.6 Specific Change-Related Matters

14.6.1 Project Standards Changes

Design-Builder shall provide Notice to GDOT of any actual or pending Project Standards Change prior to implementing any changed Project Standards in the Work. GDOT reserves the right to direct Design-Builder not to implement any such Project Standards Change in the Work. If Design-Builder commenced implementation of any such Project Standards Change prior to receiving GDOT's response as to whether Design-Builder should implement any such Project Standards Change, then Design-Builder shall credit GDOT for the cost of any unnecessary work performed, or shall exclude any additional costs associated with redoing the work already performed prior to any receipt of GDOT's response (even if such response confirms that Design-Builder should implement any such Project Standards Change). For avoidance of doubt, GDOT's response as to whether Design-Builder should implement any such Project Standards Change is not, nor shall be deemed to be, a Directive Letter under DBA Section 14.3 (*Directive Letters*). Refer to DBA Section 7.2.6 (*Performance, Design and Construction Standards, Deviations; Design Exceptions*) for provisions relating to changes to certain design and Construction Standards raised by GDOT to Design-Builder.

14.6.2 Necessary Basic Configuration Changes

14.6.2.1 Design-Builder shall be responsible for any cost increases or delays (or both) resulting from changes in requirements and obligations of Design-Builder relating to the Project due to Error(s) in the Basic Configuration, other than those that require a Necessary Basic Configuration Change.

14.6.2.2 If Design-Builder commenced any Construction Work affected by the Necessary Basic Configuration Change after the earliest of (a) the date Design-Builder knew of such conditions, (b) the date that Design-Builder had actual notice of such conditions, and (c) such date at which point Design-Builder should have known of such conditions, in each case, that would require a Necessary Basic Configuration Change, but prior to delivery of an appropriate Relief Event Notice or Compensation Event Notice (or both), then the Supplemental Agreement, following any final Relief Event Determination or final Compensation Event Determination (or both), shall allow GDOT a credit for the cost of any unnecessary Work performed and shall exclude any additional costs associated with redoing the Work already performed after such date.

14.6.2.3 Design-Builder's right to seek relief under this DBA Section 14.6.2 (*Necessary Basic Configuration Changes*) is contingent upon performing the obligations and processes under DBA Section 2.7 (*Design-Builder Proposed/State Acquired Right of Way*).

14.6.3 Noise Barrier-Related

14.6.3.1 GDOT Noise Barrier-Related Requests for Change Proposal

(a) Promptly following any GDOT Request for Change Proposal pertaining to Noise Barriers, Design-Builder shall prepare and submit to GDOT for review, comment and acceptance the Submittals set forth in TP Section 5.4 (Noise Barriers).

(b) Following GDOT's acceptance of the Submittals referred to in DBA Section 14.6.3.1(a) (*GDOT Noise Barrier Requests for Change Proposal*):

(i) GDOT will prepare an updated Traffic Noise Model to reflect the proposed GDOT Change;

(ii) Design-Builder shall update the Shop Drawings and RFC Design Documents to reflect the proposed GDOT Change; and

(iii) following Design-Builder's update under DBA Section 14.6.3.1(b)(ii) (*GDOT Noise Barrier Requests for Change Proposal*), GDOT will prepare a Noise Addendum and submit such Noise Addendum to FHWA for approval.

(c) If FHWA rejects the Noise Addendum submitted under DBA Section 14.6.3.1(b)(iii) (*GDOT Noise Barrier Requests for Change Proposal*), GDOT's precipitating Request for Change Proposal shall be deemed to have been withdrawn, and the Parties shall not enter into a Supplemental Agreement with respect to the original request pertaining to Noise Barriers.

(d) If FHWA approves the Noise Addendum submitted under DBA Section 14.6.3.1(b)(iii) (*GDOT Noise Barrier Requests for Change Proposal*), the Parties shall enter into a Supplemental Agreement in accordance with DBA Section 14.1.5 (*Request for Change Proposal*), and Design-Builder shall proceed with implementing GDOT Change.

14.6.3.2 Design-Builder-Proposed Noise Barrier-Related Changes

(a) Prior to proposing a Design-Builder Change with respect to a change to the Noise Barrier Baseline Requirements, Design-Builder shall submit a Design-Builder Noise Barrier Change Memorandum in accordance with TP Section 5.4.2 (Design-Builder Proposed Noise Barrier Location Changes) and DBA Section 6.3 (S*ubmittal Review; GDOT Oversight; Quality Posture*).

(b) If GDOT accepts the Design-Builder Noise Barrier Change Memorandum, then Design-Builder may propose a Design-Builder Change with respect to a change to the Noise Barrier Baseline Requirements. Design-Builder shall ensure that the Design-Builder Change:

(i) meets the requirements set forth in GDOT Noise Policy

(ii) includes a copy of the Design-Builder Noise Barrier Change Memorandum that sets out all required information in accordance with TP Section 5.4 (Noise Barriers); and

(iii) includes noise barriers for all receivers identified in the Provided Environmental Approvals as benefiting from a noise barrier;

provided that if (i) and (iii) are inconsistent (in other words, if a noise barrier at a particular benefitted receiver location is required in order to satisfy (iii) but GDOT Noise Policy would exclude such location), then the proposed Design-Builder Change Request to the Noise Barrier Baseline Requirement shall include such location even though it conflicts with GDOT Noise Policy.

(c) Promptly following issuance by GDOT of a draft Supplemental Agreement under Change Request under DBA Section 14.2 (*Design-Builder Changes*) with respect to a Design-Builder Change described in this DBA Section 14.6.3.2 (*Design-Builder-Proposed Noise Barrier-Related*

Changes), Design-Builder shall prepare and submit to GDOT the information specified in TP Section 5.4.2 (Design-Builder Proposed Noise Barrier Location Changes).

(d) Following receipt of the information referenced in DBA Section 14.6.3.2(c) (*Design-Builder-Proposed Noise Barrier-Related Changes*) and GDOT's acceptance of the Submittals referred to in DBA Section 14.6.3.2 (*Design-Builder-Proposed Noise Barrier-Related Changes*):

(i) GDOT will prepare an updated Traffic Noise Model to reflect the Design-Builder Change;

(ii) Design-Builder shall update the Shop Drawings and RFC Design Documents to reflect the Design-Builder Change; and

(iii) GDOT will prepare a Noise Addendum and submit such Noise Addendum to FHWA for approval.

(e) If FHWA rejects the Noise Addendum submitted under DBA Section 14.6.3.2(d)(iii) (*Design-Builder-Proposed Noise Barrier-Related Changes*), then the Supplemental Agreement shall be deemed to have been withdrawn and the Parties shall not enter into a Supplemental Agreement in accordance with DBA Section 14.2 (*Design-Builder Changes*).

(f) If FHWA approves the Noise Addendum submitted under DBA Section 14.6.3.2(d)(iii) (*Design-Builder-Proposed Noise Barrier-Related Changes*), then the Parties shall enter into a Supplemental Agreement in accordance with DBA Section 14.2 (*D*esign-Builder Changes) and Design-Builder shall proceed with implementing the Design-Builder Change.

14.6.4 Injunctions, Restraining Orders, Legal Restraints

If Design-Builder seeks relief under clause (f) of the definition of "Compensation Event" or clause (j) of the definition of "Relief Event," then, at the sole option of GDOT, and at such time as GDOT may elect, GDOT may deem such injunction, restraining order, or other legal restraint as a Termination by Court Ruling as set forth in DBA Section 18.9 (*Termination by Court Ruling*) and DBA Exhibit 5 (*Terms for Termination Compensation*).

14.6.5 Pre-Existing Hazardous Materials

GDOT's aggregate liability to Design-Builder for compensable costs for all Compensation Events under clause (e) of its definition shall not exceed $5,000,000 for the Term.

Article 15 REPRESENTATIONS AND COVENANTS

15.1 Design-Builder Representations and Covenants

Design-Builder hereby represents to and covenants with GDOT as follows:

15.1.1 During all periods necessary for the performance of the Work, Design-Builder, its employees and its Contractor(s) have maintained and will maintain all required authority, license status, applicable licensing standards, certification standards, accrediting standards, professional ability, skills and capacity to perform the Work.

15.1.2 As of the Effective Date, Design-Builder has evaluated the constraints affecting design and construction of the Project, including the Property, the Project Limits, as well as the conditions, if any, of the Provided Environmental Approvals, and has reasonable grounds for believing and does believe that the Project can be designed and built within such constraints.

15.1.3 Design-Builder has evaluated the feasibility of performing the Work within the time and for the amount herein, accounting for the aforementioned and following constraints, as well as other factors, and has reasonable grounds for believing and does believe that performance of the Work is feasible and practicable.

15.1.4 Except as to parcels that GDOT lacked title or access to prior to the Effective Date, but including those parcels that Design-Builder proposes as Design-Builder Proposed/Design-Builder Acquired Parcels, Design-Builder conducted a Reasonable Investigation of the Site and surrounding locations in accordance with Good Industry Practice and the requirements of the Design-Build Documents. Regardless, Design-Builder is familiar with, and has satisfied itself as to, the character of the Site, including quality and quantity of surface, anticipated subsurface and latent physical conditions, materials or obstacles that may be encountered, including to the extent required under O.C.G.A. § 32-2-60. Design-Builder accepts the physical requirements of the Work, subject to Design-Builder's rights to seek relief under DBA Section 7.16 (*Existing Improvements and Latent Defects*) and DBA Article 13 (*Relief Events; Compensation Events*).

15.1.5 Design-Builder has familiarized itself with the requirements of any and all applicable Laws, including O.C.G.A. § 48-13-30 *et seq.*, and the conditions of any required Governmental Approvals prior to entering into this Design-Build Agreement. Except as specifically permitted under DBA Article 13 (*Relief Events; Compensation Events*) or DBA Article 14 (*GDOT Changes; Design-Builder Changes; Directive Letters*), Design-Builder has complied and shall comply with the foregoing at its sole cost and without any additional compensation or time extension on account of such compliance, regardless of whether such compliance would require additional time for performance or additional labor, equipment and/or materials not expressly provided for in the Design-Build Documents. As of the Effective Date, Design-Builder has no reason to believe that any Governmental Approval required to be obtained by Design-Builder will not be granted in due course and thereafter remain in effect so as to enable the Work to proceed in accordance with the Design-Build Documents.

15.1.6 All Work furnished by Design-Builder will be performed by or under the supervision of Persons who hold all necessary, valid licenses to practice in the State, by personnel who are skilled, experienced, and competent in their respective trades or professions, who are professionally qualified to perform the Work in accordance with the Design-Build Documents, and who shall assume professional responsibility for the accuracy and completeness of the Design Documents, Construction Documents, and other documents prepared or checked by them, it being understood further that the award of the Design-Build Agreement was based, in part, on the qualifications and experience of the personnel listed in the

Proposal, and accordingly, Design-Builder's commitment that such individuals will be available to undertake and perform the Work as was proposed and committed.

15.1.7 Design-Builder shall at all times schedule and direct the Work to provide an orderly progression thereof so as to complete the applicable portions thereof by the applicable Milestone Deadlines, in each case in accordance with the accepted and then-current Baseline Project Schedule, including furnishing of such employees, materials, facilities, equipment and working such hours, shifts (including extra shifts and overtime shifts, Sundays and State of Georgia or federal public holidays), in each case as may be necessary to accomplish the foregoing, in each case at Design-Builder's sole cost and expense, except as expressly stated otherwise under this Design-Build Agreement.

15.1.8 As of the Effective Date, Design-Builder is a [_____], duly organized and validly existing under the laws of [_____], has the requisite power and all required licenses to carry on its present and proposed activities, and has full power, right and authority to execute and deliver the Design-Build Documents and to perform each and all of the obligations of Design-Builder provided for herein and therein. Design-Builder is duly qualified to do business, and is in good standing, in the State of Georgia as of the Effective Date, and will remain duly qualified and in good standing throughout the term of this Design-Build Agreement and for as long thereafter as any obligations remain outstanding under the Design-Build Documents.***[NTD: fill in with winning proposer's Design-Builder's information]***

15.1.9 The execution, delivery, and performance of the Design-Build Documents have been (or will be) duly authorized by all necessary corporate action of Design-Builder; each person executing the Design-Build Documents and all other such Project related documents, on behalf of Design-Builder has been (or at the time of execution will be) duly authorized to execute and deliver each such document on behalf of Design-Builder; and the Design-Build Documents, and all such other Project related documents have been (or will be) duly executed and delivered by Design-Builder.

15.1.10 Neither the execution and delivery by Design-Builder of the Design-Build Documents, nor the consummation of the transactions contemplated hereby or thereby, is (or at the time of execution will be) in conflict with or has resulted or will result in a default under or a violation of the governing instruments of Design-Builder or any agreement, judgment, or decree to which Design-Builder is a party or is bound.

15.1.11 As of the Effective Date, each of the Design-Build Documents constitutes (or at the time of execution and delivery will constitute) the legal, valid, and binding obligation of Design-Builder, enforceable against Design-Builder and, if applicable, each Design-Builder Member, in accordance with its terms, subject only to applicable bankruptcy, insolvency and similar laws affecting the enforceability of the rights of creditors generally and the general principles of equity.

15.1.12 As of the Effective Date, there is no action, suit, proceeding, investigation or litigation pending and served on Design-Builder that challenges Design-Builder's authority to execute, deliver or perform, or the validity or enforceability of, the Design-Build Documents, and all other Project related documents to which Design-Builder is a party, or that challenges the authority of Design-Builder's official executing the Design-Build Documents; and Design-Builder has disclosed to GDOT prior to the Effective Date any pending and un-served or threatened action, suit, proceeding, investigation or litigation with respect to such matters of which Design-Builder is aware. Design-Builder has no current, pending or outstanding criminal, civil, or enforcement actions initiated by GDOT or the State and agrees that it will immediately notify GDOT of any such actions.

15.1.13 As of the Proposal Due Date, Design-Builder disclosed to GDOT in writing all organizational conflicts of interest of Design-Builder and its Contractors of which Design-Builder was actually aware; and between the Proposal Due Date and the Effective Date, Design-Builder has not obtained

knowledge of any additional organizational conflict of interest, and there have been no organizational changes to Design-Builder or its Contractors identified in its Proposal that have not been approved in writing by GDOT. For this purpose, organizational conflict of interest has the meaning set forth in the RFP.

15.1.14 Neither the execution and delivery by Design-Builder of this Design-Build Agreement and all other Project related documents to which Design-Builder is a party nor the consummation of the transactions hereby or thereby, has resulted or will result, at the time of execution, in a default under any other agreement or instrument to which it is a party or by which it is bound.

15.1.15 The execution and delivery by Design-Builder of the Design-Build Documents and performance by Design-Builder of its obligations thereunder will not conflict with any Laws applicable to Design-Builder that are valid and in effect on the Effective Date. As of the Effective Date, Design-Builder is not in breach of any applicable Law that would have a material adverse effect on the Work or the performance of any of its obligations under the Design-Build Documents.

15.1.16 No event that, with the passage of time or the giving of notice, would constitute a Design-Builder Default has occurred and has not yet been cured.

15.1.17 Design-Builder certifies, by entering into this Design-Build Agreement, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from entering into this Design-Build Agreement by any federal agency or by any department, agency or political subdivision of the State, including GDOT. For purposes of this DBA Section 15.1.17 (*Design-Builder Representations and Covenants*), the term "principal" means an officer, director, owner, partner, Key Personnel, employee, or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of Design-Builder.

15.1.18 Design-Builder represents, warrants and certifies by entering into this Design-Build Agreement, that neither it nor its Affiliates is presently in arrears in payment of Taxes, permit fees or other statutory, regulatory or judicially required payments to GDOT or the State.

15.1.19 Design-Builder acknowledges and agrees, that as a requirement to enter into the Design-Build Documents, its Proposal documents delivered pursuant to the RFP, and its Detailed Cost and Pricing Data, collectively constitute all the information used in the preparation of its Proposal (by or through the Proposer under the RFP), and that no other Proposal preparation information will be considered (if considered) in the resolution of Disputes, the eligibility of consideration being in GDOT's sole discretion. Design-Builder also agrees that nothing in its Proposal documents delivered pursuant to the RFP shall change or modify the terms or conditions of the Design-Build Documents. For avoidance of doubt, this provision does not pertain to those portions of Design-Builder's (or its affiliated Proposer) Proposal expressly included or incorporated into the Design-Build Documents.

15.1.20 Design-Builder represents, warrants, and certifies that the Milestones set forth in its Proposal and as incorporated into DBA Exhibit 9 (*Milestone Schedule*) include specifically all Milestone Deadlines, and is consistent with the Milestone Schedule, as each may be adjusted pursuant to Proposal Commitments, if any.

15.1.21 Design-Builder represents, warrants, and certifies that the representations, warranties, affidavits, and certifications set forth in the attachments under DBA Exhibit 3 (*Other Proposal Submissions*) are true and correct, as of the dates made, respectively, and that the covenants contained therein are obligations hereunder.

Article 16 INSURANCE; PERFORMANCE SECURITY; INDEMNITY

16.1 Insurance

16.1.1 Insurance Policies and Coverage

At minimum, Design-Builder shall procure and keep in effect the Insurance Policies through the Warranty Period, or cause them to be procured and kept in effect through the Warranty Period, and in each case satisfy the requirements set forth in this DBA Section 16.1 (*Insurance*) and DBA Exhibit 16 (*Insurance Coverage Requirements*). All insurance placed shall be consistent with, and comply with the policies and requirements of O.C.G.A. § 50-21-37. GDOT reserves the right to review and approve the terms and conditions of all project-specific Insurance Policies, for compliance with the requirements of this DBA Section 16.1 (*Insurance*) and DBA Exhibit 16 (*Insurance Coverage Requirements*) prior to final placement of such Insurance Policies. Such review and approval includes policy wording language and proposed insurance program structure. Design-Builder shall be a named insured on all Insurance Policies, unless otherwise noted.

16.1.2 General Insurance Requirements

16.1.2.1 Qualified Insurers

Each of the Insurance Policies required hereunder shall be procured from an insurer that, at the time coverage under the applicable policy commences is:

(a) authorized to do business in the State and having a current policyholder's management and financial size category rating of A- (A minus) or better and Class VIII by A.M. Best and Company's Insurance Reports Key Rating Guide; or

(b) otherwise approved in writing by GDOT.

If an insurer providing any of the Insurance Policies (i) loses the ratings set forth in subsection (a), or (ii) becomes the subject of bankruptcy proceedings, becomes insolvent or is the subject of an order by the State, Design-Builder shall replace the insurer complying with the same coverages, terms and conditions of this DBA Section 16.1 (*Insurance*) and DBA Exhibit 16 (*Insurance Coverage Requirements*) within 60 days, or otherwise as may be approved by GDOT in its sole discretion.

16.1.2.2 Deductibles

(a) GDOT shall have no liability for deductibles or self-insured retentions ("SIRs") and amounts in excess of the coverage provided, unless part of a Compensation Amount or Termination Compensation. Design-Builder may use SIRs in lieu of deductibles with respect to Insurance Policies, so long as Design-Builder disclosed all such Insurance Policies, on a continuing basis, by Formal Communication to GDOT.

(b) Design-Builder may allocate responsibility and liability for the payment of the deductible or SIR to Design-Builder-Related Entity responsible for the matter giving rise to an insurable claim under the applicable Insurance Policy under which it is a named insured, however Design-Builder shall remain the party with primary responsible for payment of any deductible or SIR. In the event that responsibility for the matter giving rise to an insurable claim is indeterminable, the first named insured under the applicable Insurance Policy shall be responsible and liable for the payment of the deductible or SIR. In no event will GDOT be responsible for the failure of Design-Builder or any Design-Builder-Related

Entity to pay a deductible or SIR under this DBA Section 16.1 (*Insurance*), unless part of a Compensation Amount or Termination Compensation.

16.1.2.3 Primary Coverage

Each Insurance Policy specified in DBA Exhibit 16 (*Insurance Coverage Requirements*) shall provide that the coverage thereof is primary and non-contributory coverage with respect to all named or additional insureds except for coverage that by its nature cannot be written as primary. Any other insurance maintained by an insured or an additional insured shall be excess of and non-contributory with any insurance available to the Project, and Design-Builder shall provide evidence sufficient, in GDOT's sole determination, by Formal Communication, of such other insurance that Design-Builder intends to rely upon to respond to claims or potential claims with respect to the Work or the Project as and when the corresponding or analogous insurance is required to be placed hereunder.

16.1.2.4 Verification of Coverage

(a) At any time Design-Builder is required to obtain or cause to be obtained any Insurance Policy, including insurance coverage required of Contractors, and thereafter not later than 10 days prior to the expiration date of each Insurance Policy, Design-Builder shall deliver to GDOT a certificate of insurance. At or before the time initial proof of insurance coverage is to be provided, Design-Builder shall provide GDOT with a copy of the insurance company binder or, if available, the policy as evidence that compliant coverage is in place, if not previously provided.

(b) In addition, within a reasonable time after coverages are initially bound or renewed (but not to exceed 60 days after placement), Design-Builder shall deliver to GDOT (i) a complete certified copy of each such project specific insurance policy or modification, or renewal or replacement Insurance Policy and all endorsements thereto and (ii) satisfactory evidence of payment of the premium therefor.

(c) If Design-Builder has not provided GDOT with the foregoing proof of coverage and payment within five days after GDOT delivers to Design-Builder Notice of a Design-Builder Default under DBA Section 17.1.1.6 (*Design-Builder Defaults*) and demand for the foregoing proof of coverage, GDOT may, in addition to any other available remedy, without obligation or liability and without further inquiry as to whether such insurance is actually in place, (i) obtain such an Insurance Policy; and Design-Builder shall reimburse GDOT for the cost thereof upon demand, and (ii) suspend all or any portion of Work and close the Project until GDOT receives from Design-Builder such proofs of coverage in compliance with this DBA Section 16.1 (*Insurance*) (or until GDOT obtains an Insurance Policy, if it elects to do so).

(d) In addition to the foregoing, promptly following GDOT's request, Design-Builder shall make available for GDOT's review, copies of all such project Insurance Policies and reports of all losses reported and incurred on the Project, whether such losses are covered by Project-specific policies or not.

16.1.2.5 Project-Specific Insurance

Except as expressly provided otherwise in DBA Exhibit 16 (*Insurance Coverage Requirements*), all Insurance Policies required hereunder shall be purchased specifically and exclusively for the Project with coverage limits, purchased on a Project term basis to include the design, construction, any warranty period and, as appropriate, any required extended discovery or reporting period. Design-Builder must disclose the expected costs of all project specific insurance policies obtained or proposed to be obtained. Design-Builder may request GDOT to approve, in its sole discretion, inclusion of Project

insurance requirements under this DBA Section 16.1 (*Insurance*) and DBA Exhibit 16 (*Insurance Coverage Requirements*) within Design-Builder's or under a Design-Builder-Related Entity/ies corporate or insurance program, so long as the program affords the Project dedicated policy limits and sublimits, as applicable, under each Insurance Policy, with Design-Builder as a named insured.

16.1.2.6 Policies with Insureds in Addition to Design-Builder

All Insurance Policies that are required to insure Persons (whether as named or additional insureds) in addition to Design-Builder shall comply or be endorsed to comply with the following provisions.

(a) For projects with a Contract Sum over $100 million, the General Liability and Builders Risk Insurance Policies shall be written or endorsed so that no acts or omissions of an insured shall vitiate coverage of the other insureds. Without limiting the foregoing, any failure on the part of a named insured to comply with reporting provisions or other conditions of the Insurance Policies, any breach of warranty, any action or inaction of a named insured or others, or any change in ownership of all or any portion of the Project or Design-Builder's Interest shall not affect coverage provided to the other named insureds or additional insureds (and their respective members, managers, directors, officers, employees, agents and Project consultants).

(b) The insurance shall apply separately to each named insured and additional insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability. Such provision shall provide that the interests and protections of each additional insured shall not be affected by any misrepresentation, act or omission of another named insured, or any breach by named insured of any provision in the policy that would otherwise result in forfeiture or reduction of coverage for the other insureds on the policy.

(c) All endorsements adding additional insureds to required Insurance Policies shall contain no limitations, conditions, restrictions or exceptions to coverage in addition to those that apply under the Insurance Policy generally.

16.1.2.7 Additional Terms and Conditions

(a) Each Insurance Policy shall be endorsed to state that coverage cannot be canceled, or materially reduced in coverage or in limits except after 30 days' prior written Notice (or 10 Business Days' Notice in the case of cancellation for non-payment of premium) by registered or certified mail (return receipt requested), or by email (with a "hard copy" to follow), has been given to GDOT and each other insured or additional insured party requiring such notice. A material reduction in coverage or in limits shall not include payments under the policy that by their nature erode or deplete the limits of such policy. Such endorsement shall not include any limitation of liability of the insurer for failure to provide such notice.

(b) Each Insurance Policy shall provide coverage on an "occurrence" basis and not a "claims made" basis (with the exception of any professional liability and pollution liability Insurance Policies).

(c) Each Insurance Policy shall otherwise not contain exclusions or gaps that reduce coverage below the minimum levels and required limits set forth herein.

16.1.2.8 Waivers of Subrogation

Design-Builder waives all rights against the Indemnified Parties, for any claims to the extent covered by valid and collectible insurance placed by or on behalf of Design-Builder, including insurance

obtained pursuant to this DBA Section 16.1 (*Insurance*), except such rights as they may have to the proceeds of such insurance. If Design-Builder is deemed to self-insure a claim or loss under DBA Section 16.1.4.3 (*Prosecution of Insurance Claims*), then Design-Builder's waiver shall apply as if it carried the required insurance. Design-Builder shall require all Contractors to provide similar waivers in writing each in favor of all other parties enumerated above. Each Insurance Policy, including workers' compensation if permitted under the applicable workers' compensation insurance Laws, shall include an express waiver of any right of subrogation against the Indemnified Parties or a consent to the insured's waiver of recovery in advance of loss, whether by endorsement or otherwise.

16.1.2.9 No Recourse

There shall be no recourse against GDOT, the State, or any other agency or department thereof, or any of their respective Constituents, for payment of premiums, deductibles and SIRs, or other amounts with respect to the Insurance Policies required hereunder, except to the extent of increased premium costs recoverable under DBA Article 13 (*Relief Events; Compensation Events*) or DBA Section 14.1 (*GDOT Changes*).

16.1.2.10 Support of Indemnifications

The Insurance Policies shall support but are not intended to limit Design-Builder's indemnification obligations under the Design-Build Documents.

16.1.2.11 Adjustments in Coverage Amounts

(a) During the Term, as and to the extent that GDOT elects to increase any minimum coverage limits as required pursuant hereto and as set forth under DBA Exhibit 16 (*Insurance Coverage Requirements*), such additional premium costs shall be reimbursed to Design-Builder as a Compensation Event. Any such requirement for additional coverage shall be subject to Design-Builder's ability to obtain such additional coverage as and to the extent reasonably and commercially available.

(b) Any Dispute regarding increases in limits or adjustments to deductibles shall be resolved according to the Dispute Resolution Procedures.

16.1.2.12 Contractor Insurance Requirements

(a) Design-Builder's obligations regarding Contractors' insurance are contained in DBA Exhibit 16 (*Insurance Coverage Requirements*).

(b) If any Contractor fails to procure and keep in effect the insurance required of it under DBA Exhibit 16 (*Insurance Coverage Requirements*) and GDOT asserts the same as a Design-Builder Default hereunder, Design-Builder may, within the applicable cure period, cure such Design-Builder Default by (i) causing such Contractor to obtain the requisite insurance and providing to GDOT proof of insurance, (ii) procuring the requisite insurance for such Contractor and providing to GDOT proof of insurance or (iii) terminating the Contractor and removing its personnel from the Site.

16.1.2.13 Defense Costs

No defense costs shall be included within or erode the limits of coverage of any of the Insurance Policies, except that defense costs may be included within the limits of coverage of professional and pollution liability Insurance Policies.

16.1.2.14 Contesting Denial of Coverage

If any insurer under an Insurance Policy denies coverage with respect to any claims reported to such insurer, upon Design-Builder's request, GDOT and, to the extent necessary, the other Indemnified Parties shall cooperate in good faith to establish whether and to what extent to contest, and how to fund the cost of contesting, the denial of coverage; provided that if the reported claim is a matter covered by an indemnity in favor of an Indemnified Party, then Design-Builder shall bear all costs of contesting the denial of coverage.

16.1.2.15 Requirements Not Limiting

(a) The Parties acknowledge and agree that: (i) requirements of specific coverage features or limits contained in this DBA Article 16 (*Insurance; Performance Security; Indemnity*) and in DBA Exhibit 16 (*Insurance Coverage Requirements*) are minimum coverages only and not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any Insurance Policy; (ii) specific reference to a given coverage feature is not intended to be all-inclusive, or to the exclusion of other coverage, or a waiver of any type; and (iii) all insurance coverage and limits provided by Design-Builder, or by third parties pursuant to obligations of Design-Builder hereunder, and, in each case, available or applicable to this Design-Build Agreement are intended to apply to the full extent of the Insurance Policies, and nothing contained in this Design-Build Agreement limits, or shall be deemed to limit, the application of such insurance coverage.

(b) It is understood that insurance coverage described herein does not limit any obligations or liability of Design-Builder under the Design-Build Agreement. Furthermore, the insurance limits required hereunder are minimum limits only and not intended to restrict the liability imposed on Design-Builder, any Contractor, or any of its or their Subcontractors or Suppliers at any tier, or otherwise to limit or reduce coverage amounts or limits under any insurance policies procured by any such Persons.

16.1.3 Additional Insurance Policies

If Design-Builder carries (or procures) any other insurance applicable to this Project (other than Design-Builder's customary blanket coverage), then Design-Builder shall include the Indemnified Parties as additional insureds thereunder, if and to the extent they have an insurable interest. The additional insured endorsements shall be as described in DBA Section 16.1.2.6(c) (*Policies with Insureds in Addition to Design-Builder*); and Design-Builder shall provide to GDOT the proofs of coverage and copy of the policy described in DBA Section 16.1.2.4 (*Verification of Coverage*). If, however, Design-Builder demonstrates to GDOT that inclusion of such Persons as additional insureds will increase the premium, GDOT will elect either to pay the increase in premium or forego additional insured coverage. The provisions of DBA Sections 16.1.2.4 (*Verification of Coverage*), 16.1.2.6 (*Policies with Insureds in Addition to Design-Builder*), 16.1.2.7 (*Additional Terms and Conditions*), 16.1.2.8 (*Waivers of Subrogation*), 16.1.2.9 (*No Recourse*), 16.1.2.14 (*Contesting Denial of Coverage*) and 16.1.4 (*Prosecution of Insurance Claims*) shall apply to all such policies of insurance coverage, as if they were within the definition of Insurance Policies.

16.1.4 Prosecution of Insurance Claims

16.1.4.1 Unless otherwise directed by GDOT in writing with respect to GDOT's insurance claims and subject to the requirements of DBA Sections 16.4 (*Indemnity by Design-Builder*) and 16.5 (*Defense and Indemnification Procedures*) below, Design-Builder shall be responsible for reporting and processing all potential claims by GDOT or Design-Builder against the Insurance Policies required hereunder. Design-Builder agrees to report timely to the insurer(s) under such Insurance Policies any and all matters that may give rise to an insurance claim by Design-Builder or GDOT or another Indemnified

Party and to promptly and diligently pursue such insurance claims in accordance with the claims procedures specified in such Insurance Policies, whether for defense or indemnity or both. Design-Builder shall enforce all legal rights against the insurer under the applicable Insurance Policies and applicable Laws in order to collect thereon, including pursuing necessary litigation and enforcement of judgments, provided that Design-Builder shall be deemed to have satisfied this obligation if a judgment is not collectible through the exercise of lawful and diligent means.

16.1.4.2 GDOT agrees to promptly notify Design-Builder of GDOT's incidents, potential claims against GDOT, and matters that may give rise to an insurance claim against GDOT, to tender to the insurer GDOT's defense of the claim under such Insurance Policies, and to cooperate with Design-Builder as necessary for Design-Builder to fulfill its duties hereunder.

16.1.4.3 If in any instance Design-Builder has not performed its obligations respecting insurance coverage set forth in the Design-Build Documents or is unable to enforce and collect any such insurance for failure to assert claims in accordance with the terms of the Insurance Policies or to prosecute claims diligently, then for purposes of determining Design-Builder's liability and the limits thereon or determining reductions in compensation due from GDOT to Design-Builder on account of available insurance, Design-Builder shall be treated as if it has elected to self-insure up to the full amount of insurance coverage that would have been available had Design-Builder performed such obligations and not committed such failure. Nothing in this DBA Section 16.1.4 (*Prosecution of Insurance Claims*) or elsewhere in this DBA Section 16.1 (*Insurance*) shall be construed to treat Design-Builder as electing to self-insure where Design-Builder is unable to collect due to the bankruptcy or insolvency of any insurer that at the time the Insurance Policy is written meets the rating qualifications set forth in this DBA Section 16.1 (*Insurance*).

16.1.4.4 Design-Builder shall not settle or accept any settlement of any insurance claim that is in excess of $100,000 or that involves any claim that has been asserted against GDOT, the State or any agency or department thereof, without prior written approval of GDOT, provided that Design-Builder shall not be required to obtain GDOT approval for workers' compensation claims. Design-Builder shall provide Notice to GDOT promptly after settling or accepting any settlement of any insurance claim.

16.1.4.5 If in any instance Design-Builder has not promptly performed its obligation to report to applicable insurers and process any potential insurance claim tendered by GDOT or another Indemnified Party, then GDOT or the other Indemnified Party may, but is not obligated to, (a) notify Design-Builder in writing of GDOT's intent to report the claim directly with the insurer and thereafter process the claim, and (b) proceed with reporting and processing the claim if GDOT or the other Indemnified Party does not receive from Design-Builder, within 10 days after so notifying Design-Builder, written proof that Design-Builder has reported the claim directly to the insurer. GDOT or the other Indemnified Party may dispense with such notice to Design-Builder if GDOT or the other Indemnified Party has a good faith belief that more rapid reporting is needed to preserve the claim.

16.1.5 Application of Insurance Proceeds

All insurance proceeds received for physical property damage to the Project under any Insurance Policies, other than any business interruption insurance maintained as part of such Insurance Policies, shall be first applied to repair, reconstruct, rehabilitate, restore, renew, reinstate and replace each part or parts of the Project with respect to which such proceeds were received. For avoidance of doubt, and without limiting either the provisions of DBA Section 7.11.6 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*) or Design-Builder's right to assert a Relief Event or Compensation Event (or both), Design-Builder assumes all liabilities regarding, and shall maintain, rebuild, repair, restore or replace, all Work or other portions of the Project, whether owned by Design-Builder or another Person, or both, in each case that is damaged due to any construction or design defect or other cause

related to the Design-Builder's Work until expiration of the Warranty Period regardless of the cause of the damage or injury, at no additional cost to GDOT.

16.1.6 Inadequacy of Required Coverages

GDOT makes no representation that the scope of coverage and limits of liability specified for any Insurance Policy to be carried pursuant to this Design-Build Agreement or approved variances therefrom are adequate to protect Design-Builder against its undertakings under this Design-Build Agreement to GDOT, or its liabilities to any third party. It is the responsibility of Design-Builder and each Contractor to determine if any changes or additional coverages are required to adequately protect their interests. No such limits of liability or approved variances therefrom shall preclude GDOT from taking any actions as are available to it under the Design-Build Documents, or otherwise at Law.

16.2 Performance and Payment Security

Design-Builder shall furnish the P&P Bonds (and Warranty Bond, as and when required, if placed) meeting the requirements of this DBA Section 16.2 (*Performance and Payment Security*) as performance and payment security for the Work. Notwithstanding anything to the contrary in the Design-Build Documents, Design-Builder shall provide payment and performance security such that GDOT (and all additional obliges under surety bonds) have access thereto from the Effective Date through expiration of the Warranty Period. Furthermore, notwithstanding anything to the contrary in the Design-Build Documents, performance by a Surety or Guarantor (if any) of any of the obligations of Design-Builder shall not relieve of any of its obligations hereunder.

16.2.1 P&P Bonds

16.2.1.1 Design-Builder shall obtain and maintain, and deliver to GDOT P&P Bonds, as a condition to issuance of NTP1, each in the amount, subject to DBA Section 16.2.1.5, (*P&P Bonds*) equal to 120% of $[___]***[NTD: insert the preliminary Contract Sum, identified at DBA Exhibit 7 (Contract Sum and Payment Terms); this amount* excludes *the value of the Unexpected Subsurface Conditions Allowance]***, identifying Design-Builder as the P&P Obligor, and GDOT as the Obligee, in substantially the respective form attached at DBA Exhibit 19 (*Forms of P&P Bonds, Warranty Bond*), securing Design-Builder's obligations to perform the Work and to ensure that payments owing to Claimants are made with respect to such Work.

16.2.1.2 The P&P Bonds shall each be issued by a properly licensed and U.S. Treasury listed surety(ies) that have not less than A or better and Class VIII by A.M. Best and Company's Insurance Reports Key Rating Guide, and listed on Treasury Department Circular 570 (each such surety, a "Surety"). If either of the P&P Bonds are issued by more than one Surety, such P&P Bond(s) shall be executed on a joint and several basis, identifying the lead Surety (that will be the sole recipient of GDOT communications, on behalf of all Sureties).

16.2.1.3 The performance and indemnity surety bond of the P&P Bonds shall provide performance security from the Effective Date up to the Substantial Completion Date. Without limiting Design-Builder's option under DBA Section 16.2.2 (*Warranty Period Payment and Performance Security*), the payment surety bond of the P&P Bonds shall provide payment security from the Effective Date up to the date that is the later of (i) two years from the date of Substantial Completion and (ii) expiration of the Warranty Period.

16.2.1.4 If GDOT does not receive any certificate, release, certified payroll or affidavit of wages paid as required by DBA Exhibit 7 (*Contract Sum and Payment Terms*), it may require Design-

Builder to immediately increase the penal sum of the payment surety bond of the P&P Bonds to such amount as GDOT determines is appropriate to protect GDOT's interests and the Project, provided that the amount of any such increase shall not exceed the value of Work for which GDOT did not receive any such certificate, release, certified payroll or affidavit of wages paid.

16.2.1.5 The penal sum of each of the P&P Bonds shall be adjusted pursuant to any Supplemental Agreement or Design-Build Agreement amendment that adjusts the Contract Sum so as to conform to the valuation requirement set forth in DBA Section 16.2.1.1 (*P&P Bonds*).

16.2.1.6 If any surety providing either of the P&P Bonds (i) loses or fails to maintain its license(s), U.S. Treasury listing, or loses the minimum ratings (or is rated below the minimum ratings) set forth in DBA Section 16.2.1.2 (*P&P Bonds*), or (ii) becomes the subject of bankruptcy proceedings, becomes insolvent or is the subject of an order by the State, then Design-Builder shall replace the P&P Bond(s), or cause another surety to assume co-surety status on the existing P&P Bonds, substantially in any event with the respective form attached at DBA Exhibit 19 (*Forms of P&P Bonds, Warranty Bond*) within 60 days, or otherwise as may be approved by GDOT in its sole discretion.

16.2.2 Warranty Period Payment and Performance Security

16.2.2.1 At Design-Builder's option, Design-Builder shall, as a condition to Final Acceptance, either (a) furnish, or cause the furnishing of, the Warranty Bond, and deliver the Warranty Bond, in the amount equal to 10% of the Contract Sum, as may have been further adjusted pursuant to this Design-Build Agreement, identifying Design-Builder as the P&P Obligor and GDOT as the Obligee, in substantially the respective form attached at DBA Exhibit 19 (*Forms of P&P Bonds, Warranty Bond*), securing Design-Builder's obligations to perform the Work pursuant to the Warranty, or (b) cause the penal sum of the performance and indemnity surety bond of the P&P Bonds to be reduced to 10% of the Contract Sum, as may have been further adjusted pursuant to this Design-Build Agreement (and provide such evidence, as is sufficient in GDOT's sole discretion, to reflect the reduction). For avoidance of doubt, the payment surety bond of the P&P Bonds shall remain in full force and effect to ensure that payments owing to Claimants are made with respect to such Work for the duration described in DBA Section 16.2.1.3 (*P&P Bonds*); provided, however, that at the expiration of the later of (a) one year following the Substantial Completion Date and (b) expiration of the statute of limitations under State Law, Design-Builder may reduce the penal sum of such payment surety bond or, deliver a new payment surety bond of the P&P Bonds, to the amount described in this DBA Section 16.2.2.1 (*Warranty Period Payment and Performance Security*).

16.2.2.2 When Design-Builder delivers the Warranty Bond (and, if applicable, a new payment surety bond of the P&P Bonds) from a Surety under this DBA Section 16.2.2 (*Warranty Period Payment and Performance Security*), then, without limiting the general requirement with respect to duration under DBA Section 16.2 (*Performance and Payment Security*), GDOT will release the existing surety bond(s) in exchange for the new surety bond(s).

16.3 Guaranties

16.3.1 Design-Builder shall furnish to GDOT one or more Guaranty/ies. Each Guaranty shall (a) comply with the requirements of Section 5.3 of the ITP, (b) be substantively in the form attached as Form Y to the ITP or in such other form as GDOT may approve, in its sole discretion, (c) be effective through the end of the Warranty Period and (d) expressly include GDOT as guaranteed parties under such Guaranty/ies.

16.3.2 In the event Design-Builder or any Affiliate receives from any Person a guaranty of payment or performance of any obligation(s) of any other Key Contractor, Design-Builder shall cause such

Person to furnish a guaranty with respect to such Person's obligations under its Contract in compliance with this DBA Section 16.3 (*Guaranties*).

16.3.3 Each Guaranty furnished pursuant to this DBA Section 16.3 (*Guaranties*) shall (a) guaranty the performance and completion of all of the Person's obligations under the applicable Contract (including its warranty and indemnification obligations), with the same protections and rights of notice, enforcement and collection as are available to Design-Builder or any Affiliate with respect to such Person's obligations under the applicable Contract, subject, in each case, to any limitation of liability and exceptions thereunder as set forth in the applicable Contract, and (b) provide that the rights and protections of GDOT shall not be reduced, waived, released or adversely affected by the acts or omissions of any other guaranteed party, other than through the rendering of performance and payment to another guaranteed party. A duplicate original of any Guaranty furnished under this DBA Section 16.3 (*Guaranties*) shall be delivered to GDOT.

16.3.4 GDOT agrees to forbear from its right to compel Guarantor payment or performance of the guaranteed obligations under any such Guaranty so long as Design-Builder is diligently pursuing applicable remedial action as required by this DBA.

16.4 Indemnity by Design-Builder

16.4.1 Design-Builder shall release, protect, defend, indemnify, and hold harmless the Indemnified Parties from and against any and all (a) claims or Losses and (b) Third Party Claims and Third Party Losses, in each case, arising out of, relating to or resulting from:

16.4.1.1 the breach or alleged breach of the Design-Build Documents by Design-Builder;

16.4.1.2 the failure or alleged failure by Design-Builder or any Design-Builder-Related Entity to comply with the Governmental Approvals, any applicable Environmental Laws or other Laws (including Laws regarding Hazardous Materials Management);

16.4.1.3 any actual or alleged patent or copyright infringement or other actual or allegedly improper appropriation or use by Design-Builder or any Design-Builder-Related Entity of Intellectual Property of any third party in performance of the Work, or arising out of any use in connection with the Project of methods, processes, designs, information, or other items furnished or communicated to GDOT or another Indemnified Party pursuant to the Design-Build Documents; provided that this indemnity shall not apply to any infringement resulting from GDOT's failure to comply with specific written instructions regarding use provided to GDOT by Design-Builder;

16.4.1.4 any actual or alleged negligent; reckless, willful, or intentional misconduct (excluding intentional Design-Builder Default); illegal activities (or inaction); fraud; criminal conduct; or bad faith on the part of Design-Builder or any Design-Builder-Related Entity in, arising out of, relating to, caused by, or otherwise associated with performance of the Work;

16.4.1.5 any and all claims by any governmental or taxing authority claiming Taxes based on gross receipts, purchases or sales, the use of any property or income of Design-Builder or any Design-Builder-Related Entity with respect to any payment for the Work made to or earned by Design-Builder or any Design-Builder-Related Entity;

16.4.1.6 any and all stop notices, Liens and claims filed in connection with the Work, including all reasonable expenses and attorneys', accountants' and expert witness fees and costs incurred in discharging any stop notice, Lien or claim, and any other liability to Contractors, laborers and Suppliers

for failure to pay sums due for their work, services, materials, goods, equipment or supplies, including interest and attorney's fees, provided that GDOT is not in default in payments owing (if any) to Design-Builder with respect to such Work;

16.4.1.7 any actual or threatened Design-Builder Hazardous Materials Release;

16.4.1.8 any dispute or claim by a Utility Owner related to Design-Builder or any Design-Builder-Related Entity's performance of, or failure to perform, Utility Adjustment Work;

16.4.1.9 (a) any Design-Builder breach of or failure to perform an obligation that GDOT owes to a third Person, including Governmental Entities, under Law or under any agreement between GDOT and a third Person, where GDOT has expressly delegated performance of the obligation to Design-Builder pursuant to the terms of the Design-Build Documents, or (b) the negligent or willful acts or omissions of Design-Builder or any Design-Builder-Related Entities that render GDOT unable to perform or abide by an obligation that GDOT owes to a third Person, including Governmental Entities, under any agreement between GDOT and a third Person, where the agreement is previously disclosed or known to Design-Builder;

16.4.1.10 any actual or alleged negligent; reckless, willful, or intentional misconduct (excluding intentional Design-Builder Default); illegal activities (or inaction); fraud; criminal conduct; bad faith; violation of Law; violation or breach of contract (excluding breach of this Design-Build Agreement); arbitrary or capricious acts on the part of Design-Builder or any Design-Builder-Related Entity in, arising out of, relating to, caused by, or otherwise associated with performance of real property acquisition services under the Design-Build Documents;

16.4.1.11 inverse condemnation, trespass, nuisance, interference with use and enjoyment of property or similar taking of or harm to real property by reason of (a) the failure of Design-Builder or any Design-Builder-Related Entity to comply with Good Industry Practice, requirements of the Design-Build Documents, Project Management Plan or Governmental Approvals, (b) the intentional misconduct or negligence of Design-Builder or any Design-Builder-Related Entity, or (c) the entry onto or encroachment upon another's property by Design-Builder or any Design-Builder-Related Entity;

16.4.1.12 if applicable, any violation of any federal or state securities or similar law by Design-Builder or any Design-Builder-Related Entity;

16.4.1.13 Defects or Errors

(a) in the design of the Project and/or of Utility Adjustments, or the Work, included in the Design Work that fails to comply with Good Industry Practice; or

(b) in the construction of the Project and/or of Utility Adjustments, or the Work, included in the Construction Work;

16.4.1.14 any claim asserted or alleged against GDOT in contradiction of DBA Section 6.3.11 (*Limitations on Design-Builder's Right to Rely*);

16.4.1.15 all fines, penalties, or other fees imposed by any Governmental Entity arising out of, relating to, resulting from, or caused by the ownership, use, or operation of UASs in connection with the Work; or

16.4.1.16 the claim or assertion by any other developer or contractor that Design-Builder or any Design-Builder-Related Entity interfered with, or hindered the progress or completion of, work being performed by such other developer or contractor, or failed to cooperate reasonably with such other developer or contractor so as to cause inconvenience, disruptions, delay or loss, except where Design-Builder or the Design-Builder-Related Entity was not in any manner engaged in performance of the Work.

16.4.2 Subject to the releases and disclaimers herein, including all the provisions set forth in DBA Section 6.3.11 (*Limitations on Design-Builder's Right to Rely*), Design-Builder's indemnity obligation shall not extend to any Third Party Claims and Third Party Losses to the extent caused or contributed to by:

16.4.2.1 the sole negligence; recklessness, willful, or intentional misconduct (excluding intentional Design-Builder Default); illegal activities (or inaction); fraud; criminal conduct; bad faith; violation or breach of contract (excluding breach of this Design-Build Agreement); or arbitrary or capricious acts on the part of the Indemnified Party;

16.4.2.2 GDOT's breach of any of obligations under the Design-Build Documents, subject to DBA Section 6.3.11 (*Limitations on Design-Builder's Right to Rely*);

16.4.2.3 an Indemnified Party's violation of any Laws or Governmental Approvals;

16.4.2.4 solely with respect to Third Party Losses, any material defect inherent in a prescriptive design, or construction specification included in the Design-Build Documents that was not drafted or provided by Design-Builder under this Design-Build Agreement, but only where, prior to occurrence of the Third Party Loss, Design-Builder complied with such specification and did not actually know, or would not reasonably have known, while exercising reasonable diligence, of such material defect or, if Design-Builder actually knew of the deficiency, unsuccessfully sought GDOT's waiver or approval of a deviation, change, modification, alteration or exception from such specification; or

16.4.2.5 any Compensation Event or Relief Event.

16.4.3 In claims by an employee of Design-Builder, a Contractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this DBA Section 16.4 (*Indemnity by Design-Builder*) shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for Design-Builder or a Contractor under workers' compensation, disability benefit or other employee benefits laws.

16.4.4 For purposes of this DBA Section 16.4 (*Indemnity by Design-Builder*), "Third Party Claim" includes a claim, dispute, disagreement, cause of action, demand, suit, action, judgment, investigation, or legal or administrative proceeding that (a) is asserted, initiated or brought by any Indemnified Party's employee, agent or contractor against an Indemnified Party, (b) is within the scope of the indemnities and (c) is not covered by the Indemnified Party's workers' compensation program. For purposes of this DBA Section 16.4 (*Indemnity by Design-Builder*), "Third Party Loss" includes any actual or alleged Loss sustained or incurred by such employee, agent or contractor.

16.5 Defense and Indemnification Procedures

16.5.1 If any of the Indemnified Parties receives notice of a claim that it believes is within the scope of the indemnities under DBA Section 16.4 (*Indemnity by Design-Builder*), GDOT will by writing as soon as practicable after receipt of the claim, (a) inform Design-Builder of the claim, (b) send to Design-Builder a copy of all written materials GDOT has received asserting such claim and (c) notify Design-Builder that should no insurer accept defense of the claim, the Indemnified Party will conduct its own

defense unless Design-Builder accepts the tender of the claim in accordance with DBA Section 16.5.3 (*Defense and Indemnification Procedures*). As soon as practicable after Design-Builder receives notice of a claim or otherwise has actual knowledge of a claim, it shall tender the claim in writing to the insurers under all potentially applicable Insurance Policies and comply with all notice requirements contained in such Insurance Policies. GDOT and other Indemnified Parties also shall have the right to tender such claims to such insurers.

16.5.2 Subject to DBA Section 16.5.4 (*Defense and Indemnification Procedures*), if the insurer under any applicable Insurance Policy accepts the tender of defense, GDOT and Design-Builder shall cooperate in the defense as required by the Insurance Policy. If no insurer under potentially applicable Insurance Policies provides defense, then DBA Section 16.5.3 (*Defense and Indemnification Procedures*) shall apply.

16.5.3 If the defense is tendered to Design-Builder, then within 30 days after receipt of the tender it shall notify the Indemnified Party whether it has tendered the matter to an insurer and (if not tendered to an insurer or if the insurer has rejected the tender) shall deliver a Notice stating that Design-Builder:

16.5.3.1 accepts the tender of defense and confirms that the claim is subject to full indemnification hereunder without any "reservation of rights" to deny or disclaim full indemnification thereafter;

16.5.3.2 accepts the tender of defense but with a "reservation of rights" in whole or in part, with a detailed statement as to the reasons for the "reservation of rights"; or

16.5.3.3 rejects the tender of defense based on a determination that it is not required to indemnify against the claim under the terms of this Design-Build Agreement, with a detailed statement as to the reasons for the denial.

16.5.4 If Design-Builder accepts the tender of defense under DBA Section 16.5.3.1 (*Defense and Indemnification Procedures*), Design-Builder acknowledges and agrees (and has caused the insurer to be so notified of the statutory requirements) that the Attorney General of the State shall represent and defend the State, GDOT and any officer, director, commissioner or employee of such Indemnified Parties; but GDOT will request that the Attorney General of the State, without limiting the authority of the Attorney General of the State, consider attorneys recommended by Design-Builder for appointment as SAAG to represent and defend the referenced Indemnified Parties. Design-Builder may, at the option of the Attorney General, have the right to participate in the defense of the Indemnified Parties. In the event of litigation, any settlement on behalf of the Indemnified Parties must be expressly approved by the Attorney General of the State. The foregoing shall not relieve Design-Builder's obligation to bear the fees and costs of defending and settling such claim. During such defense:

16.5.4.1 Design-Builder shall fully and regularly inform the Indemnified Party and the Attorney General of the State of the progress of the defense and of any settlement discussions; and

16.5.4.2 each Indemnified Party shall fully cooperate in said defense, provide to Design-Builder all materials and access to personnel it requests as necessary for defense, preparation, and trial and which or who are under the control of or reasonably available to the Indemnified Party, and maintain the confidentiality of all communications between it and Design-Builder concerning such defense.

16.5.5 If Design-Builder responds to the tender of defense as specified in DBA Section 16.5.3.2 (*Defense and Indemnification Procedures*) or 16.5.3.3 (*Defense and Indemnification Procedures*), such Indemnified Parties shall also be represented by the Attorney General of the State who shall otherwise

control the defense of such claim, including settlement. The foregoing shall not relieve Design-Builder from its obligations to bear the fees and costs of defending and settling such claim.

16.5.6 Even if the Attorney General of the State has appointed counsel selected by Design-Builder to represent any of the Indemnified Parties, the Attorney General of the State may assume the defense of the applicable Indemnified Parties by delivering to Design-Builder Notice of such election and the reasons therefor, if the Indemnified Parties, at the time such Indemnified Party or Parties gives notice of the claim or at any time thereafter, reasonably determine(s) that:

16.5.6.1 a conflict exists between it and Design-Builder that prevents or potentially prevents Design-Builder from presenting a full and effective defense;

16.5.6.2 Design-Builder is otherwise not providing an effective defense in connection with the claim; or

16.5.6.3 Design-Builder lacks the financial capacity to satisfy potential liability or to provide an effective defense.

16.5.7 If any of the Indemnified Parties is entitled and elects to conduct its own defense pursuant hereto of a claim for which it is entitled to indemnification, Design-Builder shall reimburse on a current basis all reasonable costs and expenses any such Indemnified Parties incurs in investigating and defending, including attorney's fees. In the event the Indemnified Parties are entitled to and elect to conduct their own defense, then:

16.5.7.1 in the case of a defense conducted under DBA Section 16.5.3.1 (*Defense and Indemnification Procedures*), it shall have the right to settle or compromise the claim with Design-Builder's prior written consent, which shall not be unreasonably withheld or delayed;

16.5.7.2 in the case of a defense conducted under DBA Section 16.5.3.2 (*Defense and Indemnification Procedures*), it shall have the right to settle or compromise the claim with Design-Builder's prior written consent, which shall not be unreasonably withheld or delayed, or with approval of the court following reasonable notice to Design-Builder and opportunity to be heard and without prejudice to the Indemnified Party's rights to be indemnified by Design-Builder; and

16.5.7.3 in the case of a defense conducted under DBA Section 16.5.3.3 (*Defense and Indemnification Procedures*), it shall have the right to settle or compromise the claim without Design-Builder's prior written consent and without prejudice to its rights to be indemnified by Design-Builder.

16.5.8 A refusal of, or failure to accept, a tender of defense, as well as any Dispute over whether an Indemnified Party that has assumed control of defense is entitled to do so under DBA Section 16.5.6 (*Defense and Indemnification Procedures*), shall be submitted in accordance with the Dispute Resolution Procedures. Design-Builder shall be entitled to contest an indemnification claim and pursue, through the Dispute Resolution Procedures, recovery of defense and indemnity payments it has made to or on behalf of the Indemnified Party.

16.5.9 In determining responsibilities and obligations for defending suits pursuant to this DBA Section 16.5 (*Defense and Indemnification Procedures*), specific consideration shall be given by the Parties to the following factors: (a) the party performing the activity in question; (b) the location of the activity and incident; (c) contractual arrangements then governing the performance of the activity; and (d) allegations of respective fault contained in the claim.

16.5.10 Notwithstanding anything to the contrary set forth in DBA Section 16.4 (*Indemnity by Design-Builder*) or this DBA Section 16.5 (*Defense and Indemnification Procedures*), the Attorney General of the State of Georgia shall be acceptable, and, for avoidance of doubt, is the only counsel authorized to represent GDOT or any State affiliated agencies or departments. In the event that there is any potential conflict of interest that could reasonably arise in the representation of any Indemnified Party and Design-Builder in the defense of any action, suit or proceeding pursuant to DBA Section 16.4 (*Indemnity by Design-Builder*) or in the event that State or local law requires the use of specific counsel, (i) such Indemnified Party may elect in its sole discretion whether to waive such conflict of interest, and (ii) unless such Indemnified Party elects to waive such conflict of interest, or in any event if required by State or local law, then the counsel designated by the Indemnified Party shall solely represent such Indemnified Party and, if applicable, Design-Builder shall retain its own separate counsel, each at Design-Builder's sole cost and expense. The Attorney General of the State of Georgia will consider counsel recommended by Design-Builder for appointment as a SAAG.

16.5.11 If a suit or proceeding based on a claimed infringement of a patent or copyright is brought against any of the Indemnified Parties, Design-Builder shall, at its own expense, defend, or settle any such suit or proceeding if authorized to do so in writing by the Attorney General of the State of Georgia subject to the obligations of indemnification as set forth in DBA Section 16.4 (*Indemnity by Design-Builder*).

16.5.12 Design-Builder, subject to DBA Section 16.1.4.4 (*Prosecution of Insurance Claims*), may settle the claim without the consent or agreement of the Indemnified Parties, unless the settlement (i) would result in injunctive relief or other equitable remedies or otherwise require the Indemnified Parties to comply with restrictions or limitations that adversely affect or materially impair the reputation and standing of the Indemnified Parties, (ii) would require the Indemnified Parties to pay amounts that Design-Builder or its insurer does not fund in full, (iii) would not result in the Indemnified Parties full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement, or (iv) directly involves any such Indemnified Parties (in which case the Attorney General of the State of Georgia shall be the only counsel authorized to represent such parties with respect to any such settlement).

Article 17 DEFAULT; REMEDIES; OTHER GDOT RIGHTS; DISPUTE RESOLUTION

17.1 Default by Design-Builder; Cure Periods

17.1.1 Design-Builder Default

Subject to relief from its performance obligations pursuant to DBA Article 13 (*Relief Events; Compensation Events*), Design-Builder shall be in breach under this Design-Build Agreement upon the occurrence of any one or more of the following events or conditions (each a "Design-Builder Default"):

17.1.1.1 Design-Builder fails to begin the applicable Work within 30 days following issuance of NTP1;

17.1.1.2 an Abandonment;

17.1.1.3 Design-Builder fails to achieve (a)(i) Substantial Completion by the Substantial Completion Deadline or (ii) Final Acceptance by the Final Acceptance Deadline;

17.1.1.4 Design-Builder fails to make any undisputed payment due to GDOT under the Design-Build Documents when due;

17.1.1.5 any representation or warranty in the Design-Build Documents made by Design-Builder, or any certificate, schedule, report, instrument, or other document delivered by or on behalf of Design-Builder to GDOT pursuant to the Design-Build Documents is materially false, materially misleading or materially inaccurate when made or omits material information when made;

17.1.1.6 Design-Builder fails to obtain, provide, maintain and deliver originals, certificates or required evidence of any insurance, surety bonds, guaranties, letters of credit or other payment or performance security as and when required under this Design-Build Agreement for the benefit of relevant parties, or fails to comply with any requirement of this Design-Build Agreement pertaining to the amount, terms or coverage of the same;

17.1.1.7 Design-Builder makes or attempts to make or suffers a voluntary or involuntary assignment or transfer of all or any portion of this Design-Build Agreement, the Project or Design-Builder's Interest, or there occurs a Change of Control, in violation of DBA Article 19 (*Assignment and Transfer*);

17.1.1.8 Design-Builder materially fails to timely observe or perform or cause to be observed or performed any other material covenant, agreement, obligation, term or condition required to be observed or performed by Design-Builder under the Design-Build Documents (including failure to perform the Design Work, Construction Work, or any material portion thereof in accordance with the Design-Build Documents and including failure to comply with any Governmental Approval or Law); provided that this DBA Section 17.1.1.8 (*Design-Builder Default*) shall not apply to Design-Builder Defaults specifically addressed by other provisions of DBA Section 17.1.1 (*Design-Builder Default*);

17.1.1.9 unless continued performance of this Design-Build Agreement is permitted under the terms of a debarment agreement with the State, and after any rights of appeal have been exhausted, (a) there occurs any disqualification, suspension, or debarment (distinguished from ineligibility due to lack of financial qualifications), or there goes into effect an agreement for voluntary exclusion, from bidding, proposing, or contracting with any federal or State department or agency of (i) Design-Builder or any Design-Builder-Related Entity (excluding Subcontractors) or (ii) any Affiliate for whom transfer of

ownership would constitute a Change of Control, or (b) Design-Builder has not dismissed any Contractor or Subcontractor whose work is not substantially complete and who is determined disqualified, suspended or debarred, or otherwise excluded from bidding, or proposing or contracting with a federal or a State department or agency;

17.1.1.10 Design-Builder fails to (a) deliver to GDOT any remedial action plan as may be required pursuant to DBA Section 17.3.4 (*Remedial Action Plan Delivery and Implementation*) or (b) otherwise fails to fully comply with the schedule or portions, or take required actions required under, any such approved remedial action plan;

17.1.1.11 Design-Builder commences a voluntary case seeking liquidation, reorganization or other relief with respect to itself or its debts under any U.S. or foreign bankruptcy, insolvency or other similar Law now or hereafter in effect, seeks the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its assets; becomes insolvent, or generally does not pay its debts as they become due; admits in writing its inability to pay its debts; makes an assignment for the benefit of creditors; or takes any action to authorize any of the foregoing;

17.1.1.12 an involuntary case is commenced against Design-Builder seeking liquidation, reorganization, dissolution, winding up, a composition or arrangement with creditors, a readjustment of debts or other relief with respect to Design-Builder or Design-Builder's debts under any U.S. or foreign bankruptcy, insolvency or other similar Law now or hereafter in effect; seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of Design-Builder or any substantial part of Design-Builder's assets; seeking the issuance of a writ of attachment, execution, or similar process; or seeking like relief, and such involuntary case shall not be contested by Design-Builder in good faith or shall remain undismissed and unstayed for a period of 60 days;

17.1.1.13 (a) any voluntary or involuntary case or other act or event described in DBA Sections 17.1.1.11 (*Design Builder Default*) and 17.1.1.12 (*Design Builder Default*) shall occur (and in the case of an involuntary case shall not be contested in good faith or shall remain undismissed and unstayed for a period of 60 days) with respect to (i) any Design-Builder Member, or (ii) any Affiliate for whom transfer of ownership would constitute a Change of Control, or (iii) any Guarantor of Design-Builder obligations to GDOT under the Design-Build Documents, if any, unless another Guarantor of the same material Design-Builder obligations then exists, is solvent, is not and has not been the debtor in any such voluntary or involuntary case, has not repudiated its Guaranty and is not in breach of its Guaranty; or (b) failure by the Guarantor(s), if any, to maintain the "Net Worth" or "Liquidity" (or both) required under (and as defined within) the Guaranty, if any;

17.1.1.14 Design-Builder fails to comply with GDOT's written suspension of Work order issued in accordance with DBA Section 17.3.6 (*Suspension of Work*) or DBA Section 17.7 (*Suspension for GDOT's Convenience; Suspensions for Safety*) within the time reasonably allowed in such order;

17.1.1.15 a levy under execution or attachment has been made against all or any part of the Project or any interest therein (including Design-Builder's Interest) as a result of any Lien created, incurred, assumed or suffered to exist by Design-Builder or any Person claiming through it, and such execution or attachment has not been vacated, removed or stayed by court order, bonding or otherwise within a period of 60 days, unless such levy resulted from actions or omissions of GDOT;

17.1.1.16 Design-Builder fails to make any undisputed payment due to any Key Contractor when due; or

17.1.1.17 occurrence of a Persistent Breach.

17.1.2 Cure and Forbearance Periods

GDOT may, upon, or at any time after, occurrence of a Design-Builder Default, deliver Notice to Design-Builder that a Design-Builder Default has occurred; provided, however, that any GDOT election not to deliver such Notice shall not be, nor be deemed to be, evidence as to whether a Design-Builder Default has occurred, and any such Notice only affects, for certain Design-Builder Defaults, when a cure period, if any, commences and ends. For the purpose of GDOT's exercise of other remedies, subject to DBA Section 17.2.2 (*Effect of Warning Notice on Design-Builder Cure Period*) and subject to remedies that this DBA Article 17 (*Default; Remedies; Dispute Resolution*) expressly states may be exercised before lapse of a cure period, Design-Builder shall have the following cure periods with respect to the following Design-Builder Defaults:

17.1.2.1 respecting a Design-Builder Default under DBA Section 17.1.1.1 (*Design Builder Default*), 17.1.1.2 (*Design Builder Default*), 17.1.1.4 (*Design Builder Default*), or 17.1.1.10 (*Design Builder Default*), a period of 10 days after GDOT delivers to Design-Builder Notice of Design-Builder Default;

17.1.2.2 respecting a Design-Builder Default under DBA Section 17.1.1.6 (*Design Builder Default*) for a period of 15 days after GDOT delivers to Design-Builder Notice of Design-Builder Default; provided that GDOT will have the right, but not the obligation, to effect cure, at Design-Builder's expense, if a Design-Builder Default under DBA Section 17.1.1.6 (*Design Builder Default*) continues beyond five days after such Notice is delivered;

17.1.2.3 respecting a Design-Builder Default under DBA Section 17.1.1.15 (*Design Builder Default*), a period of 30 days after GDOT delivers to Design-Builder Notice of Design-Builder Default;

17.1.2.4 respecting a Design-Builder Default under DBA Sections 17.1.1.5 (*Design Builder Default*) or 17.1.1.8 (*Design Builder Default*), a period of 30 days after GDOT delivers to Design-Builder Notice of Design-Builder Default; provided that (a) if Design-Builder Default is of such a nature that the cure cannot with diligence be completed within such time period and Design-Builder has commenced meaningful steps to cure promptly after receiving the default notice, Design-Builder shall have such additional period of time, up to a maximum cure period of 120 days, as is reasonably necessary to diligently effect cure, and (b) as to DBA Section 17.1.1.5 (*Design Builder Default*), cure will be regarded as complete when the adverse effects of the breach are cured;

17.1.2.5 respecting a Design-Builder Default under DBA Sections 17.1.1.3 (*Design Builder Default*), 17.1.1.7 (*Design Builder Default*), 17.1.1.11 (*Design Builder Default*), 17.1.1.12 (*Design Builder Default*), 17.1.1.14 (*Design Builder Default*), 17.1.1.16 (*Design Builder Default*), or 17.1.1.17 (*Design Builder Default*), no cure period, and there shall be no right to notice (by Notice, notification, or otherwise) of a Design-Builder Default under DBA Sections 17.1.1.11 (*Design Builder Default*) or 17.1.1.12 (*Design Builder Default*);

17.1.2.6 respecting a Design-Builder Default under DBA Section 17.1.1.9 (*Design Builder Default*), no cure period; provided, however, if the debarred or suspended Person is a managing member, general partner or controlling investor of Design-Builder, cure will be regarded as complete when Design-Builder proves it has removed such Person from any position or ability to manage, direct or control the decisions of Design-Builder or to perform Work, and if the debarred or suspended Person is a Key Contractor cure will be regarded as complete when Design-Builder replaces the Key Contractor with

GDOT's prior written approval in its good faith discretion as provided in DBA Section 10.3.1 (*Use of and Change in Key Contractors*); and

17.1.2.7 respecting a Design-Builder Default under DBA Section 17.1.1.13 (*Design Builder Default*), a period of 10 days from the date of Design-Builder Default to commence diligent efforts to cure, and 30 days to effect cure of such default by providing a letter of credit or payment to GDOT for the benefit of the Project, in the amount of, as applicable, (a) the member's financial obligation for equity or shareholder loan contributions to or for the benefit of Design-Builder, or (b) the Guarantor's (if any) specified sum or specified maximum liability under its Guaranty, or if none is specified, the reasonably estimated maximum liability of the Guarantor.

17.1.3 Certain Curative Actions; Status Report

17.1.3.1 If Design-Builder Default consists of failure to give GDOT a required prior notice and opportunity to complete an applicable review and comment or approval procedure under DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*) before action is taken by Design-Builder, such Design-Builder Default shall be curable only by reversing or suspending the action until the notice and review and comment or approval procedures are followed and completed, unless Design-Builder finished the action before receiving the notice of Design-Builder Default or unless waived by GDOT.

17.1.3.2 If Design-Builder Default consists of any Design-Builder activity or failure to act that constitutes a change from Design-Builder's activities immediately prior to Design-Builder Default, such Design-Builder Default shall be curable only by reinstating the activity as it was being performed immediately prior to Design-Builder Default.

17.1.3.3 For any Design-Builder Default for which a Warning Notice has been delivered by GDOT to Design-Builder, Design-Builder may request from GDOT a status report as to Design-Builder's progress in effecting a cure, by delivering to GDOT a written request accompanied by Design-Builder's own report as to its progress in effecting a cure. GDOT will provide its response within 10 Business Days after receipt of Design-Builder's written request and report. The response shall be provided solely for purposes of informing Design-Builder as to GDOT's view of the progress in effecting a cure for Design-Builder Default, shall not constitute an admission of any fact, shall not be admissible in evidence for any purpose, shall not form the basis for any Dispute and shall not limit in any way GDOT's right to terminate this Design-Build Agreement in accordance with DBA Section 18.2 (*Termination for Design-Builder Default*) should cure not be effected within the relevant period.

17.2 Warning Notices

17.2.1 Warning Notice Events

Without prejudice to any other right or remedy available to GDOT, GDOT may, but in no case shall be required to, deliver a Notice (a "Warning Notice") to Design-Builder, stating explicitly that it is a "Warning Notice" and stating in reasonable detail the matter or matters giving rise to the Warning Notice and, if applicable, amounts due from Design-Builder, and reminding Design-Builder of the implications of such Warning Notice, whenever there occurs an act or omission of Design-Builder that may become a Design-Builder Default.

17.2.2 Effect of Warning Notice on Design-Builder Cure Period

17.2.2.1 Any Notice of a Design-Builder Default issued under DBA Section 17.1 (*Default by Design-Builder; Cure Periods*) may, if it concerns a matter under DBA Section 17.2.1 (*Warning*

Notice Events), also be issued as a Warning Notice. In such case, the cure period available to Design-Builder, if any, shall be as set forth in DBA Section 17.1.2 (*Cure and Forbearance Periods*).

17.2.2.2 If GDOT issues a Warning Notice under DBA Section 17.2.1 (*Warning Notice Events*) for any Design-Builder Default after it issues a notice of such Design-Builder Default, then the cure period available to Design-Builder, if any, for such Design-Builder Default before GDOT may seek to appoint a receiver for Design-Builder, remove Design-Builder or terminate this Design-Build Agreement on account of such Design-Builder Default shall be extended by the time period between the date the notice of such Design-Builder Default was issued and the date the Warning Notice is issued. No later issuance of a Warning Notice shall extend the time when GDOT may exercise any other remedy respecting such Design-Builder Default.

17.2.3 Other Effects of Warning Notice

17.2.3.1 The issuance of a Warning Notice shall entitle GDOT to increase the level of oversight as provided in DBA Section 17.3.8 (*Increased Oversight, Testing, and Inspection*).

17.2.3.2 The issuance of a Warning Notice may trigger a Default Termination Event as provided in DBA Section 18.2 (*Termination for Design-Builder Default*).

17.3 Remedies for Design-Builder Default

17.3.1 Termination

In the event of any Design-Builder Default that is or becomes a Default Termination Event set forth in DBA Section 18.2.1 (*Design-Builder Defaults Triggering GDOT Termination Rights*), GDOT may terminate this Design-Build Agreement and GDOT thereupon may take control of the Work, which termination shall, among other things, automatically terminate all of Design-Builder's rights under DBA Section 2.1 (*Grant of GDOT for Undertaking*), whereupon Design-Builder shall take all action required to be taken by Design-Builder under DBA Section 18.4 (*Termination Procedures and Duties*).

17.3.2 Step-in Rights

Upon the occurrence of a Design-Builder Default and expiration, without full and complete cure, of the cure period, if any, available to Design-Builder, without necessity for a Warning Notice, and without waiving or releasing Design-Builder from any obligations, GDOT will have the right, but not the obligation, for so long as such Design-Builder Default remains uncured by GDOT or Design-Builder, to pay and perform all or any portion of Design-Builder's obligations and the Work that are the subject of such Design-Builder Default, as well as any other then-existing breaches or failures to perform for which Design-Builder received prior Notice from GDOT but has not commenced or does not continue diligent efforts to cure; provided, that (i) except with respect to Design-Builder's lawful claims for third party bodily injury or property damage arising out of such GDOT action, GDOT will incur no liability to Design-Builder for any act or omission of GDOT or any other Person in the course of remedying or attempting to remedy any Design-Builder Default and (ii) GDOT's cure of any Design-Builder Default will not waive or affect GDOT's rights against Design-Builder by reason of Design-Builder Default.

17.3.2.1 In connection with such action, GDOT may, to the extent reasonably required for or incident to curing Design-Builder Default or such other breaches or failures to perform for which Design-Builder received prior Notice from GDOT but has not commenced and continued diligent efforts to cure:

(a) perform or attempt to perform or caused to be performed, such Work;

(b) employ security guards and other safeguards to protect the Project;

(c) spend such sums as GDOT deems are reasonably necessary to employ and pay such architects, engineers, consultants and contractors and obtain materials and equipment as may be required, without obligation or liability to Design-Builder or any Contractors for loss of opportunity to perform the same Work or supply the same materials and equipment;

(d) draw on and use proceeds from P&P Bonds, the Warranty Bond (if placed), guaranties, or other letters of credit or performance security to the extent available under the terms thereof to pay such sums;

(e) execute all applications, certificates, and other documents as may be required;

(f) make decisions respecting, assume control over and continue Work as may be reasonably required;

(g) meet with, coordinate with, direct and instruct contractors and suppliers, process invoices and applications for payment from contractors and suppliers, pay contractors and suppliers, and resolve claims of contractors, subcontractors and suppliers, and for this purpose Design-Builder irrevocably appoints GDOT as its attorney-in-fact with full power and authority to act for and bind Design-Builder in its place and stead;

(h) take any and all other actions it may in its sole discretion consider necessary to effect cure and perform the Work; and

(i) prosecute and defend any action or proceeding incident to the Work undertaken.

17.3.2.2 Design-Builder shall reimburse GDOT on demand GDOT Recoverable Costs in connection with the performance of any act or Work authorized by this DBA Section 17.3.2 (*Step-in Rights*).

17.3.2.3 Neither GDOT nor any of its Constituents shall be liable to Design-Builder in any manner for any inconvenience or disturbance arising out of its entry onto any portion of the Site in order to perform under this DBA Section 17.3.2 (*Step-in Rights*), unless caused by the gross negligence, recklessness, willful misconduct or bad faith of such Person. If any Person exercises any right to pay or perform under this DBA Section 17.3.2 (*Step-in Rights*), it nevertheless shall have no liability to Design-Builder for the sufficiency or adequacy of any such payment or performance, or for the manner or quality of design, or construction unless caused by the gross negligence, recklessness, willful misconduct or bad faith of such Person.

17.3.2.4 The rights under this DBA Section 17.3.2 (*Step-in Rights*) are subject to the obligation of any Surety under P&P Bonds (or Warranty Bond) to assume performance and completion of all bonded work.

17.3.2.5 In the event GDOT takes action described in this DBA Section 17.3.2 (*Step-in Rights*) and it is later finally determined that GDOT lacked the right to do so because there did not occur a Design-Builder Default and expiration, without full and complete cure, of the cure period, if any, available to Design-Builder, then GDOT's action shall be treated as a Directive Letter for a GDOT Change.

17.3.2.6 In addition to their other rights of access to the Site contained in the Design-Build Documents, GDOT shall have, and Design-Builder hereby grants, a perpetual, non-rescindable right of entry by GDOT and its contractors, subcontractors, vendors and employees onto all Temporary Interests, exercisable at any time without notice, for the purpose of carrying out GDOT's step-in rights under this DBA Section 17.3.2 (*Step-in Rights*).

17.3.3 Damages; Offset

17.3.3.1 Subject to DBA Sections 17.3.10 (*Cumulative, Non-Exclusive Remedies*) and 17.3.11 (*Limitation on Consequential Damages*) and the provisions on Deductions set forth in DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*), GDOT will be entitled to recover any and all damages available at Law (subject to the duty at Law to mitigate damages and without duplicate recovery) on account of the occurrence of a Design-Builder Default, including, to the extent available at Law, (a) loss of any compensation due GDOT under the Design-Build Documents proximately caused by Design-Builder Default, (b) actual and projected costs incurred by GDOT to remedy any defective part of the Work, (c) actual and projected costs incurred by GDOT to rectify any breach or failure to perform by Design-Builder and/or to bring the condition of the Project to the standard it would have been in if Design-Builder had complied with its obligations to carry out and complete the Work in accordance with the Design-Build Documents, (d) actual and projected costs to GDOT to terminate, take over the Project, re-procure and replace Design-Builder, and (e) actual and projected increases in costs to GDOT to complete the Project if not completed, together with interest thereon at the Default Interest Rate commencing from the date any amount becomes due to GDOT until paid. Design-Builder shall owe any such damages that accrue after the occurrence of Design-Builder Default and the delivery of notice thereof, if any, required by this Design-Build Agreement regardless of whether Design-Builder Default is subsequently cured.

17.3.3.2 In addition, GDOT may deduct and offset the amount of any demand for payment of money or damages from Design-Builder to GDOT then due and owing to GDOT from and against any amounts GDOT may owe to Design-Builder or any Affiliate pursuant to this Design-Build Agreement.

17.3.4 Remedial Action Plan Delivery and Implementation

17.3.4.1 Upon the occurrence of a Design-Builder Default, GDOT will have the right, but is not obligated, to demand that Design-Builder shall, within 10 days after Notice of such Design-Builder Default, be required to prepare and submit a remedial action plan for GDOT approval, in GDOT's sole discretion.

17.3.4.2 The remedial action plan shall set forth a schedule and specific actions to be taken by Design-Builder to improve its performance and cure Design-Builder Default. Such actions may include improvements to Design-Builder's quality control practices, plans and procedures, revising and restating components of the Management Plans, changes in organizational and management structure, increased monitoring and inspections, changes in Key Personnel and other personnel, replacement of Contractors, corrective measures necessary to expedite the progress of construction and to demonstrate ability to achieve any Milestone Deadline including (i) working additional shifts or overtime and/or (ii) supplying additional manpower, equipment and facilities, and delivery of security to GDOT.

17.3.4.3 Within 15 Business Days after receipt of a remedial action plan for GDOT approval, GDOT will notify Design-Builder whether the remedial action plan is approved. Without limiting GDOT's rights under DBA Section 17.3.9 (*Other Rights and Remedies*), if GDOT does not approve Design-Builder's remedial action plan, then GDOT may, but shall not be obligated to, require Design-Builder to

revise and resubmit a remedial action plan, consistent with GDOT's direction (which shall not be, nor be construed to be, a GDOT Change hereunder), and Design-Builder shall resubmit a remedial action plan consistent with such GDOT direction for GDOT approval, in GDOT's sole discretion. If approved, then Design-Builder shall complete the approved remedial action plan in accordance with its terms.

17.3.4.4 Design-Builder's failure to complete any such approved remedial action plan shall be deemed a further Design-Builder Default.

17.3.5 Performance Security

17.3.5.1 Upon the occurrence of a Design-Builder Default and expiration, without full and complete cure, of the applicable cure period, if any, under DBA Section 17.1.2 (*Cure and Forbearance Periods*), without necessity for a Warning Notice, and without waiving or releasing Design-Builder from any obligations, GDOT will be entitled to make demand upon and enforce any surety bond, and make demand upon, draw on, enforce and collect any guaranty or other payment or performance security available to GDOT under this Design-Build Agreement with respect to Design-Builder Default in question in any order in GDOT's sole discretion. Where access to a surety bond or other payment or performance security is to satisfy damages owing, GDOT will be entitled to make demand upon, draw on, enforce and collect regardless of whether Design-Builder Default is cured subsequent to such draw. GDOT will apply the proceeds of any such action to the satisfaction of Design-Builder's obligations under the Design-Build Documents, including payment of amounts due GDOT. The foregoing does not limit or affect any other right of GDOT to make demand upon and enforce any surety bond, and make demand upon, draw on and enforce and collect guaranty or other payment or performance security, immediately after GDOT is entitled to do so under the surety bond, guaranty or other payment or performance security.

17.3.6 Suspension of Work

17.3.6.1 GDOT will have the right and authority to suspend any affected portion of the Work by written order to Design-Builder for Design-Builder's failure to cure, within the applicable cure period available to Design-Builder (if any), the following:

(a) failure to perform the Work in compliance with, or other breach of, the Design-Build Documents;

(b) discovery of Nonconforming Work or of any activity that is proceeding or about to proceed that would constitute or cause Nonconforming Work where the Nonconforming Work or activity is not substantially cured within 15 days after GDOT delivers notice thereof to Design-Builder or within such 15 days, Design-Builder provides and submits to GDOT a plan for cure, such plan to be diligently executed and completed no later than 30 days after submission of such plan to GDOT, unless Design-Builder demonstrates to GDOT's reasonable satisfaction that full and complete cure of the Nonconforming Work, and verification of such cure, will remain practicable despite continuation of Work without suspension;

(c) failure to comply with any Law or Governmental Approval (including failure to handle, preserve, and protect archaeological, paleontological, historic, or cultural resources, or failure to handle Hazardous Materials, in accordance with applicable Laws and Governmental Approvals);

(d) failure to remove and replace personnel as set forth in DBA Section 10.6.3 (*Labor Standards*);

(e) failure to provide proof of required insurance coverage as set forth in DBA Section 16.1.2.4(c) (*Verification of Coverage*);

(f) failure to carry out and comply with Directive Letters;

(g) failure to satisfy any condition to commencement of construction set forth in DBA Section 7.5.1 (*Design-Builder's General Responsibilities*);

(h) failure to maintain, extend or replace any P&P Bonds or the Warranty Bond (if placed) and or when required under this Design-Build Agreement, unless a call upon any surety bond has been made under same in the amount of the required coverage provided for in DBA Section 16.1.5 (*Application of Insurance Proceeds*) and the proceeds of such drawing are held by GDOT;

(i) to comply with any court order or judgment (although it may qualify as a Compensation Event under clause (f) of the definition of "Compensation Event" or a Relief Event under clause (j) of the definition of "Relief Event");

(j) GDOT's performance of data recovery respecting archaeological, paleontological, historic, or cultural resources;

(k) the existence of conditions unsafe for workers, other Project personnel or the general public; or

(l) Design-Builder has failed to (i) pay in full when due sums owing any Contractor for services, materials, or equipment, or (ii) deliver any certificate, release, certified payroll, or affidavit of wages paid required with any Invoice.

17.3.6.2 GDOT will lift the suspension order promptly after Design-Builder fully cures and corrects the applicable breach or failure to perform.

17.3.6.3 Design-Builder shall promptly comply with any such written suspension order, even if Design-Builder Disputes the grounds for suspension. Design-Builder shall promptly recommence the Work upon receipt of Notice from GDOT directing Design-Builder to resume Work.

17.3.6.4 GDOT shall have no liability to Design-Builder, and Design-Builder shall have no right to a Relief Event or Compensation Event, in connection with any suspension of Work properly founded on any of the other grounds set forth in this DBA Section 17.3.6 (*Suspension of Work*) (except potential Relief Events or Compensation Events in the case of suspensions under DBA Sections 17.3.6.1(i) (*Suspension of Work*) and 17.3.6.1(j) (*Suspension of Work*)). If GDOT orders suspension of Work on one of the foregoing grounds but it is finally determined under the Dispute Resolution Procedures that such grounds did not exist, or if GDOT orders suspension of Work for any other reason, it shall be treated as a Directive Letter for a GDOT Change.

17.3.7 During any suspension periods directed by GDOT under this DBA Section 17.3 (*Remedies for Design-Builder Default*), Design-Builder shall continue to be responsible for the Project and shall prevent damage, loss, or injury to the Project. Without limiting the generality of the foregoing, Design-Builder shall specifically provide for drainage, protect any known or suspected Hazardous Materials or known or suspected archaeological, paleontological, historic, cultural, or biological resources (including taking affirmative steps to protect the Site from vandalism and unauthorized investigations), protect the Site from accidental damage, and shall erect necessary temporary structures, signs or other facilities required to maintain the Project. Design-Builder shall also maintain all Insurance Policies, P&P Bonds, the

Warranty Bond (if placed), guaranties, letters of credit and other security for payment or performance placed or required to be in placed under this Design-Build Agreement and to comply with all applicable Governmental Approvals and applicable Laws. Design-Builder shall, unless otherwise directed by GDOT, continue to be responsible for traffic control, erosion control, and maintenance of the roadway in accordance with this Design-Build Agreement.

17.3.8 Increased Oversight, Testing, and Inspection

17.3.8.1 If GDOT cannot confirm that: (a) a portion of the Design Work or the Construction Work is in accordance with the requirements of the Design-Build Documents due to a lack of documented inspection or testing by Design-Builder as required under the Design-Build Documents, or (b) Design-Builder is implementing, revising, or updating a testing and inspection plan in accordance with the Design-Build Documents for the Design Work or the Construction Work, GDOT will have the right but not the obligation, to increase monitoring, inspection, sampling, measuring, testing and oversight (collectively, "Increased Oversight") over the Project. The Increased Oversight will continue until Design-Builder corrects such deficiencies in GDOT's reasonable discretion.

17.3.8.2 If the Increased Oversight reveals: (i) a failure to perform such the Design-Builder's quality control obligations for Work and otherwise with respect to the Project or (ii) that such Work is not in accordance with the Design-Build Documents, Design-Builder shall be responsible for the costs of such Increased Oversight. Without limiting GDOT's right to offset amounts under DBA Section 17.3.3.2 (*Damages; Offset*), Design-Builder shall pay and reimburse GDOT within 30 days after receipt of written demand and reasonable supporting documentation for all increased costs and fees GDOT incurs in connection with such Increased Oversight, including GDOT Recoverable Costs.

17.3.8.3 If the Increased Oversight does not reveal any failure set forth in DBA Section 17.3.8.2 (*Increased Oversight, Testing, and Inspection*), the costs of the Increased Oversight shall be borne by GDOT.

17.3.8.4 The foregoing does not preclude GDOT, at its sole discretion and expense, from Increased Oversight at other times.

17.3.9 Other Rights and Remedies

Subject to DBA Sections 17.3.11 (*Limitation on Consequential Damages*), 17.4.8.2 (*Non-Exclusive Remedy*) and 18.7 (*Exclusive Termination Rights*), GDOT will also be entitled to exercise any other rights and remedies available under this Design-Build Agreement or any other Design-Build Documents, or available at law or in equity, and shall be authorized to permit GDOT to exercise any of such remedies on GDOT's behalf.

17.3.10 Cumulative, Non-Exclusive Remedies

Subject to DBA Sections 17.3.11 (*Limitation on Consequential Damages*), 17.4.8.2 (*Non-Exclusive Remedy*) and 18.7 (*Exclusive Termination Rights*), each right and remedy of GDOT hereunder shall be cumulative and shall be in addition to every other right or remedy provided herein or now or hereafter existing at law or in equity or by statute or otherwise, and the exercise or beginning of the exercise by GDOT of any one or more of any of such rights or remedies shall not preclude the simultaneous or later exercise by GDOT of any or all other such rights or remedies.

17.3.11 Limitation on Consequential Damages

17.3.11.1 Notwithstanding any other provision of the Design-Build Documents and except as set forth in DBA Section 17.3.11.2 (*Limitation on Consequential Damages*), to the extent permitted by applicable Law, Design-Builder shall not be liable for punitive damages or special, indirect or incidental, or consequential damages, whether arising out of breach of this Design-Build Agreement, tort (including negligence) or any other theory of liability, and GDOT releases Design-Builder from any such liability, other than for Deductions, as provided pursuant to this Design-Build Agreement or otherwise to the extent recoverable from insurance.

17.3.11.2 The foregoing limitation on Design-Builder's liability for consequential damages shall not apply to or limit, nor be construed to apply to or limit, any right of recovery GDOT may have respecting the following, each of which are agreed by the Parties to be, or to give rise to, direct damages, and not special, indirect, or consequential damages:

(a) any Liquidated Damages payable by Design-Builder under this Design-Build Agreement;

(b) any Lane Closure Deductions payable by Design-Builder under this Design-Build Agreement;

(c) any Nonrefundable Deductions assessed under this Design-Build Agreement;

(d) amounts Design-Builder may be obligated to reimburse to GDOT or that are otherwise due from Design-Builder to GDOT under the express provisions of the Design-Build Documents, including GDOT Recoverable Costs;

(e) any losses, claims, and amounts (including defense costs) paid under either or both of the P&P Bonds or the Warranty Bond (if placed);

(f) any amounts paid or payable pursuant to Design-Builder's indemnification obligations hereunder;

(g) any amounts paid or payable by Design-Builder that are covered by Insurance Policies that Design-Builder is required to place or has placed in addition to those required hereunder, including any SIRs or for which Design-Builder was required to provide insurance if coverage was not then in place, or other insurance procured, even though not required to be placed hereunder, for purposes of the Project;

(h) Losses arising out of Design-Builder Hazardous Materials Release;

(i) any Losses, claims (including claims of any Indemnified Parties), and amounts arising out of, relating to, or resulting from Design-Builder or any Design-Builder-Related Entity's negligence, reckless or willful misconduct, violation of Law and other illegal activities (or inaction), violation or breach of Governmental Approval or contract, criminal conduct, bad faith, intentional misconduct (which excludes intentional Design-Builder Default), arbitrary or capricious acts, or fraud under or relating to this Design-Build Agreement;

(j) interest, late charges, fees, transaction fees and charges, penalties, and similar charges that the Design-Build Documents expressly state are due from Design-Builder to GDOT; and

(k) any credits, deductions or offsets that the Design-Build Documents expressly provide to GDOT against amounts owing Design-Builder.

17.4 Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions

17.4.1 Liquidated Damages for Delayed Substantial Completion, Final Acceptance

17.4.1.1 In addition to any other remedies available to GDOT under this Design-Build Agreement, Design-Builder acknowledges that Design-Builder shall be liable for and pay to GDOT Liquidated Damages with respect to any failure to achieve Substantial Completion by the Substantial Completion Deadline, or any failure to achieve Final Acceptance by the Final Acceptance Deadline, as the same may be extended pursuant to this Design-Build Agreement, as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*). Such liability shall apply even though (a) a cure or remedy period remains available to Design-Builder under this Design-Build Agreement or (b) cure or remedy occurs.

17.4.1.2 The amounts of Liquidated Damages for failures to achieve Substantial Completion by the Substantial Completion Deadline, or any failure to achieve Final Acceptance by the Final Acceptance Deadline are set forth in DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.1.3 Such Liquidated Damages shall commence on the Substantial Completion Deadline or the Final Acceptance Deadline, as applicable, as the same may be extended pursuant to this Design-Build Agreement, and shall continue to accrue until the Substantial Completion Date or the Final Acceptance Date, as applicable, or until termination of this Design-Build Agreement.

17.4.2 Nonrefundable Deductions

17.4.2.1 In addition to any other remedies available to GDOT under this Design-Build Agreement, Design-Builder acknowledges that Design-Builder shall be liable for and pay to GDOT Nonrefundable Deductions with respect to certain failures identified in further detail in DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.2.2 Such liability shall apply even though cure or remedy occurs.

17.4.2.3 The amounts of the Nonrefundable Deductions are determined in accordance with DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.2.4 Such Nonrefundable Deductions shall commence and accrue until they cease as set forth in DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*), or until termination of this Design-Build Agreement.

17.4.2.5 Nonrefundable Deductions Assessment Process.

(a) For those occurrences for which Nonrefundable Deduction may be assessed that are annotated in the table within Section 1.4 of DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) as affording the Design-Builder a NRD Notice, GDOT will issue a NRD Notice to Design-Builder's Authorized Representative no later than 10 Business Days prior to the date that, if not remedied, GDOT intends to assess a Nonrefundable Deduction, directing remedy of the occurrence that forms the basis for assessment of such Nonrefundable Deduction. Design-Builder shall commence to remedy such occurrence promptly, and in no case later than the date identified in the NRD Notice. If not

remedied at such time, GDOT may assess, and Design-Builder shall be liable to GDOT for, the applicable Nonrefundable Deductions as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

(b) For those occurrences for which Nonrefundable Deduction may be assessed that are annotated in the table within Section 1.4 of DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) as not affording the Design-Builder a NRD Notice, or for which the NRD Notice would not be timely related to the nature of the occurrence (e.g. the Nonrefundable Deduction at 1.C in the table within Section 1.4 of DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*), where the submission timing is clear, GDOT will notify Design-Builder's Authorized Representative, directing remedy of the occurrence and, in GDOT's discretion, a reasonable timeframe for remedy and GDOT's intent to assess a Nonrefundable Deduction, it being the intent that GDOT will nevertheless offer opportunities to cure possible Nonrefundable Deductions where feasible, as determined in GDOT's discretion. Design-Builder shall commence to remedy such occurrence promptly, and if not remedied within such timeframe, if afforded a timeframe, GDOT may assess, and Design-Builder shall be liable to GDOT for, the applicable Nonrefundable Deductions as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.3 Liquidated Damages for Delayed Interim Milestones

17.4.3.1 In addition to any other remedies available to GDOT under this Design-Build Agreement, Design-Builder acknowledges that Design-Builder shall be liable for and pay to GDOT Liquidated Damages with respect to any failure to achieve any Interim Milestone by the date calculated pursuant to [either DBA Section 7.7.4.1(e) (*Early Openings*) or DBA Section 11.2.3 (*Related Projects Integration*)], as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*). Such liability shall apply even though (a) a cure or remedy period remains available to Design-Builder under this Design-Build Agreement or (b) cure or remedy occurs.

17.4.3.2 The amounts of Liquidated Damages for failures to achieve Interim Milestones by the corresponding date calculated pursuant to either DBA Section 7.7.4.1(e) (*Early Openings*) or DBA Section 11.2.3 (*Related Projects Integration*) are set forth in DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.3.3 Such Liquidated Damages shall commence on the respective Interim Milestone Deadline, as applicable, as the same may be extended pursuant to this Design-Build Agreement, and shall continue to accrue until achievement of the respective Interim Milestone or until termination of this Design-Build Agreement; provided, however, that if the planned date that the Relevant Related Project contractor is released to commence "Construction Work", as determined pursuant to DBA Section 11.2.3 (*Related Projects Integration*), occurs on or after the Substantial Completion Deadline, then if Design-Builder fails to complete the Related Project Configuration Work for the particular Relevant Related Project, then Design-Builder shall not owe Liquidated Damages under this DBA Section 17.4.3 (L*iquidated Damages for Delayed Interim Milestones*) solely as relates to such failure, but Design-Builder would remain liable for Liquidated Damages under DBA Section 17.4.1 (*Liquidated Damages for Delayed Substantial Completion, Final Acceptance*).

17.4.4 Liquidated Damages for Personnel-related Matters

17.4.4.1 In addition to any other remedies available to GDOT under this Design-Build Agreement, Design-Builder acknowledges that Design-Builder shall be liable for and pay to GDOT Liquidated Damages with respect to the failures relating to Key Personnel or certain Required Personnel

set forth under DBA Section 10.4 (*Key Personnel; Required Personnel*) and as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.4.2 Such liability shall apply even though cure or remedy occurs.

17.4.4.3 The amounts of Liquidated Damages for such failures are set forth in DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

17.4.4.4 Such Liquidated Damages shall commence, as to DBA Section 10.4 (*Key Personnel; Required Personnel*) on the date of unavailability, as determined by GDOT in its good faith discretion and shall continue to accrue until the Key Personnel or Required Personnel position is filled and such individual is available, also as determined GDOT in its good faith discretion, or until termination of this Design-Build Agreement.

17.4.5 Lane Closure Deductions

17.4.5.1 In addition to any other remedies available to GDOT under this Design-Build Agreement, Design-Builder acknowledges that Design-Builder shall be liable for and pay to GDOT Lane Closure Deductions with respect to certain failures relating to lane availability described in DBA Exhibit 12 (*Lane Closure Deductions*).

17.4.5.2 Such liability shall apply even though cure or remedy occurs.

17.4.5.3 The amounts of Lane Closure Deductions are set forth in DBA Exhibit 12 (*Lane Closure Deductions*).

17.4.5.4 Such Lane Closure Deductions shall commence and accrue until they cease as set forth in DBA Exhibit 12 (*Lane Closure Deductions*), or until termination of this Design-Build Agreement.

17.4.6 Acknowledgements Regarding Liquidated Damages, Nonrefundable Deductions, Lane Closure Deductions

17.4.6.1 Design-Builder further agrees and acknowledges that:

(a) Liquidated Damages with respect to failure to achieve Substantial Completion by the Substantial Completion Deadline, or any failure to achieve Final Acceptance by the Final Acceptance Deadline, as the same may be extended pursuant to this Design-Build Agreement, as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*), are reasonable in order to compensate GDOT for damages GDOT will incur as a result of late Substantial Completion or late Final Acceptance. Such damages include GDOT's loss of use, enjoyment, and benefit of the Project and connecting GDOT transportation facilities by the general public, injury to the credibility and reputation of GDOT's transportation improvement programs with policy makers and with the general public who depend on and expect availability of service by the Substantial Completion Deadline, which injury to credibility and reputation may directly result in loss of ridership on the Project and connecting GDOT transportation facilities and additional costs of administering this Design-Build Agreement (including engineering, legal, accounting, overhead and other administrative costs). The Parties acknowledge and agree that each of the foregoing damages are not indirect, incidental or consequential damages hereunder.

(b) Nonrefundable Deductions are reasonable in order to compensate GDOT for damages GDOT will incur as a result of the increased project management efforts, unavailability of portions

of the Project, GDOT's loss of use, enjoyment, and benefit of the Project and connecting GDOT transportation facilities by the general public, injury to the credibility and reputation of GDOT's transportation improvement programs with policy makers and with the general public who depend on and expect delivery of a quality Project, which injury to credibility and reputation may directly result in loss of ridership on the Project and connecting GDOT transportation facilities and additional costs of administering this Design-Build Agreement (including engineering, legal, accounting, overhead and other administrative costs). The Parties acknowledge and agree that each of the foregoing damages are not indirect, incidental or consequential damages hereunder.

(c) Liquidated Damages with respect to failure to achieve each Interim Milestone by its corresponding date calculated pursuant to either DBA Section 7.7.4.1(e) (*Early Openings*) or DBA Section 11.2.3 (*Related Projects Integration*), as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*), are reasonable in order to compensate GDOT for damages GDOT will incur as a result of late achievement of any Interim Milestone. Such damages include GDOT's additional costs of administering this Design-Build Agreement (including engineering, legal, accounting, overhead, and other administrative costs)[, Related Project costs], loss of use, enjoyment, and benefit of the Project and connecting GDOT transportation facilities by the general public, injury to the credibility and reputation of GDOT's transportation improvement programs with policy makers and with the general public who depend on and expect availability of service on the Project[and the Related project(s) as planned], which injury to credibility and reputation may directly result in loss of ridership on the Project and connecting GDOT transportation facilities). The Parties acknowledge and agree that each of the foregoing damages are not indirect, incidental, or consequential damages hereunder.

(d) Liquidated Damages with respect to certain Key Personnel-related matters under DBA Section 10.4.1.5 (*Key Personnel*) and as set forth pursuant to DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) are reasonable in order to compensate GDOT for damages GDOT will incur as a result of increased project management efforts, loss of the benefits of the qualifications and experience of the personnel listed in the Proposal and Design-Builder's commitment that such individuals would be available to undertake and perform the Work, injury to the credibility and reputation of GDOT's transportation improvement programs with policy makers and with the general public who depend on and expect that which was procured so as to ensure further the timely and professional delivery of the Project, which injury to credibility and reputation may directly result in loss of ridership on the Project and connecting GDOT transportation facilities and additional costs of administering this Design-Build Agreement (including engineering, legal, accounting, overhead and other administrative costs). The Parties acknowledge and agree that each of the foregoing damages are not indirect, incidental or consequential damages hereunder.

(e) Lane Closure Deductions are reasonable in order to compensate GDOT for damages GDOT will incur as a result of the unavailability of travel lanes, GDOT's loss of use, enjoyment and benefit of the Project and connecting GDOT transportation facilities by the general public, injury to the credibility and reputation of GDOT's transportation improvement programs with policy makers and with the general public who depend on and expect availability of service consistent with the Baseline Project Schedule, which injury to credibility and reputation may directly result in loss of ridership on the Project and connecting GDOT transportation facilities and additional costs of administering this Design-Build Agreement (including engineering, legal, accounting, overhead and other administrative costs). The Parties acknowledge and agree that each of the foregoing damages are not indirect, incidental or consequential damages hereunder.

17.4.6.2 Design-Builder further acknowledges and agrees that:

(a) each of the damages reflected in the Deductions in this DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*) are incapable of accurate measurement and difficult to prove because of, among other things, the unique nature of the Project and the unavailability of a substitute for it. Design-Builder further acknowledges that Design-Builder hereby waives any claim or defense that the Deductions are equivalent to the assessment of a penalty;

(b) the amounts of the Deductions, and manner by which Deductions are determined under this Design-Build Agreement represent good faith estimates and evaluations by the Parties as to the actual potential damages that GDOT would incur as a result of (i) late Substantial Completion, (ii) late Final Acceptance, (iii) unavailable or absent Key Personnel, (iv) Lane Closures that are not Excused Closures, and (v) events giving rise to Nonrefundable Deductions, in each case, do not constitute a penalty or to otherwise operate as a deterrent for the breach of any obligations of Design-Builder under this Design-Build Agreement;

(c) the Parties have agreed to such Deductions in order to fix and limit Design-Builder's costs and to avoid later Disputes over what amounts of damages are properly chargeable to Design-Builder;

(d) such amounts, and manner for determination, of Deductions are reasonable in light of the anticipated or actual harm caused by (i) late Substantial Completion, (ii) late Final Acceptance, (iii) unavailable or absent Key Personnel, (iv) Lane Closures that are not Excused Closures, and (v) events giving rise to Nonrefundable Deductions, as well as the difficulties of the proof of loss, and the inconvenience or infeasibility of otherwise obtaining an adequate remedy;

(e) in each case such Deductions are reasonable, as determined as of the Effective Date, in light of the respective injuries and damages that may be caused by Design-Builder's breach and given that such injuries and damages, which include but shall not be limited to, public inconvenience, increased administration and oversight by or on behalf of GDOT (and any other related agencies), and other damages to the general public, GDOT (and such other related agencies); and

(f) such Deductions are not intended to, and do not, liquidate Design-Builder's liability under the indemnification provisions of DBA Section 16.4 (*Indemnity by Design-Builder*), even though Third Party Claims against Indemnified Parties may arise out of the same event, breach or failure that gives rise to such Deductions.

17.4.6.3 Despite the intent of the Parties to deduct the Deductions as part of the preparation process for final Invoices under DBA Exhibit 7 (*Contract Sum and Payment Terms*), and without limiting DBA Section 17.4.7 (*Deductions; Payment; Satisfaction; Waiver*), Deductions shall be deemed to be due and payable by Design-Builder to GDOT when and as assessed hereunder, without right of offset, deduction, reduction or other charge.

17.4.7 Deductions; Payment; Satisfaction; Waiver

17.4.7.1 GDOT will deduct all Deductions, accrued month to date and owing under this DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*), whether subject to Dispute, as part of GDOT's review of Design-Builder's Invoice for Work completed in the preceding month.

17.4.7.2 If any Deductions deducted from the amount owing Design-Builder are in Dispute, then upon conclusion of the Dispute, Design-Builder shall present a separate line item in the next-succeeding monthly Invoice presented to GDOT reflecting the results of the Dispute, unless otherwise agreed by the Parties.

17.4.7.3 If Deductions remain after the Final Payment, then GDOT will invoice Design-Builder for the remaining Deductions, and Design-Builder shall pay any undisputed Deductions owing under this DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*) within 20 days after GDOT delivers to Design-Builder GDOT's invoice or demand therefor. If unpaid, GDOT also shall have the right to draw or call on any surety bond or other security provided by Design-Builder pursuant to this Design-Build Agreement, to satisfy Deductions not paid when due.

17.4.7.4 Nothing in this DBA Section 17.4.7 (*Deductions; Payment; Satisfaction; Waiver*) shall, or shall be deemed to, limit GDOT's rights under DBA Section 17.3.3 (*Damages; Offset*).

17.4.8 Non-Exclusive Remedy

17.4.8.1 Each item of Deductions provided under this DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*) is in addition to, and not in substitution for, any other item of Deductions assessed under this DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*).

17.4.8.2 GDOT's right to, and imposition of, Deductions are in addition, and without prejudice, to any other rights and remedies available to GDOT under the Design-Build Documents, at law or in equity respecting the breach, failure to perform or Design-Builder Default that is the basis for the Deductions or any other breach, failure to perform or Design-Builder Default, except for recovery of the monetary damage that the Deductions are intended to compensate and for which Deductions shall be the only amount recoverable on account of such damages.

17.5 Default by GDOT; Cure Periods

17.5.1 GDOT Default

GDOT will, subject to any applicable cure period as set forth in DBA Section 17.5.2 (*Cure Periods*) below, be in breach under this Design-Build Agreement upon the occurrence of any one or more of the following events or conditions (each an "GDOT Default"):

17.5.1.1 GDOT fails to make any payment due to Design-Builder under this Design-Build Agreement pursuant to a true, complete, and correct (in all material respects) Invoice within 30 days after the date that any such payment shall be due following the date on which Design-Builder delivers to GDOT Notice thereof, provided that such payment (or any portion thereof) is not subject to a Dispute; or

17.5.1.2 GDOT confiscates, sequesters, condemns, or appropriates the Project or any other material part of Design-Builder's Interest, excluding any such action pursuant to the exercise of any right of GDOT under this Design-Build Agreement.

17.5.2 Cure Periods

GDOT will have the following cure periods with respect to any of the conditions set forth in DBA Section 17.5.1 (*GDOT Default*):

17.5.2.1 respecting a GDOT Default under DBA Section 17.5.1.1, a period of 30 days after GDOT receives Notice of GDOT Default; and

17.5.2.2 respecting a GDOT Default under DBA Section 17.5.1.2, a period of 60 days after GDOT received Notice of GDOT Default; provided that if GDOT Default is of such a nature that the cure cannot with diligence be completed within such time period and GDOT has commenced meaningful steps to cure promptly after receiving the default Notice, GDOT will have such additional period of time, up to a maximum cure period of 180 days, as is reasonably necessary to diligently effect cure.

17.6 Design-Builder Remedies for GDOT Default

17.6.1 Termination and Suspension

17.6.1.1 Subject to DBA Section 18.7 (*Exclusive Termination Rights*) Design-Builder will have the right to suspend performance of the Work on account of a GDOT Default subject to any applicable notice and cure periods as set forth in DBA Section 17.5.2 (*Cure Periods*).

17.6.1.2 Further, Design-Builder may, upon Notice of not less than 15 days to GDOT following expiration of such applicable cure period, where such GDOT Default is continuing, exercise the right to terminate this Design-Build Agreement and recover termination damages as more particularly set forth in, and subject to the terms and conditions of, DBA Section 18.3 (T*ermination for GDOT Default, Suspension of Work or Materially Delayed NTP2*).

17.6.2 Damages and Other Remedies

Design-Builder shall have and may exercise the following remedies upon the occurrence of a GDOT Default and expiration, without cure, of the applicable cure period:

17.6.2.1 if Design-Builder does not terminate this Design-Build Agreement, then, subject to DBA Section 17.6.3 (*Limitations on Remedies*), Design-Builder may treat GDOT Default as a Relief Event and a Compensation Event, as to each on the terms and conditions set forth in DBA Article 13 (*Relief Events; Compensation Events*) and GDOT will pay the full Compensation Amount;

17.6.2.2 if GDOT Default is a failure to pay when due any undisputed portion of a progress payment owing under a Supplemental Agreement and GDOT fails to cure such GDOT Default within 30 days after receiving from Design-Builder Notice thereof, Design-Builder shall be entitled to suspend the Work under the Supplemental Agreement until the default is cured, subject to the following terms and conditions:

(a) Design-Builder shall be responsible for safely securing and monitoring the Site, all materials and equipment;

(b) Design-Builder shall continue to provide traffic management in accordance with the Transportation Management Plan;

(c) Design-Builder shall not suspend or cancel any Insurance Policies, any P&P Bond, or the Warranty Bond (if placed); and

(d) Design-Builder shall resume performance of the Work within 10 days after GDOT Default is cured.

17.6.3 Limitations on Remedies

17.6.3.1 Notwithstanding any other provision of the Design-Build Documents and except as forth in DBA Section 17.6.3.2 (*Limitations on Remedies*), to the extent permitted by applicable Law, GDOT shall not be liable for punitive damages or any indirect, incidental or consequential damages, whether arising out of breach of this Design-Build Agreement or any Design-Build Documents, tort (including negligence) or any other theory of liability, and Design-Builder releases GDOT from any such liability.

17.6.3.2 The foregoing limitation on GDOT's liability for consequential damages shall not apply to or limit any right of recovery Design-Builder may have respecting the following:

(a) losses directly caused by the gross negligence, reckless or willful misconduct, violation of Law and other illegal activities (or inaction), violation of contract, criminal conduct, bad faith, intentional misconduct (which excludes intentional GDOT Default), arbitrary or capricious acts, or fraud on the part of GDOT;

(b) losses arising out of GDOT Release(s) of Hazardous Materials or Pre-existing Hazardous Materials;

(c) any amounts GDOT may be obligated to reimburse Design-Builder, or that are otherwise due from GDOT to Design-Builder under the express provisions of this Design-Build Agreement for Compensation Events or events of termination;

(d) any other specified amounts GDOT may be obligated to reimburse Design-Builder, or that are otherwise due from GDOT to Design-Builder under the express provisions of the Design-Build Documents;

(e) interest and charges that the Design-Build Documents expressly state are due from GDOT to Design-Builder; and

(f) any credits, deductions, or offsets that the Design-Build Documents expressly provide to Design-Builder against amounts owing GDOT.

17.6.3.3 The measure of compensation available to Design-Builder as set forth in this Design-Build Agreement for a Compensation Event or an event of termination shall constitute the sole and exclusive monetary relief and damages available to Design-Builder from the State, GDOT arising out of or relating to such event; and Design-Builder irrevocably waives and releases any right to any other or additional damages or compensation from the State, GDOT, or GDOT. No award of compensation or damages shall be duplicative.

17.6.3.4 Without limiting the effect of DBA Section 17.6.3.3 (*Limitations on Remedies*), in the event GDOT wrongfully withholds an approval or consent required under this Design-Build Agreement, or wrongfully issues an objection to or disapproval of a Submittal or other matter under this Design-Build Agreement, Design-Builder's sole remedies against GDOT shall be extensions of time, or compensation, or both, in either case as provided in DBA Article 13 (*Relief Events; Compensation Events*).

17.6.4 Procedure for Payment of Judgments

Promptly after any final, non-appealable order or judgment awarding compensation or damages to Design-Builder, GDOT will institute payment procedures as set forth in applicable Law.

17.7 Suspension for GDOT's Convenience; Suspensions for Safety

17.7.1 GDOT may, at any time and for any reason, by Notice, order Design-Builder to suspend all or any part of performance of the Work for the period of time that GDOT deems appropriate for its convenience (each a "Suspension for Convenience"). Design-Builder shall promptly comply with any such written suspension order. Design-Builder shall promptly recommence performance of the suspended Work upon receipt of Notice from GDOT directing Design-Builder to do so.

17.7.2 GDOT shall have the right to direct Suspension(s) for Convenience not exceeding 48 hours each, up to a total of 144 hours during the Term, in which case, any such suspension shall not serve to diminish GDOT's balance of 144 hours then-existing; provided, however, that the duration of any such suspension is a Force Majeure Event.

17.7.3 If the duration of Suspensions for Convenience reaches 270 days continuously, then GDOT will be deemed to have terminated this Design-Build Agreement for its convenience under DBA Section 18.1 (*Termination for Convenience*).

17.7.4 Notwithstanding the foregoing, Design-Builder shall not be entitled to any relief from any Suspension for Convenience if such suspension is concurrent with any other unrelated delay to an activity on the Critical Path under the then-current Baseline Project Schedule for which Design-Builder is responsible under this Design-Build Agreement.

17.7.5 Notwithstanding anything to the contrary herein, and further to GDOT's rights and Design-Builder's obligations under DBA Article 12 (*Safety*), Design-Builder acknowledges that GDOT may issue an order suspending Work wholly or in part and to take appropriate action when public safety is jeopardized, as determined by or on behalf of GDOT in its sole discretion. Design-Builder shall promptly comply with any such written suspension order. Design-Builder shall promptly recommence performance of the scope of the work upon receipt of notice from GDOT directing Design-Builder to resume performance. Any such suspension shall not be, nor be deemed to be, (a) a Suspension for Convenience or (b) a suspension under DBA Section 17.3.6.1 (*Suspension of Work*), requiring notice and opportunity to cure or otherwise. GDOT shall have no liability to Design-Builder in connection with any such suspension, and Design-Builder shall have no basis for relief under this Design-Build Agreement by virtue of such a suspension under this DBA Section 17.7.5 (*Suspension for GDOT's Convenience; Suspensions for Safety*).

17.7.6 During any suspension periods directed by GDOT under this DBA Section 17.7 (*Suspension for GDOT's Convenience; Suspensions for Safety*), Design-Builder shall continue to be responsible for the Project and shall prevent damage, loss or injury to the Project. Without limiting the generality of the foregoing, Design-Builder shall specifically provide for drainage, protect any known or suspected Hazardous Materials or known or suspected archaeological, paleontological, historical, cultural, or biological resources (including taking affirmative steps to protect the site from vandalism and unauthorized investigations), protect the Site from accidental damage, and shall erect necessary temporary structures, signs or other facilities required to maintain the Project. Design-Builder shall also maintain all Insurance Policies, P&P Bonds, the Warranty Bond (if placed), guaranties, letters of credit and other security for payment or performance placed or required to be in placed under this Design-Build Agreement and to comply with all applicable Governmental Approvals and applicable Laws. Design-Builder shall,

unless otherwise directed by GDOT, continue to be responsible for traffic control, erosion control, and maintenance of the roadway in accordance with this Design-Build Agreement.

17.8 Dispute Resolution Procedures

17.8.1 The Parties shall endeavor to resolve any Dispute that may arise between them through good faith negotiations. If the Dispute is not resolved to the mutual satisfaction of all Parties within 30 days after Notice of such Dispute, or such longer time as is mutually agreed, the Dispute shall next be submitted to mediation in accordance with DBA Section 17.8.2 (*Dispute Resolution Procedures*).

17.8.2 If, despite good faith negotiations between the Parties, any Disputes are not resolved within 30 days after Notice of such Dispute, or such longer time as is mutually agreed, then the Dispute shall be submitted to mediation as set forth below. Following consultation with GDOT as to the scheduling the mediation so as to ensure GDOT's availability and adequate time for preparation, the Design-Builder shall consult with GDOT and thereafter schedule the mediation at such date and time as agreed by GDOT within 45 days after Notice of such Dispute, such that the scheduled date and time for the mediation will occur within 60 days after the aforementioned Notice of such Dispute, or such later date as the parties mutually agree. Design-Builder shall provide Notice to GDOT of the date, time, and (as determined below) location of the mediation.

17.8.2.1 The Parties shall mutually select a private mediator to formally mediate the Disputes. If the Parties cannot mutually select a private mediator, the mediator shall be selected pursuant to the mediation rules established by the American Arbitration Association or other dispute resolution organization agreed to by the Parties. GDOT and Design-Builder shall each pay one-half of the fees and costs charged by the selected mediator. Other parties, such as GDOT and Contractors, may be invited to the mediation as may be appropriate for the mediation, and if the Contractors are Key Contractors, Design-Builder shall cause such Key Contractor(s) to attend and participate, if so invited by or on behalf of GDOT.

17.8.2.2 The Parties, to provide economies of scale, may mutually agree in writing to submit one or more Disputes, whether or not factually related, to a single mediation. In such event, time periods may be extended by mutual written agreement to facilitate preparation for the mediation.

17.8.2.3 The mediation may, at the insistence of either party, and under such reasonable constraints as may be imposed by American Arbitration Association (or such other dispute resolution organization) rules (not specific to this Design-Build Agreement), be held virtually with GDOT's prior approval.

17.8.2.4 If relevant in the mediation, the Party bringing the Dispute shall bear the burden of proving the same.

17.8.2.5 If the Dispute has not been settled within 15 days following conclusion of the scheduled mediation, or within such other period that the Parties may agree in writing, such Dispute may be submitted to litigation by either Party in accordance with DBA Section 17.8.4 (*Dispute Resolution Procedures*).

17.8.3 No litigation may be filed by either Party concerning any Dispute (or the substantive issue(s) or matters(s) of the Dispute, whether or not formally a Dispute) prior to using the procedure described in DBA Section 17.8.2 (*Dispute Resolution Procedures*). This procedure is a condition precedent for any Party to commence a civil action for resolution of a Dispute. Furthermore, failure of Design-Builder to conform to the Dispute Resolution Procedures in all material respects as to any Dispute subject thereto shall constitute a failure to pursue diligently and to exhaust the administrative procedures in the Design-

Build Documents and shall operate as a bar to the Dispute; provided, however, that the foregoing shall not bar a Dispute if the failure to meet applicable deadlines is due to conduct by or on behalf of any GDOT - Related Entity.

17.8.4 All litigation, and any judicial proceeding (including those involving petitions for protective orders) between the Parties arising out of or pertaining to this Design-Build Agreement or its breach shall be filed, heard and decided in the Superior Court of Fulton County, Georgia, which shall have exclusive jurisdiction and venue pursuant to O.C.G.A. § 50-21-1. Each Party shall bear its own attorney's fees and costs in any Dispute or litigation arising out of or pertaining to this Design-Build Agreement, and no Party shall seek or accept an award of attorney's fees or costs.

17.8.5 Continuation of Disputed Work and Payments

17.8.5.1 At all times during Dispute Resolution Procedures, Design-Builder shall, and shall cause all Contractors, Subcontractors, and Suppliers to, continue with the performance of the Work and their obligations, including any Disputed Work or obligations, diligently and without delay, in accordance with the Design-Build Documents, except, and solely to the extent enjoined by order of the court identified in DBA Section 17.8.4 (*Dispute Resolution Procedures*) or otherwise approved by GDOT in its sole discretion. Design-Builder acknowledges that it shall be solely responsible for the results of any delaying actions or inactions taken during the course of Dispute Resolution Procedures relating to the Disputed Work even if Design-Builder's position in connection with the Dispute ultimately prevails.

17.8.5.2 During the course of any Dispute Resolution Procedures, the Parties shall continue to comply with all provisions of the Design-Build Documents, the accepted Project Management Plan, the Governmental Approvals and applicable Law.

17.8.5.3 Throughout the course of any Disputed Work, Design-Builder shall keep complete records that provide a clear distinction between the incurred direct and indirect costs of Disputed Work and that of undisputed Work. Design-Builder shall provide GDOT access to all Project-related Books and Records on an Open Book Basis as GDOT desires to evaluate the Dispute. Any mediator shall have similar access to all such records. These records shall be retained for a period of not less than two years after the date of resolution of the Dispute pertaining to such Disputed Work (or for any longer period required under any other applicable provision of the Design-Build Documents).

17.8.5.4 During the course of any Dispute Resolution Procedures, GDOT will continue to pay to Design-Builder when due all undisputed amounts owing under this Design-Build Agreement.

17.8.6 Interest on Certain Amounts Due or Owing to Design-Builder

Notwithstanding anything to the contrary in the Design-Build Documents, and to the maximum extent permitted under applicable Law, any amount in Dispute hereunder shall be, and shall be deemed to be, an unliquidated sum and no interest shall accrue or be payable on the sum if finally determined to be due to Design-Builder for any period prior to final determination of such sum, whether such determination be by agreement of Design-Builder and GDOT or by final judgement of the proper court in the event of litigation. Design-Builder hereby specifically waives and renounces any and all rights it may have under O.C.G.A. § 13-6-13 and agrees that in the event suit is brought by or on behalf of Design-Builder against GDOT for any sum claimed by or on behalf of Design-Builder under this Design-Build Agreement, for delay damages resulting from a breach of contract, for any breach of contract or for any extra or additional work, no interest shall be awarded on any sum found to be due from GDOT to Design-Builder in the final judgement entered in such suit. All final judgements shall draw interest at the legal rate, as specified by Law. Design-Builder agrees that notwithstanding any provision or provisions of Chapter 11 of Title 13 of

the Official Code of Georgia that the provisions of this Design-Build Agreement control as to when and how Design-Builder shall be paid for the Work. Design-Builder hereby waives and renounces any and all rights it may have under Chapter 11 of Title 13 of the Official Code of Georgia.

17.8.7 Waiver of Non-Monetary Relief

Notwithstanding anything to the contrary in the Design-Build Documents, and to the maximum extent permitted under applicable Law, Design-Builder shall have no right to seek, shall not seek, and irrevocably waives and relinquishes any right to, non-monetary relief against any GDOT -Related Entity not otherwise expressly set forth herein, including specifically any declaratory relief under the Dispute Resolution Procedures.

17.9 Partnering

17.9.1 GDOT and Design-Builder shall establish and maintain throughout the Term a partnering relationship and participate in partnering meetings in accordance with this DBA Section 17.9 (*Partnering*), TP Section 2.2.3.1 (Partnering Meetings), and TP Section 2.3.1.3 (Team Communications and Partnering Plan). The purpose of the partnering relationship is to facilitate effective communication between the Parties and to cooperate in identifying and resolving critical issues relating to the delivery of the Project.

17.9.2 The Parties acknowledge and agree that: (a) the partnering relationship and any discussions between the Parties at the partnering meetings will not amend or waive any of the terms, covenants, conditions, rights, remedies or obligations of the Parties under this Design-Build Agreement; (b) no such discussions, or memorializations thereof, shall function as an amendment to this Design-Build Agreement, and the terms of DBA Section 22.2 (*Amendments*) shall apply exclusively in respect thereof; and (c) no such discussions, or memorializations thereof, shall function as a waiver of any term, covenant, condition, right, remedy or obligation of a Party under this Design-Build Agreement, and the terms of DBA Section 22.3 (*Waiver*) shall apply in respect thereof.

17.9.3 Refer to TP Section 2.2.3.1 (Partnering Meetings) and TP Section 2.3.1.3 (Team Communications and Partnering Plan) for additional requirements pertaining to planning and facilitating partnering meetings contemplated by this DBA Section 17.9 (*Partnering*). The independent partnering facilitator identified in TP Section 2.2.3.1 (Partnering Meetings) shall be engaged by Design-Builder at Design-Builder's sole cost and expense, and on such terms as are acceptable, in advance of engagement, as are acceptable to GDOT with the facilitator identified by GDOT.

17.9.4 Nothing in this DBA Section 17.9 (*Partnering*) shall be construed to replace, supplant, or otherwise preclude the Parties obligations to endeavor to resolve Disputes under the Dispute Resolution Procedures, it being the intent of the Parties that their respective obligations under this DBA Section 17.9 (*Partnering*) do not contemplate Dispute resolution but instead all other matters for which partnering may be in the interest of the respective Parties and the Project, which may include Dispute avoidance. All references to either of the Parties' right to bring a Dispute hereunder shall not be construed to require any prior obligation to submit the basis for the Dispute to or through any partnering process under this DBA Section 17.9 (*Partnering*).

Article 18 TERMINATION

18.1 Termination for Convenience

18.1.1 GDOT may terminate this Design-Build Agreement, in whole, but not in part, if GDOT determines, in its sole discretion, that a termination is in GDOT's best interest (a "Termination for Convenience"). Termination of this Design-Build Agreement shall not relieve GDOT, Design-Builder or any Guarantor (if any) or Surety of its obligation for any claims arising prior to termination.

18.1.2 GDOT may exercise Termination for Convenience by delivering to Design-Builder a written Notice of Termination for Convenience specifying the election to terminate. Termination for Convenience shall be effective as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation*).

18.1.3 In the event of a Termination for Convenience, Design-Builder will be entitled to compensation determined in accordance with DBA Exhibit 5 (*Terms for Termination Compensation*). Payment will be due and payable as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation*).

18.1.4 If GDOT terminates this Design-Build Agreement on grounds or in circumstances beyond GDOT's termination rights specifically set forth in this Design-Build Agreement, such termination shall be deemed a Termination for Convenience for the purpose of determining the Termination Compensation due (but not for any other purpose).

18.2 Termination for Design-Builder Default

18.2.1 Design-Builder Defaults Triggering GDOT Termination Rights

If a cure period is specified, at expiration of the cure period (or if no cure period is specified, upon occurrence), each Design-Builder Default (each a "Default Termination Event") shall entitle GDOT, at its sole election, to terminate this Design-Build Agreement, effective immediately upon delivery of Notice of termination to Design-Builder. Design-Builder agrees, acknowledges and stipulates that (a) any uncured Design-Builder Default, if a cure period is specified, at expiration of the cure period and (b) any Design-Builder Default for which there is no cure period specified, in either case, would, in either case, result in material and substantial harm to GDOT's rights and interests under this Design-Build Agreement and therefore constitute a material Design-Builder Default justifying termination if not cured within the applicable cure period, if any:

18.2.2 Compensation to Design-Builder

If GDOT issues Notice of termination of this Design-Build Agreement due to a Default Termination Event, or if Design-Builder terminates this Design-Build Agreement on grounds or in circumstances beyond Design-Builder's termination rights specifically set forth in this Design-Build Agreement, Design-Builder will be entitled to compensation to the extent, and only to the extent, provided in DBA Exhibit 5 (*Terms for Termination Compensation*). Payment shall be due and payable as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation*).

18.2.3 Finality

If GDOT issues Notice of termination of this Design-Build Agreement due to a Default Termination Event, termination shall be effective and final immediately upon delivery of Notice as provided

in DBA Section 18.2.1 (*Design-Builder Defaults Triggering GDOT Termination Rights*) regardless of whether GDOT is correct in determining that GDOT has the right to terminate for Design-Builder Default. In the event it is determined that GDOT lacked such right, then such termination shall be treated as a Termination for Convenience as provided in DBA Section 18.1.2 (*Termination for Convenience*) for the purpose of determining the Termination Compensation due.

18.3 Termination for GDOT Default, Suspension of Work or Materially Delayed NTP2

18.3.1 In the event of a GDOT Default under DBA Section 17.5.1 (*GDOT Default*) that remains uncured following notice and expiration of the applicable cure period under DBA Section 17.5.2 (*Cure Periods*), Design-Builder may deliver to GDOT a further Notice setting forth such GDOT Default and warning GDOT that Design-Builder may elect to terminate this Design-Build Agreement and if GDOT does not cure such GDOT Default within 60 days after the delivery of such notice with respect to a GDOT Default under DBA Section 17.5.1.1 (*GDOT Default*). GDOT may avoid termination by effecting cure within such 60 day period. Failing such cure, Design-Builder shall have the right to terminate this Design-Build Agreement, effective immediately upon delivery of Notice of termination to GDOT. In the event of such termination, Design-Builder will be entitled to compensation determined in accordance with DBA Exhibit 5 (*Terms for Termination Compensation*). Payment shall be due and payable as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation*). Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

18.3.2 In the event (i) GDOT orders Design-Builder to suspend Work on all or any material portion of the Project (A) for a reason other than those set forth in DBA Section 17.3.6.1 (*Suspension of Work*), or (B) as a result of a Force Majeure Event, and such suspension of Work continues for a period of 270 consecutive days or more, Design-Builder shall have the right to terminate this Design-Build Agreement, effective immediately upon delivery of Notice of termination to GDOT. In the event of such termination, Design-Builder will be entitled to compensation determined in accordance with DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*). Payment shall be due and payable as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*). Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

18.3.3 In the event GDOT, due to no fault of Design-Builder or any Design-Builder-Related Entity or other than because the NEPA Finality Date has not occurred, does not issue NTP2 within 365 days after the anticipated issuance date set forth in DBA Section 3.3 (*Contract Time, Date of Commencement, and Notice to Proceed*), Design-Builder shall have the right to terminate this Design-Build Agreement, effective immediately upon delivery of Notice of termination to GDOT. In the event of such termination, Design-Builder will be entitled to compensation determined in accordance with DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*). Payment shall be due and payable as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*). Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

18.3.4 If Design-Builder issues Notice of termination of this Design-Build Agreement due to a material GDOT Default under DBA Section 17.5.1.1 (*GDOT Default*), termination shall be effective and final immediately upon delivery as provided in DBA Section 18.3.1 (*Termination for GDOT Default, Suspension of Work or Materially Delayed NTP2*) regardless of whether Design-Builder is correct in determining that it has the right to terminate for such GDOT Default. In the event it is determined that Design-Builder lacked such right, then such termination shall be treated as a termination due to material Design-Builder Default and DBA Section 18.2.2 (*Compensation to Design-Builder*) shall govern the measure of the Termination Compensation.

18.4 Termination Procedures and Duties

Upon expiration of the Term or any earlier termination of this Design-Build Agreement for any reason, the provisions of this DBA Section 18.4 (*Termination Procedures and Duties*) shall apply (except with the exception of DBA Section 18.4.4 (*Termination Procedures and Duties*) where such termination is due to a GDOT Default). Design-Builder shall timely comply with such provisions independently of, and without regard to, the timing for determining, adjusting, settling and paying any amounts due Design-Builder or GDOT on account of termination. If Design-Builder fails to timely comply with the provisions of this DBA Section 18.4 (*Termination Procedures and Duties*), as judged by GDOT in its sole discretion, then upon notice from GDOT to Design-Builder making reference to this DBA Section 18.4 (*Termination Procedures and Duties*), Design-Builder hereby stipulates that, and shall be deemed to have, surrendered its access rights to the Project Limits and otherwise under this Design-Build Agreement.

18.4.1 In any case where Notice of termination precedes the effective Early Termination Date:

18.4.1.1 Design-Builder shall continue performing the Work in accordance with, and without excuse from, all the standards, requirements and provisions of the Design-Build Documents, and without curtailment of services, quality and performance;

18.4.1.2 at GDOT's option, it may call for Increased Oversight of the Project and Design-Builder's compliance with the obligations under the Design-Build Documents, to such level as GDOT reasonably sees fit to protect against curtailment of services, quality and performance; and

18.4.1.3 not later than 90 days prior to a Termination Date, or, if applicable, within three days after Design-Builder receives or delivers a Notice of termination, Design-Builder shall meet and confer with GDOT for the purpose of developing an interim transition plan for the orderly transition of Work, demobilization and transfer of the Project control to GDOT. The Parties shall use diligent efforts to complete preparation of the interim transition plan within 15 days after the date Design-Builder receives the Notice of termination. The Parties shall use diligent efforts to complete a final transition plan within 30 days after such date. The transition plan shall:

(a) be in form and substance acceptable to GDOT in its good faith discretion;

(b) include and be consistent with the other provisions and procedures set forth in this DBA Section 18.4 (*Termination Procedures and Duties*), all of which procedures Design-Builder shall promptly follow, regardless of any delay in preparation or acceptance of the transition plan;

(c) include a plan to promptly deliver to GDOT or its designee possession of all the property, date and documents described herein; and

(d) include an estimate of costs and expenses to be incurred by both Parties in connection with the implementation of the transition plan.

18.4.2 On the Termination Date, or as soon thereafter as is possible, Design-Builder shall relinquish and surrender full control and possession of the Project to GDOT, and shall cause all persons and entities claiming under or through Design-Builder to do likewise, in at least the condition required by the post-Termination turnover requirements.

18.4.3 On the later of the Termination Date and the date Design-Builder relinquishes full control and possession, GDOT will have the exclusive right to, and shall assume responsibility, at its expense, for

the Project, subject to any rights to damages that GDOT has against Design-Builder where the termination is due to a Default Termination Event.

18.4.4 Design-Builder shall:

18.4.4.1 take such steps as are necessary to stop work and stop and cancel orders for materials, services, or facilities unless otherwise authorized in writing by GDOT;

18.4.4.2 promptly and safely demobilize and secure construction, staging, lay down, and storage areas for the Project and Utility Adjustments included in the Construction Work in a manner satisfactory to GDOT, and remove all debris and waste materials except as otherwise approved by GDOT in writing;

18.4.4.3 take such other actions as are necessary or appropriate to mitigate further cost;

18.4.4.4 subject to the prior written approval of GDOT, settle all outstanding liabilities and all claims arising out of any Contracts;

18.4.4.5 execute and deliver to GDOT a written assignment, in form and substance acceptable to GDOT, acting reasonably, of all Design-Builder's right, title, and interest in and to (a) all third party agreements and permits, except subcontracts for performance of the Design and Construction Work, provided GDOT assumes in writing all of Design-Builder's obligations thereunder that arise after the Termination Date, and (b) all assignable warranties, claims and causes of action held by Design-Builder against subcontractors and other third parties in connection with the Project or the Work, to the extent the Project or the Work is adversely affected by any subcontractor or other third party breach of warranty, contract or other legal obligation; and

18.4.4.6 carry out such other directions as GDOT may give for termination of Design Work and Construction Work.

18.4.5 If as of the Termination Date Design-Builder has entered into any other contract for the design, construction, permitting, installation, and equipping of the Project or for Utility Adjustments, GDOT will elect, by Notice to Design-Builder, to continue in effect such contract or to require its termination. If GDOT elects to continue the contract in effect, then Design-Builder shall execute and deliver to GDOT a written assignment, in form and substance acceptable to GDOT, acting reasonably, of all Design-Builder's right, title, and interest in and to the contract, and GDOT will assume in writing Design-Builder's obligations thereunder that arise from and after the Termination Date. If GDOT elects to require termination of the contract, then Design-Builder shall take actions comparable to those set forth in DBA Section 18.4.4 (*Termination Procedures and Duties*) with respect to the contract.

18.4.6 Within 30 days after Notice of termination is delivered, Design-Builder shall provide GDOT with a true and complete list of all materials, goods, machinery, equipment, parts, supplies, and other property in inventory or storage (whether held by Design-Builder or any Person on behalf of or for the account of Design-Builder) for use in or respecting the Work or the Project, or on order or previously completed but not yet delivered from Suppliers for use in or respecting the Work or the Project. In addition, on or about the Termination Date, Design-Builder shall transfer title to GDOT and deliver to GDOT's Authorized Representative, through bills of sale or other documents of title, as directed by GDOT, all such materials, goods, machinery, equipment, parts, supplies, and other property, provided GDOT assumes in writing all of Design-Builder's obligations under any contracts relating to the foregoing that arise after the Termination Date or the effective date of the transfer.

18.4.7 Design-Builder shall take all action that may be necessary, or that GDOT may direct, for the protection and preservation of the Project, the Work, and such materials, goods, machinery, hardware, data, documentation, equipment, parts, supplies, and other property.

18.4.8 On or about the Termination Date, Design-Builder shall execute and deliver to GDOT the following, together with an executed bill of sale or other written instrument, in form and substance acceptable to GDOT, acting reasonably, assigning and transferring to GDOT all of Design-Builder's right, title and interest in and to the following:

18.4.8.1 all completed or partially completed drawings (including plans, elevations, sections, details, and diagrams), specifications, designs, design documents, as-built and record plans, surveys, and other documents and information pertaining to the design or construction of the Project or the Utility Adjustments;

18.4.8.2 all samples, borings, boring logs, geotechnical data and similar data, and information relating to the Project;

18.4.8.3 all books, records, reports, test reports, studies and other documents of a similar nature relating to the Work and the Project;

18.4.8.4 all data (including Project Data) and information relating to the use of the Project, including all studies, reports, and other information provided that the transfer of any Intellectual Property shall be subject to DBA Section 20.4 (*Proprietary Intellectual Property*); and

18.4.8.5 all other work product and Intellectual Property used or owned by Design-Builder or any Affiliate relating to the Work, the Project, provided that the transfer of any Intellectual Property shall be subject to DBA Section 20.4 (*Proprietary Intellectual Property*).

18.4.9 On or about the Termination Date, Design-Builder shall execute and deliver to GDOT a written assignment, in form and substance acceptable to GDOT, acting reasonably, of all of Design-Builder's right, title, and interest in and to any escrows or similar arrangements for the protection of Intellectual Property, Source Code, or Source Code Documentation of others used for or relating to the Project or the Work.

18.4.10 On or about the Termination Date, Design-Builder shall execute and deliver to GDOT a written assignment, in form and substance acceptable to GDOT, acting reasonably, of all Design-Builder's right, title, and interest in and to all warranties.

18.4.11 Design-Builder shall otherwise assist GDOT in such manner as GDOT may require prior to and for a reasonable period following the Termination Date to ensure the orderly transition of the Project and its management to GDOT, and shall, if appropriate and if requested by GDOT, take all steps as may be necessary to enforce the provisions of the Key Contracts pertaining to the surrender of the Project.

18.4.12 For a period of four years following the Termination Date, Design-Builder shall maintain a secure archive copy of all electronic data (including archived Project Data) transferred to GDOT.

18.5 Contracts and Agreements

18.5.1 Regardless of GDOT's prior actual or constructive knowledge thereof, no contract or agreement to which Design-Builder is a party (unless GDOT is also a party thereto) as of the Termination Date shall bind GDOT, unless GDOT elects to assume such contract or agreement in writing. Except in

the case of GDOT's express written assumption, no such contract or agreement shall entitle the contracting party to continue performance of work or services respecting the Project following Design-Builder's relinquishment to GDOT of possession and control of the Project, or to any claim, legal or equitable, against GDOT.

18.6 Liability After Termination; Final Release

18.6.1 No termination of this Design-Build Agreement shall excuse either Party from any liability arising out of any default as provided in this Design-Build Agreement that occurred prior to termination. Notwithstanding the foregoing, any termination of this Design-Build Agreement shall automatically extinguish any claim hereunder, or at law, of Design-Builder to payment of Compensation Amounts for adverse cost and revenue impacts accruing after the Early Termination Date from Compensation Events that occurred prior to termination.

18.6.2 If this Design-Build Agreement is terminated early for any reason, then GDOT's payment to Design-Builder of the amounts required hereunder (if any) shall constitute full and final satisfaction of, and upon payment GDOT shall be forever released and discharged from, any and all claims, causes of action, suits, demands and Losses, known or unknown, suspected or unsuspected, that Design-Builder may have against GDOT arising out of or relating to this Design-Build Agreement or termination thereof, or the Project, except for specific Disputes that are asserted by Design-Builder in accordance with DBA Section 17.8 (*Dispute Resolution Procedures*) not later than 30 days after the effective date of termination, are unresolved at the time of such payment and are not related to termination or Termination Compensation. Upon such payment, Design-Builder shall execute and deliver to GDOT all such releases and discharges as GDOT may reasonably require to confirm the foregoing, but no such written release and discharge shall be necessary to give effect to the foregoing satisfaction and release.

18.7 Exclusive Termination Rights

This DBA Article 18 (*Termination*), together with the express provisions on termination set forth in DBA Sections 17.3.1 (*Termination*), 17.6.1 (*Termination and Suspension*) and DBA Section 18.1.1 (*Termination for Convenience*), contain the entire and exclusive provisions and rights of GDOT and Design-Builder regarding termination of this Design-Build Agreement, and any and all other rights to terminate at law or in equity are hereby waived to the maximum extent permitted by Law.

18.8 Access to Information

Design-Builder shall conduct all discussions and negotiations to determine any Termination Compensation, and shall share with GDOT all data, documents and information pertaining thereto, on an Open Book Basis.

18.9 Termination by Court Ruling

18.9.1 Except in the circumstances described in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*), Termination by Court Ruling means (a) issuance of a final order by a court of competent jurisdiction to the effect that this Design-Build Agreement is void and/or unenforceable or impossible to perform in its entirety, (b) issuance of a final order by a court of competent jurisdiction upholding the binding effect on Design-Builder or GDOT of a Change in Law that causes impossibility of performance of a fundamental obligation by Design-Builder or GDOT under the Design-Build Documents or impossibility of exercising a fundamental right of Design-Builder or GDOT under the Design-Build Documents, (c) occurrence of the circumstances described in DBA Section 22.13.2 (*Severability*), or (d) issuance of a final order by a court of competent jurisdiction to the effect that a material provision under

any Design-Build Document (other than the Design-Build Agreement) is void and/or unenforceable so as to deprive Design-Builder of its ability to exercise a fundamental right granted to Design-Builder under the Design-Build Documents and such inability resulting from such order cannot be otherwise remedied through a Compensation Event, Relief Event or other contractual remedy. The final court order shall be treated as the Notice of termination.

18.9.2 Promptly following any Termination by Court Ruling, GDOT will notify, by Formal Communication, the effective date of the Termination by Court Ruling, which shall also serve as Notice of termination of the Design-Build Agreement.

18.9.3 Once Termination by Court Ruling becomes effective, GDOT and Design-Builder shall cooperate to implement DBA Sections 18.4 (*Termination Procedures and Duties*), 18.6 (*Liability After Termination; Final Release*), and 18.7 (*Exclusive Termination Rights*).

18.9.4 Notwithstanding DBA Section 18.9.2 (*Termination by Court Ruling*), if a Termination by Court Ruling occurs, Design-Builder shall be entitled to compensation to the extent, and only to the extent, provided in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*). Payment shall be due and payable as and when provided in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*). Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

Article 19 ASSIGNMENT AND TRANSFER

19.1 Restrictions on Assignment, Subletting and Other Transfers

19.1.1 Design-Builder shall not voluntarily or involuntarily sell, assign, convey, transfer, pledge, mortgage or otherwise encumber Design-Builder's Interest or any portion thereof without GDOT's prior written approval, except:

19.1.1.1 to any entity that is under the same management control as Design-Builder; or

19.1.1.2 as expressly provided herein.

19.1.2 Design-Builder shall not grant any special right of entry onto, special occupancy of, use of, or right to manage and control the Project to any other Person that is not in the ordinary course of Design-Builder performing the Work, without GDOT's prior written approval.

19.1.3 Any voluntary or involuntary sale, assignment, conveyance, transfer, pledge, mortgage, encumbrance, or grant of right of entry, or grant of other special management, control, occupancy or use of the Project in violation of this provision shall be null and void ab initio and GDOT may, by Warning Notice, declare any such attempted action to be a material Design-Builder Default.

19.2 Standards and Procedures for Certain GDOT Approvals

19.2.1 Where GDOT's prior approval is required for a proposed sale, assignment, conveyance, transfer, pledge, mortgage, encumbrance, sublease or grant of other special occupancy or use, or for any proposed Change of Control, GDOT may withhold or condition its approval in its sole discretion. Any such decision of GDOT to withhold consent shall be final, binding and not subject to the Dispute Resolution Procedures.

19.2.2 GDOT will approve or disapprove within 30 days after it receives from Design-Builder a Formal Communication consisting of a request for approval together with (a) a reasonably detailed description of the proposed transaction, (b) such information, evidence and supporting documentation as GDOT may request concerning the identity, financial resources, qualifications, experience and potential conflicts of interest of the proposed transferee and its proposed contractors and (c) such evidence of organization and authority, and such incumbency certificates, certificates regarding debarment or suspension, and other certificates, representations and warranties as GDOT may reasonably request. GDOT will evaluate the identity, financial resources, qualifications, experience and potential conflicts of interest using the same standards and criteria that it is then currently applying, or if there is no current application, then the same standards and criteria it most recently applied, to the evaluation of Persons responding to GDOT requests for qualifications for concession or similar agreements for comparable projects and facilities.

19.2.3 If for any reason GDOT does not act within such 30 day period, or any extension thereof by mutual agreement of the Parties, then GDOT shall be deemed to have rejected the proposed sale, assignment, conveyance, transfer, pledge, mortgage, encumbrance, sublease or grant of other special occupancy or use, or for any proposed Change of Control.

19.3 Assignment by GDOT

GDOT may assign all or any portion of its rights, title and interests in and to the Design-Build Documents, P&P Bond(s), the Warranty Bond (if placed), guaranties, letters of credit and other security for

payment or performance, (a) without Design-Builder's consent, to any other Person that succeeds to the governmental powers and authority of GDOT, whether by operation of law or otherwise, and that has the sources of funding for the Project Payments that are at least as adequate and secure as GDOT's at the time of the assignment, and (b) to others with the prior written consent of Design-Builder.

19.4 Notice and Assumption

19.4.1 Assignments and transfers of Design-Builder's Interest permitted under this DBA Article 19 (*Assignment and Transfer*) or otherwise approved in writing by GDOT will be effective only upon GDOT's receipt of Notice of the assignment or transfer and a written recordable instrument executed by the transferee, in form and substance acceptable to GDOT, in which the transferee, without condition or reservation, assumes all of Design-Builder's obligations, duties and liabilities under the Design-Build Documents then in effect and agrees to perform and observe all provisions thereof applicable to Design-Builder.

19.4.2 Each transferee, including any Person who acquires Design-Builder's Interest pursuant to foreclosure, transfer in lieu of foreclosure or similar proceeding, shall take Design-Builder's Interest subject to, and shall be bound by, the Design-Build Documents, the Project Management Plan, the Key Contracts, the Governmental Approvals, and all agreements between the transferor and Governmental Entities with jurisdiction over the Project or the Work, except to the extent otherwise approved by GDOT in writing in its good faith discretion.

19.4.3 Except with respect to assignments and transfers pursuant to foreclosure, transfer in lieu of foreclosure or similar proceeding, the transferor and transferee shall give GDOT Notice of the assignment not less than 30 days prior to the effective date thereof.

19.5 Change of Organization or Name

19.5.1 Design-Builder shall not change the legal form of its organization in a manner that adversely affects GDOT's rights, protections and remedies under the Design-Build Documents without the prior written approval of GDOT, which consent may be granted or withheld in GDOT's sole discretion.

19.5.2 In the event either Party changes its name, such Party agrees to promptly furnish the other Party with Notice of change of name and appropriate supporting documentation.

Article 20 RECORDS AND AUDITS; INTELLECTUAL PROPERTY

20.1 Maintenance and Inspection of Books and Records

20.1.1 Design-Builder shall keep and maintain in Fulton County, Georgia, or in another physical or electronic location GDOT approves or directs in advance in writing in its sole discretion, all Books and Records relating to the Project, Utility Adjustments or Work, including copies of all original documents delivered to GDOT. Design-Builder shall notify GDOT where such records and documents are kept. Design-Builder shall keep and maintain such Books and Records in accordance with applicable provisions of the Design-Build Documents, the Technical Provisions, and of the Project Management Plan, applicable Law (including specifically the Open Records Act pursuant to DBA Section 20.3 (*Open Records Act and Freedom of Information Act*)), and in accordance with Good Industry Practice.

20.1.2 Without limiting DBA Section 20.1.1 (*Maintenance and Inspection of Books and Records*), Design-Builder shall make all Books and Records for the Project available for inspection by GDOT, any GDOT-Related Entity, and each of their respective representatives and legal counsel at Design-Builder's principal offices, at all times during normal business hours, without charge. Design-Builder shall provide to GDOT (and to FHWA, or otherwise to GDOT's designee) copies thereof (a) as and when expressly required by the Design-Build Documents or (b) for those not expressly required, upon request and at no expense to Design-Builder. GDOT may conduct any such inspection upon 48 hours' prior Notice, or unannounced and without prior notice where there is good faith suspicion of fraud. The right of inspection includes the right to make extracts and take notes. The provisions of this DBA Section 20.1.2 (*Maintenance and Inspection of Books and Records*) are subject to the following:

20.1.2.1 Design-Builder reserves the right to assert exemptions from disclosure for information that would be exempt under applicable State Law from discovery or introduction into evidence in legal actions;

20.1.2.2 Design-Builder shall retain the Books and Records until expiration of the Warranty Period, at which point Design-Builder shall deliver, and cause to be delivered, the Books and Records to GDOT; provided, however, that if the Design-Build Documents or applicable Law (including applicable federal Laws) specify any longer time period for retention of particular records, then such time period shall control and Design-Builder shall retain such Books and Records until expiration of such time period, whereupon Design-Builder shall deliver, and cause to be delivered, the Books and Records to GDOT. Notwithstanding the foregoing, all records that relate to Compensation Events, Compensation Event Notices, Relief Events, Relief Event Notices, and Disputes being processed or actions brought under the Dispute Resolution Procedures shall be retained and made available until any later date that such Disputes are finally resolved. Refer to Attachment 1 to DBA Exhibit 8 (*Other Legal Requirements*) regarding applicable federal requirements; and

20.1.2.3 Design-Builder shall provide an inventory of the Books and Records to GDOT, upon request, and ultimately with the final distribution pursuant to DBA Section 20.1.2.2 (*Maintenance and Inspection of Books and Records*).

20.2 Audits

20.2.1 GDOT will have such rights to review and audit Design-Builder, its Contractors and their respective Books and Records as and when GDOT deems necessary for purposes of verifying compliance with the Design-Build Documents and applicable Law. Without limiting the foregoing, GDOT will have the right to audit Design-Builder's compliance with the Project Management Plan, including the right to inspect Work and/or activities and to verify the accuracy and adequacy of the Project Management Plan.

GDOT may conduct any such audit of Books and Records upon 48 hours' prior Notice, or unannounced and without prior notice where there is good faith suspicion of fraud.

20.2.2 All Compensation Event Notices and Relief Event Notices delivered to GDOT will be subject to audit at any time following receipt by GDOT. The audit may be performed by employees of GDOT or by an auditor under contract with GDOT. Notice shall not be required before commencing any audit prior to 60 days after the expiration of the term of this Design-Build Agreement. Thereafter, GDOT will provide 20 days' notice to Design-Builder, any Contractors or their respective agents before commencing an audit. Design-Builder, Contractors or their agents shall provide adequate facilities, acceptable to GDOT, for the audit during normal business hours. Design-Builder, Contractors or their agents shall cooperate with the auditors. Failure of Design-Builder, Contractors or their agents to maintain and retain sufficient Books and Records to allow the auditors to verify all or a portion of any such notices or to permit the auditor access to such Books and Records shall constitute a waiver of the basis for relief (or compensation, or both) and shall bar any recovery thereunder. At a minimum, the auditors shall have available to them the following documents:

20.2.2.1 daily time sheets and supervisor's daily reports;

20.2.2.2 union agreements;

20.2.2.3 insurance, welfare, and benefits records;

20.2.2.4 payroll registers;

20.2.2.5 earnings records;

20.2.2.6 payroll tax forms;

20.2.2.7 material invoices and requisitions;

20.2.2.8 material cost distribution work sheet;

20.2.2.9 equipment records (list of company equipment, rates, etc.);

20.2.2.10 Contractors' (including Suppliers') invoices;

20.2.2.11 Contractors' and agents' payment certificates;

20.2.2.12 canceled checks (payroll and Suppliers);

20.2.2.13 job cost report;

20.2.2.14 job payroll ledger;

20.2.2.15 general ledger;

20.2.2.16 cash disbursements journal;

20.2.2.17 all documents that relate to each and every Formal Communication together with all documents that support the amount of damages as to each claim for relief thereunder; and

20.2.2.18 work sheets used to prepare the notice establishing (a) the cost components, including labor, benefits and insurance, materials, equipment, Contractors, all documents that establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals, and (b) the lost revenue components.

20.2.3 Full compliance by Design-Builder with the provisions of this DBA Section 20.2 (*Audits*) is a contractual condition precedent to Design-Builder's right to seek relief under DBA Section 17.8 (*Dispute Resolution Procedures*).

20.2.4 Any rights of the FHWA to review and audit Design-Builder, its Contractors and their respective Books and Records are set forth in Attachment 1 to DBA Exhibit 8 (*Other Legal Requirements*).

20.2.5 GDOT's right of audit includes the right to observe the business operations of Design-Builder and its Contractors to confirm the accuracy of Books and Records.

20.2.6 The Project Management Plan shall include internal procedures to facilitate review and audit by GDOT and, if applicable, FHWA.

20.2.7 Design-Builder represents and warrants the completeness and accuracy in all material respects of all information it or its agents provides in connection with GDOT audits, and shall cause all Contractors other than Governmental Entities acting as Contractors to warrant the completeness and accuracy in all material respects of all information such Contractors provide in connection with GDOT audits.

20.2.8 Design-Builder's internal and third party quality and compliance auditing responsibilities shall be set forth in the Project Management Plan.

20.2.9 Nothing in the Design-Build Documents shall in any way limit the constitutional and statutory powers, duties, and rights of elected State officials, including the independent rights of the State auditor, in carrying out his or her legal authority. Design-Builder understands and acknowledges that (a) the State auditor may conduct an audit or investigation of any entity receiving funds from the State directly under this Design-Build Agreement or indirectly through a Contract, (b) acceptance of funds directly under this Design-Build Agreement or indirectly through a Contract acts as acceptance of the authority of the State auditor to conduct an audit or investigation in connection with those funds, and (c) an entity that is the subject of an audit or investigation must provide the State auditor with access to any information the State auditor considers relevant to the investigation or audit.

20.3 Open Records Act and Freedom of Information Act

20.3.1 Design-Builder acknowledges and agrees that all Books and Records and other materials in GDOT's possession, as well as in Design-Builder's or any Design-Builder-Related Entity's possession or control, are subject to the provisions of the Open Records Act, subject only to certain exceptions and exemptions contained therein. Design-Builder shall comply with the Open Records Act, to include specifically to respond to public requests for information consistent therewith.

20.3.2 Design-Builder acknowledges and agrees that in accordance with the Open Records Act, Design-Builder's rights relating to any potential limit on public disclosure of Project materials in GDOT's possession: (a) apply only to trade secrets, as defined in O.C.G.A. § 10-1-761(4); (b) specifically exclude the right to limit public disclosure by GDOT of any commercial, financial, or otherwise proprietary Project information that does not constitute trade secrets; and (c) specifically exclude any right to avail itself of any other exemption to Open Records Act.

20.3.3 If Design-Builder believes information or materials is/are not subject to the Open Records Act or is excepted from disclosure as "trade secrets" under the Open Records Act, Design-Builder shall be solely responsible for specifically and conspicuously designating that information by placing "TRADE SECRET" in the center header of each such document or page affected, as it determines to be appropriate. Any specific proprietary information, trade secrets or confidential commercial and financial information shall be clearly identified as such, and shall be accompanied by an affidavit affirmatively declaring that the information constitutes trade secrets pursuant to Article 27 of Chapter 1 of Title 10 of the Georgia Code.

20.3.4 Nothing contained in this DBA Section 20.3 (*Open Records Act and Freedom of Information Act*) shall modify or amend requirements and obligations imposed on GDOT by the Open Records Act or other applicable Law, and the provisions of the Open Records Act or other Laws shall control in the event of a conflict between the procedures described above and the applicable Law.

20.3.5 In the event of any proceeding or litigation concerning the disclosure of any material submitted by Design-Builder to GDOT, Design-Builder shall be fully responsible for otherwise prosecuting or defending any action concerning the materials at its sole cost and risk; provided, however, that the Attorney General of the State shall represent GDOT who will participate in the litigation in such manner as they each may deem necessary or desirable, in their respective sole discretion. Except in the case of GDOT's voluntary intervention in litigation, and only if GDOT elects not to offset the cost and fees pursuant to DBA Exhibit 7 (*Contract Sum and Payment Terms*), Design-Builder shall pay and reimburse GDOT (as the case may be) within 30 days after receipt of written demand and reasonable supporting documentation for all costs and fees, including attorneys' fees and costs, GDOT incurs in connection with any litigation, proceeding or request for disclosure.

20.3.6 Design-Builder further acknowledges and agrees that all Submittals, records, documents, drawings, plans, specifications, and other materials in FHWA's possession may also be subject to disclosure under federal Law, including the Freedom of Information Act. Design-Builder's rights and obligations with respect to such disclosure shall be in accordance with such federal Law.

20.4 Proprietary Intellectual Property

20.4.1 Design-Builder shall deliver, or cause to be delivered, to GDOT copies of all Proprietary Intellectual Property owned by or licensed to Design-Builder that it uses in providing the Work. All Proprietary Intellectual Property shall remain exclusively the property of Design-Builder or its Affiliates or Contractors that supply the same, notwithstanding any delivery of copies thereof to GDOT or GDOT.

20.4.2 GDOT shall have, and are hereby granted by Design-Builder, a perpetual, nonexclusive, transferable, royalty-free, irrevocable, worldwide, fully paid up right and license to use, reproduce, modify, adapt and disclose, and sublicense others to use, reproduce, modify, adapt and disclose, the Proprietary Intellectual Property of Design-Builder solely in connection with the Project or another Highway or other road owned and operated by GDOT, or a State or regional Governmental Entity. GDOT's right to exercise the foregoing license shall commence and endure only at the following times:

20.4.2.1 from and after expiration or earlier termination of the Term, for any reason whatsoever;

20.4.2.2 during any time that GDOT is exercising any step-in rights pursuant to DBA Section 17.3.2 (*Step-In Rights*), in which case GDOT may exercise such license only in connection with the Project;

20.4.2.3 during any time that a receiver is appointed for Design-Builder, or during any time that there is pending a voluntary or involuntary proceeding in bankruptcy in which Design-Builder is the debtor; or

20.4.2.4 during any time that Design-Builder has been replaced.

20.4.3 Subject to the license and rights granted to GDOT pursuant to DBA Section 20.4.2 (*Intellectual Property*), GDOT will not, at any time, sell any Proprietary Intellectual Property of Design-Builder or use, reproduce, modify, adapt and disclose, or allow any party to use, reproduce, modify, adapt and disclose, any such Proprietary Intellectual Property for any other purpose not consistent with DBA Section 20.4.2 (*Intellectual Property*).

20.4.4 The right to transfer the license is limited to any Governmental Entity that succeeds to the power and authority of GDOT generally or with respect to the Project.

20.4.5 GDOT's right to sublicense the Proprietary Intellectual Property of Design-Builder is limited to State or regional Governmental Entities that own or operate a Highway or other road and to the concessionaires, contractors, subcontractors, employees, attorneys, consultants, and agents that are retained by or on behalf of GDOT or any such State or regional Governmental Entity in connection with the Project or another Highway or other road. All such sublicenses shall be subject to DBA Section 20.4.6 (*Intellectual Property*). Nothing in this Design-Build Agreement shall prohibit or limit either Party's use of information (a) previously known to it without obligation of confidence, (b) independently developed by it, (c) acquired by it from a third party that is not, to its knowledge, under an obligation of confidence with respect to such information, or (d) which is or becomes publicly available through no breach of this Design-Build Agreement.

20.4.6 Subject to DBA Section 20.3 (*Open Records Act and Freedom of Information Act*), GDOT will:

20.4.6.1 not disclose any Proprietary Intellectual Property of Design-Builder to any Person other than authorized transferees and sublicensees who agree to be bound by any confidentiality obligations of GDOT relating thereto;

20.4.6.2 enter into a commercially reasonable confidentiality agreement if requested by Design-Builder with respect to the licensed Proprietary Intellectual Property; and

20.4.6.3 include, or where applicable require such State or regional Governmental Entity to include, in the contract with the sublicensee its covenant to employ sound business practices no less diligent than those used for its own confidential information, and no less diligent than required by commercially reasonable standards of confidentiality, to protect all Proprietary Intellectual Property of Design-Builder and other materials provided under the sublicense against disclosure to third parties not in receipt of a sublicense, and to use the sublicense only for the permitted purposes.

20.4.7 Notwithstanding any contrary provision of the Design-Build Documents, in no event shall GDOT, or any of its Constituents, be liable to Design-Builder, any Affiliate of Design-Builder, or any Contractor for any damages, including loss of profit, arising out of breach of the duty of confidentiality set forth in DBA Section 20.4.6 (*Intellectual Property*) if such breach is not the result of gross negligence or intentional misconduct or is required under the provisions of the Open Government Records Law or a court order or other legal requirement. Design-Builder hereby irrevocably waives all claims to any such damages.

20.4.8 Design-Builder shall continue to have a full and complete right to use any and all duplicates or other originals of its Proprietary Intellectual Property in any manner it chooses.

20.4.9 With respect to any Proprietary Intellectual Property owned by a Person other than Design-Builder, including any Affiliate, and other than GDOT or a Governmental Entity acting as a Contractor, Design-Builder shall obtain from such owner, concurrently with execution of any contract, subcontract or purchase order with such owner or with the first use or adaptation of the Proprietary Intellectual Property in connection with the Project, for Design-Builder, GDOT, a nonexclusive, transferable, irrevocable, fully paid up licenses to use, reproduce, modify, adapt and disclose such Proprietary Intellectual Property solely in connection with the Project and any Highway or other road owned and operated by GDOT or a State or regional Governmental Entity, of at least identical scope, purpose, duration and applicability as the license granted under DBA Section 22.4.2 (*Independent Contractor*). The limitations on sale, transfer, sublicensing and disclosure by GDOT set forth in DBA Sections 20.4.3 (*Intellectual Property*) through 20.4.6 (*Intellectual Property*) shall also apply to GDOT's license in such Proprietary Intellectual Property.

20.5 Intellectual Property

20.5.1 Owner Intellectual Property. Except for Proprietary Intellectual Property, all Intellectual Property ("Owner Intellectual Property") have been specially ordered and commissioned by GDOT and shall be considered "works made for hire" as such term is defined in Section 101 of Title 17 of the U.S. Code, and accordingly for which GDOT owns the copyright.

20.5.2 Obligation to Assign to GDOT. If any such work product and related materials, is/are determined by a court of competent jurisdiction, the U.S. Copyright Office, or the U.S. Patent & Trademark Office not to be a work-made-for-hire or where GDOT is not the owner or author, Design-Builder agrees to assign to GDOT, or cause all Contractors to assign to GDOT, if applicable, all rights, title and interest in all Intellectual Property, excluding Proprietary Intellectual Property, in such work product and related materials.

20.5.3 Creation. Design Documents shall become Owner Intellectual Property upon preparation. Construction Documents shall become Owner Intellectual Property upon delivery to GDOT. All other Submittals and other documents prepared or obtained by Design-Builder or any Design-Builder-Related Entity in connection with the performance of Design-Builder's obligations under the Design-Build Documents shall become Owner Intellectual Property upon any such Design-Builder's or Design-Builder-Related Entity's preparation or receipt thereof.

20.5.4 Restricted License; Restricted Use.

20.5.4.1 GDOT hereby grants to Design-Builder a revocable, non-exclusive, non-transferable, non-sub-licensable (without GDOT's prior written consent) license to use and implement, solely in connection with the performance of the Work and for the Term (including any period of Design-Builder's performance of post-termination or post-expiration obligations), the Owner Intellectual Property. If Design-Builder or any Design-Builder-Related Entity creates or develops any improvements, modifications, enhancements or derivative works to or of the Owner Intellectual Property, Design-Builder will promptly notify GDOT thereof and provide to GDOT all materials (including electronic materials), information and other work product (as listed in the definition of "Intellectual Property") that disclose such Owner Intellectual Property related to such improvements, modifications, enhancements, or derivative works. Any and all such improvements, modifications, enhancements, or derivative works created or developed by Design-Builder or any Design-Builder-Related Entity will be deemed to be Owner Intellectual Property under the terms of this Design-Build Agreement.

20.5.4.2 Design-Builder may not, and Design-Builder shall cause all Design-Builder-Related Entities not to, use any Owner Intellectual Property except in connection with the Work or otherwise as approved by GDOT in advance and in writing.

20.5.5 Restoration. Design-Builder shall be responsible for any loss of or damage to the Owner Intellectual Property and any of the work-made-for-hire described above while in the possession or control of Design-Builder or any Design-Builder-Related Entity. Any such loss or damage shall be restored at Design-Builder's expense.

20.5.6 Access. During the Term and the period of performance of any post-termination obligations, Design-Builder shall provide full and unrestricted access to all of the work-made-for-hire described above, within 24 hours of receipt of notice from or on behalf of GDOT seeking such access.

20.6 Escrowed Documents

20.6.1 Generally. Prior to execution of this Design-Build Agreement, Design-Builder has delivered to GDOT the Escrowed Documents. Concurrently with submission of quotations or revisions to quotations provided in connection with formally proposed amendments to this Design-Build Agreement and concurrently with approval of each Supplemental Agreement, if appropriate, one copy of all documentary information used in preparation of the quotation, amendment or Supplemental Agreements, as applicable, shall be added to the Detailed Cost and Pricing Data within the Escrowed Documents. The Escrowed Documents will be held at the Escrow Agent's escrow location within the State until all of the following have occurred: (a) 180 days have elapsed from Final Acceptance or termination of the Work, as applicable; (b) all Disputes regarding the Design-Build Documents have been settled; and (c) the later of (i) the Final Acceptance Date and (ii) issuance by GDOT of the Final Payment.

20.6.2 Availability for Review. Upon at least two days' Notice, Design-Builder and GDOT may jointly examine, through one or more designees, all or any part of the Detailed Cost and Pricing Data during regular business hours of the Escrow Agent. The Party undertaking an examination need not have or state a specific reason to examine such material. GDOT shall be entitled to review all or any part of the Detailed Cost and Pricing Data in order to satisfy itself regarding the applicability of the individual documents to the matter at issue. GDOT shall be entitled to make and retain copies of such documents as it deems appropriate in connection with any such matters, in each case, without limiting GDOT's obligations under DBA Section 20.3 (*Open Records Act and Freedom of Information Act*); provided, however, that copies of such documents will not be distributed to any third parties other than the attorneys and experts of GDOT and any mediator or court considering a Dispute, and that all copies of such documents (other than those delivered to Dispute resolvers) will be either destroyed or returned to the depository (or to Design-Builder if the Detailed Cost and Pricing Data have been returned to it) upon final resolution of the negotiations or Disputes.

20.6.3 Proprietary Information. The Detailed Cost and Pricing Data are, and shall always remain, the property of Design-Builder and shall be considered to be in Design-Builder's possession, subject to the right of GDOT and use the Detailed Cost and Pricing Data as provided in this DBA Section 20.6 (*Escrowed Documents*).

20.6.4 Representations. Design-Builder represents and warrants that (i) the Detailed Cost and Pricing Data were or will be personally examined by Design-Builder's Authorized Representative to ensure compliance with DBA Section 20.6.5 (*Contents of Detailed Cost and Pricing Data*) and DBA Section 20.6.6 (*Form of Detailed Cost and Pricing Data*) prior to delivery into the Escrowed Documents; (ii) the Detailed Cost and Pricing Data constitute all of the information used in the preparation of the Proposal and pricing related to Supplemental Agreements and agrees that no other Proposal and Supplemental Agreement

preparation information will be considered in resolving Disputes; (iii) the Detailed Cost and Pricing Data provided in connection with quotations and Supplemental Agreements will be personally examined by Design-Builder's Authorized Representative to ensure compliance with DBA Section 20.6.5 (*Contents of Detailed Cost and Pricing Data*) and Section 20.6.6 (*Form of Detailed Cost and Pricing Data*) prior to delivery into the Escrowed Documents; (iv) the information contained in the Detailed Cost and Pricing Data is not part of the Design-Build Documents and that nothing in the Detailed Cost and Pricing Data shall change or modify the Design-Build Documents.

20.6.5 Contents of Detailed Cost and Pricing Data.

20.6.5.1 The Detailed Cost and Pricing Data shall clearly detail how the cost and pricing components of the Proposal were determined and shall be in sufficient detail as is adequate to enable a complete understanding and interpretation of how Design-Builder arrived at the bid Contract Sum.

20.6.5.2 The Detailed Cost and Pricing Data provided in connection with quotations and Supplemental Agreements shall clearly detail how the total price and individual components of that price were determined.

20.6.5.3 The Detailed Cost and Pricing Data in each case shall detail, in each case, in Design-Builder's usual format, but subject to DBA Section 20.6.6 (*Form of Detailed Cost and Pricing Data*):

(a) crews, equipment, materials, quantities, and rates of production;

(b) estimates of costs (further divided into Design-Builder's usual cost categories such as direct labor, repair labor, equipment ownership, rental and operation, expendable materials, permanent materials), and Contract and subcontract costs as appropriate;

(c) plant and equipment and indirect costs;

(d) Design-Builder's allocation of plant and equipment, indirect costs, risk contingencies, markup, and other items to each direct cost item, in each case, clearly identified; and

(e) itemized estimated costs of the P&P Bonds and the insurance premiums for each coverage required to be provided by Design-Builder hereunder.

20.6.5.4 The Detailed Cost and Pricing Data shall include electronic media data files associated with all assumptions, detailed quantity takeoffs, rates of production and progress calculations, quotes from Contractors, Subcontractors, and Suppliers, quotes for insurance and bond premiums, memoranda, narratives, and all other information used by Design-Builder to arrive at the bid Contract Sum or price for any Supplemental Agreement.

20.6.6 Form of Detailed Cost and Pricing Data.

20.6.6.1 Design-Builder shall submit the initial Detailed Cost and Pricing Data in such format as is used by Design-Builder in connection with its Proposal and the Contract Sum. Thereafter, the Detailed Cost and Pricing Data shall submitted substantially in such format, and failing that, in the format used to determine pricing for any Supplemental Agreement.

20.6.7 Review by GDOT; Supplementary Information.

20.6.7.1 Design-Builder shall have no right to add documents to the Detailed Cost and Pricing Data except upon GDOT's request.

20.6.7.2 GDOT may, at any time, conduct a review of the Detailed Cost and Pricing Data to determine whether they are complete. If GDOT determines that any data is missing, Design-Builder shall provide such data within five days after the request, and at that time it will be date stamped, labeled to identify it as supplementary Escrowed Documents information, and added to the Detailed Cost and Pricing Data.

20.6.7.3 At GDOT's option, which may be exercised at any time, the Detailed Cost and Pricing Data associated with any Supplemental Agreement amendment shall be reviewed, organized, and indexed, to be jointly undertaken with Design-Builder. GDOT's review shall assess the completeness and accuracy of the Detailed Cost and Pricing Data, and GDOT and Design-Builder shall jointly develop and countersign a detailed index and catalogue of the contents of the Detailed Cost and Pricing Data. If, following the review and organization, GDOT determines that the Detailed Cost and Pricing Data are incomplete, GDOT may require Design-Builder to supply data to make the Detailed Cost and Pricing Data complete.

20.6.7.4 Design-Builder shall require each Contractor and Subcontractor to submit to Design-Builder a copy of all documentary information used in determining its respective Contract price (or the price for respective Contract Work included in any Supplemental Agreement), immediately prior to executing the Contract and each change order (or equivalent) or amendment thereto, to be held in the same manner as the Detailed Cost and Pricing Data and that shall be accessible by GDOT, and Design-Builder, and each of their respective designees, on terms substantially similar to those contained herein. Each such Contract shall include a representation and warranty from the Contractor or Subcontractor, for the benefit of Design-Builder and GDOT, stating that its Detailed Cost and Pricing Data constitute all the documentary information used in establishing its Contract price, and agreeing to provide a sworn certification in favor of Design-Builder and GDOT together with each supplemental set of Detailed Cost and Pricing Data, stating that the information contained therein is complete, accurate, and current.

20.6.8 Intellectual Property Escrow.

20.6.8.1 Design-Builder acknowledges and agrees that GDOT shall be entitled to access such software, Source Code and Source Code Documentation, and Proprietary Intellectual Property further to this DBA Section 20.6 (*Escrowed Documents*):

(a) in the case of such Proprietary Intellectual Property owned by Design-Builder, when (i) this Design-Build Agreement is terminated for any reason (excluding for GDOT Default), (ii) a business failure (including voluntary or involuntary bankruptcy, and insolvency) of Design-Builder occurs, (iii) Design-Builder is dissolved or liquidated, or (iv) Design-Builder fails or ceases to provide services as necessary to permit continued use of such Proprietary Intellectual Property under the applicable license or relevant sublicense; or

(b) in the case of such Proprietary Intellectual Property owned by a Contractor or Subcontractor, when this Design-Build Agreement is terminated for any reason (excluding for GDOT Default) and either (a) a business failure (including voluntary or involuntary bankruptcy, and insolvency) of the Contractor or Subcontractor occurs or (b) the Contractor or Subcontractor is dissolved or liquidated or otherwise ceases to engage in the ordinary course of the business of manufacturing, supplying,

maintaining and servicing the software, product, part or other item containing such Proprietary Intellectual Property that is the subject of a license under DBA Section 20.4.2 (*Proprietary Intellectual Property*).

20.6.8.2 Instead of delivering such software, Source Code and Source Code Documentation, and Proprietary Intellectual Property directly to GDOT, Design-Builder may elect to deposit it into the Escrowed Documents, and GDOT shall have such rights of access thereto as are set forth in this DBA Section 20.6 (*Escrowed Documents*).

20.6.9 GDOT's rights with respect to the Escrowed Documents shall survive expiration or earlier termination of this Design-Build Agreement regardless of the reason, until both Parties mutually agree, in their respective discretion, that the Escrowed Documents, including the software, Source Code and Source Code Documentation and Property Intellectual Property is of no further use or benefit to the Project.

20.7 Subcontractor Pricing Documents.

Design-Builder shall require each Contractor and Subcontractor to submit to Design-Builder a copy of all documentary information used in determining its respective Contract price (or the price for respective Contract Work included in any Supplemental Agreement), immediately prior to executing the Contract and each change order (or equivalent) or amendment thereto, to be held in the same manner as the Detailed Cost and Pricing Data and that shall be accessible by GDOT, Design-Builder and either of their respective designees, on terms substantially similar to those contained herein. Each such Contract shall include a representation and warranty from the Contractor Subcontractor, for the benefit of Design-Builder and GDOT, stating that its Detailed Cost and Pricing Data constitute all the documentary information used in establishing its Contract price, and agreeing to provide a sworn certification in favor of Design-Builder and GDOT together with each supplemental set of Detailed Cost and Pricing Data, stating that the information contained therein is complete, accurate, and current.

Article 21 FEDERAL REQUIREMENTS

21.1 Compliance with Federal Requirements

21.1.1 Design-Builder shall comply and require its Contractors to comply with all federal requirements applicable to transportation projects that receive federal credit or funds, including those set forth in DBA Exhibit 8 (*Other Legal Requirements*), as and to the extent the Laws referenced therein are and remain effective. In the event of any conflict between any applicable Federal Requirements and the other requirements of the Design-Build Documents, the Federal Requirements (as and to the extent the Laws referenced therein are and remain effective) shall prevail to the extent of any such conflict.

21.1.2 The Parties understand and agree that, because the Project is subject to the Federal Requirements, and because, as between GDOT and Design-Builder, GDOT will be responsible to operate and maintain the Project after Final Acceptance using federal aid funds, the Project must remain eligible for federal funding participation. Further, Design-Builder shall not, and shall not permit any other Design-Builder-Related Entity to, take any actions or failures to act in the course of performance of the Work that would have the effect of removing the Project from the federal aid system or making the Project ineligible for the future use of federal funds. Should GDOT receive Notice that the Project will lose its eligibility for federal funding and that GDOT will be required to reimburse FHWA as a result of the acts or omissions of Design-Builder or any Design-Builder-Related Entity, GDOT will provide Notice to Design-Builder and will reasonably attempt to solicit input from Design-Builder in connection with GDOT's discussions with FHWA; provided, however, that if any such acts or omissions are not in accordance with the Design-Build Documents, then any adjustments, costs, re-Work, or other remedy to recover or preserve eligibility for federal funding shall be, and be deemed to be, within the Contract Sum and not itself a basis for any Compensation Event or Relief Event.

21.2 Role of and Cooperation with FHWA

Design-Builder acknowledges and agrees that FHWA will have certain approval rights with respect to the Project, including the right to provide certain oversight and technical services with respect to the Work. Design-Builder shall cooperate with FHWA in the reasonable exercise of FHWA's duties and responsibilities in connection with the Project and shall provide such assistance and information as may be required by GDOT to comply with FHWA reporting requirements.

21.3 Special Provision Regarding Waiver of Buy America Requirements

21.3.1 At Design-Builder's request, GDOT may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist pursuant to 23 C.F.R. § 635.410(c), as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021) and 2 C.F.R. § 184.7. A request for a waiver shall be treated as a Change Request under DBA Section 14.2 (*Design-Builder Changes*).

21.3.2 If the foregoing waiver of requirements sought via submission of a timely Change Request pursuant to DBA Section 14.2 (*Design-Builder Changes*) is not available or not pursued by GDOT, then Design-Builder shall comply with, and cause all Subcontractors of any tier to comply with, the applicable Buy America requirements within the foregoing statutes and regulations and submit, and cause to be submitted, promptly following Notice from GDOT to Design-Builder of such unavailability or intent not to pursue such waiver, a Certificate of Compliance in form and substance under Attachment 9 to DBA Exhibit 8 (*Other Legal Requirements*).

Article 22 MISCELLANEOUS

22.1 Taxes

22.1.1 Design-Builder shall pay, prior to delinquency, all applicable Taxes. Design-Builder shall have no right to a Compensation Event or any other claim under the Design-Build Documents, at law, or in equity, due to (a) its misinterpretation of Laws respecting Taxes, (b) incorrect assumptions regarding applicability of Taxes, (c) any representation, agreement, allocation, or statement of or by GDOT in the Design-Build Documents with respect to or relating to Taxes, or (d) any change in State or a local government (or political subdivision of either) sales Taxes that might otherwise qualify as a Change in Law.

22.2 Amendments

The Design-Build Documents may be amended only by a written instrument duly executed by both Parties or their respective successors or assigns, except to the extent expressly provided otherwise in this Design-Build Agreement.

22.3 Waiver

22.3.1 No waiver of any term, covenant, or condition of this Design-Build Agreement or the other Design-Build Documents shall be valid unless in writing and signed by the obligee Party. No right conferred on either Party under the Design-Build Documents shall be deemed waived, and no breach of the Design-Build Documents excused, unless such waiver is in writing and signed by the Party claimed to have waived such right.

22.3.2 The exercise by a Party of any right or remedy provided under this Design-Build Agreement or the other Design-Build Documents shall not waive or preclude exercise of any other right or remedy. No waiver by any Party of any right or remedy under this Design-Build Agreement or the other Design-Build Documents shall be deemed to be a waiver of any other or subsequent right or remedy under this Design-Build Agreement or the other Design-Build Documents. The consent by one Party to any act by the other Party requiring such consent shall not be deemed to render unnecessary the obtaining of consent to any subsequent act for which consent is required, regardless of whether similar to the act for which consent is given.

22.3.3 Except as provided otherwise in the Design-Build Documents, no act, delay, or omission done, suffered or permitted by one Party or its agents shall be deemed to waive, exhaust, or impair any right, remedy, or power of such Party hereunder, or to relieve the other Party from the full performance of its obligations under this Design-Build Agreement or the other Design-Build Documents.

22.3.4 Either Party's waiver of any breach or failure to enforce any of the terms, covenants, conditions, or other provisions of the Design-Build Documents at any time shall not in any way limit or waive that Party's right thereafter to enforce or compel strict compliance with every term, covenant, condition, or other provision, any course of dealing or custom of the trade notwithstanding. Furthermore, excluding Interpretive Engineering Decisions, if the Parties make and implement any interpretation of the Design-Build Documents without documenting such interpretation by an instrument in writing signed by both Parties, such interpretation and implementation thereof will not be binding in the event of any future Disputes.

22.3.5 Subject to DBA Section 13.4.1.9 (*Determining Compensation Amounts*), the acceptance of any payment or reimbursement by a Party shall not waive any preceding or then-existing breach or default by the other Party of any term, covenant, or condition of this Design-Build Agreement or the other Design-

Build Documents, other than the other Party's prior failure to pay the particular amount or part thereof so accepted, regardless of the paid party's knowledge of such preceding or then-existing breach or default at the time of acceptance of such payment or reimbursement. Nor shall such acceptance continue, extend or affect: (a) the service of any notice, any Dispute Resolution Procedures or final judgment; (b) any time within which the other Party is required to perform any obligation; or (c) any other notice or demand.

22.4 Independent Contractor

22.4.1 Design-Builder is an independent contractor, and nothing contained in the Design-Build Documents shall be construed as constituting any relationship with GDOT other than that of Project designer, contractor and independent contractor under this Design-Build Agreement.

22.4.2 Both Parties, in the performance of the Design-Build Documents, shall act in an individual capacity and not as agents, employees, partners, joint venturers, or associates of one another. Nothing in the Design-Build Documents is intended or shall be construed to create any partnership, joint venture or similar relationship between GDOT and Design-Builder; and in no event shall either Party take a position in any tax return or other writing of any kind that a partnership, joint venture, or similar relationship exists. The Parties do not thereby express any intention to form or hold themselves out as a *de jure* or *de facto* partnership, joint venture, or similar relationship, to share net profits or net losses, or to give GDOT control or joint control over Design-Builder's financial decisions or discretionary actions concerning the Project and Work.

22.4.3 In no event shall the relationship between GDOT and Design-Builder be construed as creating any relationship whatsoever between GDOT and Design-Builder's employees or agents. Neither Design-Builder nor any of its employees or agents is or shall be deemed to be an employee or agent of GDOT. Except as otherwise specified in the Design-Build Documents, Design-Builder has sole authority and responsibility to employ, discharge, and otherwise control its employees and has complete and sole responsibility as a principal for its agents, for all Contractors and for all other Persons that Design-Builder or any Contractor hires to perform or assist in performing the Work.

22.5 Successors and Assigns

The Design-Build Documents shall be binding upon and inure to the benefit of GDOT and Design-Builder and their permitted successors, assigns and legal representatives.

22.6 Designation of Representatives; Cooperation with Representatives

22.6.1 GDOT and Design-Builder shall each designate an individual or individuals who shall be authorized to make decisions and bind the Parties on matters relating to the Design-Build Documents ("Authorized Representative"). DBA Exhibit 11 (*Initial Designation of Authorized Representatives*) provides the initial Authorized Representative designations for the Parties and GDOT's designated individual(s). A Party may change such designations by a subsequent writing delivered to the other Party in accordance with DBA Section 22.11 (*Notices and other Formal Communications*). For purposes of this Design-Build Agreement, except where expressly stated to the contrary, all communications and deliveries, including Submittals, shall be through the respective Authorized Representative for each Party.

22.6.2 Design-Builder shall cooperate with GDOT and all representatives of GDOT, each as designated and as described above.

22.7 Survival

Design-Builder's representations, covenants, warranties (including Design-Builder's Warranties and Warranty-related obligations), the Dispute resolution provisions contained in DBA Section 17.8 (*Dispute Resolution Procedures*), GDOT's rights and Design-Builder's obligations with respect to Escrowed Documents under DBA Section 20.6 (*Escrowed Documents*), the indemnifications, any Design-Builder or Design-Builder-Related Entity's releases, the express obligations of the Parties following termination, Design-Builder's obligations to pay GDOT amounts owed hereunder, and all other provisions that by their inherent character should survive expiration or earlier termination of this Design-Build Agreement and/or completion of the Work shall survive the expiration or earlier termination of this Design-Build Agreement and/or the completion of the Work. The provisions of DBA Section 17.8 (*Dispute Resolution Procedures*) shall continue to apply after expiration or earlier termination of this Design-Build Agreement to all Disputes between the Parties as well as to any basis for relief asserted under any Compensation Event Notice or Relief Event Notice arising out of the Design-Build Documents.

22.8 Limitation on Third Party Beneficiaries

22.8.1 It is not intended by any of the provisions of the Design-Build Documents to create any third party beneficiary hereunder or to authorize anyone not a Party hereto to maintain a suit for personal injury or property damage pursuant to the terms or provisions hereof, except as provided in DBA Section 22.9.2 (*No Personal Liability of GDOT Employees; No Tort Liability*) and other specific provisions (such as the warranty and indemnity provisions) that identify third parties and state that they are entitled to benefits hereunder. Except as otherwise provided in this DBA Section 22.8 (*Limitation on Third Party Beneficiaries*), the duties, obligations, and responsibilities of the Parties to the Design-Build Documents with respect to third parties shall remain as imposed by Law. The Design-Build Documents shall not be construed to create a contractual relationship of any kind between GDOT and a Contractor or any Person other than Design-Builder.

22.8.2 GDOT shall be a third party beneficiary, and entitled to the benefits, with respect to the rights under the Design-Build Documents related to the following:

22.8.2.1 oversight, review, inspection, testing, monitoring, approval, and enforcement of Design-Builder's obligations to perform the design and construction of the Project in accordance with the Design-Build Documents and applicable Law;

22.8.2.2 review, audit, inspection and copying of data, information, documents, Books and Records of Design-Builder and any Design-Builder-Related Entity;

22.8.2.3 step-in rights upon the occurrence of a Design-Builder Default; and

22.8.2.4 exercise of any statutory rights or obligations or other rights or obligations by intergovernmental agreement, in each case acting in its capacity as a body corporate and politic and an instrumentality and public corporation of the State of Georgia under O.C.G.A. § 32-2-2, including specifically those delegated by or owed to FHWA.

22.9 No Personal Liability of GDOT's Constituents; No Tort Liability

22.9.1 GDOT's Constituents are acting solely as agents and representatives of such respective entities, as applicable, when carrying out the provisions of or exercising the power or authority granted to them under the Design-Build Documents. They shall not be liable to Design-Builder or any Design-

Builder-Related Entity either personally or as officers, employees, advisors, consultants, or representatives of GDOT for actions in their ordinary course of employment or engagement.

22.9.2 The Parties agree to provide each other with Notice of any claim that such Party may receive from any third party relating in any way to the matters addressed in this Design-Build Agreement, and shall otherwise provide notice in such form and within such period as is required by Law.

22.10 Governing Law

The Design-Build Documents shall be governed by and construed in accordance with the laws of the State of Georgia.

22.11 Notices and other Formal Communications

22.11.1 Formal Communications under the Design-Build Documents shall be in writing and: (a) delivered personally; (b) sent by certified mail, return receipt requested; (c) sent by a recognized overnight mail or courier service, with delivery receipt requested; or (d) sent by email communication, followed by a hard copy and with receipt confirmed by return email, to the following addresses (or to such other address as may from time to time be specified in writing by such Person):

22.11.1.1 all Formal Communications to Design-Builder shall be delivered to the following addresses or as otherwise directed by Design-Builder's Authorized Representative:

[_____]
Attention: [_____]
[_____]
[_____]
Telephone: [_____]
Email: [_____]

with a copy to:

[_____]
Attention: [_____]
[_____]
[_____]
Telephone: [_____]
Email: [_____]

22.11.1.2 all Formal Communications to GDOT shall be marked as regarding the "I-75 at Bethlehem Road Interchange Project" and shall be delivered to the following addresses or as otherwise directed by GDOT's Authorized Representative:

Georgia Department of Transportation
Office of the P3 Division
600 West Peachtree Street, NW
Atlanta, Georgia 30308

Attention: Blake Jennings
Telephone: (678) 630-1271
Email: bjennings@dot.ga.gov

In addition, copies of all Relief Event Notices and Compensation Event Notices shall also be delivered to the following person:

following person:

Georgia Department of Transportation
Office of P3 Division
600 West Peachtree Street, NW
Atlanta, Georgia 30308
Attention: Hiral Patel
Telephone: (404) 631-1519
Email: hpatel@dot.ga.gov

and

Georgia Department of Transportation
P3 Commercial Advisory Administrator
600 West Peachtree Street, NW, Suite 1900
Atlanta, Georgia 30308
Attention: Helen Pinkston-Pope
Telephone: (404) 631-1492
Email: hpinkstonpope@dot.ga.gov

In addition, copies of all Formal Communications (including Notices) regarding Disputes as well as default and termination Notices shall be delivered to the following persons:

Georgia Department of Transportation
P3 Commercial Advisory Administrator
600 West Peachtree Street, NW, Suite 1900
Atlanta, Georgia 30308
Attention: Helen Pinkston-Pope
Telephone: (404) 631-1492
Email: hpinkstonpope@dot.ga.gov

22.11.2 Formal Communications shall be deemed received when actually received in the office of the addressee (or by the addressee if personally delivered) or when delivery is refused, as shown on the receipt of the U.S. Postal Service, private courier, or other Person making the delivery. Notwithstanding the foregoing, all Formal Communications received after 5:00 p.m. shall be deemed received on the first Business Day following delivery. For avoidance of doubt, the date of delivery of a Formal Communication initially dispatched by electronic communication will be considered to be the date of the email notification during the regular business hours of 8:00 a.m. to 4:00 p.m. to the appropriate GDOT personnel. GDOT will not accept facsimile communication of Formal Communications.

22.11.3 Any technical or other communications pertaining to the Work, including specifically all Submittals, shall be handled as if "Submittals" for purposes of this DBA Section 22.11 (*Notices and other Formal Communications*) and conducted by Design-Builder's Authorized Representative and technical representatives designated by GDOT. All Submittals shall be submitted via the PMCS in accordance with TP Section 2.5 (Project Management Controls System) and TP Attachment 2-9 (Project Management Controls System Requirements), and the Submittal shall be deemed received on the date the PMCS date stamp for the relevant Submittal. Design-Builder shall include the submission and timing requirements for

all such technical or other communications pertaining to the Work (including specifically all Submittals) in performing its obligations under TP Section 2.9 (Submittals).

22.11.4 In addition to complying with the requirements set forth in this DBA Section 22.11 (*Notices and other Formal Communications*), Design-Builder shall submit a copy of all Formal Communications to the PMCS in accordance with TP Attachment 2-9 (Project Management Controls System Requirements); provided, however, that submission into the PMCS does not abrogate, nor shall it be used in determining, actual or deemed receipt under DBA Section 22.11.2 (*Notices and other Formal Communications*).

22.12 Integration of Design-Build Documents

GDOT and Design-Builder agree and expressly intend that, subject to DBA Section 22.13 (*Severability*), this Design-Build Agreement, and other Design-Build Documents constitute a single, non-severable, integrated agreement whose terms are interdependent and non-divisible.

22.13 Severability

22.13.1 If any clause, provision, section, or part of this Design-Build Agreement or the other Design-Build Documents is ruled invalid (including invalid due to Change in Law) by a court having proper jurisdiction, then the Parties shall: (a) promptly meet and negotiate a substitute for such clause, provision, section, or part, that shall, to the greatest extent legally permissible, effect the original intent of the Parties; and (b) if necessary or desirable, apply to the court or other decision maker (as applicable) that declared such invalidity for an interpretation of the invalidated portion to guide the negotiations. The invalidity or unenforceability of any such clause, provision, section or part shall not affect the validity or enforceability of the balance of the Design-Build Documents, which shall be construed and enforced as if the Design-Build Documents did not contain such invalid or unenforceable clause, provision, section or part.

22.13.2 If after the efforts required by DBA Section 22.13.1 (*Severability*), the Parties mutually agree that without the section or part of the Design-Build Documents that the court ruled to be invalid, there is no interpretation or reformation of the Design-Build Documents that can reasonably be adopted that will return the Parties to the benefits of their original bargain, the Parties can mutually agree to treat the court order as a Termination by Court Ruling pursuant to DBA Section 18.9 (*Termination by Court Ruling*).

22.14 Headings

The captions of the sections of this Design-Build Agreement and in the Design-Build Documents are for convenience only and shall not be deemed part of this Design-Build Agreement or the Design-Build Documents or considered in construing this Design-Build Agreement or the Design-Build Documents.

22.15 Construction and Interpretation of the Design-Build Documents

22.15.1 The language in all parts of the Design-Build Documents shall in all cases be construed simply, as a whole and in accordance with its fair meaning and not strictly for or against any Party. The Parties hereto acknowledge and agree that the Design-Build Documents are the product of an extensive and thorough, arm's length exchange of ideas, questions, answers, information, and drafts during the proposal preparation process, that each Party has been given the opportunity to independently review the Design-Build Documents with legal counsel, and that each Party has the requisite experience and sophistication to negotiate, understand, interpret, and agree to the particular language of the provisions of the Design-Build Documents. Accordingly, in the event of an ambiguity in or Dispute regarding the interpretation of the Design-Build Documents, the Design-Build Documents shall not be interpreted or construed against the Party preparing it, and instead other rules of interpretation and construction shall be utilized.

22.15.2 References in this instrument to this "Design-Build Agreement" mean, refer to and include this instrument as well as any riders, exhibits, addenda, and attachments hereto (which are hereby incorporated herein by reference) or other documents expressly incorporated by reference in this instrument, and all amendments hereto and thereto, except as expressly stated otherwise. Any references to any covenant, condition, obligation, and/or undertaking "herein," "hereunder" or "pursuant hereto" (or language of like import) mean, refer to and include the covenants, conditions, obligations, and undertakings existing pursuant to this instrument and any riders, exhibits, addenda, attachments, or other documents affixed to or expressly incorporated by reference in this instrument. All terms defined in this instrument shall be deemed to have the same meanings in all riders, exhibits, addenda, attachments, or other documents affixed to or expressly incorporated by reference in this instrument unless the context thereof clearly requires the contrary. Unless expressly provided otherwise, all references to exhibits, articles, and sections refer to same as set forth in this Design-Build Agreement. Where a specific section is referenced, such reference shall include all subsections thereunder. Unless otherwise stated in this Design-Build Agreement or the other Design-Build Documents, words that have well-known technical or construction industry meanings are used in this Design-Build Agreement or the other Design-Build Documents in accordance with such recognized meaning. All references to a subsection or clause "above" or "below" refer to the denoted subsection or clause within the section in which the reference appears. Wherever the word "including," "includes" or "include" is used in the Design-Build Documents, it shall be deemed to be followed by the words "without limitation". Wherever reference is made in the Design-Build Documents to a particular Person or Governmental Entity, it includes any successors or assigns, legal representatives, trustees, executors, and administrators (including any Person taking party by way of novation) or, with respect to Governmental Entities, any public agency succeeding to the powers and authority of such Governmental Entity. All references to time are to prevailing Eastern time. The meaning of "or" will be that of the inclusive "or," that is meaning one, some, or all of a number of possibilities. References to Laws include all consolidations, amendments, extension, or replacements, unless otherwise indicated. Reference to a right include any benefit, remedy, discretion, authority, or power associated with such right. References to any agreement, document, standards, principle, or other instrument includes a reference to the same as amended, supplemented, amended and restated, substituted, novated, or assigned, in each case, except where otherwise stated. "May," when used in the context of a power or right exercisable by GDOT (or its designee) means the power to exercise that right or power in its sole discretion, with no obligation to Design-Builder or any Design-Builder-Related Entity to do so. "May," when used in all other contexts, indicates permission by GDOT for Design-Builder to do (or refrain from doing) an action. The use of the word "remedy" or its variants means that the event to be remedied must be cured or its effects overcome. If the Design-Build Documents require calculation of any amount payable to a Party, there must be no double counting in such calculation, such that the receiving Party would receive more than owed or payable. As used in this Design-Build Agreement and the other Design-Build Documents and as the context may require, the singular includes the plural and vice versa, and the masculine gender includes the feminine and vice versa. All monetary amounts and obligations (including use of the symbol "$") set forth in the Design-Build Documents are expressed and payable in U.S. dollars. On plans, drawings, detail sheets, or other pictorial presentations, calculated dimensions take precedence over scaled dimensions.

22.15.3 Inconsistent or conflicting provisions of the Design-Build Documents shall not be treated as erroneous provisions under this DBA Section 22.15.3 (*Construction and Interpretation of the Design-Build Documents*), but instead shall be governed by DBA Section 1.2 (*Design-Build Documents; Order of Precedence*).

22.15.4 Design-Builder acknowledges that prior to the Effective Date it had the opportunity to identify any of the Technical Provisions that are erroneous or create a potentially unsafe condition, and the opportunity and duty to notify GDOT in writing of such fact and of the changes to the provision that Design-Builder believed were the minimum necessary to render it correct, safe and consistent with the Design-Build Documents, Good Industry Practice, and applicable Law.

22.15.5 Design-Builder shall not take advantage of, or benefit from, any apparent or actual Error in the Design-Build Documents. Should it appear that Work or any related matter is not sufficiently detailed or explained in the Design-Build Documents, Design-Builder shall request in writing such further explanations from GDOT as may be necessary and agrees to abide by the explanation provided, in each case, prior to undertaking any activity (or refraining from undertaking an activity) that would otherwise increase cost or delay the Work (or that increases the risk of either or both). Design-Builder shall promptly provide Notice to GDOT of all Errors that it may discover in the Design-Build Documents and shall obtain specific direction from GDOT in writing prior to proceeding with any Work affected thereby, it being understood that correction of Errors shall not in itself be the basis for any Relief Event or Compensation Event hereunder, or other claim at law or in equity.

22.15.6 If it is reasonable or necessary to adopt changes to the Technical Provisions after the Effective Date to make the provisions correct and safe, such changes shall not be grounds for a Relief Event, Compensation Event, or other claim at law or in equity, unless (a) Design-Builder neither knew nor had reason to know through exercise of reasonable care prior to the Effective Date that the provision was erroneous or created a potentially unsafe condition or (b) Design-Builder knew of and reported to GDOT the erroneous or potentially unsafe provision prior to the Effective Date and GDOT did not adopt reasonable and necessary changes. Except for a circumstance as set forth under (b) herein, if Design-Builder commences or continues any Design Work or Construction Work affected by such a change after the need for the change was discovered or suspected, or should have been discovered or suspected through the exercise of reasonable care, Design-Builder shall bear any additional costs and time associated with redoing the Work already performed.

22.15.7 The fact that the Design-Build Documents omit or misdescribe any detail of the Work that is otherwise necessary to carry out the intent of the Design-Build Documents (and delivery of the Project), or that are customarily performed, shall not relieve Design-Builder from the obligation to perform such omitted or misdescribed details attendant to the Work, and Design-Builder is obligated to perform such omitted or misdescribed Work as if fully and correctly set forth in the Design-Build Documents, it also being understood that such omissions, correction of misdescriptions, or performance of those aspects customarily performed in connection with the Work shall not in itself be the basis for any Relief Event or Compensation Event hereunder, other right to risk or cost sharing, if any, hereunder, or other claim at law or in equity.

22.16 Computation of Periods

If the date to perform any act or give any Formal Communication specified in the Design-Build Documents (including the last date for performance or provision of Notice "within" a specified time period) falls on a non-Business Day, such act or Formal Communication may be timely performed on the next succeeding day that is a Business Day; and (b) State of Georgia or federal public holidays are not "calendar days" (except in the case of assessment of Liquidated Damages, Nonrefundable Deductions, Lane Closure Deductions, or other accruing charges hereunder). Notwithstanding the foregoing, requirements contained in the Design-Build Documents relating to actions to be taken in the event of an emergency, Notices, Formal Communications, and other notifications regarding site conditions or Hazardous Materials, and other requirements for which it is clear that performance is intended to occur on a non-Business Day, shall be required to be performed as specified, even though the date in question may fall on a non-Business Day.

22.17 Usury Savings

The Design-Build Documents are subject to the express condition that at no time shall either Party be obligated or required to pay interest on any amount due the other Party at a rate that could subject the other Party to either civil or criminal liability as a result of being in excess of the maximum non-usurious

interest rate permitted by Georgia Law (the "maximum legal rate"), if any. If, by the terms of the Design-Build Documents either Party at any time is obligated to pay interest on any amount due in excess of the maximum legal rate, then such interest shall be deemed to be immediately reduced to the maximum legal rate and all previous payments in excess of the maximum legal rate shall be deemed to have been payments in reduction of the principal amount due and not on account of the interest due. All sums paid or agreed to be paid to a Party for the use, forbearance, or detention of the sums due that Party under the Design-Build Documents shall, to the extent permitted by applicable Georgia Law, be amortized, prorated, allocated, and spread throughout the full period over which the interest accrues until payment in full so that the rate or amount of interest on account of the amount due does not exceed the maximum legal rate in effect from time to time during such period. If after the foregoing adjustments a Party still holds interest payments in excess of the maximum legal rate, it shall promptly refund the excess to the other Party. Notwithstanding the foregoing, and except as otherwise expressly stated (and solely to the extent stated), to the maximum extent permitted under applicable Law, GDOT shall not owe, nor be deemed to owe, interest on any amount due Design-Builder hereunder.

22.18 Further Assurances

Design-Builder shall promptly execute and deliver to GDOT all such instruments and other documents and assurances as are reasonably requested by GDOT to further evidence the obligations of Design-Builder hereunder, including assurances regarding the validity of any instruments securing performance hereof.

22.19 Entire Agreement

This Design-Build Agreement and the other Design-Build Documents contain the entire understanding of the Parties with respect to the subject matter thereof and supersede all prior agreements, understandings, statements, representations and negotiations between the Parties with respect to their subject matter.

22.20 GDOT to Bind Design-Builder

The signatory for Design-Builder represents that s/he has been duly authorized to execute this Design-Build Agreement on behalf of Design-Builder and has obtained all necessary or applicable approvals to make this Design-Build Agreement, and the remainder of the Design-Build Documents, binding upon Design-Builder when her/his signature is affixed and accepted by GDOT.

22.21 Counterparts

This instrument may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The delivery of an executed counterpart of this instrument by electronic (email) delivery in portable document format ("*.pdf") or by a certified electronic signature program (e.g., DocuSign) will be deemed to be valid delivery thereof.

[Signature Page Immediately Follows]

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have set their hands and affixed their seals, and have executed this Design-Build Agreement, including the requirements of the Design-Build Documents, as of the date first above written.

[_____]	**GEORGIA DEPARTMENT OF TRANSPORTATION**
By:_____**(SEAL)**	By:_____**(SEAL)**
Name:_____	Name:_____
Title:_____	Title:_____
Attested by:	**Attested by:**
By:_____	By:_____
Name:_____	Name:_____
Title:_____	Title:_____

Exhibit 1

ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

(*attached*)

Unless otherwise specified, wherever the following abbreviations or terms are used in the Design-Build Agreement and the Technical Provisions, they have the meanings set forth below:

2D	two-dimensional
3D	three-dimensional
AAP	AASHTO: Accreditation Program
AASHTO	American Association of State Highway and Transportation Officials
AC	alternating current
ADA	Americans with Disabilities Act
ANSI	American National Standards Institute
APE	Area of Potential Effects
ASTM	American Society of Testing and Materials
ATC	Alternative Technical Concept
BECR	Baseline Element Condition Report
BFI	Bridge Foundation Investigation
BMP	Best Management Practice
C.F.R. (or CFR)	(United States) Code of Federal Regulations
CADD	Computer-aided design and drafting
CAP	Compliance Action Plan or, in the context of NCEs, Corrective Action Plan
CAPWAP	Case Pile Wave Analysis Program
CAR	Corrective Action Request
CCIP	Contractor-controlled insurance program
CCTV	Closed Circuit Television
CERCLA	The Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601-9675)
CFRP	Carbon Fiber Reinforced Polymer
CLOMR	Conditional Letter of Map Revision
CMS	Changeable Message Sign
CODP	Control of Odors and Dust Plan
CPI	Consumer Price Index
CPM	Critical Path Method or Lead Contractor Project Manager, as context may require
CPPI	Contractor's Protective Professional Indemnity
CRAOE	Cultural Resources Assessment of Effects
CSJ	Control Section Job
CUF	Commercially Useful Function
CWA	Clean Water Act
D&C	Design and Construction
DB	Design-Build
DBA	Design-Build Agreement or Davis-Bacon Act, as context may require (see, e.g., FHWA Form 1273)

DB-PS	Design-Builder-Provided Specifications
DD	Design Deviation
DE	Design Exception
DMS	Dynamic Message Signs
DNR	Georgia Department of Natural Resources
DPM	Lead Design Consultant Project Manager
DB-PS	Design-Builder-Provided Specifications
DV	Design Variance
EA	Environmental Assessment
EAOER	Ecological Assessment of Effects Report
ECB	Electrical Communication Boxes
ECMP	Environmental Compliance and Mitigation Plan
ECT	Environmental Commitments Table
EJ	Environmental Justice
EOR	Engineer(s) of Record
EPD	Georgia Department of Natural Resources, Environmental Protection Division
EPS	Expanded polystyrene
EPTP	Environmental Protection Training Plan
ERIT	Environmental Resources Impacts Table
ESA	Endangered Species Act of 1973, 16 U.S.C. §§ 1531 *et seq.*, as amended from time to time; Environmental Site Assessment; Environmentally Sensitive Area, in each case as context may require
ESB	Environmental Survey Boundary
ESPCP	Erosion, Sedimentation, and Pollution Control Plan
ESS	Environmental Sensor Stations
ETC	estimate to complete
EUC	Emergency Utility Coordinator
EURP	Emergency Utility Response Plan
FAA	Federal Aviation Administration
FAQ	Frequently Asked Questions
FDC	Field Design Changes
FDU	Fiber Distribution Unit
FEMA	Federal Emergency Management Agency
FHWA	U.S. Federal Highway Administration
FIB	Florida-I Beam
FIS	Flood Insurance Studies
FMV	Full market value
FONSI	Finding of No Significant Impact
FS	Federal Standard
FWCA	Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661 *et seq.*, as amended from time to time
GaEPD	Georgia Environmental Protection Division

GDOT	Georgia Department of Transportation
GDOT BDM	GDOT Bridge and Structures Design Manual
GDOT UAM	GDOT Utility Accommodation Manual
GEOS	GaEPD Online System
GEPA	Georgia Environmental Policy Act, as amended from time to time
GIS	Geographical Information System
GP	General Purpose
GPAS	Georgia Permit Application System
GUFPA	Georgia Utility Facility Protection Act
HEC	Hydraulic Engineering Circular
HERO	Highway Emergency Response Operator
HMMP	Hazardous Materials Management Plan
HMOSHP	Hazardous Materials Operations, Safety and Health Plan
HVAC	heating, ventilating, and air conditioning
HWd	headwater depth
ID	Identification
IP	Internet Protocol
ISO	International Organization for Standardization
ITP	Instruction to Proposers
ITS	Intelligent Transportation System
IVDS	Video Detection System
LCS	Lane Control System
LED	light-emitting diode
LEP	limited English proficient
LOMR	Letter of Map Revision
LOS	Level of Service
LRFD	Load and Resistance Design Factor
MARTA	Metropolitan Atlanta Rapid Transit Authority
MASH	Manual for Assessing Safety Hardware
MMIP	Major Mobility Investment Program
MMP	Maintenance Management Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPH	Miles Per Hour
MS4	Municipal Separate Storm Sewer System
MSE	Mechanically Stabilized Earth
MTS	manual transfer switch
MUTCD	Manual of Traffic Control Devices
MVDS	Microwave Video Detection System
NAD	North American Datum

NAICS	North American Industry Classification System
NAVD	North American Vertical Datum
NBIS	National Bridge Inspection Standards
NCHRP	National Cooperative Highway Research Program
NCR	Nonconformance Report
NDC	Notice of Design Changes
NEC	National Electrical Code
NEPA	National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.*, as amended from time to time
NFIP	National Flood Insurance Program
NIA	Noise Impact Assessment
NOI	Notice of Intent
NOT	Notices of Termination
NPDES	National Pollutant Discharge Elimination System
NRD	Nonrefundable Deduction
NRHP	National Register of Historic Places
NTCIP	National Transportation Communications for ITS Protocol
NTP	Notice to Proceed
O.C.G.A.	Official Code of Georgia Annotated
OE/AAA	FAA Obstruction Evaluation / Airport Airspace Analysis
OHWM	ordinary high-water mark
OJT	On-the-job training
OSHA	Occupational Safety and Health Administration
OTS	Over-the-Shoulder
P.I.	Project Identification
PACES	Pavement Condition Evaluation System
PAR	Corrective/Preventative Action Report
PC	points of curvature
PCC	points of compound curvature
PCMS	Portable Changeable Message Sign
PCSR	Post-Construction Stormwater Report
PDA	pile driving analyzer
PDF	Portable document format
PDM	Precedence Diagram Method
PDOH	Public Detour Open House
PI	Public information or points of intersection
PIR	public information requests
PLS (or **RPLS**)	Registered Professional Land Surveyor
PM	Project Manager
PMCS	Project Management Control System
PML	Probable maximum loss
PMP	Project Management Plan
PPE	personal protective equipment

PPG	GDOT's Plan Presentation Guide
PRC	points of reverse curvature
PS	Project Standard
PSC	Prestressed Concrete
PT	points of tangency
QPL	Qualified Products List
RCDG	Reinforced Concrete Deck Girder
RCRA	Resource Conversation and Recovery Act (42 U.S.C. §§ 6901 *et seq.*), as amended
REC	Recognized Environmental Condition
RFC	Released for Construction
RFP	Request for Proposals
RFQ	Request for Qualifications
RIDs	Reference Information Documents
ROE	right of entry
ROW	Right of Way
ROW AM	Right of Way Acquisition Manager
RPM	raised pavement markings
RTF	Related Transportation Facilities
SAAG	Special Assistant to the Attorney General
SDS	Safety Data Sheets
SHPO	State Historic Preservation Officer
SIR	Self-insured retention
SOP	Standard Operating Procedure
SOQ	Statement of Qualifications
SOV	Schedule of Values or Single Occupancy Vehicle, as context may require.
SR	State Route
SSPC	Society for Protective Coatings
STI	Sampling, Testing, & Inspection
SUE	Subsurface Utility Engineering
SWPPP	Storm Water Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
TCM	Traffic Control Manager
TIM	Traffic Incident Management
TIR	Traffic Interruption Request
TMC	Traffic Management Center
TMC SI	Traffic Management Center System Integrator
TMP	Transportation Management Plan
TNM	Traffic Noise Model
TP	Technical Provision(s)
TRIP	Towing Recovery and Incentive Program
TSM	Transportation Systems Management
TSS	total suspended solids
TTCP	Temporary Traffic Control Plan

U.S. DOT	United States Department of Transportation
UAM	Means the GDOT UAM
UAP	Utility Adjustment Plan
UAPP	Utility Adjustment Preliminary Plans
UAS	Unmanned Aircraft System
UCC	Uniform Commercial Code
UCS	User Classification Subsystem
UDC	Utility Design Coordinator
UIA	Utility Impact Analysis
UM	Utility Manager
UMP	Utility Management Plan
UPC	Utilities Protection Center
UPS	uninterruptable power supply
US	United States Highway
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VECP	Value Engineering Change Proposal
VSLS	variable speed limit sign
WBS	Work Breakdown Structure
WECS	Worksite Erosion Control Supervisor
WFI	Wall Foundation Investigations
WMRS	Weather Monitoring and Reporting System
WOTUS	Waters of the United States
WTCS	Worksite Traffic Control Supervisor
WUCS	Worksite Utility Coordination Supervisor

"**Abandonment**" means that Design-Builder abandons all or a material part of the Project, which abandonment shall have occurred if either (a)(i) Design-Builder does not commence to perform the Work in a material way, as determined in GDOT's good faith discretion, or (ii) no significant Work (taking into account the Project Schedule, if applicable, and any Relief Event) on the Project or a material part thereof is performed for a continuous period of more than 30 days, (b) Design-Builder or any Contractor demonstrates through statements, acts, or omissions an intent not to continue (for any reason other than a Compensation Event or Relief Event) to design and construct any or all of the Project, (c) Design-Builder or any Contractor demonstrates through statements, acts, or omissions a right or an entitlement to suspend or terminate all or any part of the Work (i) that it does not have under this Design-Build Agreement, (ii) during the pendency of, and without final determination under, any Dispute Resolution Procedures, or (iii) not in good faith.

"**Accelerated Bridge Construction**" means the set of elements, systems, technologies, and construction techniques contemplated in AASHTO "LRFD Guide Specifications for Accelerated Bridge Construction".

"**Accident Investigation Site**" means an area providing a place to pull off the travel lanes beyond the normal width shoulder.

"**Acquisition Services**" means all Work related to the acquisition of the State Proposed/State Acquired Right of Way, State Proposed/Design-Builder Acquired Right of Way, Design-Builder Proposed/Design-Builder Acquired Right of Way, and Design-Builder Proposed/State Acquired Right of Way, management of relocation payment assistance, demolition, and property management to be performed by Design-Builder in accordance with TP Section 6 (Right of Way) and includes the Pre-Acquisition Services, Parcel Acquisition Services and Post-Acquisition Services.

"**Acquisition Services Workflows**" means the workflows set forth in TP Attachment 6-1 (Acquisition Services Workflow).

"**Adjust**" means to perform a Utility Adjustment.

"**Adjustment**" means a Utility Adjustment.

"**Adjustment Standards**" means the standard specifications, standards of practice, and construction methods that a Utility Owner customarily applies to facilities (comparable to those being Adjusted on account of the Project) constructed by the Utility Owner (or for the Utility Owner by its contractors), at its own expense. Unless the context requires otherwise, references in the Design-Build Documents to a Utility Owner's "applicable Adjustment Standards" refer to those that are applicable pursuant to DBA Section 7.5.12 (*Conditions to Commencement of Utility Adjustments*).

"**Administrative Review Letter**" has the meaning set forth in DBA Section 2.5.10 (*State-Proposed/Design-Build Acquired Right of Way*.

"**Administrative Review Package**" means the administrative review package described in TP Section 6.4.4.2 (Parcel Owner Administrative Review Request).

"**Administrative Work**" means all Work that is neither Design Work nor Construction Work, including by way of example only invoicing, quality-, compliance-, and document control-related Work, in each case for which Design-Builder charges GDOT as part of the Work.

"**Affidavit of Property Interest**" means the DOT 8413M Property Interest Affidavit for Utility Facilities Located Off of Rights-of-Way (Revised June 12, 2019) produced by GDOT, as updated from time to time.

"**Affiliate**" means:

(a) any Design-Builder Member;

(b) any Person who directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, Design-Builder or any of its shareholders, members, partners or joint venture members; and

(c) any Person for which 10% or more of the equity interest in such Person is held directly or indirectly, beneficially or of record by (i) Design-Builder, (ii) any Design-Builder Member or (iii) any Affiliate of Design-Builder under clause (b) of this definition.

For purposes of this definition the term "control" means the possession, directly or indirectly, of the power to direct or to cause the direction of the management or policies (or both) of a Person, whether through voting rights or securities, by contract, family relationship or otherwise.

"**Affiliate Contractor**" means any Contractor that is an Affiliate.

"**Alternative Technical Concept**" means an alternative technical concept proposed by Design-Builder or any unsuccessful proposer pursuant to the terms set forth in the RFP

"**Appraiser**" has the meaning set forth in TP Section 6.3.5.1 (Appraisal Services).

"**ATC Supplement**" has the meaning set forth in DBA Section 1.2.6 (*Design-Build Documents; Order of Precedence*).

"**Authorized Representative**" has the meaning set forth in DBA Section 22.6.1 (*Designation of Representatives; Cooperation with Representatives*), and shall be applicable person(s) and/or party(ies) authorized to act on behalf of each of GDOT and Design-Builder, respectively, as initially set forth pursuant to DBA Exhibit 11 (*Initial Designation of Authorized Representatives*). All Formal Communications between GDOT and Design-Builder, shall be directed to the respective Authorized Representative for each Party, unless expressly provided to the contrary in the Design-Build Agreement.

"**Baseline Inspections**" means an inspection undertaken in accordance with TP Section 19.3.1.1 (Baseline Inspections) to determine the condition of each applicable portion of the Work.

"**Baseline Project Schedule**" means the logic-based Critical Path Method schedule for all Work from commencement of the Work leading up to and including each Milestone Deadline, to be prepared by Design-Builder consistent with and reflecting the Milestones set forth in DBA Exhibit 9 (*Milestone Schedule*) and the Milestone Schedule, as and when such Baseline Project Schedule has been accepted by GDOT, all as more particularly described in TP Section 2 (Project Management). The "Baseline Project Schedule" may refer to the Preconstruction Baseline Project Schedule, the Construction Baseline Project Schedule, or a Revised Baseline Project Schedule, as and when any of the foregoing is the then-current Baseline Project Schedule. For avoidance of doubt, Project Schedule Updates are not a Baseline Project Schedule.

"**Baseline Schedule of Values**" means a detailed line item monetary valuation for all parts of the Work, which lists all SOV Line Items in the format and to the detail as described in DBA Exhibit 7 (*Contract Sum and Payment Terms*) and TP Section 2 (Project Management). The sum total of all line items must equal the Contract Sum. The SOV is the Preconstruction Baseline SOV, Construction Baseline SOV, and Revised Baseline SOV, each as corresponds with the then-current Baseline Project Schedule.

"**Basic Configuration**" means:

collectively, (a) the NEPA Basic Configuration and (b) the "Mandatory Configuration Elements" listed in TP Section 1.4 (Mandatory Configuration Elements).

"**Basis of D&C**" means the basis of D&C as set forth in TP Attachment 2-2 (Basis of D&C Requirements).

"**Basis of Rejection**" means rejection of a Type 2 Submittal where: (a) the Work that is the subject of the Type 2 Submittal fails to comply with any applicable covenant, condition, requirement, term, or provision of the Design-Build Documents, after taking into account the resolution of any point of interpretation of this Design-Build Agreement in accordance with DBA Section 1.2 (*Design-Build Documents; Order of Precedence*) or DBA Section 1.6 (*Interpretive Engineering Decisions*) (or both); (b) the Work that is the subject of the Type 2 Submittal is not to a standard at least equal to or better than the requirements of Good Industry Practice; or (c) Design-Builder has not provided all content or information required with respect to the Type 2 Submittal.

"**Best Management Practices**" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"**Betterment**" has, with respect to a given Utility being Adjusted, the meaning (if any) set forth in the Utility MOU(s) applicable to the Utility (so long as the term is not narrower or otherwise more onerous on GDOT than the corresponding definition in any Utility MOU); in all other cases, "Betterment" means any upgrading of the Utility in the course of such Utility Adjustment that is not attributable to the design or construction of the Project and is made solely for the benefit of and at the election of the Utility Owner, including (i) an increase in the capacity, capability, efficiency or function of an Adjusted Utility over that which was provided by the existing Utility, (ii) expansion of an existing Utility, and (iii) all Incidental Utility Adjustment Work associated with such Betterment. Notwithstanding the foregoing, the following are not considered Betterments unless otherwise provided in the applicable Utility MOU(s):

(a) any upgrading which is required for accommodation of the Project;

(b) replacement devices or materials that are of equivalent standards although not identical;

(c) replacement of devices or materials no longer regularly manufactured with an equivalent or next higher grade or size;

(d) any upgrading required by applicable Law;

(e) replacement devices or materials that are used for reasons of economy (e.g., non-stocked items may be uneconomical to purchase);

(f) any upgrading required by the Utility Owner's applicable Adjustment Standards; and

(g) any discretionary decision by a Utility Owner that is contemplated within a particular standard described in clause (f) above.

With respect to any New Interest, "Betterment" has the meaning (if any) set forth in the applicable Utility MOU(s). In all other cases, a New Interest shall be considered a Betterment, except if reinstallation of a Utility in the New Interest (i) is necessary in order to meet the requirements of the Design-Build Documents, or (ii) is called for by Design-Builder in the interest of overall economy for the Project.

"**Books and Records**" means any and all documents, books, records, papers, letters/correspondence, maps, plans, tapes, photographs, exhibits, computer- or other electronic-based, -stored, or -generated information, or other information or materials, whether prepared and maintained or received, of Design-Builder or any Design-Builder-Related Entity or Affiliate relating to the Project, including (a) all design and construction documents, and all operations and maintenance documents (including Submittals, Contracts, invoices, schedules, meeting minutes, budgets, forecasts and change orders), (b) all budgets, certificates, claims, correspondence, data (including test data and other Project Data), data fields, documents, analyses (including expert analyses), facts, files, investigations, notices, plans, projections, proposals, records, reports, requests, samples, schedules, settlements, statements, studies, surveys, tests, test results, vehicular traffic information analyzed, categorized, characterized, created, collected, generated, maintained, processed, produced, prepared, provided, recorded, stored or used by Design-Builder or any Design-Builder-Related Entity or any of its or their Contractors in connection with the Project, (c) any other sketches, charts, calculations, drawings, layouts, depictions, specifications, manuals, electronic files, artwork, and other documents, information, materials, or other work product created or collected under the terms of, or otherwise under the Design-Build Documents, (d) any other "Books and Records", "Public Record" (as defined under the Open Records Act), or words of similar effect as specifically required or identified under applicable Law or Governmental Approval, and (e) any of the foregoing that disclose or embody Intellectual Property.

"**Business Day**" means any day that is not a Saturday, a Sunday, a State of Georgia public holiday or a federal public holiday.

"**Category II**" means, for purposes of insurance requirements under this Design-Build Agreement only, a project with a Contract Sum valued at greater than $5,000,000 but less than or equal to $20,000,000 as of the Effective Date.

"**Category III**" means, for purposes of insurance requirements under this Design-Build Agreement only, a project with a Contract Sum valued at greater than $20,000,000 as of the Effective Date.

"**Change in Law**" means, in either case, when legally binding on Design-Builder:

(a) the adoption of any Law of (1) the State (or political subdivision), or (2) a local government (or political subdivision) where a duly enacted statute of the General Assembly either (A) expressly makes such local government or political subdivision Law applicable to GDOT, or (B) expressly grants the power and authority to such local government or political subdivision to promulgate a Law that is to be applicable to GDOT (to the extent of such express statutory authority), in either case, after the Setting Date, provided such new Law is materially inconsistent with the Laws of the State (or political

subdivision) or such local government (or political subdivision and applicable to GDOT) in effect on the Setting Date, or

(b) any change, modification, amendment, or alteration to, repeal or revocation (in whole or in part) of any Law of (1) the State (or political subdivision), or (2) a local government or political subdivision meeting the additional criteria set forth in clause (a)(2)(A) or (a)(2)(B) of this definition), after the Setting Date, in each case that is materially inconsistent with the Laws of the State (or political subdivision) or such local government (or political subdivision and applicable to GDOT), in effect on the Setting Date;

excluding, however,

(i) any new or changed Law of the State or a local government (or political subdivision of either) that also constitutes or causes (A) a change in or new Adjustment Standards or (B) any Project Standards Change (unless such Project Standards Change is required due to a Change in Law);

(ii) any new or changed Law of the State or a local government (or political subdivision of either) pending, passed or adopted but not yet effective as of the Setting Date;

(iii) any change in federal law;

(iv) any new or changed Laws of the State or a local government (or political subdivision of either) that constitutes or causes a change in, or new, sales Tax assessed against Design-Builder or any Design-Builder-Related Entity; and

(v) any change in the State tax Laws of general application except the adoption after the Setting Date of any Law not otherwise excluded that results in the levy of the State ad valorem property taxes on Design-Builder's Interest.

"**Change of Control**" means any assignment, sale, financing, grant of security interest, transfer of interest or other transaction of any type or description, including by or through voting securities, asset transfer, contract, merger, acquisition, succession, dissolution, liquidation or otherwise, that results, directly or indirectly, in a change in possession of the power to direct or control or cause the direction or control of the management of Design-Builder or a material aspect of its business. A change in the power to direct or control or cause the direction or control of the management of a Design-Builder Member may constitute a Change of Control of Design-Builder if such Design-Builder Member possesses the power to direct or control or cause the direction or control of the management of Design-Builder. Notwithstanding the foregoing, the following shall not constitute a Change of Control:

(a) a change in possession of the power to direct or control the management of Design-Builder or a material aspect of its business due solely to a bona fide open market transactions in securities effected on a recognized public stock exchange, including such transactions involving an initial public offering;

(b) a change in possession of the power to direct or control the management of Design-Builder or a material aspect of its business due solely to a bona fide transaction involving securities or beneficial interests in the ultimate parent organization of a Design-Builder Member, (but not if Design-Builder Member is the ultimate parent organization), unless the transferee in such transaction is at the time of the transaction suspended or debarred or subject to a proceeding to suspend or debar from bidding, proposing or contracting with any federal or State department or agency;

(c) an upstream reorganization or transfer of direct or indirect interests in Design-Builder so long as there occurs no change in the entity with ultimate power to direct or control or cause the direction or control of the management of Design-Builder;

(d) a transfer of interests between managed funds that are under common ownership or control other than a change in the management or control of a fund that manages or controls Design-Builder; or

(e) the exercise of minority veto or voting rights (whether provided by applicable Law, by Design-Builder's organizational documents or by related member or shareholder agreements or similar agreements) over major business decisions of Design-Builder, provided that if such minority veto or voting rights are provided by shareholder or similar agreements, GDOT has received copies of such agreements.

For purposes of this definition, a Person shall be deemed to own shares or membership interests in another Person if such person own the legal, beneficial, and equitable interest in their relevant shares or membership interest of the other Person.

"**Change Request**" means a written request from Design-Builder seeking to change the character, quantity, quality, description, scope or location of any part of the Work, or to modify or deviate from the Design-Build Documents.

"**Claimant**" means any Person that would be entitled to protection of payment surety bond under O.C.G.A. § 13-10-63, including any P&P Bonds and the Warranty Bond.

"**Comment**" means, in the context of Submittals, a GDOT remark, comment, edit, suggestion, expression of preference, request for additional information or accommodation, or other disposition that, in each case, is not a Basis of Rejection.

"**Commissioner**" means the Commissioner of GDOT appointed by the State Transportation Board and any successor thereto having substantially similar powers and authority.

"**Compensation Amount**" means the amount of compensation to be paid to Design-Builder for a Compensation Event as set forth and subject to the limitations in DBA Article 13 (*Relief Events; Compensation Events*).

"**Compensation Event**" means the occurrence of any of the following events, subject to any limitations, claims submissions requirements, and other conditions set forth in the Design-Build Agreement, occurring during the D&C Period, and that (i) is beyond the reasonable control of Design-Builder; (ii) actually, demonstrably, materially and adversely affects performance of Design-Builder's obligations (other than payment obligations) in accordance with the Design-Build Documents; and (iii) is not attributable to the negligence, reckless or willful misconduct, act or omission or breach or violation of applicable Law, Governmental Approval, or contract (including any Design-Build Document) by Design-Builder or any Design-Builder-Related Entity, provided that, in each case, such events (or the effects of such events) are not caused, and could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Design-Builder or any Design-Builder-Related Entity:

(a) Change in Law (excluding a Pandemic Event);

(b) Uncovering of Work that was not Nonconforming Work under DBA Section 7.3.4.5(c) (*Right to Uncover*) (in which case, any compensation to which Design-Builder may be

entitled shall be limited to Design-Builder's actual, documented uncover costs and expenses, without mark-up, pursuant to DBA Section 7.3 (*Design-Builder Responsibility for Nonconforming Work*).

(c) GDOT-Caused Delay, other than with respect to GDOT's failure to provide response to Design-Builder Submittals as provided under clause (d) of the definition of "GDOT-Caused Delay";

(d) GDOT Change;

(e) discovery in, on, or under the Existing Right of Way or (in each case, after acquired) the State Proposed/State Acquired Right of Way, as applicable, of any Pre-existing Hazardous Materials. Design-Builder shall account for same in the Baseline Project Schedule and impacts shall be limited to such conditions not identified therein (whether in type or quantity);

(f) Issuance by a court in a legal proceeding of any preliminary or permanent injunction or temporary restraining order (or other similar order, legal restraint, or prohibition) that prohibits prosecution of any material portion of the Work, except if arising out of, related to, caused by, resulting from, or based on the wrongful act or wrongful omission of Design-Builder or any Design-Builder-Related Entity;

(g) Failure to obtain, or unreasonable and unjustified delay in obtaining or otherwise maintaining once issued, a Governmental Approval from any Governmental Entity, except if such failure or delay results from failure by Design-Builder or any Design-Builder-Related Entity to locate or design the Project or carry out the Work in accordance with any Governmental Approval the NEPA Approval, (ii) means or methods used by Design-Builder or any Design-Builder-Related Entity for carrying out the Work, or [(ii)]/[(iii)] decision or action by or on behalf of Design-Builder to use or acquire Design-Builder Proposed/Design-Builder Acquired Right of Way);

(h) GDOT's (i) lack of good and sufficient title to any parcel in the Existing Right of Way, (after acquired) the State Proposed/State Acquired Right of Way, or (after acquired) the Design-Builder Proposed/State Acquired Right of Way by GDOT, to the extent it materially interferes with or materially and adversely affects performance of Work, or (ii) the existence at any time following issuance of the NTP3 of any title reservation, condition, easement or encumbrance on any parcel in the Existing Right of Way or (after acquired) the State Proposed/State Acquired Right of Way, of record or not of record, to the extent it materially interferes with or materially and adversely affects performance of Work, except any title reservations, conditions, easements or encumbrances (A) concerning Utilities or (B) caused, permitted or suffered by Design-Builder or any Design-Builder-Related Entity;

(i) Additional insurance premium costs as set forth in DBA Section 16.1.2.11 (*Adjustments in Coverage Amounts*);

(j) discovery at, near or on the Existing Right of Way or (after acquired) State Proposed/State Acquired Right of Way during the Construction Period of any Unexpected Endangered Species, excluding any such presence of species known to Design-Builder prior to the Setting Date or that would become known to Design-Builder by undertaking Reasonable Investigation;

(k) any change in the design concept of the Project or any portion thereof resulting from judicial or administrative action taken with respect to a legal challenge to any NEPA Approval as compared to the NEPA Basic Configuration, except to the extent the change in design concept (i) had already been incorporated into Design-Builder's design schematics assumed in connection with the Contract Sum, or (ii) results from failure by Design-Builder or any Design-Builder-Related Entity to locate

or design the Project to carry out the Work in accordance with the Provided Environmental Approvals or other Governmental Approvals;

(l) suspension or termination of any NEPA Approval, except to the extent that such suspension or termination results from failure by Design-Builder or any Design-Builder-Related Entity to locate or design the Project or carry out the work in accordance with the NEPA Approval, excluding Necessary Basic Configuration Changes, or other Governmental Approval (which failure may include (i) modification by or on behalf of Design-Builder of the design concept included in the NEPA Approval, (ii) means or methods used by Design-Builder or any Design-Builder-Related Entity for carrying out the Work, or (iii) decision or action by or on behalf of Design-Builder to use or acquire Design-Builder Proposed/Design-Builder Acquired Right of Way);

(m) discovery of an Unidentified Utility Facility within the relevant time periods under, and subject to the terms and conditions of DBA Section 7.5.10 (*Unexpected Utility Adjustments*) (in which case, any compensation to which Design-Builder may be entitled shall be limited to Design-Builder's actual and documented costs and expenses, without mark-up, for the design and Utility Adjustment Work resulting directly therefrom);

(n) except where specifically permitted hereunder, suspensions of the Work ordered by GDOT that do not arise out of, relate to, or result from any act or omission of Design-Builder or any Design-Builder-Related Entity that is not required or permitted under the Design-Build Documents;

(o) any (i) Necessary Basic Configuration Changes (subject to the terms and conditions of DBA Section 14.6.2 (*Necessary Basic Configuration Changes*)); or (ii) an erroneously excluded Parcel under DBA Section 2.7.1.3(a) (De*sign-Builder Proposed/State Acquired Right of Way*);

(p) *ultra vires* enforcement of any inapplicable local law (or political subdivision thereof) by or on behalf of the local Governmental Entity;

(q) any other event that the Design-Build Documents expressly state shall be treated as a Compensation Event;

(r) Latent Defects to the extent affected or impacted by the Work and as and to the extent materially and adversely affecting the completion of Work on those Parcels identified in DBA Section 7.16 (*Existing Improvements and Latent Defects*); and

(s) The discovery of a material error in GDOT Boring Data in accordance with DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

"**Compensation Event Determination**" has the meaning set forth in DBA Section 13.2.1 (*Relief Event and Compensation Event Determinations*).

"**Compensation Event Notice**" means the Notice submitted by Design-Builder in accordance with DBA Section 13.1 (*Notices*).

"**Compensation Event Package**" means the documents and information described in Section 13.1.4.2 (*Compensation Event Package and Relief Event Package*), as pertains to a Compensation Event that is the subject of a Detailed Compensation Event Notice.

"**Compensation Event Records**" has the meaning set forth in DBA Section 13.1.1.5(b) (*General Notice Requirements*).

"**Condemnation Package**" means the condemnation package described in TP Section 6.4.7.1 (Condemnation Request).

"**Conditional Letter of Map Revision**" means the revision described in TP Section 12.3.4 (FEMA Requirements).

"**Conditions to Assistance**" has the meaning set forth in DBA Section 7.5.8.7 (*Failure of Utility Owners to Cooperate*).

"**Conflict**" means the conflict described in TP Section 7.3.1 (When Utility Adjustment is Required).

"**Constituents**" means, with respect to any entity or group of entities, any or all of its members, managers, officers, directors, share/stockholders, commissioners and officeholders (public Persons only), partners, employees, agents, representatives, consultants, attorneys, contractors, successors, and assigns.

"**Construction Baseline Project Schedule**" means the Baseline Project Schedule provided by Design-Builder prior to NTP3 and prepared in accordance with TP Section 2.4.2.2 (Construction Baseline Project Schedule), which schedule is consistent with Milestones set forth in DBA Exhibit 9 (*Milestone Schedule*), the Preconstruction Baseline Project Schedule, and the Milestone Schedule, each as may be adjusted pursuant to this Design-Build Agreement.

"**Construction Baseline Schedule of Values**" means the SOV provided by Design-Builder to GDOT in accordance with TP Attachment 2-7 (SOV and Price-Loading Requirements) prior to, and as a condition to, issuance of NTP3.

"**Construction Detail**" means a drawing detailing GDOT required dimensions, specifications, construction methods, or requirements for a specific portion of the Project. TP Attachment 1-4 (Project Standards) identifies which Construction Details shall be considered Project Standards for this Project.

"**Construction Documents**" means all working drawings, erection and installation work plans, fabrication plans, manufacturer's literature, material and hardware descriptions, specifications, construction quality-related reports, and samples (materials, display, other) specified, necessary, or desirable for construction of the Project. Construction Documents include all such drawings, etc., pertaining to all Utility Adjustments, regardless as to whether included in the Construction Work or self-performed by or on behalf of Utility Owners (it being understood that the equivalent of "Design Documents" with respect to such Utility Adjustments are not "Construction Documents").

"**Construction Manager**" means the individual person, identified in the SOQas the "Construction Manager" and included in Design-Builder's Proposal, who fulfills this Key Personnel role as further described in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Construction Period**" means the period commencing at issuance of NTP3 and ending upon the Final Acceptance Date.

"**Construction Phase**" means a portion of the Construction Work defined by geometric zones, areas or segments within logical termini that enables staged progression and sequencing of construction pursuant to Design-Builder's approach to perform the Work.

"**Construction Phasing and Staging Plan**" means the plan provided by Design-Builder in accordance with TP Attachment 2-2 (Basis of D&C Requirements) that depicts the phasing and staging of the Construction Work

"**Construction Standard**" means a drawing detailing GDOT required dimensions, specifications, construction methods, or requirements for a particular part of the Work or portion of the Project. TP Attachment 1-4 (Project Standards) identifies which Construction Standards are Project Standards.

"**Construction Work**" means all portions of the Work (excluding associated Administrative Work) necessary to build or construct, reconstruct, rehabilitate, make, form, manufacture, furnish, install, integrate, supply, deliver, or equip the Project and/or the Utility Adjustments. Construction Work includes Maintenance During Construction, all work and activities after Substantial Completion required to achieve Final Acceptance, including completion of all FA Punch List items and FA Landscaping Work, all other landscaping and aesthetic treatments as well as the development of the Construction Documents and performance of all construction-related quality control Work. Construction Work does not include Design Work.

"**Contract**" means any agreement, and any supplement or amendment thereto, by either (a) Design-Builder with any other Person or Contractor, or (b) any Contractor with any Person or Subcontractor, to perform any part of the Work or provide any materials, equipment or supplies for any part of the Work, or any such agreement, supplement or amendment at a lower tier, between a Subcontractor and its lower tier sub-subcontractor or supplier. The term "Contract" excludes Standard Utility Agreements and any agreement with GDOT.

"**Contract Sum**" means the total contract sum to be paid to Design-Builder on account of the fully and properly performed Work as set forth in the Design-Build Agreement, as adjusted pursuant to Supplemental Agreements (including to reflect adjustments for Compensation Events or Supplemental Agreements as provided in the Design-Build Agreement), in each case as full and complete compensation for the Work and all other obligations to be performed for, or on behalf of, Design-Builder under the Design-Build Agreement, including all costs of Work and services, materials, equipment, supplies, general conditions costs, overhead and administrative expenses, professional fees and advisor, consultant and subconsultant costs, acquisition and other costs associated with acquisition of any real property interests (excluding Temporary Interests), insurance and surety bond premiums, sales taxes, assessments, tariffs, permit, license and registration fees, and all other related costs and expenses. The preliminary Contract Sum is set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

"**Contract Time**" means the time period provided for Design-Builder's completion of the Work as provided in DBA Section 3.3.1 (*Contract Time, Date of Commencement, and Notice to Proceed*).

"**Contractor**" means any Person with whom Design-Builder has entered into any Contract to perform any part of the Work or provide any services, materials, equipment, hardware or supplies for any part of the Project and/or the Utility Adjustments included in the Construction Work, on behalf of Design-Builder, and any other Person with whom any Contractor has further subcontracted any part of the Work, at all tiers. The term "Contractor" excludes GDOT and any Utility Owner self-performing Utility Adjustment Work. The Lead Design Consultant is a "Contractor" regardless as to contracting structure among the members of Design-Builder's team (from its Proposal).

"**Corrective/Preventative Action Report**" means Design-Builder's plan for taking corrective action with respect to systemic Nonconforming Work as described in TP Section 3.5.8 (Corrective/Preventative Action Report).

"**Counter Offer**" means the counter offer described in TP Section 6.4.3.3 (Offers and Counter Offers).

"**Critical Path**" means the sequence of activities that must be completed on schedule for the entire Project to be completed on time in accordance with the Milestone Deadlines. This is the longest duration path (or "chain"), in terms of time, of logically connected activities of D&C Work on the Baseline Project Schedule (as such schedule is statused and updated in accordance with this DBA, which may include a Time Impact Analysis) ending with the relevant Milestone Deadline in respect thereof (ultimately, the Final Acceptance Date), corrected for any improper logic, improper activity durations, and errors.

"**Critical Path Method**" means a scheduling method that utilizes the Precedence Diagram Method to calculate each activity's early dates, late dates, float values and establishes the critical path through the activity network.

"**D&C Period**" means the period commencing at issuance of NTP1 and ending upon the Final Acceptance Date.

"**D&C Work**" means the Design Work and the Construction Work.

"**Day**" or "**day**" means calendar day unless otherwise expressly specified otherwise.

"**Deductions**" means, in the context of DBA Exhibit 7 (*Contract Sum and Payment Terms*), each of the Nonrefundable Deductions and Monthly Lane Closure Deductions, as well as any other Liquidated Damages assessed in the relevant Invoice Period. In all other instances, and depending upon context, "Deductions" means Liquidated Damages, Nonrefundable Deductions, and Lane Closure Deductions, individually or collectively.

"**Default Interest Rate**" means the interest rate GDOT receives from time to time on its deposits into a State Depository.

"**Default Termination Event**" means each of Design-Builder Defaults listed in DBA Section 18.2.1 (*Design-Builder Defaults Triggering GDOT Termination Rights*).

"**Defect**" means any Work that (i) does not conform with the Design-Build Documents, or (ii) otherwise is a defect, whether by design, construction, installation, damage or wear, affecting the condition, use, functionality or operation of any portion of the Work that would cause or have the potential to cause one or more of the following:

(a) a hazard, nuisance or other risk to public or worker health or safety, including the health and safety of Users;

(b) a structural deterioration of the affected part of the Work or portion of the Project;

(c) damage to a third party or a third party's property or equipment;

(d) damage to the Environment; or

(e) failure of a part of the Work or portion of the Project to meet a Performance Requirement.

"**Design-Build Agreement**" means this Design-Build Agreement for the I-75 at Bethlehem Road Interchange Project, executed by GDOT and Design-Builder, including any and all exhibits, attachments, riders, and amendments thereto.

"**Design-Build Documents**" means those documents as set forth in DBA Section 1.2 (*Design-Build Documents; Order of Precedence*) and all such other agreements entered into by GDOT and Design-Builder or any Design-Builder-Related Entity, or otherwise executed by Design-Builder or a Design-Builder-Related Entity and delivered to GDOT, with respect to or in connection with the Design-Build Agreement, including Supplemental Agreements or any guaranty.

"**Design-Builder**" means the party identified as such in the opening paragraph, together with its successors, permitted assigns, and Constituents.

"**Design-Builder Default**" has the meaning set forth in DBA Section 17.1.1 (*Design-Builder Default*).

"**Design-Builder-Led Environmental Approvals**" means all Environmental Approvals other than the Provided Environmental Approvals.

"**Design-Builder Hazardous Materials Release(s)**" means (a) Hazardous Materials Release(s), or the exacerbation of any such release(s), attributable to the actions, omissions, negligence, reckless or willful misconduct, violation of Law and other illegal activities (or inaction), violation of contract, criminal conduct, bad faith, intentional misconduct (which excludes intentional Design-Builder Default), arbitrary or capricious acts, fraud, or violation or breach of any Governmental Approval or contract by Design-Builder or any Design-Builder-Related Entity; (b) Hazardous Materials Release(s) arranged to be brought onto the Site or elsewhere by Design-Builder or any Design-Builder-Related Entity; regardless of cause, or (c) use, containment, storage, management, handling, transport and disposal of any Hazardous Materials by Design-Builder or any Design-Builder-Related Entity in violation of the requirements of the Design-Build Documents or any applicable Law or Governmental Approval.

"**Design-Builder Member**" means any shareholder, member, partner or joint venture or consortium member of Design-Builder or a Person with a material financial obligation owing to Design-Builder for equity or shareholder loan contributions.

"**Design-Builder Noise Barrier Change Memorandum**" means the document submitted proposing a Design-Builder Change in relation to a change to the Noise Barrier Baseline Requirements, as further described in DBA Section 14.6.3.2 (*Design-Builder-Proposed Noise Barrier-Related Changes*) and TP Section 5.4.2 (Design-Builder Proposed Noise Barrier Location Changes).

"**Design-Builder Proposed/Design-Builder Acquired Right of Way**" means those Parcels or portions of property proposed by Design-Builder in addition to the State Proposed Right of Way and are to be used for Project or in connection with the construction thereof, all as expressly designated as "Design-Builder Proposed/Design-Builder Acquired Right of Way" within the ROW Acquisition Plan. Design-Builder Proposed/Design-Builder Acquired Right of Way shall not include any Temporary Interests.

"**Design-Builder Proposed/State Acquired Right of Way**" means those Parcels or portions of property identified by Design-Builder, in addition to the State Proposed Right of Way and Design-Builder Proposed/Design-Builder Acquired Right of Way, to be used for Project or in connection with the construction thereof, for which GDOT is obligated to provide access to Design-Builder. Design-Builder Proposed/State Acquired Right of Way shall not include any Temporary Interests. The term specifically includes all air space, surface rights and subsurface rights within the limits of the Design-Builder

Proposed/State Acquired Right of Way, and specifically excludes any Design-Builder Proposed/Design-Builder Acquired Right of Way, State Proposed/State Acquired Right of Way, and State Proposed/Design-Builder Acquired Right of Way.

"**Design-Builder-Provided Specifications**" has the meaning set forth in TP Section 1.5 (Project Standards).

"**Design-Builder Quality Program**" means the quality program to be developed, implemented and continually improved by Design-Builder in accordance with TP Section 3 (Design-Builder Quality Program).

"**Design-Builder-Related Entities**" means (a) Design-Builder Members, (b) all Contractors (including Suppliers), (c) any other Persons performing any of the Work, (d) any other Persons for whom Design-Builder may be legally or contractually responsible, and (e) the Constituents of any of the foregoing; provided, however, that no GDOT-Related Entity, acting under or relating to the Work, shall be considered a Design-Builder-Related Entity.

"**Design-Builder's Interest**" means all right, title, and interest of Design-Builder in, to, under or derived from the Design-Build Documents.

"**Design-Builder's Design**" means, at any given time, and depending upon context, (a) the aggregate of accepted Design Document Submittals, (b) the design concepts set forth in such aggregate of accepted Design Document Submittals, or (c) the action of developing Design-Builder's Project design.

"**Design-Builder's Schematic Plan of Project**" has the meaning set forth in TP Attachment 2-2 (Basis of D&C Requirements).

"**Design Deviation**" means a documented decision to design a portion of the Project to design criteria that do not meet minimum suggested or permissive values or ranges as established by either FHWA, GDOT, or GDOT but which have not been identified as either a controlling criteria by FHWA or a Project Standard. Design Deviations shall be documented in the Record Design Documents.

"**Design Documents**" means all drawings (including plans, profiles, cross-sections, notes, elevations, typical sections, details, and diagrams), specifications, reports, studies, erection and shoring drawings, calculations, electronic files, records, and other submissions necessary for, or related to, the design of the Project and to the Utility Adjustments (including Utility Adjust Plans and Utility Adjustment Preliminary Plans), regardless as to whether included in the Design Work and/or the Construction Work. The Design Documents include each of the Preliminary Design Documents, Final Design Documents, Released for Construction Design Documents, Shop Drawings and Record Design Documents.

"**Design Exception**" means a documented decision to design a portion of the Project or a segment of the roadway to design criteria that do not meet minimum values or ranges established for the Project as set by the 10 controlling criteria as defined by "AASHTO – A Policy on Geometric Design of Highway and Streets. Design Exceptions require approval from both GDOT and FHWA. The Design Exceptions listed in TP Section 11.3.10 (Allowable Design Exceptions, Variances, and Deviations) and TP Attachment 11-2 (Design Exceptions and Variances) are permitted for use, inasmuch as use is required to implement the schematic design of the NEPA Basic Configuration.

"**Design Variance**" means a documented decision to design a portion of the Project or a segment of the roadway to design criteria that do not meet minimum values or ranges established for the Project as denoted by GDOT as a standard above and beyond those established by FHWA. Design Variances require

approval from GDOT. The Design Variances, listed in TP Section 11.3.10 (Allowable Design Exceptions, Variances, and Deviations) and TP Attachment 11-2 (Design Exceptions and Variances) are permitted for use, inasmuch as use is required to implement the schematic design of the NEPA Basic Configuration.

"**Design Work**" means all Work of design, redesign, engineering or architecture for the Project (excluding associated Administrative Work); acquisition of the State Proposed/Design-Builder Acquired ROW or Design-Builder Proposed/Design-Builder Acquired Right of Way; and design activities relating to Utility Adjustment Work. "Design Work" includes development of the Design Documents and performance of all design-related quality control Work. "Design Work" includes subsurface utility investigations and geotechnical investigations incidental to Design Work.

"**Detailed Compensation Event Notice**" has the meaning set forth in DBA Section 13.1.3.2 (*Detailed Compensation Event Notices*).

"**Detailed Relief Event Notice**" has the meaning set forth in DBA Section 13.1.2.2 (*Detailed Relief Event Notices*).

"**Detailed Cost and Pricing Data**" means all documents and materials used by Design-Builder to prepare its Proposal and to bid the Contract Sum. The "Detailed Cost and Pricing Data" includes all writings, working papers, computer printouts, charts, and all data compilations which contain or reflect information, data, formulas, unit and materials prices, other cost and fee information, and calculations and includes specifically all materials quantity assumptions, schedules, equipment or machinery use or rental rates, transportation charges, overhead rates, labor rates, management or supervisory labor costs, efficiency or productivity factors, arithmetic extensions, binding or other quotations from consultants, subconsultants, subcontractors, and material suppliers (including costs, rates, assumptions, and adjustments with respect to changes arising out of Supplemental Agreements under the Design-Build Agreement, if any), property damage, liability, and other non-statutory insurance premiums, and all costing assumptions for human resources (e.g., salary and benefits), and otherwise all information and materials required under DBA Section 20.6.5 and DBA Section 20.6.6 (*Escrowed Documents*).

"**Detailed Unexpected Subsurface Condition Proposal**" has the meaning set forth in DBA Section 7.18.3 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

"**Directive Letter**" means the letter described in DBA Section 14.3 (*Directive Letters*).

"**Disadvantaged Persons**" has the meaning set forth in Section 1(a) (*OJT Plan – Objectives*) of the OJT Requirements.

"**Discipline Group**" has the meaning set forth in TP Section 2.9.3 (Coordination and Discipline Groups).

"**Dispute**" means any dispute, disagreement or controversy between GDOT and Design-Builder concerning their respective rights and obligations under the Design-Build Documents, including concerning any alleged breach or failure to perform and remedies.

"**Dispute Resolution Procedures**" means the procedures for resolving Disputes set forth in DBA Section 17.8 (*Dispute Resolution Procedures*).

"**Disputed Work**" means any Work that is the subject of a Dispute.

"**Drainage System**" means the Drainage System described in TP Section 12.1 (General Requirements).

"**Early Opening**" has the meaning set forth in DBA Section 7.7.4.1(a) (*Early Openings*).

"**Early Termination Date**" means the effective date of termination for any reason prior to the Final Acceptance Deadline, as specified in the relevant provisions of DBA Article 19 (*Assignment and Transfer*).

"**Effective Date**" means the date set forth in the Preamble.

"**Electronic Portions**" has the meaning set forth in DBA Section 1.2.7 (*Design-Build Documents; Order of Precedence*).

"**Eligible Existing Improvement**" means an Existing Improvement that is a bridge, structure, or wall itself (and nothing else).

"**Emergency**" means an unforeseen event affecting the Project whether directly or indirectly which (a) causes or has the potential to cause disruption to the free flow of traffic on the Project or a threat to the safety of the public; (b) is an immediate or imminent threat to the long term integrity of any part of the infrastructure of the Project, to the Environment, to property adjacent to the Project or to the safety of Users or the traveling public; (c) is recognized by the Georgia Department of Public Safety as an emergency; or (d) is recognized or declared by the Governor of the State, FEMA, the U.S. Department of Homeland Security or other Governmental Entity with authority and having jurisdiction over the Project or GDOT to declare an emergency.

"**Emergency Utility Response Plan**" means the plan described in TP Section 7.2.9 (Emergency Utility Response Plan).

"**Encroachment Applicant**" has the meaning set forth in DBA Section 6.6.2 (*Encroachment Permits*).

"**Encroachment Permit**" means any encroachment permit issued by GDOT with respect to any area within Project Limits in accordance with GDOT "Regulations for Driveway and Encroachment Control," manual (Revision 5.0), dated July 3, 2019, produced by GDOT and as updated from time to time.

"**Encroachment Permit Holders**" means any Person holding an Encroachment Permit from time to time.

"**Engineer of Record**" means the individual person, identified in the SOQand included in Design-Builder's Proposal, who fulfills this Key Personnel role as further described in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Environment**" means air, soils, submerged lands (or "wetlands"), surface waters, groundwater, land, stream sediments, surface or subsurface strata, biological resources, including endangered, threatened and sensitive species, natural systems (including ecosystems), and archaeological, paleontological, historical, or cultural resources.

"**Environmental Approvals**" means all Governmental Approvals arising from or required by any Environmental Law in connection with development, design, or construction of the Project. Environmental

Approvals include all Provided Environmental Approvals and Design-Builder-Led Environmental Approvals.

"**Environmental Assessment**" means the [_____].*[NTD – GDOT to provide prior to Proposal Submission Deadline]*

"**Environmental Commitment**" (also "Environmental Permits, Issues and Commitments") means the environmental commitments Design-Builder is required to perform as set forth in TP Attachment 5-3 (Environmental Commitments).

"**Environmental Law**" means any Law applicable to the Project or the Work requiring consideration of environmental impacts or addressing, regulating, relating to, or imposing liability, actions or standards of conduct that pertains to (1) the Environment, Hazardous Materials, pollution, contamination of any type whatsoever, health, or safety, and any lawful requirements and standards that pertain to the Environment, Hazardous Materials, pollution, contamination of any type whatsoever, health, and safety, or (2) otherwise the protection of public health, public welfare, public safety, in any case, set forth in any Laws, or other criteria and guidelines promulgated pursuant to such Laws, or Governmental Approvals applicable to the Project or the Work, as such have been or are amended, modified, or supplemented from time to time (including any present and future amendments thereto and reauthorizations thereof) including those relating to:

(a) The manufacture, processing, use, distribution, existence, treatment, storage, disposal, generation, and transportation of Hazardous Materials;

(b) Air, soil, surface and subsurface strata, stream sediments, surface water, and groundwater;

(c) Hazardous Materials Releases;

(d) Protection of nonhuman life (including wildlife, Threatened or Endangered Species, sensitive species), wetlands, water courses and water bodies, archaeological, paleontological, historical, or cultural resources, and natural resources;

(e) The operation and closure of underground storage tanks;

(f) The safety of employees and other persons; and

(g) Notification, documentation, and record keeping requirements relating to the foregoing.

Without limiting the above, the term "Environmental Laws" shall also include the following:

(i) The National Environmental Policy Act (42 U.S.C. §§ 4321 *et seq.*), as amended;

(ii) The Georgia Environmental Policy Act (O.C.G.A. §§ 12-16-1 to 12-16-8), as amended;

(iii) CERCLA, as amended;

(iv) The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 U.S.C. §§ 6901 *et seq.*);

(v) The Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. §§ 11001 *et seq.*), as amended;

(vi) The Clean Air Act (42 U.S.C. §§ 7401 *et seq.*), as amended;

(vii) The Federal Water Pollution Control Act, as amended by the Clean Water Act (33 U.S.C. §§ 1251 *et seq.*);

(viii) The Resource Conservation and Recovery Act (42 U.S.C. §§ 6901 *et seq.*), as amended;

(ix) The Toxic Substances Control Act (15 U.S.C. §§ 2601 *et seq.*), as amended;

(x) The Hazardous Materials Transportation Act (49 U.S.C. §§ 1801 *et seq.*), as amended, and the Hazardous Materials Transportation Uniform Safety Act of 1990;

(xi) The Oil Pollution Act (33 U.S.C. §§ 2701 *et seq.*), as amended;

(xii) The Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. §§ 136 *et seq.*), as amended;

(xiii) The Federal Safe Drinking Water Act (42 U.S.C. §§ 300 *et seq.*), as amended;

(xiv) The Federal Radon and Indoor Air Quality Research Act (42 U.S.C. §§ 7401 *et seq.*), as amended;

(xv) The Occupational Safety and Health Act (29 U.S.C. §§ 651 *et seq.*), as amended;

(xvi) The Endangered Species Act (16 U.S.C. §§ 1531 *et seq.*), as amended;

(xvii) The Fish and Wildlife Coordination Act (16 U.S.C. §§ 661 *et seq.*), as amended;

(xviii) The National Historic Preservation Act (16 U.S.C. §§ 470 *et seq.*), as amended;

(xix) The Coastal Zone Management Act (33 U.S.C. §§ 1451 *et seq.*), as amended;

(xx) The Bald Eagle and Golden Eagle Protection Act (16 U.S.C. §§ 688 *et seq.*), as amended;

(xxi) The Migratory Bird Treaty Act (16 U.S.C. §§ 703 *et seq.*), as amended;

(xxii) The Surface Mining Control and Reclamation Act, 30 U.S.C. § 1201 *et seq.*), as amended;

(xxiii) Section 4(f) of the U.S. Department of Transportation Act, 49 U.S.C. § 303(c), as amended;

(xxiv) Georgia Water Quality Act (O.C.G.A. § 12-5-20), as amended;

(xxv) Georgia Erosion and Sedimentation Act (O.C.G.A. § 12-7-1), as amended;

(xxvi) Best Management Practices (O.C.G.A. § 12-7-6(b)(15)), as amended;

(xxvii) Georgia Underground Storage Act (O.C.G.A. § 12-13-1), as amended;

(xxviii) GEPA, as amended; and

(xxix) State species-related laws, including the Georgia Endangered Wildlife Act (O.C.G.A. §§ 27-3-130 to 27-3-133) and the Georgia Wildflower Preservation Act (O.C.G.A. § 12-6-170 *et seq.*), each as amended.

"**Environmental Site Assessment**" means the environmental site assessment Design-Builder is required to perform in accordance with TP Section 8.3.3.6 (Environmental Site Assessment).

"**Environmentally Sensitive Areas**" mean the areas identified in the NEPA Approval and TP Attachment 5-5 (Environmental Resource Exhibit).

"**Error**" means an error, omission, inconsistency, inaccuracy, deficiency, or other defect that is not a Defect.

"**Escrow Agent**" means NCC Group Software Resilience (NA) LLC, at 6111 Live Oak Parkway, Norcross, Georgia 30093, or such other escrow agent as may be identified by GDOT to Design-Builder, or any of their successors and permitted assigns.

"**Escrowed Documents**" means the "Escrow Bid Documentation" delivered by Design-Builder, as Apparent Successful Proposer (or such other Proposer that succeeds in award of this Design-Build Agreement), pursuant to the ITP. The "**Escrowed Documents**" consist in (a) an executed Escrow Agreement, in the form of Form V to the ITP, (b) an executed Escrow Affidavit, in the form of Form W to the ITP, (c) the Detailed Cost and Pricing Data, as supplemented from time to time, and (d) if triggered by one or more of the events described in DBA Section 20.6.8 (*Intellectual Property Escrow*), software, Source Code and Source Code Documentation, and Proprietary Intellectual Property.

"**Excused Closure**" has the meaning given in DBA Exhibit 12 (*Lane Closure Deductions*).

"**Existing Improvements**" means the existing highway, bridge, and related improvements as of the date of issuance of the RFP within the Existing Right of Way.

"**Existing Interest**" means any right, title or interest in real property (e.g., a fee or an easement) claimed by a Utility Owner as the source of its right to maintain an existing Utility in such real property, which is compensable in eminent domain.

"**Existing Right of Way**" means any real property (which term is inclusive of all estates and interests in real property), improvements and fixtures described and identified in the "Existing Right of Way Lines" in TP Attachment 6-3 (Environmental Resource Exhibit) in or to which GDOT has an interest

for the purposes of implementing the Project. The term specifically includes all air space, surface rights and subsurface rights within the limits of the Existing Right of Way.

"**FA Punch List**" means a "punch list" of Administrative Work that remains to be completed following Substantial Completion as a condition to Final Acceptance, prepared by Design-Builder and agreed by GDOT prior to the Substantial Completion Date, in accordance with DBA Section 7.7 (*Substantial Completion, Punch List, Final Acceptance*). The FA Punch List shall only include any incomplete Construction Work that, due to its nature and the activities required to correct and complete the work, will not require any Lane Closures, and will not have any material or adverse effect on the normal, uninterrupted and safe use of the Project. The FA Punch List shall include the Landscaping Work to be carried out prior to Final Acceptance. For purposes of this definition, a "punch list" is an itemized list of minor items of Construction Work that remains to be completed, where the nature of any such incomplete Work, and the correction and completion of same, will neither impede traffic nor otherwise have a material or adverse effect on the normal and safe use and operation of the Project. "Minor" is as determined by GDOT in its sole discretion.

"**Federal Requirements**" means the provisions required to be part of federal-aid construction contracts, including the provisions set forth in DBA Exhibit 8 (*Other Legal Requirements*).

"**Field Design Change**" has the meaning set forth in TP Section 4 (Design Documents).

"**Final Acceptance**" means the occurrence of all the events and satisfaction of all the criteria and conditions for completion of the Project as set forth in DBA Section 7.7.3 (*Final Acceptance*), as and when confirmed by GDOT's issuance of a certificate of Final Acceptance in accordance with the procedures and within the time frame established in DBA Section 7.7.3 (*Final Acceptance*).

"**Final Acceptance Date**" means the date upon which GDOT certifies that Design-Builder has satisfied all conditions of and for Final Acceptance.

"**Final Acceptance Deadline**" means the deadline for achieving Final Acceptance, as set forth in the Milestone Schedule, as such deadline may be extended as and to the extent provided in the Design-Build Agreement. The initial Final Acceptance Deadline is the date identified as such in the Proposal.

"**Final Design Documents**" means the Design Documents described in TP Section 4.3.2 (Final Design Documents).

"**Final Parcel File**" means the files described in TP Section 6.5.4 (Final Parcel File)

"**Final Payment**" means the final payment, pursuant to a Design-Builder Invoice, made by GDOT to Design-Builder for Work performed under this Design-Build Agreement.

"**Fiscal Year**" means the 12 month fiscal year used by GDOT for budgeting purposes, which begins July 1 and ends June 30 of the succeeding calendar year.

"**Float**" means the amount of time that any given activity or logically connected sequence of activities shown on the Baseline Project Schedule, as the case may be, may be delayed before it will affect completion of any Work as required to achieve any Milestone Deadline. "Float" generally means the calculated difference between early completion times and late completion times for activities shown on the Baseline Project Schedule, including any float contained within an activity.

"**Force Majeure Event**" means the occurrence of any of the following events, subject to any limitations, claims submissions requirements, and other conditions set forth in the Design-Build Agreement, occurring during the D&C Period, and that (i) is beyond the reasonable control of Design-Builder; (ii) directly delays the Critical Path; (iii) otherwise actually, demonstrably, materially and adversely affects performance of Design-Builder's obligations (other than payment obligations) in accordance with the Design-Build Documents; and (iv) is not attributable to the negligence, reckless or willful misconduct, act or omission or breach or violation of applicable Law, Governmental Approval, or contract (including any Design-Build Document) by Design-Builder or any Design-Builder-Related Entity, provided that, in each case, such events (or the effects of such events) are not caused, and could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Design-Builder or any Design-Builder-Related Entity:

(a) war (including civil war and revolution), invasion, armed conflict, violent act of foreign enemy, military or armed blockade, or military or armed takeover of the Project, in each case occurring within the State;

(b) any act of terrorism or sabotage that causes direct physical damage to the Project;

(c) nuclear explosion or contamination that causes direct physical damage to the Project;

(d) riot and civil commotion on or in the immediate vicinity of the Project that has a direct adverse impact on Design-Builder's ability to perform the Work;

(e) fire, explosion, flood, earthquake, hurricane, windstorm, or tornado, in each case that causes direct physical damage to the Project;

(f) national or statewide (i.e., State of Georgia) strike that has a direct adverse impact on Design-Builder's ability to obtain materials, equipment or labor for the Project and, in each case not specific to Design-Builder or any Design-Builder-Related Entity or that cannot be resolved by Design-Builder or any Design-Builder-Related Entity;

(g) a Pandemic Event; or

(h) A Suspension for Convenience, exceeding in each instance or cumulatively those periods described in DBA Section 17.7.2 (*Suspension for GDOT's Convenience; Suspension for Safety*).

"**FMV Offer**" means the fair market value offer, based on the accepted Appraisal, which is made by Design-Builder to a Parcel Owner during the Parcel Acquisition Services.

"**Formal Communication**" means any Notice or any other written notice, request, demand, instruction, certificate, consent, explanation, agreement, approval, notification, correspondence, order, work product, or other written or electronic communication or end product given, submitted, or delivered under the Design-Build Documents by, or on behalf of, a Party to another Party or its Constituent(s), in each case that is not a Submittal. Except with respect to "Notices", "Formal Communications" exclude email communications, except when followed by a "hard copy" of the substance of the communication.

"**Fracture Critical Member**" has the meaning set forth in FHWA Memorandum "Clarification of Requirements for Fracture Critical Members" dated June 20, 2012.

"**Fragnet**" shall mean the sequence of new activities, which include newly-titled activity revisions, and their logic predecessor and successor relationships that are proposed to be added to the existing Baseline Project Schedule to demonstrate and quantify the impacts to the Critical Path Method calculations.

"**Full-Time**" means the full amount of time necessary for the proper performance of assigned responsibilities on the Site. A full-time commitment to the Project means (i) having no work responsibilities assigned by Design-Builder, any Contractor, or any Affiliate of Design-Builder or any Contractor with respect to any project other than the Project, and (ii) dedicating not less than the greater of 40 hours per week and such greater amount of time as is needed for the Work, at those times, dates, and durations as may be required.

"**Full-Time On-Call**" means Full-Time and accessible to GDOT 24 hours per day, seven days per week, and available to be on-Site within 45 minutes after notification by GDOT.

"**GDOT**" means the Georgia Department of Transportation, as set forth in the preamble, and any entity succeeding to the powers, authorities and responsibilities of GDOT invoked by or under the Design-Build Documents.

"**GDOT Boring Data**" means GDOT's boring and core sample data disclosed to the Developer and attached as TP Attachment 8-5 (Preliminary Borings).

"**GDOT-Caused Delay**" means any of the following events, solely to the extent not concurrent or overlapping with any delay attributable to Design-Builder, or the risks (and costs) for which this Design-Build Agreement expressly allocates to Design-Builder, or the risks (or costs, or both risks and costs) for which this Design-Build Agreement expressly does not allocate to GDOT, and with respect to any Compensation Event caused by such event, solely to the extent that, after taking into account any available Float, the cumulative effect of any such delays as set forth below have resulted in a delay to the then-current Critical Path (as of the date of the event):

(a) failure of GDOT to issue NTP1 as provided pursuant to DBA Section 3.3.1 (*Contract Time, Date of Commencement, and Notice to Proceed*) and/or failure to issue NTP2 as provided pursuant to DBA Section 3.3.3 (*Notice to Proceed 2*);

(b) issuance of a Directive Letter that requires Design-Builder to perform additional Work;

(c) failure of GDOT to obtain (but not to maintain) the Provided Environmental Approvals from GDOT within the time periods set forth in TP Section 5.3.3 (Provided Environmental Approvals), subject to DBA Section 6.2.1 (*Governmental Approvals and Third Party Agreements*) (refer to DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*) relating to maintaining Provided Environmental Approvals);

(d) failure of GDOT to provide:

(i) with respect to any Type 3 Submittal for which a response period is specified in the Submittal Requirements Database, a response to such Type 3 Submittal within the time period determined in accordance with DBA Section 6.3.2 (*Time Periods*) (and the Submittal Requirements Database), subject to Design-Builder complying with its obligation to notify GDOT of its failure to timely respond under DBA Section 6.3.3 (*Type 3 Submittal*); and

(ii) with respect to any Type 2 Submittal, a response to such Type 2 Submittal within the time period determined in accordance with DBA Section 6.3.2 (*Time Periods*), subject to Design-Builder complying with its obligation to notify GDOT of its failure to timely respond under DBA Section 6.3.4 (*Type 2 Submittal*).

(e) failure of GDOT to provide Design-Builder with access to the Existing Right of Way and the State Proposed/State Acquired Right of Way, by the date specified in DBA Exhibit 4 (*Parcel Acquisition Table*); provided, however, that if a set aside motion is filed pursuant to O.C.G.A. § 32-3-11 with respect to a Parcel, then Design-Builder's deferred right to access to such Parcel until the motion is resolved is not an "GDOT-Caused Delay" under this clause (e) unless such set aside motion (i) actually delays Design-Builder's access to such Parcel beyond the date access is contemplated by the then-current Baseline Project Schedule, and (ii) is filed solely in relation to an alleged act or omission of GDOT that is not due to any wrongful act or omission of Design-Builder;

(f) the occurrence of a GDOT Release(s) of Hazardous Materials;

(g) a Special Event, if GDOT either does not provide or provides Notice to Design-Builder less than 30 days prior to the event; or

(h) any other event that the Design-Build Documents expressly state shall be treated as a GDOT-Caused Delay.

Any proper suspension of Work pursuant to DBA Section 17.3.6 (*Suspension of Work*) shall not be considered a GDOT-Caused Delay.

"**GDOT Change**" means:

(a) any change in the scope of the Work or terms and conditions of the Technical Provisions (including, subject to DBA Section 14.6.1 (*Project Standards Changes*), any Project Standards Change) that GDOT has directed Design-Builder to perform, or the Parties agree that Design-Builder will perform, through a Supplemental Agreement as described in DBA Section 14.1 (*GDOT Changes*) or a Directive Letter pursuant to DBA Section 14.3 (*Directive Letters*); and

(b) any other event that the Design-Build Documents expressly state shall be treated as a GDOT Change.

"**GDOT Default**" has the meaning set forth in DBA Section 17.5.1 (*GDOT Default*).

"**GDOT Drainage Manual**" means Drainage Design For Highways Manual produced by GDOT and as updated from time to time.

"**GDOT Hazardous Materials Release(s)**" means, except as provided below, a Hazardous Materials Release directly by GDOT, the State, the State Transportation Board, and their respective directors, employees, commissioners, and office-holders (public individuals only), agents and contractors (excluding Design-Builder and any Design-Builder-Related Entity). GDOT Hazardous Materials Release(s) excludes, however, (a) any Hazardous Materials so introduced that are in or part of construction materials and equipment incorporated into the Project and (b) any Hazardous Materials identified in the Phase 1 Hazardous Materials Investigation or otherwise in the Reference Information Documents.

"**GDOT On-The-Job Training Program Manual**" means the on-the-job training program manual described in TP Attachment 1-4 (Project Standards).

"**GDOT Noise Policy**" means Highway Noise Abatement Policy for Federal-Aid Projects (dated March 14, 2020), as updated from time to time.

"**GDOT Pre-Qualification Application**" means the GDOT Pre-Qualification Application (Right of Way Services for Georgia Department of Transportation Projects) as updated from time to time and available at the Setting Date at http://www.dot.ga.gov/PartnerSmart/Documents/ROW/RWApp.pdf.

"**GDOT ROW Manual**" means External Right of Way manual produced by GDOT and as updated from time to time.

"**GDOT Standard Barrier**" means the Construction Standards and details #4941A, 4941B, 4949B, 4949C, 4949D set forth in TP Attachment 1-4 (Project Standards) and the barriers set forth in TP Attachment 11-4 (Special Details – Parapets and Barriers).

"**GDOT Standard Specifications**" means the GDOT Standard Specifications – Construction of Transportation Systems, as may be updated from time to time.

"**GDOT Utility Accommodation Manual**" or "**GDOT UAM**" means the Utility Accommodation Policy and Standards Manual at Ga. Comp. R. & Regs. 672-11-.01 through -.04, as the same may be amended, supplemented or replaced by GDOT from time to time, produced by GDOT and as updated from time to time.

"**GDOT Recoverable Costs**" means:

(a) the costs of any assistance, action, activity or Work undertaken by GDOT which Design-Builder is liable for or is obligated to reimburse GDOT, as the case may be, under the terms of the Design-Build Documents, including the charges of third party experts, consultants, and contractors, and reasonably allocated wages, salaries, compensation, benefits and overhead of GDOT staff and employees, performing such action, activity or work; plus

(b) third-party costs GDOT incurs to publicly procure any such third party experts, consultants, attorneys, and contractors; plus

(c) reasonable fees and costs of attorneys (including the reasonably allocable fees and costs of the Georgia Attorney General's Office), financial advisors, engineers, architects, insurance brokers and advisors, investigators, traffic and revenue consultants, risk management consultants, other consultants, and expert witnesses, as well as court costs and other litigation costs, in connection with any such assistance, action, activity or Work, including in connection with investigating and defending claims by and resolving disputes with third party contractors; plus

(d) any expense or cost for which GDOT is to be reimbursed by Design-Builder pursuant to the express terms of the Design-Build Agreement or other Design-Build Documents; plus

(e) interest on all the foregoing sums at the Default Interest Rate from the date due under the applicable terms of the Design-Build Documents and continuing until paid.

"**GDOT-Initiated VECP**" has the meaning set forth in DBA Section 7.17.1 (*Value Engineering, Generally*).

"**GDOT-Related Entities**" means (a) GDOT, (b) any other Persons for whom GDOT may be legally or contractually responsible, and (c) the Constituents of any of the foregoing; provided, however,

that neither Design-Builder nor any Design-Builder-Related Entity, acting under or relating to the Work, shall be considered a GDOT-Related Entity.

"**General Purpose Lanes**" means the lanes within and adjacent to the Project Limits for through traffic available to Users without vehicle or occupancy restrictions or charge for use[, including lanes designated as General Purpose Lanes on TP Section 1.4 (Mandatory Configuration Elements),

"**Geotechnical Engineering Report**" means a report prepared by Design-Builder in accordance with TP Section 8.3 (Investigation and Reporting Requirements) detailing the subsurface conditions of portions of the Project Limits and Project-specific requirements for the design and construction of the Project

"**Good Industry Practice**" means the exercise of the degree of skill, diligence, prudence and foresight that would reasonably and ordinarily be expected from time to time from a skilled and experienced designer, engineer, constructor, or other contractor (i) performing high quality work such as the Work, (ii) that seeks in good faith to comply with its contractual obligations (i.e., with respect to the Project, complying with the Design-Build Documents) and all applicable Laws and Governmental Approvals, (iii) that (A) with respect to design or engineering matters, uses the skill, care, diligence, and professional standards ordinarily used by similarly-situated design or engineering professionals, or (B) with respect to construction matters, uses the skill, care, diligence, and professional standards used by similarly-situated professional construction companies, and in either case, seeking to comply with professional standards in their respective disciplines that are accepted as the standards of the industry in the State, (iv) that seeks to perform such high quality work in a manner commensurate with standards of safety, performance, dependability, efficiency, and economy as would other skilled and experienced designers, engineers, constructors, or other contractors, as applicable, engaged in the same type of undertaking (A) in the United States, (B) under similar circumstances and conditions (including environmental conditions), and (C) as are generally considered prudent practices in the exercise of reasonable judgment and in light of facts then-known when a relevant decision was made or action was taken. Good Industry Practice is not intended to be the optimum practices, methods, etc., to the exclusion of all others, but rather a spectrum of possible, but reasonable, practices, methods, etc., having due regard for, among other things, contractual and legal obligations as well as manufacturers' requirements and warranties.

"**Governmental Approval**" means any registration, permit, license, consent, concession, grant, franchise, authorization (statutory or otherwise), waiver, variance, permission or other approval, mitigation agreement, special provision, or memoranda of agreement/understanding, and any amendment or modification of any of them provided or issued by Governmental Entities (including GDOT, each acting in their respective regulatory capacity and not in their respective capacities under this Design-Build Agreement), including State, local, or federal regulatory agencies, agents, or employees, which authorize or pertain to the Project or the Work. Governmental Approvals include all Environmental Approvals.

"**Governmental Entity**" means any federal, State or local government and any political subdivision or any governmental, quasi-governmental, judicial, public or statutory instrumentality, administrative agency, authority, body or entity other than GDOT (in either case, acting in its capacity as contract counterparty or agent, but not in its regulatory capacity), in each case, exercising executive, legislative, judicial, regulatory, administrative, or taxing functions.

"**GPAS Permit**" means a utility encroachment permit issued by GDOT to a Utility Owner with respect to any area within the Project Limits.

"**Green Book**" means the AASHTO A Policy on Geometric Design of Highways and Streets.

"**Guarantor**" means any Person that is the obligor under any guaranty in favor of GDOT required under the Design-Build Agreement.

"**Guaranty**" means any and each guaranty of any or all of the obligations of Design-Builder, to include the guaranty, as and to the extent required pursuant to the ITP, in such form as provided in Form Y to the ITP, or in such other form as GDOT has approved, in its sole discretion, and subject to DBA Section 16.3 (*Guaranties*).

"**Hazardous Materials**" means any element, chemical, compound, product, waste, material or substance, whether solid, liquid or gaseous, of any nature whatsoever, which at any time is defined, listed, classified or otherwise regulated in any way under any Environmental Laws, or any other such substances or conditions that may create any unsafe or hazardous condition or pose any threat to health (including human health), safety, or the indoor or outdoor Environment. "Hazardous Materials" includes the following:

(a) hazardous wastes, hazardous material, hazardous substances, hazardous constituents, and toxic (including reproductivity toxic), ignitable, corrosive, reactive, carcinogenic properties, substances or related materials, including properties, substances or materials defined, listed, classified, included in, or otherwise regulated under or pursuant to any Environmental Law as a "hazardous waste", "hazardous material", "hazardous substance", "extremely hazardous waste", "acutely hazardous waste", "radioactive waste", "radioactive materials", "bio-hazardous waste", "pollutant", "toxic pollutant", "contaminant", "restricted hazardous waste", "infectious waste", "toxic substance", "toxic waste", "toxic material", or any other term or expression intended to define, list, classify, or include in any concept substances by reason of properties harmful to health, safety or the indoor or outdoor Environment (including harmful properties of "TCLP toxicity" or "EP toxicity" or words of similar import under any applicable Environmental Laws);

(b) any petroleum, including crude oil and any fraction thereof, and including any refined petroleum product or any additive thereto or fraction thereof or other petroleum derived substance; and any waste oil or waste petroleum byproduct or fraction thereof or additive thereto;

(c) any drilling fluids, produced waters and other wastes associated with the exploration, development or production of crude oil, natural gas or geothermal resources;

(d) any flammable substances or explosives, including unexploded ordnance;

(e) any radioactive materials;

(f) any polychlorinated biphenyls (PCBs), asbestos or asbestos-containing materials

(g) any other hazardous building materials in structures and/or other improvements on or in the Site or in subsurface artifacts;

(h) any lead, cadmium, or lead-based paint, or any other heavy metal-based paint or material;

(i) any radon or radon gas;

(j) any methane gas or similar gaseous materials, and any natural gas, synthetic gas, or mixtures thereof;

(k) any urea formaldehyde foam insulation;

(l) electrical equipment and components which contains any oil or dielectric fluid containing regulated levels of polychlorinated biphenyls;

(m) pesticides, herbicides, or fungicides;

(n) mold (and other mycotoxins, fungi) or fecal material;

(o) any solvent, solvent waste, including any refined solvent product, and any waste solvent or waste solvent byproduct, including any additive, byproduct, or fraction of any of the foregoing;

(p) per- and polyfluoroalkyl substances, and per- and poly fluorinated substances or compounds;

(q) silica;

(r) any metal listed in or regulated by or pursuant to RCRA;

(s) "Hazardous Waste" as defined in 40 C.F.R. Part 261 (to the extent not already included within this definition of "Hazardous Materials");

(t) "hazardous waste", "hazardous constituent", "designated hazardous waste," and "solid waste", each as defined under O.C.G.A. § 12-8-62;

(u) any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any Governmental Entity or which may or could pose a hazard to the health and safety of the owners, operators, Users or any Persons in the vicinity of the Project or to the indoor or outdoor Environment;

(v) soil, or surface water or ground water, contaminated with Hazardous Materials as defined above; and

(w) any element, chemical, compound, product, waste, material or substance, whether solid, liquid or gaseous, which may give rise to liability under any Environmental Law or common law theory based upon negligence, trespass, intentional tort, nuisance, or strict liability, or under any reported decisions of any State or federal court of law (having jurisdiction over the Project).

"**Hazardous Materials Management**" means procedures, practices and activities, exercised in accordance with Good Industry Practice, to address and comply with Environmental Laws and Environmental Approvals with respect to Hazardous Materials encountered, impacted, disturbed, released, caused by or occurring in connection with the Project or the Work, as well as investigation and remediation of such Hazardous Materials. Hazardous Materials Management may include sampling, characterization, handling, stock-piling, storage, backfilling in place, asphalt batching, recycling, treatment, collection, containment, clean-up, remediation, transportation and/or off-site disposal of Hazardous Materials, whichever approach is most technically appropriate, effective, and cost-efficient and authorized under applicable Law.

"**Hazardous Materials Release**" means any spill, leak, emission, release, discharge, injection, escape, leaching, pouring, pumping, emptying, dumping, or disposal of Hazardous Materials into the soil,

air, water, surface, groundwater, submerged lands or Environment, including any exacerbation of an existing release or condition of Hazardous Materials contamination.

"**Highway**" means a travel way for vehicular traffic that is included in the State or federal highway system.

"**Highway Service Systems**" means GDOT's or a Governmental Entity's lighting and electrical systems, traffic control systems (including streetlights and other lighting systems (including for the Project), traffic signals, ramp metering systems, flashing beacon systems), communications systems and irrigation systems serving street or highway purposes (including ITS, fiber, and Intelligent Vehicle Highway System facilities).

"**Hour**" means a period of 60 minutes in a day, the first such period (calculated with reference to a 24 hour clock) commencing at 00:00 hours on that day, and each further period commencing on the hour.

"**Immigration Act**" has the meaning set forth in DBA Section 10.6.4 (*Labor Standards*).

"**Incident**" means any unplanned event during the course of construction.

"**Incident Commander**" has the meaning set forth in TP Section 19.5.1 (Operational Support Responsibilities).

"**Incidental Utility Adjustment Work**" means all of the following as necessary for the construction of the Project:

(a) Temporary Utility Adjustments;

(b) Utility Adjustments of Service Lines;

(c) Protections in Place;

(d) The Utility Adjustment of Utility appurtenances (e.g., manholes, valve boxes, vaults) for line and grade upon completion of roadway Work;

(e) All other Work necessary to remove any Utilities (whether or not in use as of the Effective Date) in situations in which leaving the Utilities in place is not feasible or permitted, or for facilities that Design-Builder proposes be removed to accommodate or permit construction of the Project, regardless as to whether replacements for such Utilities are being installed in other locations; and

(f) All Work necessary to abandon in place any Utility in accordance with proper procedures (e.g., flushing, capping, slurry backfill, etc.).

"**Increased Oversight**" has the meaning set forth in DBA Section 17.3.8.1 (*Increased Oversight, Testing, and Inspection*).

"**Indemnified Parties**" means GDOT, the State, the State Transportation Board, and their respective agencies, departments, divisions, and other Constituents. "Indemnified Party" shall mean any of the aforementioned.

"**Initial Compensation Event Notice**" has the meaning set forth in DBA Section 13.1.3.1 (*Initial Compensation Event Notices*).

"**Initial Relief Event Notice**" has the meaning set forth in DBA Section 13.1.3.1 (*Initial Relief Event Notices*).

"**Instructions to Proposers**" means the instructions to proposers included in the RFP, containing directions for the preparation and submittal of information by the proposers in response to the RFP.

"**Insurance Policies**" means any or all of the insurance policies Design-Builder is required to carry pursuant to DBA Section 16.1 (*Insurance*) and DBA Exhibit 16 (*Insurance Coverage Requirements*) as well as DBA Section 7.10 (*Railroad-Highway Matters*), as may be applicable.

"**Intellectual Property**" means all current and future legal and/or equitable rights and interests in know-how (including trade secrets and confidential business information that have been recorded in or on any media), patents (including applications), copyrights (including moral rights), trademarks (registered and unregistered), service marks, trade names, trade dress, trade secrets, trade secret rights, designs (registered and unregistered), other design rights, logos, utility models, circuit layouts, plant varieties, database rights, business and domain names (including fictitious business names), inventions (patentable or not), solutions embodied in technology, other intellectual activity, other proprietary information, all analogous rights in other jurisdictions and applications (drafted or pending) of or for any of the foregoing, subsisting in or relating to the Work, the Project, Project design data or other Project data (including testing data, traffic data and Project Data). Intellectual Property includes software used in connection with the Project (including software used for management of traffic on the Project), and Source Code and Source Code Documentation, as well as other proprietary pricing information. Intellectual Property is distinguished from Submittals and Formal Communications and the physical construction and equipment itself and from data, sketches, charts, calculations, drawings, layouts, plans, depictions, specifications, manuals, electronic files, artwork, records, reports, analyses, studies, correspondence, and other documents and materials created or collected under the terms of, or otherwise under the Design-Build Documents, and other work product and other related materials that disclose Intellectual Property.

"**Intelligent Transportation System**" means the intelligent transportation system for the Project meeting the requirements, and as further defined in, TP Section 17 (Intelligent Transportation Systems).

"**Interim Milestone**" means any or all of the Related Project Configuration Work – [_____] Project and Early Opening – [_____], as context may require.

"**Interim Milestone Completion Date**" means the date upon which Design-Builder achieves an Interim Milestone.

"**Interim Milestone Deadline**" means the deadline and committed date for achievement of each Interim Milestone, as set forth in the Milestone Schedule, as such deadline may be extended from time to time pursuant to this Design-Build Agreement. The initial Interim Milestone Deadlines are the dates identified as such with respect to each Interim Milestone in the Proposal.

"**Interim Utility As-Builts**" means the interim Utility As-Builts described in TP Section 7.4.6.3 (Interim Utility As-Builts).

"**Internal Revenue Code**" means the Internal Revenue Code of 1986, as amended and the U.S. Treasury Regulations promulgated thereunder.

"**Interpretive Engineering Decision**" has the meaning set forth in DBA Section 1.6 (*Interpretive Engineering Decisions*).

"**Invoice**" or "**Design-Builder Invoice**" has the meaning set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

"**Invoice Amount**" has the meaning set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

"**Invoice Period**" has the meaning set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

"**Invoice Support Package**" has the meaning set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

"**ITS Batch**" means the batch of ITS Sites included by Design-Builder and accepted by GDOT in accordance with TP Section 17.4 (Site Acceptance).

"**ITS Batch Acceptance**" meaning set forth in TP Section 17.2.5 (ITS Infrastructure Implementation Plan Requirements).

"**ITS Site Acceptance**" has the meaning set forth in Section 3 of TP Attachment 17-4 (ITS Acceptance Requirements).

"**ITS Sites**" is described in TP Section 17.2.5 (ITS Infrastructure Implementation Plan Requirements).

"**Key Contract**" means any one of the following Contracts for Work that Design-Builder or Design-Builder's Contractor's causes to be performed:

(a) all prime construction Contracts;

(b) all project or program management services, architectural design, or engineering Contracts (including the Contract with the Lead Design Consultant);

(c) all other Contracts with a single Contractor or Subcontractor which individually or in the aggregate total in excess of 25% of the Contract Sum; and the term "Key Contracts" shall mean all such Contracts in the aggregate or more than one of such Contracts; and

"**Key Contractor**" means any Contractor or Subcontractor, as the case may be, under any Key Contract.

"**Key Personnel**" means those individuals appointed by Design-Builder and approved by GDOT from time to time to fill the "Key Personnel" positions listed in TP Attachment 2-1 (Key Personnel and Required Personnel). The specific individuals appointed by Design-Builder and approved by GDOT to initially fill certain of the Key Personnel positions are identified in DBA Exhibit 2 (*Proposal Commitments*). "Key Personnel" include those persons who replace such initial individuals in accordance with DBA Section 10.4.1 (*Key Personnel*).

"**Landscaping Work**" means planting and establishing vegetative ground cover and all other landscaping work in accordance with the requirements of the Technical Provisions.

"**Lane Closure**" means the occurrence, for any duration of time, where all or part of any travel or traffic lane, shoulder, ramp, direct connector, or cross street within the Project Limits, or where access to

or use of the same is blocked, closed, or restricted, or where the width of the same is less than the minimum requirements.

"**Lane Closure Deduction**" means the deduction from amounts payable by GDOT to Design-Builder for each Lane Closure (or fraction thereof) as set forth in DBA Exhibit 12 (*Lane Closure Deductions*).

"**Latent Defect**" means any defect, imperfection, error, omission, deficiency, or other condition, inherently lying within an Eligible Existing Improvement, in each case whether by design, construction, installation that affects the condition, use, functionality or operation of such Eligible Existing Improvement, that

(a) is not disclosed by or on behalf of GDOT, properly inferable, or readily discoverable by Reasonable Investigation or, following the Setting Date, by a reasonable or customary inspection, in keeping with Good Industry Practice in connection with Work associated with the Eligible Existing Improvement,

(b) is caused by design or construction errors based on codes, standards, and specifications in effect at the time of the original design and construction of the Eligible Existing Improvement,

(c) negatively impacts the use of the Eligible Existing Improvement from that intended at the time of the original design and construction,

(d) is within a portion of the Eligible Existing Improvement that is essential to the operation or safety of the Project, and

(e) could only have been discovered by intrusive testing or dismantling of some or all of the Eligible Existing Improvement,

and, in each case would cause or have the potential to cause one or more of the following:

(i) a hazard, nuisance or other risk to public or worker health or safety, including the health and safety of Users;

(ii) a structural deterioration of the affected part of the Eligible Existing Improvements that are connected to any portion of the Project;

(iii) damage to a third party or a third party's property or equipment; or

(iv) damage to the Environment.

"**Law**" or "**Laws**" means (a) any statute, law, code, regulation, ordinance, rule or common law, (b) any binding judgment (other than regarding any Dispute), (c) any binding judicial or administrative order or decree (other than regarding any Dispute), or (d) any written directive or other governmental restriction (including those resulting from the initiative or referendum process, but excluding those by GDOT within the scope of its administration of the Design-Build Documents or in the normal course of its adoption of new or revised technical standards pursuant to DBA Section 7.2.6 (*Performance, Design and Construction Standards; Deviations; Design Exceptions*)), in each case which is applicable to the Project or the Work or any party to this Design-Build Agreement or affiliated Person, whether taking effect before or after the Effective Date, including Environmental Laws. "Law" includes any federal or State emergency declaration, travel restriction, or other order, decree, directive, or requirement, in each case, having the force of law

regarding public conduct in response to COVID-19 or any other epidemic or pandemic. "Laws", however, excludes Governmental Approvals.

"**Lead Contractor Project Manager**" means the individual person, identified in the SOQ and included in Design-Builder's Proposal, who fulfills this Key Personnel role as further described in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Lead Design Consultant**" means the entity (whether a single incorporated entity or an incorporated or unincorporated joint venture) with primary responsibility for preparation of the detailed plans and specifications for construction of the Project.

"**Lead Design Consultant Project Manager**" means the individual person, identified in the SOQand included in Design-Builder's Proposal, who fulfills this Key Personnel role as further described in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Lien**" means any pledge, lien, security interest, mortgage, deed of trust or other charge or encumbrance of any kind, or any other type of preferential arrangement (including any agreement to give any of the foregoing, any conditional sale or other title retention agreement, any lease in the nature of a security instrument and the filing of or agreement to file any financing statement under the Uniform Commercial Code of any jurisdiction).

"**Liquidated Damages**" means such liquidated damages as may accrue and be due and payable by Design-Builder to GDOT as set forth under DBA Section 17.4 (*Liquidated Damages; Lane Closure Deductions; Nonrefundable Deductions*); DBA Exhibit 12 (*Lane Closure Deductions*), and DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

"**Load and Resistance Factor Design**" means the governing structural design code for bridges and other highway structures in the United States as set forth in the AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals and AASHTO LRFD Bridge Design Specifications.

"**Loss**" or "**Losses**" means, whether asserted, suffered, or incurred, any loss, damage, injury, liability, obligation, cost, response cost, expense (including attorneys', accountants' and expert witnesses' fees and expenses (including those incurred in connection with the enforcement of any indemnity or other provision)), fee, charge, judgment, penalty, fine or Third Party Claims, in each case whether actual, prospective, or contingent, and whether or not then-currently ascertainable. Losses include injury to or death of persons, damage or loss of property, loss of or damage to valuable papers and records, and harm or damage to natural resources.

"**Maintenance During Construction**" means all work and activities (excluding associated Administrative Work) related to the management, administration, maintenance, repair, preservation, modification, reconstruction, rehabilitation, restoration, renewal and replacement of the Project during the Construction Period (or commencing at such earlier date as may be agreed by the Parties or directed by GDOT), all as more fully set forth in TP Section 19 (Maintenance).

"**Maintenance Management Plan**" means the maintenance management plan set forth in TP Section 19 (Maintenance).

"**Major Culvert**" has the meaning set forth in TP Section 12.3.9.1 (Drainage Report for Hydraulic Structures (Riverine Bridges and Major Culverts)).

"**Management Plans**" means all of the management plans identified in TP Section 2.3 (Management Plan).

"**Milestone**" means each of the milestones for commencement and/or completion of the Work set forth in the Milestone Schedule.

"**Milestone Deadline**" means the deadline for completion or commencement, as applicable, of each respective Milestone, as set forth in DBA Exhibit 9 (*Milestone Schedule*), as further adjusted pursuant to any Supplemental Agreement.

"**Milestone Schedule**" means the schedule of Milestone Deadlines set forth in DBA Exhibit 9 (*Milestone Schedule*), as may be adjusted upon approval of the Baseline Project Schedule as set forth in DBA Section 3.3 (*Contract Time, Date of Commencement, and Notice to Proceed*) and as may be further adjusted pursuant to any Supplemental Agreement, including on account of any Relief Events.

"**Minimum Qualifications (Key Personnel)**" means for each Key Personnel, the "minimum qualifications" set forth for that Key Personnel in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Minimum Qualifications (Required Personnel)**" means for each Required Personnel, the "minimum qualifications" set forth for that Required Personnel in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Month**" means a calendar month.

"**Monthly Acquisition Services Status Report**" is the report described in TP Section 6.2.6 (Monthly Acquisition Services Status Report).

"**Monthly Lane Closure Deduction**" means the amount calculated in accordance with DBA Exhibit 12 (*Lane Closure Deductions*).

"**MS4 Permit**" means the Municipal Separate Storm Sewer System Permit, or GDOT's General NPDES Stormwater Permit No. GAR 041000, depending on the context.

"**National Contingency Plan**" means the "National Oil and Hazardous Substances Pollution Contingency Plan" described in 40 C.F.R. Part 300, as amended from time to time.

"**NCR1**" has the meaning set forth in TP Section 3.6.4 (Nonconforming Work Classification).

"**NCR2**" has the meaning set forth in TP Section 3.6.4 (Nonconforming Work Classification).

"**Necessary Basic Configuration Change**" means a change in the Basic Configuration that is necessary to meet the requirements of the Design-Build Documents as a result of an Error in the Basic Configuration and, further to DBA Section 6.2.11 (*Provided Environmental Approval Re-evaluation*), a re-evaluation, amendment, or supplement of the NEPA Approvalis/are required. For purposes of this definition, a change is "necessary" only if the Error renders Design-Builder unable to meet the requirements of the Design-Build Documents without a material change to the Basic Configuration.

"**NEPA Approval**" means the Environmental Assessment and FONSI, the Environmental Impact Statement and Record of Decision, and the Categorical Exclusion Determination, as applicable to the

Project, and in each case as may be modified by any supplements and re-evaluations, if applicable, pertaining to the Project.

"**NEPA Basic Configuration**" means the schematic design, established disturbance limits to support assumed construction means and methods and other studies, schematics or information on which the NEPA Approval was based.

"**NEPA Finality Date**" means the date NEPA Approval becomes final and non-appealable and the federal statute of limitations for commencing legal action to challenge the validity of any NEPA Approval has expired

"**New Interest**" means any permanent right, title or interest in real property outside of the Project Limits (e.g., a fee or an easement) that is acquired for a Utility being reinstalled in a new location as a part of the Utility Adjustment Work. The term specifically excludes any statutory right of occupancy or permit granted by a Governmental Entity for occupancy of its real property by a Utility.

"**Noise Addendum**" means the addendum to a noise impact assessment prepared in accordance with, which validates the results of the noise impact assessment and documents changes from the NEPA Basic Configuration.

"**Noise Barrier**" means a structure that is constructed between the highway noise source and the noise sensitive receptor(s) that lowers the noise level, including stand-alone noise walls, noise berms (earth or other material), and combination berm/wall systems.

"**Noise Barrier Baseline Requirements**" means the requirements set forth in TP Table 5-5 (Proposed Noise Barrier Baseline Requirements).

"**Nonconformance Report**" means a report initiated by Design-Builder within the PMCS (also subject to initiation and modification by GDOT, documenting the status, proposed remedial action and disposition of each instance of Nonconforming Work, as further described in TP Section 3.5 (Nonconforming Work).

"**Nonconforming Work**" means any D&C Work that:

(a) otherwise does not conform to the requirements of the Design-Build Documents;

(b) is not constructed in accordance with the Released for Construction Design Documents or the Construction Documents;

(c) is not conducted in accordance with the Project Management Plan; or

(d) does not conform the requirements of Governmental Approvals or applicable Laws.

"**Nonconforming Work Remedy**" means action taken by Design-Builder to bring, rebuild, rework, upgrade, enhance, repair, rectify or otherwise improve Nonconforming Work such that it would then meet the requirements of this Design-Build Agreement.

"**Nonrefundable Deductions**" means those incidents and occurrences listed in Section 1.4 of DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

"**Notice**" means all Formal Communications (a) titled "Notice" or "Notice of …" as prescribed under the Design-Build Documents, (b) required to be communicated as a "Notice" or "notice" under the Design-Build Documents, or (c) given or received in connection with any Dispute Resolution Procedure or other legal or quasi-legal proceeding with respect to the Project.

"**Notice of Design Change**" has the meaning set forth in TP Section 4 (Design Documents).

"**Notice of Termination for Convenience**" means Notice issued by GDOT to Design-Builder terminating the Design-Build Agreement in whole or in part for convenience.

"**Notice of Utility Failure to Cooperate**" has the meaning set forth in DBA Section 7.5.8.3 (*Failure of Utility Owners to Cooperate*).

"**Notice to Proceed**" means a Notice issued by GDOT to Design-Builder authorizing Design-Builder to proceed with the portion of the Work as being designated as subject to such notice to proceed in the then-applicable Baseline Project Schedule, including NTP1, NTP2, and NTP3.

"**NRD Notice**" means a Notice that GDOT delivers to Design-Builder pursuant to the table within Section 1.5 of DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*) and DBA Section 17.4.2.5 (*Nonrefundable Deductions Assessment Process*).

"**NTP1**" means a Notice issued by GDOT to Design-Builder authorizing Design-Builder to proceed with the portion of the Work described in DBA Section 3.3.2 (*Notice to Proceed 1*).

"**NTP2**" means a Notice issued by GDOT to Design-Builder authorizing Design-Builder to proceed with the portion of the Work described in DBA Section 3.3.3 (*Notice to Proceed 2*).

"**NTP3**" means a Notice issued by GDOT to Design-Builder pursuant to DBA Section 3.3.4 (*Notice to Proceed 3*) authorizing Design-Builder to proceed with the remaining Work and other activities pertaining to the Project.

"**OJT Goal**" has the meaning set forth in Section 2.1 (*OJT Goal and Requirements*) of the OJT Requirements.

"**OJT Plan**" means the plan defined in Section 1(a) (*OJT Plan - Objectives*) of the OJT Requirements.

"**OJT Progress Report**" has the meaning set forth in Section 5(d) (Documentation of Efforts and Reporting) of the OJT Requirements.

"**OJT Requirements**" means DBA Exhibit 14 (*OJT Requirements*).

"**Open Book Basis**" means allowing GDOT to review all underlying assumptions, information, documents and data associated with the issue in question, including assumptions as to costs of the Work, schedule, composition of equipment spreads, equipment rates (including rental rates), labor rates and benefits, productivity, estimating factors, design and productivity allowance, contingency and indirect costs, risk pricing, discount rates, interest rates, inflation and deflation rates, gross commercial revenues, insurance rates, insurance proceeds, credits and refunds, overhead, profit, and other items reasonably required by GDOT to satisfy itself as to the reasonableness and accuracy of any amount.

"**Open Records Act**" means the Georgia Open Records Act, O.C.G.A. §§ 50-18-70 *et seq.*, as amended from time to time.

"**Option Agreement**" has the meaning set forth in DBA Section 2.5.7 (*State Proposed/Design-Builder Acquired Right of Way*).

"**Over-the-Shoulder**" means the "over-the-shoulder" review (as such principle is generally used in the design and construction industries) conducted by GDOT in accordance with DBA Section 6.3.7.5 (*GDOT Oversight*).

"**Owner Intellectual Property**" has the meaning set forth in DBA Section 20.5.1 (*Owner Intellectual Property*).

"**P&P Bonds**" means the performance and payment surety bonds, each meeting the requirements of DBA Section 16.2.1 (*P&P Bonds*).

"**P&P Obligor**" means the Person identified as the obligor or account party in the P&P Bonds, as applicable.

"**Pandemic Event**" means the occurrence of an epidemic or pandemic in the State or directly affecting the State (including the continuation of the COVID-19 pandemic after the Setting Date), where:

(a) Such occurrence is the subject of a Change in Law, including any federal or State emergency declaration, travel restriction, or other order, decree, directive, or requirement regarding public conduct in response to such epidemic or pandemic; and

(b) Such Change in Law prohibits the performance of a substantial part of the Construction Work on the Project Limits or travel to or from the Project Limits.

"**Parcel**" means an individual parcel of property and, with respect to:

(a) State Proposed/State Acquired Right of Way and State Proposed/Design-Builder Acquired Right of Way, the parcels identified in DBA Exhibit 4 (*Parcel Acquisition Table*);

(b) Design-Builder Proposed/Design-Builder Acquired Right of Way, the parcels identified as such by Design-Builder in its ROW Acquisition Plan; and

(c) Design-Builder Proposed/State Acquired Right of Way, the parcels identified as such by Design-Builder in its ROW Acquisition Plan or at such later date due to a GDOT Change.

"**Parcel Acquisition Services**" means the services Design-Builder is required to perform and other requirements Design-Builder is required to meet with respect to the acquisition of a Parcel, as set forth in TP Section 6.4 (Parcel Acquisition Services).

"**Parcel Acquisition Table**" means the table set forth at DBA Exhibit 4 (*Parcel Acquisition Table*), as updated in accordance with TP Section 6.4.1.2 (Design Contingent ROW Parcels).

"**Parcel Availability Date**" means:

(a) with respect to each Parcel of State Proposed/State Acquired Right of Way, the date either (i) specified as the "Parcel Availability Date (State Acquired)" in DBA Exhibit 4 (*Parcel*

Acquisition Table) for each Parcel or (ii) determined under DBA Section 2.4.2.2 (*State Proposed/State Acquired Right of Way*); [or]

(b) with respect to a Parcel of Design-Builder Proposed/State Acquired Right of Way, the date determined under DBA Section 2.7.5 (*Design-Builder Proposed/State Acquired Right of Way*) or

(c) with respect to a Parcel of Design-Builder Proposed/Design-Builder Acquired Right of Way, the date determined under DBA Section 2.6.2.2 (*Design-Builder Proposed/Design-Builder Acquired Right of Way*)

"**Parcel Displacee**" means with respect to each Parcel, a Parcel Owner, lessee, licensee, occupant or other person with compensable interest in the Parcel.

"**Parcel Access Date**" means, for each Parcel, the date determined in accordance with DBA Section 2.8 (*Access to Certain Parcels within the Project Limits*).

"**Parcel Owner**" means with respect to each Parcel, the owner of record of title or holder of any other real property interest with respect to such Parcel.

"**Part-Time**" means the full amount of time necessary for the proper performance of assigned responsibilities on the Site, where such time commitment is less than Full-Time. A part-time commitment to the Project means availability at such times, dates, and durations per week as may be required for the Work. A part-time commitment does not preclude having work responsibilities assigned by Design-Builder, any Contractor, or any Affiliate of Design-Builder or any Contractor with respect to a project other than the Project.

"**Party**" or "**party**" means Design-Builder or GDOT, as the context may require, and "**Parties**" or "**parties**" means Design-Builder and GDOT, collectively. "Parties" or "parties" exclude third parties or references based upon context to third parties.

"**Pavement Limits**" means that portion of the Project Limits within which pavement Work (not pavement-related Design Work) is conducted.

"**Permanent Works**" means all the permanent, furnished, and installed Construction Work and all parts and materials thereof, as context may require.

"**Persistent Breach**" means any breach of this Design-Build Agreement other than a breach that arises as a direct result of the occurrence of a Compensation Event or a Relief Event that, in either case, (a) continues for more than 30 consecutive days, or (b) occurs more than three times in any rolling six-month period, measured to the day, after GDOT gave a Warning Notice.

"**Person**" means any individual (i.e., natural person), estate, corporation, joint venture, limited liability company, company, voluntary association or other association, partnership, trust, unincorporated organization, Governmental Entity, or GDOT.

"**Plans**" means (only where capitalized) plans, profiles, cross-sections, contract drawings, working drawings, supplemental drawings, detail sheets or exact reproductions thereof, which show the location, character, dimensions and details of the Construction Work to be done.

"**PML Study**" has the meaning set forth in DBA Exhibit 16 (*Insurance Coverage Requirements*).

"**Post-Acquisition Services**" means the services Design-Builder is required to perform and other requirements Design-Builder is required to meet with respect to the acquisition of a Parcel, as set forth in TP Section 6.5 (Post-Acquisition Services).

"**Post-Construction Stormwater Report**" means the report prepared by Design-Builder in accordance with TP Section 12.3.8.2 (Municipal Separate Storm Sewer System (MS4)).

"**Post-Let Utility Certification**" means the certification obtained under TP Section 7 (Utility Adjustments).

"**Pre-Acquisition Services**" means the services Design-Builder is required to perform and other requirements Design-Builder is required to meet with respect to the acquisition of a Parcel, as set forth in TP Section 6.3 (Pre-Acquisition Services).

"**Preconstruction Baseline Project Schedule**" means the Baseline Project Schedule provided by Design-Builder no later than thirty days after issuance of NTP1, prepared in accordance with TP Section 2.4.2.1 (Preconstruction Baseline Project Schedule), which schedule is consistent with the Milestones set forth in DBA Exhibit 9 (*Milestone Schedule*) and the Milestone Schedule itself.

"**Preconstruction Baseline Schedule of Values**" means the SOV provided by Design-Builder to GDOT in accordance with TP Attachment 2-7 (SOV and Price-Loading Requirements).

"**Pre-existing Hazardous Materials**" means Hazardous Materials that are in, on or under the Existing Right of Way and the State Proposed/State Acquired Right of Way as of the date GDOT makes available to Design-Builder the relevant parcel. "Pre-existing Hazardous Materials" do not include any Hazardous Materials located in, on or under any Temporary Interests, any Design-Builder Proposed Right of Way, or any Design-Builder Acquired Right of Way. "Pre-existing Hazardous Materials" exclude any such conditions known to Design-Builder prior to the Setting Date, of the type, quantity, location set forth, or otherwise identified, in the Reference Information Documents, or that would become known to Design-Builder prior to the Setting Date by undertaking Reasonable Investigation. For purposes of determining whether Hazardous Materials were in, on, or under the Site, as of the relevant date specified in the first sentence of this definition, Design-Builder shall have the burden of proof to demonstrate it was not a Design-Builder Hazardous Materials Release. For the purpose of this definition, "makes available" means: (x) the Effective Date, except for parcels not yet acquired as of the Effective Date; and (y) as to State Proposed Right of Way/State Acquired Right of Way not yet acquired as of the Effective Date, the date Design-Builder first receives the right to take and maintain possession of the Parcel for all purposes for the remainder of the Term in accordance with the Design-Build Documents, including commencement of construction, as the result of Design-Builder's or GDOT's having secured title or right of possession by contract or title instrument or by a special commissioners' award through the eminent domain process or otherwise.

"**Precedence Diagram Method**" means a method of constructing a schedule network diagram that uses boxes, referred to as nodes, to represent activities consisting of durations and connects them with arrows that show the dependencies for use in forward pass and backward pass schedule network calculations to establish each activity's early dates and late dates, respectively.

"**Preliminary Design Documents**" means the Design Documents described in TP Section 4.3.1 (Preliminary Design Documents).

"**Professional Engineer**" means a person who is duly licensed and registered by the Georgia State Board of Registration for Professional Engineers and Land Surveyors to engage in the practice of engineering in the State of Georgia.

"**Professional Land Surveyor**" means a person who is duly licensed and registered by the Georgia State Board of Registration for Professional Engineers and Land Surveyors to engage in the practice of land surveying in the State of Georgia.

"**Project**" means the I-75 at Bethlehem Road Interchange Project as defined in the RFP, that is the subject, and which shall include the transportation facilities and all related Permanent Works and other structures, improvements, and communications systems used in connection with operation of such transportation facilities, to be developed, designed, and constructed pursuant to the terms of the Design-Build Documents. The Project is also briefly summarized in Recital C.

"**Project Data**" means all data, calculations, electronic files, records, reports, analyses, maps, computations, logs, and all other work product and other materials created, displayed, or collected under the terms of the Design-Build Documents, whether from Owner Intellectual Property or Proprietary Intellectual Property. "Project Data" as a product is distinguished from the Intellectual Property that produced it.

"**Project Inspection Checklist**" has the meaning set forth in DBA Section 2.5.5 (*State Proposed/Design-Builder Acquired Right of Way*).

"**Project Limits**" means:

(a) the Existing Right of Way;

(b) when acquired, the State Proposed/State Acquired Right of Way;

(c) when acquired, the State Proposed/Design-Builder Acquired Right of Way;

(d) when acquired, Design-Builder Proposed/Design-Builder Acquired Right of Way;

(e) the limits identified under those Third Party Agreements with Governmental Entities as set forth in TP Attachment 23-1 (Third Party Agreements);

(f) the Property; and

(g) when acquired, Design-Builder Proposed/State Acquired Right of Way (if any).

For avoidance of doubt, it is the intention of the Parties that, upon completion of the Project, the Project Limits include all of the Property, as may be amended pursuant to any re-evaluation, amendment, or supplement to a Provided Environmental Approval upon which the Basic Configuration, in whole or in part, was premised.

"**Project Management Controls System**" has the meaning set forth in TP Section 2.5 (Project Management Controls System).

"**Project Management Plan**" means the document described in TP Section 2.3.1.1 (Project Management Plan).

"**Project Office**" means the office established by Design-Builder in accordance with TP Section 1.6 (Offices) and TP Attachment 1-5 (Project Office Facilities and Equipment).

"**Project Payments**" means the portion of the Contract Sum, as may be adjusted pursuant to the Design-Build Agreement, to be paid by GDOT to Design-Builder monthly, further to an Invoice. Project Payments are payments actually made by GDOT, not Invoice Amounts asserted by Design-Builder (or as adjusted by GDOT).

"**Project Schedule**" means the Preconstruction Baseline Project Schedule, Construction Baseline Project Schedule, or Revised Baseline Project Schedule, as and when the operative schedule for the Work, as well as the Project Schedule Updates.

"**Project Schedule Narrative**" means a separate typewritten report submitted with each Project Schedule.

"**Project Schedule Update**" means a Submittal provided by Design-Builder after the Baseline Project Schedule is accepted that shows actual progress information through a given update interval and forecasts Design-Builder's remaining plan to complete the Work.

"**Project Standards**" means those standards, manuals, and guidelines, policies, details, specifications (including GDOT Standard Specifications (defined term)), and special provisions (including the Special Provisions (defined term)) set forth in TP Attachment 1-4 (Project Standards) in the form most recently published and in effect on the Setting Date, as such Project Standards may be changed, added to or replaced pursuant to the Design-Build Documents. For avoidance of doubt, (a) Adjustment Standards are not "Project Standards," and (b) Railroad Standards are "Project Standards".

"**Project Standards Change**" means any addition, alteration, or other change to the Project Standards, excluding any additions, alterations, or other changes that are required pursuant to a Change in Law or that relate to Railroad Standards.

"**Property**" has the meaning set forth in DBA Section 2.2.1 (*Right of Way; Property Ownership*) (which generally is only such property as identified in the Provided Environmental Approvals including specifically the NEPA Approval upon which the Basic Configuration, in whole or in part, was premised.).

"**Proposal**" has the meaning set forth in Recital F.

"**Proposal Commitments**" means those portions of the Proposal set forth in DBA Exhibit 2 (*Proposal Commitments*).

"**Proposal Due Date**" means October 2, 2025, the deadline for submission of the Proposal to GDOT.

"**Proposer**" means the "Apparent Successful Proposer" (or such other Proposer that succeeds in award of this Design-Build Agreement)selected in accordance with (and as defined under) the RFP), which is or is affiliated with Design-Builder.

"**Proprietary Intellectual Property**" means Intellectual Property created, used, applied or reduced to practice in connection with the Project or the Work that derives commercial value from its protection as a trade secret under applicable Law or from its protection under patent or copyright Laws.

"**Protection in Place**" means any action taken to avoid damaging a Utility which does not involve removing or relocating that Utility, including staking the location of a Utility, exposing the Utility, avoidance of a Utility's location by construction equipment, installing steel plating or concrete slabs, encasement in concrete, temporarily de-energizing power lines, and installing physical barriers. The term includes both temporary measures and permanent installations meeting the foregoing definition.

"**Provided Environmental Approvals**" means the Governmental Approvals listed in TP Section 5.3.3 (Provided Environmental Approvals).

"**Qualified Products List**" has the meaning set forth in TP Section 1.9 (Construction Material).

"**Quality Control**" means quality control to be performed by Design-Builder in accordance with TP Section 3 (Design-Builder Quality Program).

"**Railroad**" means the companies identified in TP Section 14.1 (General) and any other company organized to construct, maintain, and operate railroads that will be physically impacted by the Project, to include the owning company and the operating company (within a relevant corridor).

"**Railroad Agreements**" means any agreements, permits, approvals and/or licenses between the Design-Builder and a Railroad, as referenced in TP Section 14.3 (Railroad Agreements).

"**Railroad Construction Agreement**" has the meaning set forth in TP Section 14.4 (Railroad Construction Agreement).

"**Railroad Manual**" means the Railroad's public projects manual and other applicable Railroad requirements as described in TP Attachment 14-2 (Railroad Manual).

"**Railroad PE Agreement**" has the meaning set forth in TP Section 14.3.1.1 (Preliminary Engineering Agreement).

"**Railroad RoE Agreement**" has the meaning set forth in TP Section 14.3.1.2 (Right-of-Entry Agreement).

"**Railroad Standards**" means those Project Standards that relate to Railroad Work and any standards provided by a Railroad, as such Railroad Standards may be changed, added to or replaced. For avoidance of doubt, executed Railroad Agreements are Railroad Standards, and the Railroad Manual may contain, but is not itself, a Railroad Standard.

"**Railroad ROW**" means all real property interests owned or controlled by a Railroad affected by the Railroad Work

"**Railroad Work**" means all efforts and costs necessary to: (a) complete any Work required under or otherwise necessitated by a Railroad Agreement, or as otherwise necessary to satisfy Design-Builder's obligations under TP Section 14 (Railroad); (b) comply with the Railroad Agreements; (c) complete all Work impacting the Railroad; and (d) negotiate and enter into any Railroad Agreement to which Design-Builder is a party. Any Railroad Work furnished or performed by or on behalf of the Railroad is "Railroad Work" and thus part of the Work.

"**Ready to Open to Traffic**" means, with respect to a portion of the Work, (a) all lanes in the relevant movement direction are paved to final pavement surface layer, (b) all permanent striping is in place (temporary tape being permitted in lane drop tapers or with GDOT's prior, written approval), (c) temporary

signing is in place, (d) temporary barrier wall is installed, in each case in accordance with the Design-Build Documents, and (e) opening such portion of the Project to traffic is in keeping with Good Industry Practice.

"**Reasonable Investigation**" means the following activities by appropriate, qualified professionals prior to the Setting Date (and, as pertains to Utilities, in accordance with the Utility Owner interaction process set forth in TP Section 7 (Utility Adjustments), as was required under the ITP):

(a) (i) visit and visual inspection of (A) the Existing Right of Way and (B) to the extent not included therein, the Property, and (C) Eligible Existing Improvements identified, or otherwise as could reasonably be expected to be affected by, or implicated in, the scope of the Work, and (ii) visual inspection of adjacent locations, except areas to which access rights have not been made available by the Setting Date;

(b) review and analysis of all Reference Information Documents;

(c) review and analysis of the Provided Environmental Approvals available prior to the Setting Date;

(d) review and analysis of all public records and accessible private records, to the extent Design-Builder reasonably should have known that such private records were available and relevant to the Project, contained or referenced in the Design-Build Documents or Reference Information Documents;

(e) reasonable inquiry with Utility Owners, including request for and review of Utility Plans provided by Utility Owners;

(f) review and analysis of Laws applicable to the Project or the Work as of the Setting Date;

(g) performance, review and analysis of corings, GDOT- or GDOT-provided borings (or such other or additional borings requested, and thereafter obtained (if approved) by or on behalf of Design-Builder, and other investigations within the Existing Right of Way and, to the extent not included therein, the Property;

(h) performance, review and analysis of field studies, other geotechnical investigations on the Existing Right of Way and, to the extent not included therein, the Property and adjacent locations, except areas to which access rights have not been made available by the Setting Date; and

(i) to the extent not subsumed under any of the foregoing clauses, perform such other activities to familiarize Design-Builder with (A) surface and subsurface conditions, including the presence of Utilities, Hazardous Materials, archaeological, paleontological, historical, cultural resources or artifacts, biological resources, and species listed as threatened or endangered under any federal or State endangered species Laws, affecting the Site or surrounding locations, and (B) the Eligible Existing Improvements.

"**Recognized Environmental Condition**" has the meaning set forth in ASTM E-1527-13.

"**Record Design Documents**" means the Design Documents, in form and substance, as described in TP Section 4.3.5 (Record Design Documents).

"**Reference Information Documents**" means the collection of information, data, documents and other materials that GDOT has provided to Design-Builder for general or reference information only, including specifically all contents of the PMCS.

"**Registered Architect**" means an individual properly registered as an architect with the State of Georgia.

"**Registered Engineer**" means a Professional Engineer (defined term).

"**Registered Professional Engineer**" means a Professional Engineer (defined term).

"**Registered Professional Land Surveyor**" means a Professional Land Surveyor (defined term).

["**Related Projects**" has the meaning set forth in DBA Section 11.2.3 (*Related Projects Integration*). For purposes of this DBA, Design-Builder obligations pertaining to Related Transportation Facilities also apply to Related Projects, but obligations relating to Related Projects do not apply to Related Transportation Facilities.

"**Related Project Configuration Work**" means the final configuration work and activities described in TP Attachment 1-7 ([_____], i.e., the "Related Project Configuration Work – [_____]"]***[NTD: replicate if more than one such Interim Milestone; delete if not used]***

"**Related Transportation Facility(ies)**" means all existing and future highways, streets and roads, including upgrades and expansions thereof, that are or will be adjacent to, connecting with or crossing under or over the Project, as specifically identified in the TP Section 1.3 (Related Transportation Facilities). For purposes of this DBA, Design-Builder obligations pertaining to Related Transportation Facilities also apply to Related Projects, but obligations relating to Related Projects do not apply to Related Transportation Facilities.

"**Released for Construction Design Documents**" means the Design Documents described in TP Section 4.3.3 (Released for Construction (RFC) Design Documents).

"**Relief Event**" means the occurrence of any of the following events, subject to any limitations, claims submissions requirements, and other conditions set forth in the Design-Build Agreement, occurring during the D&C Period, and that (i) is beyond the reasonable control of Design-Builder; (ii) directly delays the Critical Path (iii) otherwise actually, demonstrably, materially and adversely affects performance of Design-Builder's obligations (other than payment obligations) in accordance with the Design-Build Documents; and (iv) is not attributable to the negligence, reckless or willful misconduct, act or omission or breach or violation of applicable Law, Governmental Approval, or contract (including any Design-Build Document) by Design-Builder or any Design-Builder-Related Entity, provided that, in each case, such events (or the effects of such events) are not caused, and could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Design-Builder or any Design-Builder-Related Entity:

(a) Force Majeure Event;

(b) Change in Law;

(c) Actual delay (and only delay) to the Critical Path suffered by Design-Builder with respect to Work that was not Nonconforming Work under DBA Section 7.3.4.5(c) (*Right to Uncover*);

(d) GDOT Change;

(e) GDOT-Caused Delay;

(f) as and when real property interests are acquired affording Design-Builder access to the affected portion(s) of the Project Limits, performance of work within the Project Limits by Separate Contractors that directly disrupts the Work or other documented delays to the Critical Path of the Work directly caused by such Separate Contractor, in each case excluding any Utility Adjustment Work by a Utility Owner;

(g) discovery in, on, or under the Existing Right of Way or (in each case, after acquired) the State Proposed/State Acquired Right of Way, as applicable, of (a) any Pre-existing Hazardous Materials; or (b) any archaeological, paleontological, historical, or cultural resources not known to Design-Builder prior to the Setting Date or that would not have become known to Design-Builder by undertaking a Reasonable Investigation and otherwise not identified in the RIDs. Design-Builder shall account for same in the Baseline Project Schedule and impacts shall be limited to such conditions not identified therein (whether in type or quantity);

(h) discovery at, near, or on the Existing Right of Way or (in each case, after acquired) the State Proposed/State Acquired Right of Way, State Proposed/Design-Builder Acquired Right of Way, or Design-Builder Proposed/State Acquired Right of Way, as applicable, of any Unexpected Endangered Species, excluding any such presence of species known to Design-Builder prior to the Setting Date or that would become known to Design-Builder by undertaking Reasonable Investigation;

(i) Third-Party Hazardous Materials Releases that (i) occur after the Setting Date, (ii) occur on the Existing Right of Way or (after acquired) the State Proposed/State Acquired Right of Way, (after acquired) the Design-Builder Proposed/State Acquired Right of Way, or (after acquired) the Design-Builder Proposed/ Design-Builder Acquired Right of Way, as applicable, (iii) are required to be reported to a Governmental Entity, and (iv) render use of the roadway or construction area unsafe or potentially unsafe absent assessment, containment and/or remediation;

(j) Issuance by a court in a legal proceeding of any preliminary or permanent injunction or temporary restraining order (or other similar order, legal restraint, or prohibition) that prohibits prosecution of any material portion of the Work, except if arising out of, related to, caused by, resulting from, or based on the wrongful act or wrongful omission of Design-Builder or any Design-Builder-Related Entity;

(k) suspension, termination or interruption of any NEPA Approval, except to the extent that such suspension, termination or interruption results from failure by Design-Builder or any Design-Builder-Related Entity to locate or design the Project or carry out the work in accordance with such NEPA Approval or other Governmental Approval (which failure may include (i) modification by or on behalf of Design-Builder of the design concept included in the NEPA Approval, excluding Necessary Basic Configuration Changes, (ii) means or methods used by Design-Builder or any Design-Builder-Related Entity for carrying out the Work, or (iii) decision or action by or on behalf of Design-Builder to use or acquire Design-Builder Proposed/Design-Builder Acquired Right of Way);

(l) any change in the design concept of the Project or any portion thereof resulting from judicial or administrative action taken with respect to a legal challenge to any NEPA Approval as compared to the design concept indicated in the alternative that was the subject of the NEPA Approval, except to the extent the change in design concept (i) had already been incorporated into Design-Builder's design schematics assumed in connection with the Contract Sum, or (ii) results from failure by Design-Builder or any Design-Builder-Related Entity to locate or design the Project or to carry out the Work in accordance with the Provided Governmental Approvals or other Governmental Approvals;

(m) failure to obtain, or to maintain once issued, beyond the timelines specified in the Technical Provisions, a Governmental Approval from any Governmental Entity, except to the extent that such failure or delay results from failure by Design-Builder or any Design-Builder-Related Entity to locate or design the Project or carry out the Work in accordance with a Governmental Approval (which failure may include (i) modification by or on behalf of Design-Builder of the design concept included in [such GEPA-related documents, if any, that was/were premised, in whole or in part, upon the Basic Configuration of NEPA Approval, (ii) means or methods used by Design-Builder or any Design-Builder-Related Entity for carrying out the Work, or (iii) decision or action by or on behalf of Design-Builder to use or acquire Design-Builder Proposed/Design-Builder Acquired Right of Way);

(n) GDOT's (i) lack of good and sufficient title to any parcel in the Existing Right of Way, (after acquired) the State Proposed/State Acquired Right of Way, or (after acquired) the Design-Builder Proposed/State Acquired Right of Way, to the extent it interferes with or adversely affects performance of Work (ii) inability or failure to obtain an interest (including by easement or other right of access) to real property not identified in the State Proposed Right of Way and required for construction of the Project as demonstrated by Design-Builder, exclusive of any Design-Builder Proposed/Design-Builder Acquired Right of Way, Temporary Interests, or parcels that are solely for the convenience of Design-Builder, to the extent it interferes with or adversely affects performance of Work, or (iii) the existence at any time following issuance of NTP3 of any title reservation, condition, easement or encumbrance on any parcel in the Existing Right of Way or (after acquired) the State Proposed/State Acquired Right of Way, of record or not of record, to the extent it interferes with or adversely affects performance of Work, except any title reservations, conditions, easements or encumbrances (A) concerning Utilities or (B) caused, permitted or suffered by Design-Builder or any Design-Builder-Related Entity;

(o) subject, as applicable to DBA Section 7.5.9.6 (*Applications for Utility Permits*), unreasonable and unjustified delay by a Utility Owner in connection with a Utility Adjustment, or failure or delay of any Utility Owner in obtaining any required easement, right of way or other property interest as may be required; provided that, in each case, all of the Conditions to Assistance have been satisfied and 30 days have expired since Design-Builder has asked for GDOT's assistance;

(p) GDOT's failure to acquire good and sufficient title to any parcel in the State Proposed/Design-Builder Acquired Right of Way by the State Proposed/Design-Builder Acquired ROW Acquisition Date after Design-Builder provides notice to GDOT that Design-Builder has performed all of the Acquisition Services required under DBA Section 2.2.3 (*Right of Way; Property Ownership*), to the extent it interferes with or adversely affects performance of Work;

(q) any delay to the Critical Path directly resulting from any Unexpected Utility Adjustment Work for an Unidentified Utility Facility discovered within the relevant time periods under, and subject to the terms and conditions of DBA Section 7.5.10 (*Unexpected Utility Adjustments*);

(r) any (i) Necessary Basic Configuration Changes (subject to the terms and conditions of DBA Section 14.5 (*Necessary Basic Configuration Changes*)); or (ii) erroneously excluded Parcel(s) under DBA Section 2.7.1.3(a) (*Design-Builder Proposed/State Acquired Right of Way*);

(s) any other event that the Design-Build Documents expressly state shall be treated as a Relief Event;

(t) the discovery of any Unexpected Subsurface Condition during the carrying out of the D&C Work

(u) A Utility Owner failure to cooperate, to the extent, under the terms, and subject to the conditions, of DBA Section 7.5.8.16 (*Failure of Utility Owners to Cooperate*);

(v) ultra vires enforcement of any inapplicable local law (or political subdivision thereof) by or on behalf of the local Governmental Entity;

(w) Latent Defects to the extent affected or impacted by the Work, and as and to the extent materially and adversely affecting the completion of Work on those Parcels identified in DBA Section 7.16.2 (*Existing Improvements and Latent Defects*); and

(x) The discovery of a material error in GDOT Boring Data in accordance with DBA Section 7.18.13 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

"**Relief Event Determination**" has the meaning set forth in DBA Section 13.2.1 (*Relief Event and Compensation Event Determinations*).

"Relief Event Notice" means the Notice required to be provided by Design-Builder under DBA Section 13.1 (*Notices*). Relief Event Notice may mean an Initial Relief Event Notice or a Detailed Relief Event Notice, as context may require.

"**Relief Event Package**" means the documents and information described in Section 13.1.4.2 (*Compensation Event Package and Relief Event Package*), as pertains to a Relief Event that is the subject of a Detailed Relief Event Notice.

"**Relief Event Records**" has the meaning set forth in DBA Section 13.1.1.5(a) (*General Notice Requirements*).

"**Relocation Benefits Claim Form**" means the form described in TP Section 6.4.3.2 (Acquisitions Involving Displacements and Relocations).

"**Relocation Benefits Package**" means the package described in TP Section 6.4.3.2 (Acquisitions Involving Displacements and Relocations).

"**Request for Change Proposal**" means a Notice issued by GDOT to Design-Builder setting forth a proposed GDOT Change and requesting Design-Builder's assessment of cost, and schedule impacts thereof, as set forth in DBA Section 14.1.2 (*Request for Change Proposal*).

"**Request for Parcel Certification Release**" means each request submitted by Design-Builder under TP Section 6.5.23.1 (Request for Parcel Certification Release).

"**Request for Proposals**" has the meaning set forth in Recital E.

"**Request for Qualifications**" has the meaning set forth in Recital C

"**Required Personnel**" means those individuals filling the roles assigned by Design-Builder for "Required Personnel" positions listed in TP Attachment 2-1 (Key Personnel and Required Personnel). Several job or role titles may be capitalized throughout the Design-Build Documents, and where no definition is given for such title, the title refers to the job or role as listed in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Revised Baseline Project Schedule**" means the Baseline Project Schedule described under TP Section 2.4.2.4 (Revised Baseline Project Schedule).

"**Revised Baseline SOV**" means the modified SOV provided by Design-Builder in accordance with TP Section 2.4.4 (SOV and Price-Loading) when substantial changes are made to Design-Builder's price breakdown structure of the Contract Sum and/or changes are made to the Contract Sum itself.

"**Roles (Key Personnel)**" means for each Key Personnel, the requirements set forth for that Key Personnel in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**Roles (Required Personnel)**" means for each Required Personnel, the requirements set forth for that Required Personnel in TP Attachment 2-1 (Key Personnel and Required Personnel).

"**ROW Acquisition Plan**" means the plan described in TP Section 6.3.1 (ROW Acquisition Plan).

"**ROW Service Class**" has the meaning set forth in TP Section 6.2.5 (ROW Service Classes).

"**ROW Submittals**" means the Submittals required by TP Section 6 (Right of Way) (other than the ROW Acquisition Plan and the Monthly Acquisition Services Status Report).

"**Rules**" has the meaning set forth in Recital C.

"**SAAG**" has the meaning set forth in DBA Section 2.5.2 (*State Proposed/Design-Builder Acquired Right of Way*).

"**Safety Plan**" means the plan provided by Design-Builder that fully describes Design-Builder's policies, procedures, plans, training programs, and worksite controls to ensure the health and safety of personnel involved in the Project and the general public affected by the Project during the period commencing at NTP1 through Final Acceptance.

"**Schedule of Values**" has the meaning set forth in TP Section 2.4.4 (SOV and Price-Loading).

"**SC List**" means the nonexclusive itemized list of Work that remains to be completed in order to satisfy the conditions to achieving Substantial Completion, prepared by Design-Builder and agreed by GDOT in accordance with DBA Section 7.7 (*Substantial Completion, Punch List, Final Acceptance*).

"**Separate Contractor(s)**" means each and any separate contractor or vendor engaged by GDOT or any other Governmental Entity of the State to perform, provide, and/or supply work, services, labor or materials for (a) the Project that is expressly excluded from Design-Builder's Work pursuant to the Design-Build Documents or (b) another project to construct a Related Transportation Facility, in each case on the Project Limits (after the relevant portion is acquired).

"**Service Line**" means a Utility line, the function of which is to directly connect the improvements on an individual property to another Utility line located off such property, which other Utility line connects more than one such individual line to a larger system. However, unless otherwise noted in the Technical Provisions, the term "Service Line" excludes any line that supplies an active feed from a Utility Owner's facilities to supply, activate or energize GDOT's or a Governmental Entity's Highway Service System, which line, including its actual connection to the Utility facility, shall instead be considered to be part of the applicable Highway Service System.

"**Setting Date**" means the date that is 30 days prior to the Proposal Due Date, as identified in the RFP, as issued, and not as amended, unless the amendment(s) expressly state that the Setting Date is adjusted.

"**Shop Drawings**" means the Design Documents described in TP Attachment 4-1 (Shop Drawing Requirements). Shop Drawings include all working, shop, and erection drawings, associated trade literature, calculations, schedules, manuals, and similar documents submitted by Design-Builder to define some portion of the Permanent Works or Temporary Works not fully detailed in the Released for Construction Design Documents that requires additional drawings and coordination prior to constructing the item.

"**Shop Drawing Engineer**" means a Professional Engineer that is the initiator or producer of Shop Drawings.

"**SIR**" has the meaning set forth in DBA Section 16.1.2.2 (*Deductibles*).

"**Site**" means the Project Limits and all Temporary Interests.

"**SOQ**" has the meaning set forth in Recital C.

"**Source Code**" and "**Source Code Documentation**" mean software written in programming languages, such as C and Fortran, including all comments and procedural code, such as job control language statements, in a form intelligible to trained programmers and capable of being translated into object or machine readable code for operation on computer equipment through assembly or compiling, and accompanied by documentation, including flow charts, schematics, statements of principles of operations, architectural standards, and commentary, explanations and instructions for compiling, describing the data flows, data structures, and control logic of the software in sufficient detail to enable a trained programmer through study of such documentation to maintain and/or modify the software without undue experimentation. Source Code and Source Code Documentation also include all modifications, revisions, additions, substitutions, replacements, updates, upgrades and corrections made to the foregoing items.

"**SOV Line Item**" means those numbered line items on the Schedule of Values corresponding to those portions of the Work or charges, each with an associated dollar value and in total equal to the Contract Sum as it may be adjusted in accordance with this Design-Build Agreement.

"**SOV Update**" means an update to the SOV provided by Design-Builder in accordance with TP Attachment 2-7 (SOV and Price-Loading Requirements) after the Preconstruction Baseline SOV, Construction Baseline SOV, or Revised Baseline SOV is accepted that shows updated price information for each line item on an earned value basis through a given update interval and forecasts the balance to finish.

"**Special Event**" means an event or holiday identified in accordance with TP Section 18.4.1 (Special Events and Holidays), from time to time, by Notice and in advance, from GDOT to Design-Builder, of specified duration and location.

"**Special Provision**" means the additions or revisions to the GDOT Standard Specifications identified in TP Attachment 1-4 (Project Standards).

"**Specialty Report**" means a specialty report prepared in accordance with TP Section 6.4.5.1 (Specialty Reports).

"**Standard Specification(s)**" means all, or any one of, the GDOT Standard Specifications specifically set forth in TP Attachment 1-4 (Project Standards), Table 2 (Project Standards – Standard Specifications Construction of Transportation Systems). For avoidance of doubt, the (defined term) "Standard Specifications" does not mean the entirety of the GDOT Standard Specifications, but instead those portions included in the Technical Provisions as described.

"**Standard Utility Agreement**" has the meaning set forth in the GDOT UAM. "Standard Utility Agreement" means, generally, an agreement between GDOT and a Utility Owner providing for Adjustment of the Utility Owner's Utility facility to be performed by or on behalf of the Utility Owner and modification of easement limited provisions, if applicable, related thereto.

"**Starting Date**" has the meaning set forth in DBA Section 13.1.2.1 (Initial Relief Event Notices). The Starting Date for a Compensation Event is the date of the precipitating event giving rise to Design-Builder's assertion of a Compensation Event.

"**State**" means the State of Georgia.

"**State Depository**" means a bank or trust company which has its deposits insured by the Federal Deposit Insurance Corporation and which is appointed by the State Depository Board pursuant to O.C.G.A. § 50-17-50 *et seq.*

"**State Proposed/Design-Builder Acquired Right of Way**" means any real property (which term is inclusive of all estates and interests in real property), improvements and fixtures within the lines established in and designated as "State Proposed/Design-Builder Acquired ROW" within DBA Exhibit 4 (*Parcel Acquisition Table*) for which Design-Builder is responsible to acquire a leasehold estate or other similar property interest or rights. The term specifically includes all air space, surface rights and subsurface rights within the limits of the State Proposed/Design-Builder Acquired Right of Way and specifically excludes any Design-Builder Proposed/Design-Builder Acquired Right of Way, State Proposed/State Acquired Right of Way, and Design-Builder Proposed/State Acquired Right of Way.

"**State Proposed/Design-Builder Acquired ROW Acquisition Date**" means the date set forth in DBA Exhibit 4 (*Parcel Acquisition Table*).

"**State Proposed Right of Way**" means the Existing Right of Way, State Proposed/Design-Builder Acquired Right of Way, State Proposed/State Acquired Right of Way, and Design-Builder Proposed/State Acquired Right of Way, if any.

"**State Proposed/State Acquired Right of Way**" means any real property (which term is inclusive of all estates and interests in real property), improvements and fixtures within the lines established in and designated as "State Proposed/State Acquired ROW" within DBA Exhibit 4 (*Parcel Acquisition Table*) for which GDOT is obligated to provide access to Design-Builder. The term specifically includes all air space, surface rights and subsurface rights within the limits of the State Proposed/State Acquired Right of Way and specifically excludes any Design-Builder Proposed/Design-Builder Acquired Right of Way, State Proposed/Design-Builder Acquired Right of Way, and Design-Builder Proposed/State Acquired Right of Way. All portions of the State Proposed/State Acquired Right of Way, as and to the extent of any property interests in same acquired by GDOT, shall thereafter and without further amendment to DBA Exhibit 4 (*Parcel Acquisition Table*) be deemed Existing Right of Way.

"**State Proposed/State Acquired Right of Way (Design Contingent)**" means any Parcel of State Proposed/State Acquired Right of Way designated as "Design Contingent" under DBA Exhibit 4 (*Parcel Acquisition Table*).

"**Structural Elements**" has the meaning set forth in TP Section 13.1 (General Requirements).

"**Subcontractor**" means any other Person, including any Supplier with whom any Contractor has further subcontracted, purchased or procured any part of the Work, at all tiers, under a Contract.

"**Submittal**" means each Type 3 Submittal, Type 2 Submittal and Type 1 Submittal, and in each case, shall include any ROW Submittal and any resubmittal which Design-Builder is required to make in accordance with DBA Section 6.3 (*Submittal Review; GDOT Oversight; Quality Posture*).

"**Submittal Packaging Plan**" means the plan provided as part of the Basis of D&C by Design-Builder that depicts the component parts and packaging of Submittals during the period from NTP1 through Final Acceptance.

"**Submittal Requirements Database**" means the more recent of:

(a) the Submittal Requirements Database included in TP Attachment 2-10 (Submittal Requirements Database); or

(b) the latest GDOT-accepted version of updates to the Submittal Requirements Database submitted by Design-Builder in accordance with TP Section 2 (Project Management).

"**Substantial Completion**" means the occurrence of all the events and satisfaction of all the criteria and conditions for completion of D&C Work as set forth in DBA Section 7.7 (*Substantial Completion, Punch List, Final Acceptance*), as and when confirmed by GDOT's issuance of a Certificate of Substantial Completion in accordance with the procedures and within the time frame established in DBA Section 7.7.1 (*Substantial Completion*).

"**Substantial Completion Date**" means the date upon which GDOT issues the Certificate of Substantial Completion.

"**Substantial Completion Deadline**" means the deadline and required date for Substantial Completion of the Project as set forth in the Milestone Schedule, as such deadline may be extended from time to time pursuant to this Design-Build Agreement. The initial Substantial Completion Deadline is the date identified as such in the Proposal.

"**Subsurface Utility Engineering**" means an engineering process for accurately identifying the quality of subsurface utility information needed for highway plans, and for acquiring and managing that level of information during the development of a highway project, as more particularly described, as of the Effective Date, at the FHWA website http://www.fhwa.dot.gov/programadmin/sueindex.cfm.

"**Supplemental Agreement**" means a written (or otherwise documented, in GDOT's sole discretion), mutual agreement between GDOT and Design-Builder for changes in the Work under DBA Article 13 (*GDOT Changes; Design-Builder Changes; Directive Letters*) or to account for certain amounts under this DBA that GDOT states will be paid by GDOT to Design-Builder, which (a) in the case of such GDOT and Design-Builder for changes in the Work and those on account of any Relief Event Determination and/or Compensation Event Determination as set forth under DBA Section 13.2.1 (*Relief Event and Compensation Event Determinations*), shall set forth adjustments to the Contract Sum and/or Contract Time, if any, and (b) in the case of draws against the Unexpected Subsurface Conditions Allowance, account for the amount of each draw and the balance of the Unexpected Subsurface Conditions Allowance remaining.

"**Supplier**" means any Person not performing work at or on the Site that supplies machinery, equipment, materials, hardware, software, systems or any other appurtenance to the Project to Design-Builder or to any Contractor in connection with the performance of the Work. Persons who merely transport, pick up, deliver or carry materials, personnel, parts or equipment or any other similar items or persons to or from the Site shall not be deemed to be performing Work at the Site.

"**Surety**" means each surety company meeting the requirements and qualifications under DBA Section 16.2.1.2, which has issued any of the P&P Bonds or the Warranty Bond. A "Surety" may include a surety company, insurance company, or other Person, in each case, approved by GDOT not meeting such requirements but nonetheless approved to issue any of the P&P Bonds or the Warranty Bond.

"**Suspension for Convenience**" has the meaning set forth in DBA Section 17.7.1 (*Suspension for GDOT's Convenience; Suspensions for Safety*).

"**Taxes**" means federal, State, local or foreign income, margin, gross receipts, sales, use, excise, transfer, consumer, license, payroll, employment, severance, stamp, business, occupation, premium, windfall profits, environmental (including taxes under Section 59A of the Internal Revenue Code), customs, permit, capital stock, franchise, profits, withholding, social security (or similar), unemployment, disability, real property, personal property, registration, value added, alternative or add-on minimum, estimated or other taxes, levies, imposts, duties, fees or charges imposed, levied, collected, withheld, or assessed at any time, whether direct or indirect, relating to, or incurred in connection with, the Project, the performance of the Work, or act, business, status or transaction of Design-Builder, including any interest, penalty, or addition thereto, and including utility rates or rents, in all cases whether disputed or undisputed.

"**Technical Provisions**" means the "Georgia Department of Transportation Technical Provisions for Design-Build Agreement P.I. No. 0017182," dated as of the Effective Date, as such documents that comprise the Technical Provisions may individually or collectively (a) have been generally revised from time to time up to the date of issuance of the RFP, or (b) be changed, added to or replaced pursuant to the Design-Build Documents. The Technical Provisions include all the Project Standards, as well as other standards, criteria, requirements, conditions, procedures, specifications and other provisions set forth in the manuals and documents identified therein

"**Temporary Interests**" means any additional temporary property interests or rights, other than the Existing Right of Way, State Proposed/State Acquired Right of Way, State Proposed/Design-Builder Acquired Right of Way, Design-Builder Proposed/Design-Builder Acquired Right of Way, and Design-Builder Proposed/State Acquired Right of Way, that Design-Builder may require for performance of the Work, including for temporary activities in connection with the Construction Work, such as construction work sites, temporary work areas, lay down areas, staging areas, storage areas, stockpiling areas, earthwork material borrow sites and similar sites, and in connection with Railroad Work under the Railroad Agreements.

"**Temporary Traffic Control Plan**" means the plan provided by Design-Builder in accordance with TP Section 18.3.2 (Temporary Traffic Control Plans).

"**Temporary Utility Adjustment**" means any (a) interim Utility Adjustment of any Utility (i.e., the installation, removal, and disposal of an interim Utility facility) pending installation of a permanent Utility facility in the same or a new location, and (b) removal and reinstallation of the Utility facility in the same place without an interim Utility Adjustment.

"**Temporary Works**" means any temporary Construction Work necessary for the construction of the Permanent Works. "Temporary Works" includes falsework, formwork, scaffolding, temporary shoring,

temporary earthworks, temporary paving, cofferdams, special erection equipment, and any other parts and materials associated therewith.

"**Term**" has the meaning set forth in DBA Section 3.1 (*Term*).

"**Termination by Court Ruling**" has the meaning set forth in DBA Section 18.9 (*Termination by Court Ruling*).

"**Termination Compensation**" means each of the measures of compensation upon termination prior to the stated expiration of the Term, pursuant to DBA Article 19 (*Assignment and Transfer*), and as set forth in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*).

"**Termination Date**" means (a) the date of expiration of the Term or (b) if applicable, the Early Termination Date.

"**Termination for Convenience**" has the meaning set forth in DBA Section 18.1 (*Termination for Convenience*).

"**Termination Holdback**" has the meaning set forth in DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*).

"**Third Party Claim**" means, subject to DBA Section 16.4.4 (*Indemnity by Design-Builder*), any and all claims, disputes, disagreements, causes of action, demands, suits, actions, investigations, or legal or administrative proceedings asserted, initiated or brought by a Person that is not an Indemnified Party or Design-Builder with respect to any Third Party Loss.

"**Third-Party Hazardous Materials Release**" means a Hazardous Materials Release directly by a Person that is not an Indemnified Party, Design-Builder, or any Design-Builder-Related Entity or acting in the capacity of an Indemnified Party, the Design-Builder or a Design-Builder-Related Entity.

"**Third Party Loss**" means, subject to DBA Section 16.4.4 (*Indemnity by Design-Builder*), any actual or alleged Loss sustained or incurred by a Person that is not an Indemnified Party or Design-Builder.

"**Threatened or Endangered Species**" means any species listed by the USFWS as threatened or endangered pursuant to the Endangered Species Act, as amended, 16 U.S.C. §§ 1531 *et seq.* or any species listed as threatened or endangered pursuant to the State endangered species act.

"**Time Impact Analysis**" means a time impact analysis prepared in accordance with TP Section 2.4.5 (Time Impact Analysis) and based on the latest accepted Baseline Project Schedule.

"**Traffic Interruption Requests**" has the meaning set forth in TP Section 18.2.5 (Notifications and Traffic Interruption Requests (TIR)).

"**Traffic Noise Model**" means the traffic noise model initially prepared by GDOT for the NEPA Approval and subsequently updated in accordance with TP Section 5.3.5 (Time Periods for Amendments to Provided Environmental Approvals).

"**Transportation Management Plan**" means Design-Builder's plan for transportation management and Incident response throughout the Term, as more particularly described in TP Section 18.2.4 (Transportation Management Plan) and TP Attachment 18-2 (Requirements for the Transportation Management Plan).

"**Two-Week Detail Schedule**" means the two-week detail schedule provided by Design-Builder in addition to the Project Schedule and provides a more detailed breakdown of the activities for the purpose of coordination of the D&C Work, oversight planning, verification of D&C Work completed, and materials inspection and testing

"**Type 1 Submittal**" means any Submittal:

(a) that is expressed to be subject to the review or comment of GDOT, as identified in the Submittal Requirements Database; or

(b) that is determined by GDOT (in its sole discretion) to be a Type 1 Submittal in accordance with TP Section 2.9.2 (Type 3 Submittals, Type 2 Submittals, and Type 1 Submittals).

"**Type 2 Submittal**" means any submittal:

(a) that is expressed to be subject to acceptance by GDOT, but which is not a Type 3 Submittal, as identified in the Submittal Requirements Database; or

(b) that is determined by GDOT (in its sole discretion) to be a Type 2 Submittal in accordance with TP Section 2.9.2 (Type 3 Submittals, Type 2 Submittals, and Type 1 Submittals).

"**Type 3 Submittal**" means any Submittal that is expressed to be subject to acceptance by GDOT in its sole discretion, as identified in the Submittal Requirements Database.

"**Unexpected Endangered Species**" means the presence of Threatened or Endangered Species discovered within the Project Limits during the Construction Period, the temporary, continual or habitual presence of which, as of the Setting Date, was neither:

(a) known to Design-Builder; or

(b) reasonably to be expected to be found temporarily, continually or habitually on the Site based on a Reasonable Investigation and otherwise the review and analysis of the Reference Information Documents or publicly available information undertaken by an appropriately qualified and experienced contractor, engineer or expert working in that field exercising due care and skill and Good Industry Practice.

"**Unexpected Subsurface Conditions**" means an actual subsurface condition encountered within the State Proposed Right of Way during the performance of the D&C Work, including in respect of bridge and structure foundations, sound barrier foundations, retaining walls or earthwork, and such condition is materially different from:

(a) conditions that may have been reasonably inferred from a review of GDOT Boring Data, prior to the Setting Date;

(b) conditions that as of the Setting Date are known to the Design-Builder;

(c) conditions that as of the Setting Date are identified in the Reference Information Documents;

(d) conditions that as of the Setting Date reasonably could have been identified or discovered by an appropriately qualified and experienced contractor or engineer exercising due care and skill and Good Industry Practice based on the Reference Information Documents and/or any publicly

available information, the existence and nature of which the Design-Builder had or reasonably should have notice of, access to the State Proposed Right of Way granted prior to the Setting Date, or any visual examination of the Existing Right of Way and, to the extent reasonably visible for such examination, any other property which may form part of the Site and surrounding location, to include accounting for the impacts of lateral spread and liquefaction; or

(e) the assumption defined in TP Section 13, Table 13-1 (Bridge Requirements) for bridge No 1 (Bethlehem Road over Bethlehem Bottoms).

"Unexpected Subsurface Conditions" exclude those conditions described in DBA Section 6.1.3 (*Preliminary Planning and Engineering Activities; Site Conditions*), any Latent Defects, and any other condition that would otherwise meet this definition, if discovered or encountered on any Temporary Interests.

"**Unexpected Subsurface Conditions Allowance**" has the meaning set forth in DBA Section 7.18.1.1 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

"**Unexpected Subsurface Condition Order**" has the meaning set forth in DBA Section 7.18.6.1 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

"**Unexpected Utility Adjustment**" means any Utility Adjustment of an Unidentified Utility Facility that is specifically identified by Design-Builder within the timeframes, pursuant to, under the terms, and subject to the conditions, of DBA Section 7.5.10.1 (*Unexpected Utility Adjustments*).

"**Unexpected Utility Adjustment Work**" means Utility Adjustment Work in relation to any Unexpected Utility Adjustment.

"**Unidentified Utility Facility**" means any Utility present on the Existing Right of Way that was not shown on the SUE Plans, or that would not have been discovered with a Reasonable Investigation, in each case excluding any Utility that:

(a) was installed on a part of the State Proposed Right of Way (excluding Design-Builder Proposed/State Acquired Right of Way) after right of entry was granted to Design-Builder in relation to the relevant part of the State Proposed Right of Way in accordance with the terms of this Design-Build Agreement; or

(b) is a Service Line.

"**Uniform Act**" means the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, P.L. 91-646, as amended.

"**User**" means either (a) the traveling public and any others who use the Project, whether by motorized or nonmotorized vehicles, or on foot; or (b) the registered owner of a vehicle traveling on the Project or any portion thereof.

"**Utility**" or "**utility**" means any of the following:

(a) a public, private, cooperative, municipal and/or government line, facility, or system used for the carriage, transmission and/or distribution of power, electricity, light, heat, gas, oil, crude or other petroleum products, hydrocarbons, water, steam, waste, chemicals, signals (including telecommunications, internet, "cable" television/internet, fiber optics, other internet transmission signals),

a combined storm water and sanitary system, or other similar commodities or materials, including wireless communications, internet services, television transmission signals, and publicly owned fire, police, other emergency communications, alert, or signal systems, which directly or indirectly service the public;

(b) a line, facility or system which (i) carries, transmits and/or distributes any of the items listed in clause (a) above but does not directly or indirectly serve the public, and (ii) is designated in the Technical Provisions to be treated, for purposes of the Design-Build Documents only, in the same manner as a line, facility or system that qualifies as a Utility under clause (a) above;

(c) appurtenances to each utility, including the Utility source, guide poles, Service Lines (regardless as to ownership), service laterals, supports, etc.; and

(d) a radio tower or transmission tower (including cellular) that directly or indirectly serves the public.

Notwithstanding the foregoing, the term "Utility" or "utility" excludes:

(i) all storm water lines, facilities, and systems that are part of the Drainage System on and for the Project Limits or connect to that system;

(ii) any would-be utility owned by a Railroad; and

(iii) GDOT's or a Governmental Entity's Highway Service Systems.

"**Utility Adjustment**" means each relocation (temporary or permanent), abandonment and/or dormancy, Protection in Place, removal (of previously abandoned or dormant Utilities as well as of newly-abandoned or dormant Utilities), replacement, reinstallation, and/or modification of existing Utilities necessary to accommodate the Work or the Project.

"**Utility Adjustment Field Modification**" means any horizontal or vertical design change to the plans included in a Utility Work Plan (previously accepted by GDOT) required by Design-Builder or proposed by a Utility Owner due to (i) non-Utility-related Project design, (ii) Utility design, or (iii) conditions otherwise not accurately reflected in the corresponding previously-accepted Utility Work Plan, that alters the design included in the approved Utility Work Plan.

"**Utility Adjustment Plans**" means the utility adjustment plans described in TP Section 7.3.5 (Utility Adjustment Plans).

"**Utility Adjustment Preliminary Plan**" means the utility adjustment preliminary plan described in TP Section 7.3.5 (Utility Adjustment Plans).

"**Utility Adjustment Schedule**" means the schedule described in TP Section 7.3.6 (Utility Adjustment Schedule).

"**Utility Adjustment Work**" means all efforts and costs necessary to accomplish the required Utility Adjustments, including all Incidental Utility Adjustment Work, coordination, design, design review, permitting, construction, inspection, maintenance of records, relinquishment of Existing Interests, and acquisition of New Interests, whether provided by Design-Builder or by the Utility Owners, and performance of such obligations (or delegated obligations) necessary or desirable to effect the Utility Adjustment Work. The term also includes any reimbursement of Utility Owners that is Design-Builder's

responsibility pursuant to DBA Section 7.5 (*Utility Adjustments*). Any Utility Adjustment Work furnished or performed by the Utility Owner is "Utility Adjustment Work" and thus part of the Work.

"**Utility As-Builts**" means the drawings described in TP Section 7.4.6.1 (Utility As-Built Requirements) and TP Section 7.4.6.2 (Utility As-Built Plan Requirements).

"**Utility Coordination Meeting**" means the meeting described in TP Section 7.2.3 (Required Meetings).

"**Utility Escalation and Mediation Process**" means the dispute resolution process described in Section 10.3 of the GDOT UAM, O.C.G.A. § 32-6-171, and Section 672-19-.02 of the Rules.

"**Utility Facility Relocation Acceptance Form**" means the form set forth in TP Attachment 7-1 (DB Utility Facility Relocation Acceptance Form), as further described in TP Section 7.4.7 (Utility Facility Relocation Acceptance Form).

"**Utility Impact Analysis**" means the analysis described in TP Section 7.3.3 (Utility Impact Analysis).

"**Utility Management Plan**" means the utility management plan provided by Design-Builder in accordance with TP Section 7 (Utility Adjustments).

"**Utility MOU**" means each memorandum of understanding listed in TP Attachment 7-2 (Executed Utility MOUs).

"**Utility Owner**" means the owner or operator of any Utility (including both privately held and publicly held entities, cooperative utilities, and municipalities and other governmental agencies).

"**Utility Plan**" means the existing utility plans described in TP Section 7.3.2 (Verification of Utility Plans and SUE Investigations).

"**Utility Work Plan**" means the collection of agreements, plans and other information and materials which Design-Builder is required to submit to GDOT in connection with each Utility Adjustment, as more particularly described in TP Section 7.3.7 (Utility Work Plan). Depending on the context, the term also refers to any amended or supplemented Utility Work Plans.

"**Value Earned for Work**" has the meaning set forth in DBA Exhibit 7 (*Contract Sum and Payment Terms*).

"**Value Engineering Change Proposal**" or "**VECP**" means a proposed value engineering recommendation developed and documented by Design-Builder, inclusive of at a minimum all the information required under DBA Section 7.17.2 (*Value Engineering, VECP Information*), that:

(a) would modify or require a change in any of the commitments, requirements of or constraints set forth in the Design-Build Documents in order to be implemented; and

(b) reduces the Project cost without impairing essential functions or characteristics of the Project (including the meeting of requirements contained in all Governmental Approvals), including service life, economy of operation, ease of maintenance, and safety;

provided that, in each case, a VECP it is not based solely upon a change in quantities, performance or reliability or a relaxation of the requirements contained in the Design-Build Documents.

"**Warning Notice**" means a Notice that GDOT delivers to Design-Builder pursuant to DBA Section 17.2 (*Warning Notices*).

"**Warranty**" has the meaning set forth in DBA Section 7.11.1 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*).

"**Warranty Bond**" means the surety bond substantially in the form of DBA Exhibit 19 (*Forms of P&P Bonds, Warranty Bond*) and meeting the requirements of DBA Section 16.2.2 (*Warranty Period Payment and Performance Security*).

"**Warranty Period**" has the meaning set forth in DBA Section 7.11.2 (*Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work*).

"**Work**" means all of the work and services required to be furnished and provided by Design-Builder, as well as all obligations of Design-Builder, under the Design-Build Documents, including all administrative, design, engineering, construction, supply, manufacturing, installation, environmental mitigation and management, Utility Adjustment (whether performed by Design-Builder or by the Utility Owner), utility accommodation, real property acquisition and other support services (including support services of procurement, legal, financial, and other professionals), ITS and ITS integration, supervision, management, testing, verification, labor, materials, equipment, maintenance (as required under the Design-Build Agreement), cost reimbursement/payment, documentation, coordination, and fulfillment of such other duties and performance of such other services as required and as may reasonably inferred for full and proper completion of the Project and fulfillment of the Warranty in accordance with the Design-Build Documents. The Work excludes those efforts which such Design-Build Documents expressly specify will be performed by Persons other than Design-Builder or Design-Builder-Related Entities. The term "Work" may also be used to mean the products of the Work. For avoidance of doubt, the "Work" includes the Design Work, the Construction Work, and all other work, services and obligations required to be furnished, performed and provided by Design-Builder under this Design-Build Agreement.

"**Work Breakdown Structure**" means a deliverable-oriented hierarchical structure that breaks the D&C Work into elements that have distinct identification and that contain specific scope characteristics. Each descending WBS level represents an increasingly detailed delineation of elements of the D&C Work. The WBS will contain all of the elements of Design Work and Construction Work. There shall be clearly identifiable linkage between the WBS, the elements of the Work, and the Baseline Project Schedule.

"**Worksite Erosion Control Supervisor**" means the Required Personnel described in TP Attachment 2-1 (Key Personnel and Required Personnel) as the Worksite Erosion Control Supervisor.

"**Worksite Traffic Control Supervisor**" means the Required Personnel described in TP Attachment 2-1 (Key Personnel and Required Personnel) as the Worksite Traffic Control Supervisor.

"**Worksite Utility Coordination Supervisor**" means the Required Personnel described in TP Attachment 2-1 (Key Personnel and Required Personnel) as the Worksite Utility Coordination Supervisor.

Exhibit 2

PROPOSAL COMMITMENTS

(*attached*)

The following constitute Proposal Commitments for the Project:

1. Key Personnel:

Position	Individual Person
Lead Contractor Project Manager (CPM)	
Lead Design Consultant Project Manager (DPM)	
Engineer of Record (EOR)	
Construction Manager	

Attached: (a) Key Personnel commitments from SOQ

(b) "Bring-Down" of Key Personnel commitments from Proposal

2. Reserved

3. Other Proposal Commitments:

Commitment No.	Proposal Location	Proposal Commitment
1.		

Parcel No.	Parcel Availability Date Commitment

Exhibit 3

OTHER PROPOSAL SUBMISSIONS

(on following pages)

Non-Collusion Affidavit

Exhibit 3B SOQ Certificate, "Bring-Down" SOQ Certificate from Proposal

Exhibit 3C Equal Employment Opportunity Certification

Exhibit 3D Debarment and Suspension Certification

Exhibit 3E Proposal Buy America Certificate and Build America, Buy America Certificate of Compliance for Construction Materials

Exhibit 3F Escrow Affidavit

Exhibit 3A Non-Collusion Affidavit

Exhibit 3B SOQ Certificate, "Bring-Down" SOQ Certificate from Proposal

Exhibit 3C Equal Employment Opportunity Certification

Exhibit 3D Debarment and Suspension Certification

Exhibit 3E Proposal Buy America Certificate and Build America, Buy America Certificate of Compliance for Construction Materials

Exhibit 3F Escrow Affidavit

Exhibit 4

Parcel Acquisition Table

(*attached*)

(Existing Right of Way and State Proposed Right of Way)

Parcel No.	Parcel Grouping	Acquired Date	Parcel Availability Date (SPSA)	State Proposed/ State Acquired	State Proposed/ State Acquired Design Contingent	State Proposed/ Developer Acquired
			PI #0017182			
1	A		7/1/2026	X		
2	A		7/1/2026	X		
3	A		7/1/2026	X		
4	A		7/1/2026	X		
5	B		10/1/2026	X		
6	A	10/10/2024	7/1/2026	X		
7	A	10/10/2024	7/1/2026	X		
8	B		10/1/2026	X		
9	A		7/1/2026	X		
10	A		7/1/2026	X		
11	A		7/1/2026	X		
12	A		7/1/2026	X		
13	B		10/1/2026	X		
14	A		7/1/2026	X		
15	A		7/1/2026	X		
16	B		10/1/2026	X		
17	A		7/1/2026	X		
18	A		7/1/2026	X		
19	B		10/1/2026	X		
20	B		10/1/2026	X		
21	B		10/1/2026	X		
22	A		7/1/2026	X		
23	A		7/1/2026	X		
24	A		7/1/2026	X		
25	A		7/1/2026	X		
27	B		10/1/2026	X		
28	B		10/1/2026	X		
29	B		10/1/2026	X		
30	B		10/1/2026	X		
31	B		10/1/2026	X		
32	B		10/1/2026	X		
33	B		10/1/2026	X		
34	B		10/1/2026	X		
35	C		1/10/2027	X		
36	C		1/10/2027	X		
37	B		10/1/2026	X		
38	B		10/1/2026	X		

Parcel No.	Parcel Grouping	Acquired Date	Parcel Availability Date (SPSA)	State Proposed/ State Acquired	State Proposed/ State Acquired Design Contingent	State Proposed/ Developer Acquired
41	B		10/1/2026	X		
42	C		1/10/2027	X		
43	B		10/1/2026	X		
45	A		7/1/2026	X		
46	B		10/1/2026	X		
47	B		10/1/2026	X		
48	B		10/1/2026	X		
49	B		10/1/2026	X		
PI# 0014203						
183	B		10/1/2026	X		
PI# 0013995						
2	A	11/12/2021	7/1/2026	X		
4	A	3/28/2022	7/1/2026	X		
5A	B		10/1/2026	X		
6A	A		7/1/2026	X		

Commitments relating to acquisition of parcels of Design-Builder Proposed/Design-Builder Acquired are set forth in DBA Exhibit 2 (*Proposal Commitments*).

There are no Parcels of State Proposed/State Acquired Right of Way (Design Contingent).

Exhibit 5

TERMS FOR TERMINATION COMPENSATION AND PREPAYMENT

(*attached*)

A. Compensation on Termination for Convenience, Termination for GDOT Default, or Termination for Suspension of Work; Termination for Materially Delayed NTP2.

1. In the event of termination under DBA Section 18.1 (*Termination for Convenience*), Section 18.3 (*Termination for GDOT Default or Suspension of Work or Materially Delayed NTP2*), or DBA Section 18.9 (*Termination by Court Ruling*), the Termination Compensation shall equal:

(a) that portion of the Contract Sum on account of Work performed that has not already been paid; plus

(b) the amount necessary to reimburse reasonable and documented out-of-pocket costs of third party and Affiliate Contractors to demobilize under and to terminate Contracts between Design-Builder and third parties or Affiliate Contractors for performance of Work, including to recover any reasonable nonrefundable deposits to Suppliers, but excluding Design-Builder's non-contractual liabilities and indemnity liabilities (contractual or non-contractual) to third parties or Affiliate Contractors; plus

(c) if termination occurs prior to the Final Acceptance Date, Design-Builder's own reasonable and documented out-of-pocket costs including (without duplication) demobilization and reasonable and documented costs for additional work done or to be done to carry out termination obligations pursuant to DBA Article 18 (*Termination*) (the "Termination Holdback"); minus

(d) the sum of (i) the greater of:

(A) the proceeds received from insurance (including casualty insurance and business interruption insurance, if obtained) that is required to be carried pursuant to DBA Section 16.1 (*Insurance*) and provides coverage to pay, reimburse, or provide for any of the costs and losses attributable to covered peril or insured loss (exclusive of payments on account of replacement Work performed and to be reimbursed under the builder's risk insurance coverage), and

(B) the proceeds received from insurance (including casualty insurance and business interruption insurance, if obtained) that is actually carried by or insuring Design-Builder under policies solely with respect to the Project and the Work, regardless of whether required to be carried pursuant to DBA Section 16.1 (*Insurance*), and that provides coverage to pay, reimburse or provide for any of the costs and losses attributable to any covered peril or insured loss (exclusive of payments on account of replacement Work performed and to be reimbursed under the builder's risk insurance coverage)

plus (ii) the foregoing costs and losses that Design-Builder is deemed to have self-insured pursuant to DBA Section 16.1 (*Insurance*); minus

(e) the portion of any Compensation Amounts previously paid to (or charged against) Design-Builder that compensated Design-Builder for Work attributable to the period after the Early Termination Date, other than to the extent that such amounts have been committed or spent as work in progress not invoiced.

2. In the event of termination under DBA Section 18.1 (*Termination for Convenience*), or DBA Section 18.3 (*Termination for GDOT Default, Suspension of Work or Materially Delayed NTP2*), any such Termination Compensation shall be payable as follows:

(a) For Termination for Convenience

(i) Termination for Convenience shall be valid and effective on the date set forth in the Notice of Termination for Convenience, which date shall not be more than three months and no less than one month after the date the notice is delivered.

(ii) In the event that the Termination Compensation is positive, GDOT will pay, in immediately available funds, within 45 days after the Early Termination Date, the Termination Compensation due, less the Termination Holdback, subject to subsections (c) and (d) below.

(b) For Termination for GDOT Default or Termination for Suspension of Work or Materially Delayed NTP2

(i) If the Design-Build Agreement is terminated due to Design-Builder's exercise of its right to terminate under DBA Section 18.3 (*Termination for GDOT Default, Suspension of Work or Materially Delayed NTP2*), termination shall be valid and effective on the date notice of termination is delivered; and

(ii) subject to DBA Sections 18.2.2 (*Compensation to Design-Builder*) and 18.3.4 (*Termination for GDOT Default, Suspension of Work or Materially Delayed NTP2*), in the event that the Termination Compensation is positive, GDOT will pay, in immediately available funds, within 45 days after the Early Termination Date, the Termination Compensation due, less the Termination Holdback, subject to subsection (c) below.

(c) GDOT will pay the Termination Holdback within 10 days after Design-Builder completes all its post-termination obligations under DBA Section 18.4 (*Termination Procedures and Duties*).

3. In the event that the Termination Compensation amount is negative, then Design-Builder shall be liable to pay the amount to GDOT within 15 days after delivery of GDOT's Notice requiring payment.

B. Compensation on Termination for Design-Builder Default

1. In the event of termination under DBA Section 18.2 (*Termination for Design-Builder Default*), Design-Builder shall not be entitled to receive, and GDOT will not pay Design-Builder, any compensation, including any compensation for or relating to any costs or expenses with respect to third party and Affiliate Contractors to demobilize under and to terminate Contracts between Design-Builder and third parties or Affiliate Contractors for performance of Work, demobilization costs and expenses, any costs and expenses for additional work done or to be done to carry out termination obligations pursuant to DBA Article 18 (*Termination*).

2. Design-Builder shall be liable to pay to GDOT (a) Liquidated Damages, Nonrefundable Deductions, and Lane Closure Deductions, in each case owed to GDOT, and (b) reimbursement of all costs and expenses reasonably incurred by GDOT or expected to be incurred by GDOT or any Person acting on GDOT's behalf in completing the Work or having the Work completed by another Person, including remediating any Nonconforming Work, procurement costs, and throw away costs for unused portions of the completed Work.

C. Compensation on Termination by Court Ruling

If the Design-Build Agreement is terminated under DBA Section 18.9 (*Termination by Court Ruling*), then such termination shall be treated as follows:

1. If such termination occurs after the Effective Date but prior to NTP1, then no termination compensation shall be, or shall be deemed to be, due and payable.

2. If such termination occurs after NTP1, then the Termination Compensation will be calculated in accordance with Section A.1 above.

3. Any such Termination Compensation shall be payable in accordance with Section A.2 above.

D. Outstanding Amounts or Demands of GDOT Against Design-Builder

1. Notwithstanding anything to the contrary herein, Termination Compensation shall include and be adjusted on account of any outstanding amount or demand by GDOT for payment of money or damages from Design-Builder to GDOT that is independent of the event of termination. The Parties shall adjust the Termination Compensation by the amount of the unpaid award, if any, on any such amount or demand. In circumstances where no Termination Compensation is payable, GDOT shall nonetheless have a right to, and Design-Builder shall be obligated to pay GDOT, any such outstanding amount or demand by GDOT for payment of money or damages.

2. At GDOT's sole election, it may hold back from payment of the Termination Compensation the amount owing by Design-Builder to GDOT not resolved prior to payment. GDOT will provide Notice to Design-Builder of any such election, the reason for the withholding, and the amount being held back, prior to or concurrently with tendering payment of the Termination Compensation.

3. If as of the date GDOT tenders payment under this DBA Exhibit 5 (*Terms for Termination Compensation and Prepayment*), the Parties have not agreed upon the amount of Termination Compensation due, then:

(a) GDOT will pay Design-Builder the undisputed portion of the Termination Compensation, if any;

(b) within 30 days after dispatch of such payment, Design-Builder shall deliver to GDOT Notice of the additional amount of Termination Compensation that Design-Builder in good faith determines is still owing (the "disputed portion");

(c) if finally settled, ordered, or adjudged, and only to the extent of such settlement, order, or judgment, GDOT will pay Design-Builder the determined amount of disputed portion within 30 days after the settlement, final order or final judgment; and

(d) failure by GDOT to effect payment by such date shall not entitle Design-Builder to reinstatement of the Design-Builder's Interest or to rescission of the termination.

4. If it is determined by settlement or final judgment that the Termination Compensation due from GDOT is less than the payment previously made by GDOT, then within 30 days after the date of settlement or final judgment Design-Builder shall reimburse the excess payment, together with interest thereon at the Default Interest Rate from the date of overpayment until the date of reimbursement.

Exhibit 6

MODIFICATIONS TO EQUIPMENTWATCH EQUIPMENT RATES

Allowable Equipment Rates shall be established as defined below:

(i) Allowable Hourly Equipment Rate = Monthly Rate/176 x Adjustment Factors x 70%.

(ii) Allowable Hourly Operating Cost = Hourly Operating Cost x 70%.

(iii) Allowable Rate Per Hour = Allowable Hourly Equipment Rate + Allowable Hourly Operating Cost.

(iv) Standby Rate = Allowable Hourly Equipment Rate x 35%

(v) The monthly rate is the basic machine plus any attachments.

(c) Standby rates shall apply when equipment is not in operation and is either directed or approved, pursuant to Design-Builder's request, by GDOT to standby for later use. In general, standby rates shall apply when equipment is not in use, but will be needed again to complete the Work and the cost of moving the equipment will exceed the accumulated standby cost. Payment for standby time will not be made on any day the equipment operates for 8 or more hours. For equipment accumulating less than 8 hours operating time on any normal workday, standby payment will be limited to only that number of hours which, when added to the operating time for that day equals 8 hours. Standby payment will not be made on days that are not normally considered workdays.

(d) GDOT will not approve any rates in excess of the rates as outlined above unless such excess rates are supported by an acceptable breakdown of cost.

(e) Payable time periods will not include:

(i) Time elapsed while equipment is broken down

(ii) Time spent in repairing equipment, or

(iii) Time elapsed after GDOT has advised the Design-Builder the equipment is no longer needed

(f) If a piece of equipment is needed which is not included in the above Blue Book rental rates, reasonable rates shall be agreed upon in writing before the equipment is used. All equipment charges by persons or firms other than the Design-Builder shall be supported by invoices.

(g) Transportation charges for each piece of equipment to and from the site of the Work will be paid provided:

(i) The equipment is obtained from the nearest approved source

(ii) The return charges do not exceed the delivery charges

(iii) Haul rates do not exceed the established rates of licensed haulers, and

(iv) Such charges are restricted to those units of equipment not already available and not on or near the Project

(h) No additional compensation will be made for equipment repair.

Exhibit 7

CONTRACT SUM AND PAYMENT TERMS

(on following pages)

Attachment 1 to Exhibit 7 Form of Invoice

Unless expressly stated otherwise, references to sections in this DBA Exhibit 7 (*Contract Sum and Payment Terms*) are internal to this DBA Exhibit 7 (*Contract Sum and Payment Terms*).

1. Contract Sum

a. The preliminary Contract Sum is $[_____]***[NTD: get this from the Proposal]***.

b. The preliminary Contract Sum excludes the Unexpected Subsurface Conditions Allowance.

2. Generally Regarding Processing of Invoices

a. All draft and final Invoices, and all deliverables in connection therewith, shall be submitted to GDOT for approval.

b. When final Invoices are approved, GDOT will issue all payments on account of the Work as set forth in this DBA Exhibit 7 (*Contract Sum and Payment Terms*).

c. Project Payments owed by GDOT to Design-Builder pursuant to a Supplemental Agreement shall be paid in accordance with this DBA Exhibit 7 (*Contract Sum and Payment Terms*) as part of any Invoice for Work completed in the ordinary course, with relevant materials associated with Supplemental Agreements so identified within the Invoice Support Package.

d. Parties intend that payments for the Work, as may change pursuant to a Supplemental Agreement, payments for additional Work under a Supplemental Agreement, and payments under "force account," pursuant to DBA Section 13.4.5.3 (*Force Account*), pending finalization under a Supplemental Agreement, will be submitted as part of each monthly Invoice, as more fully described below. Invoices shall also be used for payments of amounts due, as and when determined pursuant to, and in accordance with, DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

e. For avoidance of doubt, the Invoice Support Package shall include information required under DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*) for amounts sought to be drawn against the Unexpected Subsurface Conditions Allowance and information required under DBA Section 13.4.5.3(g) (*Force Account*) for "force account" amounts.

3. Baseline Schedule of Values; Invoicing Process.

3.1 Reserved

3.2 Form of Invoice

3.2.1 Design-Builder's Invoice shall be in the form included as Attachment 1 to this DBA Exhibit 7 (*Contract Sum and Payment Terms*), with no additions or deletions other than those approved by GDOT, with supporting documents, including any Supplemental Agreement serving as the basis for some of the Invoiced amount (such supporting documents, the "Invoice Support Package").

(i) For avoidance of doubt, where amounts Design-Builder may present variations to the formats of the Invoice for GDOT approval at least 15 Business Days prior to the submittal of the first Invoice. Once GDOT has approved the varied format(s), the formats shall not change unless subsequently approved by GDOT.

(ii) Except as otherwise already set forth in the DBA (with respect to "force account" amounts and as relates to Unexpected Subsurface Conditions Allowance draws, Design-Builder shall obtain GDOT's approval of the requirements for the supporting documents which are to be included with the Invoice within 15 Business Days after issuance of NTP1.

3.2.2 The draft Invoice package shall include one electronic copy of: (a) the Invoice; and (b) the Invoice Support Package for the period covered by the draft Invoice.

3.3 Timing.

3.3.1 Design-Builder shall submit a draft Invoice to GDOT at a maximum frequency of once every month. Once approved in accordance with Section 4, the Invoice serves as an invoice for Work performed (including that performed pursuant to a Supplemental Agreement) in the preceding calendar month (each an "Invoice Period")

3.3.2 Design-Builder shall submit each draft Invoice and Invoice Support Package (inclusive of the SOV Update) after submittal of the SOV Update and Project Schedule Update, with reference to the then-current Baseline SOV, and no earlier than five Business Days following the end of the Invoice Period.

3.3.3 Design-Builder shall not submit the first draft Invoice prior to NTP1.

3.4 Invoice Amounts.

3.4.1 *Generally*.

(i) The "Invoice Amount" for a given Invoice Period shall be calculated as follows: (a) the "Value Earned for Work" performed in accordance with Section 3.4.2; *minus* (b) Deductions in accordance with Section 2.4; *plus* (c) any Supplemental Agreement amounts, if any; *plus or minus* (d) other adjustments in accordance with the Design-Build Agreement, including separate draws against the Unexpected Subsurface Conditions Allowance and amounts sought pursuant to "force account" principles.

(ii) Without limiting Section 3.3.1 and Section 6, at no time may the sum of previously-approved and paid Invoice Amounts plus the amount of the current Invoice exceed, in the aggregate, an amount equal to the Contract Sum, as adjusted under the Design-Build Agreement (e.g., less cumulative Deductions plus Supplemental Agreement amounts, if any, and otherwise reflecting all other adjustments accumulated up to and including the current Invoice Period), *plus* the cumulative value of amounts drawn properly under the Unexpected Subsurface Condition Allowance.

(iii) If the Invoice submitted meets either criterion under Section 3.4.1(ii), then, Sections 5.2 and 6.2 shall apply.

(iv) Invoices for Work shall be based upon the Value Earned for Work (including, with respect to amounts sought pursuant to Supplemental Agreements), except with respect to those portions of the Work calculated under "force account" principles pursuant to DBA Section 13.4.5.3 (*Force Account*). Those portions of any Invoice based upon the terms of a Supplemental Agreement shall be limited to the Work identified therein, subject to the succeeding sentence. Except with respect to "force account" Work, Invoice Amounts shall be limited to work detailed in the Schedule of Values Update for the given month, or the latest accepted Baseline Schedule of Values, whichever is more recent, eligible amounts for insurance, P&P Bonds, and mobilization costs, which will be based on their actual costs, and, with respect to Supplemental Agreements, amounts detailed under the Supplemental Agreements.

(v) Invoice totals for [_____] shall be calculated on a percentage complete basis, such that the resulting percentage results in no more than two significant figures (e.g. XX.XX%). Any numbers above two significant figures will be rounded down to the nearest two significant figures, and the Invoice adjusted accordingly.***[NTD: PMC/GDOT to discuss with GDOT finance on what types of Work are listed in the bracket]***

3.4.2 *Evaluation and Determination of Value Earned for Work Performed*.

"Value Earned for Work" performed during each Invoice Period shall be evaluated and determined by identifying activities against those identified and valued on the current version of the Baseline Schedule of Values and the Baseline Project Schedule to measure the true progress and degree of completion of the Work. "Value Earned for Work" may also include Work identified under Supplemental Agreements, including eligible payments under "force account" principles calculated, with respect to the Invoice Period, pursuant to DBA Section 13.4.5.3 (*Force Account*).

3.5 Deductions

3.5.1 *Generally*

Deductions shall be made monthly based on performance in the Invoice Period. Each Invoice Support Package shall detail occurrences of Liquidated Damages, Nonrefundable Deductions, and Lane Closure Deductions in the Invoice Period. These Deductions will be considered independently by GDOT. For avoidance of doubt, GDOT may apply full Deductions for each Invoice Period regardless as to whether Design-Builder has Disputed any Deduction (or the amount of any Deduction). If the Dispute is resolved in whole or part in favor of Design-Builder, then the amount so determined will be included in the draft Invoice delivered for the next succeeding Invoice Period.

3.5.2 *Deduction Amount*

The amount of Deductions in a given month shall be calculated as follows: (a) total Liquidated Damages for the month, *plus* (b) total Nonrefundable Deductions for the month, plus (c) total Lane Closure Deductions for the month.

4. Invoice Review by GDOT.

GDOT shall review the Invoice and Invoice Support Package (inclusive of the SOV Update), and when applicable, SOV Line Item assignment data exhibit generated from the Project Schedule Update, if Design-Builder cost-loads the Baseline Project Schedule and also when applicable that portion of the Invoice Support Package relating to "force account" Work, promptly, but in no case later than five days after receipt of all of the foregoing. GDOT intends, as part of its review, independently to address and finalize the following:

- actual start dates, actual finish dates, percent completion (where authorized and relevant), and Value Earned for Work with respect to Work in the ordinary course during the Invoice Period and for the Project to date;
- actual start dates, actual finish dates, percent completion (where authorized and relevant), and Value Earned for Work with respect to Work under any Supplemental Agreements pursuant to which payment is sought during the Invoice Period and for the Project to date;
- incorporation of all the effects of all approved Supplemental Agreements on the Contract Sum;
- Deductions and other adjustments (including specifically any offsets made further to GDOT's rights under DBA Section 17.3.3.2 (*Damages; Offset*); and
- Such other items as may pertain to "force account" Work; and
- requested draws upon the Unexpected Subsurface Conditions Allowance.

GDOT reserves the right to reject any Invoice, or to require Design-Builder to revise, resubmit, or supplement any Invoice, as a result of GDOT's review, such that GDOT has, and is reviewing, a complete Invoice and Invoice Support Package, (inclusive of the SOV Update and other required information, as applicable), and when applicable, SOV Line Item assignment data (described just above). If GDOT exercises any such right, GDOT's obligation to review the foregoing shall be deemed to begin no later than five days after receipt of the revised, resubmitted, or supplemented Invoice.

5. Approval of Invoices; Payment.

5.1 Within five Business Days after receipt of a correct and complete Invoice and Invoice Support Package, and when applicable accompanying SOV Update, SOV Line Item assignment data, "force account" information and required information relating to sought draws upon the Unexpected Subsurface Conditions Allowance, each as described above, GDOT will approve the Invoice, as submitted (in which case, countersigning Design-Builder's Invoice), or approve (and sign) an Invoice, as adjusted by GDOT based upon the foregoing analysis (in which case, GDOT shall return the adjusted Invoice to Design-Builder for countersignature, should it choose).

5.2 If Design-Builder elects to Dispute the adjusted Invoice, then GDOT shall not direct GDOT to pay, nor shall GDOT be deemed to be required to pay, nor be deemed to be required to direct GDOT to pay, any amount above the amount of the adjusted Invoice, but GDOT shall direct GDOT to pay Design-Builder the undisputed portion, if any, of the adjusted Invoice.

5.3 GDOT shall pay the Invoiced amount (or the adjusted, undisputed Invoiced amount) no later than 10 Business Days after receipt of the countersigned Invoice or signed adjusted Invoice to GDOT.

6. Reserved

7. No Waiver

No payments made shall be construed as an acceptance by or on behalf of GDOT of any Nonconforming Work or improper materials nor shall any such payments be, or be deemed to be, conclusive evidence of the performance of this Design-Build Agreement.

8. Disputes

If GDOT and Design-Builder disagree as to the amount identified on the submitted or adjusted Invoice, or other matters relating to the procedure outlined in this DBA Exhibit 7 (*Contract Sum and Payment Terms*), then such Disputes shall be resolved pursuant to the Dispute Resolution Procedures.

ATTACHMENT 1 TO EXHIBIT 7
FORM OF INVOICE

I-75 at Bethlehem Road Interchange Project
GDOT Contract No.: P.I. No. 0017182
Invoice Number and Period for Invoice Amount: #_____, _____, 20__ through _____, 20__

Contract Sum and Payment Summary			
Contract Sum, adjusted for Supplemental Agreements *This subsection determines the total amount available, as of the Invoice period, to pay for the Work*			
1(a)	Contract Sum at Effective Date[1]	$[_____]	
1(b)	Aggregate adjustments to Contract Sum approved **Supplemental Agreements** *[enter 0 if no adjustments]*	$[_____] or ($[_____])	
1(c)	Contract Sum, as adjusted *(Line 1(a) +/- Line 1(b))*		$[_____]
1(d)	Balance of holdbacks, withholdings, charge backs not yet Invoiced[2] *[enter 0 if none]*	$[_____] or ($[_____])	
1(e)	Aggregate of prior Invoices paid	($[_____])	
1(f)	**Net outstanding balance of Contract Sum before this Invoiced period** *(Line 1(c) + Line 1(d) - Line 1(e))*		**$[_____]**
Summary for Invoice Period			
This Section determines the total amount of the Invoice for the Invoice period			
2(a)(i)	Value Earned for "General"[3] Work performed for this Invoice period (non-Supplemental Agreement Work) (*see SOV, Section A. (General)*)	$[_____]	
2(a)(ii)	Value Earned for "General" Work performed for this Invoice period (**Supplemental Agreement Work**[4]) *[enter 0 if no adjustments]*	$[_____]	

[1] The amount specified in Line 1(a) (Contract Sum and Payment Summary) is static throughout the Term, such that it will not change from Invoice to Invoice. This amount is the "preliminary Contract Sum" set forth in Section 1(a) of DBA Exhibit 7 (*Contract Sum and Payment Terms*).

[2] This line item should include amounts that are not Deductions (defined term) not invoiced or otherwise paid-in-full, and which have not otherwise been previously reconciled for invoicing, or credits, *see e.g.*, DBA Sections 2.5.17, 2.6.14, 7.3.3.5, 7.17.5.4, 14.4.1, 14.4.2, 14.6.1, 14.6.2.2, Exhibit 5 (for any Termination Holdback); and other amounts withheld (DBA Sections 10.8, 10.9.3.4, 10.13, and 17.6).

[3] non-Design Work, non-Construction Work; see DBE Exhibit 1, def. "Baseline Schedule of Values".

[4] For all Supplemental Agreement Work, including "force account" Work under DBA Sections 13.4.5.1, .2 (*Lump Sum Compensation*), the Invoice Support Package shall account for payments under prior Invoices made on account of Directive Letters. See Line 3 (Directive Letter Payments). See also Lines 1(b), 2(b)(ii), and 2(c)(ii).

2(b)(i)	Value Earned for Design Work performed for this Invoice period (non-Supplemental Agreement Work) (*see SOV, Section B. (Design Services)*)	$[_____]	
2(b)(ii)	Value Earned for Design Work for this Invoice period (**Supplemental Agreement Work**) *[enter 0 if no adjustments]*	$[_____]	
2(c)(i)	Value Earned for Construction Work performed for this Invoice period (non-Supplemental Agreement Work) (*see SOV, Section C. (Construction)*)	$[_____]	
2(c)(ii)	Value Earned for Construction Work performed for this Invoice period (**Supplemental Agreement Work**) *[enter 0 if no adjustments]*	$[_____]	
2(d)	**Total Value Earned for the Work for this Invoiced period** *(Line 2(a)(i) + Line 2(a)(ii) + Line 2(b)(i) + Line 2(b)(ii) + Line 2(c)(i) + Line 2(c)(ii))*		$[_____]
3	**Directive Letter payments, if any**[5] *[enter 0 if none]*	$[_____]	
4(a)	Deductions (enumerated by Liquidated Damages, Nonrefundable Deductions, and Lane Closure Deductions, all as allocated for the Invoice Period)[6][7]	$[_____]	
4(b)	Approved adjustments to the Contract Sum (prior holdbacks, withholdings, charge backs, as allocated for the Invoice Period)[8]	$[_____] or ($[_____])	
4(c)	**Invoice Amount (Work) equals** *Line 2(d) + Line 3 - Line 4(a) (total) +/- Line 4(b)*		**$[_____]**
Contract Sum Remaining			
This Section is an accounting for the calculation for Line 1(f) on the next, succeeding Invoice			

[5] See DBA Section 14.1.6 (*Request for Change Proposal*), DBA Section 14.3 (*Directive Letters*). Directive Letter payments are interim payments of reasonable, documented costs, and the Invoice Support Package shall justify these payments. Subsequent Supplemental Agreements will be net of these interim payments.

[6] See DBA Section 17.4.6.3 (*Acknowledgements Regarding Liquidated Damages, Nonrefundable Deductions, Lane Closure Deductions*) and DBA Section 17.4.7 (*Deductions; Payment; Satisfaction; Waiver*) (i.e., without limiting the operation of the foregoing sections referenced, Deductions assessed, despite Dispute; adjustments following resolution of the Dispute would be an "approved adjustment" in a succeeding invoice under Lines 4(c).

[7] Enumerate separately the Liquidated Damages, Nonrefundable Deductions, and Lane Closure Deductions in the Invoice Support Package.

[8] The value here will affect Line 1(d) on the succeeding Invoice. These, in each case that are not adjustments under Supplemental Agreements (i.e., which are listed in Line 1(b)).

5(a)	Net outstanding balance of Contract Sum after this Invoice Period *Line 1(f) - Line 4(c)*		$[_____]
Unexpected Subsurface Conditions Allowance			
6(a)	Unexpected Subsurface Conditions Allowance at Effective Date[9]	$[_____]	
6(b)	Aggregate of prior draws against the Unexpected Subsurface Conditions Allowance as of the date of the Invoice	($[_____])	
6(c)	Balance of Subsurface Conditions Allowance Remaining *(Line 6(a) - Line 16(b))*		$[_____]
6(d)	Amount of draw sought against the Unexpected Subsurface Conditions Allowance under this Invoice	($[_____])	
Total Invoiced Amount			
6(e)	**Invoice Amount (Work + Allowance)** *Line 4(c) + Line 6(d)*		**$[_____]**

Submitted this _____***[Date]*** by:

[_____]***[Design-Builder]***

By:_____
Name:_____
Title:_____

Approved this _____***[Date]*** by:

Georgia Department of Transportation

By:_____
Name:_____
Title:_____

[9] The amount specified in Line 6(a) (Unexpected Subsurface Conditions Amount) is static throughout the Term, such that it will not change from Invoice to Invoice. This amount is as set forth in DBA Section 7.18.1.1 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*).

DESIGN-BUILDER CERTIFICATE

In order to induce the Georgia Department of Transportation ("GDOT") to make payment as requested by this Invoice, Design-Builder hereby certifies, represents, and warrants to GDOT, with respect to Invoice No. ___ for the period from _____ to _____, as follows:

1. Unless otherwise indicated, capitalized terms used herein shall have the meanings set forth in that certain Design-Build Agreement, dated as of _____, by and between GDOT and Design-Builder (the "Design-Build Agreement").

2. The Work associated with each SOV Line Item described in the exhibits and documents attached hereto has been completed to the level represented by this Invoice and has been fully performed in compliance in all material respects with the requirements of the Design-Build Documents; and the information contained in such exhibits and documents is true, complete, and correct in all material respects.

3. If applicable, the Work performed and accounted for under "force account" principles, pursuant to DBA Section 13.4.5.3 (*Force Account*), has been completed to the level represented by this Invoice and has been fully performed in compliance in all material respects with the requirements of the Design-Build Documents; and the information contained in the Invoice Support Package – Force Account, pursuant to such DBA Section, is true, complete, and correct in all material respects.

4. If applicable, the draw sought against the Unexpected Subsurface Conditions Allowance has been actually incurred, and amounts sought under such draw, complies with the requirements set forth in DBA Section 7.18 (*Discovery of Unexpected Subsurface Conditions and Errors in GDOT Boring Data*); and the information contained in the Invoice Support Package with respect thereto is true, complete, and correct in all material respects.

5. The amount specified in this Invoice has been computed in accordance with, and is due and payable under, the terms and conditions, has not been the subject of any previous Invoice (unless Disputed or rejected for payment) and is not the subject of any pending Invoice from Design-Builder.

6. For Work previously paid under "force account" principles, the Supplemental Agreement amounts sought under this Invoice do not double count such Work.

7. No Design-Builder Default has occurred and is continuing that has not been reported to GDOT.

8. The representations and warranties of Design-Builder set forth in the Design-Build Agreement are true and correct as of the date of this Invoice.

9. All Governmental Approvals necessary for the Work that are Design-Builder's obligation to obtain pursuant to the Design-Build and to which this Invoice relates have been secured, except to the extent GDOT and the issuing Governmental Entity have granted a written exception, and there exists no reason to believe that any future Governmental Approvals that are Design-Builder's obligation to obtain pursuant to the Design-Build Documents for the Work cannot be secured.

10. Neither Design-Builder nor any Contractor, Subcontractor, or Supplier is barred or suspended from providing goods or services to any local, state or federal agency. Except for any specific Contractor, Subcontractor, or Supplier listed as barred or suspended in an attachment hereto, each Contractor, Subcontractor, and Supplier for the Work has certified in its respective invoice to Design-Builder that it is not barred or suspended from providing goods or services to any local, state or federal agency, and to Design-Builder's knowledge no Contractor, Subcontractor, or Supplier has been so barred or suspended.

11. As of the date of this Invoice, all Contractors, Subcontractors, and Suppliers, together with all Utility Owners and other third parties engaged or retained by Design-Builder or such Contractors, Subcontractors,

or Suppliers for performance or supply of Work have been paid all amounts due under their respective contracts or purchase agreements (in each case, other than amounts to be paid pursuant to this Invoice, and in each case other than amounts in dispute, of which Design-Builder has previously given GDOT written notice setting forth in detail the amounts in dispute).

12. Prevailing wages have been paid to all employees of Design-Builder, all Contractors, and Subcontractors in accordance with the rates set forth in the Design-Build Agreement.

13. Design-Builder has not requested nor received any payments from GDOT on account of any amount sought hereby.

14. Design-Builder and the undersigned making the certifications in connection with the Invoice acknowledge that GDOT will rely on the certifications and information presented herein and represent and certify that the calculations as set forth in the Invoice are true and correct as of the date hereof.

15. Also attached hereto are:

(a) A certificate and release signed by each Contractor, Subcontractor, and Supplier for Work, and each Contractor, Subcontractor, Supplier, and Utility Owner or other third party engaged or retained for performance of Work or supply of related services, materials or equipment included in any preceding Invoice for which Design-Builder received payment, certifying that it has received payment in full for such services, materials or equipment, except only for amounts in dispute, stating any amounts in dispute and waiving and releasing any and all claims or Liens, known or unknown, suspected or unsuspected, arising out of such services, materials or equipment against any person or property whatsoever, including GDOT, the State, the Project, any P&P Bond and any letters of credit; and

(b) An "Affidavit of Wages Paid" submitted by Design-Builder, each Contractor, and Subcontractor, certifying wages paid and compliance with applicable prevailing wage requirements.

16. Design-Builder has provided a complete copy of this Invoice, attachments thereto, and all other supporting documentation to GDOT simultaneously with its submission to GDOT.

17. The Work completed during the period covered by this Invoice was in reasonable conformance with the approved plans and specifications, including any approved changes, and the amount indicated in this Invoice is true and correct statement of the amount due the Design-Builder for the timeframe covered by this Invoice. No part of the amount due under this Invoice has been previously approved for payment by GDOT.

[_____]***[Design-Builder]***

By:_____
Name:_____
Title:_____

Date:

Exhibit 8

OTHER LEGAL REQUIREMENTS

Exhibit Description		No. of Pages
Attachment 1 –	Federal Requirements for Federal Aid Construction Facilities	[7]
Attachment 2 –	Required Contract Provisions, Federal-Aid Construction Contracts - FHWA Form 1273	[14]
Attachment 3 –	[Reserved.]	1
Attachment 4 –	Federal Prevailing Wage Rate	[6]
Attachment 5 –	Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246) (43 FR 14895)	1
Attachment 6 –	[Reserved.]	1
Attachment 7 –	Debarment and Suspension Certification	2
Attachment 8 –	Certification Regarding Use of Contract Funds For Lobbying	1
Attachment 9 –	Buy America Certificate of Compliance and Build America, Buy America Certificate of Compliance for Construction Materials	[4]

ATTACHMENT 1 TO EXHIBIT 8

FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION FACILITIES

GENERAL. — The work herein proposed will be financed in whole or in part with federal funds, and therefore all of the statutes, rules and regulations promulgated by the federal government and applicable to work financed in whole or in part with federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, Form FHWA-1273," are included in this DBA Exhibit 8 (*Other Legal Requirements*). Whenever in said required contract provisions references are made to:

(a) "contractor," "prime contractor," "bidder" or "prospective primary participant," such references shall be construed to mean Design-Builder or its authorized representative;

(b) "contract" or "prime contract," such references shall be construed to mean the Design-Build Agreement;

(c) "subcontractor," "supplier," "vendor," "prospective lower tier participant" or "lower tier subcontractor," such references shall be construed to mean, as appropriate, Contractors; and

(d) "department," "agency" or "department or agency entering into this transaction," such references shall be construed to mean GDOT, except where a different department or agency is specified.

PERFORMANCE OF PREVIOUS CONTRACT. — In addition to the provisions in Section II, "NONDISCRIMINATION," and Section VI, "SUBLETTING OR ASSIGNING THE CONTRACT," of the Form FHWA-1273 required contract provisions, Design-Builder shall cause the contractor to comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the Proposal. No request for subletting or assigning any portion of the contract in excess of $10,000 will be considered under the provisions of Section VI of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION. — The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary Projects. Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by 23 U.S.C. § 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28 U.S.C. § 1746, is included in the Proposal.

PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN SUBCONTRACTING.

(a) Part 26, Title 49, Code of Federal Regulations applies to this Project. Pertinent sections of said Code are incorporated within other sections of the Design-Build Agreement and any other Contract and the GDOT Disadvantaged Business Enterprise Program adopted pursuant to 49 C.F.R. Part 26. Each

contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex, sexual orientation, or gender identity in the performance of this contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;

(2) Assessing sanctions;

(3) Liquidated damages; and/or

(4) Disqualifying the contractor from future bidding as non-responsible.

(b) In accordance with 49 C.F.R. § 26.29, all Project contractors: (a) must pay all subcontractors for satisfactory performance of their contracts no later than 30 days from receipt of each payment made to such contractor; and (b) ensure prompt and full payment of retainage to all subcontractors within 30 days after such subcontractor's work is satisfactorily completed. The foregoing requirement must be included in any agreement for Project services between a Project prime contractor and a subcontractor.

(c) The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendix A and Appendix E are attached.

WORK HOURS

Each project contractor and subcontractor party to a contract or subcontract covered by this Section V must comply in all respects with the requirements of 40 U.S.C. 3702 and 3704 as supplemented by 29 C.F.R. § 5. Each project contract or subcontract covered by this Section V must specifically incorporate the foregoing requirement."

CONVICT PRODUCED MATERIALS

(a) FHWA Federal-aid projects are subject to 23 C.F.R. § 635.417, convict produced materials.

(b) Materials produced after July 1, 1991, by convict labor may only be incorporated in a federal aid highway construction project if such materials have been: (i) produced by convicts who are on parole, supervised release, or probation from a prison, or (ii) produced in a prison project in which convicts, during the 12 month period ending July 1, 1987, produced materials for use in federal aid highway construction projects, and the cumulative annual production amount of such materials for use in federal aid highway construction does not exceed the amount of such materials produced in such project for use in federal aid highway construction during the 12 month period ending July 1, 1987.

ACCESS TO RECORDS

(a) Design-Builder and its Contractors and Subcontractors shall allow GDOT, FHWA, and the Comptroller General of the United States, or their duly authorized representatives, access to all books, documents, papers, and other records of Design-Builder and Contractors which are directly pertinent to any grantee or subgrantee contract, for the purpose of making audit, examination, excerpts, and transcriptions thereof. In addition, as required by 49 C.F.R. § 200.333, Design-Builder and its Contractors and Subcontractors shall retain all such books, documents, papers, and other records for three years from the date of submission of the final expenditure report made pursuant to any such contract. Notwithstanding the

foregoing: (i) if any litigation, claim, or audit is started before the expiration of the 3-year period, the records must be retained until all litigation, claims, or audit findings involving the records have been resolved and final action taken; (ii) upon written notice from GDOT, FHWA, or the Comptroller General of the United States that any records must be retained beyond the 3-year period, such materials shall be retained until the Contractor or Subcontractor (as applicable) receives written notice from the party imposing such requirement that retention shall no longer be required; and (iii) records for real property and equipment acquired with Federal funds must be retained for three years after final disposition.

(b) Design-Builder agrees to include (and cause to be included) this section in each Contract at each tier, without modification except as appropriate to identify the Contractor or Subcontractor who will be subject to its provisions.

RECOVERED MATERIALS

Design-Builder and its contractors (at all tiers) shall comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), including the regulatory provisions of 40 C.F.R. Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 C.F.R. Part 247. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

CLEAN AIR/WATER

The following provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts:

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency.

CARGO PREFERENCE ACT

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction (46 C.F.R. Part 381) (and Design-Builder and Contractor shall insert the substance of the required provisions set forth in this section, in all applicable construction and procurement contracts and subcontracts).

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

(a) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(b) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor).

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations**: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations[10] relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination**: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 C.F.R. Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment**: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports**: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by GDOT or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to GDOT or the FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, GDOT will impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

    a. withholding payments to the contractor under the contract until the contractor complies; and/or

[10] The following statutory and regulatory cites are referred to herein as the " Acts" and "Regulations," respectively:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled *Non-discrimination In Federally-Assisted Programs Of The Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964*);
- 28 C.F.R. Part 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964).

b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as GDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request GDOT to enter into any litigation to protect the interests of GDOT. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 C.F.R. Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 C.F.R. Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-259), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Title IX of the Education Amendments of 1972, as amended, which prohibits discrimination because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

ATTACHMENT 2 TO EXHIBIT 8

FHWA-1273

Revised October 23, 2023

REQUIRED CONTRACT PROVISIONS

FEDERAL-AID CONSTRUCTION CONTRACTS

I. I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d *et seq.*), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d *et seq.*), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

> "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:
a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at

reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:
(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

c. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.
The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. Conformance. (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii)That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and

extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. Required disclosures and access (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).
Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

7. **Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors

to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

8. **Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

9. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

10. **Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

11. **Certification of eligibility**. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1.Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2.Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.
* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3.Withholding for unpaid wages and liquidated damages

a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with Section IV

paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on longstanding interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

> "Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or
>
> Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or
>
> Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;
>
> Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be

considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

c. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective

participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.
3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

3. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

ATTACHMENT 3 TO EXHIBIT 8

[Reserved.]

ATTACHMENT 4 TO EXHIBIT 8

FEDERAL PREVAILING WAGE RATE

(Subject to change)

ATTACHMENT 5 TO EXHIBIT 8

RESERVED

1.

ATTACHMENT 6 TO EXHIBIT 8

RESERVED

ATTACHMENT 7 TO EXHIBIT 8

DEBARMENT AND SUSPENSION CERTIFICATION

[1.] [For Design-Builder]: By executing the Design-Build Agreement (with respect to Contractors, any Contract), Design-Builder shall be deemed to have signed and delivered the following:

[1.] [For Contractors and Subcontractors]: By executing the [Contract]/[Subcontract], [Contractor]/[Subcontractor] shall be deemed to have signed and delivered the following:

The undersigned certifies to the best of its knowledge and belief, that it and its principals:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;

b. have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for: (i) commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) or private agreement or transaction; (ii) violation of federal or state antitrust statutes (including those proscribing price fixing between competitors, allocation of customers between competitors, and bid rigging); (iii) commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, or obstruction of justice; or (iv) commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects its present responsibility;

c. are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. have not within a 3-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default; or

e. if a corporation, have not been convicted of a felony violation under any Federal law within the two-year period preceding this proposal; and

f. if a corporation, does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2. Where Design-Builder, Contractor, or Subcontractor is unable to certify to any of the statements in this certification, such Person shall attach a certification to its proposal or bid, or shall submit it with the executed Design-Build Agreement, Contract, or Subcontract, stating that it is unable to provide the certification and explaining the reasons for such inability.

[signature on following page]

[_____][Design-Builder/Contractor/Subcontractor]

By:_____

Name:

Title:

ATTACHMENT 8 TO EXHIBIT 8

CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

[For Design-Builder]: By executing the Design-Build Agreement (with respect to Contractors, any Contract), Design-Builder shall be deemed to have signed and delivered the following:

[For Contractors and Subcontractors]: By executing the [Contract]/[Subcontract], [Contractor]/[Subcontractor] shall be deemed to have signed and delivered the following:

1. The prospective Design-Builder/Contractor certifies, to the best of its knowledge and belief, that:

a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with THIS Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Design-Build Agreement or Contract. If during the term of this contract there occurs any event that materially affects the accuracy of the information contained in any Standard Form-LLL declaration previously filed by the undersigned in connection with this contract, the undersigned shall complete and submit an updated Standard Form-LLL in accordance with its instructions no later than the end of the calendar quarter in which such event occurs.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352. Any person who makes a prohibited expenditure or fails to file (or amend) the required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such expenditure or failure.

3. Design-Builder/Contractor shall require that the language of this certification be included in all lower tier Contracts which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. § 3801, *et seq.*, apply to this certification and disclosure, if any.

NOTE: DESIGN-BUILDER AND EACH CONTRACTOR (AND SUBCONTRACTOR) IS REQUIRED, PURSUANT TO FEDERAL LAW, TO INCLUDE THE ABOVE LANGUAGE IN CONTRACTS OVER $100,000 AND TO OBTAIN THIS LOBBYING CERTIFICATE FROM DESIGN-BUILDER AND EACH CONTRACTOR (AND SUBCONTRACTOR) BEING PAID $100,000 OR MORE.

ATTACHMENT 9 TO EXHIBIT 8

COMPLIANCE WITH BUY AMERICA AND BUILD AMERICA, BUY AMERICA REQUIREMENTS

Design-Builder shall comply with the requirements of 23 U.S.C. § 313 as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021), and the federal regulations under 23 C.F.R. § 635.410, 2 C.F.R. § 200.322(c) and 2 C.F.R. § 184.

23 C.F.R. § 635.410 permits federal financial assistance in the Design-Build Agreement only if (a) all iron and steel used in the Project be produced in the United States (i.e., all manufacturing processes, from the initial melting stage through the application of coatings, to occur in the United States); (b) all manufactured products[1] used in the Project are produced in the United States (i.e., the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product[2], unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation); and (c) all construction materials[3] are manufactured in the United States (i.e., all manufacturing processes for the construction material occurred in the United States and satisfy the material-specific requirements set forth in 2 C.F.R. § 184.6); provided, however, that the following exceptions shall apply:[4]

(i) iron and steel where all manufacturing processes did not occur in the United States may be used so long as the cumulative cost of such steel and iron materials as they are delivered to the Project does not exceed 0.1% of the total contract amount, or $2,500, whichever is greater;

(ii) construction materials and manufactured products[5]not meeting the requirements set forth in subsections (b) and (c) above may be used so long as no more than the lesser of (A) $1,000,000, or (B) 5% of total applicable costs for the Project (defined as the total cost of iron and steel, manufactured products, and construction materials used in the Project, whether or not within the scope of an existing waiver); and

---

1 "Manufactured products" is as defined in 2 C.F.R. § 184.3.

2 To be calculated in accordance with 2 C.F.R. § 184.5.

3 "Construction materials" is defined in 2 C.F.R. § 184.3 (as affected by section 70917(c)(1) of the Infrastructure Investment and Jobs Act).

4 A waiver is currently in place for steel, iron, manufactured products, and construction materials in electric vehicle chargers manufactured prior to July 1, 2024 (see: FHWA "Waiver of Buy America Requirements for Electric Vehicle Chargers": https://www.federalregister.gov/documents/2023/02/21/2023-03498/waiver-of-buy-america-requirements-for-electric-vehicle-chargers). Consult the waiver itself for more detail

5 A nationwide Buy America waiver that supersedes Build America, Buy America requirements is currently in effect for manufactured products, but (as of January 14, 2024) is scheduled to expire, effective March 17, 2025. The requirement for manufactured products, which are not predominantly steel or iron products or a combination of both, must be produced in the United States will be effective for federally participating FHWA projects, with funds committed on or after October 1, 2025. The requirement for 55% of manufactured products' components, by cost, being minded, produced, or manufactured in the United States will be effective for projects with FHWA funds so committed on or after October 1, 2026. "Predominantly steel or iron products or a combination of both" is defined essentially as a product where the cost of iron and steel content exceeds 50% of the total cost of all the components of the product.

(iii) no domestic preference requirements under the statutes and regulations covered by this certification shall be applicable where the total amount of Federal financial assistance applied to the project, through awards or subawards, is below $500,000.

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure Project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure Project, but are not an integral part of the structure or permanently affixed to the infrastructure Project.

Concurrently with execution, Design-Builder has completed and submitted, or shall complete and submit, to GDOT a Buy America Certificate and a Build America, Buy America Certificate, each in the format below. After submittal, Design-Builder is bound by its original certifications.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. Should the Design-Build Agreement be investigated, Design-Builder has the burden of proof to establish that it is in compliance.

At Design-Builder's request, GDOT may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist pursuant to 23 C.F.R. § 635.410(c), as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021) and 2 C.F.R. § 184.7. However, Design-Builder certifies that it will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by GDOT. A request for a waiver shall be treated as a Change Request under DBA Section 14.2 (*Design-Builder Changes*).

Capitalized terms used, but not otherwise defined in this Attachment 9 to DBA Exhibit 8 (*Other Legal Requirements*) have the meanings ascribed in DBA Exhibit 1 (*Acronyms, Abbreviations, and Definitions*).

BUY AMERICA CERTIFICATE

Certificate of Compliance

Design-Builder hereby certifies that it is in compliance with the requirements of 23 U.S.C. § 313 as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021), and the Federal regulations under 23 C.F.R. § 635.410, 2 C.F.R. § 200.322(c), and 2 C.F.R. § 184 for the following project:

P.I. No. 0017182– I-75 at Bethlehem Road Interchange Project

HENRY COUNTY

Design-Builder further certifies that as required, Design-Builder will maintain all records and documents pertinent to the Buy America requirement, for not less than 3 years from the date of Final Acceptance. These files will be available for inspection and verification by GDOT and/or the Federal Highway Administration.

Date:_____

Signature:_____

Design-Builder's Name:_____

Title:_____

Subscribed and sworn to before me this _day of _____, _____.

_____ My Commission Expires: _____
Notary Public/Justice of the Peace

or

Certificate for Noncompliance

With respect to the following project:

P.I. No. 0017182 –I-75 at Bethlehem Road Interchange Project

HENRY COUNTY

Design-Builder hereby certifies that it cannot comply with the requirements of 23 U.S.C. § 313, as amended by the Build America, Buy America Act (under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law, Pub. L. 117-58, Nov. 15, 2021), and the applicable regulations in 23 C.F.R. § 635.410, 2 C.F.R. § 200.322(c), and 2 C.F.R. § 184, but may qualify for a waiver to these requirement(s) pursuant to the foregoing statutes and regulations, and that Design-Builder has submitted or will submit, within 15 Days after the date of this certificate, a Change Request under DBA Section 14.2 (*Design-Builder Changes*).

Design-Builder acknowledges, agrees, and further certifies that if the foregoing waiver of requirements sought via submission of a timely Change Request pursuant to DBA Section 14.2 (*Design-Builder Changes*) is not available or not pursued by GDOT, then Design-Builder shall comply with, and cause all Subcontractors of any tier to comply with, the applicable Buy America requirements within the foregoing statutes and regulations and submit, and cause to be submitted, promptly following Notice from GDOT to Design-Builder of such unavailability or intent not to pursue such waiver, a Certificate of Compliance in form and substance under this Attachment 9 to DBA Exhibit 8 (*Other Legal Requirements*).

References to the "DBA" (and to sections, exhibits, and attachments thereto) are to the "Design-Build Agreement", by and between GDOT and the Design-Builder, with respect to the foregoing project.

Date:_____

Signature:_____

Design-Builder's Name:_____

Title:_____

Subscribed and sworn to before me this _day of _____, _____.

_____ My Commission Expires: _____

Notary Public/Justice of the Peace

BUILD AMERICA, BUY AMERICA CERTIFICATE OF COMPLIANCE FOR CONSTRUCTION MATERIALS

Design-Builder certifies that it is in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the Project will have been produced in the United States of America.

P.I. No. 0017182 – I-75 at Bethlehem Road Interchange Project

HENRYCOUNTY

Design-Builder further certifies that as required, Design-Builder will maintain all records and documents pertinent to the BABA requirements, at the address given below, for not less than 3 years from the date of Final Acceptance. These files will be available for inspection and verification by GDOT and/or FHWA.

Date:_____

Signature:_____

Design-Builder's Name:_____

Title:_____

Address:_____

Subscribed and sworn to before me this _____day of _____, _____.

_____

Notary Public/Justice of the Peace

My Commission Expires:_____

Exhibit 9

MILESTONE SCHEDULE

(attached)

Milestone	Deadline
Interim Milestone Deadline - Introduced by the Proposer	[Add Interim Milestone if included in the successful proposer schedule. If no interim milestone proposed place the word 'NONE' here.]
Substantial Completion Deadline	[_____] days after the date GDOT issues NTP1 (not to exceed 1125 Days)
Final Acceptance Deadline	90 days after the Substantial Completion Date

Exhibit 10

HAZARDOUS MATERIALS RISK ALLOCATION TERMS

(attached)

1. Design-Builder shall be solely responsible for Hazardous Materials Management, including all required remediation and disposal, of Hazardous Materials on the Site (or off-Site if any Hazardous Materials Release arises out of, relates to, is caused by, or results from the Work or the Project), including Pre-existing Hazardous Materials, in each case in accordance with applicable Law and Governmental Approvals, regardless as to whether Hazardous Materials Management is required due to a GDOT Hazardous Materials Release(s) or a Third-Party Hazardous Materials Release. Nothing in this paragraph 1 precludes Design-Builder from seeking relief as and when entitled under the Design-Build Agreement with respect to Hazardous Materials.

2. GDOT will be responsible for Hazardous Materials Management with respect to any given Hazardous Materials Release only if Design-Builder has not undertaken timely Hazardous Materials Management, as determined by GDOT in its sole judgment, or if GDOT provides Design-Builder with Notice that GDOT will perform the Hazardous Materials Management with respect to such Hazardous Materials Release. In no case shall any GDOT undertaking of Hazardous Materials Management with respect to any given Hazardous Materials Release constitute a change in responsibility for subsequent (or previously- or concurrently-undertaken) Hazardous Materials Management by Design-Builder.

3. GDOT may not require any monitoring by or on behalf of GDOT of Hazardous Materials under the Design-Build Agreement for any duration beyond expiration or early termination of the Design-Build Agreement).

4. Notwithstanding the aforementioned or anything to the contrary in the Design-Build Agreement, none of the following costs and expenses shall be chargeable to or reimbursed by GDOT:

(a) costs and expenses attributable to Design-Builder Hazardous Materials Releases and any Hazardous Materials with respect to any Design-Builder Proposed/Design-Builder Acquired Right of Way or Temporary Interests (other than GDOT Hazardous Materials Release(s));

(b) delay costs and expenses, except to the extent expressly set forth under the Design-Build Agreement;

(c) disruption costs and expenses;

(d) costs and expenses that could be avoided by the exercise of commercially reasonable efforts to mitigate and reduce cost;

(e) attorneys' fees or other expenses incurred by Design-Builder in demonstrating or determining the proportionate responsibility between the parties as to Design-Builder Hazardous Materials Release(s), GDOT Hazardous Materials Release(s), and Pre-existing Hazardous Materials; and

(f) fees and profit for any Design-Builder Related Entity.

5. Nothing contained herein shall be interpreted to limit Design-Builder's obligations with respect to DBA Section 7.8 (*Hazardous Materials Management*).

Exhibit 11

INITIAL DESIGNATION OF AUTHORIZED REPRESENTATIVES

(attached)

GDOT's "Authorized Representative":

GDOT hereby designates the persons serving from time to time as the P3 Project Manager of GDOT as its "Authorized Representative" and such other persons as the Commissioner may from time to time designate by delivering Notice thereof to Design-Builder. Any such designations by the Commissioner may be limited in scope and duration and may be revoked at any time by delivery of Notice thereof to Design-Builder pursuant to DBA Section 22.11 (*Notices and other Formal Communications*).

Design-Builder's Authorized Representative:

Design-Builder hereby designates the persons from time to time serving as the [_____] of Design-Builder as its Authorized Representative and such other persons as the [_____] may from time to time designate by delivering Notice thereof to GDOT. Any such designations by the [_____] may be limited in scope and duration and may be revoked at any time by delivery of Notice thereof to GDOT pursuant to DBA Section 22.11 (*Notices and other Formal Communications*).

Exhibit 12

LANE CLOSURE DEDUCTIONS

(attached)

A. Lane Closure Deductions:

1. Lane Closure Deductions may be assessed during the period commencing at NTP2 and ending at the Substantial Completion Date.

2. Refer to TP Section 18 (Traffic Control) for the allowable and restricted hours for the various Lane Closure conditions.

3. The Lane Closure Deduction for each Lane Closure shall be assessed in accordance with Table 1 below:

Table 1: Closure Deductions[1]

Lane Closure Impacting	Lane Closure Deduction ($/hr. for each lane impacted)
I-75	$15,000
Ramps	$7,000
Side Roads	$1,000
	$[_____]
	$[_____]

[1] The Lane Closure Deductions in Table 1 are for one direction of travel.

4. Each Lane Closure Deduction shall be measured in one Hour increments. Use of all or part of any restricted Hour results in an assessment of the full hourly Lane Closure deduction.

5. Each Lane Closure shall be deemed to start when the WTCS informs the TMC of the start, or absent that, when the Lane Closure may reasonably be inferred to have started based upon Traffic Interruption Requests (TIR), inspections, streaming camera records, (as may be applicable), and CCTV records. Each Lane Closure shall be deemed to end when TMC records the re-opening (or otherwise the end of the Lane Closure), or absent that, when the circumstances giving rise to the Lane Closure no longer apply or there is effectively no closure of that portion of the lane previously affected by the Lane Closure, whichever is the earlier, as determined by GDOT in its reasonable discretion.

6. GDOT shall be entitled to assess one or more Lane Closure deduction(s) and include any Lane Closure that is not an Excused Closure. No Lane Closures deductions shall be assessed with respect to any Excused Closure.

7. Where one or more Lane Closures create one or more travel lanes in opposing directions of travel, each Lane Closure will be assessed independently.

8. In the case of a Lane Closure that occurs at any time during a Special Event, the Lane Closure deductions shall be increased by 50%, where the deduction calculation itself (Table 1 value multiplied by the duration factor in Section 4) is assessed first and then the product multiplied by 1.5.

9. If any traffic lane(s) is/are the subject of an Excused Closure, and a Lane Closure occurs in the adjacent traffic lane(s) remaining in service, then the Lane Closure on the adjacent traffic lane(s) shall be subject to Lane Closure Deductions unless the basis for the Lane Closure in such adjacent traffic lane(s) independently meets the definition and criteria of an Excused Closure.

10. Lane Closure Deductions will not be assessed for Lane Closures occurring due to performance of traffic pacing provided that traffic pacing is performed in accordance with the requirements of TP Attachment 18-1 (Temporary Traffic Control) and the restrictions in TP Section 18.4.2.5 (Pacing and Work Over the Mainline).

11. Lane Closure Deductions will be accrued monthly, in arrears, and the cumulative value of such Lane Closure Deductions ("Monthly Lane Closure Deductions") shall be used in the preparation of the Invoice under DBA Exhibit 7 (*Contract Sum and Payment Terms*).

12. For avoidance of doubt, and except as may be stated otherwise in this DBA Exhibit 12 (*Lane Closure Deductions*), the closure, blockage, restriction, or impermissible narrowing of multiple lanes, ramps, or crossing streets within the Project Limits, or any combination of the foregoing, at the same time or because of the same cause, will be treated as multiple Lane Closures (one Lane Closure for each affected lane, shoulder, and crossing street).

B. Excused Closures

1. Subject to clause B.2 of this DBA Exhibit 12 (*Lane Closure Deductions*), the following Lane Closures shall be deemed to be Excused Closures:

    a. Lane Closures that result from a Relief Event (only to the extent of the duration of the Relief Event);

    b. for those circumstances where the actions of another contractor do not constitute a Relief Event, Lane Closures arising as a direct result by another contractor performing its work within the Project Limits (e.g., a Utility Owner self-performing work where a Lane Closure is permitted and required to support their work); and

    c. Lane Closures arising as a direct result of an Emergency or Incident, in either case, only to the extent not arising out of, relating to, or resulting from:

        i. any breach of the Design-Build Agreement caused by Design-Builder or any Design-Builder-Related Entity;

        ii. any defect or Nonconforming Work;

        iii. any willful misconduct or negligent act or omission of Design-Builder or any Design-Builder-Related Entity; or

        iv. any risk that Design-Builder is required to insure against pursuant to the terms of the Design-Build Agreement.

2. Design-Builder shall use commercially reasonable best efforts to:

    (i) mitigate the impact of the relevant Lane Closure;

    (ii) reopen the affected portions of the Project as quickly and as safely as possible to traffic;

    (iii) minimize Design-Builder's activities that impact traffic flow during such Lane Closure; and

    (iv) with respect to any Emergency or Incident, respond to the Emergency or Incident in accordance with the applicable provisions of the Design-Build Documents.

3. The duration of any Excused Closure is only as long as the event(s) giving rise to the Lane Closure exist(s).

4. GDOT will not assess any Lane Closure Deductions Excused Closures so long as the Lane Closure constitutes an Excused Closure and Design-Builder continues to perform its obligations under clause B.2 of this DBA Exhibit 12 (*Lane Closure Deductions*).

Exhibit 13

RESERVED

Exhibit 14

OJT REQUIREMENTS

(*attached*)

Form 1 Form 1409

1. OJT PLAN – OBJECTIVES

(a) Design-Builder shall prepare an OJT Plan in accordance with the requirements of this DBA Exhibit 14 (*OJT Requirements*) describing Design-Builder's approach to train minorities, females, and Disadvantaged Persons in highway construction classifications, by fostering equal training opportunities for minorities, females, and Disadvantaged Persons on highway construction projects.

(b) A Disadvantaged Person is a person from a family whose total annual household income is below the limits listed at 125% of the current published "Federal Poverty Level" (or "FPL") in Municipal Planning Organization counties (found, as of the Effective Date, at http://www.gampo.org/members.html) and 100% of the FPL in all other counties, as defined by the Georgia Department of Community Health (found, as of the Effective Date, at https://dch.georgia.gov/federal-poverty-guidelines-0).

2. TRAINING REQUIREMENTS

2.1 OJT Goal and Requirements

(a) Design-Builder shall provide on-the-job training aimed at developing full journeymen in the type of trades and job classifications required for the Work.

(b) Design-Builder shall seek to provide at least 29, trainees or 29,000 hours on the Project (the "OJT Goal").

(c) Where feasible, 25% of trainees in each occupation shall be in their first year of training.

(d) Design-Builder shall distribute the number of trainees among the work classifications based on needs and the availability of trainees in each classification (within a reasonable area of recruitment).

(e) The OJT Goal applies to all training performed by Design-Builder.

2.2 Recruitment and Training

(a) Design-Builder shall provide the following types of training for trainees:

(i) construction crafts, including lower-level management positions if training is oriented toward construction applications such as office engineers, estimators, time-keepers, etc.; and

(ii) laborers to the extent the training is meaningful and if significance is proven and accepted by GDOT.

(b) Design-Builder shall also conduct systematic and direct recruitment through public and private sources likely to yield minority and women trainees in a reasonable area of recruitment.

(c) Design-Builder shall only consider applicants meeting the following criteria:

(i) the applicant must be a minimum of 18 years of age;

(ii) the applicant cannot be a current college student on a seasonal break from classes and use the on-the-job training as a summer employment opportunity; and

(iii) no applicant will be accepted as a trainee in any classification for which the applicant has successfully completed a course leading to journey worker status or in which the applicant has been gainfully employed.

(d) Design-Builder shall ensure that a trainee begins training on the Project as soon as feasible after the work that uses the trained skill has begun. Design-Builder shall ensure the trainee remains on the Project as long as training opportunities exist in the work classification or until the trainee has completed the training program.

(e) Design-Builder must submit all required Federal forms for proposed trainees along with acknowledgment letters signed by the trainee entering the OJT program. Design-Builder shall sign forms, as required, and obtain GDOT's acceptance and signature.

(f) Design-Builder acknowledges and agrees that only training programs approved by GDOT with FHWA concurrence, the U.S. Department of Labor, its agencies, the Bureau of Apprenticeship and Training, or by a state apprenticeship agency or council recognized by the U.S. Department of Labor may be used to fulfil training requirements in this DBA Exhibit 14 (*OJT Requirements*) and may be used to meet the OJT Goal.

(g) Design-Builder may not assign any portion of the training requirements established herein to a Contractor without the prior acceptance of GDOT and the written approval of the relevant Contractor.

3. OJT PLAN REQUIREMENTS

3.1 OJT Plan Requirements

Design-Builder shall develop an OJT Plan in accordance with DBA Section 10.10 (*Job Training Program*) to describe Design-Builder's methods for achievement of the OJT Goal identified in Section 2.1 (*OJT Goal and Requirements*) of this DBA Exhibit 14 (*OJT Requirements*), while also maintaining compliance with applicable Laws. Design-Builder shall include the following in the OJT Plan:

(a) the approach to management of the OJT Plan, including staffing, roles, and responsibilities, including:

(i) identification of the point of contact for issues and other team members responsible for implementing Design-Builder's OJT Plan, including the name of each individual;

(ii) a description of relevant experience for team members responsible for implementing the OJT Plan; and

(iii) a description of specific roles and responsibilities for these team members;

(b) the approach to develop and implement on-the-job training, including:

(i) identification and description of the classifications where trainees will be used during the D&C Period in accordance with the classifications set forth in GDOT On-The-Job Training Program Manual, including the breakdowns for selected classifications set forth in the manual. New classifications are subject to acceptance by GDOT;

(ii) identification of the minimum length and type of training that will be offered for each position;

(iii) demonstration of the steps taken to use recruitment resources and recruit minorities and women who are applicants for employment or current employees with efforts aimed at developing full journey level status employees in the type of trade or job classification involved;

(iv) a description of how Design-Builder will recruit their workforce, including planned outreach events involving the local community;

(v) a description of how Design-Builder plans to utilizes subcontractors to achieve the OJT Goal;

(vi) a description of how Design-Builder shall coordinate with workforce development organizations to advertise job openings locally;

(vii) approach to conducting periodical review of training opportunities and promotion potential for minority and women employees and methods to be implemented which encourage eligible employees to apply for such training and promotion;

(viii) a description of Design-Builder's approach to graduating participants which shall strive to maximize participant graduation rates from the pre-approved trainee programs during the D&C Period;

(ix) a description of how Design-Builder plans to utilize Contractors to achieve the OJT Goal;

(c) the approach to working with GDOT in implementation of the OJT Plan; and

(d) the approach to implementing a system of processes and procedures, including reports, that monitor and document progress toward achievement of the OJT Goal, including:

(i) a description of how Design-Builder will monitor hours completed, training provided, and how Design-Builder will alleviate barriers to employment, graduation and successful permanent placement;

(ii) the approach to using a schedule showing the distribution of training hours over each year of the Project for the duration of the D&C Period; and

(iii) a description of the recovery tools and methods that will be implemented should appropriate progress not be made toward the OJT Goal.

3.2 **Additional Requirements and Updates**

(a) Design-Builder shall ensure that no employee shall be employed as a trainee in any classification in which the employee has successfully completed a training course leading to journey-level status or in which the employee has been employed at the journey level.

(b) Design-Builder shall prepare the OJT Plan in accordance with the requirements of the Design-Build Agreement and this DBA Exhibit 14 (*OJT Requirements*). Revisions to the OJT Plan must be requested by Design-Builder and are subject to GDOT's acceptance.

(c) Design-Builder shall submit and update the OJT Plan to GDOT in accordance with the Submittal Requirements Database and DBA Section 6.3 (*Submittal Review, GDOT Oversight; Quality Posture*).

4. TRAINEE NOTIFICATION

(a) Design-Builder, prior to the start of training, shall provide written notice to each individual to be trained under Design-Builder's training program of that individual's designation as a trainee, the training program and classification under which training will be provided, the length of the training program, and the hourly wage rate to be paid to the trainee.

(b) Each month, while enrolled in the training program, Design-Builder shall inform the trainees of the number of hours they have accumulated in the training program.

(c) Upon graduation, each trainee shall be issued a permanent certification designating the bearer as a graduate journey person of the appropriate training program.

5. DOCUMENTATION OF EFFORTS AND REPORTING

(a) Design-Builder shall submit documentation of good faith efforts or reasonable efforts in accordance with Section 2.1 (*OJT Goal and Requirements*) of this DBA Exhibit 14. Design-Builder shall document good faith efforts through the following actions:

(i) demonstrating that Design-Builder reached out to community organizations and used other channels to solicit minority or female workers to fill the training position;

(ii) demonstrating that Design-Builder reviewed its current workforce for potential upgrade, including all subcontractors; and

(iii) interviewing minority or female applicants of which did not produce a viable employee.

(b) Design-Builder shall provide the documentation referred to in Section 5(a) above in the form of correspondence, including emails, letters, interview results, internal and external reports.

(c) Design-Builder shall maintain a record of time trained for each trainee in accordance with State and Federal requirements.

(d) Design-Builder shall prepare and submit an OJT Progress Report, in accordance with the Submittal Requirements Database, documenting trainee progress on a semi-annual basis (semi-annual periods end on June 30th and December 31st) in the form of Form 1 of this DBA Exhibit 14 (*OJT Requirements*) ("OJT Progress Report"). Design-Builder is responsible to complete all fields and obtain necessary signatures by Design-Builder and GDOT.

(e) When Design-Builder determines that the trainee is capable of performing the full skills of the classification in which he or she is being trained, Design-Builder shall submit a signed final Form 1 of this DBA Exhibit 14 (*OJT Requirements*) to GDOT.

6. **TRAINING CREDIT**

(a) Credit for off-site training may be made only if trainees are concurrently employed on the Project and Design-Builder does one or more of the following:

(i) contributes to the cost of the training; and/or

(ii) provides instruction to the trainee or pays the trainee's wages during the off-site training.

(b) Design-Builder shall notify GDOT when a trainee is terminated in accordance with Section 2.1 (*OJT Goal*) of this DBA Exhibit 14 (*OJT Requirements*).

(c) Design-Builder shall not earn any credit toward the OJT Goal for any trainee that is terminated or leaves the Project prior to completing the training program.

7. **TRAINEE PAY**

(a) Design-Builder shall pay trainees in accordance with the following:

(i) trainees are paid not less than 60% of the appropriate minimum journeyman's rate specified for the first half of the training period, 75% for the third quarter of the training period, and 90% for the last quarter of the training period; or

(ii) if trainees in an approved existing program are enrolled as trainees in the same classification on this Project, the appropriate rates approved by the Departments of Labor or Transportation for the existing program shall apply to the trainees; and

(iii) if applicable, attach a copy of SF 1444 Additional Wage classification and supporting documentation.

(b) Design-Builder shall be compliant with all United States labor laws.

8. **FAILURE TO COMPLY**

If Design-Builder fails to meet any of the requirements of this DBA Exhibit 14 (*OJT Requirements*), Nonrefundable Deductions will be assessed against Design-Builder in accordance with DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).

FORM 1

FORM 1409

1. NAME OF CONTRACTOR		1a. ADDRESS
2. NAME OF TRAINEE	2a. SEX. ☐ M ☐ F	2b. ADDRESS
3. AGE OF TRAINEE	4. SOCIAL SECURITY NUMBER xxx-xx-_____	5. EMPLOYEE STATUS *(CHECK ONE)* ☐NEW HIRE ☐ UP-GRADE
6. ETHNIC GROUP DESIGNATION *(CHECK ONE)* ☐ AFRICAN AMERICAN ☐ ASIAN ☐ SPANISH AMERICAN ☐ AMERICAN INDIAN ☐ OTHER		
7. SUMMARY OF PREVIOUS TRAINING: *(ENTER AMOUNT AND TYPE OF TRAINING RECEIVED BY TRAINEE ON OTHER CONTRACTS UNDER APPROVED TRAINING PROGRAMS).*		
_____HOURS COMPLETED TOWARD _____HOURS REQUIRED IN TRAINING PROGRAM FOR		PERSONS IN HOUSEHOLD _____ TOTAL HOUSEHOLD INCOME
8. JOB CLASSIFICATION OF TRAINEE 1.	9. DATE TRAINING STARTED ON THIS CONTRACT	TYPE OF ON THE JOB TRAINING (C*HECK ONE)* ☐APPRENTICESHIP ☐OTHER

REPORTING PERIODS

INSTRUCTIONS: *One vertical column is to be completed for each succeeding reporting period and the form submitted. Enter June 30, Dec. 31 as applicable in columns a through h below*

	HOURS OF TRAINING DATA	A	B	C	D	E	F	G	H
		20_	20__	20__	20__	20__	20__	20__	20_
11.	PROVIDED DURING REPORT PERIOD								
12.	PROVIDED TO DATE								
13.	REMAINING TO COMPLETE THE APPROVED PROGRAM								

14. TERMINATION

(IF TRAINING WAS TERMINATED PRIOR TO COMPLETION OF APPROVED PROGRAM EXPLAIN REASON FOR TERMINATION

EFFECTIVE DATE

(CHECK APPROPRIATE)

☐ 1. FULL COURSE
☐ 2. EARLY COMPLETION
☐ 3. ACCEPTED FULL-TIME JOB
☐ 4. INVOLUNTARILY DROPPED
☐ 5. VOLUNTARILY DROPPED
☐ 6. TRANSFERRED TO OTHER TRAINING PROGRAM

15. REPORT PREPARED BY (SIGNATURE AND TITLE OF CONTRACTOR'S REPRESENTATIVE)	15a. DATE
(SIGNATURE) *(TITLE)*	
16. REPORT REVIEWED BY (SIGNATURE AND TITLE OF GDOT OFFICIAL)	16a. DATE
(SIGNATURE) *(TITLE)*	

Exhibit 15

REQUIRED STATE CERTIFICATIONS

(on following pages)

Part A: Georgia Security and Immigration Compliance Act Affidavits

Part B: Certification of Compliance with the State of Georgia's Sexual Harassment Prevention Policy

Part C: Drug-Free Workplace

Part A

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT
(Design-Builder)

Contractor(s) Name: _____

Letting: _____

Call No.: _____

By executing this affidavit, the undersigned person or entity verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Georgia Department of Transportation has registered with, is authorized to participate in, and is participating in the federal work authorization program commonly known as E-Verify™*, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned person or entity further agrees that it will continue to use the federal work authorization program throughout the contract period, and it will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the undersigned with the information required by O.C.GA. § 13-10-91(b).

The undersigned person or entity further agrees to maintain records of such compliance and provide a copy of each such verification to the Georgia Department of Transportation within five Business Days after any subcontractor(s) is/are retained to perform such service.

_____ _____
EEV / E-Verify™ Company Identification Number | Date of Authorization

_____ _____
BY: Authorized Officer or Agent (Name of Person or Entity) | Date

_____
Title of Authorized Officer or Agent

_____
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THE

_____ DAY OF _____, 20__

_____
Notary Public

My Commission Expires: _____

*** or any subsequent replacement** operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603.

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

(SUBCONTRACTOR)

Name of Subcontractor: _____

Name of Project: _____

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or entity which is engaged in the physical performance of services under a contract with _____ on behalf of the Georgia Department of Transportation has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify™, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period, and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91(b).

Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five Business Days of receipt. If the undersigned subcontractor receives notice of receipt of an affidavit from any sub-subcontractor that has contracted with a sub-subcontractor to forward, within five Business Days of receipt, a copy of such notice to the contractor.

Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

_____ _____

E-Verify™ / Company Identification Number Date of Authorization

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 20___ in _____(city), _____(state).

_____

Signature of Authorized Officer or Agent

_____

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE

_____ DAY OF _____, 20__ [NOTARY SEAL]

_____

Notary Public

My Commission Expires: _____

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

(SUB-SUBCONTRACTOR)

Name of Sub-Subcontractor: _____

Name of Project: _____

By executing this affidavit, the undersigned sub-subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or entity which is engaged in the physical performance of services under a contract with _____ (subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract) and _____ (contractor) on behalf of the Georgia Department of Transportation has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify™, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned sub-subcontractor will continue to use the federal work authorization program throughout the contract period, and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the sub-subcontractor with the information required by O.C.G.A. § 13-10-91(b).

Additionally, the undersigned sub-subcontractor shall submit, at the time of such contract, this affidavit to _____ (subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Additionally, the undersigned sub-subcontractor will forward notice of the receipt of any affidavit from a sub-subcontractor to _____ (subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract).

Sub-subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

_____ _____

E-Verify™ / Company Identification Number Date of Authorization

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 20___ in _____(city), _____(state).

_____

Signature of Authorized Officer or Agent

_____

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE

_____ DAY OF _____, 20__ [NOTARY SEAL]

_____

Notary Public

My Commission Expires: _____

Part B

CERTIFICATION OF COMPLIANCE WITH THE STATE OF GEORGIA'S SEXUAL HARASSMENT PREVENTION POLICY

The State of Georgia promotes respect and dignity and does not tolerate sexual harassment in the workplace. The State is committed to providing a workplace and environment free from sexual harassment for its employees and for all persons who interact with state government. All State of Georgia employees are expected and required to interact with all persons including other employees, contractors, and customers in a professional manner that contributes to a respectful work environment free from sexual harassment. Furthermore, the State of Georgia maintains an expectation that its contractors and their employees and subcontractors will interact with entities of the State of Georgia, their customers, and other contractors of the State in a professional manner that contributes to a respectful work environment free from sexual harassment.

Pursuant to the State of Georgia's Statewide Sexual Harassment Prevention Policy (the "Policy"), all contractors who are regularly on State premises or who regularly interact with State personnel must complete sexual harassment prevention training on an annual basis.

A contractor, including its employees and subcontractors, who have violated the Policy, including but not limited to engaging in sexual harassment and/or retaliation may be subject to appropriate corrective action. Such action may include, but is not limited to, notification to the employer, removal from State premises, restricted access to State premises and/or personnel, termination of contract, and/or other corrective action(s) deemed necessary by the State.

(i) If [Design-Builder / Contractor / Subcontractor] is an individual who is regularly on State premises or who will regularly interact with State personnel, [Design-Builder / Contractor / Subcontractor] certifies that:

(a) [Design-Builder / Contractor / Subcontractor] has received, reviewed, and agreed to comply with the State of Georgia's Statewide Sexual Harassment Prevention Policy located at https://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy;

(b) [Design-Builder / Contractor / Subcontractor] has completed sexual harassment prevention training in the last year; or will complete the Georgia Department of Administrative Services' sexual harassment prevention training located at http://doas.ga.gov/human-resources-administration/sexual-harassment-prevention/hr-professionals/employee-training (scroll down to section for entities without a LMS section) or this direct link https://www.youtube.com/embed/NjVt0DDnc2s?rel=0 prior to accessing State premises and prior to interacting with State employees; and on an annual basis thereafter; and,

(c) upon request by GDOT, the [Design-Builder / Contractor / Subcontractor] will provide documentation substantiating the completion of sexual harassment training.

(ii) If [Design-Builder / Contractor / Subcontractor] has employees and subcontractors that are regularly on State premises or who will regularly interact with State personnel, [Design-Builder / Contractor / Subcontractor] certifies that:

(a) [Design-Builder / Contractor / Subcontractor] will ensure that such employees and subcontractors have received, reviewed, and agreed to comply with the State of Georgia's

Statewide Sexual Harassment Prevention Policy located at http://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy;

(b) [Design-Builder / Contractor / Subcontractor] has provided sexual harassment prevention training in the last year to such employees and subcontractors and will continue to do so on an annual basis; or Contractor will ensure that such employees and subcontractors complete the Georgia Department of Administrative Services' sexual harassment prevention training located at http://doas.ga.gov/human-resources-administration/sexual-harassment-prevention/hr-professionals/employee-training (scroll down to section for entities without a LMS section) or this direct link https://www.youtube.com/embed/NjVt0DDnc2s?rel=0 prior to accessing State premises and prior to interacting with State employees; and on an annual basis thereafter; and

(c) upon request of GDOT, [Design-Builder / Contractor / Subcontractor] will provide documentation substantiating such employees and subcontractors' acknowledgment of the State of Georgia's Statewide Sexual Harassment Prevention Policy and annual completion of sexual harassment prevention training.

Date: _____

[Design-Builder / Contractor / Subcontractor]: _____

Signature: _____

Name: _____

Title: _____

Part C

DRUG-FREE WORKPLACE

STATE OF _____)
)SS:
COUNTY OF _____)

Each of the undersigned, being first duly sworn, deposes, and says that:

_____ is the _____ of _____ and _____ is the _____ of _____, which entity(ies) are the _____ of _____, the entity that is [a [contractor to]/[subcontractor to a contractor to][the "Design-Builder" under the Design-Build Agreement for the [_____] Project.

The undersigned certifies that the provisions of O.C.G.A. §§ 50-24-1 through 50-24-6, relating to the "Drug-free Workplace Act", have been complied with in full.

The undersigned further certifies that:

(1) a drug-free workplace will be provided for the contractor's employees during the performance of the contract; and

(2) each contractor who hires a subcontractor to work in a drug-free workplace shall secure from that subcontractor the following written certification: "As part of the subcontracting agreement with (contractor's name)_____,_____ (subcontractor's name)_____ certifies to the contractor that a drug-free workplace will be provided for the subcontractor's employees during the performance of this contract pursuant to paragraph (7) of subsection (b) of O.C.G.A. § 50-24-3."

The undersigned further certifies that he/she will not engage in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Work.

[*signature page follows*]

(Signature)

(Name Printed)

(Title)

Subscribed and sworn to before me this ___ day of _____, 20__.

Notary Public in and for
said County and State

[Seal]

My commission expires: _____

Exhibit 16

INSURANCE COVERAGE REQUIREMENTS

(attached)

The following minimum insurance requirements shall apply and supplement the requirements as set forth in DBA Section 16.1 (*Insurance*). Except as otherwise expressly indicated herein, minimum coverages and limits shall be provided on a project-specific, project term, basis.

1. Builder's Risk Insurance During Construction

At all times during the period from NTP3 (or such earlier time as may be required with respect to the Work, including Utility Adjustment Work, until the Substantial Completion Date, Design-Builder shall procure and maintain, or cause to be procured and maintained, a policy of builder's risk insurance as specified below.

(a) The policy shall provide coverage for "all risks" of direct physical loss or damage to the portions or elements of the Project under construction, including terrorism (certified by the Secretary of the Treasury pursuant to the Terrorism Risk Insurance Act, Pub. L. 107-297, as amended by the Terrorism Risk Insurance Program Reauthorization Act of 2015, Pub. L. 114-1, as further amended by the Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. 116-94, as may be further amended), the perils of earthquake, earth movement, flood, storm, tempest, windstorm, hurricane, and tornado and subsidence; shall contain extensions of coverage that are typical for a project of the nature of the Project; and shall contain only those exclusions that are typical for a project of the nature of the Project.

(b) The policy shall cover all property, roads, buildings, structures, fixtures, materials, supplies, foundations, pilings, machinery, and equipment that are part of or related to the parts of the Work or portions of the Project under construction, and the works of improvement, including Permanent Works and Temporary Works, and including goods intended for incorporation into the works located at the Site, in storage or in the course of inland transit on land to the Site, and existing roadway, structures and improvements that are within the Construction Work zone or are or will be incorporated into the Construction Work.

(c) The policy shall provide coverage per occurrence up to the replacement value of the Project, subject to commercially reasonable sublimits for flood, earth movement and named storm and as further outlined clause 1(g) below; provided, however, that if the Project's replacement value is in excess of $75,000,000, then Design-Builder may place a Builder's Risk Insurance Policy with a limit that is the greater of the probable maximum loss as determined by a probable maximum loss study ("PML Study") or $35,000,000 per occurrence and in the aggregate of the covered property loss, plus an allowance for professional fees, demolition and debris removal, without risk of co-insurance. Such policy may include commercially reasonable sublimits for earth movement, named storm and flood, however, in no event shall such sublimits be less than $5,000,000. Any PML Study shall be performed and prepared by a qualified third party experienced in performing such analysis such that the results demonstrate the coverage limits adequate to insure the Work. GDOT reserves the right to review and comment on the PML Study to verify reasonableness under industry standard underwriting practices prior to issuance of the policy or renewal of any policy.

(d) Design-Builder, the State, GDOT, Contractors, and Subcontractors of every tier shall each be the insureds on the policy as their respective interests appear. GDOT will be named as "Loss Payee" under the policy.

(e) The policy shall include coverage for (i) foundations, including pilings, but excluding normal settling, shrinkage, or expansion, (ii) physical damage resulting from machinery accidents but excluding normal and natural wear and tear, corrosion, erosion, inherent vice, or latent defect in the machinery, (iii) plans, blueprints, and specifications, (iv) demolition and debris removal coverage, (v) the increased replacement cost due to any change in applicable codes or other Laws, (vi) expense to reduce

loss, (vii) building ordinance compliance, with the building ordinance exclusion deleted, and (viii) soft cost expense" (including costs of Governmental Approvals, mitigation costs, attorneys' fees, and other fees and costs associated with such damage or loss or replacement thereof).

(f) Subject to commercial market availability, and if the Contract Sum is greater than $20,000,000, the policy shall be endorsed with LEG3 (defective work endorsement) or DE5 (1995) (defects exclusions) language or such other endorsement as approved by GDOT effecting the same result, in any case with a sublimit of no less than 25% of the overall policy limit.

(g) Such policy shall include the following minimum coverage sublimits:

Sublimit	***Category I Project***	***Category II Project***	***Category III Project (Contract Sum < $250,000,000***	***Category III Project (Contract Sum ≥ $250,000,000***
(i) for off-site storage and in-transit;	$1,000,000	1,000,000	$5,000,000	$5,000,000
(ii) plans, blueprints, and specifications;	$50,000	$100,000	$250,000	$250,000
(iii) demolition and debris removal coverage;	$500,000	$1,000,000	$5,000,000	$25,000,000
(iv) increased replacement cost due to any change in applicable codes or other Laws and/or building ordinance compliance (with building ordinance exclusion deleted);	$250,000	$1,000,000	$5,000,000	$5,000,000
(v) expense to reduce loss;	$100,000	$250,000	$1,000,000	$2,000,000
(vi) "Soft cost expense" (including costs of Governmental Approvals, mitigation costs, attorneys' fees, and other fees and costs associated with such delay resulting from damage or loss or replacement thereof) such soft cost limit must be disclosed to and approved by GDOT; and				
(vii) damage to adjacent roadway and structures within the Site to be incorporated into the Construction Work which are damaged as a result of an insured loss.	$250,000	$500,000	$1,000,000	$2,000,000

2. Builders Risk During Warranty Period

During the Warranty Period, at all times construction work valued at $2,000,000 or more is being undertaken, Design-Builder shall procure and maintain, or cause to be procured and maintained, a policy of builder's risk insurance as specified below.

(a) The policy shall provide coverage for "all risks" of direct physical loss or damage to the portions or elements of the Project under construction, including terrorism (certified by the Secretary of the Treasury pursuant to the Terrorism Risk Insurance Act, Pub. L. 107-297, as amended by the Terrorism Risk Insurance Program Reauthorization Act of 2015, Pub. L. 114-1, as further amended by the Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. 116-94, as may be further amended), the perils of earthquake, earth movement, flood, storm, tempest, windstorm, hurricane, and tornado and subsidence; shall contain extensions of coverage that are typical for a project of the nature of the Project; and shall contain only those exclusions that are typical for a project of the nature of the Project.

(b) The policy shall cover all property, roads, buildings, structures, fixtures, materials, supplies, foundations, pilings, machinery, and equipment that are part of or related to the parts of the Work or portions of the Project under construction, and the works of improvement, including Permanent Works and Temporary Works, and including goods intended for incorporation into the works located at the Site, in storage or in the course of inland transit on land to the Site. The coverage for existing GDOT properties may be sublimited as provided below in clause 2(f) of this DBA Exhibit 16 (*Insurance Coverage Requirements*).

(c) The policy shall provide coverage of at least $2,000,000 per occurrence and in the aggregate of the covered property loss, plus an allowance for professional fees, demolition and debris removal, without risk of co-insurance; provided, however, that the policy may include a sublimit for earth movement, flood, and named storm. Such policy need not be project-specific.

(d) Design-Builder, the State, GDOT, Contractors, and Subcontractors of every tier shall each be the insureds on the policy as their respective interests appear. GDOT will be named as Loss Payee under the policy.

(e) The policy shall include coverage (with commercially reasonable sublimits) for (i) foundations, including pilings, but excluding normal settling, shrinkage, or expansion, (ii) physical damage resulting from machinery accidents but excluding normal and natural wear and tear, corrosion, erosion, inherent vice, or latent defect in the machinery, (iii) plans, blueprints, and specifications, (iv) demolition and debris removal coverage, (v) the increased replacement cost due to any change in applicable codes or other Laws, (vi) expense to reduce loss, (vii) building ordinance compliance, with the building ordinance exclusion deleted, and (viii) soft cost expense" (including costs of Governmental Approvals, mitigation costs, attorneys' fees, and other fees and costs associated with such damage or loss or replacement thereof).

(f) Such policy shall include appropriate sublimits for the following coverage extensions: off-site storage and in-transit, blueprints, and specifications, demolition and debris removal, expense to reduce loss, "soft cost expense", and damage to adjacent/existing property.

3. Commercial General Liability Insurance

At all times from the Effective Date until the end of the Warranty Period, Design-Builder shall procure and maintain, or cause to be procured and maintained, commercial general liability insurance as specified below.

(a) The policy shall be in form reasonably acceptable to GDOT, and shall be an occurrence form. The policy shall contain extensions of coverage that are typical for a project of the nature of this Project, and shall contain only those exclusions that are typical for a project of the nature of this Project.

(b) The policy shall include, but not be limited to, the following coverages:

(i) contractual liability;

(ii) premises/operations;

(iii) separation of insureds;

(iv) products and completed operations;

(v) terrorism (to the extent available);

(vi) Underground, Explosion and Collapse;

(vii) defense (in addition to liability limits);

(viii) fellow employee exclusion deleted;

(ix) incidental medical malpractice;

(x) no exclusion for work within 50 feet of a Railroad; and

(xi) professional services exclusion with an exception for construction management, means and methods.

(c) The Insurance Policy shall cover liability arising out of the acts or omissions of Design-Builder's employees and any other contractors or other business engaged in the Work.

(d) Design-Builder shall be a named insured on the policy and the policy shall have minimum limits of not less than $1,000,000 per occurrence and $2,000,000 in the aggregate with a general aggregate applicable on a per-project basis for bodily injury, personal injury, and property damage liability. The policy need not be project-specific, provided the per project aggregate limit is applicable per above. Coverage shall be continued for a period of eight years after the Substantial Completion Date or, if a project-specific policy, include an completed operations/extended reporting period for eight years after the Substantial Completion Date.

(e) The Indemnified Parties shall each be additional insureds on a primary and non-contributory basis on either ISO CG 10 20 04 13 or ISO 10 37 04 13.

4. Automobile Liability Insurance

At all times from the Effective Date until the end of the Warranty Period, Design-Builder procure and maintain automobile liability insurance as specified below.

(a) The policy limits maintained by Design-Builder from the beginning of the Term through Final Acceptance shall be not less than $1,000,000 combined single limit for bodily injury and property damage.

(b) Each policy shall cover accidental death, bodily injury, and property damage liability arising from the ownership, maintenance, or use of all owned (if any), non-owned and hired vehicles connected with performance of the Work, including loading and unloading.

(c) The Indemnified Parties shall each be included as additional insureds on a primary, non-contributory basis.

(d) Automobile liability insurance coverage need not be provided on a project-specific, project term, basis.

(e) If Design-Builder's or any Contractor's activities involve transportation of Hazardous Materials, the automobile liability Insurance Policy for Design-Builder or such Contractor shall be endorsed to include for private, non-commercial vehicles Motor Carrier Act Endorsement-Hazardous Materials Clean up (MCS-90).

5. Umbrella/Excess Liability Insurance

At all times from the Effective Date through expiration of the Warranty Period, Design-Builder shall procure and maintain, or cause to be procured and maintained with Design-Builder as a named insured, umbrella/excess liability insurance providing following-form coverage excess of the underlying commercial general liability, automobile liability, and employer's liability insurance limits noted herein. If the underlying commercial general liability insurance is not project-specific in compliance with clause 3 of this DBA Exhibit 16 (*Insurance Coverage Requirements*), then the umbrella/excess liability insurance need not be project-specific either. This policy must have a minimum limit, determined as follows:

Contract Sum	**Per Occurrence**	**Aggregate**
Less Than $5,000,000:	$1,000,000	$1,000,000
Equal to or Greater than $5,000,000 and Less than $50,000,000	$5,000,000	$5,000,000
Equal to or Greater than $50,000,000 and Less than $100,000,000	$10,000,000	$10,000,000
Equal to or Greater than $100,000,000 and Less than $250,000,000	$20,000,000	$20,000,000
Equal to or Greater than $250,000,000 and Less than $500,000,000	$25,000,000	$25,000,000
Equal to or Greater than $500,000,000	$50,000,000	$50,000,000

The policy shall include each of the Indemnified Parties as additional insureds on a primary, non-contributory basis. Coverage shall be continued for a period of eight years after the Substantial Completion Date or, if a project-specific policy, include a completed operations/extended reporting period for eight years after the Substantial Completion Date.

During the Warranty Period, the Umbrella/Excess Liability limit may be reduced to:

Contract Sum	**Policy Limit**
Less Than $5,000,000:	$1,000,000
Equal to or Greater than $5,000,000 and Less than $20,000,000:	$2,000,000
Equal to or Greater than $20,000,000 and	
Less than $250,000,000:	$10,000,000
Equal to or Greater than $250,000,000	$15,000,000

with coverage to continue or an extended completed operation period shall be in effect for seven years after expiration of the Warranty Period.

6. Pollution Liability Insurance

At all times from NTP1 until the end of the Warranty Period, Design-Builder shall procure and maintain, or cause to be procured and maintained, contractor's pollution liability insurance as specified below.

(a) The policy shall cover sums that the insured becomes liable to pay (i) to a third party, (ii) as or for clean-up costs, or (iii) as costs that are incurred by the order of a regulatory body consequent upon a pollution incident, subject to the policy terms and conditions. Such policy shall cover claims related to pollution conditions to the extent such are caused by the performance of Work that occur on the Project, including coverage for transportation, disposal at non-owned off-site locations, clean-up and emergency response.

(b) Design-Builder shall be a named insured on the policy. Each of the Indemnified Parties shall be additional insureds under such policy. The policy shall include standard separation of insureds language providing that the interests and protections of each additional insured shall not be affected by any misrepresentation, act or omission of another named insured, or any breach by a named insured of any provision in the policy which would otherwise result in forfeiture or reduction of coverage for the other insureds on the policy. The policy shall have no exclusions that limit pollution liability claims and actions by any Indemnified Party against Design-Builder.

(c) The policy shall have a limit of not less than $1,000,000 per claim and in the aggregate per policy period (for projects with a Contract Sum below or equal to $50,000,000) or not less than $3,000,000 per claim and in the aggregate per policy period (for projects with a Contract Sum greater than $50,000,000). Such coverage need not be project-specific.

7. Contractor's Professional Liability Insurance

At all times during the Term, the Design-Builder will procure and maintain a contractor's professional liability insurance policy with the Design-Builder as the named insured in a form acceptable to GDOT with a limit, in each case per claim and in the aggregate, not less than $2,000,000 (for projects with a Contract Sum of $100,000,000 or less), and $5,000,000 (for projects with a Contract Sum of greater than $100,000,000). Coverages shall be maintained for the duration of the Work and shall be maintained for a minimum of five years after all work is complete. Such coverage need not be project-specific and may include Contractor's Protective Professional Indemnity (CPPI) insurance protection as part of the coverage.

8. Professional Liability Insurance

(a) At all times that professional services are rendered respecting design and construction of the Project until the first to occur of (i) five years after the professional services have concluded for the Project or (ii) expiration of all applicable statutes of limitation and repose applicable to professional services performed for the Project, the Design-Builder shall require the Lead Design Consultant, or any lead design Subcontractor(s) acting as or employing an Engineer of Record, to procure and maintain professional liability insurance with minimum limits, in each case per claim and in the aggregate, of not less than $3,000,000 (for projects with a Contract Sum of $100,000,000 or less), $5,000,000 (for projects with a Contract Sum greater than $100,000,000 but less than or equal to $250,000,000), and $7,000,000 (for projects with Contract Sums greater than $250,000,000). Such coverage need not be project-specific.

Any professional liability policies maintained under this Section 8 (*Professional Liability Insurance*) (including all alternative coverages) for projects where the Contract Sum is greater than $250,000,000 must include GDOT, the State, the State Transportation Board, and their respective directors, employees, commissioners, and office holders (public individuals only) as "Indemnified Parties" under the policy.

(b) To the extent not covered by the policy (or policies) described above, Design-Builder shall, or shall cause the Lead Design Consultant (in the case of the Design Work), to require professional liability of each Contractor and Subcontractor providing professional services respecting such design and construction, including quality- and inspection-related obligations, to procure and keep in force professional liability insurance as specified below with in force professional liability insurance limits not less than those specified in the following table:

Contract Sum	***Minimum Limits of Liability***	***Years Coverage to Remain in Place after Design Service are Completed***
Over $5,000,000	$3,000,000 Each Claim and Aggregate	5 Years
Equal to or less than $5,000,000	$1,000,000 Each Claim and Aggregate	3 Years

Each such policy shall insure the party performing the professional services for liability arising out of any negligent act, error, or omission in the performance of the professional services or activities for the Project. Such additional policies need not be Project-specific. If any coverage is written on a claims-made basis, the retroactive date applicable to coverage under the policy must precede the effective date of the design subcontract.

9. Workers' Compensation/Employer's Liability Insurance

Design-Builder shall procure and maintain from the Effective Date through the later of expiration of the Warranty Period and completion of Work pursuant to the Warranty, or cause to be procured and maintained at all times when Work is being performed by any employee of Design-Builder, a policy (or policies) of workers' compensation insurance for those employees in conformance with applicable Law. The Insurance Policy (or Policies) shall provide statutory workers' compensation benefits and minimum employer's liability limits of $1,000,000 per accident or disease.

The workers' compensation Insurance Policy (or Policies as required by Law) need not be project-specific and shall contain the following endorsements:

(a) a voluntary compensation endorsement; and

(b) coverage will be extended, if needed, to cover any claims under the United States Longshore and Harbor Workers' Compensation Act (33 U.S.C. §§ 901-950 and the Jones Act (46 U.S.C. § 30104).

10. Aircraft Liability Insurance

Design-Builder shall ensure that proper insurance is obtained and kept in effect for any Work undertaken via use of UAS or other aircraft. If UASs are utilized during the course of the Project, Design-Builder shall evidence coverage either through a stand-alone unmanned aircraft systems policy or by endorsement (CG 24 50 or equivalent) to the commercial general liability policy.

Minimum limits for aviation insurance shall be typical for such work being undertaken on a project such as this Project. In no event shall such limits be less than $5,000,000 per occurrence and in the aggregate for bodily injury and property damage liability, excepting that with regard to UASs, the limit of liability shall not be less than $1,000,000 per occurrence with a $1,000,000 annual aggregate.

11. Railroad Protective Liability

Design-Builder shall provide insurance coverage terms and conditions as may be required by any Railroad as a condition of the Railroad's consent for entry into or work nearby Railroad facilities or property (including Railroad ROW).

All Railroad Protective Liability Insurance Policies shall be in a form acceptable to the Railroad. The original Railroad Protective Liability Insurance Policy shall be submitted to the Railroad with the Railroad as the named insured. Copies of all other insurance policies shall be submitted to the owning Railroad, and, if different from the owning Railroad, the operating Railroad, and GDOT and be approved by the Railroad(s) prior to any entry by Design-Builder or any Design-Builder-Related Entity upon or nearby Railroad facilities or real property rights.

All Railroad Protective Liability Insurance Policies shall be effective during the period any Work is being performed within 50 feet of the Railroad right of way or otherwise as required by the Railroad.

Such Railroad Protective Liability Insurance Policies shall provide that the placing insurer shall notify the Railroad of any cancellation, effective no earlier than 30 days after notification to the Railroad.

Design-Builder shall comply with, and cause its Contractors and Subcontractors to comply with, any additional or more stringent insurance requirements set forth in TP Section 14 (Railroad), Standard Specification 107.08, and the Railroad Standards.

12. Umbrella and Excess Policies

Except as expressly stated otherwise herein, Design-Builder shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall be "following-form" and comply with all insurance requirements, terms, and provisions set forth in this Design-Build Agreement for the applicable type of coverage.

13. Contractor and Subcontractor Insurance

Except to the extent that a Contractor or Subcontractor is covered as a named insured under a policy maintained by Design-Builder, each such Contractor or Subcontractor shall be required to provide proof of the following minimum insurance coverages:

(a) Workers' Compensation and Employer's Liability Insurance with statutory workers' compensation (Coverage A) limits and employer's liability (Coverage B) limits of $500,000 bodily injury

by accident, each accident, and $500,000 bodily injury by disease, each employee, and aggregate. Coverage will be extended, if needed, to cover any claims under the United States Longshore and Harbor Workers' Compensation Act (33 U.S.C. §§ 901-950) and the Jones Act (46 U.S.C. § 30104).

(b) Commercial General Liability Insurance including coverage for premises and operations, independent contractors, personal injury, product and completed operations, explosion, collapse and underground, and contractual liability. Minimum limits shall be no less than $1,000,000 per occurrence and in the aggregate annually.

(c) Automobile Liability Insurance with a limit of at least $500,000 combined single limit for bodily injury and property damage covering all owned (if any), non-owned, hired, or borrowed vehicles on site or off.

(d) Umbrella/Excess Liability Insurance in excess of the underlying limits noted above for employer's liability, commercial general liability, and automobile liability for contracts valued at more than $1,000,000, coverage shall be in the amount of $1,000,000 per occurrence and in the aggregate and for projects with Contract Sums at or in excess of $5,000,000 (as of the Effective Date), coverage shall be in the amount of $4,000,000 per occurrence and in the aggregate.

The Indemnified Parties shall be included as additional insureds on a primary, non-contributory basis for the coverages set forth in clauses (b), (c), and (d) just above, and a waiver of subrogation shall apply to the Indemnified Parties under all policies listed in clauses (a) through (d), inclusive, as well as under any professional liability insurance policies required under clause 7.

Should Design-Builder implement a contractor-controlled insurance program (CCIP) providing compliant insurance for all participants with regard to on-site activities, all Construction Subcontractors enrolled in the CCIP shall still be responsible for procuring and maintaining automobile liability insurance and the other insurance coverages noted above with regard to off-site work with the Indemnified Parties as additional insureds on a primary, non-contributory basis for the applicable insurance coverages set forth in clauses (b), (c), and (d) above.

Exhibit 17

MEASURES OF LIQUIDATED DAMAGES AND NONREFUNDABLE DEDUCTIONS

(attached)

1.1 For Late Completion of Milestones

(a) Liquidated Damages for failure to achieve Substantial Completion by the Substantial Completion Deadline shall equal $40,000 per day for each day that the Substantial Completion Date is later than the Substantial Completion Deadline.

(b) Liquidated Damages for failure to achieve Final Acceptance by the Final Acceptance Deadline shall equal $17,000 per day for each day that the Final Acceptance Date is later than the Final Acceptance Deadline.

(c) Liquidated Damages assessed under subsection (b) above for failure to achieve Final Acceptance by the Final Acceptance Deadline shall not be cumulative and in addition to Liquidated Damages assessed under subsection (a) above for failure to achieve Substantial Completion by the Substantial Completion Deadline, provided that where any such Liquidated Damages under subsection (a) cease to accrue as a result of Design-Builder achieving Substantial Completion, subsection (b) shall then apply.

1.2 For Late Achievement of Interim Milestones

(d) Liquidated Damages for failure to complete the Interim Milestone – by the deadline date included in Exhibit 9 shall equal $30,000 per day for each day that the Interim Milestone Deadline is later than the foregoing date so determined.

(e) Liquidated Damages assessed under subsections 1.2(a) and (b) just above for failures to achieve Interim Milestones the corresponding date determined in accordance with DBA Section 7.7.4.1(e) (*Early Openings*) and with DBA Section 11.2.3 (Related Projects Integration) shall be cumulative and in addition to Liquidated Damages assessed elsewhere under this DBA Exhibit 17 (*Measures of Liquidated Damages and Nonrefundable Deductions*).]***[NTD:*** include if any Interim Milestones in the Project]

1.3 For Key Personnel- and Required Personnel-related Matters

(a) If Design-Builder fails either (a) to cause each individual filling (i) a Key Personnel position to be available or (ii) a Required Personnel position (in the table below) to be available or (b) to provide to GDOT a proposed replacement that meets or exceeds (i) the Minimum Qualifications (Key Personnel) or (ii) as to the Required Personnel positions in the table below, Minimum Qualifications (Required Personnel), in each case, as is required under DBA Section 10.4 (*Key Personnel; Required Personnel*), then Liquidated Damages with respect to either such failure is as follows:

Key Personnel or Required Personnel Position	**Liquidated Damages**
Lead Contractor Project Manager (CPM)	$10,000 per occurrence
Lead Design Consultant Project Manager (DPM)	$10,000 per occurrence
Engineer of Record (EOR)	$10,000 per occurrence
Construction Manager	$10,000 per occurrence
Worksite Erosion Control Supervisor (WECS)	$3,000 per occurrence

Worksite Traffic Control Supervisor (WTCS)	$3,000 per occurrence
Worksite Utility Coordination Supervisor (WUCS)	$3,000 per occurrence

(b) A further liquidated damage in the amount of $10,000 for Key Personnel and $2,000 for Required Personnel (identified in the table above), in each case and as applicable, will be payable from Design-Builder to GDOT as to each position for each three month period where any Key Personnel position or the identified Required Personnel position above is vacant or not being fulfilled in accordance with the Design-Build Documents as determined by GDOT, in its sole discretion.

1.4 Nonrefundable Deductions

Nonrefundable Deductions upon the occurrence of the following, which shall not be cumulative, for any single occurrence. Where there are multiple incidents as set forth below contributing to a single occurrence, the highest value (or if of equivalent value, the occurrence with the more frequent assessment) Nonrefundable Deduction shall apply.

	Nonrefundable Deduction	**NRD Deduction Amount**	**NRD Notice**
1	Failure to develop, utilize, or maintain the Project Management Plan as required by TP Section 2.3 (Project Management Plan).	$11,000	NRD Notice
2	Causing environmental damage, as determined by GDOT in its sole discretion, in contravention of TP Section 5 (Environmental) and the latest approved Environmental Documents	$18,000	**No** NRD Notice
3	Failure to follow the approved procedures outlined in the Utility Emergency Procedures Information as required in TP Section 7 (Utility Adjustments)	$19,500	**No** NRD Notice
4	Failure to establish and maintain traffic in accordance with an approved Transportation Management Plan in accordance with Design-Builder Team's Work, including in Related Transportation Facilities and GP traffic lanes	$14,600	**No** NRD Notice
5	Failure to respond to GDOT direction regarding changeable message signs (CMS) as specified in TP Section 18.3.2 (Traffic Control Plans)	$3,300 per hour	**No** NRD Notice
6	Failure to bring GDOT ITS system (fiber optic trunk, electrical power, ITS device (camera, radar, VSLS, etc.)) back on line within 24 hours after damage or failure arising out of or relating to the Work	$18,500	**No** NRD Notice

7	Failure to submit the Corrective/Preventative Action Report within 10 Business Days after receipt of a notification under DBA Section 7.3.2.1 (*Discovery of Nonconforming Work*) or DBA Section 7.3.3.2 (*Correction of Nonconforming Work*)	$19,500	**No** NRD Notice
[9]	[_____]***[NTD: insert project-specific NRD, if desired]***	[_____]***[NTD: insert project-specific basis for assessment]***	[**No**] NRD Notice

1.5 In addition to Liquidated Damages and Nonrefundable Deductions, in each of the foregoing instances for which Liquidated Damages or Nonrefundable Deductions may be assessed, Design-Builder shall be liable for any fines assessed against GDOT, as well as all costs for repairs of ITS and related equipment and materials (including specifically as relates to ITS system components (fiber optic trunk, electrical power, etc.), ITS devices (cameras, radar, VSLS, etc.) or enclosures), as well as loss of use to an existing ITS device, in each case as a result of any of the foregoing events or conditions.

Exhibit 18

ATC SUPPLEMENT

(attached)

ATC No.	Description	Final Agreement Regarding ATCs
ATC already included Proposal		
ATC Unsuccessful Proposer		

Notes:

I-75 at Bethlehem Road Interchange Project] Project*[NTD: add name of project]*

ATC Conditions

With the incorporation of the agreed upon list of ATCs as part of this DBA Exhibit 18 (*ATC Supplement*), the Parties agree that the following conditions are hereby incorporated in the Design-Build Agreement:

Exhibit 19

FORMS OF P&P BONDS, WARRANTY BOND

(on following pages)

Exhibit 20A Form of Performance Bond

Exhibit 20B Form of Payment Bond

Exhibit 20C Form of Warranty Bond (Performance Bond)

Exhibit 20A

FORM OF PERFORMANCE BOND
(Bond No. _____)

KNOW ALL PERSONS BY THESE PRESENTS:

That [_____]***[INSTRUCTION NOTE:*** Insert Legal Name and Address of Design-Builder] an entity duly authorized to do business in the State of Georgia (the "State"), as Bond Principal (hereinafter referred to as "Principal"), and [_____]***[INSTRUCTION NOTE: Legal Title and Address of Surety***] duly authorized to do business in the State, as surety (hereinafter referred to as "Surety") are held and firmly bound unto Georgia Department of Transportation, a body corporate and politic and an instrumentality and public corporation of the State of Georgia as obligee (the "Obligee" or "GDOT"), in the amount of $[_____]***[INSTRUCTION NOTE: insert amount that is 120% of the Contract Sum***], to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally to the Obligee.

WHEREAS, the Principal has entered into a contract with GDOT bearing the date of [_____, 20__], for designing and constructing of the I-75 at Bethlehem Road Interchange Project (the "Project") (the "Design-Build Agreement"); which is incorporated herein by reference and made a part hereof, and capitalized terms not defined in this Bond have the meanings assigned in such Design-Build Agreement.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that,

1. The recitals above are hereby incorporated by reference as though fully set forth herein.

2. If the Principal shall promptly and faithfully perform and comply with the terms and conditions of the Design-Build Agreement; and shall indemnify and save harmless the Obligee, and each of its directors, officers, employees and representatives, against and from all cost, expenses, damages, injury or loss to which the Obligee (or any of its directors, officers, employees, and representatives) may be subjected by reason of any wrongdoing, including misconduct, want of care or skill, default or failure of performance on the part of said Principal, its agents, subcontractors or employees, in the execution or performance of that portion of the Work as defined in the Design-Build Agreement (as defined in the Design-Build Agreement) ("Obligee's Losses"); and if the Principal shall reimburse upon demand of the Obligee any sums paid to the Principal that exceed the final payment determined to be due upon final completion and acceptance of the Project, then this obligation shall be void, otherwise it shall remain in full force and effect.

3. The Surety agrees that payments made to contractors and suppliers to satisfy claims on the payment bond do not reduce the Surety's legal obligations under this bond. Payments made to contractors or suppliers under any agreement where the Surety has arranged for completion of the work to satisfy this bond will not be considered payment bond claims.

4. If the Principal fails to perform the Work as required pursuant to the Design-Build Agreement, the Surety shall promptly, at the Surety's expense, take one of the following actions:

(a) remedy such breach or default; or

(b) complete the Work covered by this bond in accordance with the terms and conditions of the Design-Build Agreement then in effect; provided, however that completion of such work shall not be effected by the Principal or any affiliate of the Principal, for and on behalf of the Surety, without the Obligee's express prior consent, granted in its sole discretion; or

(c) select a qualified contractor or contractors to complete all Work covered by this bond in accordance with the terms and conditions of the Design-Build Agreement then in effect, which qualifications shall include meeting GDOT prequalification requirements, and to arrange for a contract meeting all the requirements of the Design-Build Agreement between such contractor or contractors and the Obligee, and make available as work progresses (even though there should be a breach or default (or a succession thereof) under such contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the unpaid balance of the contract price, but not exceeding, including other costs and damages for which Surety is liable hereunder, the penal sum; or

(d) waive its right to remedy such breach or default, perform and complete, arrange for performance and completion, or obtain a new contractor or contractors (under the foregoing clauses (a) to (c)), and after investigation, pay the Obligee the Surety's reasonable estimate of the cost to complete the Work pursuant to the Design-Build Agreement, and any other Obligee's Losses, provided that any such payment shall be on account only and subject to final adjustment and reimbursement based on the total of all Losses incurred by the Obligee, with reasonable promptness under the circumstances, time being of the essence, in no case to exceed 30 days after receipt of notice of Obligee's declaration of default under the Design-Build Agreement.

CONDITIONS OF THIS BOND ARE AS FOLLOWS:

A. The said Surety to this bond, for value received, hereby stipulates and agrees that no change or changes, extension(s) of time, alteration(s), addition(s), omission(s) or other modification(s) to the terms of the Design-Build Agreement, or to the work to be performed with respect to the Project, or in the specifications, plans or drawings accompanying same, or the exercise of the Obligee's right to do Work, or any change or modification of any terms of payment or extension of time for any payment pertaining or relating to the Design-Build Agreement, or any conditions precedent or subsequent in this bond attempting to limit the right of recovery of claimants otherwise entitled to recover under this bond, or any fraud practiced by any other person other than the claimant seeking to recover this bond, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change(s), extension(s) of time, alteration(s), addition(s), omission(s) or other modification(s) to the terms of the Design-Build Agreement or to the Work or to the specifications, plans or drawings.

B. Any suit under this bond must be instituted on or prior to the first anniversary of the Substantial Completion Date (as defined in the Design-Build Agreement) by the Obligee pursuant to and as defined in the Design-Build Agreement.

C. The amount of this Bond is a fixed amount and shall not be changed. The Surety hereunder shall not be liable to the Obligee in the aggregate in excess of the penal sum stated above.

D. If the Surety elects, and Obligee consents, as applicable, to act under Section 4(a), Section 4(b), or Section 4(c), then the responsibilities of the Surety to the Obligee shall not be greater than those of the Principal under the Design-Build Agreement, and the responsibilities of the Obligee to the Surety shall not be greater than those of the Obligee under the Design-Build Agreement. Subject to the commitment by the Obligee to pay the balance of the contract price, the Surety is obligated, without duplication, for:

(i) the responsibilities of the Principal for correction of defective work and completion of the Project under the terms, and subject to the conditions, of the Design-Build Agreement then in effect;

(ii) additional legal, design professional, delay costs, disruption costs, and other additional costs resulting from the Principal's breach or default (to the extent not subject to liquidated damages under clause D(iii) just below, and resulting from the actions or failures to act of the Surety under Section 4; and

(iii) damages claimed by, and due and owing to the Obligee under, the terms of the Design-Build Agreement, including liquidated damages, if any.

For purposes of the foregoing, the "balance of the contract price" is the total amount to be payable by the Obligee to the Principal, if any, after all adjustments have been made to which the Principal is entitled, collectively reduced by all payments made to or on behalf of the Principal under the Design-Build Agreement.

E. Notwithstanding the existence of the Design-Build Agreement, as the same may be amended, it is agreed that the Surety shall not be liable under this Bond to the Obligee, unless the Obligee has (i) made all payments to Design-Builder as and to the extent due under the Design-Build Agreement, and (ii) agrees, upon an election of Surety to complete or to arrange for completion of the Work pursuant to Section 4(a), Section 4(b), or Section 4(c) of this Bond, to remit all payments to become due on account of further Work to be performed.

F. Neither any change in or under the Design-Build Agreement, nor any compliance or noncompliance with any formalities provided in the Design-Build Agreement nor the change shall relieve the Surety of its obligations under this Bond.

[G.] ***[INSTRUCTION NOTE: Use in case of multiple or co-sureties***] The co-sureties herein named and executing this bond agree to empower a single representative with authority to act on behalf of all of the co-sureties with respect to this bond, so that the Obligees and claimants will have no obligation to deal with multiple sureties hereunder. All correspondence from the Obligee or claimants to the co-sureties and all claims under this bond shall be sent to such designated representative. The designated representative may be changed only by delivery of written notice (by personal delivery or by certified mail, return receipt requested) to the Obligees designating a single new representative, signed by all of the co-sureties. The initial representative shall be [_____], and correspondence to be directed at the following address(es):

NAME:_____
TITLE:_____
ADDRESS:_____
CITY:_____ STATE:_____ ZIP CODE:_____
TELEPHONE:_____

[remainder of page intentionally left blank]

Signed, sealed and dated this _____ day of _____, 20__. ***[INSTRUCTION NOTE: tag for date surety signs***]

Principal: [Principal]

By:_____

Name:_____

Its:_____ (Seal)

Surety: [Surety]

By:_____

Name:_____

Its:_____ (Seal)

Exhibit 20B

FORM OF PAYMENT BOND
(Bond No. _____)

KNOW ALL PERSONS BY THESE PRESENTS:

That [_____]***[INSTRUCTION NOTE:*** **Insert Legal Name and Address of Design-Builder**] an entity duly authorized to do business in the State of Georgia (the "State"), as Bond Principal (hereinafter referred to as "Principal"), and [_____]***[INSTRUCTION NOTE:*** **Legal Title and Address of Surety**] duly authorized to do business in the State, as surety (hereinafter referred to as "Surety") are held and firmly bound unto the Georgia Department of Transportation, a body corporate and politic and an instrumentality and public corporation of the State of Georgia ("GDOT") as obligee (the "Obligee"), in the amount of $[_____] ***[INSTRUCTION NOTE:*** **insert amount that is 120% of the Contract Sum**], to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally to the Obligee.

WHEREAS, the Principal has entered into a contract with GDOT bearing the date of [_____, 20__], for designing and constructing of the I-75 at Bethlehem Road Interchange Project (the "Project") (the "Design-Build Agreement"); which is incorporated herein by reference and made a part hereof.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly and faithfully make payment to all claimants, for all labor, equipment and materials supplied in the prosecution of the work provided for in the Design-Build Agreement; then this obligation shall be void, otherwise it shall remain in full force and effect.

1. The recitals above are hereby incorporated by reference as though fully set forth herein.

CONDITIONS OF THIS BOND ARE AS FOLLOWS:

A. Each said claimant shall have a right of action against the Principal and Surety for the amount due him or her due under the claimant's contract.

B. Every person entitled to the protection hereunder and who has not been paid in full for labor or materials furnished in the prosecution of the work referred to in said bond before the expiration of a period of ninety (90) days after the day on which the last of the labor was done or performed by him or her, or materials or equipment or machinery was furnished or supplied by him or her for which claim is made, shall have the right to sue on such payment bond for the amount, or the balance thereof, unpaid at the time of the commencement of such action and to prosecute such action to final execution and judgment for the sum or sums due him or her, provided, however, that any person having direct contractual relationship with a subcontractor, but no contractual relationship express or implied with the Principal furnishing said payment bond shall have (a) given written notice to said Principal within ninety (90) days from the day on which such person did or performed the last of the labor, or furnished the last of the materials or machinery or equipment for which such claim is made stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished or supplied or for whom the labor was performed or done; and (b) if the Principal has filed a Notice of Commencement in accordance with the requirements of O.C.G.A. § 13-10-62, given to said contractor a written Notice to Contractor within thirty (30) days from the filing of the Notice of Commencement or thirty (30) days following the first delivery of labor, materials, machinery or equipment, whichever is later, setting forth:

1. the name, address, and telephone number of the person providing labor, material, machinery, or equipment;

2. the name and address of each person at whose instance the labor, material, machinery or equipment is being furnished;

3. the name and the location of the public work; and

4. a description of the labor, material, machinery, or equipment being provided and, if known, the contract price or anticipated value of the labor, material, machinery, or equipment to be provided or the amount claimed to be due, if any.

C. It is provided further that nothing contained herein shall limit the right of action to said ninety (90) day period. Notice may be served by the depositing of a notice, registered mail, postage paid, duly addressed to the Principal at any place it maintains an office or conducts its business, or its residence, in any post office or branch post office or any letter box under the control of the Post Office Department or notice may be served in any manner in which the sheriffs of Georgia are authorized by law to serve summons or process. Every suit instituted under this section shall be brought in the name of the claimant without Obligee being made a party thereof. The official who has custody of said bond is authorized and directed to furnish, to any person making application thereof who submits an affidavit that it has supplied labor or materials for such work and payment therefore has not been made, or that it is being sued on any such bond, a copy of such bond and the contract for which it was given, certified, by the official who has custody of said bond and contract shall be admitted in evidence without further proof. Applicants shall pay for such certified statements and such fees as the official fixes to cover the cost of preparation thereof, but in no case shall the fixed fee exceed the fees that the clerks of the superior courts are permitted to charge for similar copies.

D. An action must be instituted by a claimant, whether in privity with the Principal or not, against the Principal or the Surety on this Bond within on this Bond within one year following Substantial Completion (as defined in the Design-Build Agreement) on account of any claim for payment. A claimant may not waive in advance his or her right to bring an action under this Bond against the Surety. In any action brought to enforce a claim against this Bond under this section, the prevailing party is entitled to recover a reasonable fee for the services of his or her attorney for trial and appeal or for arbitration, in an amount to be determined by the court, which fee must be taxed as part of the prevailing party's costs, as allowed in equitable actions.

E. The amount of this Bond is a fixed amount and shall not be changed. The Surety hereunder shall not be liable to the Obligee in the aggregate in excess of the penal sum stated above.

F. The Surety shall not be liable under this Bond to the Obligee, unless the Obligee has made all payments to the Principal as and to the extent due under the Design-Build Agreement, and otherwise agrees to perform all the other obligations pursuant to said Design-Build Agreement.

G. Neither any change in or under the Design-Build Agreement, nor any compliance or noncompliance with any formalities provided in the Design-Build Agreement nor the change shall relieve the Surety of its obligations under this Bond.

H. It is expressly agreed by the Principal and the Surety that the Obligee is at liberty to make inquiries at any time of subcontractors, laborers, materialmen, or other parties concerning the status of payments for labor, materials, or services furnished in the prosecution of the work.

I. For the purposes of this bond, the name and address of the responsible official of the Surety's claims department, to whom correspondence and telecommunications may be addressed and/or with whom business concerning this bond may be conducted will be as follows:

NAME:_____
TITLE:_____
ADDRESS:_____
CITY:_____ STATE:_____ ZIP CODE:_____
TELEPHONE:_____

J. A claimant as set forth pursuant to this Bond shall include only those individuals or entities having a direct contract with the Principal, or any subcontractor of any tier thereof, to furnish labor, materials, equipment or other elements of the Work. The term claimant shall exclude any bank or financing institution.

[remainder of page intentionally left blank]

Signed, sealed and dated this _____ day of _____, 20__. ***[INSTRUCTION NOTE: tag for date surety signs***]

Principal: [Principal]

By:_____

Name:_____

Its:_____ (Seal)

Surety: [Surety]

By:_____

Name:_____

Its:_____ (Seal)

Exhibit 20C

FORM OF WARRANTY BOND
(Bond No. _____)

KNOW ALL PERSONS BY THESE PRESENTS:

That ***[INSTRUCTION NOTE: Insert Legal Name and Address of Design-Builder***] an entity duly authorized to do business in the State of Georgia (the "State"), as Bond Principal (hereinafter referred to as "Principal"), and ***[INSTRUCTION NOTE: Legal Title and Address of Surety***] duly authorized to do business in the State, as surety (hereinafter referred to as "Surety") are held and firmly bound unto the Georgia Department of Transportation, a body corporate and politic and an instrumentality and public corporation of the State of Georgia ("GDOT") as obligee (the "Obligee"), in the amount of $[_____] ***[INSTRUCTION NOTE: insert $ [___] [10% of the Contract Sum]***], to which payment the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally to the Obligee.

WHEREAS, the Principal has entered into a contract with GDOT bearing the date of [_____, 20__], for designing and constructing of the I-75 at Bethlehem Road Interchange Project (the "Project") (the "Design-Build Agreement"); which is incorporated herein by reference and made a part hereof, and capitalized terms not defined in this Bond have the meanings assigned in such Design-Build Agreement.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that,

1. The recitals above are hereby incorporated by reference as though fully set forth herein.

2. If the Principal shall promptly and faithfully perform and comply with the terms and conditions of the Design-Build Agreement arising on and after Final Acceptance (as defined under the Design-Build Agreement); and shall indemnify and save harmless the Obligee, and each of its directors, officers, employees, and representatives, against and from all cost, expenses, damages, injury or loss to which the Obligee (or any of its directors, officers, employees, and representatives) may be subjected by reason of any wrongdoing, including misconduct, want of care or skill, default or failure of performance on the part of said Principal, its agents, subcontractors or employees, in the execution or performance of such portion of the Work as defined in the Design-Build Agreement arising on or after Final Acceptance (as defined in the Design-Build Agreement) ("Obligee's Losses"); and if the Principal shall reimburse upon demand of the Obligee any sums paid to the Principal that exceed the final payment determined to be due upon final completion and acceptance of the Project, then this obligation shall be void, otherwise it shall remain in full force and effect.

3. The Surety agrees that payments made to contractors and suppliers to satisfy claims on the payment bond do not reduce the Surety's legal obligations under this bond. Payments made to contractors or suppliers under any agreement where the Surety has arranged for completion of the work to satisfy this bond will not be considered payment bond claims.

4. If the Principal fails to perform the Work as required pursuant to the Design-Build Agreement, the Surety shall promptly, at the Surety's expense, take one of the following actions:

(a) remedy such breach or default; or

(b) complete the Work covered by this bond in accordance with the terms and conditions of the Design-Build Agreement then in effect; provided, however that completion of such

work shall not be effected by the Principal or any affiliate of the Principal, for and on behalf of the Surety, without the Obligee's express prior consent, granted in its sole discretion; or

(c) select a qualified contractor or contractors to complete all Work covered by this bond in accordance with the terms and conditions of the Design-Build Agreement then in effect, which qualifications shall include meeting GDOT prequalification requirements, and to arrange for a contract meeting all the requirements of the Design-Build Agreement between such contractor or contractors and the Obligee, and make available as work progresses (even though there should be a breach or default (or a succession thereof) under such contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the unpaid balance of the contract price, but not exceeding, including other costs and damages for which Surety is liable hereunder, the penal sum; or

(d) waive its right to remedy such breach or default, perform and complete, arrange for performance and completion, or obtain a new contractor or contractors (under the foregoing clauses (a) to (c)), and after investigation, pay the Obligee the Surety's reasonable estimate of the cost to complete the Work pursuant to the Design-Build Agreement, and any other Obligee's Losses, provided that any such payment shall be on account only and subject to final adjustment and reimbursement based on the total of all Losses incurred by the Obligee, with reasonable promptness under the circumstances, time being of the essence, in no case to exceed 30 days after receipt of notice of Obligee's declaration of default under the Design-Build Agreement.

CONDITIONS OF THIS BOND ARE AS FOLLOWS:

A. The said Surety to this bond, for value received, hereby stipulates and agrees that no change or changes, extension(s) of time, alteration(s), addition(s), omission(s) or other modification(s) to the terms of the Design-Build Agreement, or to the work to be performed with respect to the Project, or in the specifications, plans or drawings accompanying same, or the exercise of the Obligee's right to do Work, or any change or modification of any terms of payment or extension of time for any payment pertaining or relating to the Design-Build Agreement, or any conditions precedent or subsequent in this bond attempting to limit the right of recovery of claimants otherwise entitled to recover under this bond, or any fraud practiced by any other person other than the claimant seeking to recover this bond, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change(s), extension(s) of time, alteration(s), addition(s), omission(s) or other modification(s) to the terms of the Design-Build Agreement or to the Work or to the specifications, plans or drawings.

B. Any suit under this bond must be instituted on or prior to expiration of the Warranty Period (as defined in the Design-Build Agreement) by the Obligee pursuant to and as defined in the Design-Build Agreement.

C. The amount of this Bond is a fixed amount and shall not be changed. The Surety hereunder shall not be liable to the Obligee in the aggregate in excess of the penal sum stated above.

D. If the Surety elects, and Obligee consents, as applicable, to act under Section 4(a), Section 4(b), or Section 4(c), then the responsibilities of the Surety to the Obligee shall not be greater than those of the Principal under the Design-Build Agreement, and the responsibilities of the Obligee to the Surety shall not be greater than those of the Obligee under the Design-Build Agreement. Subject to the commitment by the Obligee to pay the balance of the contract price, the Surety is obligated, without duplication, for:

(i) the responsibilities of the Principal for correction of defective work and completion of the Project under the terms, and subject to the conditions, of the Design-Build Agreement then in effect;

(ii) additional legal, design professional, delay costs, disruption costs, and other additional costs resulting from the Principal's breach or default (to the extent not subject to liquidated damages under clause D(iii)), and resulting from the actions or failures to act of the Surety under Section D; and

(iii) damages claimed by, and due and owing to the Obligee under, the terms of the Design-Build Agreement, including liquidated damages, if any.

For purposes of the foregoing, the "balance of the contract price" is the total amount to be payable by the Obligee to the Principal, if any, after all adjustments have been made to which the Principal is entitled, collectively reduced by all payments made to or on behalf of the Principal under the Design-Build Agreement.

E. Notwithstanding the existence of the Design-Build Agreement, as the same may be amended, it is agreed that the Surety shall not be liable under this Bond to the Obligee, unless the Obligee has (i) made all payments to Design-Builder as and to the extent due under the Design-Build Agreement, and (ii) agrees, upon an election of Surety to complete or to arrange for completion of the Work pursuant to Section 4(a), Section 4(b), or Section 4(c) of this Bond, to remit all payments to become due on account of further Work to be performed.

F. Neither any change in or under the Design-Build Agreement, nor any compliance or noncompliance with any formalities provided in the Design-Build Agreement nor the change shall relieve the Surety of its obligations under this Bond.

[G]. ***[INSTRUCTION NOTE: Use in case of multiple or co-sureties***] The co-sureties herein named and executing this bond agree to empower a single representative with authority to act on behalf of all of the co-sureties with respect to this bond, so that the Obligees and claimants will have no obligation to deal with multiple sureties hereunder. All correspondence from the Obligee or claimants to the co-sureties and all claims under this bond shall be sent to such designated representative. The designated representative may be changed only by delivery of written notice (by personal delivery or by certified mail, return receipt requested) to the Obligees designating a single new representative, signed by all of the co-sureties. The initial representative shall be [_____], and correspondence to be directed at the following address(es):

NAME:_____
TITLE:_____
ADDRESS:_____
CITY:_____ STATE:_____ ZIP CODE:_____
TELEPHONE:_____

[remainder of page intentionally left blank]

Signed, sealed and dated this _____ day of _____, 20__. [***INSTRUCTION NOTE: tag for date surety signs***]

Principal: [Principal]

By:_____

Name:_____

Its:_____ (Seal)

Surety: [Surety]

By:_____

Name:_____

Its:_____ (Seal)

Exhibit 20

MATERIAL INDEXATION ADJUSTMENTS

Unless expressly stated otherwise, references to sections and attachments under this DBA Exhibit 20 (*Material Indexation Adjustments*) are internal to this DBA Exhibit 20 (*Material Indexation Adjustments*).

1. Definitions; Section and Attachment References. For purposes of this DBA Exhibit 20 (*Material Indexation Adjustments*) only, the following capitalized terms have the meanings ascribed below. Other capitalized terms have the meanings given in DBA Exhibit 1 (*Acronyms, Abbreviations, and Definitions*) or as are titled or defined within the cited indexing reference within these definitions. Section and attachment references, except as otherwise expressly stated otherwise, are to sections and attachments within this Exhibit 20 (*Material Indexation Adjustments*).

"**Base Index Value**" or "**BIVx**" means any or all of the Base Index Value Asphalt, Base Index Value Fuel, Base Index Value Portland Cement, and Base Index Value Steel, as context may require, and where "**x**" is the Base Material subject to the BIV.

"**Base Index Value Asphalt**" means the index value for asphalt cement of $X / ton obtained from http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex and set forth in GDOT's Notice to Proposers on the Base Index Value Date.

"**Base Index Value Fuel**" means respectively the index value for regular fuel of $Y / gallon and diesel fuel of $X / gallon obtained from http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex and set forth in GDOT's Notice to Proposers on the Base Index Value Date.

"**Base Index Value Portland Cement**" means the index value for Portland Cement of $X / ton obtained from the *United States Department of Labor Bureau of Labor and Statistics* (https://data.bls.gov/timeseries/WPU132) and forth set in GDOT's Notice to Proposers on the Base Index Value Date.

"**Base Index Value Steel**" means respectively the index value for Semi-Finished Steel Mill Products of $X / CWT obtained from the United States Department of Labor Bureau of Labor and Statistics Semi-Finished Steel Mill Products WPU 101702 (https://data.bls.gov/timeseries/WPU101702)and set forth in GDOT's Notice to Proposers on the Base Index Value Date.

"**Base Index Value Date**" means the date of *October 16, 2025* on which GDOT's Notice to Proposers setting forth the base index values for the Base Materials was issued.

"**Base Material**" shall means those materials listed in Section 2 for which Material Indexation Adjustments are to be calculated.

"**Indicative Proposal Quantity**" means the material quantity for each Base Material set forth on the Design-Builder's Form AA submitted with their Proposal that is attached hereto at Attachment 1.

"**Material Indexation Adjustment**" or "**MIA**" means a periodic determination, positive or negative, in dollars for each Base Material in accordance with Section 2.

"**Periodic Index Value**" or "**PIVx**" means any or all of the Periodic Index Value Asphalt, Periodic Index Value Fuel, Periodic Index Value Portland Cement, and Periodic Index Value Steel, as context may require, in each case where "x" is the Base Material subject to the PIV. For purposes of each Periodic Index Value, the "most recent index value" is that published (e.g., monthly), such that, for example, a monthly value, set in June of year X but not yet set for July would be the Periodic Index Value as to a Base Material where the Invoice Period covers July to August of the same year.

"**Periodic Index Value Asphalt**" means the most recent index value for asphalt cement obtained from http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex prior to the Invoice Period.

"**Periodic Index Value Fuel**" means respectively the most recent index value for regular fuel and diesel fuel obtained from http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex prior to the Invoice Period.

"**Periodic Index Value Portland Cement**" means the most recent index value for Portland Cement obtained from the *United States Department of Labor Bureau of Labor and Statistics* (https://data.bls.gov/timeseries/WPU132) prior to the Invoice Period.

"**Periodic Index Value Steel**" means respectively the most recent index value for Semi-Finished Steel Mill Products (WPU 101702) obtained from the *United States Department of Labor Bureau of Labor and Statistics* (https://data.bls.gov/timeseries/WPU101702) prior to the Invoice Period.

"**Periodic Quantity**" or "**PQ_x**" means the amount delivered to the Site of a Base Material for use on the Project obtained or contracted for at a fixed price by the Design-Builder (e.g., when a mill order is placed), or other means of measurement and recording to which the Parties may agree, during the Invoice Period, where "x" is the Base Material quantified/counted.

2. Determination of Material Indexation Adjustments.

Commencing at NTP3 and continuing until the Substantial Completion Deadline, for each Invoice Period, Design-Builder shall use the provisions of this DBA Exhibit 20 (*Material Indexation Adjustments*) to determine Material Indexation Adjustments for the following Base Materials, to be included in the Invoice package, for GDOT's consideration of the submitted Invoice. The Periodic Index Value for a Base Material shall be assessed as of the last day of the preceding month.

a. Asphalt cement incorporated directly into the Project

b. Fuel (regular and diesel directly consumed in the hauling of goods and materials to the Site for the Project)

c. Portland Cement incorporated directly into the Project

d. Steel (Reinforcing Bars, Hot-Rolled Carbon-Steel Plate and Steel Piling (H-Pile) incorporated directly into the Project

For each Base Material, if the Periodic Index Value is within 95% and 105% of its respective Base Index Value (to include equaling 95% and 105%, then no Material Indexation Adjustment will be made for the relevant Invoice Period.

For each Base Material, if the Periodic Index Value is less than 95% of the Base Index Value, a negative Material Indexation Adjustment shall be calculated as follows: the Periodic Index Value minus

0.95 times the Base Index Value with the result multiplied by the Periodic Quantity. For the avoidance of doubt, a ratio of Periodic Index Value to Base Index Value of 0.94 would result in a negative 1 per cent Material Indexation Adjustment with respect to the subject Base Material.

For each Base Material, if the Periodic Index Value is greater than 105% of the Base Index Value, a positive Material Indexation Adjustment shall be calculated as follows: the Periodic Index Value minus 1.05 times the Base Index Value with the result multiplied by the Periodic Quantity. For the avoidance of doubt, a ratio of Periodic Index Value to Base Index Value of 1.06 would result in a positive 1 per cent Material Indexation Adjustment.

3. Accumulation of Material Indexation Adjustments.

The sum of Material Indexation Adjustments as to each Base Material that is determined for each Invoice Period and all Periodic Quantities shall be recorded in a ledger in a form acceptable to GDOT and a running balance of accumulated adjustments shall be calculated each Invoice Period.

If the ledger balance is positive and a Supplemental Agreement (initiated for reasons other than Material Indexation Adjustment) is pending, then the positive balance shall be added to the Supplemental Agreement as a Project Payment and the ledger balance shall be reset to zero.

If the ledger balance is positive and 12 months have passed without a Supplemental Agreement, then GDOT shall prepare a Supplemental Agreement reflecting the positive balance added as a Project Payment and the ledger balance shall be reset to zero.

If the ledger balance is negative, then no immediate action regarding Material Indexation Adjustments shall be taken. If a negative balance exists at the end of the Project, then the amount of the negative balance shall be deducted from the Final Payment. Any remaining negative balance exceeding the amount of the Final Payment shall become due and payable to GDOT in accordance with DBA Section 17.3.3.2 (Damages; Offset).

Project Payments owed by GDOT to Design-Builder pursuant to a Supplemental Agreement as contemplated in this DBA Exhibit 20 (*Material Indexation Adjustments*) shall be paid in accordance with the Supplemental Agreement applicable to such Project Payments, and the provisions of DBA Exhibit 7 (*Contract Sum and Payment Terms*) shall not apply to such Project Payments unless otherwise agreed by the Parties in the applicable, executed Supplemental Agreement.

4. Limitations on Material Indexation Adjustments.

The total amount of all positive Material Indexation Adjustments resulting in Project Payments under this DBA Exhibit 20 (*Material Indexation Adjustments*) shall not exceed a positive or negative $4,000,000 net over the Term.

The total quantity of each Base Material used for its respective Material Indexation Adjustments during the Term may not exceed the Indicative Proposal Quantity for that Base Material.

Notwithstanding the foregoing, Design-Builder shall not be entitled to any Material Indexation Adjustments after the Substantial Completion Deadline.

5. Record Keeping Requirements.

The Design-Builder shall retain records pertinent to the Material Indexation Adjustments including true and complete copies of material orders, deliveries, invoices, contracts and other such documents, in each case, as is necessary to demonstrate that the quantities for which Material Indexation Adjustments are sought are actual and necessary for the Work. Supporting documentation shall be available for review upon request by GDOT.

6. Burden of Proof.

Design-Builder bears the burden of proving entitlement to any Material Indexation Adjustment under this this DBA Exhibit 20 (*Material Indexation Adjustments*).

INDICATIVE PROPOSAL QUANTITIES

Base Material	Indicative Proposal Quantity	Unit
Asphalt Cement		Ton
Fuel (Regular)		Gallon
Fuel (Diesel)		Gallon
Steel (Reinforcing Bars)		CWT
Steel (Hot-Rolled Carbon-Steel Plate)		CWT
Steel (Steel Piling (H-Pile))		CWT
Portland Cement		Ton

Base Index Value Date means the date of October 16, 2025 on which GDOT's notice to Proposers setting forth the base index values for the Base Materials was issued and will be added into the Indicative Proposal Quantities prior to execution of the Design-Build Agreement.

Exhibit 21

RESERVED

Exhibit 22

FORM OF CERTIFICATE REGARDING RELIEF EVENT AND COMPENSATION EVENT

I, [Name], the [Title] of [Name of Design-Builder, Contractor or Subcontractor, as applicable] (the "Company"), do hereby certify as of [Date] that:

(a) This certificate is being executed and delivered in connection with the [the Relief Event Package for Detailed Relief Event Notice No.[·] *OR* [the Compensation Event Package for Detailed Compensation Event Notice No. [·];

(b) The claim that the events described in the relevant Detailed Relief Event Notice or Detailed Compensation Event Notice constitute a Relief Event or Compensation Event, as applicable pursuant to the DBF Documents is made in good faith and in accordance with the terms of the Design-Build Documents;

(c) The amount of time and compensation requested accurately reflects the appropriate adjustments to the Baseline Project Schedule and the Contract Sum, as applicable, justified pursuant to the terms and conditions of the Design-Build Agreement;

(d) The Relief Event Package and the Compensation Event Package, respectively, include all known and anticipated impacts or amounts whatsoever that may be incurred as a result of the event giving rise to the asserted Relief Event or the asserted Compensation Event;

(e) The Relief Event Package and the Compensation Event Package, as applicable, addresses any and all costs and delays arising out of the relevant Relief Event or Compensation Event; and

(f) The Design-Builder (and Contractor(s) and Subcontractor(s), as applicable) has/have no reason to believe and does/do not believe that the factual basis for the claim of Relief Event or Compensation Event, as applicable, is falsely represented.

IN WITNESS WHEREOF, the undersigned is/are the [ ], [ ] and [ ] of the entity(ies) to which this certificate relates, [respectively] and has/have duly executed this certificate as of the date first written above.

By:_____ Print Name:_____

Title:_____

By:_____ Print Name:_____

Title:_____

By:_____ Print Name:_____

Title:_____

Georgia Department of Transportation

Technical Provisions
For

Design-Build Agreement

P.I. No. 0017182

I-75 AT BETHLEHEM ROAD INTERCHANGE DESIGN-BUILD PROJECT

AMENDMENT #1: AUGUST 1, 2025

AMENDMENT #2: AUGUST 29, 2025

AMENDMENT #3: OCTOBER 3, 2025

AMENDMENT #4: OCTOBER 17, 2025

CONTENTS

1 GENERAL REQUIREMENTS 1-1
2 PROJECT MANAGEMENT 2-1
3 DESIGN-BUILD QUALITY PROGRAM 3-1
4 DESIGN DOCUMENTS 4-1
5 ENVIRONMENTAL 5-1
6 RIGHT OF WAY 6-1
7 UTILITY ADJUSTMENTS 7-1
8 GEOTECHNICAL 8-1
9 SURVEYING AND MAPPING 9-1
10 GRADING 10-1
11 ROADWAYS 11-1
12 DRAINAGE 12-1
13 STRUCTURES 13-1
14 RAILROAD 14-1
15 LANDSCAPE AND HARDSCAPE ENHANCEMENTS 15-1
16 SIGNING, PAVEMENT MARKING, SIGNALIZATION 16-1
17 INTELLIGENT TRANSPORTATION SYSTEMS 17-1
18 TRAFFIC CONTROL 18-1
19 MAINTENANCE 19-1
20 BICYCLE AND PEDESTRIAN FACILITIES 20-1
21 RESERVED 21-1
22 NOISE BARRIERS 22-1
23 RESERVED 23-1

ATTACHMENTS

Attachment 1-1 ..... Related Transportation Facilities Map
Attachment 1-2 ..... Reserved
Attachment 1-3 ..... UAS Requirements
Attachment 1-4 ..... Project Standards
Attachment 1-5 ..... Project Office Facilities and Equipment
Attachment 1-6 ..... Required Lane Configuration
Attachment 2-1 ..... Key Personnel and Required Personnel
Attachment 2-2 ..... Basis of D&C Requirements
Attachment 2-3 ..... Public Information and Communications
Attachment 2-4 ..... Safety Requirements
Attachment 2-5 ..... Project Schedule Technical Requirements
Attachment 2-6 ..... Project Schedule Software Requirements
Attachment 2-7 ..... SOV and Price-Loading Requirements
Attachment 2-8 ..... Project Schedule and SOV Submittal Requirements
Attachment 2-9 ..... Reserved
Attachment 2-10 ..... Submittal Requirements Database
Attachment 3-1 ..... Reserved
Attachment 3-2 ..... Nonconforming Work Process
Attachment 4-1 ..... Shop Drawing Requirements
Attachment 4-2 ..... PE Signing and Sealing
Attachment 5-1 ..... Environmental Resources Impact Table
Attachment 5-2 ..... Environmental Commitments
Attachment 5-3 ..... Environmental Document Responsibility Matrix
Attachment 5-4 ..... Environmental Resource Exhibit
Attachment 6-1 ..... Acquisition Services Workflow
Attachment 6-2 ..... SP/SA Required Clearance
Attachment 6-3 ..... State Proposed ROW Plans
Attachment 6-4 ..... ROW Commitments
Attachment 7-1 ..... Utility Facility Relocation Acceptance Form
Attachment 7-2 ..... Executed Utility MOUs
Attachment 7-3 ..... Utility Plans
Attachment 7-4 ..... UIA Template
Attachment 7-5 ..... USR Template
Attachment 7-6 ..... Utility Damage Report
Attachment 8-1 ..... Status of Geotechnical Design Policy and Guides
Attachment 8-2 ..... Blasting Requirements
Attachment 8-3 ..... Wheel Path Definition

Attachment 8-4 ..... Concrete to Asphalt Pavement Transition Detail
Attachment 8-5 ..... Preliminary Borings
Attachment 9-1 ..... Approved Survey Control Package
Attachment 11-1 ..... Design Criteria
Attachment 11-2 ..... Design Variances
Attachment 11-3 ..... Design Deviations
Attachment 11-4 ..... Driveway Requirements
Attachment 11-5 ..... T80PP Traffic Rail
Attachment 12-1 ..... MS4 Responsibilities
Attachment 12-2 ..... Requirements for the Drainage Design Report
Attachment 13-1 ..... Legal Load Configurations
Attachment 13-2 ..... CVL Typical
Attachment 13-3 ..... CVL Alignment
Attachment 13-4 ..... CVL Profile
Attachment 13-5 ..... HET Loading Requirements
Attachment 15-1 ..... Reserved
Attachment 15-2 ..... Noise Barrier Aesthetics
Attachment 16-1 ..... Span Wire Sign Layout
Attachment 17-1 ..... Reserved
Attachment 17-2 ..... Spare Replacement Units (GDOT)
Attachment 17-3 ..... ITS Maintenance Area Requirements
Attachment 17-4 ..... ITS Acceptance Requirements
Attachment 17-5 ..... Reserved
Attachment 17-6 ..... ITS Asset Information
Attachment 18-1 ..... Temporary Traffic Control
Attachment 18-2 ..... Requirements for the TMP
Attachment 18-3 ..... Traffic Interruption Request
Attachment 18-4 ..... Approved and Design-Builder Identified Detours
Attachment 18-5 ..... Traffic Analysis Tool
Attachment 19-1 ..... Maintenance Defect Definition and Remedy Table
Attachment 19-2 ..... Requirements for the MMP
Attachment 19-3 ..... Restoration of Haul Roads

1 GENERAL REQUIREMENTS

1.1 Project Description

The Project will construct a new service interchange with Interstate 75 (I-75) at Bethlehem Road, a new location roadway, south of the existing Bethlehem Road (Old Bethlehem Road). The new interchange will have roundabouts on Bethlehem Road at both the northbound and southbound ramp terminals. Bethlehem Road will begin at the intersection of Greenwood Road/Lester Mill Road/Eagles Brooke Drive and will terminate at State Route 42 (SR 42). The Project will remove the Old Bethlehem Road overpass and retain sections of Old Bethlehem Road east and west of I-75. SR 42 will be widened from Pine Grove Road to Bethlehem Road. The Project is partially located within the city limits of Locust Grove in Henry County, Georgia.

The Design-Builder shall construct the Project within the Project Limits. The Design-Builder shall only be permitted to use easements, including existing GDOT easements, for the designated purposes for which they were acquired. The Design-Builder shall not be permitted to use easements which are not owned by GDOT. All physical infrastructure (e.g., bridges, walls, strain poles, sign gantries, etc.) shall be located within the public right of way unless GDOT agrees in writing to allow an exception.

1.2 Existing Road Designation

Old Bethlehem Road is a rural local roadway consisting of two 11 to 12-foot travel lanes and 2-foot paved shoulders. Old Bethlehem Road does not provide access to or from I-75.

SR 42 is an urban minor arterial consisting of two 12-foot travel lanes, 6 to 8-foot shoulders (2-foot paved), and left and right turn lanes throughout the corridor.

I-75 is a rural interstate that consists of six 12-foot travel lanes (three lanes in each direction) with 12-foot shoulders and a varying width depressed median.

1.3 Related Transportation Facilities

Related Transportation Facilities are shown in TP Attachment 1-1 (Related Transportation Facilities Map).

The Design-Builder shall meet with, share files with, allow Site access to, and coordinate with all developers or contractors engaged on Related Transportation Facility projects at the request of GDOT.

The Design-Builder is made aware that GDOT P.I. No. 0020636 (I-75 from I-675 to South of SR 155 – Express Lanes) may be split into multiple phased construction projects. The Design-Builder shall be required to coordinate with any phased construction portion of the project which may occur during the construction of this Project.

The Design-Builder is made aware that GDOT P.I. No. 0014203 (I-75 from I-475 to SR 155 – Commercial Vehicle Lanes) may be split into multiple phased construction projects. The Design-Builder shall be required to coordinate with any phased construction portion of the project which may occur during the construction of this Project.

The Design-Builder shall meet with, share files with, coordinate with, and allow reasonable Site access to all developers or contractors engaged on any roadway project not identified in TP Attachment 1-1 (Related Transportation Facilities Map) at the request of GDOT.

Other non-roadway developments may be occurring near the Project. The Design-Builder shall meet with, share files with, allow Site access to, and coordinate with all site development projects at the request of GDOT.

1.4 Mandatory Configuration Elements

The Design-Builder shall design and construct the Project in compliance with the following mandatory elements of the Basic Configuration:

1. Provide the minimum lane configurations as shown in TP Attachment 1-6 (Required Lane Configuration).
2. Construct roundabouts at Bethlehem Road and Greenwood Road/Lester Mill Road/Eagles Brooke Drive intersection, the I-75 northbound and southbound ramp terminals, and at the Old Bethlehem Road intersection.

The mandatory elements of the Basic Configuration set forth in this TP Section 1.4 do not identify all required Project components.

1.5 Project Standards

1.5.1 General

The Project Standards are set out in TP Attachment 1-4 (Project Standards).

As applied to the Work, the Project Standards shall be in the form most recently published and in effect as at the Setting Date, subject to any Project Standards Changes which have been agreed to and set out in Supplemental Agreements in accordance with DBA Section 14.6.1 (Project Standards Changes).

The Design-Builder shall request clean versions (without the watermark) of all special design details used in the Design-Builder's design from GDOT for inclusion into the plan set. The Design-Builder shall indicate in the request the detail as applicable at the Setting Date and include the actual date of the Setting Date. The use of the special design details shall be limited to the application for which they were intended.

1.6 Offices

1.6.1 GDOT Field Office and Equipment Requirements

The Design-Builder shall provide GDOT office facilities and equipment in accordance with the requirements of TP Attachment 1-5 (Project Office Facilities and Equipment).

1.7 Existing Utility

Prior to any land disturbing activities, the Design-Builder shall locate all underground Utilities. The Design-Builder is responsible for contacting the Georgia Utilities Protection Center (UPC) (811 or 1-800-282-7411) a minimum of 48 and a maximum of 96 hours prior to the land disturbing activity. The Design-Builder shall be responsible for identifying and locating the local Utilities that are not included in the UPC Program. The Design-Builder shall be responsible for

locating Highway Service Systems, including all ITS fiber networks, per the requirements in TP Section 17 (Intelligent Transportation Systems).

The Design-Builder shall not impact or cause to relocate any Georgia Transmission Corporation's (GTC) facilities. The Design Builder shall provide two weeks' notice to GTC for any crossing of an existing GTC easement and shall provide GTC with permanent gated driveway access to its existing easements. The Design-Builder shall coordinate with GTC to ensure that all proposed design and construction avoids conflict with GTC facilities.

1.8 Reserved

1.9 Construction Material

Except where recycled materials are permitted in the Project Standards, the Design-Builder shall ensure that all materials used to construct the Project are new. The Design-Builder shall ensure all material meets the minimum requirements as specified in TP Attachment 1-4 (Project Standards). The Design-Builder shall ensure all materials used to construct the Project conform to the requirements of the GDOT Qualified Products List (QPL) or equivalent as approved by GDOT.

1.10 Unmanned Aircraft System

The Design-Builder may use small, unmanned aircraft systems (UAS) in conducting Work for the Project, subject to the requirements in TP Attachment 1-3 (UAS Requirements).

1.11 Oversize Permits

The Design-Builder shall acquire oversize permits for all loads as required. Information on size and weight restrictions, potential haul routes, and permit application process can be found on GDOT's website (https://www.dot.ga.gov/GDOT/Pages/OversizePermits.aspx).

1.12 Storage of Construction Equipment

The Design-Builder shall not be permitted to store the following under a bridge for any length of time:

1. Construction or maintenance equipment.
2. Construction or maintenance vehicles.
3. Combustible construction or maintenance materials.

The Design-Builder may store non-combustible materials under a bridge with prior written consent of GDOT. The Design-Builder shall not store any materials or equipment on a bridge except for the materials actively being used for construction of the bridge.

The Design-Builder shall not stockpile or store materials that are not for use on the Project within the Project Limits. Where Project-specific materials are stockpiled within the Project Limits, the following requirements shall apply:

1. Stockpiles shall be constructed in conformance with TP Attachment 1-4 (Project Standards). Appropriate erosion control measures shall be placed and maintained.
2. The material shall conform to the requirements of the Plans and TP Attachment 1-4 (Project Standards).

3. Any damage to the material due to the delay in incorporation into the Work shall be at the risk of the Design-Builder.
4. The quantity of the material shall not exceed the quantity required by the Project.

The Design-Builder shall not be permitted to store fuel tanks or other hazardous materials within a water quality critical area associated with the Indian Creek Watershed District as defined by:

1. Indian Creek Watershed District: all land that lies on each side of Indian Creek and each perennial stream that flows into Indian Creek from the ridge line from the S.H. Gardner Reservoir Dam located on Indian Creek just north of Indian Creek Road to the beginning points of Indian Creek and each perennial stream that drains into the Indian Creek within said area.
2. Water quality critical area: for each perennial stream within the Indian Creek Watershed District:
    a. All land that lies adjacent to the normal pool level of a reservoir and extending either to the ridge line boundary of the watershed or 500 feet, whichever is shorter; and
    b. All land extending a distance of 3 miles upstream from the normal pool level of the reservoir and extending either to the ridge line boundary of the watershed on each side of the perennial stream or 500 feet, whichever is shorter.
    c. The normal pool level elevation of the Indian Creek Reservoir is 728.0 feet.

1.13 Submittals

With respect to the general requirements described in this TP Section 1, the Design-Builder shall provide the Submittals identified in the Submittal Requirements Database and comply with DBA Section 6.3 (Submittal Review; GDOT Oversight; Quality Posture) and TP Section 2.9 (Submittals).

TP Section 1 Attachments

Attachment No.	*Title*
Attachment 1-1	Related Transportation Facilities Map
Attachment 1-2	Reserved
Attachment 1-3	UAS Requirements
Attachment 1-4	Project Standards
Attachment 1-5	Project Office Facilities and Equipment
Attachment 1-6	Required Lane Configuration

Georgia Department of Transportation

Technical Provisions

For

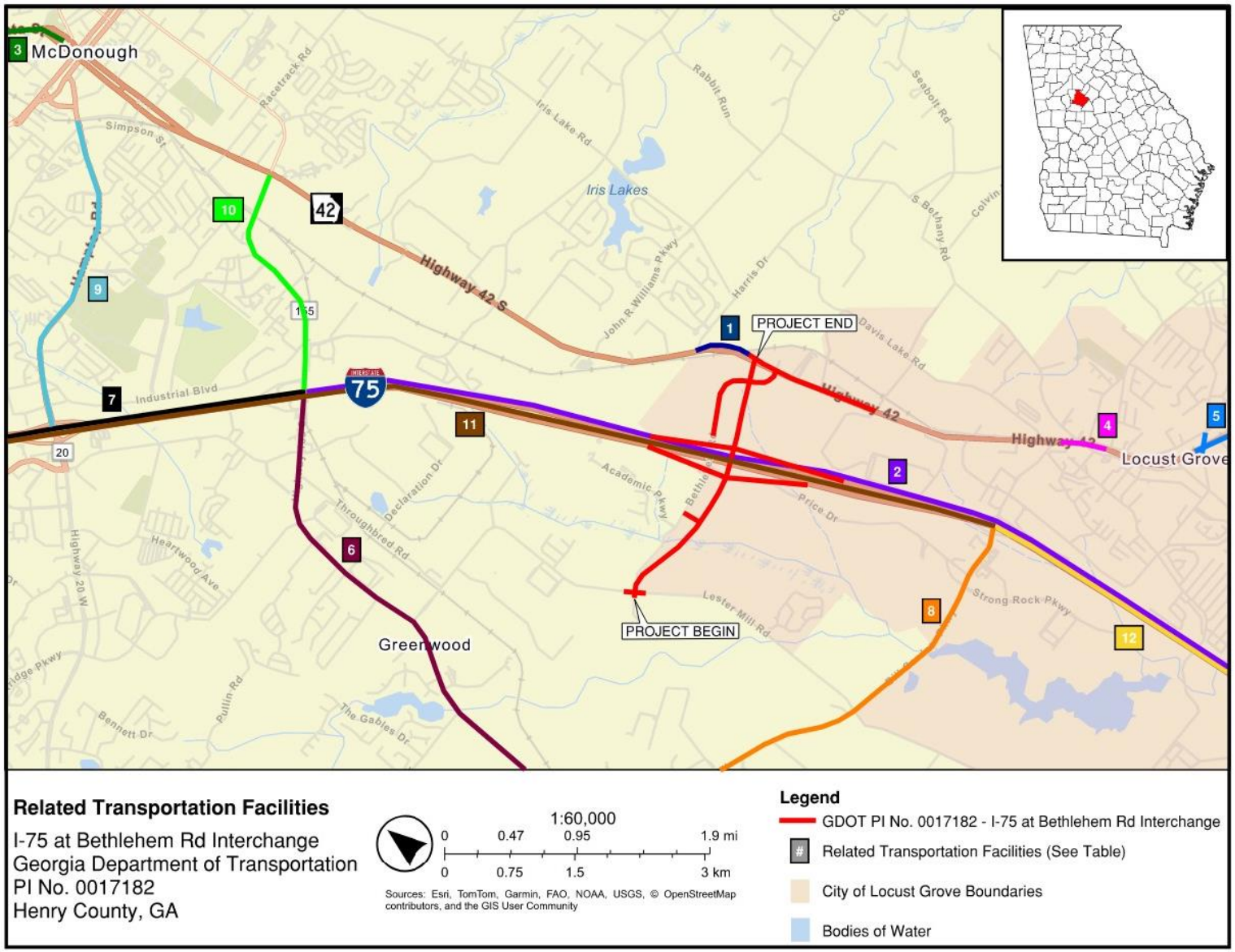
Design-Build Agreement

P.I. No. 0017182

Attachment 1-1

Related Transportation Facilities Map

Attachment 1-1: Related Transportation Facilities Map



Project ID	*Project Description*	*Implementing Agency*	*Current Construction Schedule*[1]
1	SR 42 @ NS #718418R 5 MI S of McDonough (P.I. No. 0013995)	GDOT	FY 2029
2	I-75 from I-475 to SR 155 – Commercial Vehicle Lanes (P.I. No. 0014203)	GDOT	FY 2028
3	SR 42 from Downtown McDonough to SR 138 (P.I. No. 0007855)	GDOT	FY 2029
4	SR 42 from CS 636/Bill Gardner Pkwy to CS 645/Peeksville Rd (P.I. No 0015823)	GDOT	Under Construction
5	SR 42 @ CR 331/Jackson Street/CR 3092/Locust Grove (P.I. No 0013334)	GDOT	FY 2030
6	SR 155 from I-75 to Hampton-Locust Grove Road/Bill Gardner Parkway (P.I. No. 0015284)	GDOT	FY 2030
7	I-75 From I-675 To S of SR 155 – Express Lanes (P.I. No. 0020636)	GDOT	FY 2029
8	CR 636/CR650/Bill Gardner Pkwy from SR 155 to I-75 (P.I. No. 0017817/0000562)	GDOT	Long Range
9	SR 20 From I-75 to CS 72/Phillips Drive (P.I. No. 0013531)	GDOT	Under Construction
10	SR 155 From I-75 to SR 42/US 23 (P.I. No. 0007856)	GDOT	FY 2027
11	I-75 from CS 636/Bill Gardner Pkwy to SR 920/Jonesboro Road (P.I. No. 0007891)	GDOT	Long Range
12	I-75 from SR 16 to CR 636/Bill Gardner Pkwy (P.I. No. 0007881)	GDOT	Long Range

1. Construction schedules are subject to change. Dates indicate year of notice to proceed.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 1-2

Reserved

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 1-3

UAS Requirements

Attachment 1-3: UAS Requirements

The Design-Builder may use any small unmanned aircraft system (UAS), as defined in 14 CFR Part 107, in performance of the Work and for purposes related to the Work in accordance with DBA Section 7.12 (UAS Requirements) and the requirements set forth in this TP Attachment 1-3.

1. Prior to the use of any UAS, the Design-Builder shall submit to GDOT the following documentation (collectively, the "UAS Documentation"):
    a. A copy of the current Federal Aviation Administration (FAA) UAS registration certificate obtained pursuant to 14 CFR Part 107.13 for each UAS to be used on this Project.
    b. A copy of each UAS remote pilot's certificate with a small UAS rating obtained pursuant to 14 CFR Part 107. If the pilot holds an FAA pilot certificate (other than a student pilot certificate) issued under 14 CFR Part 61 and meets the flight review requirements specified in 14 CFR Part 61.56, prior to the use of the UAS, the Design-Builder shall provide a copy of their pilot's certificate and copy of logbook endorsement signed by a flight instructor certified to rate UAS remote pilots.
    c. A Certificate of Insurance evidencing coverage either through a stand-alone unmanned aircraft systems policy or by endorsement (CG 24 50 or equivalent) to the commercial general liability policy.
    d. A copy of the Design-Builder's UAS policy and standard operating procedures, which at a minimum must address applicable Laws relating to the ownership, use, and operation of UAS.
    e. A copy of the Design-Builder's UAS training program guidelines, which at a minimum must include UAS training requirements, the aviation safety plan, licensing and currency, recertification, and the process for recording training attendance.
    f. A copy of the Design-Builder's aviation safety plan, which at a minimum must address emergency procedures (such as lost link, GPS signal, return to home, emergency avoidance procedures, and emergency checklist), accident/incident reporting, flight area perimeter management, flight crew communications, and external communications in controlled airspace.
    g. A proposed flight plan which includes locations, dates, and time of use of the UAS.
2. The Design-Builder shall not be permitted to use any UAS with respect to the Project until all complete and compliant UAS Documentation has been submitted to GDOT.
3. The Design-Builder shall obtain and maintain all FAA waivers, clearances, and authorizations necessary to fly in controlled airspace pursuant to 14 CFR Part 107 Subpart D through the FAA portal or LAANC system and otherwise in accordance with applicable Laws. The Design-Builder shall provide, upon request, copies of any such waiver, clearance, and authorization requests, as well as approvals or rejections, including current Section 333 exemption, to GDOT at the time of submission to FAA or other Governmental Entities.
4. When using a UAS in aid of the Design-Builder's survey grade aerial mapping work, the Design-Builder shall complete a systems test by flying a full-grade mapping test site and

meet the standard set (0.1 foot or 3 centimeters or less) by GDOT's Statewide Location Bureau.

5. Any person piloting or controlling a UAS on behalf of the Design-Builder shall have a proper pilot's certificate and have completed the Design-Builder's training program as described above in the UAS Documentation.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 1-4

Project Standards

Attachment 1-4: Project Standards

1 Project Standards Application

The Project Standards shall apply to the Work.

2 Global Modifications to the Project Standards

The following global modifications and interpretations shall apply to the Project Standards:

1. Notwithstanding that certain Project Standards including GDOT Manuals are drafted in the style of guidance documents, all provisions of Project Standards, including the figures and tables, shall be mandatory. The following modifications and definitions shall apply unless a) identified otherwise in TP Attachment 11-1 (Design Criteria); or b) where the use of a value other than desirable has been accepted by GDOT as a Design Exception or a Design Variance:
    a. “Should,” “must,” “preferred,” “recommended,” “will,” “require,” “typical”: The use of these words indicates that the Design-Builder shall follow the design criteria unless doing so would be inconsistent with the Provided Environmental Approvals or would require Work outside the ROW, which in either instance should be documented as a Design Deviation.
    b. “May,” “can,” “could,” “might,” “where practical,” “where necessary,” and other words indicating a permissive condition: The use of these words indicates a permissive condition. If the Design-Builder does not adopt the permitted condition, a Design Deviation shall be required to provide documentation that in this decision sound engineering judgment has been used.
    c. “Not normally,” “is not good practice,” “should never,” “cannot,” “should be avoided”: The use of these words indicates that the Design-Builder shall construe these as prohibited.
    d. The Design-Builder shall disregard qualifying words such as “usually,” “normally,” “commonly,” “in general,” and “generally.”
    e. Where design criteria are designated as “desirable” values these shall be the minimum criteria for the Design Work unless doing so would be inconsistent with the Provided Environmental Approvals or would require Work outside the ROW, which in either instance should be documented as a Design Deviation.
2. Any references related to pay items, measurement for payment, method of measurement, basis of payment, extra work, adjustment of unit prices, or similar phrases shall be disregarded.
3. For technical issues, use of the term “engineer” or “the engineer” shall mean either the Design-Builder or GDOT depending on context. If the Design-Builder believes that the use of the term “engineer” or “the engineer” within a Project Standard is unclear, the Design-Builder shall submit a clarification request to GDOT.
4. Words such as “Department” and “GDOT offices” shall have the meaning that would be reasonable to attribute to them with consideration of the roles and responsibilities otherwise established by the Design-Build Documents. In the event of doubt or ambiguity of the appropriate meaning, GDOT shall have the right to determine the meaning at its sole discretion.

5. Where provisions in a Project Standard do not apply to the Project, but provide general information (e.g., descriptions of GDOT divisions and their duties, descriptions of legal authority, or descriptions of internal GDOT procedures) these provisions shall be ignored. If the Design-Builder believes that applicability of such provisions to the Project is unclear, the Design-Builder shall submit a clarification request to GDOT.
6. The Design-Builder shall disregard provisions within the Project Standards relating to the mechanism for submitting clarification requests. All requests for clarification shall be submitted in accordance with the Design-Build Documents.
7. When a Project Standard refers to an action being necessary or needed, the Design-Builder shall construe the action as required unless the context requires otherwise.
8. Where the notes refer to items that are indicated in the Plans or special provisions or required in the Plans or special provisions, the Plans or special provisions shall mean the Design-Builder's Plans or special provisions.
9. References to approved products, materials, or equipment shall mean approved by GDOT.
10. Where a Project Standard shows the use of a form by GDOT or other parties to report information, the Design-Builder shall prepare and submit forms within the AQMP, DQMP, or CQMP using substantially the same information and in the same format.
11. References to GDOT practices and policies shall be construed to be mandatory requirements.
12. The Design-Builder shall complete all laboratory testing at laboratories that have obtained all GDOT-required certifications.

3 Project Standards

3.1 Project Standards – Manuals and Guides

Table 1 (Project Standards – Manuals & Guides) lists the status of manuals and guides and their applicability to the Project.

Table 1: Project Standards – Manuals & Guides

INF	Reference Information
PS	Project Standard for all elements (subject to global modifications)
IS	Industry standard, Design-Builder's responsibility to acquire
E	Document to be given to the Design-Builder in electronic format
W	Standard is available as a download on organization's website, Design-Builder's responsibility to acquire

Project Standard	***Status***	***Availability***
Design Manuals		
AASHTO — A Policy on Geometric Design of Highways and Streets	PS	IS
GDOT — Design Policy Manual	PS	E
AASHTO — A Policy on Design Standards Interstate System	PS	IS
AASHTO — Guidelines for Geometric Design of Low-Volume Roads	PS	IS
ADA Standards for Accessible Design	PS	IS
FHWA — Diverging Diamond Interchange Informational Guide	PS	IS
GDOT — Pedestrian and Streetscape Guide	PS	E
Guide for Roundabouts (NCHRP 1043)	PS	IS
GDOT — Roundabout Design Guide	PS	E
American National Standards Institute (ANSI)/ Illuminating Engineering Society of North America (IESNA) RP-8 Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting	PS	IS
AASHTO — Roadway Lighting Design Guide	PS	IS
GDOT — Plan Presentation Guide	PS	E
AASHTO — Guide for Development of Bicycle Facilities (2012)	PS	IS
GDOT — Electronic Data Guidelines	INF	E
GDOT — Plan Development Process	INF	E
AASHTO — Guide for High-Occupancy Vehicle Facilities	INF	IS

Project Standard	***Status***	***Availability***
AASHTO — Roadside Design Guide	INF	IS
AASHTO — Manual for Assessing Safety Hardware (MASH)	INF	IS
AASHTO — Guide for the Planning, Design, and Operation of Pedestrian Facilities	INF	IS
GDOT — Regulations for Driveway and Encroachment Control	INF	E
GDOT — Georgia Guidebook for Pedestrian Planning	INF	E
Guidelines for Implementing Managed Lanes (NCHRP 835)	INF	IS
FHWA — Priced Managed Lane Guide	INF	IS
FHWA — Design Decision Documentation and Mitigation Strategies for Design Exceptions	INF	IS
GDOT — Context Sensitive Design Online Manual	INF	E
GDOT — Design Build Manual	INF	E
GDOT — Design Exception/Design Variance Guide	INF	E
Structural Manuals		
AASHTO — AASHTO LRFD Bridge Design Specifications, 9th Edition	PS	IS
AASHTO — LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals	PS	IS
AASHTO — AASHTO Standard Specifications for Highway Bridges	PS	IS
AASHTO — Manual for Bridge Evaluation	PS	IS
AASHTO — AWS D1.1/ANSI Structural Welding Code – Steel	PS	IS
AASHTO — D1.5/AWS D1.5 Bridge Welding Code (2015)	PS	IS
AISC Manual of Steel Construction, referred to as “AISC Specifications”	PS	IS
GDOT — Bridge and Structures Design Manual	PS	E
GDOT — Bridge and Structures Detailing Policy Manual	PS	E
AASHTO — Guide Specification for Bridge Temporary Works	PS	IS
Geotechnical Engineering Circular (GEC) No. 7 - Soil Nail Walls - Reference Manual	PS	IS
AASHTO — Guide Specification for Structural Design Sound Barrier	PS	IS
AASHTO — Guide Specifications for LRFD Seismic Bridge Design	PS	IS

Project Standard	*Status*	*Availability*
AASHTO — Guide Specifications for Analysis and Identification of Fracture Critical Members and System Redundant Members	PS	IS
AASHTO — Manual for Design and Construction of Road Tunnels	PS	IS
AASHTO — LRFD Road Tunnel Design and Construction Guide Specifications	PS	IS
AASHTO — Bridge Inspection Evaluation Maintenance Manual	INF	IS
GDOT — Bridge, Culvert, and Retaining Wall Construction Manual	INF	E
GDOT — Bridge Structure Maintenance & Rehabilitation Repair Manual	INF	E
GDOT — Bridge Structure Maintenance Plan	INF	E
GDOT — Accelerated Bridge Construction Guidance	INF	E
Drainage Manuals		
GDOT — Drainage Design Policy Manual	PS	E
GDOT — Stormwater Design Guide	PS	E
GDOT — Guidance for Hydrologic & Hydraulic Studies	PS	E
NPDES Construction Storm Water General Permits — GAR100002 Infrastructure Construction General Permit	PS	IS
GDOT — MS4 Special Design Post-Construction Details	PS	E
GDOT — MS4 Permit	PS	IS
Georgia Soil and Water Conservation Commission — Manual for Erosion and Sediment Control in Georgia	PS	IS
GDOT — Facilities Stormwater Pollution Prevention Plan	PS	E
GDOT — Stormwater System Inspection and Maintenance Manual	PS	E
Hydraulic Engineering Circular (HEC) 23 "Bridge Scour and Stream Instability Countermeasures"	PS	IS
Hydraulic Engineering Circular (HEC) 18 "Evaluating Scour at Bridges"	PS	IS
Hydraulic Engineering Circular (HEC) 14 "Hydraulic Design of Energy Dissipators for Culverts and Channels"	PS	IS
GDOT — Design Build MS4 Plan Development Process (Design-Build Phase)	PS	E
Georgia Stormwater Management Manual Volumes 1 & 2	INF	IS
Georgia EPD — Coastal Stormwater Supplement to the Stormwater Management Manual	INF	IS

Project Standard	***Status***	***Availability***
GDOT — Drainage DV Requirements Table	PS	E
Geotechnical Manuals		
GDOT — Geotechnical Manual	See TP Attachment 8-1 (Status of Geotechnical Design Policy and Guides)	E
GDOT — Pavement Distress Classifications	INF	E
GDOT — Pavement Design Manual	INF	E
GDOT — Pavement Type Selection Manual	INF	E
Utility Manuals		
GDOT — Utility Accommodation Policy and Standards Manual	PS	E
AASHTO — A Guide for Accommodating Utilities within Highway ROW	PS	IS
TRB Policies for Accommodation of Utilities on Highway Rights-of-Way	PS	IS
American Railway Engineering and Maintenance-of-Way Association (AREMA)	PS	IS
Federal Railroad Administration Regulations	INF	IS
Public Project Information for Construction and Improvement Projects That May Involve the Railroad (CSX)	PS	IS
Public Projects Manual: For Projects Which May Impact Norfolk Southern Railway Company	PS	IS
Specifications for Pipeline Occupancy of Norfolk Southern Corporation Property	PS	IS
Specifications for Wireline Occupancy of Norfolk Southern Corporation Property	PS	IS
Traffic Operations Manuals		
GDOT — Signing and Marking Design Guidelines	PS	E
MUTCD — Standards Highway Signs and Markings	PS	IS
Standard Highway Signs and supplements	PS	IS
GDOT — Signal Design Guidelines	PS	E
FHWA — Traffic Monitoring Guide	PS	IS
FHWA — Traffic Detector Handbook	PS	IS

Project Standard	***Status***	***Availability***
ITE/AASHTO Traffic Management Data Dictionary (TMDD), Standards for Traffic Management Center to Center Communications	PS	IS
AASHTO — Highway Capacity Manual	PS	IS
ITS Manuals		
GDOT — ITS Design Guidelines	PS	E
National Electrical Safety Code ANSI C2 (NESC)	PS	IS
NFPA-780: Standard for the Installation of Lighting Protection Systems	PS	IS
NFPA 70 — National Electric Code	PS	IS
GDOT — ITS Assets Standard Naming Guidelines	PS	E
GDOT — Site and Fiber Standard Naming Guidelines	PS	E
Environmental Manuals		
U. S. Environmental Protection Agency Regulations	PS	IS
Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) and Guideline Handbook	PS	IS
GDOT — Environmental & Cultural Guidebooks – General	PS	E
GDOT — Environmental & Cultural Guidebooks – Air & Noise	PS	E
GDOT — Environmental & Cultural Guidebooks – Cultural Resources	PS	E
GDOT — Environmental & Cultural Guidebooks – Ecology	PS	E
GDOT — Environmental & Cultural Guidebooks – Environmental Analysis	PS	E
GDOT — Highway Noise Abatement Policy for Federal-Aid Projects	PS	E
Construction Manuals		
GDOT — Work Zone Safety and Mobility Policy	PS	E
FHWA — Work Zone Safety and Mobility Rule	PS	IS
GDOT — STI (Sampling, Testing and Inspection) Quick Guide and Documents	PS	E
GDOT — Construction Manual and Form Documents	INF	E
Miscellaneous Manuals		
GDOT — Automated Survey Manual	PS	E
Occupational Safety and Health Administration Standards (OSHA)	PS	IS

Project Standard	***Status***	***Availability***
GDOT — Qualified Products List (QPL)	PS	W
GDOT — Right-of-Way Policies & Procedures	PS	E
Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada	PS	IS
GDOT — On-The-Job Training Program Manual	PS	E
HPMS Field Manual	PS	IS
P3 Division Style Guide	PS	E
ANSI Z60.1 American Standard for Nursery Stock	PS	IS
ANSI Z133.1 Safety Requirements for Pruning, Trimming, Repair, Maintaining, and Removing Trees and for Cutting Brush	PS	IS
GDOT — IRVM Herbicide Standards Manual	INF	E
GDOT — IRVM Straight Line Mowing Standards Manual	INF	E
TIME Taskforce Guidelines for the Mitigation of Motor Vehicle Fluid Spills and Crash Scenes	INF	E
GDOT — Winter Weather Plan	INF	E
Traffic Incident Management (TIM) Guidelines	INF	E
GDOT — QC/QA Manual	INF	E
Manuals, documents, procedures, guidelines, and standards as referenced in the Design Documents	PS	IS
GDOT — Public Involvement Plan for NEPA Projects	PS	E

3.2 Project Standards – Standard Specifications

All sections of the 2021 GDOT Standard Specifications Construction of Transportation Systems (Spec Book) as modified by the 2024 Supplement Specifications shall be a Project Standard unless listed otherwise in Table 2 (Project Standards – Standard Specifications). The Specifications listed in Table 2 (Project Standards – Standard Specifications) shall be considered not applicable for the Project and shall not be considered Project Standards.

The Special Provisions listed in Table 3 (Project Standards – Special Provisions) shall modify the GDOT Standard Specifications Construction of Transportation Systems (Spec Book). All Special Provisions, except Design-Builder-Provided Specifications, not listed in Table 3 (Project Standards – Special Provisions) shall not be a Project Standard.

Table 2: Project Standards – Standard Specifications

Specifications
Section 101 — Definitions and Terms
Section 102 — Bidding Requirements and Conditions
Section 103 — Award and Execution of Contract
Section 104 — Scope of Work
Section 105 — Control of Work
Section 106 — Control of Materials
Section 107 — Legal Regulations and Responsibility to the Public
Section 108 — Prosecution and Progress
Section 109 — Measurement and Payment
Section 149 — Construction Layout
Section 150 — Traffic Control
Section 151 — Mobilization
Section 152 — Field Laboratory Buildings
Section 158 — Training Program
Section 202 — Random Clearing and Grubbing
Section 230 — Lump Sum Construction
Section 233 — Haul Roads
Section 502 — Timber Structures
Section 542 — Contractor Proposed Alternate to Reinforced Concrete Deck Girder
Section 543 — Bridge Complete
Section 940 — NaviGAtor Advanced Transportation Management System Integration

Table 3: Project Standards – Special Provisions

Special Provisions
Norfolk Southern — Special Provisions for Protection of Railway Interests
Prompt Payment
Section 105 — Control of Work – Duties of the Inspectors
Section 106 — Control of Materials
Section 107.23B — Inadvertent Discovery of Cultural Resources and Human Remains (From Standard Specification Section 107)
Section 107.23F — Environmentally Sensitive Areas (From Standard Specification Section 107)
Section 107.23G — Protection of Migratory Birds and Bats (From Standard Specification Section 107)
Section 107.23H — Protection of Protected Species
Section 154 — Construction Vibration Monitoring*
*Design-Builder to modify per requirements in TP Section 11 (Roadways)
Section 165.3.05 — Maintenance of Temporary Erosion and Sedimentation Control Devices
Section 169 — Post-Construction Stormwater BMP Items
Section 201 — Clearing and Grubbing Right-of-Way
Section 208 — Embankments
Section 300 — General Specifications for Base and Subbase Courses
Section 301 — Soil-Cement Construction
Section 315 — Cement Stabilized Reclaimed Base Construction
Section 432 — Remove Epoxy Polymer Overlay from Concrete
Section 443 — Elastomeric Profile Bridge Joint Seals
Section 447 — Modular Expansion Joints
Section 449 — Preformed Silicon Joints
Section 449 — Precompressed Joint
Section 456 — Rumble Strips
Section 500 — High Performance Concrete
Section 500 — High Strength Concrete
Section 500 — Lightweight Concrete
Section 500 — Mass Concrete
Section 500 — UHPC
Section 505 — Composite Steel Grid Deck with Precast Concrete Slab
Section 511 — Mechanical Couplers
Section 518 — Raise Existing Bridge

Special Provisions
Section 519 — Conventional Portland Cement Concrete Overlays with Hydrodemolition & Ride Quality Acceptance – Railroads
Section 519 — Conventional Portland Cement Concrete Overlays with Hydrodemolition & Ride Quality Acceptance
Section 519 — Fast Track Portland Cement Concrete Overlay with Hydrodemolition, Ride Quality Acceptance
Section 519 — Latex Modified Concrete
Section 519 — Two Part Epoxy Polymer Overlay
Section 521 — Patching Concrete Bridge Structures
Section 528 — Epoxy Pressure Injection of Concrete Cracks
Section 528 — Epoxy Sealing of Concrete Cracks
Section 535 — Metalizing Existing Structural Steel
Section 581 — Disc Bearings
Section 590 — Fiber Reinforced Polymer (FRP) Composite Material
Section 627 — Mechanically Stabilized Embankment Retaining Wall – Contractor Design
Section 628 — Permanent Soil Nailed Walls
Section 632 — Portable Changeable Message Signs
Section 643 — Ornamental Fencing
Section 653 – Thermoplastic Traffic Stripe
Section 660 — Sanitary Sewer
Section 663 — Electric Transmission Systems – Georgia Power
Section 664 — Electric Distribution Systems – Georgia Power
Section 665 — Gas Distribution Systems
Section 670 — Water Distribution Systems
Section 716 — Erosion Control Mats (Slopes)
Section 797 — Hub Buildings
Section 800 — Coarse Aggregate
Section 801 — Fine Aggregate
Section 802 — Aggregates for Asphaltic Concrete
Section 820 — Asphalt Cement
Section 849 — Thin Lift Surface Sealing Asphaltic Concrete Mix
Section 950 — Telecommunication Facilities – AT&T
Section 951 — Cable Television Systems – Comcast
Section 999 — Precast Concrete Bridge Decks
Section 999 — Precast Modular Retaining Walls (Contractor Design)
Section 999 — Composite Deck Beam Units

Special Provisions
Section 999 — Micropiles
Section 999 — Surge Protection
Special Provisions in TP Attachment 8-1 (Status of Geotechnical Design and Policy Guides) *Design-Builder to modify per requirements in TP Section 8 (Geotechnical)

3.3 Project Standards – Construction Standards and Details

The latest Construction Standards and Construction Details Book shall be a Project Standard unless listed otherwise in Table 4 (Project Standards – Standards and Details). All Construction Standards and Construction Details listed as for Maintenance Repairs Only on the GDOT ROADS website shall only be applicable to repair of existing Elements and shall not be used for new or reconstructed Elements.

Table 4: Project Standards – Standards and Details

N/A	Specification shall not be included in Project Standards
DB-PS	Design-Builder-Provided Specification based upon the GDOT Specification (may be re-written by Design-Builder)

#	*Description*	*Status*
4961	Details of Precast Temporary Barrier	DB-PS
5046H	Joint Details For Plain Portland Cement Concrete Paving	NA
9017M	Reinforced Concrete Approach Slab 30 Ft. Length (With Concrete Barrier)	NA
9033	Mileposts	DB-PS
9055	Erection and Foundation Details for Special Roadside Signs — Breakaway Type Post (Wood) (To be used only where specified)	N/A
RA-03	Roundabout Typical Section — Rural Shoulder Application	N/A

All Special Design Details listed in the GDOT Special Design Details Index shall be Project Standards unless listed otherwise in Table 5 (Project Standards – Special Design Details).

Table 5: Project Standards – Special Design Details

N/A	Specification shall not be included in Project Standards
INF	Reference Information

#	*Description*	*Status*
LIB-1	Reinforced Concrete Approach Slab 30 Ft. Length, Typical Use: Where Shoulder is Adjacent to Roadway and LIBP Bridge	NA
LIB-2	Reinforced Concrete Approach Slab 20 Ft. Length, Typical Use: Where Shoulder is Adjacent to Roadway and LIBP Bridge	NA
4964	MASH 16 F Shape Portable Barrier (Concrete and Rebar Details)	INF
-	Cable Barrier Detail and Placement (32’ to 44’ Medians)	NA
N-6	Sound Barrier Type F Glass Reinforced Thermo Composite Panel Filled with Recycled Tire Rubber	NA
-	C.R.C.P. Concrete Repair Details	NA
-	5 Lug Terminal Anchorage for Continuously Reinforced Concrete Pavement 11 inch Slab Thickness	NA
-	5 Lug Terminal Anchorage for Continuously Reinforced Concrete Pavement 12 inch Slab Thickness	NA
-	Continuously Reinforced Concrete Pavement 11 inch Slab Thickness	NA

#	*Description*	*Status*
-	Continuously Reinforced Concrete Pavement 12 inch Slab Thickness	NA

3.4 Project Standards – Policy and Procedures

Table 6 (Project Standards – Policy and Procedures) lists the GDOT Policy and Procedures applicable to the Project. All Policies and Procedures not listed in Table 6 (Project Standards – Policy and Procedures) shall not be a Project Standard.

Table 6: Project Standards – Policy and Procedures

Ref.	*GDOT Policy, Procedure or Form*
2445-1a	Specification Template
4030-3	Outdoor Storage Policy for Flammable and Combustible Material
4A-5	Intersection Control Evaluation (ICE) Policy
4A-5a	ICE Memo
5250-1	Certified Flaggers on All Work Done on State Route System
6120-3	Resurfacing at Bridge Approaches
6120-8	Vehicle Routing Policy
6120-9	Reporting of Change in Vertical Clearance
6755-9	Policy for Landscaping and Enhancements on GDOT Right of Way
6785-1	Traffic Signals
6785-2	Left Turn Phasing
6865-8	Railroad Maintenance of Grade Crossings on the State Highway System
6865-9	Acquisition of Right of Way from Railroads
6865-9a	Example 1 — Highway Crossing a Railroad
6865-9b	Example 2 — Highway Parallel to Railroad
8030-3	Password Authentication
8068-1	Network Security Controls and Remote Access
8068-1b	Inter-Agency Data Access Authorization and Confidentiality Agreement
8068-1c	Data Access Authorization and Confidentiality Agreement (For Non-Governmental Entities Only)
DOT1901	Notice of Intent to Fly At or Near Airport for UAS Operators

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 1-5

Project Office Facilities and Equipment

Attachment 1-5: Project Office Facilities and Equipment

1 General Requirements

The Design-Builder shall provide one Project Office for GDOT use that meets the requirements of this TP Attachment 1-5. The preferred location for the Project Office is within the Project Limits and within walking distance of the Contractor's field office to facilitate communication and coordination. If the preferred location is not feasible then it shall be located within 2 miles (or further at GDOT's sole discretion) of the Project Limits. The location shall meet all Federal, State, and Local laws and environmental codes and regulations and shall be approved by GDOT. The Design-Builder shall verify the location is not in an environmentally sensitive area.

The Design-Builder shall submit a preliminary and a final Project Office layout to address comments with sufficient time to provide the Project Office (available for occupancy) no later than 90 days before the first phased construction of NTP3 is started.

The Design-Builder may submit a building, storefront, rented office space, house, mobile office, or trailer to GDOT for approval as the Project Office. The Project Office shall be in good and serviceable condition and shall always be at least of the same quality as those of the Design-Builder's local Project Office. If a mobile office or trailer are provided, the doors, walls, roof, ceiling, floor, and office support shall meet the requirements of GDOT Special Provision 153.3.05 B (Building Requirements).

The Design-Builder shall provide the following for GDOT use:

1. The Project Office shall provide a minimum total of 1,440 square feet.
2. GDOT shall have access to the space 24 hours per day, seven days per week, until Final Acceptance.
3. All necessary permits and ensure the building space meets all local building code requirements.
4. Four reasonably sound-proof, closed-door office spaces with lockable doors. Each sized to be no less than 100 square feet with a minimum of one exterior window.
5. Each exterior wall (unless predominately occupied by a door) shall have at least one hinged, jalousied, or sliding window that is glazed, screened, and fitted with horizontal mini-blind window coverings.
6. Eight workstations (cubicles) that must be a minimum of 50 square feet.
7. Sufficient general area to support a conference area, plan review, document storage, breakroom, and document printing.
8. Overhead lighting that meets the requirements of the United States Occupational Safety and Health Administration, and building and electrical codes for office space, which shall include a minimum circuit capacity of 20 amperes, and at least two duplex receptacles for each office space.
9. Insurance shall be obtained by the Design-Builder covering the use of the Project Office by GDOT. The insurance required shall be no less than required by the DBA.
10. Provide dedicated electrical power circuits for copiers.
11. Heating, ventilation, air conditioning, and cooling systems capable of maintaining temperatures between 68 and 75 degrees Fahrenheit in all spaces, including the

network room, 24 hours per day, seven days per week, through final acceptance of the Contract. GDOT shall maintain control of the thermostat.

12. Separate women's and men's restrooms. Provide hot water to the sink in both.
13. Break area with a 7-foot-long counter space with sink, hot and cold water, and a garbage disposal.
14. A room with a lockable door for use by GDOT as a computer server and telephone network connection room. The computer network and phone network connections for the GDOT office spaces shall terminate in this room. The flooring material shall be non-static. This room may be common with the Design-Builder's phone and computer network service room.
15. A lockable storage closet 3-feet by 3-feet and two keys.
16. At least two building entrances/exits, each secured with a door lock plus a dead-bolt lock and electronic security system. Mobile offices shall have a covered porch over each door and continuous between them a minimum depth of 8 feet and ADA compliant.
17. A fire suppression system or extinguishers per the local fire code and fire marshal with jurisdiction.
18. Ensure that the site and office space meet all accessibility requirements of the ADA, as amended (42 USC Section 12101, et seq.).
19. Concrete cylinder curing box constructed of non-corroding materials and capable of storing a minimum of 22 test cylinders, 6-inch by 12-inch (150-millimeters by 300-millimeters) stored vertically with the lid closed. Additional capacity may be required at the direction of GDOT. The curing box shall be equipped with heating/cooling capabilities, automatic temperature control, and a maximum/minimum (high/low) temperature readout. The curing box shall be capable of meeting the moisture and temperature requirements of AASHTO T 23.
20. Loss or damage:
    a. If the GDOT office space, related facilities, or fixtures are destroyed, damaged, or stolen during the Work, the Design-Builder shall, at its cost, within 10 Business Days after occurrence of such destruction or damage, repair the items to their original condition or replace them.
    b. If any Loss or damage has been caused as a direct result of willful misconduct of GDOT personnel, GDOT will reimburse Design-Builder for the actual, reasonable, and documented costs of the repair, replacement, or restoration prior to the Termination Date.
21. At least one large conference room for shared use between the Design-Builder and GDOT with tables and chairs capable of seating 30 people.
    a. In the event the requirements for any meeting exceed the space available, the Design-Builder shall provide meeting space at a suitable alternate location. The alternate location shall be located within 2 miles of the Project Office, unless otherwise accepted by GDOT.

2 Requirements for Security, Site and Utilities

The Design-Builder shall provide for the Project Office:

1. A well-graded site secured with a 6-foot high chain link fence that has an access road and appropriately sized parking area. A minimum of 25 all-weather 24-hour parking spaces. Parking surface shall be an aggregate surface course or asphalt millings a minimum depth of 6 inches.
2. All utilities at no cost to GDOT.
3. Potable water and sewer service.
4. Weatherproof outdoor 220-volt electrical receptable attached to a power source.
5. Outdoor water faucet with a minimum 75-foot heavy-duty hose.
6. Ensure there is exterior security lighting that is automatically activated at low-light levels to maintain at least 2 foot-candles of lighting around all sides of the building.
7. Provide 24-hour security patrol service or an alarm system in accordance with Special Provision 153.3.05 B (28) Alarm System.
8. Provide a Project Office sign presenting at a minimum the GDOT logo, Project Name, Design-Builder name, 24-hour contact information, and website. The sign shall be fabricated and installed according to GDOT Standard Specifications Section 636, Section 910, Section 911, Section 912, and Section 913.
9. If the Project Office is not located adjacent to the Project roadway, the Design-Builder shall install a second sign on the Project according to Special Provision 153 and as directed by GDOT, as well as enough guide signs to direct Users to the Project Office. Guide signs shall be as shown in Special Provision 153 Figures 2 and 3.

3 Requirements for Office Furniture and Equipment

The Design-Builder shall provide, install, and maintain the office furniture and equipment in Table 1 (Office Furniture and Equipment) in new condition.

Table 1: Office Furniture and Equipment

Per Office (100 SF)		
Item	***Description***	***Quantity/Units***
Desk	At least 24 square feet of surface area with four lockable drawers with keys	1
Desk chair	Office desk chair on wheels and 46-inch by 60-inch chair mat	1
Bookcase	36-inch by 72-inch bookcase with minimum four shelves	1
Fireproof filing cabinet	Minimum of four lockable drawers	1
Dry erase board	4-foot by 6-foot (minimum) heavy-duty porcelain steel magnetic dry erase board and map rail	1
Garbage can	7-gallon garbage can	1

Per Workstation (cubicles)		
Item	***Description***	***Quantity/Units***
Desk	Table or desk with two lockable drawers with keys	1
Desk chair	Office desk chair on wheels and 46-inch by 60-inch chair mat	1
Garbage Can	7-gallon garbage can	1
Conference Area or Room		
Item	***Description***	***Quantity/Units***
Conference table	Table to comfortably seat 10 people and HDMI/USB/VGA system to connect to room monitors or overhead projector	1
Chairs	Office desk chairs on wheels	12
Dry erase board	4-foot by 8-foot (minimum) heavy-duty porcelain steel magnetic dry erase board and map rail	1
Garbage can	15-gallon garbage can	1
GDOT Storage Room		
Item	***Description***	***Quantity/Units***
Bookcase	36-inch by 72-inch bookcase with minimum four shelves or equivalent amount of wall shelving	2 or 3
Plan Review		
Item	***Description***	***Quantity/Units***
Bookcases	Bookcases capable of storing 11-inch by 17-inch design set submittal progression in an organized manner	As needed to store all drawings
Hole punch	High-capacity electric (30 sheets) three-hole punch	1
Paper trimmer	Heavy-duty guillotine style paper trimmer	1
Filing cabinets	Fire-proof and lockable four drawer filing cabinet with keys	1
Paper shredder or shredder service	Large capacity paper shredder or shredding service containers which provides secure document handling	1
Breakroom		
Item	***Description***	***Quantity/Units***
Refrigerator	Full size refrigerator (min. 24 cubic feet) with a freezer compartment	1
Microwave	Minimum 2 cubic feet, 1250 watts	1
Water cooler	Water cooler (which provides filtered cold water) and water service	1
Bulletin board	2-foot by 3-foot (minimum) bulletin board (corkboard)	1
Coffee Maker	Keurig single serve or equivalent	1
Garbage can	30-gallon garbage can	1

4 Information Technology and Communication

The Design-Builder shall provide technology meeting the following minimum requirements:

1. High speed broadband internet service to each office, workspace, and conference room, prior to occupancy by GDOT. Bandwidth shall be a minimum of 300 Mbps download and 20 Mbps upload for asynchronous Internet such as Comcast/Xfinity, Time Warner, or AT&T U-Verse. For synchronous Internet, bandwidth shall be a minimum of 25 Mbps upload and 25 Mbps download. For synchronous Internet, dedicated Internet access shall be used, which is typically delivered over fiber. Minimum requirement for latency is 90 milliseconds or less. Statis IP address as approved by GDOT.
2. Prior to selection of the service provider, the Design-Builder shall obtain GDOT acceptance of the proposed method for providing service. The service shall include all equipment necessary to provide the service to each office space and work station. The service provided to meet these requirements shall be used solely by GDOT.
3. Cradle Point Mobile Broadband Router with modem security enclosure or equal approved by GDOT IT Infrastructure.
4. Uninterruptible Power Supply: American Power Conversion Corporation Back-UPS ES 750VA or Newpoint 750VA Battery Backup or equivalent (minimum 5 receptacles).
5. The Design-Builder shall punch out and wire the Project Office space for CAT6 network jacks installed not more than every 10 feet along the walls, with a minimum of four network jacks per side office, a minimum of one network jack to each workstation, and a minimum of four network jacks in the conference area and main room. CAT6 cables will be run from the CAT6 network jacks back to a Project Office server and telephone room and terminate into a patch panel. All network jacks shall be terminated, tested, toned, and labeled. The Design-Builder shall also provide a shelf to support the equipment 5 feet off the floor, and a minimum of eight duplex receptacles with three dedicated 20-ampere circuits and one 30-ampere circuit to power network equipment.
6. Provide local and U.S. long-distance telephone service with at least one direct outside line (with voicemail service) for each office and a fax machine with one outside line dedicated to fax service. All internet and phone service shall be routed through servers located within the United States (no routing outside of the U.S.). GDOT use shall not be monitored nor restricted by the Design-Builder.

4.1 Requirements for Electronic Equipment

The Design-Builder shall provide, install, and maintain the following electronic equipment in Table 2 (Electronic Equipment), in working order. All computer, printer, plotter, photocopy, and phone equipment shall include the appropriate data and voice cabling for a complete installation and shall include cord protectors for all cables and cords in exposed areas, per safety standards.

Table 2: Electronic Equipment

Per Office and Workstations (cubicles)							
Item	***Size***	***Min. Resolution***	***Hertz***	***Display***	***Output***	***Other***	***Quantity/ Units***
Monitor	27-inch	1920x1080	60 >	LED backlit LCD, anti-glare	VGA/ USB/ HDMI		1

Conference Area or Room							
Item	***Size***	***Min. Resolution***	***Hertz***	***Display***	***Output***	***Other***	***Quantity/ Units***
Large screen/TV LED, including VGA and HDMI cables	Min 75-inch	1080p	120-240	LED TV	HDMI/ VGA/ USB		1
Conference call station or device							1
Plan Review Area							
Item	***Size***	***Min. Resolution***	***Hertz***	***Display***	***Output***	***Other***	***Quantity /Units***
Multifunction copier/printer	11-inch by 17-inch sheet	Color	1200 by 1200	Color: 31 ppm	Yes	Two-sided printing, multi tray, auto staple, network connectivity	1
A scanner capable of handling 11-inch by 17-inch (tabloid) scans or full size (24-inches by 36-inches) scans and converting to PDF and JPEG formats.							1

5 Requirements for Office Supplies, Services, and Maintenance

The Design-Builder shall provide the following supplies, services, and maintenance for the entire time the Project Office is in use by GDOT:

1. Office supplies (including but not limited to) scissors, staplers, pens, notebook pads and paper, binders, highlighters, hanging folders for filing cabinets, tape and tape dispensers, staples and staplers, masking tape, dry erase markers, erasers and cleaners, printed stock material.
2. Restroom supplies (including but not limited to) hand towels (unless air hand dryer installed), toilet paper, hand soap, cleaning supplies.
3. Break room supplies (including but not limited to) coffee, sugar, creamer, hot/cold drink cups, napkins, paper towels, disposable plates and utensils, dish soap, garbage can liners, hand soap, sponges, spray cleaner.
4. Provide daily janitorial service (except on Saturdays, Sundays, and holidays), including a stringent nightly cleaning service, which includes disinfecting surfaces, cleaning floors, cleaning restroom facilities, maintenance of trash containers, replacement of light bulbs, and trash pickup service.
5. Provide disposal or removal of all temporary office facilities and facilitate any site restoration needed when and as agreed to by GDOT in writing.
6. Maintenance of the exterior areas, including access to parking areas, that keeps them neat, clean, in good repair, and safe, including snow removal.
7. Access to mail service.
8. Adequate pest control for the Project term.

Georgia Department of Transportation

Technical Provisions

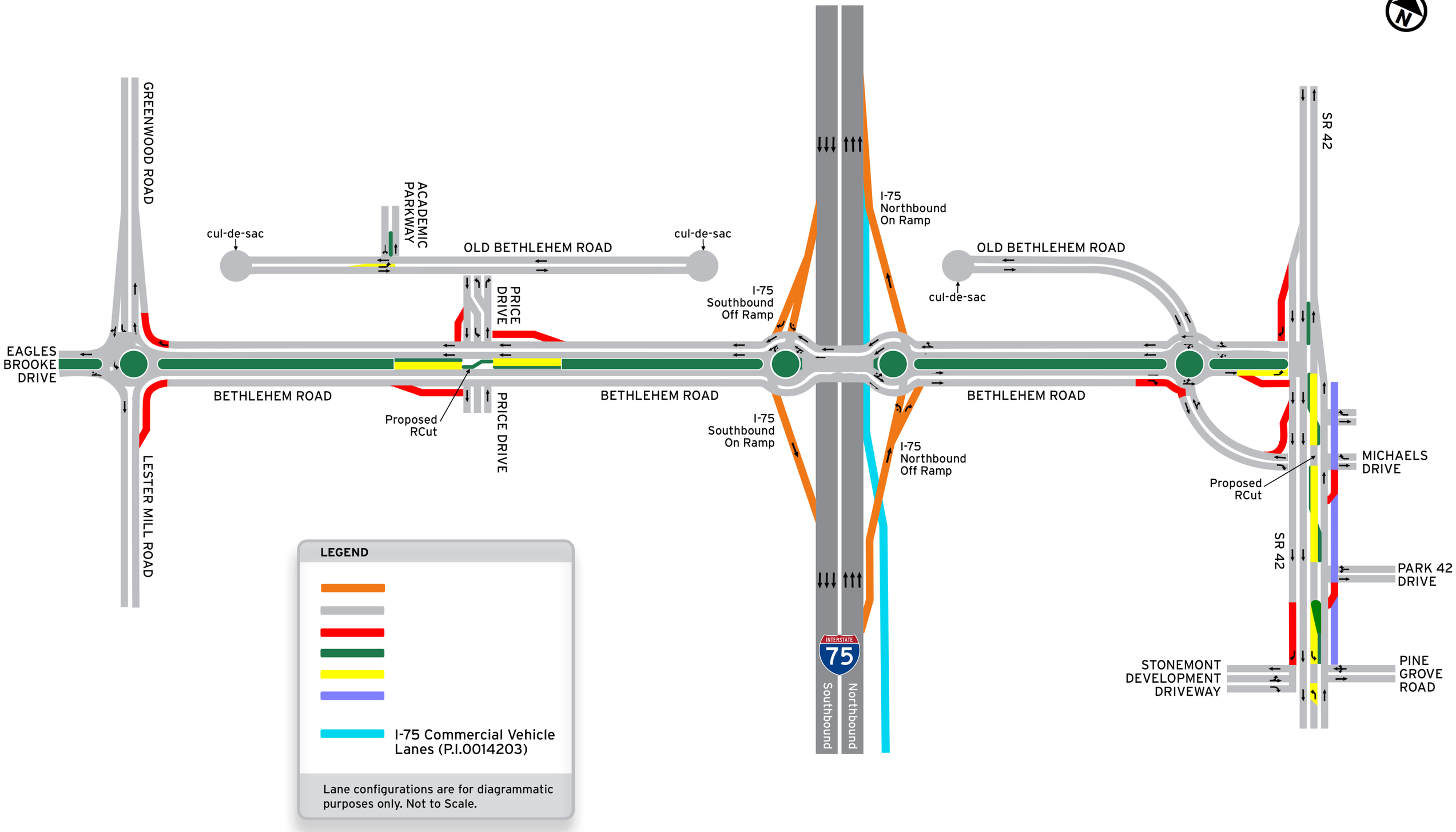
For

Design-Build Agreement

P.I. No. 0017182

Attachment 1-6

Required Lane Configuration


GREENWOOD ROAD
ACADEMIC PARKWAY
cul-de-sac
OLD BETHLEHEM ROAD
cul-de-sac
PRICE DRIVE
I-75 Northbound On Ramp
I-75 Southbound Off Ramp
OLD BETHLEHEM ROAD
cul-de-sac
SR 42
EAGLES BROOKE DRIVE
BETHLEHEM ROAD
Proposed RCut
PRICE DRIVE
BETHLEHEM ROAD
BETHLEHEM ROAD
I-75 Southbound On Ramp
I-75 Northbound Off Ramp
Proposed RCut
MICHAELS DRIVE
SR 42
PARK 42 DRIVE
STONEMONT DEVELOPMENT DRIVEWAY
PINE GROVE ROAD
LESTER MILL ROAD
INTERSTATE 75
Southbound
Northbound
LEGEND
I-75 Commercial Vehicle Lanes (P.I.0014203)
Lane configurations are for diagrammatic purposes only. Not to Scale.

2 PROJECT MANAGEMENT

2.1 General Requirements

This TP Section 2 includes project management requirements, including the Project Management Plan, the Project Schedule, Schedule of Values (SOV), the Project Management Controls System (PMCS), document management, safety, public information and communications, and Submittals.

2.2 Administrative Requirements

2.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 2 in accordance with the Project Standards.

2.2.2 Key Personnel and Required Personnel

With respect to the requirements described in each TP Section, the Design-Builder shall engage the Key Personnel and Required Personnel identified in TP Attachment 2-1 (Key Personnel and Required Personnel) with the responsibilities listed in TP Attachment 2-1 (Key Personnel and Required Personnel). The Key Personnel and Required Personnel shall have the minimum qualifications and fulfill the specified responsibilities described in TP Attachment 2-1 (Key Personnel and Required Personnel).

2.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings set forth in TP Table 2-1 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 2-1 (Required Project Meetings). The Design-Builder shall invite the necessary staff from GDOT and its representatives and shall cause to attend each meeting the necessary Key Personnel, Required Personnel, and other staff having responsibility for the subject matter, authority to make decisions, and ability to implement actions arising at the meeting. The Design-Builder is encouraged to combine meetings when appropriate. The Design-Builder shall lead and facilitate the meetings; prepare and distribute meeting agendas at least 24 hours in advance; and prepare and distribute meeting minutes within three Business Days after the meeting. The Design-Builder shall hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. At a minimum, meeting minutes shall clearly identify the following:

1. Date, time, location, and purpose of meeting
2. Meeting attendees
3. Action items and issues
4. Parties responsible for each action item
5. Due dates for identified action items
6. Status of action items and issues (once completed, note “completed” in next meeting minutes before removing from subsequent minutes)

Table 2-1: Required Project Meetings

Meeting and Section Reference	***Frequency***	***Minimum Design-Builder Attendees***
Post-Award kickoff meeting	As soon as possible after NTP1	CPM, DPM, Project Scheduler
Project communications meeting	As needed	Subject matter experts, as needed
Partnering meeting	As needed	CPM, DPM, EOR
Baseline Project Schedule alignment meetings TP Section 2.4.1 (Baseline Project Schedule Alignment Meetings)	Per TP Section 2.4.1 (Baseline Project Schedule Alignment Meetings)	CPM, DPM, Project Scheduler
Project Schedule Update and SOV Update review meeting	Monthly (within 5 Business Days after submitting Project Schedule Update and Invoice Package)	CPM, DPM, Project Scheduler
Progress status team meeting	Every two weeks	CPM, DPM, EOR, ECM, Project Scheduler
Basis of D&C workshop TP Section 2.3.1.4 (Basis of D&C)	Scheduled no later than NTP1 + 30 Business Days	CPM, DPM, EOR, DQCM, UM, ECM
Stakeholder meeting	As needed	CPM, DPM, others as needed
Submittals review meeting	Weekly	DPM, EOR, DQCM
Time Impact Analysis Fragnet Meeting TP Section 2.4.5 (Time Impact Analysis)	As needed	CPM, DPM, Project Scheduler
Post Design-Build Review Meeting	After Substantial Completion	CPM, DPM
Construction kick-off meeting	Prior to NTP3	CPM, CQCM
Pre-activity meeting TP Section 3.4.2 (Pre-Activity Meetings)	As needed	CPM, CQCM, others as needed
Materials, quality, and reporting meeting	Every two weeks	CPM, CQCM
Audit close-out meeting	For each External Audit	CPM, DQCM, CQCM

2.2.3.1 Partnering Meetings

Prior to meeting, GDOT will provide an independent facilitator for the partnering process who has experience with partnering and facilitation on projects of similar type, scale, and complexity, to facilitate the partnering meetings.

At the first partnering meeting, the Parties will discuss and agree upon:

1. The Parties' mutual goals and objectives for the partnering relationship which shall be recorded in a Project charter.

2. The date and location of future partnering meetings.
3. The key individuals from GDOT, the Design-Builder, and the Key Contractors (including Key Personnel) who will attend all partnering meetings and the process for inviting additional attendees as required.
4. The process for developing the agenda for each partnering meeting.
5. The process for periodic partnering evaluation to measure the progress of the Parties' mutual goals and key short term Project issues.

2.2.4 Invoice Support Package

The Design-Builder shall include the following components as part of each Invoice Support Package (which shall be submitted with each Invoice):

1. SOV Update Submittal meeting the requirements of TP Section 2.4.4.5 (SOV Updates), including TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements).
2. List of Contracts and Contractors in accordance with DBA Section 10.1 (Disclosure of Contracts and Contractors).

2.3 Management Plans

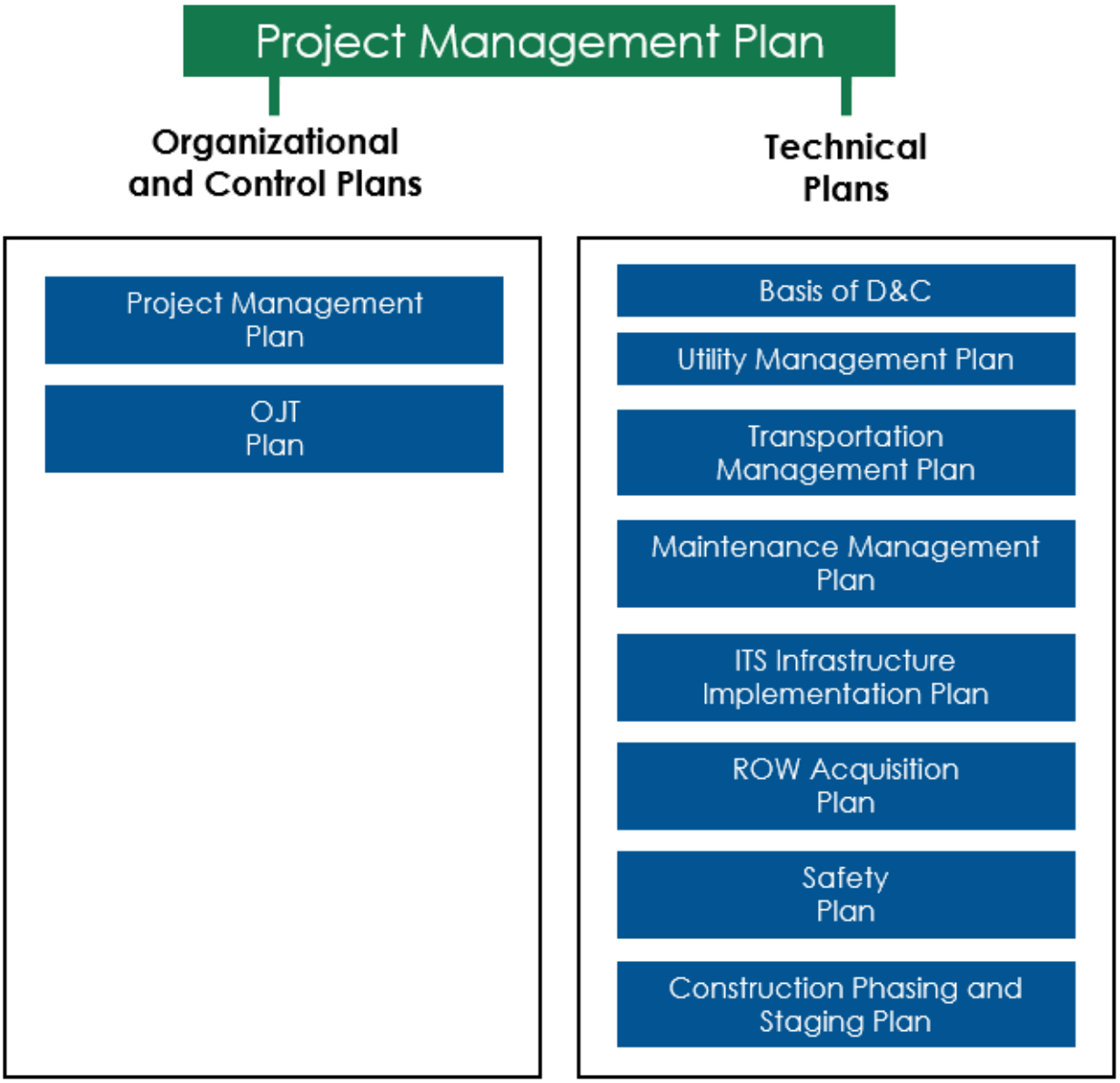
The Design-Builder shall develop, utilize, and maintain the Management Plans included in this TP Section 2. The Management Plans shall meet the following requirements:

1. Comply with the requirements of all provisions of the Design-Build Documents that identify a requirement of the Management Plans or specify a component of a Management Plan.
2. Be consistent with DBA Exhibit 2 (Proposal Commitments).
3. Incorporate those processes, procedures, rights, and other provisions as set forth in the DBA, including DBA Section 9.1 (Project Management Plan) and 20.2 (Audits).
4. Be a living document, with the Design-Builder updating the individual Management Plans as required by the Design-Build Documents.

In addition to the Management Plans, the Design-Builder shall assist GDOT as necessary and provide all pertinent information to GDOT in connection with its preparation of any required project management plan submissions by GDOT to FHWA pursuant to the FHWA requirements for major projects.

Upon GDOT's review, comment, or acceptance, as applicable, of each Management Plan and updates thereto, such Management Plans shall remain in effect until Final Acceptance.

Figure 2-1: Management Plans Organization



2.3.1 Management Plans

Information should not be duplicated in multiple plans, but an individual Management Plan may reference other Management Plans as needed to simplify the plans and any required updates.

2.3.1.1 Project Management Plan

The Project Management Plan (PMP) shall describe the Design-Builder's organization, approach to managing and implementing the Work, approach to quality, and approach to ensuring that the requirements of the Design-Build Documents are met and consistent with the Project goals and objectives. The PMP shall provide the Design-Builder's overall approach to the Project.

The PMP shall detail the structure of the Design-Builder's team, other identified Contractors, including at least those party to the Contracts referred to in DBA Section 10.1 (Disclosure of Contracts and Contractors) and all Key Personnel and Required Personnel. The PMP shall demonstrate how the Design-Builder addresses each Section of the Technical Provisions from NTP1 through Final Acceptance.

The PMP shall include organization-diagram(s) showing the following:

1. Corporate organizational charts indicating the roles of the Design-Builder, Lead Design Consultant, Lead Construction Contractor, and Subcontractors and Subconsultants identified by the Design-Builder as of the Proposal Due Date, and their respective shares of ownership or responsibilities in any joint venture, whether unincorporated or incorporated.

The PMP shall include a narrative describing how each of the design and construction organizations function and interface with each other and with the Design-Builder's organization. Roles and responsibilities of Key Personnel, Required Personnel, and other management and Project execution staff shall be defined. The narrative shall convey how appropriate management oversight and responsibility will be carried out.

The PMP shall include a quality policy statement that includes the corporate quality policies of the Design-Builder, sets out the Design-Builder's Quality Management objectives, and describes the Design-Builder's commitment to implement and continually improve the Design-Builder Quality Program. The PMP shall include all processes and procedures used by the Design-Builder to confirm the Work is delivered in accordance with the requirements set out in the Design-Build Documents.

The PMP shall include an overall high-level quality organization description that includes the identification of all the Design-Builder's Quality Management personnel. This description shall include the roles and responsibilities for each identified personnel and the lines of authority and reporting responsibilities for each identified personnel, throughout both design and construction.

The PMP shall include the procedures for communication of Project information between the Design-Builder's organization and GDOT.

2.3.1.2 Reserved

2.3.1.3 OJT Plan

The On-The-Job Training (OJT) Plan shall be developed in accordance with DBA Exhibit 14 (OJT Requirements).

2.3.1.4 Basis of D&C

The Basis of Design and Construction (D&C) shall be developed in accordance with TP Attachment 2-2 (Basis of D&C Requirements).

2.3.1.5 Utility Management Plan

The Utility Management Plan shall be developed in accordance with TP Section 7 (Utility Adjustments).

2.3.1.6 Transportation Management Plan

The Transportation Management Plan (TMP) shall be developed in accordance with TP Section 18 (Traffic Control).

2.3.1.7 Maintenance Management Plan

The Maintenance Management Plan (MMP) shall be developed in accordance with TP Section 19 (Maintenance).

2.3.1.8 ITS Infrastructure Implementation Plan

The ITS Infrastructure Implementation Plan shall be developed in accordance with TP Section 17 (Intelligent Transportation Systems).

2.3.1.9 ROW Acquisition Plan

The Right of Way (ROW) Acquisition Plan shall be developed in accordance with TP Section 6 (Right of Way). ROW Acquisition Plan shall only be required in such cases where DB Team acquires ROW parcels.

2.3.1.10 Safety Plan

The Safety Plan shall be developed in accordance with TP Section 2.7 (Safety).

2.3.1.11 Construction Phasing and Staging Plan

The Design-Builder shall submit a Construction Phasing and Staging Plan prior to commencing the Construction Work. The Construction Phasing and Staging Plan shall be consistent with the Design-Builder's approach to achieving the Milestone Deadlines shown in the Design-Build Documents.

The Construction Phasing and Staging Plan shall contain the following items:

1. Drawings including the following elements related to construction phasing and staging:
    a. Construction phasing and staging layout (scale: 1 inch = 200 feet) depicting both Temporary Works and Permanent Works and indicating the Design-Builder's overall sequencing of the Construction Work including lane configuration, traffic management, anticipated treatment of ramps, Utility Adjustments, installation of noise barriers, and staging of longitudinal drainage trunk lines during the Construction Phases of the Project.
    b. Supporting drawings such as identification of yard size and locations for laydown areas and the associated sequencing.
2. A supplemental narrative that is aligned with the drawings and describes the following elements related to construction phasing and staging:
    a. An overall description of how the Design-Builder will approach and sequence each Construction Phase. The description shall illustrate the Design-Builder's approach to constructing the Work, including a description of Work areas, sequence of Work to be performed during each Construction Phase, and the overall order, sequence, and linkages between each Construction Phase.
    b. A description of how the Design-Builder intends to schedule and sequence the construction to minimize impacts on the Environment, communities, third-party

agencies, and the traveling public, while still providing acceptable construction performance.

c. Procedures and processes for installing and maintaining safe ingress and egress of construction vehicles in the work zone, including acceleration and deceleration lanes for construction vehicles.

d. A description of intended laydown, recycling, staging, disposal, and maintenance locations to be used during construction.

e. A description of how the ROW and adjacent roads and properties will be maintained and protected, including the intended measures to be used to mitigate and minimize noise, vibration, light, dust, erosion/run-off, and local road damage.

f. A description of all existing roadways and structures to be closed, demolished, left as is, or incorporated into the Project.

g. A listing of the Design Document Submittals and Construction Document Submittals associated with each Construction Phase consistent with the Basis of D&C.

h. A description indicating how the Construction Phasing and Staging Plan will be closely coordinated with the Transportation Management Plan (TMP) and Traffic Control Plans. The Design-Builder shall reference the TMP and Traffic Control Plans with which the Construction Phasing and Staging Plan aligns. The Design-Builder shall clearly describe any discrepancies or deviations between the Construction Phasing and Staging Plan, TMP, and Traffic Control Plans and state the reasons and justification for each (if none; so state).

i. A description indicating the order and sequence in which proposed noise barriers are to be installed. The Design-Builder shall demonstrate how the Work will be phased and staged to enable noise barrier construction to be completed as soon as practical in accordance with TP Section 22 (Noise Barriers).

3. Any other information to supplement the construction phasing and staging drawings and narrative and pertinent to the Design-Builder's intended approach to construct the Work.

4. The following items shall be included in the Construction Phasing and Staging Plan:

   a. Interim Milestone dates (i.e., the need to open a structure by a certain date for traffic operations).

   b. Bridge Demolition Plan meeting the requirements included in TP Section 13 (Structures).

   c. Overall construction sequence: the order in which individual structures are to be built, the sequence in which individual spans of girders or cantilevers are to be erected, and the sequence in which spans are to be made continuous. Erection plans and sequence drawings shall be provided for all bridge construction.

   d. The general location of any physical obstacles that might impose restraints or otherwise affect construction, and an outline of how to deal with such obstacles during Construction Work. Obstacles may include road, rail, and waterway clearances; temporary diversions; transmission lines; Utilities; and the Design-Builder's own Temporary Works such as haul roads, cofferdams, plant clearances; and the like.

e. The approximate location of any special lifting equipment in relation to structures, including clearances required for the operation of the equipment (e.g., crane positions, operating radii, and the like).

f. The approximate locations of all temporary falsework and the conceptual outline of all special erection equipment.

g. An outline of the handling, transportation, and storage of fabricated components, such as girders or concrete segments.

h. The Design-Builder shall present the information in items (a) through (g) on as few drawings as possible to show the Design-Builder's approach in relation to the design intent.

2.3.2 Management Plan Updates

After each Management Plan has been reviewed, commented on, or accepted by GDOT for the first time, individual components may be subject to changes, including clarifications, modifications, additions, and deletions. Each Management Plan shall remain in effect until review, comment, or acceptance of any update thereto. Management Plan updates to may be initiated by the Design-Builder, the QCM, the CQCM, the DQCM, or GDOT. Circumstances that trigger a change to a Management Plan include the following:

1. Changes to organization, other Contracts referred to in DBA Section 10.1 (Disclosure of Contracts and Contractors), Key Personnel, Required Personnel, changes to staff with stop Work authority, changes in roles, responsibilities, authorities, and line reporting relationships.

Any requirement, event, or circumstance that triggers a change to a Management Plan will require a mandatory Submittal of that Management Plan by the Design-Builder to GDOT. In addition to the foregoing requirement, GDOT shall be entitled to initiate a change to any Management Plan upon becoming aware of any such requirement, event, or circumstance.

As part of any Submittal to GDOT in accordance with the preceding paragraph, the Design-Builder shall include and update a revisions table at the front of each Management Plan with the revision number, date of the revision, and a description of the revision. Revised Management Plans may be submitted individually on an interim update.

2.4 Project Schedule and Schedule of Values

In addition to the requirements of this TP Section 2.4, the Design-Builder shall generally conform with the terminology and methods in the publication CPM in Construction Management, latest edition, by James J. O'Brien and Fredric L. Plotnick.

For each Submittal of the Project Schedule and SOV, the Design-Builder shall comply with the requirements set forth in this TP Section 2.4, TP Attachment 2-5 (Project Schedule Technical Requirements), TP Attachment 2-6 (Project Schedule Software Requirements), TP Attachment 2-7 (SOV and Price-Loading Requirements), and TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements).

2.4.1 Baseline Project Schedule Alignment Meetings

Within 10 Business Days following submittal of each Baseline Project Schedule, the Design-Builder shall schedule and conduct a meeting with the attendees shown in TP Table 2-1

(Required Project Meetings) to discuss the Baseline Project Schedule. Baseline Project Schedule alignment meetings shall include a discussion of the following topics:

1. WBS; activity coding; and the breakdown, detail, and definition of activities
2. Design-Builder's approach and sequencing of Administrative Work, ROW acquisitions, Utility Adjustments, environmental permitting, and the Submittal Packaging Plan to a) accommodate all necessary reviews and approvals; and b) enable execution of the Construction Phasing and Staging Plan
3. Construction phasing, staging, sequencing, anticipated staffing, and resource constraints
4. Identification of the Critical Path
5. Identification, forecasted timing, durations, sequencing, and Float values for all activities to be performed by GDOT and other third-party involvement in the Work and for interfaces with Related Transportation Facilities, localities, municipalities, and other Governmental Entities
6. Identification and forecasted achievement of major traffic shifts as indicated in the Construction Phasing and Staging Plan
7. Forecasted achievement of the Milestone Deadlines

2.4.2 Baseline Project Schedule

The Design-Builder shall implement a multi-staged Baseline Project Schedule development process consistent with this TP Section 2.4.2. Each Baseline Project Schedule shall accurately forecast the achievement of each Milestone Deadline, reflect requirements in the Design-Build Documents relating to commencement of certain portions of the Work, reflect constraints imposed by the Design-Build Documents on certain activities, and reflect the Design-Builder's overall approach and planning for the prosecution of the Work.

2.4.2.1 Preconstruction Baseline Project Schedule

The Design-Builder shall submit the Preconstruction Baseline Project Schedule that fully details all Work (as further specified in TP Attachment 2-5 (Project Schedule Technical Requirements)) that is:

1. Authorized by the Effective Date, NTP1 and NTP2
2. Required as conditions to commence the Design Work and the Construction Work, respectively
3. Identified as early Construction Work packages in the Design-Builder's Basis of D&C

The scope of all remaining Work, including all Work authorized by NTP3, shall be encompassed in the Preconstruction Baseline Project Schedule and shall, at a minimum, be represented by activities at a summary-level of detail (e.g., one or more activities representing each Construction Phase).

As a foundation to prepare the Preconstruction Baseline Project Schedule, the Design-Builder shall use the Proposal Schedule and make the following modifications:

- Adjust the data date and imposed Milestone Deadline constraints to reflect the executed date of NTP1.

- If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), the Design-Builder shall price-load the Preconstruction Baseline Project Schedule with the Preconstruction Baseline SOV in the manner set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements).

The Design-Builder may bypass the Preconstruction Baseline Project Schedule and instead submit a Construction Baseline Project Schedule that meets all the requirements in this TP Section 2.4.2.1 and the requirements in TP Section 2.4.2.3 (Construction Baseline Project Schedule) with written notice at the time of the Submittal (i.e., by way of the corresponding Baseline Project Schedule Narrative).

The Design-Builder shall only submit the Preconstruction Baseline Project Schedule after submitting the Basis of D&C, and if the Design-Builder elects to price-load the Preconstruction Baseline Project Schedule, after submitting the Preconstruction Baseline SOV.

2.4.2.2 Reserved

2.4.2.3 Construction Baseline Project Schedule

The Design-Builder shall submit the Construction Baseline Project Schedule for GDOT's acceptance that:

- Fully details all Work and activities necessary to complete the Work (as further specified in TP Attachment 2-5 (Project Schedule Technical Requirements)) and subject to the following:
  - The Design-Builder may propose that certain elements of the Construction Work (i.e., such as those that have not yet sufficiently progressed through the design) remain at a summary-level (e.g., per TP Section 2.4.2.1 (Preconstruction Baseline Project Schedule) via the Baseline Project Schedule Narrative and subject to GDOT review and acceptance.
  - In such an instance as the preceding, the Design-Builder acknowledges a Revised Baseline Project Schedule, fully detailing all Work and activities necessary to complete the Work, shall be submitted prior to commencing the associated Construction Work.
- Accurately memorializes actual progress data, showing only undisputed status information based on accepted Project Schedule Updates and approved Invoices since the latest accepted Baseline Project Schedule.

The Design-Builder shall only submit the Construction Baseline Project Schedule after submitting the Construction Phasing and Staging Plan, and if the Design-Builder elects to price-load the Construction Baseline Project Schedule, after submitting the Construction Baseline SOV.

2.4.2.4 Revised Baseline Project Schedule

Revised Baseline Project Schedule means the Baseline Project Schedule submitted by the Design-Builder for acceptance by GDOT that: a) accurately memorializes actual progress data, showing only undisputed status information based on the accepted Project Schedule Updates and approved Invoices since the latest accepted Baseline Project Schedule; and b) may otherwise introduce changes to the Baseline Project Schedule when any of the conditions set forth in this TP Section 2.4.2.4 occur, all as subject to review and acceptance by GDOT. A

Revised Baseline Project Schedule may be submitted in accordance with DBA Section 3.2.5 (Revised Baseline Project Schedule).

A Revised Baseline Project Schedule shall detail the Work to a commensurate level of detail as the Baseline Project Schedule it is intended to replace (i.e., Preconstruction Baseline Project Schedule, Construction Baseline Project Schedule, or the latest Revised Baseline Project Schedule accepted by GDOT thereafter).

2.4.3 Project Schedule Updates

The Design-Builder shall submit Project Schedule Updates based on the latest accepted Baseline Project Schedule and corresponding to each Invoice Period (i.e., on a monthly basis) until the earliest occurrence of the following:

- The next Baseline Project Schedule is accepted by GDOT (upon which Project Schedule Updates shall commence in the same manner set forth herein).
- Final Acceptance is achieved and the final Project Schedule Update (i.e., as-built Project Schedule Update) is submitted by the Design-Builder and accepted by GDOT.

Project Schedule Updates shall accurately reflect and report out:

- The current status (i.e., progress) of the Work performed during each Invoice Period (i.e., based on all prior accepted Project Schedule Updates and approved Invoices and the current Invoice Period) and used for justifying Invoice amounts as set forth in DBA Exhibit 7 (Contract Sum and Payment Terms).
- The forecasted plan to perform the remaining Work and achieve the Milestone Deadlines in relation to the latest accepted Baseline Project Schedule.

The Design-Builder shall identify all changes (i.e., added/deleted activities, original durations, activity relationships (logic), calendar assignments, calendar work/nonwork periods (work days or work hours/day, WBS (or equivalent activity code groupings), activity code definitions, software settings, etc.) included in the Project Schedule Update relative to the latest accepted Project Schedule and the justification for each change in the accompanying Project Schedule Narrative. Depending on the nature of proposed changes and at the sole discretion of GDOT, a Project Schedule Update may be returned by GDOT to the Design-Builder directing preparation and submission of a Revised Baseline Project Schedule for review and acceptance.

2.4.4 SOV and Price-Loading

Schedule of Values (SOV) shall mean the Contract Sum distributed across SOV Line Items such that the sum of the prices of all SOV Line Items equals the Contract Sum, in each case, as may be adjusted pursuant to the Design-Build Documents. Under the Design-Build Documents, the SOV is either any SOV Updates or the Baseline SOV, as context may require, and each SOV is further described in this TP Section 2.4.4. Each SOV Submittal shall comply with the requirements set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements) and TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements).

The Design-Builder shall implement a multi-staged Baseline SOV development process consistent with this TP Section 2.4.4.

2.4.4.1 Reserved

2.4.4.2 Preconstruction Baseline SOV

The Design-Builder shall submit the Preconstruction Baseline SOV for GDOT's acceptance that fully details SOV Line Items for all Work (as further specified in TP Attachment 2-7 (SOV and Price-Loading Requirements)) that is:

1. Authorized by NTP1 and NTP2
2. Required for issuance of NTP3
3. Required as conditions to commence the Design Work and the Construction Work, respectively
4. Identified as early Construction Work packages in the Design-Builder's Basis of D&C

The scope of all remaining Work shall be encompassed in the Preconstruction Baseline SOV and represented by SOV Line Items at a sufficient level of detail to accurately represent the Design-Builder's price breakdown of the Work and, if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), capable of being price-loaded onto the Preconstruction Baseline Project Schedule.

The Preconstruction Baseline SOV shall not indicate any progress data (i.e., no actual price data).

The Design-Builder may bypass the Preconstruction Baseline SOV and instead submit a Construction Baseline SOV that meets all the requirements in this TP Section 2.4.4.2 and the requirements in TP Section 2.4.4.3 (Construction Baseline SOV) with written notice at the time of the Submittal (i.e., by way of the corresponding Baseline SOV Narrative).

2.4.4.3 Construction Baseline SOV

The Design-Builder shall submit the Construction Baseline SOV for GDOT's acceptance that:

- Fully details all Work (as further specified in TP Attachment 2-7 (SOV and Price-Loading Requirements)) and, if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), is capable of being price-loaded onto the Construction Baseline Project Schedule
- Accurately memorializes actual progress data, showing only undisputed status information based on the accepted SOV Updates and approved Invoices since the latest accepted Baseline SOV

2.4.4.4 Revised Baseline SOV

Changes to the Contract Sum resulting from a Supplemental Agreement shall be incorporated into a Revised Baseline SOV in the manner set forth in the Supplemental Agreement and shall be submitted by the Design-Builder for GDOT's acceptance as a Revised Baseline SOV Submittal.

Any Design-Builder-proposed changes to the previously accepted Baseline SOV (such as changes in format, structure, and modifications to SOV Line Item identification numbers, SOV Line Item descriptions, and scheduled values assigned to each SOV Line Item) shall be submitted by the Design-Builder for GDOT's acceptance as a Revised Baseline SOV Submittal.

A Revised Baseline SOV shall accurately memorialize actual progress data, showing only undisputed status information based on the accepted SOV Updates and approved Invoices since the latest accepted Baseline SOV.

A Revised Baseline SOV shall detail the Work to a commensurate level of detail as the Baseline SOV it is intended to replace (i.e., Preconstruction Baseline SOV or Construction Baseline SOV). The Design-Builder shall obtain GDOT acceptance of the Revised Baseline SOV prior to submitting the corresponding Revised Baseline Project Schedule.

2.4.4.5 SOV Updates

The Design-Builder shall submit SOV Updates based on the latest accepted Baseline SOV and corresponding to each Invoice Period (i.e., on a monthly basis) until the earliest occurrence of the following:

- The next Baseline SOV is accepted by GDOT (upon which SOV Updates shall commence in the same manner set forth herein).
- Final Acceptance is achieved and the final SOV Update is submitted by the Design-Builder and accepted by GDOT.

SOV Updates shall accurately reflect the Value Earned for Work performed on each SOV Line Item during the Invoice Period relative to the scheduled value for each SOV Line Item shown in the accepted Baseline SOV for the primary purpose of justifying Invoice amounts as set forth in DBA Exhibit 7 (Contract Sum and Payment Terms). SOV Update Submittals shall be included as a part of the Invoice Support Package and submitted with each Invoice.

2.4.4.6 Price-Loaded Project Schedule

This Section 2.4.4.6, and all related price-loading requirements set forth by the Design-Build Documents, shall apply if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV (as determined and communicated by the Design-Builder in the then-current Baseline Project Schedule Narrative and then-current Baseline SOV Narrative), and upon such Submittal, shall remain in effect until the Design-Builder achieves Final Acceptance.

The Baseline Project Schedule shall be price-loaded with the corresponding Baseline SOV and, except for the Preconstruction Baseline Project Schedule, shall show SOV Line Item-related progress data (i.e., Value Earned for Work performed) through the most recently approved Invoice Period in the manner set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements). The Baseline Project Schedule shall show all scheduled values matching those shown in the corresponding Baseline SOV.

All Project Schedule Updates and SOV Updates shall show SOV Line Item-related progress data (i.e., Value Earned for Work performed) through the current Invoice Period in the manner set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements) and with all scheduled values matching exactly those shown in the corresponding and latest accepted versions of the Baseline Project Schedule and Baseline SOV, respectively.

2.4.5 Time Impact Analysis

If the Design-Builder is submitting a Relief Event Package, or a response to a Request for Change Proposal, or a Change Request, the Design-Builder shall include a Time Impact Analysis meeting the requirements of this TP Section 2.4.5 and based on the latest accepted

Baseline Project Schedule as of the date of the effect giving rise to the Relief Event, date specified in the Request for Change Proposal, or Change Request, as applicable.

The Design-Builder shall use the latest accepted Baseline Project Schedule and shall accurately show undisputed status information (i.e., actual dates, percent complete, remaining durations, actual price data, and remaining price data, etc.) based on the accepted Project Schedule Updates and approved Invoices with a data date updated to the start of the asserted Relief Event or the date of directed inclusion in the Relief Event Package, Response to Request for Change Proposal, or Change Request, as applicable. Using this status-included version of the Baseline Project Schedule, the Design-Builder shall incorporate a Fragnet demonstrating how the Design-Builder proposes to accommodate the change, delay, or request in the following manner:

- Hold a meeting and obtain agreement with GDOT regarding the Fragnet, then the Design-Builder shall:
  - Insert the Fragnet into the status-included version of the Baseline Project Schedule.
  - Calculate schedule effects using the Critical Path Method.
- The impacted version of the status-included Baseline Project Schedule shall identify the predecessors to the Fragnet and demonstrate the effects upon successor activities.
- The Time Impact Analysis shall demonstrate the time impact to every affected Baseline Project Schedule activity at the time of the occurrence.
- The time computation of all affected Baseline Project Schedule activities shall include the effects of steps used by the Design-Builder to mitigate the impacts of the effect or request.

If the Baseline Project Schedule is subsequently revised by the Design-Builder and accepted by GDOT following submission of the Time Impact Analysis as part of the Relief Event Package, Response to Request for Change Proposal, or Change Request, but prior to GDOT determining its disposition, the Design-Builder shall:

- Resubmit the modified version of the Time Impact Analysis when directed by GDOT.
- Promptly indicate the same by Notice to GDOT of the need for a modification, if any, to the submitted Time Impact Analysis.

As part of the Time Impact Analysis, the Design-Builder shall include both the accepted Baseline Project Schedule, further status-included (and clearly so identified), as well as the version incorporating the Fragnet demonstrating the Design-Builder's proposed accommodation. Both the nonimpacted and impacted versions of the status-included Baseline Project Schedule included in the Time Impact Analysis shall be:

- Subject to all requirements for the Baseline Project Schedule as set forth in this TP Section 2.4, TP Attachment 2-5 (Project Schedule Technical Requirements), TP Attachment 2-6 (Project Schedule Software Requirements), and if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), TP Attachment 2-7 (SOV and Price-Loading Requirements).
- In the format and with the contents specified for a Baseline Project Schedule set forth in TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements).

The Time Impact Analysis shall include a Project Schedule Narrative (PDF or MS Word file format) that: a) details the change, delay, or request, including justification for all added, changed, or deleted data for Baseline Project Schedule activities, durations, and logic; and b) describes the steps used by the Design-Builder to mitigate the impacts of the effect or request.

Upon execution of a Supplemental Agreement in respect to the Relief Event Determination or GDOT Change, or as may be determined pursuant to Dispute Resolution Procedures, the Design-Builder shall submit a Revised Baseline Project Schedule setting forth the final extension of time, the impacted version of the preceding status-included Baseline Project Schedule, adjusted in accordance with the Supplemental Agreement, which shall:

- Be updated through the current period to accurately show undisputed status information (i.e., actual dates, percent complete, remaining durations, actual price data, and remaining price data) based on the accepted Project Schedule Updates and approved Invoices.
- Comply with all requirements for a Revised Baseline Project Schedule Submittal as set forth in this TP Section 2.4, TP Attachment 2-5 (Project Schedule Technical Requirements), TP Attachment 2-6 (Project Schedule Software Requirements), TP Attachment 2-8 (Project Schedule and SOV Submittal Requirements), and if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), TP Attachment 2-7 (SOV and Price-Loading Requirements); provided, however, that the Submitted Revised Baseline Project Schedule further to Dispute Resolution Procedures shall reflect all, not merely undisputed, status information, as described in the clause above. Following GDOT's acceptance, the Revised Baseline Project Schedule shall form the basis for subsequent Project Schedule Updates as set forth in TP Section 2.4.2.4 (Revised Baseline Project Schedule) and TP Section 2.4.3 (Project Schedule Updates).

2.4.6 Two-Week Detail Schedules

In addition to Project Schedule Submittals, the Design-Builder shall submit Two-Week Detail Schedules that comply with the following:

1. Include a rolling period of at least two weeks ahead for planned activities.
2. Use the latest accepted Baseline Project Schedule as a foundation and provide a more detailed breakdown of the activities for the purpose of coordination of the Work, oversight planning, verification of Work completed, and materials inspection and testing.
3. Define subsequent daily operations for all Work activities scheduled to be performed during the look-ahead period, displaying the Design-Builder's "daily planner" (i.e., more detail than that shown in the Project Schedule).
4. Show all the planned activities, including all anticipated material quantities for sampling, and testing preparations within the period shown.
5. Show all planned Lane Closures in the Two-Week Detail Schedule in accordance with TP Section 18 (Traffic Control).

Two-Week Detail Schedules may be prepared and submitted in a software other than Primavera P6 (e.g., MS Excel format).

2.5 Project Management Controls System

The Design-Builder shall use the web-based Project Management Controls System (PMCS) provided by GDOT, for the period commencing at NTP1 through Final Acceptance to transmit to GDOT all Submittals, correspondence, communication, and information required by the Design-Build Documents. The Design-Builder shall also provide reporting, record keeping, and documents identified in the Submittal Requirements Database via the PMCS.

The Design-Builder shall comply with the requirements of current and successor systems as implemented by GDOT from time to time including modifications to folder structures, file naming conventions, file types, training requirements, and access protocols.

The PMCS provides the following:

1. Centralized data that acts as a single source of information
2. Access to Project information
3. Built-in work processes for certain administrative elements of the Work
4. Automated ball-in-court tracking for certain processes
5. Project reporting

2.6 Design-Builder-Maintained Information Systems

Independent of and in addition to the PMCS provided by GDOT, the Design-Builder shall establish and maintain a document control system to store, catalog, and retrieve all Project-related documents in a format that is accepted for use by GDOT from NTP1 through Final Acceptance.

For documents retained by the Design-Builder, the Design-Builder shall provide a secure, fireproof location with controlled access to store electronic and hardcopy backup files to protect them from loss, damage, and deterioration. For electronic files, the Design-Builder shall provide off-Site backup.

2.7 Safety

The Design-Builder shall comply with the requirements for safety set forth in TP Attachment 2-4 (Safety Requirements).

2.8 Public Information and Communications

The Design-Builder shall comply with the requirements for public information and communications set forth in TP Attachment 2-3 (Public Information and Communications).

2.8.1 Streaming Cameras

The Design-Builder shall provide and operate, at a minimum, two streaming cameras at each bridge location with remote digital access to camera livestreams and prior camera footage at all times (24 hours per day, seven days per week, and 365 days per year), in a manner compatible with GDOT's existing technology infrastructure, and otherwise satisfactory to GDOT. Each camera shall have the ability to pan, tilt, zoom and have a clear view of the entire bridge construction area with a sufficient height such that the view cannot be obscured by traffic. Streaming cameras shall be operational no later than the issuance of NTP3 and shall remain

operational through Substantial Completion. Any camera identified to need repair shall be repaired or replaced by the Design-Builder within 48 hours of notification. Cameras shall provide the following:

1. Timeline navigation system for selecting specific images and times
2. Time date overlay for instant viewing, downloading, and embedding
3. Day and night function
4. Minimum 8-megapixel (3840 x 2160) full color resolution
5. Wireless data connection

The Design-Builder shall submit the camera specifications and locations for GDOT's review and acceptance no later than 90 days prior to the start of the construction phase or the issuance of NTP3. GDOT reserves the right to request the adjustment or relocation of a camera location after each camera is in place, up to four times per camera, to capture a clear picture of the Work effort. Any adjustments or relocations to camera locations shall be completed by the Design-Builder within seven days of receiving the request.

The Design-Builder shall submit a final video archive of the previous recorded activity compiled of stilled images captured at least every 10 minutes to GDOT prior to Final Acceptance. All streaming camera footage shall be Books and Records and shall not be deemed Project Data.

2.9 Submittals

2.9.1 Design-Builder Responsibility for Submittals

The Design-Builder shall provide all Submittals as required to demonstrate compliance with the requirements set out in the Design-Build Documents, the Applicable Standards, Governmental Approvals, and the Law and shall comply with DBA Section 6.3 (Submittal Review, GDOT Oversight, Quality Posture). The Design-Builder shall attach to each Submittal all required support documentation and responses to previously provided review comments.

TP Attachment 2-10 (Submittal Requirements Database) provides a list of baseline Submittals and requirements pursuant to the Technical Provisions. The Submittals listed in TP Attachment 2-10 (Submittal Requirements Database) may not be all-inclusive or exhaustive. It is the Design-Builder's responsibility to determine and submit all items required by the Design-Build Documents, the Applicable Standards, Governmental Approvals, and the Law.

2.9.2 Type 3 Submittals, Type 2 Submittals, and Type 1 Submittals

The Submittal Requirements Database indicates for each Submittal whether it is a Type 3 Submittal, Type 2 Submittal, or a Type 1 Submittal. Any Submittal not included in the Submittal Requirements Database, including any additional Submittal required by an Applicable Standard, shall be either a Type 2 Submittal or a Type 1 Submittal as determined by GDOT.

2.9.3 Coordination and Discipline Groups

The Design-Builder shall schedule and coordinate all Submittals to allow an efficient and orderly Submittal review process. The Submittal Requirements Database provides a list of Submittals and Submittal dates for coordinating reviews and facilitating the Work. Notwithstanding the suggested initial Submittal dates provided in TP Attachment 2-10 (Submittal Requirements

Database), the Design-Builder shall provide each Submittal at the appropriate time for review, comment, or acceptance by GDOT to enable the Design-Builder to comply with the Baseline Project Schedule, including achieving each Notice to Proceed and Released for Construction Design Document date.

For purposes of GDOT review, the Design-Builder shall categorize Submittals into Discipline Groups as follows:

1. Right of way (ROW Group)
2. Railroad, Utilities, and Transit (RRUT Group)
3. Roadway, Drainage, and Maintenance of Traffic (RDMOT Group)
4. Bridge, Structures, Retaining Walls, and Aesthetics (BSRA Group)
5. ITS, Toll Infrastructure and Traffic, including signing, pavement marking, signals, and lighting (ITSTT Group)
6. Project Management and Project Quality (PMPQ Group)
7. Environmental (ENV Group)
8. Public Information and Communications (PIC Group)
9. Maintenance (MN Group)
10. Other (OTH Group)

2.9.4 Time Periods for GDOT Review

Time periods for GDOT review, comment, or acceptance shall be as set out in TP Attachment 2-10 (Submittal Requirements Database), or if no time period is specified for a Submittal, the time period specified in DBA Section 6.3.2 (Time Periods). For any Submittals received after noon Eastern Time, GDOT's review period begins the following Business Day.

The durations provided in TP Attachment 2-10 (Submittal Requirements Database) are specifically for the review period required for GDOT to review, comment, or accept. Accuracy, completeness, and time spent to address GDOT comments and resubmit for re-review of any Submittal in accordance with DBA Section 6.3 (Submittal Review; GDOT Oversight; Quality Posture) are the responsibility of the Design-Builder. The Design-Builder shall provide sufficient review and revision time in the Baseline Project Schedule and account for possible multiple re-Submittals to secure GDOT review, comment, or acceptance, and when applicable, third-party approvals.

Submittals and re-Submittals shall be considered distinct Submittals for purposes of calculating the number of concurrent Submittals in review at one time. With respect to Submittals required by TP Section 6 (Right of Way), excluding the ROW Acquisition Plan and the Monthly Acquisition Services Status Report, the requirements of TP Section 6.6 (Submittals) shall apply regarding the maximum number of concurrent Submittals. For all other submittals GDOT's review periods shall be adjusted for multiple concurrent Submittals as follows:

- Whenever there are more than five concurrent Submittals in review in the subject document's particular Discipline Group, an additional five Business Days will be added to the prescribed review period for each additional increment of five concurrent Submittals. For example, if there are between six and 10 Submittals in concurrent review in a Discipline Group, then an additional five Business Days are added to the prescribed

review period for each Submittal; if there are between 11 and 15 Submittals in concurrent review in a Discipline Group, then an additional 10 Business Days are added to the prescribed review period for each Submittal, and so forth.

- For purposes of calculating the number of Submittals, the accepted Baseline Project Schedule will be used as a guide, except that complementary documents (e.g., bridge plans and bridge calculations) will be considered a single Submittal. Documents that fully integrate multiple disciplines in the presentation (e.g., roadway and drainage plans, together with the respective calculations) will be counted as one Submittal. For Design Documents or packages that include multiple bridges, each individual bridge will be counted as a separate Submittal. For Design Documents or packages that include multiple retaining walls, noise barriers, Bridge Foundation Investigations (BFI), or Wall Foundation Investigations (WFI), GDOT will determine the number of Submittals to be counted.

2.9.5 Quality Review and Format

The Design-Builder shall complete the quality review process described in TP Section 3 (Design-Build Quality Program) and identified in the Submittal Requirements Database for each Submittal prior to submission to GDOT.

The Design-Builder shall provide all Submittals in electronic format, via the PMCS, and hardcopy format as specified elsewhere in the Design-Build Documents. The Design-Builder shall include and update a revisions table at the front of all Submittals with the revision number, date of the revision, and a description of the revision. Re-Submittals shall include both a clean copy and a copy tracking and clearly identifying all changes since the previous submitted version.

2.9.6 Other Agency Reviews and Coordination

In addition to the Submittals to GDOT, the Design-Builder is also responsible for providing submittals to third parties and Governmental Entities as set forth in the Design-Build Documents.

TP Section 2 Attachments

Attachment No.	***Title***
Attachment 2-1	Key Personnel and Required Personnel
Attachment 2-2	Basis of D&C Requirements
Attachment 2-3	Public Information and Communications
Attachment 2-4	Safety Requirements
Attachment 2-5	Project Schedule Technical Requirements
Attachment 2-6	Project Schedule Software Requirements
Attachment 2-7	SOV and Price-Loading Requirements
Attachment 2-8	Project Schedule and SOV Submittal Requirements
Attachment 2-9	Reserved
Attachment 2-10	Submittal Requirements Database

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-1

Key Personnel and Required Personnel

Attachment 2-1: Key Personnel and Required Personnel

Table 1: Key Personnel

Position	*Role*	*Minimum Qualifications*	*Commitment*
Lead Contractor PM (CPM)	Responsible for management of the design and construction for the Project (with primary responsibility for Project permitting and schedule). Serves as the single point of contact for all contract administration and correspondence with GDOT. May not hold any other position.	A minimum of 10 years' industry experience and at least three years' experience in the same or similar role for projects of similar size and complexity as the Project.	Full-Time on-call from NTP1 to Final Acceptance.
Lead Design Consultant PM (DPM)	Responsible for oversight of all necessary design-related work and permitting throughout the term of the Project. May also be the EOR.	A minimum of 10 years' industry experience and at least three years' experience in the same or similar role for projects of similar size and complexity as the Project. Licensed as a Professional Engineer (PE) in Georgia.	Full-Time from NTP1 until NTP3, then Part-Time until Final Acceptance.
Engineer(s) of Record (EOR)	Responsible for the supervision and quality of all Design Work and design process throughout the Term, with primary responsibility for accuracy, adequacy, and conformance of the Work (as defined in the Design-Build Documents) to the Technical Provisions, professional standards of practice, and other applicable standards, specifications, or criteria, including conformance of the constructed Project to the design. May also be the Lead Design Consultant PM.	A minimum of 10 years' industry experience and at least three years' experience in the same or similar role for projects of similar size and complexity as the Project. Licensed as a Professional Engineer (PE) in Georgia.	Full-Time from NTP1 until NTP3, then Part-Time until Final Acceptance.

Position	***Role***	***Minimum Qualifications***	***Commitment***
Construction Manager	Responsible for overseeing the day-to-day construction operations, including Quality Control, for the Design-Builder with primary responsibility for construction supervision, construction scheduling, and adherence to design and construction specifications, standards, and requirements including specifically: • Project safety • Environmental compliance • Utility relocation • Erosion and sediment control • Maintenance of traffic May not hold any other position.	A minimum of 10 years' industry experience and at least three years' experience in the same or similar role for projects of similar size and complexity as the Project.	Full-Time from NTP3 until Substantial Completion, then Part-Time until Final Acceptance.

Table 2: Required Personnel

Position	*Role*	*Minimum Qualifications*	*Commitment*
Project Scheduler	Responsible for developing, assembling, updating, maintaining, and reporting on the Project Schedule as set out in TP Section 2.4 (Project Schedule and Schedule of Values).	At least five years of experience developing, creating, managing, and reporting on schedules for projects of similar size, type, and complexity to this Project and proficient in the designated scheduling software system.	Part-Time upon NTP1 until Final Acceptance.
PMCS Coordinator	Responsible for being the internal point of contact for coordinating the Design-Builder's use of the PMCS as set out in TP Section 2.5 (Project Management Controls System). Responsible to ensure all electronic documents are properly uploaded in the PMCS in a timely manner. Position considered an administrative function.	At least one year of relevant experience and proficient in the designated software system.	Full-Time upon NTP1 until Substantial Completion then Part-Time until Final Acceptance. May have other administrative duties.
Safety Manager	Responsible for the development of the Safety Plan and the enforcement of safety and health policies, procedures, and work practices. Refer to TP Section 2.7 (Safety) for additional information.	At least five years of relevant safety management experience, and OSHA 100 certification.	Full-Time upon NTP3 until Substantial Completion then Part-Time until Final Acceptance. May have other administrative duties.
Construction Quality Control Manager (CQCM)	Responsible for the quality control of the overall Project, specifically integrating the required quality control activities into the planning and execution of the Work. Must be capable of answering questions and inquiries relating to construction Work and meeting the requirements in TP Section 3 (Design-Build Quality Program).	A minimum of 10 years' industry experience.	Full-Time from NTP3 until Substantial Completion, then Part-Time until Final Acceptance.
Design Quality Control Manager (DQCM)	Responsible for the development and implementation of the DQMP, meeting the requirements in TP Section 3 (Design-Build Quality Program), and supervision of the associated quality control personnel.	Recent experience in the management of a quality management program of similar size and complexity as the Project.	Full-Time upon NTP1, during design production, then Part-Time during construction until Final Acceptance.

Position	***Role***	***Minimum Qualifications***	***Commitment***
Worksite Erosion Control Supervisor (WECS)	Responsible for the oversight of initiation, installation, maintenance, inspection, and condition reporting of all erosion control devices. Refer to TP Section 5.2.2.2 (Worksite Erosion Control Supervisor) for additional information.	Has at least one year of experience in erosion and sediment control, including the installation, inspection, maintenance, and reporting of BMPs. Has successfully completed the Georgia Soil and Water Conservation Commission Certification Course Level IA and GDOT's WECS Certification Course.	Full-Time upon NTP3 to Substantial Completion then Part-Time until Final Acceptance.
NEPA Specialist	Provide expertise in Environmental Laws, regulations, and policies during the Work, lead environmental inputs (duration, logic linkages, etc.) into the Design-Builder's Project Schedule, and address environmental justice issues related to the Project.	Meets the certification requirement of GDOT's Consultant Prequalification Manual, Section VII Transportation Planning Area Class 1.06(a) NEPA Documentation.	Part-Time upon NTP1 until Final Acceptance.
History Specialist	Provide expertise in NHPA Section 106 laws, regulations, and policies as it pertains to historic resources. Provide expertise in monitoring impacts to historic resources during the Work.	Meets the certification requirement of GDOT's Consultant Prequalification Manual, Section VII Transportation Planning Area Class 1.06(b) History. Cultural Resource Management Personnel must meet professional standards under regulations developed by the Secretary of the Interior, found at https://www.doi.gov/pam/asset-management/historic-preservation/pqs.	Part-Time upon NTP1 until Final Acceptance.
Archaeology Specialist	Provide expertise in NHPA Section 106 laws, regulations, and policies as it pertains to archaeological resources. Provide expertise in monitoring impacts to archaeological resources during the Work.	Meets the certification requirement of GDOT's Consultant Prequalification Manual, Section VII Transportation Planning Area Class 1.06(f) Archaeology. Cultural Resource Management Personnel must meet professional standards under regulations developed by the Secretary of the Interior, found at https://www.doi.gov/pam/asset-management/historic-preservation/pqs.	Part-Time upon NTP1 until Final Acceptance.

Position	***Role***	***Minimum Qualifications***	***Commitment***
Water Quality Specialist	Provide expertise in permitting (USACE Section 404 and GA EPD Buffer Variance), state and federal waters delineations, storm water pollution prevention, and the protection of jurisdictional state and federal waters.	Provide expertise in permitting (USACE Section 404 and GA EPD Buffer Variance), state and federal waters delineations, storm water pollution prevention, and the protection of jurisdictional state and federal waters. Meets the certification requirements of GDOT's Consultant Prequalification Manual, Section VII Transportation Planning Area Classes 1.06(e) (Ecology). Meets the certification requirements of GDOT's Consultant Prequalification Manual, Section VII Transportation Planning Area Classes 1.06(e) (Ecology).	Part-Time upon NTP1 until Final Acceptance.
Noise Specialist	Provide expertise for noise studies. Refer to TP Section 5.4 (Noise Barriers) for more information.	Meets the certification requirement of GDOT's Consultant Prequalification Manual, Section VII Transportation Planning Area Class 1.06(d) (Noise Studies)	Part-Time upon NTP1 until Final Acceptance.
Hazardous Materials Manager	Provide expertise in the safe handling of Hazardous Materials required to perform the Work and those that may be discovered/impacted during the Term. Schedule and/or conduct training for the Design-Builder's employees. Verify all employee certifications have been obtained prior to any handling of Hazardous Materials. Maintain records of all Incidents involving Hazardous Materials and notify the ECM, GDOT, and appropriate authorities in writing of any such Incidents.	Meets the certification requirements of GDOT Soils, Foundation and Material Testing, Hazardous Waste Site Assessment Studies 6.05 Is a qualified professional with 40 hours of HAZWOPER certification. Has at least five years of experience on projects of similar scope and complexity to the Project in the following areas: • Development of investigative work plans, site investigation reports, and remedial action plans or equivalent reports necessary and acceptable to the EPA in material discovery and remediation efforts of Hazardous Materials. • Investigation and remediation of Hazardous Materials following GDOT Environmental Procedures Manual guidelines.	Part-Time upon NTP1 until Final Acceptance.

Position	***Role***	***Minimum Qualifications***	***Commitment***
ROW Project Manager	The ROW Project Manager is responsible for supervision of Acquisition Services.	Verifiable experience with the GDOT ROW Manual about performing project management and oversight of all Acquisition Services. Service Class D-1 (R/W Project Manager) of GDOT ROW Pre-Qualification Application.	Part-Time if needed to meet the requirements of the Design-Build Documents.
ROW Acquisition Manager	The ROW Acquisition Manager oversees all aspects of TP Section 6.4 (Parcel Acquisition Services).	Verifiable experience with the GDOT ROW Manual regarding Performing Parcel Acquisition Services. Service Class D-3 (Acquisition Manager) of GDOT ROW Pre-Qualification Application.	Part-Time if needed to meet the requirements of the Design-Build Documents.
Utility Manager (UM)	The UM shall manage all obligations of the Design-Builder with respect to Utility Adjustments such as financial arrangements with Utility Owners and technical requirements.	The UM shall have at least four years of relevant experience in coordinating Utility Adjustments on projects of similar complexity, size, and scope.	Full-Time upon NTP1 until completion of all Utility Adjustment Work.
Utility Design Coordinator (UDC)	The UDC shall be responsible for coordinating the Utility Adjustment design with the overall Project design features.	The UDC shall have at least four years of relevant experience in coordinating Utility Adjustments on projects of similar complexity, size, and scope.	Full-Time upon NTP1 until completion of all Utility Adjustment Work.
Worksite Utility Coordination Supervisor (WUCS)	The WUCS shall be responsible for initiating and conducting Utility Coordination Meetings, accurately recording and reporting the progress of Utility Adjustments, ensuring contact with www.Georgia 811.com and that requirements have been met, and preparing the EURP.	Shall have at least four years of relevant experience in coordinating complex Utility Adjustments on highway improvement projects of similar complexity, size, scope, and delivery method to the Project. Shall have a complete understanding of the Georgia Utilities Protection Center operation and shall be knowledgeable of the High-Voltage Safety Act and trained on the GUFPA (Georgia Utility Facility Protection Act).	Full-Time upon NTP1 until Substantial Completion.

Position	***Role***	***Minimum Qualifications***	***Commitment***
Emergency Utility Coordinator (EUC)	The EUC is responsible for notifying the appropriate Utility Owner or Utility Owner's subcontractor in case of an Emergency.	Shall have at least four years of relevant experience in coordinating complex Utility Adjustments on highway improvement projects of similar complexity, size, scope, and delivery method to the Project. This responsibility may be assigned to another Person on the Required Personnel list if they meet the minimum qualifications.	Part-Time upon NTP1 until Substantial Completion.
ITS Construction Manager	Oversight of ITS infrastructure Construction Work.	Minimum of 10 years of experience in ITS.	Part-Time from NTP3 until Substantial Completion.
Traffic Control Manager (TCM)	Prepare, implement, monitor, and maintain the Transportation Management Plan (TMP). The TCM may be the EOR for the TTCP. Supervise the implementation and maintenance of traffic management strategies including the planning and implementation of TIRs detailed in TP Attachment 18-3 (Traffic Interruption Request). Coordinate with the construction Project team to ensure traffic control activities support the planned Work activities. Supervise the activities of the WTCS.	Professional Engineer with relevant experience overseeing the development and implementation of a traffic management plan and implementation of temporary traffic control plans on highway projects similar in size and scope as this Project.	Part-Time upon NTP1 until Substantial Completion.

Position	***Role***	***Minimum Qualifications***	***Commitment***
Worksite Traffic Control Supervisor(s) (WTCS)	Oversee installation and maintenance, and continuously monitor and inspect daily all traffic control devices under the supervision of the TCM and as specified in TP Attachment 18-1 (Temporary Traffic Control). Notify the TCM when traffic control is causing unanticipated impacts to the Level of Service of the roadway. Ensure staffing for traffic control implementation is adequate at each location.	Hold an unexpired certificate issued by the American Traffic Safety Services Association (ATSSA), Work Site Traffic Supervisor Certification Program, or the National Safety Council Certification Program.	Full-Time upon NTP3 until Substantial Completion.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-2

Basis of D&C Requirements

Attachment 2-2: Basis of D&C Requirements

1 Administrative

The Basis of Design & Construction is a Project-specific planning document for the D&C Work prepared as a single Submittal inclusive of the entire Project to document development and delivery of all Plans and the Design-Builder's overall approach to constructing the Project. The Design-Builder shall logically organize the Project sections and design packages into buildable units and shall include sufficient information and details to confirm the Design-Builder's intent and validate conditions included in the Basis of D&C. The Basis of D&C Submittal shall include the following:

1. Design-Builder's Schematic Plan of Project meeting the requirements prescribed in this TP Attachment 2-2.
2. Basis of D&C Narrative meeting the requirements prescribed in this TP Attachment 2-2.
3. Proposed Design-Builder Changes to Project Standards in accordance with DBA Section 14.6.1 (Project Standards Changes) and DBA Section 14.2 (Design-Builder Changes).
4. For modifications to or replacement of GDOT-published standards, specifications, Construction Standards, or Construction Details permitted as a Design-Builder Provided Specification as identified in TP Attachment 1-4 (Project Standards), an explanation of the design criteria and parameters; Standard Drawings; design manuals; and other design requirements that shall apply.
5. Complete and up-to-date documentation for all design criteria, design parameters, and design decisions, including known Design Variances, Exceptions and Deviations. The Design-Builder shall include the finalized and comprehensive documentation for all design criteria, design parameters, and design decisions with the Record Design Documents.
6. Proposed alternative design software products in accordance with TP Section 4 (Design Documents).

The Design-Builder shall schedule and conduct a Basis of D&C workshop with the attendees shown in TP Section 2 (Project Management) and TP Table 2-1 (Required Project Meetings) to discuss the Design-Builder's approach to design and construct the Project including the Design-Builder's Schematic Plan of Project and Basis of D&C Narrative. The purpose shall be to familiarize involved personnel with the design concepts, environmental documentation, phasing approach and Submittal packaging. The Design-Builder shall jointly develop the workshop agenda with GDOT and agree upon how it will be organized (such as by GDOT office and engineering discipline). During the workshop, the Design-Builder shall discuss with GDOT any application of Over-the-Shoulder (OTS) design review meetings to reach resolution for Project Elements that pose complex constraints or entail additional review effort. The workshop shall also discuss the extent of GDOT, Utility Owner, and third-party reviews. A primary goal of the workshop is to make the design review process more effective and efficient for all parties. The Design-Builder shall submit the Basis of D&C to GDOT as a Management Plan in accordance with TP Section 2 (Project Management) following the Basis of D&C workshop.

2 Design-Builder's Schematic Plan of Project

2.1 General

The Design-Builder's Schematic Plan of Project shall provide the Design-Builder's Design and approach to the scope of the project to include roadways, bridges and other structures, interchanges, and drainage as applicable. The Design-Builder's Schematic Plan of Project shall include the following:

1. The Design-Builder's proposed preliminary schematics depicting the lane configuration that is consistent with the requirements of these Technical Provisions
2. Any Design-Builder Proposed/Design-Builder Acquired Right of Way and any Temporary Interests required for construction or maintenance activity
3. Any areas that are not consistent with the Provided Environmental Approvals, including potential Design-Builder Proposed detours
4. Any areas that, by reason of a change to layout or geometry, may require consultation with a Governmental Entity
5. Any additional or modified Design Deviations compared to the Design Deviations identified in TP Attachment 11-3 (Design Deviations)

2.2 Conceptual Design Schematic Drawings

2.2.1 Roadway

The conceptual design schematic drawings shall include the following elements related to roadway work per the scope of the project:

1. General Project roadway information, including Project limits, design speeds, functional classifications, and other data
2. Horizontal alignments, including P.I. station/location, degree of curve, radius, length of curve, PCs and PTs (graphical locations), and bearings
3. Planimetrics, including curbs and barriers, driveways, sidewalks, edges of pavement, and surface roadways' edge of shoulders
4. Directional arrows indicating the number of lanes
5. Major roadway profiles, including existing/natural ground, vertical clearance, grades, VPI stations, vertical curve lengths, and K-values
6. Typical sections, including existing ground, pavement cross-slope, superelevation, lane and shoulder widths, and slope ratio for fills and cuts

2.2.2 Drainage

The conceptual design schematic drawings shall include the following elements related to drainage work per the scope of the project:

1. The Design-Builder's conceptual design for conveying runoff through the Site to discharge points, including major trunk lines for pipes with a diameter greater than or equal to 48 inches, with detail showing pipe sizes, flow direction, outfalls, and receiving waters/streams
2. The approximate limits of any temporary construction easements and drainage easements necessary for completion of the drainage work

2.2.3 Structures

The conceptual design schematic drawings shall include the following elements related to structures (including walls) work per the scope of the project:

1. Sufficient detail to indicate bridge locations and limits, bridge types, assumed foundation types, controlling vertical clearances, and typical span arrangements
2. Preliminary wall types, proposed preliminary locations and limits for retaining and noise barriers

2.2.4 Right of Way

The conceptual design schematic drawings shall include the following elements related to ROW work per the scope of the project:

1. Identification of State Proposed/Design-Builder Acquired ROW, if any
2. Identification of Design-Builder Proposed/Design-Builder Acquired ROW, if any
3. Identification of Design-Builder Proposed/State Acquired ROW, if any
4. Identification of State Proposed/State Acquired ROW

2.2.5 Utility Adjustments

The conceptual design schematic drawings shall include the following elements related to Utility Adjustments work per the scope of the project:

1. Alignments for major Utility Adjustments representing significant risk to the Project

2.3 Narrative

The Design-Builder shall include a narrative that describes its approach to project design, Utility Adjustments, environmental permitting, construction phasing and any ROW acquisitions. The Design-Builder shall demonstrate how the approach and sequencing of each will enable execution of the Project. The Design-Builder shall identify and describe the parts of the Design-Builder's Schematic Plan where the design or the construction means and methods differ from the assumptions included in the NEPA Basic Configuration in a manner that may result in a different environmental impact compared to the impact assessed in the Provided Environmental Approvals in accordance with TP Section 5 (Environmental).

The Narrative shall encompass the Design-Builder's plan for providing Submittals during the period between NTP1 and Substantial Completion, and shall contain the following items:

1. A list of proposed segments (e.g., station x+xx to station y+yy) for the Work that aligns with the Construction Phases depicted in the Design-Builder's Technical Proposal.
2. A proposed listing of Design Documents that reflect the Design-Builder's approach to submit staged Design Document Submittals.

Commensurate with the level of detail provided in the Design-Builder's Technical Proposal, the Narrative shall also describe how the Design-Builder will approach and sequence each Construction Phase. The description shall illustrate the Design-Builder's approach to constructing the Work, including a description of Work areas, sequence of Work to be performed during each Construction Phase, and the overall order and linkages between each. Specifically, the Design-Builder should detail out any potential early Construction Work packages (e.g., typically defined as any Construction Phase anticipated to commence within

NTP1 + XX days or as otherwise identified by the Design-Builder such as scopes of Work the Design-Builder is seeking an early limited NTP3 for, etc.). The narrative shall be consistent with the Design-Builder's approach to achieving the Milestone Deadlines shown in the Design-Build Documents.

The construction portion of the narrative shall contain the following items:

1. Drawings including the following elements:
    a. Construction phasing and staging layout (scale: 1 inch = 200 feet) depicting both Temporary Works and Permanent Works and indicating the Design-Builder's overall sequencing of the Construction Work including lane configuration, traffic management, and any major Utility Adjustments.
    b. Supporting drawings such as identification of yard size and locations for laydown areas and the associated sequencing.
2. A description of the following elements related to construction phasing and staging:
    a. How the Design-Builder intends to schedule and sequence the construction to minimize impacts while still providing acceptable construction performance.
    b. A description of known intended laydown, recycling, staging, disposal, and maintenance locations to be used during construction.
3. Any other information to supplement the construction phasing and staging drawings pertinent to the Design-Builder's intended approach to construct the Work, including potential detour routes and timeframes.

2.4 Submittal Format

The conceptual design schematic drawings shall be submitted in English units on scalable 11-inch by 17-inch plans (at a scale of 1 = 100 feet) and 36-inch by 125-inch maximum length roll plots (at a scale of 1 inch = 200 feet) and shall clearly identify the Work to be completed. The drawings shall be legible and clearly convey intent. A larger scale may be necessary to convey details in critical areas. The narrative shall be submitted as a letter-sized (8.5-inch by 11-inch) PDF.

2.5 Staged Design Document Submittals

For each Construction Phase, the Design-Builder shall either submit a complete set of Design Documents that advance through the standard design progression (e.g., Preliminary Design Documents, Final Design Documents, and RFC Design Documents) set out in TP Section 4 (Design Documents) or make a series of staged Design Document Submittals.

A staged Design Document Submittal is a distinct Submittal of one or more component packages of the Design Documents representing a portion or portions of the Work within the limits of a Construction Phase, and capable of being logically submitted in a series of related Design Document Submittals to enable execution of the D&C Work. For example, component packages of Design Documents for a particular Construction Phase may include grading; drainage; roadway; traffic sequencing; signing and pavement marking; erosion control; individual structures such as a bridge or one or more of its components, such as foundations, substructures, abutments, complete continuous units of superstructure; etc.

Staged Design Document Submittals shall advance through the standard design progression of Design Document Submittals and shall comply with the requirements set out in TP Section 4

(Design Documents). The timing and content of staged Design Document Submittals shall be logical and include or be preceded by related items (e.g., bridge submittals must include or be preceded by related highway geometry; a bridge and its related retaining walls must be submitted together; etc.). The Design-Builder shall correlate and align staged Design Document Submittals with the anticipated schedule for Governmental Approvals, Environmental Approvals, and permits.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-3

Public Information and Communications

Attachment 2-3: Public Information and Communications

1 General Requirements

This TP Attachment 2-3 describes the requirements regarding the provision of information and communication to assist GDOT in facilitating public information, communications, and education to media, Governmental Entities, Users, business owners, third parties affected by the Project, and other organizations with interest in the Project.

The Design-Builder shall not serve as the public and media spokesperson for the Project. The Design-Builder and Subcontractors shall not create or maintain Project-specific websites or social media channels.

The Design-Builder shall be responsible for the notifications in the TP's and attachments, particularly TP Section 18 (Traffic Control) and TP Section 18 (Traffic Control) attachments associated with public information and communications. Provide relevant Project information, such as Milestone updates, traffic interruptions, and construction activity, to GDOT for communication to stakeholders in advance of activities in accordance with TP Section 18 (Traffic Control).

When requested by GDOT the Design-Builder shall assist in coordinating media and other group tours of the Project at appropriate times and stages.

When requested by GDOT the Design-Builder shall attend meetings and events with other Project staff, elected officials, the general public, representatives of civic organizations, businesses, and special interest groups along the Project corridor (individually or in groups), for the purpose of building rapport with affected stakeholders. At GDOT's request, the Design-Builder shall assist GDOT in informing the public of the Project progress and discussing key issues as they emerge.

2 Public Information Requests

The Design-Builder, in coordination with GDOT, shall be responsible for providing information related to public information requests (PIR). The Design-Builder shall provide support to GDOT in development of a response to the PIR within five Business Days.

The Design-Builder shall immediately notify GDOT of the following:

1. Requests received from elected officials
2. Inquiries with a known negative implication
3. Inquiries from a known Project opponent
4. Media requests

3 Public Information Materials

The Design-Builder shall provide content for communication materials, at GDOT's request, for use in all communications, public information, stakeholder, and outreach activities. GDOT will issue public-facing notices for social and digital media using this Design-Builder provided content.

The Design-Builder shall provide content for materials, including the following:

1. Display boards
2. Fact sheets
3. FAQ sheets
4. Presentations
5. Public notice signage
6. Maps and renderings
7. Project status/progress updates
8. Social media and web pages
9. Press releases and media advisories (weekly)

The Design-Builder shall also support development of the materials described in Table 1 (Public Information Material Details).

Table 1: Public Information Material Details

Material	*Description*	*Design-Builder Requirements*
Traffic Impact Reports	Traffic impact reports are distributed to inform the media and traveling public of activities on the roadway that may impact motorists.	The Design-Builder shall use GDOT-approved templates for traffic impact reports. The Design-Builder shall provide traffic impact reports and detour maps (if necessary) for review on a weekly basis regarding notification per this TP Attachment 2-3 and the following week's traffic impact requests.
Photos and Videos	Digital photographs and videos (preferably taken from a drone) will be used for public communications, media relations, and GDOT archival purposes. Any photographs including aerial orthophotographs taken by the Design-Builder during construction of the Project shall be provided to GDOT upon request.	The Design-Builder shall provide high-quality digital photos and videos depicting construction progress that allow indexing by date and location. The Design-Builder shall provide a minimum of five digital photos at up to 10 locations requested by GDOT monthly during the period from NTP3 through Final Acceptance.

4 Public Information Requirements

The Design-Builder shall perform the following to keep the public informed:

1. Notify GDOT, using a Traffic Impact Report, no less than 30 calendar days in advance of the start of any long-term construction activity (impacts greater than 24 hours) that will impact Users, such as any changes in traffic patterns to the existing transportation facilities, so that GDOT can communicate the potential impacts of these activities to Users and affected Governmental Entities. This notification must accompany the following to meet the notification requirements:
    a. Approved TTCP reflecting the traffic impact.

b. Mitigation strategies to minimize the traffic impacts.

c. A scheduled pre-activity meeting to cover the Work.

d. A plan for meeting the TIR requirements.

e. Documentation showing coordination with related transportation facilities.

2. Notify GDOT, using a Traffic Impact Report or updated Traffic Impact Report, no less than 72 hours (by noon Thursday for any closure occurring at the beginning of the following week) in advance of the start of short-term construction activities (impacts less than 24 hours) that will impact Users, so that GDOT can communicate the potential impacts of these activities to Users and affected Governmental Entities.
3. Provide Lane Closures for GDOT distribution by following the TIR process in TP Attachment 18-3 (Traffic Interruption Request).
4. Upon GDOT's request, participate in presentations with GDOT to the general public, civic organizations, businesses, and other community and stakeholder groups.
5. Provide detailed information (e.g. mile markers, stations, coordinates, etc.) to GDOT for coordination efforts with applicable navigation applications to update and display significant traffic shifts, closures, detours, new traffic patterns, etc. for the traveling public. Navigation applications may include Google Maps, Apple Maps, Waze, etc.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-4

Safety Requirements

Attachment 2-4: Safety Requirements

1 Safety Plan

The Design-Builder shall prepare and submit to GDOT a comprehensive Safety Plan. GDOT review is limited to verifying the Safety Plan appears to be specific to the Project. The Safety Plan shall fully describe the Design-Builder's policies, procedures, plans, training programs, worksite controls, and Incident response plans to protect the health and safety of personnel involved in the Project and the general public affected by the Project during the period commencing at NTP1 through Final Acceptance.

The prevention of accidents during execution of the Project shall be a primary concern of all participants and shall be the responsibility of all levels of the Design-Builder and Design-Builder related parties. Safety shall never be sacrificed for production and shall be considered an integral part of an efficient and quality project.

The Safety Plan shall include or address the following:

1. Safety and health standards
2. Roles and responsibilities of the safety staff
3. Contractors having a safety manager and an accepted safety manual (or plan) that is consistent with the Design-Builder's Safety Plan and available to all employees
4. Contractors holding periodic on-Site safety meetings
5. Contractors conducting periodic on-Site safety inspections
6. Contractors providing safety training for all new employees and refresher training for all employees
7. Contractors conducting drug screening for all new hires
8. Contractors establishing daily housekeeping and clean-up procedures
9. Where first-aid and medical kits will be made readily available
10. Emergency management, including roles and responsibilities, Emergency evacuations, communications, first responder awareness training, and field drills
11. Periodic safety reporting (no less than monthly)
12. Schedule of recurring safety meetings to be held on the Project
13. Methodology and requirements for an ID system that includes logos or other identification on safety vests, hard hats, equipment, and vehicles working on the Site with either the company name or the role identified in the PMP in such a manner that they can be easily identified

In addition, the Design-Builder shall conduct appropriate threat and vulnerability assessments and take these assessments into consideration throughout the period commencing at NTP1 through Final Acceptance.

2 Safety Management

The Design-Builder shall provide health and safety leadership to promote and support a safe working environment. All Design-Builder management and Contractors shall support the Design-Builder's safety personnel in the implementation and enforcement of the Safety Plan.

The Design-Builder shall provide adequate safety personnel suitable to the size of the Project and length of the corridor and shall designate a Safety Manager. The responsibilities of the Safety Manager are set out in TP Attachment 2-1 (Key Personnel and Required Personnel). The role of the Safety Manager includes providing Project direction to maintain a safe, healthy, and secure work environment for all employees, Contractors, GDOT personnel, and Users. The Safety Manager shall have the authority to suspend all or a portion of the Work because of public or worker safety-related issues.

All workers are responsible for planning and completing all Work in a safe manner by following all applicable policies, procedures, and safe work practices.

3 Safety Training

The Safety Manager shall verify that all personnel on the Project are provided a thorough safety orientation and periodic refreshers on the Project safety requirements. The Design-Builder shall provide access to the Safety Plan and safety training to GDOT personnel and their representatives assigned to the Project prior to entry to the Site. The safety orientation shall include the following:

1. Roles and responsibilities
2. Hazard communications
3. Job hazard analysis
4. Reporting of Incidents and accidents
5. Drug and alcohol policies
6. Driving policies
7. Disciplinary procedures
8. General health and safety requirements including proper usage of PPE
9. General Site safety rules
10. Proper use, care, and storage of specialty safety equipment
11. Other training as applicable under Good Industry Practice or stemming from a job hazard analysis

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-5

Project Schedule Technical Requirements

Attachment 2-5: Project Schedule Technical Requirements

1 Baseline Project Schedule Technical Requirements

The Design-Builder shall comply with the following Baseline Project Schedule requirements:

1. Show the Design-Builder's plan to complete the Work in compliance with the Milestone Deadlines, as adjusted for Relief Events that have been finally determined under Dispute Resolution Procedures and otherwise as pursuant to Supplemental Agreements that are executed by the Parties.
2. Use a Work Breakdown Structure (WBS) and activity codes to organize all Work activities shown in the Baseline Project Schedule and comply with the following requirements:
    a. Use the first level of the WBS as the Project itself. Include discrete nodes at the second level of the WBS for the following: Project summary and milestones, general and Project management, environmental and permitting, Design Work, ROW, Utility Adjustment Work (including Utility coordination, design, and construction), procurement (including individual Contractors, long-lead materials, and equipment), Construction Work, and close-out.
    b. Reflect the Design-Builder's overall approach to the planning and execution of the Work in the organization and breakdown of the WBS. Align the WBS for the Preconstruction Baseline Project Schedule with the Basis of D&C and the Construction Baseline Project Schedule with the Construction Phasing and Staging Plan.
    c. For Construction Work, the lowest level of the WBS shall be broken down to identifiable physical locations within definable geometric limits and Work features, such as location/alignment, station-to-station sectioning, and structure number identification of specific retaining walls or bridges. For Design Work, Administrative Work, and all other pre-Construction Work, the lowest level of the WBS shall be broken down to identifiable features of Work, such as specific design package, Submittal, ROW parcel, permit type, or procurement item (including individual Contractors, long-lead materials, and equipment).
    d. The Design-Builder shall remain consistent with the order and hierarchy number of each specific level of the WBS used. The Design-Builder shall develop additional detail in the WBS, provided that any modifications do not alter the principles identified herein or affect the Design-Builder's ability to summarize to the required WBS levels.
    e. For all Construction Work and Utility Adjustment Work (construction only), include the following activity codes assigned to each activity:
        1) Work element (each individual bridge, retaining wall, noise wall, drainage run, etc.).
        2) Location/alignment (each mainline, collector-distributor, ramp, and crossing street and further defined by geometric limits such as sections for station-to-station, inside/outside, etc.).
        3) Work type (environmental, roadway, drainage, bridges, retaining walls, noise barriers, landscaping, ITS, etc.).

4) Responsibility (party within Design-Builder's team responsible for each activity with individual Contractors identified).

5) Construction Phase.

f. Use only Project-level (not global) activity codes. Include the P.I. number in the description of all activity code definition titles (i.e., PI######_Work type; PI######_responsibility; etc.).

3. Use standard and consistent activity identification numbers and activity textual descriptions (i.e., activity names) and comply with the following requirements:

   a. Use a coding structure for activity identification numbers with no spaces, hyphens, symbols, or special characters.

   b. Ensure each activity is uniquely named and consists of a verb, noun, and location in the activity description (i.e., activity name), and is consistent with its WBS and activity code assignments. For Construction Work and Utility Adjustment Work (construction only), include identifiable physical locations within definable geometric limits and Work features in each activity description such as location/alignment, station-to-station sectioning, specific retaining wall or bridge, bent and span numbers, drainage structure numbers, etc. For Design Work, Administrative Work, and all other pre-Construction Work activities, include identifiable feature of Work, such as specific design package, Submittal, ROW parcel, permit type, or procurement item (including individual Contractors, long-lead materials, and equipment) in the activity description. Activity descriptions referring to a percentage of a multi-element item (e.g., construct deck 50 percent) shall not be used.

   c. All activities shall be defined by identifiable Work features such that any change to the Design-Builder's Basis of D&C, Construction Phasing and Staging Plan or Work sequencing shall not affect or alter the definition of an activity in subsequent versions of the Baseline Project Schedule following acceptance of the Preconstruction Baseline Project Schedule.

4. Encompass all Work and activities necessary to complete the Work as specified by the Design-Build Documents and illustrate the Design-Builder's approach, means, and methods. Break the Work into discrete activities commensurate with the level of detail prescribed in TP Section 2.4.2 (Baseline Project Schedule) for each Baseline Project Schedule type. Scopes of Work identified as fully detailed in TP Section 2.4.2 (Baseline Project Schedule) and further described herein shall be shown as discrete activities associated with only one operation or tightly integrated operations in a single, contiguous and continuous area of the Project and sufficiently detailed to readily identify, evaluate, and measure progress. If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), each Baseline Project Schedule shall include activity sets capable of being price-loaded with the Baseline SOV as set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements). The Baseline Project Schedule shall include the following activities and shall likewise meet the following activity requirements:

   a. Start milestones for each of the following: NTP1, NTP2, NTP3, and the commencement of Construction Work.

   b. Finish milestones for each of the following: each Interim Milestone Deadline, the Substantial Completion Deadline, and the Final Acceptance Deadline.

   c. Project start-up, site setup, and Work related to mobilization.

d. Level of effort activities for:

   1) Ongoing activities as identified in TP Attachment 2-7 (SOV and Price-Loading Requirements).

   2) Each duration specified by the Design-Build Documents with appropriate logic ties to the detailed Work activities and/or Milestone activities.

e. Planning, management, administrative, and pre-Construction Work, including Submittals required by the Design-Build Documents. Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activities for the preparation, submittal, review, and approval/acceptance of each Submittal. The Design-Builder shall depict Submittals in the Baseline Project Schedule consistent with the Submittal Requirements Database.

f. Design Work. Depict Baseline Project Schedule activities consistent with the Design-Builder's Basis of D&C. Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activities for the preparation, submittal, review and acceptance or RFC of each staged Design Document Submittal and each Shop Drawing Submittal.

g. Environmental Work (Design-Builder-Led Environmental Permit Approval Services, Environmental Mitigation Costs, Design-Builder Support to Provided Environmental Approval Reevaluation, etc.), including Work shown in TP Table 5-3 (GDOT-Led Environmental Preparation and Approval) and TP Table 5-4 (Design-Builder-Led Environmental Permit Approval). Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activities for the development, submittal, review, and approval or issuance of each.

h. ROW, right of entry, and easement Work required by the Design-Build Documents. Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activities for: a) the preparation, submittal, review, and acceptance of ROW-related Submittals, including the ROW Plans, ROW Acquisition Plan, and ROW Certification and Release; and b) Acquisition Services including Pre-Acquisition Services, Parcel Acquisition Services, and Post-Acquisition Services for each required Parcel.

i. Utility Adjustment Work (including utility coordination, design, and construction) required by the Design-Build Documents. Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activities for:

   1) The preparation, submittal, review, and acceptance of Utility-related Submittals, letters, and requests.

   2) Supplemental verification, investigations, and SUE Utility Impact Analysis.

   3) Preparation, submittals, review and acceptance/issuance of Utility Adjustment Preliminary Plans, Utility Adjustment Plans, Utility Work Plan, agreements, reports, procedures, permits and certifications.

   4) Construction of each Utility Adjustment.

5) Sufficient detail for constructing the Utility Adjustment Work shall be commensurate to that required for the Construction Work under each Baseline Project Schedule type.

j. Owner or other third-party involvement in the Work and for interfaces with Related Transportation Facilities, localities, municipalities, and other Governmental Entities.

k. Procurement (including individual Contractors, long-lead materials, and equipment). Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activity durations for:

1) Procurement of individual Contractors.

2) Fabrication and delivery of long-lead materials and equipment items.

l. Depending on each Baseline Project Schedule type as set forth in TP Section 2.4.2 (Baseline Project Schedule), scopes of Work required to be fully detailed shall include distinct activities for all Permanent Works, demolition of existing facilities, and Temporary Works. Sufficient detail for activities representing the Construction Work shall be achieved as follows:

1) For bridge structure Work, indicate each element of individual bents (piles, footings, columns, caps, with clear activity descriptions or separate activities for formwork, rebar, concrete placements, strip and separate activities for cure times); each element of Work in individual spans (i.e., separate activities for girders, strip seal joints, and decks with clear activity descriptions or separate activities for formwork, rebar, concrete placements, strip and separate activities for cure times); individual approach slabs, railings, and miscellaneous other bridge Work.

2) For cast-in-place retaining wall structure Work, indicate each with clear activity descriptions or separate activities for excavation, formwork, rebar, concrete placements, strip and separate activities for cure times and back-fill; and for mechanically stabilized earth (MSE) walls, indicate each broken-out by excavation, leveling pad, setting panels/wall face, settlement periods, wall caps, and related Work.

3) For noise barrier Work, indicate each broken-out by foundations, posts, panels, and related Work.

4) For grading, roadway, and related elements of Work, include distinct activities within identifiable physical locations and definable geometric limits, such as location/alignment and station-to-station sectioning for the following: individual temporary access roads; detour roads; temporary traffic control including traffic shifts; clearing and grubbing; excavation and embankment; removal of existing pavements, pipes, buildings, and miscellaneous structures; subgrade preparation and stabilization; aggregate surfacing; earth shouldering; cast-in-place barrier; roadway base course and paving; guardrail; crash cushions/impact attenuators; fencing; permanent lighting including electrical systems and lighting structures; signing, pavement marking, and signalization; landscape and hardscape enhancements; bicycle and pedestrian facilities; and other miscellaneous elements.

5) For drainage Work, include distinct activities for physical components of the Drainage System encompassing identifiable Work elements (such as drainage

structure numbers) within identifiable physical locations for the following: riverine bridges, stormwater conveyances (open-channel and closed-conduit), inlets, stormwater management, detention/retention ponds, soil erosion measures, pavement and subgrade drainage, culverts, stream and wetland restoration, bridge deck drainage, and any other stormwater drainage components.

6) For ITS Work, include structure foundations, structure supports, conduits, cabinets, power conductors, fiber optic, ITS equipment, cable splicing, testing and start-up, and other related Work encompassing identifiable Work elements and within identifiable physical locations.

7) Equipment installation, testing and start-up, and other related Work encompassing identifiable Work elements and within identifiable physical locations.

8) Activities representing the start and completion of each Construction Phase and the various stages of the Construction Work.

m. Submittal and execution of all FA Punch List, Record Design Documents, demobilization and closeout of the Work.

5. Use durations in whole day increments with a maximum duration of 20 working days (based on the assigned calendar) or 30 days, and not less than one day, except for the following:
   a. Milestone activities allowable under this TP Attachment 2-5.
   b. Level of effort activities allowable under TP Attachment 2-7 (SOV and Price-Loading Requirements).
   c. Summary-level activities allowable under Preconstruction Baseline Project Schedule Submittals.
   d. Submittal preparation activities.
   e. Long-lead procurement activities.
   f. Embankment settlement activities.
   g. Agency review durations stipulated in the Design-Build Documents.
   h. Activities clearly identified by Design-Builder in Baseline Project Schedule Narrative with justification and subject to review and acceptance by GDOT.
6. Ensure activity durations represent the anticipated Work effort to complete the task and reflect planned production rates. Activity durations shall be contiguous and not interruptible.
7. The Baseline Project Schedule shall be a logic-driven, computer-generated Critical Path Method (CPM) graphic diagram that uses the Precedence Diagram Method (PDM) and shall include appropriate logic ties necessary to complete the Work and illustrate the Design-Builder's approach as well as means and methods. This includes sufficient hard logic (i.e., relationships between activities depicting how the Work must logically flow, such as construction logic) and sufficient preferential logic (i.e., flow of Work based on the Design-Builder's available resources (i.e., resource constraints) and soft logic). Identify all resource constraints using activity relationships. Include preferential logic ties that accurately dictate the planned flow of Work on an early date basis, as well as sufficient logic ties to ensure the late date basis represents a reasonable plan and

accurately reflects the Design-Builder's production rates and resource constraints. Comply with the following Baseline Project Schedule logic requirements:

a. Ensure all activities, except for the NTP1 start milestone and "forecasted Final Acceptance Date" finish milestone, have a minimum of one predecessor activity and one successor activity. Ensure each activity has at least one "start" predecessor (i.e., FS0d, SS0d) and one "finish" successor (i.e., FS0d, FF0d).

b. Use finish-to-start (FS) relationship types with no lags whenever possible. Finish-to-finish (FF) or start-to-start (SS) relationship types shall generally be avoided. Do not use start-to-finish (SF) relationship types.

c. Use of lags with a negative value is not allowed. Do not use relationship lags when the creation of an activity will perform the same function, including:

   1) SS lags where lag is greater than predecessor's original duration.

   2) FF lags where lag is greater than successor's original duration.

   3) FS lags greater than zero days.

8. Constrain start milestone activity for NTP1 with a "start on or after" primary constraint date to reflect executed NTP1 date using beginning of day convention.

9. Show Baseline Project Schedule Float calculations based on the Milestone Deadlines using the following convention:

   a. Include a start milestone with activity name "NTP2." This activity shall have as predecessors all the activities that must be completed prior to the NTP2 Conditions Deadline. Assign any suitable successors to the NTP2 Conditions Deadline to this activity. Constrain this activity with an activity-level "start on or before" primary constraint date reflecting the NTP2 Conditions Deadline shown as a calendar date using beginning of day convention. Do not use a secondary constraint on this activity.

   b. Include a finish milestone with activity name "forecasted Substantial Completion Date." This activity shall have as predecessors all the activities that must be completed prior to the Substantial Completion Deadline. Assign any suitable successors to the Substantial Completion Deadline to this activity. Constrain this activity with an activity-level "finish on or before" primary constraint date reflecting the Substantial Completion Deadline shown as a calendar date using end of day convention. Do not use a secondary constraint on this activity. Use this same convention for all Interim Milestone Deadlines.

   c. Include a finish milestone with activity name "forecasted Final Acceptance Date." This activity shall have as predecessors all the activities that must be completed prior to the Final Acceptance Deadline. Do not use a primary constraint or secondary constraint on this activity. Use the Project-level "must finish by" date to reflect the Final Acceptance Deadline shown as a calendar date using end of day convention.

   d. Do not sequester Float using lags, extended durations, one or more activities, calendar manipulation, or any other such methodology. Date constraints, other than those required by the Design-Build Documents, will not be allowed in the Baseline Project Schedule unless accepted by GDOT as part of the Design-Builder's Baseline Project Schedule Narrative. Do not use "as late as possible" and "mandatory" constraint types for any proposed constraints. Do not use or reference external dates.

10. Use the Gregorian calendar and comply with the following requirements:
    a. Use only Project-level calendars. Do not use or reference global level calendars. Do not use the "inherit holidays and exceptions from global calendar" option.
    b. Include a clear, identifiable, and unique name for each calendar used in the Baseline Project Schedule (e.g., include a unique descriptor and identify the standard workdays per week and any standard non-workdays per week in the description of each calendar).
    c. Satisfactorily account for anticipated adverse weather. Use calendar non-workdays clearly defined for anticipated adverse weather or other equally effective means.
    d. Show maintenance of traffic/closure or restriction periods, self-imposed and regulatory non-work periods for environmental or other restrictions, all non-work periods, or any other time restrictions prescribed by the Design-Build Documents, including those specified in TP Section 1 (General Requirements), TP Section 5 (Environmental), and TP Section 18 (Traffic Control). The Design-Builder shall constrain Work scheduling in these periods by using special calendars or other equally effective means.
    e. Unless otherwise accepted in the Baseline Project Schedule Narrative by GDOT, the Design-Builder shall maintain the same hourly work/non-work times and same hours/day for each calendar used in the Baseline Project Schedule. The Design-Builder shall ensure all calendars (and all activity durations) used in the Baseline Project Schedule consist of workday shifts in full-day increments such that all start and finish times for each Baseline Project Schedule activity are calculated by the scheduling software using a beginning of day and end of day convention, respectively.
11. Excepting the Preconstruction Baseline Project Schedule (which shall be based on the Proposal Schedule), the Design-Builder shall at all times use the latest previously accepted Baseline Project Schedule as a foundation to prepare the new version of the Baseline Project Schedule. For instance:
    a. As a foundation to prepare the Construction Baseline Project Schedule, the Design-Builder shall use the latest accepted Baseline Project Schedule (i.e., the Preconstruction Baseline Project Schedule or a Revised Baseline Project Schedule accepted by GDOT thereafter); and so forth.
12. The Design-Builder shall incorporate changes to the Work into the Baseline Project Schedule upon authorization of a Supplemental Agreement by GDOT. Include the Supplemental Agreement number in the activity description, WBS, and activity code groupings.
13. The data date in the Preconstruction Baseline Project Schedule shall be set equal to the executed date of NTP1 using a beginning of day convention. Excepting the Preconstruction Baseline Project Schedule, the Design-Builder shall set the data date in all other Baseline Project Schedules to the day immediately following close of the most recently approved Invoice Period. For example, if the period closes on the 31st at 11:59 p.m., set the data date to the 1st of the next month using a beginning of day convention.
14. Work activities in the Preconstruction Baseline Project Schedule shall not indicate progress (i.e., no actual dates or actual price data). Excepting the Preconstruction Baseline Project Schedule, all other Baseline Project Schedules shall accurately memorialize actual progress (not calculated progress) data, showing only undisputed

status information (e.g., actual start dates, actual finish dates, physical percent complete (manually input), remaining durations, actual price data (i.e., aggregate Value Earned for Work performed), and remaining price data) for all activities completed and in-progress as of the data date and based on the accepted Project Schedule Updates and approved Invoices. Limit the input of actual progress data to the period spanning from the data date in the latest previously accepted Baseline Project Schedule through the most recently approved Invoice Period. Do not show actual dates beyond the data date. Do not revise previously actualized start and finish dates shown in the latest previously accepted Baseline Project Schedule except when directed in writing by GDOT to correct the Project Schedule to display undisputed status information based on the accepted Project Schedule Updates and approved Invoices. Do not use expected finish dates.

15. Calculate the Baseline Project Schedule using the retained logic method. Reforecast early dates and recalculate late dates for all remaining activities (i.e., those in-progress and those not yet started). Out-of-sequence activities shall not be permitted in the Baseline Project Schedule.
16. Ensure period performance is stored in the Baseline Project Schedule corresponding to each Invoice Period in the manner set forth in TP Attachment 2-6 (Project Schedule Software Requirements).
17. Maintain the unique activity identification number, name, and scope of each activity shown in the Preconstruction Baseline Project Schedule in every subsequent Baseline Project Schedule Submittal throughout the period between NTP1 through Final Acceptance. Activity identification numbers can only be used once. After the Preconstruction Baseline Project Schedule is accepted, the Design-Builder shall not be permitted to:
    a. Modify, reassign, or reuse activity identification numbers.
    b. Revise activity descriptions to represent different scope than originally intended.
    c. Delete any activities.
18. If an activity's scope is eliminated, the Design-Builder shall revise the description to include "scope deleted," reduce the duration to zero days, remove logic, remove all price data assigned to the activity and redistribute to other activities (if applicable), and actualize dates to the day immediately preceding the data date. If additional activities are incorporated into the Construction Baseline Project Schedule, or a Revised Baseline Project Schedule to refine, supplement, or replace the scope of a single activity shown in the latest previously accepted Baseline Project Schedule, the existing activity shall maintain its activity identification number and be converted to a level of effort summary activity that spans the newly added detailed activities.

2 Project Schedule Update Technical Requirements

The Design-Builder shall comply with the following Project Schedule Update requirements:

1. Project Schedule Updates shall accurately memorialize actual progress (not calculated progress) data, showing status information (e.g., actual start dates, actual finish dates, physical percent complete, remaining durations, actual price data (i.e., aggregate Value Earned for Work performed), and remaining price data) for all activities completed and in-progress as of the close of the current Invoice Period. The Design-Builder shall not use default mechanisms included in the scheduling software system to automatically status the Project Schedule Update. The Design-Builder shall limit the input of actual

progress data to the period spanning from the data date in the latest previously accepted Project Schedule (i.e., Project Schedule Updates shall be based on the Baseline Project Schedule or the latest accepted Project Schedule Update thereafter) through the close of the current Invoice Period. Do not show actual dates beyond the data date. Revising previously actualized start and finish dates shown in the latest accepted Baseline Project Schedule and the latest previously accepted Project Schedule Update shall generally be avoided (i.e., except a) when directed in writing by GDOT to correct the Project Schedule to display un-Disputed status information based on the accepted Project Schedule Updates and approved Invoices, or b) to make minor corrections to historical data from time-to-time based upon the project record, which shall be clearly identified by Design-Builder in Project Schedule Narrative with justification and subject to review and acceptance by GDOT). Do not use expected finish dates.

2. The Design-Builder shall set the data date in each Project Schedule Update to the day immediately following close of the current Invoice Period. For example, if the period closes on the 31st at 11:59 p.m., set the data date to the 1st of the next month using a beginning of day convention.
3. Ensure period performance is stored corresponding to each Invoice Period in the manner set forth in TP Attachment 2-6 (Project Schedule Software Requirements).
4. Calculate the Project Schedule Update using the retained logic method to demonstrate compliance with schedule-related constraints imposed under the Design-Build Documents and the forecasted plan to achieve the Milestone Deadlines in relation to the latest accepted Baseline Project Schedule. Revise, adjust, and recalculate the Project Schedule Update to represent the current plan to complete the Work. Out-of-sequence activities shall generally be avoided in the Project Schedule Update but may be permissible at GDOT's sole discretion. The Design-Builder shall identify and describe the nature of out-of-sequence activities in the accompanying Project Schedule Narrative, which shall be subject to review and acceptance by GDOT.
5. Notwithstanding the foregoing requirements, Project Schedule Updates shall comply with the requirements specified in this TP Attachment 2-5 for Baseline Project Schedules, including those specified for activity scope eliminations, refinements, and supplements.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-6

Project Schedule Software Requirements

Attachment 2-6: Project Schedule Software Requirements

The Design-Builder shall prepare all Project Schedule Submittals using Oracle Primavera P6 software.

The Design-Builder shall apply the following Primavera P6 software admin settings:

1. Use “engineering and construction” as the industry to use for terminology and default calculation settings in the P6 Professional module.
2. Use “USD – dollar” as currency type.
3. Check “use assigned calendar to specify the number of work hours for each time period.”
4. Use “activity % complete” as the earned value technique for computing performance percent complete.
5. Use “ETC = remaining cost for activity” as the technique for computing estimate to complete (ETC).
6. Use “at completion values with current dates” or “planned values with current dates” when calculating earned value. Do not use “planned values with planned dates” option.

The Design-Builder shall apply the following Project settings and defaults:

1. Clearly identify each Project Schedule Submittal with a unique Project ID and Project file name (i.e., the Primavera P6 file’s data fields within the software) and clearly label as the Preconstruction Baseline Project Schedule, Construction Baseline Project Schedule, each Revised Baseline Project Schedule, and each Project Schedule Update prior to submission (prior to starting the export process). Excepting the Preconstruction Baseline Project Schedule, additionally include the corresponding Invoice number and Invoice Period in the Project file name.
2. Set the Project status to “active.”
3. Use “.” as the character for separating code fields for the WBS tree.
4. Use “July” as the fiscal year begins on the 1st day of setting.
5. Use “Project baseline” as the baseline for earned value calculations.
6. Use “longest path” to define critical activities.
7. Set default price/unit for activities without resource or role price/units to “$0.00/h.”
8. Uncheck “activity percent complete based on activity steps.”
9. Check “link budget and at completion for not started activities.”
10. Select “reset remaining duration and units to original.”
11. Set the default calendar to the most common Project-specific production calendar. Calendar assignments may be changed at the activity level, as applicable.

The Design-Builder shall apply and ensure all Project Schedule activities conform to the following:

1. Use “fixed duration and units” as duration type for all task dependent and level of effort activities; use “fixed duration and units/time” for milestones.
2. Use “physical” as percent complete type for all activities.
3. Use “task dependent” as activity type for all activities except for Milestones and level of effort activities allowable under the Design-Build Documents. Do not use resource dependent or WBS summary activity types.

The Design-Builder shall apply the following WBS default settings:

1. Set the status for all WBS levels with activities assigned to “active.”
2. Select “activity percent complete” as the technique for computing performance percent complete. Uncheck “use resource curves / future period buckets.”
3. Select “ETC = remaining cost for activity” as the technique for computing estimate to complete (ETC).

Under Primavera P6 tools (schedule) the Design-Builder shall apply the following options:

1. Check “ignore relationships to and from other projects.”
2. Uncheck “make open-ended activities critical.”
3. Uncheck “use expected finish dates.”
4. Uncheck “schedule automatically when a change affects dates.”
5. Uncheck “level resources during scheduling.”
6. Uncheck “recalculate assignment costs after scheduling.”
7. When scheduling progressed activities use “retained logic.”
8. Calculate start-to-start lag from “early start.”
9. Define critical activities as “longest path.”
10. Calculate Float based on finish date of “each project.”
11. Compute total Float as “finish Float = late finish - early finish.”
12. In setting the calendar for scheduling relationship lag, use “predecessor activity calendar” or specify with the Baseline Project Schedule Submittal if lags are to be calculated on predecessor, successor, or 24-hour calendar, and do not change in future Project Schedule Submittals.

If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), the Design-Builder shall establish financial periods that correspond to each Invoice Period (e.g., spanning from the first day of each month to the last day of each month or as otherwise determined in accordance with Section 3.3 (Timing) of DBA Exhibit 7 (Contract Sum and Payment Terms)). Under Primavera P6 tools, the Design-Builder shall “store period performance” prior to preparing each Project Schedule Update Submittal such that the previous month’s period data is accurately retained within the software through the last day of each Invoice Period.

The following data types shall not be imported by the Design-Builder and will not be considered for purposes of review or acceptance by GDOT: resource codes, resource code values, shift names, work products and documents, relationships to external projects, project funding assignments, issues, project code assignments, thresholds, activity step templates/activity steps, timesheets, risks, high level planning assignments and project budget data (budget log, spending plans, funding sources, and current budget), user defined fields, notebook topics/notebook entries, activity discussion and feedback tabs.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-7

SOV and Price-Loading Requirements

Attachment 2-7: SOV and Price-Loading Requirements

1 SOV Requirements

1.1 Baseline SOV

The Design-Builder shall structure the Baseline SOV in a hierarchal manner to include subtotals for logical groupings of SOV Line Items that meet the requirements of Section 1.3 (SOV Line Items) of this TP Attachment 2-7. The Design-Builder shall include a separate row for each SOV Line Item shown on the Baseline SOV with the following columns and populated fields:

1. Unique and consistently labeled SOV Line Item identification number
2. Unique and consistently labeled SOV Line Item description
3. Scheduled value for each SOV Line Item (i.e., budgeted value of Work on price basis; include quantity, unit of measure, and unit price if applicable) which shall be established in the accepted Baseline SOV and shall not be modified in SOV Updates
4. Aggregate Value Earned for Work performed prior to the current Invoice Period (i.e., aggregate value based on all prior approved Invoices) for each SOV Line Item (i.e., on price and percent-complete basis of scheduled value established in the latest accepted Baseline SOV)
5. Value Earned for Work performed during the current Invoice Period for each SOV Line Item (on price and percent-complete basis of scheduled value established in the latest accepted Baseline SOV)
6. Aggregate Value Earned for Work performed through the close of the current Invoice Period (i.e., aggregate value based on all prior approved Invoices plus the value performed during the current Invoice Period) for each SOV Line Item (i.e., on price and percent-complete basis of scheduled value established in the latest accepted Baseline SOV)
7. Balance to finish for each SOV Line Item (i.e., remaining amount on price and percent-complete basis of scheduled value established in the latest accepted Baseline SOV) which shall equal the difference between the scheduled value and the aggregate Value Earned for Work performed through the close of the current Invoice Period for each SOV Line Item

Excepting the Preconstruction Baseline SOV (which shall be based on the Proposal SOV), the Design-Builder shall at all times use the latest previously accepted Baseline SOV as a foundation to prepare the new version of the Baseline SOV. For instance, as a foundation to prepare the Construction Baseline SOV, the Design-Builder shall use the latest accepted Baseline SOV (i.e., the Preconstruction Baseline SOV or a Revised Baseline SOV accepted by GDOT thereafter); and so forth.

The Preconstruction Baseline SOV shall not indicate progress (i.e., no actual price data). Excepting the Preconstruction Baseline SOV, all other Baseline SOV Submittals shall accurately show undisputed status information (e.g., items 4-7 listed above) updated through the most recently approved Invoice Period and in the manner set forth in this TP Attachment 2-7. The Design-Builder shall limit the input of actual progress data to the period spanning from the latest previously accepted Baseline SOV through the most recent Invoice Period corresponding to the latest accepted Invoice.

1.2 SOV Updates

Each SOV Update shall be prepared in the same manner as the latest accepted Baseline SOV, showing only progress (status) related information for items 4-7 listed in Section 1.1 (Baseline SOV) of this TP Attachment 2-7 during each Invoice Period (i.e., based on all prior approved Invoices and the current Invoice Period) and with no changes to the information included in items 1-3 listed in Section 1.1 (Baseline SOV) of this TP Attachment 2-7 as shown in the latest accepted Baseline SOV.

1.3 SOV Line Items

SOV Line Items shown on each Baseline SOV shall match the SOV Line Items shown on the Proposal SOV, including prescribed dollar and percentage allocation requirements, structure, order, and exact scheduled values shown on the Proposal SOV, subject only to adjustments as set forth in the Design-Build Documents.

Levels of SOV Line Items for the Baseline SOV are defined as follows:

1. Level 1 is the D&C Amount and the Contract Sum, as may be adjusted further to the Design-Build Documents
2. Level 2 includes general, design services, and construction that correspond to the capital letter headings on the Proposal SOV
3. Level 3 includes those numerically numbered SOV Line Items listed on the Proposal SOV as direct subsidiaries to general, design services, and construction
4. Level 4 includes those lower-case lettered SOV Line Items listed on the Proposal SOV and any further breakdown of level 3 SOV Line Items (that do not have a level 4 on the Proposal SOV) by the Design-Builder
5. Level 5 shall include a further breakdown of level 4 SOV Line Items by the Design-Builder in accordance with the requirements set forth herein. When applicable, level 5 shall be further broken down (e.g., level 6, 7, etc.) to reflect the Design-Builder's approach shown in the Basis of D&C and Construction Phasing and Staging Plan

The Design-Builder shall utilize subsidiary levels to the SOV Line Items shown in the Proposal SOV to achieve the level of detail prescribed in TP Section 2.4.4 (SOV and Price-Loading) for each Baseline SOV type. Elements of the Work required to be fully detailed in the Baseline SOV shall comply with the following requirements:

1. "B.1.a. Design Documents" shall be broken down into separate level 5 SOV Line Items (and sublevels thereof) in a manner consistent with the Basis of D&C. "B.1.b. Design-Builder Support to Provided Environmental Approval Reevaluation," "B.1.c. ROW Acquisition Services," and "B.1.d. Utility Design" shall likewise be subdivided to commensurately detailed level 5 SOV Line Items (and sublevels thereof) representing discrete elements of the Work to the satisfaction of GDOT.
2. Level 4 subsidiaries to "C.1. Construction cost and support" shall be broken down into separate level 5 SOV Line Items (and sublevels thereof) in a manner consistent with the Basis of D&C and Construction Phasing and Staging Plan to the satisfaction of GDOT.

The scheduled value for each SOV Line Item shown on the Baseline SOV shall accurately represent the value of the component of the Work identified. SOV Line Items shall not be front-loaded. The Design-Builder shall provide further detail to accurately represent the scheduled value of the Work for the SOV Line Items comprising the Baseline SOV when directed in writing

by GDOT. No SOV Line Item may be assigned a scheduled value greater than $500,000.00 except when otherwise stipulated by the Design-Build Documents.

1.4 Method for Determining Value Earned for Work

The Design-Builder shall comply with the requirements set forth in Table 1 (Method for Determining Value Earned for Work), or if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), Table 2 (Price-Loading Assignments and Method for Determining Value Earned for Work) shall apply.

Table 1: Method for Determining Value Earned for Work

SOV Line Item	*Method for Determining Value Earned for Work Performed*
A. General	
A.1. Insurance & bonds	Scheduled value shall be earned upon performance of the Work and all relevant and required documentation has been submitted by the Design-Builder.
A.2. Project Office facilities, equipment, and supplies	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
A.3.a. Project management and coordination	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
A.3.b. Home office overhead & support	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
A.3.c. Management Plans	For each Submittal: • Up to 50 percent of the scheduled value shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the preparation, addressing of comments, and submission. Also see note f. • Forty percent of the scheduled value shall be earned upon GDOT acceptance of the initial Submittal. • The remainder of the scheduled value shall be earned in equal amounts upon each updated Submittal (as determined by number of planned updates to account for yearly maintenance or required updates to the Submittal).
A.3.d. Project Schedule and SOV	For each Submittal: • Up to 50 percent of the scheduled value shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the preparation, addressing of comments, and submission. Also see note f. • Forty percent of the scheduled value shall be earned upon GDOT acceptance of the initial Submittal. • The remainder of the scheduled value shall be earned in equal amounts upon each updated Submittal (as determined by number of planned updates to account for yearly maintenance or required updates to the Submittal).

SOV Line Item	***Method for Determining Value Earned for Work Performed***
A.3.e. Project reporting	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
A.3.f. Public information and communications	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
A.4. Design-Builder-Led Environmental Permit Approval Services	For each Submittal: • Up to 60 percent of the scheduled value shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the preparation, addressing of comments, and submission. Also see note f. • Fifteen percent of the scheduled value shall be earned upon GDOT acceptance of the initial Submittal. • The remainder of the scheduled value shall be earned upon agency acceptance/issuance. If agency review is not required by the Design-Build Documents, the remainder shall be divided evenly between the Design-Builder's Submittal and GDOT's acceptance.
A.5. Environmental mitigation costs	Scheduled value shall be earned upon performance of the Work and all relevant and required documentation has been submitted by the Design-Builder.
A.6. Design-Builder Quality Management	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
A.7. Mobilization	Scheduled value shall be evenly apportioned and earned in equal amounts upon achievement of each NTP1, NTP2, and NTP3 activity.
B. Design Services	
B.1.a. Design Documents Also see note c.	For each Submittal: • Up to 55 percent of the scheduled value shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the preparation, addressing of comments, and submission of Preliminary Design Documents (PDDs). Also see note f. • Five percent of the scheduled value shall be earned upon GDOT acceptance of the PDDs Submittal. • Up to 25 percent of the scheduled value shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the preparation, addressing of comments, and submission of Final Design Documents (FDDs). Also see note f. • Ten percent of the scheduled value shall be earned upon GDOT acceptance of the FDDs Submittal. • The remainder of the scheduled value shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the preparation, addressing of comments, and submission of RFC Design Documents. Also see note f.
B.1.b. Design-Builder Support to Provided Environmental Approval Reevaluation	See note d.

SOV Line Item	***Method for Determining Value Earned for Work Performed***
B.1.c. ROW Acquisition Services	See note d.
B.1.d. Utility Design	See note d.
B.2. Design support during Construction	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
B.2. Record Design Documents	See note d.
C. Construction	
C.1.a. through C.1.n., C.1.p, C.1.q, C.1.t. and C.1.u.	Scheduled values shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the Work. Also see note e and note f.
C.1.o Erosion Control	Scheduled values shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
C.1.r. Maintenance during Construction & temporary conditions	Scheduled values shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
C.1.t. Traffic control related to ongoing elements of Work such as Work zone law enforcement	Scheduled value shall be earned in equal amounts on a monthly basis (e.g., linear and uniform over the aggregate duration of the associated Work). Also see note a and note b.
C.1.t. Traffic control related to discrete elements of Work such as installation of: • temporary concrete barrier • temporary signals • temporary pavement markings	Scheduled values shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the Work.
C.2. Training hours	Scheduled values shall be earned in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the Work.
C.3. Punch List, final close-out, and demobilization	Scheduled value shall be earned as a lump sum amount upon achievement of Final Acceptance.

Notes:

a. Unless otherwise stipulated by the Design-Build Documents, the Design-Builder shall reflect 0 percent of the scheduled value as Value Earned for Work when the associated Work has not started for that Invoice Period and redistribute those funds equally among remaining months.

b. With regard to those SOV Line Items for which value is earned monthly in equal amounts, if the associated schedule duration is adjusted in accordance with the terms of the Design-Build Documents, then the unearned value of that SOV Line Item shall be redistributed equally across the remaining months such that that total amount that may be earned for that item remains unchanged.

c. Requirements prescribed for “B.1.a. Design Documents” shall apply to SOV Line Items apportioned to each Submittal of the Design Documents (whether the sum total of Design Documents representing each stage of the standard design progression (e.g., Preliminary, Final, and RFC Design Documents) for the whole Project or subtotals representing the standard design progression for an element of the Work through a series of staged Design Document Submittals).

SOV Line Item	*Method for Determining Value Earned for Work Performed*

d. Unless otherwise stipulated by the Design-Build Documents, the Design-Builder shall earn the scheduled values for the following SOV Line Items (and all subsidiary SOV Line Items thereof): "B.1. b. Design-Builder Support to Provided Environmental Approval Reevaluation," "B.1. c. ROW Acquisition Services," "B.1. d. Utility Design," and "B.2. Record Design Documents" in a manner consistent with the requirements set forth for "B.1. a. Design Documents."

e. All progress on Construction Work represented by SOV Line Items "C.1.a. through C.1.q., C.1.t. and C.1.u." and all subsidiary SOV Line Items thereof shall be consistent with and supported by the physical percent complete of the corresponding Baseline Project Schedule activities, and reimbursable up to 90 percent of the scheduled value until all relevant and required documentation has been submitted by the Design-Builder except for the associated Record Design Documents. Upon such submittal, the Design-Builder shall be entitled to reflect as completed the remainder of the schedule value assigned to the relevant SOV Line Items.

f. If GDOT determines that physical percent complete for a SOV Line Item was inaccurate in excess of 10 percent or that unincorporated material is not on-site and that either was reported as Value Earned for Work on a previously accepted SOV Update or approved Invoice, then GDOT may reduce the next Invoice to be processed by the corresponding amount if the Work has not been progressed in line with the reporting or the materials remain undelivered.

General requirements:

1. No portion of a scheduled value shall be recorded as Value Earned for Work performed on any SOV Line Item that is not supported by an accurate actual start date for the associated Work activities in the Project Schedule. The full scheduled value shall only be marked as Value Earned for Work performed on any SOV Line Item when supported by an accurate actual finish date for the associated Work activities in the Project Schedule.
2. The Value Earned for Work performed shall be reflected in each SOV Update and supported by the corresponding Project Schedule Update for the period in which the Work was performed, and subject to all requirements for Nonconforming Work as set forth in the Design-Build Documents.

1.5 Unincorporated Materials

The Design-Builder may reflect as Value Earned for Work performed a portion of an SOV Line Item to account for Project specific unincorporated materials, which will be stored onsite or offsite material, for the following items: prestressed concrete beams; fabricated steel beams or girders; MSE wall panels; overhead sign structures; large sign panels; noise barrier posts and panels; ITS hub buildings; support poles; generators; emergency access gates; Dynamic Message Signs (DMS); piling; timber and lumber (not including formwork or falsework); concrete traffic barrier; precast box culverts larger than 25 square feet; reinforced concrete pipe larger than 66 inches; illumination poles; or other materials subject to prior written approval by GDOT.

In no case shall the portion of scheduled value reflected as Value Earned for Work performed representing the unincorporated material exceed 75 percent of the total scheduled value for the SOV Line Item in aggregate and the associated Permanent Works at the specific location to which the materials will be incorporated. The Design-Builder shall not reflect as Value Earned for Work performed representing unincorporated material worth less than $25,000.00.

The method for determining the Value Earned for Work performed for unincorporated materials shall comply with the requirements for "C.1.a. through C.1.q., C.1.t. and C.1.u." and all subsidiary SOV Line Items thereof in the manner set forth in Table 1 (Method for Determining Value Earned for Work), or if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), Table 2 (Price-Loading Assignments and Method for Determining Value Earned for Work) shall apply.

The Design-Builder shall retain all records, bills of sale, and invoices related to such unincorporated materials until Final Acceptance and provide these records to GDOT upon request.

2 Price-Loaded Project Schedule Requirements

If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), this Section 2 shall apply.

2.1 Baseline Project Schedule

The Design-Builder shall devise a hierarchical account structure (using Primavera P6 cost accounts or equivalent) in the Baseline Project Schedule representing the SOV Line Items shown in the corresponding Baseline SOV. The Design-Builder shall apportion the scheduled value of each SOV Line Item across Baseline Project Schedule activities (using Primavera P6 project expenses or equivalent) that, in aggregate, represent the associated Work.

The first level of the account structure shall be the Project itself (i.e., level 1 of the Baseline SOV) with all other accounts (i.e., levels 2 and above of the Baseline SOV) assigned as subsidiaries. Each SOV Line Item account shall include one or more price-loaded Baseline Project Schedule activities capable of being grouped by the individual SOV Line Item account to which they are assigned. The price-loading method must be capable of displaying, for each Baseline Project Schedule activity and SOV Line Item account, the following populated fields:

1. Unique and consistently labeled SOV Line Item identification number.
2. Unique and consistently labeled SOV Line Item description.
3. Scheduled value (i.e., budgeted amount on price basis; include quantity, unit of measure, and unit price if applicable) which shall be established in the accepted Baseline Project Schedule and shall generally not be modified in Project Schedule Updates. Any proposed adjustments to the scheduled value as part of a Project Schedule Update may require submittal of a Revised Baseline Project Schedule at GDOT's sole discretion.
4. Aggregate Value Earned for Work performed through the close of the current Invoice Period (i.e., aggregate value based on all prior approved Invoices plus the value performed during the current Invoice Period) on price and percent-complete basis of scheduled value established in the latest accepted Baseline Project Schedule.
5. Balance to finish (i.e., remaining amount on price-basis) which shall equal the difference between the scheduled value established in the latest accepted Baseline Project Schedule and the aggregate Value Earned for Work performed through the close of the current Invoice Period.
6. At completion value (i.e., the sum of the aggregate Value Earned for Work performed through the close of the current Invoice Period and balance to finish on price-basis) which shall equal the scheduled value established in the latest accepted Baseline Project Schedule.

The Design-Builder shall comply with the following price-loaded Baseline Project Schedule requirements:

1. Price-load the Baseline Project Schedule with the monetary valuation of all SOV Line Items comprising, collectively, the D&C Amount. The sum total of scheduled values for all price-loaded Baseline Project Schedule activities shall equal the D&C Amount.
2. Price-load the Preconstruction Baseline Project Schedule with the Preconstruction Baseline SOV; the Construction Baseline Project Schedule with the Construction

Baseline SOV; and each Revised Baseline Project Schedule with the Revised Baseline SOV.

3. Activities assigned to a particular SOV Line Item account in each price-loaded Baseline Project Schedule shall match exactly and roll-up to the associated SOV Line Item values (e.g., scheduled values, aggregate Value Earned for Work performed, and balance to finish values) shown in the corresponding Baseline SOV.
4. Distribute SOV Line Items onto Baseline Project Schedule activities and reflect the Value Earned for Work performed in each subsequent version of the Baseline Project Schedule thereafter in the manner set forth in Section 2.3 (Price-Loading Assignments and Method for Determining Value Earned for Work) of this TP Attachment 2-7.

2.2 Project Schedule Updates

The Design-Builder shall comply with the following price-loaded Project Schedule Update requirements:

1. Once the price-loaded Baseline Project Schedule is accepted, no changes shall be made in any subsequent Project Schedule Update to the SOV Line Item account structure, Baseline Project Schedule activity assignments and individual scheduled value (budgeted amount) assignments. Any Design-Builder-proposed changes to such items shall be submitted by the Design-Builder for GDOT's acceptance as a Revised Baseline Project Schedule Submittal.
2. Activities assigned to a particular SOV Line Item account in each price-loaded Project Schedule Update shall match exactly and roll-up to the associated SOV Line Item values (e.g., scheduled values, aggregate Value Earned for Work performed, and balance to finish values) shown in the corresponding SOV Update.
3. Reflect the Value Earned for Work performed in each Project Schedule Update in the manner set forth in Section 2.3 (Price-Loading Assignments and Method for Determining Value Earned for Work) of this TP Attachment 2-7.

2.3 Price-Loading Assignments and Method for Determining Value Earned for Work

The Design-Builder shall comply with the requirements set forth in Table 2 (Price-Loading Assignments and Method for Determining Value Earned for Work).

Table 2: Price-Loading Assignments and Method for Determining Value Earned for Work

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
A. General			
A.1. Insurance & bonds	Milestone	Lump sum (evenly apportioned to one or more activities representing the associated Work).	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
A.2. Project Office facilities, equipment, and supplies	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
A.3.a. Project management and coordination	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
A.3.b. Home office overhead & support	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
A.3.c. Management Plans	Task dependent	For each Submittal: • Up to 50 percent of the scheduled value shall be assigned in a linear and uniform manner over one or more activities representing the preparation, addressing of comments, and submission. • Forty percent of the scheduled value shall be assigned to one-day “GDOT accept” activity (or on last day of a “GDOT review and accept” activity). • The remainder of the scheduled value shall be apportioned equally by number of planned updates to account for yearly maintenance or required updates to the Submittal.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
A.3.d. Project Schedule and SOV	Task dependent	For each Submittal: • Up to 50 percent of the scheduled value shall be assigned in a linear and uniform manner over one or more activities representing the preparation, addressing of comments, and submission. • Forty percent of the scheduled value shall be assigned to one-day "GDOT accept" activity (or on last day of a "GDOT review and accept" activity). • The remainder of the scheduled value shall be apportioned equally by number of planned updates to account for yearly maintenance or required updates to the Submittal.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
A.3.e. Project reporting	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
A.3.f. Public information and communications	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
A.4. Design-Builder-Led Environmental Permit Approval Services	Task Dependent	For each Submittal: • Up to 60 percent of the scheduled value shall be assigned in a linear and uniform manner over one or more activities representing the preparation, addressing of comments, and submission. • Fifteen percent of the scheduled value shall be assigned to one-day "GDOT accept" activity (or on last day of a "GDOT review and accept" activity). • The remainder of the scheduled value shall be assigned to one-day "agency accept/issue" activity (or on last day of a "agency review and accept/issue" activity). If agency review is not required by the Design-Build Documents, the remainder shall be divided evenly between Design-Builder's Submittal activities and GDOT's "accept" activity.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
A.5. Environmental mitigation costs	Task Dependent	For each Submittal, the apportioned scheduled value shall be assigned to one-day "submit proof of purchase" activity (or on last day of "prepare and submit proof of purchase" activity).	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
A.6. Design-Builder Quality Management	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
A.7. Mobilization	Milestone	Lump sum (evenly apportioned in equal amounts to each NTP1, NTP2, and NTP3 activity).	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.

SOV Line Item	*Baseline Project Schedule activity type*	*Price-loading assignments to Baseline Project Schedule activities and distribution type*	*Method for Determining Value Earned for Work Performed*
B. Design Services			
B.1.a. Design Documents Also see note c.	Task dependent	For each Submittal: • Up to 55 percent of the scheduled value shall be assigned in a linear and uniform manner over one or more activities representing the preparation, addressing of comments, and submission of Preliminary Design Documents (PDDs). • Five percent of the scheduled value shall be assigned to one-day "GDOT accept PDDs" activity (or on last day of a "GDOT review and accept PDDs" activity). • Up to 25 percent of the scheduled value shall be assigned in a linear and uniform manner over one or more activities representing the preparation, addressing of comments, and submission of Final Design Documents (FDDs). • Ten percent of the scheduled value shall be assigned to one-day "GDOT accept FDDs" activity (or on last day of a "GDOT review and accept FDDs" activity). • The remainder of the scheduled value shall be assigned in a linear and uniform manner over one or more activities representing the preparation, addressing of comments, and submission of RFC Design Documents.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
B.1.b. Design-Builder Support to Provided Environmental Approval Reevaluation	Task dependent	See note d.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
B.1.c. ROW Acquisition Services	Task dependent	See note d.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
B.1.d. Utility Design	Task dependent	See note d.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
B.2. Design support during Construction	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
B.2. Record Design Documents	Task dependent	See note d.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
C. Construction			
C.1.a. through C.1.n., C.1.p, C.1.q, C.1.t. and C.1.u.	Task dependent	See note e and note f.	See note g and note h.
C.1.o. Erosion Control	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
C.1.r. Maintenance during Construction & temporary conditions	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.
C.1.s. Traffic control related to ongoing elements of Work such as Work zone law enforcement	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in equal amounts. Also see note b and note i as applicable.

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
C.1.s. Traffic control related to discrete elements of Work such as installation of: 1. Temporary concrete barrier 2. Temporary signals 3. Temporary pavement markings	Task dependent	See note e and note f.	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.
C.2. Training hours	Level of effort	Monthly (linear and uniform over one or more activities representing aggregate duration of the associated Work). Also see note a and note i.	Monthly in amounts accurately reflecting the physical percent complete of the associated Baseline Project Schedule activities representing the Work.
C.3. Punch List, final close-out, and demobilization	Milestone	Lump sum (assigned to Final Acceptance activity).	Upon physical percent complete of the relevant Baseline Project Schedule activities representing the Work.

Notes:

a. Unless otherwise stipulated by the Design-Build Documents, each ongoing level of effort activity shall: a) span the planned start of the activity through Substantial Completion or Final Acceptance, as applicable; and b) be price-loaded with one SOV Line Item only, with a scheduled value equal to the associated SOV Line Item. Adjustments to ongoing level of effort activities shall occur when Work has not started, and the Design-Builder shall reflect 0 percent for that update period and redistribute those funds equally among remaining months.

b. With regard to those SOV Line Items for which value is earned monthly in equal amounts, if the associated schedule duration is adjusted in accordance with the terms of the Design-Build Documents, then the unearned value of that SOV Line Item shall be redistributed equally across the remaining months such that that total amount that may be earned for that item remains unchanged.

c. Requirements prescribed for "B.1.a. Design Documents" shall apply to SOV Line Items apportioned to each Submittal of the Design Documents (whether the sum total of Design Documents representing each stage of the standard design progression (e.g., Preliminary, Final, and RFC Design Documents) for the whole Project or subtotals representing the standard design progression for an element of the Work through a series of staged Design Document Submittals).

d. Unless otherwise stipulated by the Design-Build Documents, the Design-Builder shall apportion the scheduled values for SOV Line Items "B.1.b. Design-Builder Support to Provided Environmental Approval Reevaluation," "B.1.c. ROW Acquisition Services," "B.1.d. Utility Design," and "B.2. Record Design Documents," in a manner consistent with the requirements set forth for "B.1.a. Design Documents," (e.g., distributed across detailed, task dependent activities for "Design-Builder submit," "GDOT acceptance," and "agency acceptance/issuance," of each Submittal, as applicable).

e. The relevant portions of subsidiary SOV Line Items to "C.1. Construction Cost and Support" shall be price-loaded in the Preconstruction Baseline Project Schedule (and any Revised Baseline Project Schedule thereafter) onto the detailed, task-dependent activities representing all early Construction Work packages identified in the Design-Builder's Basis of D&C in the manner set forth in the table above. The remaining portion of the SOV Line Item "C.1. Construction Cost and Support" shall be price-loaded in the Preconstruction Baseline Project Schedule (and any Revised Baseline Project Schedule thereafter) onto one or more summary-level activities representing the Work. Only for such summary-level Construction Work activities allowable under the Preconstruction Baseline Project Schedule, the Design-Builder may elect to apply a distribution curve (e.g., nonlinear) to approximate the forecasted earnings per month for the associated portions of the SOV Line Item.

SOV Line Item	*Baseline Project Schedule activity type*	*Price-loading assignments to Baseline Project Schedule activities and distribution type*	*Method for Determining Value Earned for Work Performed*

f. Unless otherwise stipulated by the Design-Build Documents, all subsidiary SOV Line Items to "C.1. Construction Cost and Support" shall be price-loaded in the Construction Baseline Project Schedule (and any Revised Baseline Project Schedule thereafter) onto the detailed, task-dependent activities representing the associated Construction Work in the manner set forth in the table above.

g. All progress on Construction Work represented by SOV Line Items "C.1.a. through C.1.q., C.1.t. and C.1.u." and all subsidiary SOV Line Items thereof shall be: a) based on the physical percent complete of the relevant Baseline Project Schedule activities; and b) reimbursable up to 90 percent of the scheduled value until all relevant and required documentation has been submitted by the Design-Builder except for the associated Record Design Documents. Upon such submittal, the Design-Builder shall be entitled to reflect as completed the remainder of the schedule value assigned to the relevant Baseline Project Schedule activities.

h. If GDOT determines that physical percent complete for a SOV Line Item was inaccurate in excess of 10 percent and that the inaccuracy is material in nature (i.e., greater than 1% of the D&C Amount) or that unincorporated material is not on-site and that either was reported as Value Earned for Work on a previous approved Invoice, then GDOT may reduce the next Invoice to be processed by the corresponding amount if the Work has not been progressed in line with the reporting or the materials remain undelivered.

i. The Design-Builder may elect to breakout pertinent elements of Work or a portion of SOV Line Items identified as "level of effort" in the table above into detailed, task dependent activities. Such elements shall be price-loaded and recorded as Value Earned for Work performed in a manner consistent with the requirements set forth herein for other "task dependent" elements (such as by Submittal, acceptance, etc.). Alternatively, the Design-Builder may elect to price-load a singular level of effort activity to carry SOV Line Items identified as "level of effort" that span the entire project as shown in the table above (e.g., use a singular Project Management activity price-loaded with separate cost accounts and expense line items (or equivalent) for A.2, A.3.a, A.3.b, A.3.e, A.3.f, etc.).

General requirements:

1. The scheduled value (or portion of scheduled value) of each SOV Line Item assigned to each Baseline Project Schedule activity shall accurately represent the value of the component of the Work identified.
2. No Baseline Project Schedule activity may be of a nature to have a scheduled value less than $1,000.00. No Baseline Project Schedule activity may be assigned a scheduled value greater than $500,000.00 except for the following: ongoing level of effort activities listed in table above and summary-level activities allowable under Preconstruction Baseline Project Schedule Submittals or as otherwise stipulated by the Design-Build Documents.
3. Baseline Project Schedule activities shall not be front-loaded, whether over an individual activity's duration or when a SOV Line Item is apportioned across multiple Baseline Project Schedule activities. Unless otherwise stipulated by this TP Attachment 2-7, the Design-Builder shall distribute prices in a linear and uniform manner unless otherwise identified with justification provided by the Design-Builder in the Baseline Project Schedule Narrative, subject to GDOT review and acceptance.
4. The Design-Builder shall provide further detail to accurately represent the SOV Line Item scheduled value apportioned to each Baseline Project Schedule activity when directed in writing by GDOT.
5. No portion of a scheduled value shall be recorded as Value Earned for Work performed in an SOV Update and Project Schedule Update on any Baseline Project Schedule activity that does not contain an accurate actual start date. The full scheduled value shall only be marked as Value Earned for Work performed in an SOV Update and Project Schedule Update on Baseline Project Schedule activities that contain an accurate actual finish date.
6. The Value Earned for Work performed shall be reflected in each SOV Update and Project Schedule Update for the period in which the Work was performed; and subject to all requirements for Nonconforming Work as set forth in the Design-Build Documents.
7. The Design-Builder may price-load a portion of a SOV Line Item onto Baseline Project Schedule activities that account for Project specific unincorporated materials as set forth in Section 1.5 (Unincorporated Materials) of this TP Attachment 2-7. In no case shall the portion of scheduled value assigned to a Baseline Project Schedule activity representing the unincorporated material exceed 75 percent of the total scheduled value for the SOV Line Item in aggregate and the associated Permanent Works at the specific location to which the materials will be incorporated. The Design-Builder shall not price-load any Baseline Project Schedule activity representing unincorporated material worth less than the amount in Section 1.5 (Unincorporated Materials) of

SOV Line Item	***Baseline Project Schedule activity type***	***Price-loading assignments to Baseline Project Schedule activities and distribution type***	***Method for Determining Value Earned for Work Performed***
this TP Attachment 2-7. The scheduled value for each unincorporated materials item shall be assigned to a one-day "obtain and store unincorporated materials" activity (or on the last day of a "fabricate, deliver, obtain and store unincorporated materials" activity) representing the associated Work in the Baseline Project Schedule. The method for determining the Value Earned for Work performed for unincorporated materials shall comply with the requirements for "C.1.a. through C.1.q., C.1.t. and C.1.u." and all subsidiary SOV Line Items thereof in the manner set forth in this Table 2.			

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-8

Project Schedule and SOV Submittal Requirements

Attachment 2-8: Project Schedule and SOV Submittal Requirements

1 Schedule of Values Submittal Requirements

1.1 Baseline SOV Submittal Requirements

The Design-Builder shall submit each Baseline SOV in MS Excel (.xlsx or equivalent) and PDF in the manner set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements) and "rolled-down" to display all levels of SOV Line Items.

The Design-Builder shall include a Baseline SOV narrative (PDF) meeting the requirements prescribed herein with all Baseline SOV Submittals. The Design-Builder shall update and correlate the Baseline SOV narrative with each Baseline SOV Submittal. The Baseline SOV narrative shall describe the Design-Builder's rational basis for the contents included on the Baseline SOV, including sufficient detail that addresses each of the following:

1. The structure and organization of the Baseline SOV
2. The scope of each SOV Line Item shown on the Baseline SOV
3. The scheduled value (budgeted amount) assigned to each SOV Line Item

1.2 SOV Update Submittal Requirements

The Design-Builder shall submit each SOV Update in MS Excel (.xlsx or equivalent) and PDF formats in the manner set forth in TP Attachment 2-7 (SOV and Price-Loading Requirements) including:

1. An exhibit (PDF) of the SOV Update that is prepared in the same manner set forth for the Baseline SOV and "rolled-down" to display all levels of SOV Line Items.
2. An exhibit (PDF) of the SOV Update that is prepared in the same manner set forth for the Baseline SOV and "rolled-up" to display only levels of SOV Line Items that detail and enumerate the Value Earned for Work performed during the current Invoice Period, with the total of the Value Earned for Work performed during the current Invoice Period matching the amount shown on the corresponding Invoice.

For price-loaded Project Schedules (when applicable), the data shown on the SOV Update shall match exactly the corresponding data shown on the Project Schedule Update, including the SOV Line Item assignment data exhibit.

2 Project Schedule Submittal Requirements

The file type for each Project Schedule Submittal shall be electronic Primavera P6 file format (XER) compatible with the software version in use by GDOT at the date of Submittal. If the Design-Builder intends to use a different file type, the file shall be a P6 export file type providing equivalent functionality and readability to the XER file type and shall be subject to GDOT's acceptance prior to the Preconstruction Baseline Project Schedule Submittal. The Design-Builder shall not submit multiple P6 Projects in a single XER file.

2.1 Baseline Project Schedule Submittal Requirements

In addition to submitting the XER file of each Baseline Project Schedule, the Design-Builder shall include the following with each Baseline Project Schedule Submittal:

1. Baseline Project Schedule Narrative (PDF or MS Word file format) meeting the requirements prescribed herein.
2. Gantt chart exhibit (PDF) filtered to display all activities.
3. Gantt chart exhibit (PDF) filtered to display activities on the Critical Path.
4. If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), each Baseline Project Schedule Submittal shall additionally include the following:
    a. SOV Line Item assignment data (PDF): shall be a product of the software creating the price-loaded Baseline Project Schedule and in a tabular layout or report grouped by SOV Line Item accounts with summary band info displayed and "rolled-down" to display all assigned price-loaded Baseline Project Schedule activities. Display the SOV Line Item account; activity ID; activity name; activity status; budgeted unit; price per unit; budgeted cost (i.e., scheduled value); percent complete; actual cost (i.e., aggregate Value Earned for Work performed) based on approved Invoices; remaining cost; at completion cost (which shall match the budgeted cost); and activity assignment distribution type.
    b. Incremental and cumulative S-curve data (MS Excel format): shall be a product of the software creating the price-loaded Baseline Project Schedule and in a tabulation of monthly incremental and cumulative price-loaded data including actual values and forecasted values (i.e., remaining and at completion values) on an early-date and late-date basis.

2.2 Project Schedule Update Submittal Requirements

In addition to submitting the XER file of each Project Schedule Update, the Design-Builder shall include the following with each Project Schedule Update Submittal:

1. Project Schedule Update Narrative (PDF or MS Word file format) meeting the requirements prescribed herein.
2. Gantt chart exhibit (PDF) filtered to display all activities.
3. Gantt chart exhibit (PDF) filtered to display activities on the Critical Path.
4. If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), each Project Schedule Update Submittal shall additionally include the following:
    a. SOV Line Item assignment data (PDF): shall be a product of the software creating the price-loaded Project Schedule Update and presented in a tabular layout or report grouped by SOV Line Item accounts with summary band info displayed and "rolled-down" to display all price-loaded activities showing: a) the scheduled (i.e., budgeted) value of each activity as accepted in the Baseline Project Schedule; and b) the actual value (i.e., aggregate Value Earned for Work performed) asserted by the Design-Builder to have been progressed (each in relation to the scheduled value established in the latest accepted Baseline Project Schedule) through the current Invoice Period. Display the SOV Line Item account; activity ID; activity name; activity status;

budgeted unit; price per unit; budgeted cost (i.e., scheduled value established in the latest accepted Baseline Project Schedule); percent complete; actual cost (i.e., aggregate Value Earned for Work performed through the current Invoice Period); remaining cost; at completion cost (which shall match the budgeted cost); and activity assignment distribution type. The data shown on the SOV Line Item assignment data shall match exactly the corresponding data shown on the SOV Update.

2.3 Gantt Chart Exhibit Requirements

All Gantt chart exhibits submitted by the Design-Builder shall:

1. Be generated from and match exactly the data contained in the then-current XER file of the Project Schedule.
2. Be in 11-inch by 17-inch landscape color PDF, at 85 percent normal or greater.
3. Be in Arial font, black in color, and a minimum size of 8-point font.
4. Display the activity table on the left side and bar chart on the right side of each page. The timescale shall be commensurate with the filter used (e.g., display Project start through Project finish with the year and month displayed for most exhibits). The timescale for look-ahead schedules shall be scaled appropriately to the shorter interval being displayed.
5. Display activities organized by a logical grouping such as WBS (or by equivalent activity code groupings).
6. Display the following columns: activity ID; activity name; original duration; remaining duration; start date; finish date; physical percent complete; total Float; activity calendar; and, if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), price-loaded data (scheduled (i.e., budgeted) value as accepted in the Baseline Project Schedule and the actual value (i.e., aggregate Value Earned for Work performed) through the current Invoice Period).
7. Display a legend at the bottom of each page that displays the following: Design-Builder name; Project number and name; Primavera P6 project ID and file name; layout and filter name; data date; date prepared; bar legend; and page numbers (current and total). The legend shall define all abbreviations, terms, and symbols used.
8. Display distinctive colors, symbols, and bar types for activities shown on the Gantt chart. Show task dependent activities on the Critical Path as red bars, completed activities as blue bars, remaining (non-critical) activities as green bars, level of effort activities as teal bars, and Milestones as black diamonds.

2.4 Project Schedule Narrative Requirements

With each Project Schedule Submittal, the Design-Builder shall include a Project Schedule Narrative. The Design-Builder shall update and correlate the Project Schedule Narrative with each Project Schedule Submittal.

2.4.1 Baseline Project Schedule Narratives

Each Baseline Project Schedule Narrative shall include the following, separated into sections:

1. Reference to the Basis of D&C with which the Baseline Project Schedule Submittal aligns. Construction Baseline Project Schedule Submittals shall additionally reference the corresponding Construction Phasing and Staging Plan.
2. Identification of the Design-Builder's planned resourcing and staffing levels to perform all D&C Work. The Design-Builder shall identify all resource constraints, including a listing of the various types and available number of design and construction crews and major equipment to perform the D&C Work. Describe how these resource constraints are incorporated into the Baseline Project Schedule, including the order in which the Design Work will progress based on the available design team resources, where the Construction Work will begin, and how crews will progress through the Project based on the available construction resources. If recovery efforts are required as part of a Revised Baseline Project Schedule, the Design-Builder shall also identify the composition of, and production rate for, each crew type.
3. A description of the Critical Paths and near-Critical Paths.
4. Identification of any non-work periods, starts, or completions imposed on the Baseline Project Schedule. The Design-Builder shall clearly identify such starts or completions imposed (e.g., special calendars, constraints, etc.) on the Baseline Project Schedule and include a detailed description of each.
5. Identification of any lag greater than zero days proposed and an explanation for the purpose of the lag.
6. A statement describing the status of any required permits.
7. If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), the Design-Builder shall include a description detailing how specific scheduled value assignments were determined, distributed, and allocated to Baseline Project Schedule activities for each SOV Line Item.
8. A description of any risks, issues, or problems encountered or anticipated since the latest accepted Baseline Project Schedule, inclusive of any unusual labor, shift, equipment or material conditions, or restrictions encountered. The Design-Builder shall include proposed and recommended solutions to each item identified.
9. Excepting the Preconstruction Baseline Project Schedule Submittal, the Design-Builder shall include a detailed description of all proposed changes to the latest accepted Baseline Project Schedule with justification for changes to any of the following: Critical Path; activity sets (added, deleted, or modified); original durations; activity relationships (logic); calendar assignments; calendar work and non-work periods (work days or work hours per day); constraints; WBS (or equivalent activity code groupings); activity code definitions; software settings; scheduled value assignments for price-loaded activities (if the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule)); modifications to historical actual progress data (actual dates, actual price data, etc.) shown in the latest accepted Baseline Project Schedule; and inclusion of Work authorized by Supplemental Agreement. Identify any changes to the work crews (number and size of each crew), shifts, hours worked, days worked, or major equipment changes.

10. A description of the status of the forecasted completion dates relative to the Milestone Deadlines. The Design-Builder shall address any changes since the latest accepted Baseline Project Schedule.
11. A description detailing the Design-Builder's Work Breakdown Structure (WBS), activity coding, activity identification numbers, and definition of activities included in the Baseline Project Schedule.
12. A description of how the Baseline Project Schedule addresses and accommodates the following:
    a. Use and application of the Design-Builder's workdays per week, number of shifts per day, number of hours per shift, and holidays observed.
    b. Anticipated adverse weather days for each month.
    c. Work to be completed each season.
    d. Maintenance of traffic.
    e. Lane closure or travel restriction periods.
    f. Self-imposed and regulatory non-work periods for environmental or other restrictions.
    g. All other non-work periods.
    h. All other time restrictions prescribed by the Design-Build Documents. The Design-Builder shall include a list of all calendars and all constraints used in the Baseline Project Schedule and a description of the use of each.
13. If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), include a description detailing the Design-Builder's methodology for price-loading the Baseline Project Schedule with the Baseline SOV.

2.4.2 Project Schedule Update Narratives

Each Project Schedule Update Narrative shall include the following, separated into sections:

1. A detailed description of the Work performed during the current Invoice Period in relation to the latest accepted Baseline Project Schedule. The Design-Builder shall sufficiently describe all Design Work, Administrative Work, and all other pre-Construction Work performed during the current Invoice Period, identifying the scopes of Work performed, including identifiable features of Work (e.g., specific design package, Submittal, ROW parcel, permit type, procurement item, etc.) and each responsible Contractor. The Design-Builder shall sufficiently describe all Construction Work performed during the current Invoice Period, identifying the scopes of Work performed, including identifiable features of Work (e.g., identifiable physical locations within definable geometric limits) and each responsible Contractor. If the Work performed does not match the Work scheduled to be performed as forecasted in the latest accepted Baseline Project Schedule (on an early-date basis), the Design-Builder shall include a detailed description of why there is a discrepancy between the activities that should have been completed or progressed as indicated (on an early-date basis) in the latest accepted Baseline Project Schedule. The Design-Builder shall include an analysis of time lost and gained during the current Invoice Period on the Critical Path and near-Critical Paths as indicated in the latest accepted Baseline Project Schedule. The Design-Builder shall include an analysis and explanation for the consumption of available Float (as established for each activity in the latest accepted Baseline Project Schedule) during the current Invoice Period.

2. If the Design-Builder elects to price-load the Baseline Project Schedule with the Baseline SOV as set forth in TP Section 2.4.4.6 (Price-Loaded Project Schedule), the Design-Builder's rational basis and justification for the asserted Value Earned for Work performed (each in relation to the scheduled value established in the latest accepted Baseline Project Schedule) for activities marked as started, completed, and in-progress during the current Invoice Period.
3. A description of the status of the forecasted completion dates relative to the Milestone Deadlines. The Design-Builder shall address any changes since the latest accepted Baseline Project Schedule and provide an explanation if any forecasted completion dates are projected to occur after the Milestone Deadlines.
4. A description of any risks, issues, or problems encountered or anticipated since the latest accepted Baseline Project Schedule, inclusive of any unusual labor, shift, equipment or material conditions, or restrictions encountered. The Design-Builder shall include proposed and recommended solutions to each item identified.
5. A statement describing the status of any required permits.
6. A detailed description of all proposed changes introduced in a Project Schedule Update relative to the latest accepted Baseline Project Schedule with justification for changes to any of the following: activity sets (added, deleted, or modified); original durations; activity relationships (logic); calendar assignments; calendar work/non-work periods (work days or work hours/day); WBS (or equivalent activity code groupings); activity code definitions; and software settings. Identify any changes to the work crews (number and size of each crew), shifts, hours worked, days worked, or major equipment changes.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 2-9

Reserved

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P.I. No. 0017182

Attachment 2-10

Submittal Requirements Database

Attachment 2-10: Submittal Requirements Database

1 Definitions

Term	*Definition*
Submittal Classifications	
AW	Administrative Work
DW	Design Work
CW	Construction Work
General Abbreviations	
EPA	Environmental Protection Agency
EPD	Environmental Protection Division
FEMA	Federal Emergency Management Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
IGA	Intergovernmental Agreement
NA	Not Applicable
NTP	Notice to Proceed
TBD	To be determined by the Design-Builder in coordination with GDOT
USACE	United States Army Corps of Engineers
Discipline Group Abbreviations	
ROW	Right of Way
RRUT	Railroad, Utilities, and Transit
RDMOT	Roadway, Drainage, and Maintenance of Traffic
BSRA	Bridge, Structures, Retaining Walls, and Aesthetics
ITSTT	ITS, Toll Infrastructure, and Traffic, including signing, pavement marking, signals, and lighting
PMPQ	Project Management and Project Quality
ENV	Environmental

Item No.	Submittal Item Description	Source	Delivery Date	Submittal Type	Discipline Group	Base GDOT Review Period	BD or CD	Additional Information
000010	SC List	DBA Article 7	Prior to Substantial Completion	2	PMPQ	10	BD	
000020	FA Punch List	DBA Article 7	Prior to Final Acceptance	2	PMPQ	10	BD	
000025	Invoice package (Invoice and Invoice Support Package)	DBA Exhibit 7, TP Section 2	After approval of Baseline SOV, and within 5 Business Days following close of each invoice Period	2	PMPQ	5	BD	
010010	Preliminary Project Office Layout	TP Section 1	Prior to NTP 2	1	PMPQ	10	CD	
010020	Final Project Office Layout	TP Section 1	Prior to Establishment of Project Office	2	PMPQ	5	BD	
020020	PMP	TP Section 2	Prior to NTP 2, and NTP 3 (if any updates)	2	PMPQ	10	BD	
020060	OJT Plan	TP Section 2	Prior to NTP 3	2	PMPQ	30	BD	
020110	Basis of D&C	TP Section 2	Prior to NTP 2, and NTP 3 (if any updates)	2	PMPQ	15	BD	
020120	Utility Management Plan	TP Section 2, TP Section 7	Prior to NTP 2	2	PMPQ	10	BD	
020130	Transportation Management Plan (TMP)	TP Section 2, TP Section 18	Prior to NTP 3	2	PMPQ	15	BD	
020140	Comprehensive Environmental Protection Plan	TP Section 2, TP Section 5	Prior to NTP 2, and NTP 3 (if any updates)	2	PMPQ	15	BD	
020150	"Maintenance Management Plan (MMP)"	TP Section 2, TP Section 19	Prior to NTP 3	2	PMPQ	15	BD	
020160	ITS Infrastructure Implementation Plan	TP Section 2, TP Section 17	Prior to start of ITS Work	2	PMPQ	10	BD	
020170	ROW Acquisition Plan	TP Section 2, TP Section 6	Prior to Start of Acquisition Services; Alternative Parcel Grouping; Specialty Report	2	PMPQ	20	BD	
020180	Safety Plan	TP Section 2	Prior to any Field work	1	PMPQ	10	BD	
020190	Construction Phasing and Staging Plan	TP Section 2	Prior to NTP 3	2	PMPQ	15	BD	
020210	Change to any component of the PMP	TP Section 2	As directed by GDOT	**	PMPQ	**	**	** As specified herein for each component of the PMP
020215	Preconstruction Baseline SOV	TP Section 2	Within 5 Business Days of NTP1 issuance	2	PMPQ	10	BD	Can be combined with Construction Baseline SOV
020230	Construction Baseline SOV	TP Section 2	Prior to NTP 3	2	PMPQ	10	BD	
020240	Revised Baseline SOV	TP Section 2	Within 14 days of being directed by GDOT	2	PMPQ	10	BD	
020245	Preconstruction Baseline Project Schedule (BPS)	TP Section 2	Within 5 Business Days of NTP1 issuance	2	PMPQ	15	BD	Can be combined with Construction Baseline Project Schedule

Item No.	*Submittal Item Description*	*Source*	*Delivery Date*	*Submittal Type*	*Discipline Group*	*Base GDOT Review Period*	*BD or CD*	*Additional Information*
020260	Construction Baseline Project Schedule (BPS)	TP Section 2	Prior to NTP 3	2	PMPQ	20	BD	
020270	Revised Baseline Project Schedule (BPS)	TP Section 2	Within 14 days of being directed and when required per TP Section 2	**	PMPQ	**	**	** Same as the BPS type (i.e., Preconstruction BPS, Construction BPS) that the Revised BPS is intended to replace
020280	Project Schedule Updates	TP Section 2	After GDOT acceptance of a BPS and within 5 Business Days following close of each Invoice Period	1	PMPQ	10	BD	
020300	Two-Week Detail Schedules	TP Section 2, TP Section 3	Same day every week in which Construction Work occurs	1	PMPQ	5	BD	
020310	Traffic Impact Report	TP Section 2	Weekly when Lane Closures are implemented	1	RDMOT	3	BD	
020320	Streaming camera Specifications and Locations	TP Section 2	Prior to NTP 3	2	TBD	15	BD	
030010	Corrective/Preventative Action Report (PAR)	TP Section 3	No later than 5 Days after issuance of a Corrective Action Request (CAR) by GDOT	3	PMPQ	15	BD	
040010	Preliminary Design Documents (PDDs)	TP Section 4	After issuance of NTP 2	1	TBD	30	CD	Applies to all PDDs, unless included separately in this TP Attachment 2-10
040020	Preliminary Bridge Layout	TP Section 13	After issuance of NTP 2	2	BSRA	15	BD	
040030	Final bridge plans	TP Section 13	Prior to Start of Associated Construction Work	3	BSRA	20	BD	
0040040	Final Design Documents (FDDs)	TP Section 4	After GDOT acceptance of PDDs	2	TBD	15	BD	Applies to all FDDs, unless included separately in this TP Attachment 2-10. Final Design packages may be combined per accepted Basis of D&C.
040050	Final Signal Plans	TP Section 16	Prior to Start of Associated Construction Work	2	ITSTT	15	BD	
040060	Final Signing Plans	TP Section 16	Prior to Start of Associated Construction Work	2	ITSTT	15	BD	
040070	Final Lighting Plans	TP Section 11	Prior to Start of Associated Construction Work	2	ITSTT	15	BD	
040080	Final ESPC Plans	TP Section 5	Prior to NTP 3	1	RDMOT	NA	CD	To be submitted to EPD concurrent with NOI.
040090	RFC Design Documents (RFCDDs)	TP Section 4	Prior to Start of Associated Construction Work	1	TBD	5	BD	
040100	Level 1 Field Design Changes (FDCs)	TP Section 4	Prior to Start of associated Construction Work	1	TBD	5	BD	
040110	Level 2 FDCs & Changes to RFCDDs	TP Section 4	Prior to Start of associated Construction Work	2	TBD	10	BD	
040120	Record Design Documents	TP Section 4	Prior to Final Acceptance	2	TBD	10	BD	

Item No.	Submittal Item Description	Source	Delivery Date	Submittal Type	Discipline Group	Base GDOT Review Period	BD or CD	Additional Information
040130	Shop Drawings (SDs)	TP Section 4	Prior to Start of associated Construction Work	1	TBD	10	BD	
040140	Changes to SDs	TP Section 4	Prior to Start of associated Construction Work	1	TBD	10	BD	
040150	Construction Documents (CDs)	TP Section 4	Prior to Start of associated Construction Work	1	TBD	10	BD	
050010	Updated Environmental Resource Impact Table (ERIT) (including narrative & documentation to support amendments or supplements including environmental reevaluation)	TP Section 5	Prior to Start of associated Construction Work	2	ENV	30	CD	
050020	"Section 404 Permit Application (Type TBD)"	TP Section 5	Prior to Start of associated Construction Work	2	ENV	30	CD	USACE 30-day Review *not* included; see TP Table 5-4
050030	Georgia Stream Buffer Variance (SBV) Application	TP Section 5	Prior to Start of associated Construction Work	2	ENV	30	CD	EPD 30-day Review *not* included; see TP Table 5-4
050040	NPDES Construction General Permit (GAR100002), NOI	TP Section 5	Prior to Start of associated Construction Work	1	ENV	NA	CD	
050050	NPDES Construction General Permit (GAR100003), NOI	TP Section 5	Prior to Start of associated Construction Work	1	ENV	NA	CD	
050060	Noise Barrier Change Memorandum	TP Section 5	Prior to Submittal of Noise Barrier Design to support Noise Barrier Vote	2	ENV	15	CD	
050070	Noise Barrier Design to support GDOT-Led Noise Barrier Vote	TP Section 5	After GDOT acceptance of Noise Barrier Change Memorandum	1	ENV	15	CD	
050080	Submittals to support Noise Impact Assessment (NIA) conducted by GDOT	TP Section 5	After GDOT acceptance of Noise Barrier Design to support GDOT-Led Noise Barrier Vote	2	ENV	30	CD	
050090	Limited Access Fencing Removal and Installation Plan	TP Section 5	Prior to Start of associated fencing removal and installation within ESAs	2	ENV	30	CD	
050100	USACE Section 404 and GA EPD Buffer Variance Mitigation Credits Proof of Purchases	TP Section 5	Prior to Start of associated Construction Work within ESAs	2	ENV	30	CD	
060010	Acquisition Services Status Report	TP Section 6	During the Acquisition Phase	2	ROW	10	CD	
060020	ROW Plans/Maps	TP Section 6	After GDOT acceptance of Acquisition Plan and Prior to Parcel Acquisition	2	ROW	30	CD	
060030	Appraisal	TP Section 6	After GDOT acceptance of Acquisition Plan and prior to Relocation Package; Proposed Negotiation Settlement Offer; Administrative Review Package; Condemnation Package	2	ROW	30	CD	
060040	Relocation Benefits Claim Form	TP Section 6	Prior to GDOT Payment to displace	2	ROW	14	CD	
060050	Administrative Review Package	TP Section 6	Prior to Closing of Parcel	2	ROW	14	CD	
060060	Condemnation Package	TP Section 6	Prior to Condemnation of Parcel	2	ROW	30	CD	

Item No.	*Submittal Item Description*	*Source*	*Delivery Date*	*Submittal Type*	*Discipline Group*	*Base GDOT Review Period*	*BD or CD*	*Additional Information*
060070	Final Parcel File	TP Section 6	Prior to ROW Certification & Release	2	ROW	14	CD	
070010	Emergency Utility Response Plan (EURP)	TP Section 7	Prior to start of SUE QL-A investigations or start of corresponding field activities	2	RRUT	14	CD	
070020	URPN Letter 1	TP Section 7	Prior to QL-B Submittal	1	RRUT	7	CD	
070030	Supplemental verification of Overhead/Subsurface Utility Engineering (SUE) Investigations - QL-B	TP Section 7	After GDOT acceptance of URPN letter 1a and Prior to UIA Submittal	1	RRUT	14	CD	
070040	Utility Impact Analysis (UIA)	TP Section 7	Prior to UAP Submittal	1	RRUT	14	CD	
070050	Overhead/Subsurface Utility Engineering (SUE) Investigations - QL-A as required	TP Section 7	Prior to UAPP Submittal	1	RRUT	7	CD	
070060	Utility Adjustment Preliminary Plans (UAPP)	TP Section 7	Prior to UAP Submittal	1	RRUT	21	CD	
070070	Utility Adjustment Plans (UAP)	TP Section 7	Prior to URPN Letter 2 and associated construction work	1	RRUT	14	CD	
070080	Utility Status Report (USR)	TP Section 7	As required	1	RRUT	14	CD	
070090	URPN Letter 2	TP Section 7	After GDOT acceptance of UAP and prior to NTP 3	1	RRUT	7	CD	
070100	Utility Adjustment Field Modification Procedure (UAFMP)	TP Section 7	As required	1	RRUT	14	CD	
070110	Utility Work Plan	TP Section 7	As required	2	RRUT	21	CD	
070120	Interim Utility As-Built Drawings	TP Section 7	No later than 90 days after completion of Utility Adjustment	1	RRUT	14	CD	
070130	Final Utility As-Built Drawings	TP Section 7	Prior to Final Acceptance	1	RRUT	21	CD	
070140	Utility Facility Relocation Acceptance Form	TP Section 7	Prior to Final Acceptance	2	RRUT	14	CD	
080010	Subsurface exploration and testing program	TP Section 8	Prior to drilling activities	2	RRUT	15	BD	
080020	Environmental Site Assessment Phase I	TP Section 8	After satisfying requirements prescribed in DBA Section 3.4	2	TBD	25	BD	
080030	Environmental Site Assessment Phase II	TP Section 8	After Environmental Site Assessment Phase I acceptance	2	TBD	25	BD	
080040	Dynamic pile testing reports	TP Section 8	Prior to Start of Associated Construction work	1	TBD	10	BD	
080050	Blasting plan(s)	TP Section 8	Prior to Start of Associated Construction work	2	TBD	15	BD	

Item No.	Submittal Item Description	Source	Delivery Date	Submittal Type	Discipline Group	Base GDOT Review Period	BD or CD	Additional Information
080060	Pavement Designs	TP Section 8	Prior to FDDs	3	RDMOT	25	BD	
080070	Geotechnical Engineering Reports	TP Section 8	Prior to Submittal of associated FDDs	2	TBD	25	BD	
090010	Survey Letters	TP Section 9	Prior to accessing private property	2	TBD	5	BD	
090020	Survey Control Package	TP Section 9	Prior to survey	1	TBD	5	BD	
090030	Initial bathymetric charts and sonar images	TP Section 9	Prior to Start of associated Construction Work	2	TBD	10	BD	
090040	Final bathymetric charts and sonar images	TP Section 9	After completion of associated Construction Work & Prior to Final Acceptance	2	TBD	10	BD	
110030	Design Exceptions	TP Section 11	Prior to NTP 3	3	RDMOT	30	CD	
110040	Design Variances	TP Section 11	Prior to NTP 3	3	RDMOT	30	CD	
110050	Photometric Lighting Study	TP Section 11	Prior to Start of Associated Construction work	2	RDMOT	30	BD	Review time includes GDOT Design Policy & Support Review
120010	CLOMR Application	TP Section 12	Prior to Start of construction activities within the applicable floodplain/floodway	3	TBD	15	BD	
120020	Draft Post Construction Stormwater Report (PCSR)	TP Section 12	Prior to Start of Construction Work	1	RDMOT	15	BD	Review time includes GDOT Design Policy & Support Review
120030	Post Construction Stormwater Report (PCSR)	TP Section 12	Prior to EPD disapproval period expiration prior to Substantial Completion	2	RDMOT	30	BD	Review time includes GDOT Design Policy & Support Review
120040	Non-MS4 Detention Report	TP Section 12	Prior to NTP 3	2	RDMOT	30	BD	Review time includes GDOT Design Policy & Support Review
120050	MS4 Quarterly Reporting	TP Section 12	Beginning at NTP3	1	RDMOT	10	BD	
130010	Bridge Demolition Plan	TP Section 13	Prior to Bridge Demolition	2	PMPQ	25	BD	
130020	FAA Submittals	TP Section 13	Prior to Start of Associated Construction work	1	TBD	NA	BD	Only if FAA approval is required
130030	Temporary Vertical Clearance Request	TP Section 13	Prior to Start of Associated Construction work	3	BSRA	25	BD	
130040	Load Rating Template	TP Section 13	Prior to FDDs	2	BSRA	15	BD	
150020	Embellishment mock-ups	TP Section 15	Prior to Start of Associated Construction work	2	TBD	5	BD	Not often required
160010	Traffic Signal Timing Plan	TP Section 16	Prior to beginning signal work	2	ITSTT	10	BD	

Item No.	Submittal Item Description	Source	Delivery Date	Submittal Type	Discipline Group	Base GDOT Review Period	BD or CD	Additional Information
160020	Traffic Signal Permit	TP Section 16	Prior to beginning signal work	2	ITSTT	15	BD	Review time includes GDOT Traffic Operations Review
160030	Signal Equipment Salvage List	TP Section 16	72 hours before removal of existing equipment	2	ITSTT	3	CD	
180005	TTCP	TP Section 18	NTP 3 and Prior to start of Associated Construction Work	2	RDMOT	10	BD	
180010	Traffic Interruption Request	TP Section 18	Prior to start of associated Lane Closure; see Note	2	RDMOT	See Note	BD	The following schedule should be followed: 1. Notice of openings should be given two weeks in advance of implementing the change. 2. Notice of detours should be given one week prior to implementing. 3. Lane closures and other traffic interruptions should be reported a week in advance and at no time less than three days prior to implementing.
180020	Request to modify Lane Closure time periods or Lane Closure restrictions	TP Section 18	Prior to Lane Closure impacted by request; see note above	3	RDMOT	5	BD	
190010	Baseline Element Condition Report (BECR)	TP Section 19	Prior to NTP3	2	MN	15	BD	
230040	Encroachment Impact Assessment	TP Section 23	Prior to GDOT issuance of encroachment permit	3	OTH	Unlimited	BD	

3 DESIGN-BUILD QUALITY PROGRAM

3.1 General Requirements

This TP Section 3 sets out the requirements for the Design-Build Quality Control Program for the Work (including Maintenance During Construction). The Design-Builder shall establish, implement, and continually improve the Design-Builder Quality Program.

3.2 Administrative Requirements

3.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 3 in accordance with the Project Standards.

3.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

3.2.3 Required Meetings

See the requirements in TP Section 2.2.3 (Required Meetings).

3.2.4 Design-Builder Coordination with GDOT Oversight

The Design-Builder shall provide the following for GDOT in its performance of GDOT oversight pursuant to DBA Section 6.3 (Submittal Review; GDOT Oversight; Quality Posture): coordinated schedules, training, equipment, and a means to allow for safe access to the Site. The Design-Build shall implement construction Quality Control processes and procedures on all Construction Work prior to the performance of Quality Assurance by GDOT, including performing these functions within the requirements set out in the Submittal Requirements Database.

GDOT will provide construction engineering inspection and testing in accordance with GDOT Specifications and the Engineer of Record's Design Documents. GDOT will provide plant inspection, testing and certification of plant produced materials at existing GDOT approved plant locations such as for precast/pre-stressed concrete, asphalt, and structural steel fabrication.

3.2.4.1 Nonconforming Work and Corrective Action

The QMP shall include processes and procedures for the identification, prevention, and rectification of Nonconforming Work described in TP Section 3.5 (Nonconforming Work) and the procedures that the Design-Builder shall use to prepare Corrective/Preventative Action Reports (PARs) in response to a Corrective Action Request (CAR) issued by GDOT in accordance with TP Section 3.5.7 (Corrective Action Request) and TP Section 3.5.8 (Corrective/Preventative Action Report).

The Design-Builder's corrective and preventative action procedures shall include the following:

1. Identification and improvement of processes and remedy of issues that produce, or may produce, systemic Nonconforming Work.

2. Procedures to investigate the cause of systemic Nonconforming Work and to determine what corrective action is needed to prevent recurrence.
3. Procedures to analyze all processes, work operations, quality records, service reports, and assessments/testing to detect and eliminate the possibility of systemic Nonconforming Work from occurring.
4. Controls to ensure that effective corrective action is taken when the need is identified.
5. Methods to implement and record changes in procedures resulting from any corrective action.

3.3 Design Quality Control

The Design-Builder shall perform quality control to ensure that the Design Work and all submittals meet the requirements of the Design-Build Documents, TP Section 2.9 (Submittals), and the accepted Management Plans.

3.3.1 Requirements

The Design-Builder shall integrate design Quality Control into its production operations by developing processes, procedures, reviews, and checks to control the quality of the Design Work. Design Quality Control shall include:

1. Review and checking of math and engineering computations
2. Technical accuracy
3. Appropriate methodology
4. Compliance with applicable codes and standards
5. Conformance to Design-Build Document requirements
6. Review of form, content, and spelling
7. Coordination with other disciplines, including construction

Designated design Quality Control personnel, who are not directly responsible for the particular Design Work product and are under the supervision of the DQCM, shall:

1. Be responsible for reviewing and checking the Design Work product for conformance with the requirements of the Design-Build Documents.
2. Participate in audits in which compliance with processes and procedures are verified.
3. Ensure the implementation of any changes identified.

The design Quality Control shall be carried out to a level commensurate with the complexity of the design approach and the criticality of the design element. The design Quality Control shall be led by a Professional Engineer officially licensed in at least one state within the United States with an appropriate level of experience in the design discipline of the Work being reviewed and checked. Each design Quality Control review and check shall clearly identify the design engineer and the individual performing the design Quality Control and be verified by the DQCM. The Design-Builder shall maintain in auditable format all design Quality Control records showing date, designer, reviewer, and resolution of comments. The Design Work will be provided to GDOT as complete Submittals inclusive of all necessary evidence demonstrating the Submittal has been subject to the required quality processes, checks, reviews, and approvals, and

contains the necessary records and certifications that are required by the Design-Build Documents.

Design Quality Control shall also evaluate whether the design engineer appropriately applied the correct analyses and assigned qualified personnel to the tasks, including the following:

1. Addressing whether the design solution meets the requirements set out in the Design-Build Documents and, if not, proposing remedies.
2. Addressing or incorporating internal or external design comment resolution.
3. Applying appropriate skill and experience to the particular complexity of the Work.
4. Applying professional engineering judgment, taking into consideration safety, operational requirements, Level of Service, life cycle performance, and the standards and performance requirements set out in the Design-Build Documents.
5. Applying Good Industry Practice, methods, techniques, and standards.
6. Verifying software output information. Use of software does not relieve designers of their responsibility to perform required design Quality Management of designs performed using this software.

The design Quality Control function shall incorporate processes to resolve disagreement, correct errors or omissions, resolve comments, and make the resulting appropriate modifications to the Design Documents at all stages of their development, up to and including Record Design Documents.

3.4 Construction Quality Control

The Design-Builder shall perform quality control to ensure that Construction Work and construction Submittals meet the requirements of the Design-Build Documents, TP Section 2.9 (Submittals), the accepted Management Plans, and the Design Documents.

Design Documents and Construction Documents will be provided to GDOT as complete Submittals inclusive of all necessary evidence demonstrating the Submittal has been subject to quality processes, checks, reviews, and approvals, and contains the necessary records and certifications that are required by the Design-Build Documents.

3.4.1 Requirements

The CQCM shall integrate construction Quality Control into the Design-Builder's production operations by developing processes, procedures, tests, inspections, and checks to be implemented by personnel, under the supervision of the CPM, in order to control the quality of the Construction Work. The Design-Builder's Quality Control is intended to validate and support GDOT's inspection and testing operations.

3.4.2 Pre-Activity Meetings

The CPM shall hold pre-activity meetings, providing GDOT advance notice of at least five Business Days, whenever any of the following are to occur:

1. A new phase of Construction Work is due to commence
2. A new type of construction activity (e.g., pile driving, soil nail installation, underground drainage) is due to commence

3. Commencement of demolition or construction of a bridge
4. A new Contractor commences Work
5. Construction Work is within 50 feet of Environmentally Sensitive Areas or as required by the Agreement to meet Environmental Commitments

The purpose of pre-activity meetings is to validate that the Design-Builder is ready to proceed with the upcoming phase of Work and that the required quality activities have been planned. Topics to be included in the pre-activity meetings shall include traffic control for new phases or changed conditions, bridge beam placement, work over or directly adjacent to traffic, and safety. The CQCM shall attend pre-activity meetings.

3.4.3 Stop Work Authority

The CQCM shall have the right and obligation to issue a stop Work notice to the Design-Builder requiring all or part of the Work to cease in order to prevent or mitigate a violation of the Design-Builder Quality Program requirements described in this TP Section 3. Any such notice shall be copied to GDOT and shall include the reasons for the stop Work notice and the conditions that must be fulfilled before Work resumes. Upon receipt, the Design-Builder shall immediately cease the Work that is subject of the stop Work notice. Examples of circumstances that require the issue of a stop Work notice include:

1. Nonconforming Work has been identified and if the Work were to proceed the Nonconforming Work would be covered or obscured
2. Stopping the Work is necessary to prevent the occurrence of a potential NCR as further described in TP Section 3.5.2 (Initiation of NCR and Potential NCR)
3. Stopping the Work would prevent or mitigate the assessment of a Quality Instance or Noncompliance Event related to the Design-Builder Quality Program
4. The Design-Builder is failing to comply with its Safety Plan

3.5 Nonconforming Work

3.5.1 Nonconforming Work Process

The process for identification of Nonconforming Work, the initiation of a Nonconformance Report (NCR), the classification of the NCR, the identification and implementation of a Nonconforming Work Remedy, and where applicable, the issuance of a CAR and the production and implementation of a PAR are described below and depicted in TP Attachment 3-2 (Nonconforming Work Process).

The Design-Builder shall comply with the following process for Nonconforming Work:

1. When Nonconforming Work is identified an NCR will be initiated within the Program Management Control System (PMCS) in accordance with TP Section 3.5.2 (Initiation of NCR and Potential NCR).
2. The Nonconforming Work and the resulting NCR shall be detailed in the PMCS in accordance with TP Section 3.5.3 (NCR Data Requirements).
3. Following notification of the proposed disposition by the Design-Builder, GDOT will review the NCR for compliance with the Design-Build Documents and respond with a determination made in its sole discretion regarding the NCR.

4. Following GDOT's determination the Design-Builder shall implement the Nonconforming Work Remedy in accordance with TP Section 3.5.6 (Nonconforming Work Remedy) if the proposed disposition is accepted.
    a. Where GDOT does not accept the classification, proposed disposition, or proposed Nonconforming Work Remedy, the Design-Builder shall revise and resubmit the NCR to GDOT via the PMCS within five Business Days.
5. After the accepted Nonconforming work Remedy has been implemented, the Design-Builder shall notify GDOT. GDOT will verify implementation, documentation, and closeout the NCR.
6. A CAR notice may be issued to the Design-Builder at any point during the Nonconforming Work process as set out in TP Section 3.5.7 (Corrective Action Request). In the event a CAR is issued, the Design-Builder shall submit a PAR in accordance with TP Section 3.5.8 (Corrective/Preventative Action Report).

3.5.2 Initiation of NCR and Potential NCR

GDOT may initiate NCRs in its oversight and administration of the Work. The Design-Builder shall initiate an NCR as soon as possible, and in all cases within 24 hours whenever the Design-Builder discovers from internal audits, external audits, inspections, testing, or by notification from GDOT that Nonconforming Work has occurred. It is anticipated that this initiation of NCRs by the Design-Builder will typically be performed by the DQCM, or CQCM. No later than five days after initiation of an NCR, the Design-Builder shall upload to the PMCS all information required by TP Section 3.5.3 (NCR Data Requirements). The Design-Builder shall rectify or otherwise address the Nonconforming Work as described in the NCR, subject to GDOT's acceptance, in a manner that allows each NCR to be closed out within the period identified by GDOT in the NCR, but in any event no later than 180 days from acceptance of disposition, or as otherwise stated in DBA Section 7.3 (Design-Builder Responsibility for Nonconforming Work). GDOT may initiate a potential NCR in its oversight and administration of the Work. Notwithstanding that Nonconforming Work has not yet occurred, a potential NCR shall be initiated whenever any of the following apply:

1. An audit finding shows that a process or procedure in the Management Plans is not clearly documented.
2. It has been discovered that the applicable reviews, testing, or inspection related to the Work may not have been followed and the Project documents or records are incomplete or inconclusive.
3. Work of a similar nature or subject to similar processes to the Work that is the subject of the potential NCR has been discovered to be Nonconforming Work and the root cause has not yet been established.
4. Work is in a state prior to reaching a fixed condition such that modification would require its destruction or otherwise require unplanned Work to occur to correct the condition to make the Work conform to the requirements of the Design-Build Documents. These fixed points include:
    a. Upon transmittal of a Submittal.
    b. Any other point in time where Work has a distinct transition into a new and subsequent stage, form, or time period.

An NCR or potential NCR shall be initiated with respect to any of the following types of Work:

1. Any Type 1 Submittal
2. Management Plans, including conformance to stated process and procedures
3. Design Work at or after the RFC Submittal, including associated Field Design Change, Notice of Design Change, and Shop Drawings along with their associated revisions
4. Construction Work

Wherever this TP Section 3 refers to the Design-Builder's actions and obligations with respect to each NCR, this shall be deemed to include the Design-Builder actions and obligations with respect to each potential NCR. The same processes and procedures specified herein for NCRs shall be followed for potential NCRs.

3.5.3 NCR Data Requirements

Where the NCR is initiated by GDOT, the Design-Builder shall populate all required details pertaining to the Nonconforming Work in the PMCS not already populated by GDOT and in accordance with TP Section 3.5.1 (Nonconforming Work Process).

3.5.3.1 PMCS Records

Each NCR developed shall include the following, where applicable:

1. NCR number using GDOT-accepted naming and numbering convention.
2. Location of Nonconforming Work using an established Project naming or stationing convention.
3. Description of the Nonconforming Work details.
4. The Nonconforming Work and the proposed Nonconforming Work Remedy.
5. Where the NCR is associated with Construction Work including structures:
    a. Name of structure, fabricator, and location within structure, where applicable.
    b. Member identification where applicable: member type, fabrication date, product/piece ID, erection mark, and design length or area.
    c. Detailed description of the deficiency and where the member is in the fabrication process.
    d. Color photographs of the deficiencies or damage, including images from far enough away to show the location and extent, and close-ups to show the severity.
    e. Diagrams detailing pertinent dimensions and locations of the deficiencies.
    f. Relevant sections of the Shop Drawings and other Design Documents.
    g. Information on whether the deficiency or damage occurs over pedestrian or vehicular traffic (for concrete members).
    h. Technical data sheets on the proposed repair materials (if applicable).
6. Where the NCR is associated with Design Work including a process or procedure:
    a. Identification of the element of the Work which is Nonconforming with reference to Design-Build Document requirement.

b. The reference to the process or procedure affected.

c. An explanation of how the process or procedure was not followed.

7. Root cause of the Nonconforming Work and explanation of why the Nonconforming Work occurred.
8. Assessment and proposed NCR disposition in accordance with TP Section 3.5.5 (NCR Disposition Options).
9. Proposed Nonconforming Work Remedy to correct the Nonconforming Work in accordance with TP Section 3.5.6 (Nonconforming Work Remedy).
10. Timeline to implement proposed Nonconforming Work Remedy in accordance with TP Section 3.5.2 (Initiation of NCR and Potential NCR).
11. Proposed classification of NCR in accordance with TP Section 3.5.4 (Nonconforming Work Classification).
12. Proposed preventative action implemented to prevent the recurrence of Nonconforming Work of a similar nature.
13. Any other documents needed to support the NCR.

3.5.4 Nonconforming Work Classification

NCRs shall be classified according to status, severity, frequency, and other factors. NCR1 shall be an NCR that meets all the characteristics set forth in TP Table 3-1 (Characteristics of NCR1).

Any NCR not classified as NCR1 shall be classified as NCR2. If GDOT issues to the Design-Builder a CAR notice as set forth in TP Section 3.5.7 (Corrective Action Request), the NCR shall be classified as a type NCR2.

In the case of an NCR classified as NCR1, the information uploaded by the Design-Builder to the PMCS shall be considered a Type 1 Submittal.

In the case of an NCR classified as NCR2, the information uploaded by the Design-Builder to the PMCS shall be considered a Type 2 Submittal.

Notwithstanding that the information uploaded to the PMCS for an NCR1 is considered to be a Type 1 Submittal, the classification and associated disposition of an NCR in accordance with TP Section 3.5.5 (NCR Disposition Options) shall be at GDOT's sole discretion.

Table 3-1: Characteristics of NCR1

Factor	***Characteristics of NCR1***
Identification of process	The Nonconforming Work arose from the failure to follow a process that can be clearly identified.
Recurrence of failure	The Nonconforming Work is not part of a pattern of similar failures or a recurrent failure of similar elements.
Extent of re-work	The rectification of the Nonconforming Work itself and any associated effort to address and rectify the root cause does not require substantial re-work.
Extent of required change to process or procedures	May require a change or improvement in process or procedure to prevent recurrence, but the process to control quality associated with the Nonconforming Work is already in place.

Factor	*Characteristics of NCR1*
Extent of input required from EOR	Does not require the input of the EOR to resolve and correct the Nonconforming Work.
Extent of investigation and root cause analysis	The reasons for the Nonconforming Work are evident at the time of discovery and do not require significant root cause analysis or forensic investigation.
Experience and capability of personnel	Personnel responsible for the Nonconforming Work have previously produced similar Work in compliance with the Design-Build Documents and understand the causes and reasons for the Nonconforming Work.

3.5.5 NCR Disposition Options

After an NCR has been initiated, the Design-Builder, in conjunction with the EOR as applicable, shall provide a proposed disposition. Notwithstanding the Design-Builder's proposal of an NCR disposition, GDOT shall determine the disposition of each NCR within the PMCS at its sole discretion. Options available for the NCR disposition are:

1. Submit/re-submit — Nonconforming Work can be corrected by performing or submitting the required Work or correction of the Non-Conformance and subsequent resubmittal.
2. Redesign — Design Work process or procedure is found to be out of compliance and requires remedy or a Design Work Submittal is found to be out of compliance and requires remedy. Applicable only to Design Work Submittal at or after RFC status or its associated Type 1 Submittals.
3. Rework — The Nonconforming Work can be brought into conformance with the requirements set out in the Design-Build Documents through re-machining, reassembling, reprocessing, reinstalling, or completing the required operations.
4. Reject and replace — The Work is unsuitable for its intended use and incapable of being re-worked or repaired to meet the requirements of the Design-Build Documents.
5. Repair — Action is required that will result in making the Work acceptable for its intended use, as determined by an engineering evaluation, although the element subject to the NCR may not meet all of the requirements set out in the Design-Build Documents.
6. Accept as-is — Allows the use of the Work completed that does not meet all requirements set out in the Design-Build Documents, but it is determined by engineering evaluation that the Work will satisfy its intended use.

3.5.6 Nonconforming Work Remedy

Where GDOT accepts the disposition of an NCR as "rework," "repair," or "accept as-is":

1. Prior to implementation of any accepted remedy involving re-work or repair, the Design-Builder shall verify the Work is satisfactory and in conformance with the intended remedy.
2. Where the disposition of an NCR is to "repair" or "accept as-is," the EOR shall issue an associated sign and sealed Notice of Design Change or Field Design Change for the "repair" disposition.
3. For NCR disposition "repair" or "accept as-is," the provisions of DBA Section 7.11 (Warranties; Contractor Warranties and Correction of Defects; Correction of Nonconforming Work) shall apply.

Where the disposition of an NCR is set to "submit/re-submit" for periodic or re-occurring Submittals, the accepted remedy must have been implemented prior to the next periodic Submittal or subsequent stage of Submittal.

Where the disposition of an NCR is set to "re-design" for a post-RFC Design Work Submittal and the remedy requires the Design Work to be modified, the Design-Builder shall issue the associated Field Design Change or Notice of Design Change with the Submittal in accordance with the process set forth in TP Section 4 (Design Documents).

The Design-Builder shall document the completion of any Nonconforming Work Remedy and, if applicable, any corrective action, once accomplished, and shall promptly notify GDOT so that GDOT can perform its verification.

3.5.7 Corrective Action Request

GDOT is entitled to issue to the Design-Builder a CAR notice if any of the following circumstances apply:

1. NCRs have occurred in similar work types or elements more than four times in any calendar year.
2. More than two NCRs have occurred in any 30-day period that result from inadequacies in production processes, quality testing, or quality inspections.
3. The Design-Builder has failed to timely submit the required information with respect to NCRs on more than two occasions in a 30-day period.
4. The Design-Builder has failed to act upon and implement an accepted Nonconforming Work Remedy on more than two occasions in a 30-day period.
5. Nonconforming Work Remedies have failed to address the root cause of Nonconforming Work on more than one occasion in any calendar year.
6. There is evidence that actions arising from Design-Builder quality audits are not being implemented.
7. Quality procedures are systemically not being carried out in accordance with the QMP or resolved in a timely fashion.
8. When the Nonconforming Work relates to public health and safety, third-party property, or the environment.

3.5.8 Corrective/Preventative Action Report

Following the issuance of a CAR notice, the Design-Builder shall submit a PAR within the timeframe set out in TP Attachment 2-10 (Submittals Requirements Database)unless otherwise agreed upon in writing. The PAR shall address whether the performance by personnel responsible for the relevant activities may be a primary or contributing cause of the systemic Nonconforming Work. In such case, remedial action shall include additional training or the replacement of personnel or Contractors from the activity or Project. Where GDOT does not accept the PAR, the Design-Builder shall revise and resubmit the PAR via the PMCS within the timeframe required by GDOT. Upon GDOT acceptance of a PAR, the CAR shall be closed. The Design-Builder's failure to provide or address GDOT's comments shall be handled in accordance with DBA Section 7.3.5 (Failure to Implement Corrective/Preventative Action Report).

3.6 External Audits

GDOT may conduct system audits, process audits, and product audits with respect to the Design-Builder Quality Program.

As part of each external audit, GDOT may provide with its notification a list of questions to which the Design-Builder will be required to respond and may specify documentation required to be provided by the Design-Builder. The list of questions may not be comprehensive and additional questions may be asked by GDOT during or after the audit to which the Design-Builder will be required to respond. The Design-Builder is responsible for identifying and providing the documentation, processes, procedures, or products required to substantiate its responses to GDOT's satisfaction. GDOT may also specify additional documentation required to be provided by the Design-Builder.

The Design-Builder shall promptly and in any event within three days respond to all audit questions and shall immediately make Books and Records available to GDOT in response to audit questions in accordance with DBA Section 20.2 (Audits).

Upon receipt of the external audit notice, the Design-Builder shall, within the time period specified in the audit notification, upload responses in the appropriate PMCS folders with objective evidence of compliance with the applicable process, procedure, or product for each of the questions.

Following the Design-Builder's upload to PMCS of responses and evidence of compliance, GDOT will convene an audit close-out meeting which shall be attended by the DQCM, CQCM, EOR, the individuals responsible for production, checking, oversight, or review of each element of the Work that is subject to audit, and any other individual GDOT requires to attend.

GDOT's audit findings will be in the following categories:

1. Accepted
2. Unable to decide
3. Deficiency notice and corrective action required: Design-Builder shall initiate NCR
4. Not audited

3.7 Submittals

With respect to the requirements of the Design-Builder Quality Program described in this TP Section 3, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 3 Attachments

Attachment No.	***Title***
Attachment 3-1	Reserved
Attachment 3-2	Nonconforming Work Process

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 3-1

Reserved

Georgia Department of Transportation

Technical Provisions

For

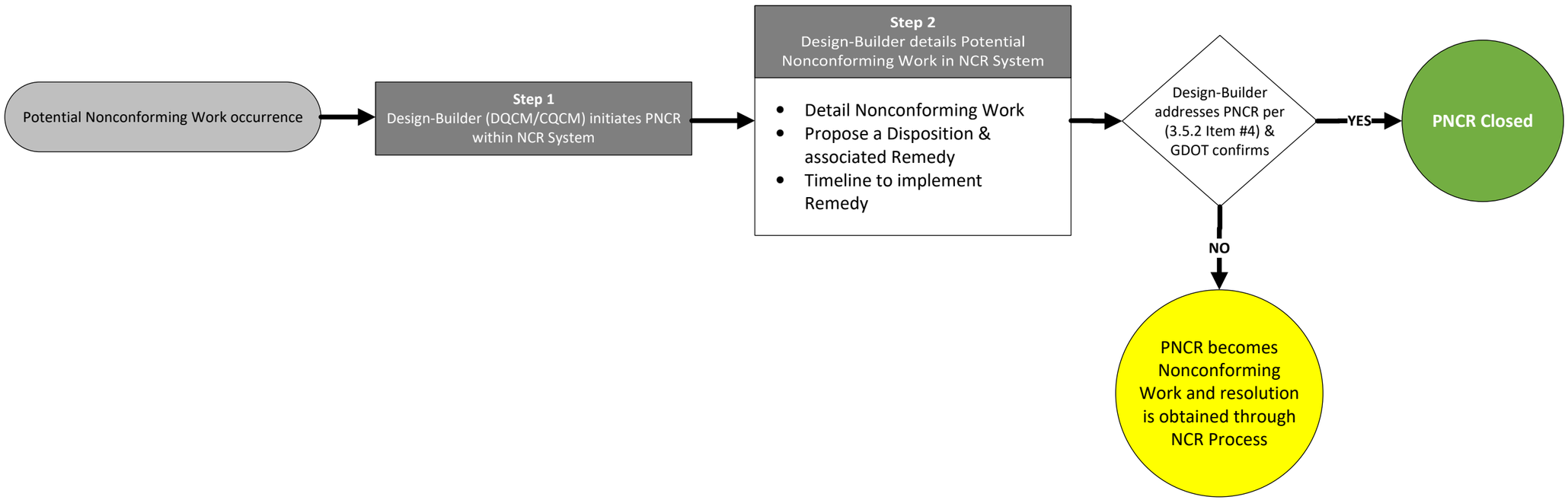
Design-Build Agreement

P.I. No. 0017182

Attachment 3-2

Nonconforming Work Process

Nonconforming Work Process



Potential Nonconformance Report (PNCR) Process

Nonconforming Work Process

Nonconformance Report (NCR) Process

Nonconforming Work occurrence

Step 1
Design-Builder (DQCM/CQCM) initiates NCR within NCR System

Step 2
Design-Builder details Nonconforming Work in NCR System

- Detail Nonconforming Work
- Propose a Disposition & associated Remedy
- Root cause of Nonconforming Work & corrective/ preventative action
- Timeline to implement Remedy
- Classify NCR type (3.5.4)

NCR 1*

*Characteristics applicable for NCR 1 designation, per Section 3.5.4 (Nonconforming Work Classification)

GDOT identifies systemic Nonconformance or no Classification

NO

YES

Systemic Nonconformance triggers a CAR (3.5.11)

CAR

NCR 2

NO

Revise & Resubmit

Step 3
EOR Remedy verification

- Review Proposed Remedy is compliant with the Agreement/Management Plans

GDOT identifies if systemic NCR triggers a CAR (3.5.11)

YES

CAR

NO

Revise & Resubmit

Step 4
GDOT accepts** NCR Classification, Disposition, and associated Remedy

- Submit / re-Submit
- Redesign
- Rework
- Reject & Replace
- Repair
- Accept-as-is

**Where GDOT accepts Disposition, additional actions per (3.5.10) shall apply

NO

Revise & Resubmit

Step 3
EOR Remedy verification

- Review Proposed Disposition & Remedy is compliant with the Agreement / Management Plans

YES

Step 4
GDOT accepts** NCR Classification, Disposition, and associated Remedy

- NCR 1 / NCR 2
- Submit / re-Submit
- Rework
- Reject & Replace

Design-Builder NCR response triggers a CAR (3.5.11)

YES

CAR

NO

Step 5
Design-Builder implements Nonconforming Work Remedy

Design-Builder implements:

- Remedy
- Corrective Action

Step 6
GDOT verifies NCR Remedy implementation

- Verifies Remedy completion
- Assures Agreement compliance
- Verifies documentation of corrective action

NO

GDOT Concurrence

NO

YES

NCR Closed

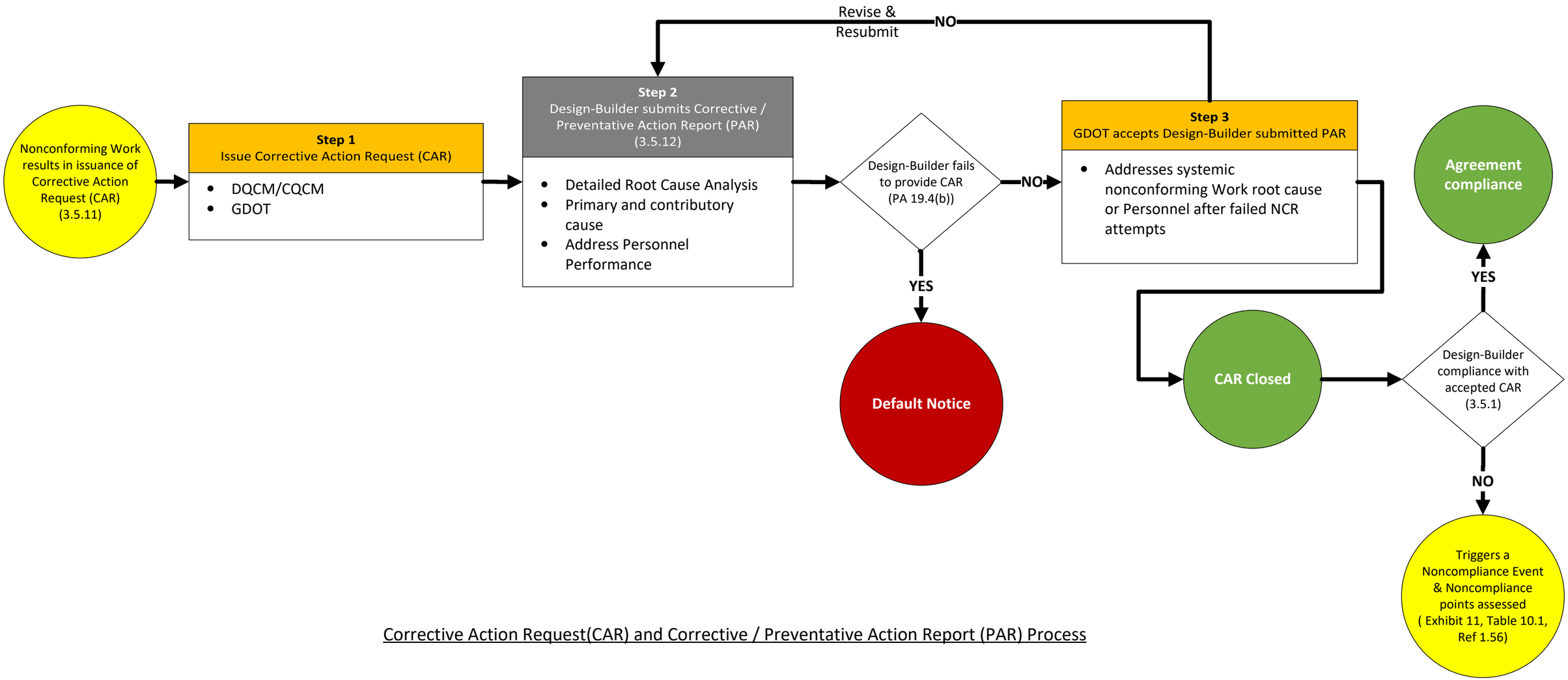
Design-Builder NCR response triggers a CAR (3.5.11)

YES

CAR

NO

Nonconforming Work Process



Corrective Action Request(CAR) and Corrective / Preventative Action Report (PAR) Process

4 DESIGN DOCUMENTS

4.1 General Requirements

This TP Section 4 includes the standard design progression process and requirements for Design Documents, including Preliminary Design Documents, Final Design Documents, Released for Construction (RFC) Design Documents, Shop Drawings, Field Design Changes (FDCs), Notice of Design Changes (NDCs), and Record Design Documents.

The Design-Builder shall comply with the requirements for Design Documents and Construction Documents set forth in this TP Section 4, including TP Attachment 4-1 (Shop Drawing Requirements). The Design-Builder shall prepare and submit Design Documents and Construction Documents in accordance with the Submittal Packaging Plan and Submittal Requirements Database included in the accepted Basis of D&C.

The Design-Builder shall not commence Construction Work until the Design-Builder has submitted the applicable signed and sealed RFC Design Documents and Shop Drawings and GDOT has returned them with an acknowledgement of receipt.

4.2 Administrative Requirements

4.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 4 in accordance with the Project Standards.

4.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

4.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings set forth in TP Table 4-1 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 4-1 (Required Project Meetings). The Design-Builder shall invite the necessary staff from GDOT and its representatives and shall cause to attend each meeting the necessary Key Personnel, Required Personnel, and other staff having responsibility for the subject matter, authority to make decisions, and ability to implement actions arising at the meeting. The Design-Builder is encouraged to combine meetings when appropriate. The Design-Builder shall lead and facilitate the meetings, prepare and distribute meeting agendas a minimum of 24 hours in advance, and prepare and distribute meeting minutes within three Business Days after the meeting. The Design-Builder shall hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. At a minimum, meeting minutes shall clearly identify the following:

1. Date, time, location, and purpose of meeting
2. Meeting attendees
3. Action items and issues
4. Parties responsible for each action item
5. Due dates for identified action items

6. Status of action items and issues (once completed, note “completed” in next meeting minutes before removing from subsequent minutes)

Table 4-1: Required Project Meetings

Meeting and Section Reference	***Frequency***	***Minimum Design-Builder Attendees***
Design coordination meetings	Every other week or as deemed appropriate	CPM, DPM, EOR, UDC
Field plan review meeting	Following the submittal of Preliminary Design Documents	CPM, DPM, EOR, QCM, as required
Over-the-Shoulder (OTS) design review meetings TP Section 4.2.3.2 (OTS Design Review Meetings)	As needed	CPM, DPM, EOR, QCM, DQCM

4.2.3.1 Field Plan Review Meeting

GDOT will facilitate a field plan review meeting. The purpose of the meeting is to provide GDOT the opportunity to review and comment on the Preliminary Design Documents prior to the development of Final Design Documents. Emphasis of review will be placed on Utilities, bridges and walls, constructability, signs and signals, drainage, and appropriate environmental impacts (including erosion control). At GDOT’s discretion, the field plan review meeting may include a field visit.

4.2.3.2 OTS Design Review Meetings

The Design-Builder may initiate and conduct OTS design review meetings with its design personnel, GDOT, third parties, the DQCM, and the Design Quality Management personnel related to design during the development of the Design Documents. GDOT may also initiate and participate in OTS design review meetings in accordance with DBA Section 6.3.8 (Oversight by GDOT for FHWA and Federal Compliance). OTS design review meetings are not intended to restrict the progress of the design, but serve as opportunities for GDOT to provide interim comments and feedback during the development of the Design Documents. OTS design review meetings shall be led by the EOR or the DPM, and may be used to:

1. Discuss general design concepts, parameters, approaches, and application of design standards.
2. Address complex or unique design issues or elements or where the Design-Builder intends for such reviews to increase Project efficiency through such engagement.
3. Resolve conflicts and unresolved comments after the Preliminary Design Documents have been reviewed but prior to the Final Design Documents submittal. The Design-Builder shall specifically highlight, check, and bring to the attention of GDOT any information differing from or supplemental to that presented in the Preliminary Design Documents.
4. Remedy conflicts, account for exceptions, and incorporate betterments during the development of the Design Documents.

4.2.4 Design Software

Proprietary structural design software may be used in lieu of GDOT specific computer software products. The Design-Builder shall include a comprehensive list of all proposed alternative

software products as part of the initial Basis of D&C Submittal. All proposed alternative software products shall constitute a Type 3 Submittal, and upon such approval may be used to design the following Structural Elements:

1. Prestressed concrete beams
2. Steel girders (both curved and straight)
3. Concrete decks
4. Bridge substructure, including end bents and intermediate bents
5. Foundations, including pilings and drilled caissons
6. Bearings

Structural analysis software may be used to perform complex analysis or finite element modeling of bridges and bridge elements.

Spreadsheets or MathCad-type programs may be used to develop hand calculations for repetitive design elements.

The Design-Builder shall ensure all software, spreadsheets, and MathCad output is present in design documentation so that it can be verified to be compliant with design requirements by an independent checker. The Design-Builder shall provide the input, formulas (with code references shown), and output for hand calculations developed using software so that it can be verified. The Design-Builder shall ensure that all code checks, including those performed on propriety software output, are visible to be verified in accordance with the process defined in TP Section 3 (Design-Build Quality Program).

If the original design and survey was completed in InRoads/Microstation v8i, the Design-Builder may continue to use InRoads/Microstation v8i without updating to OpenRoads Designer.

4.3 Design Document Types

Design Documents shall include the design of all Permanent Works. Temporary Works shall be shown in the Design Documents wherever it is considered necessary and as prescribed for Shop Drawings in TP Attachment 4-1 (Shop Drawing Requirements). Design Documents shall meet the following requirements and shall be presented at the levels of completeness identified below.

4.3.1 Preliminary Design Documents

The Preliminary Design Documents (approximately 60 percent complete design) shall provide a formal opportunity for GDOT to confirm the design for a given package is progressing in conformance with the requirements set out in the Design-Build Documents. Preliminary Design Documents shall include updates to the Environmental Resource Impact Table and shall show final design impacts to all Environmentally Sensitive Areas. Preliminary Design Documents shall include final ROW and easement areas, cut and fill limits, temporary work areas/impacts for large culverts and bridges, and any other areas of impact to Environmentally Sensitive Areas (temporary or permanent) that are needed to construct the Project. The Preliminary Design Documents shall include Plans, specifications, and reports that capture all major items,

elements, and portions of the Work such that the Design-Builder can demonstrate a comprehensive understanding of the Project, including:

1. Verification Project ROW is sufficient for the Work
2. Substantiation of design concepts through Site investigation and analysis of Site conditions
3. Appropriate application of Project Standards
4. Verification of design concept constructability, including structures

The following items shall be included, as applicable in accordance with the Submittal Packaging Plan, within the individual Preliminary Design Documents submittals:

1. Plans in accordance with GDOT's Plan Presentation Guide (PPG) including:
    a. Section 01: Cover sheet
    b. Section 02: Index
    c. Section 04: General notes
    d. Section 05: Typical sections, including:
        1) Travel-way including number, width, and cross-slope of all travel lanes
        2) Shoulders (paved and unpaved), including width and cross-slope
        3) Location of profile grade point
        4) Typical side-slope design, including width and slopes of foreslopes, ditches, and backslopes
        5) Pavement composition
        6) Longitudinal joints
        7) Subsurface drainage (e.g., underdrains, aggregate drains)
        8) Details of curbs, walls, and guardrail locations
    e. Section 11: Construction Layout
    f. Section 13: Mainline and crossroad plan drawings, including:
        1) Existing topography
        2) Existing buildings
        3) Existing ROW lines
        4) Delineated streams, wetlands, floodplains, floodways and other major environmental features
        5) Horizontal alignment information (e.g., centerlines, curve data)
        6) Horizontal clearances
        7) Construction limits
        8) Culverts (existing and proposed, size, flow direction, and end treatments)
        9) Permanent storm water protection features

10) Storm sewer systems, including trunk lines
11) Driveway locations
12) Roadside safety devices locations including proposed end treatments
13) Signal pole and cabinet locations
14) Noise barrier locations
15) Retaining wall locations
16) Proposed ROW and easements

g. Section 15 and Section 16: Mainline and crossroad profiles, including:
   1) Existing topography
   2) Vertical alignment data
   3) Vertical clearances
h. Section 17: Driveway profiles
i. Section 18: Special grading drawings, including:
   1) Post-construction stormwater BMPs
j. Section 19: Construction staging plan and cross-sections
k. Section 20: Construction staging details
l. Section 22: Drainage profiles
m. Section 23: Cross-sections, including:
   1) Existing and proposed centerline elevations using profile grade
   2) Foreslopes, ditches, and backslopes
   3) Grading for guardrail end treatments
   4) Retaining walls
   5) Bridge structures
   6) Noise barriers maintenance vehicle envelope
n. Section 24: Utility plans
o. Section 26:Signing and marking plans
p. Section 28: ATMS/ITS plans
q. Section 31: Retaining wall envelope, including:
   1) Location
   2) Elevation
   3) Wall type
   4) Minimum top of footing
r. Section 38: Special construction details, including:

1) All Construction Standards and Construction Details that were provided or modified by the Design-Builder

s. Section 54: Erosion control plans: construction best management practice location details:

1) Permanent BMPs and perimeter control only

2. Supporting data:
   a. Superelevation tables/details
   b. Topographic mapping per requirements in TP Section 9 (Surveying and Mapping)
   c. Demolition and Abandonment Plan per requirements in TP Section 10 (Grading)
   d. Vibration Control Plan per requirements in TP Section 11 (Roadways)
   e. Turning movement designs per requirements in TP Section 11 (Roadways)
   f. Drainage Design Report per requirements in TP Section 12 (Drainage)
   g. Preliminary bridge layouts per requirements in TP Section 13 (Structures)
   h. Landscape Enhancement Plan per requirements in TP Section 15 (Landscape and Hardscape Enhancements)
   i. Hardscape Enhancement Plan per requirements in TP Section 15 (Landscape and Hardscape Enhancements)
   j. Line-of-sight analysis per requirements in TP Section 16 (Signing, Pavement Marking, Signalization)
   k. Capacity analysis of intersections
   l. Intersection sight distance calculations
   m. Stopping sight distance calculations
   n. Roundabout fastest path calculations, if applicable
3. Project Specifications Book, as described in this TP Section 4

4.3.2 Final Design Documents

The Final Design Documents (100 percent complete design) shall be prepared by the Design-Builder for each respective element and discipline of the Project. When the design for a given package is deemed 100 percent complete by the Design-Builder and after the Design-Builder has resolved all review comments from the Preliminary Design Documents Submittal, or any necessary resubmittal into the Design Documents, the Design-Builder shall submit the Final Design Documents to GDOT.

The contents of the Final Design Documents shall be as specified in the requirements set out in the Design-Build Documents and shall include all information necessary to construct certain portions of the Work. Final Design Documents may be split into separate submittal packages as outlined in Design-Builder's Basis of D&C (e.g. Final Lighting Plans, Final Signing Plans, Final Signal Plans, etc.). The Final Design Documents shall include:

1. Design drawings (Plans)

2. Design reports, studies, and related data
3. Design calculations
4. Material type and associated quantity estimates for the purposes of planning inspection, sampling, and testing requirements set out in the Design-Build Documents
5. Project Specifications Book

4.3.3 Released for Construction Design Documents

After the Design-Builder has resolved all review comments from the Final Design Document Submittal, or any necessary resubmittal, into the Design Documents, the Design-Builder shall submit the RFC Design Documents to GDOT. RFC Design Documents shall be signed and sealed by the EOR.

The Design-Builder's RFC Design Documents shall comply with requirements in the Design-Build Documents, shall be detailed, complete, in accordance with Good Industry Practice in such a manner that the Project is constructible as designed, and shall allow verification of the design criteria in compliance with the Design-Build Documents.

The Design-Builder EOR shall sign and seal all RFC Design Document Plan submittals and ROW Plan Submittals per the requirements in TP Attachment 4-2 (PE Signing and Sealing). The Design-Builder shall be considered a consultant for the purposes of applying the sign and seal requirements. The GDOT Chief Engineer will not be responsible for signing any portion of the plans.

Concurrent with the RFC submission, the Design-Builder shall submit the final ESPCP plans to Georgia EPD via the web-based goPost portal at https://gopost-georgiaepd.eplansoftreview.com/#/login?portal=georgiaEPDconstructionstormwatergdot.

4.3.4 Shop Drawings

Shop Drawings shall comply with the requirements prescribed in TP Attachment 4-1 (Shop Drawing Requirements).

4.3.5 Record Design Documents

Upon completion of the Construction Work, a complete set of Record Design Documents organized by Construction Phase shall be provided to GDOT. The Design-Builder shall provide Record Design Documents as CAD generated drawings that compile all Field Design Changes, Plan revisions as a result of NDCs, and all accepted as-is Nonconforming Work into a single strike-through format set of Plans. Where appropriate, new drawings may be inserted into the Plans to depict portions of the as-built Construction Work.

The Design-Builder shall ensure all Record Design Documents are signed and sealed per the requirements in TP Attachment 4-2 (PE Signing and Sealing) and all sheet numbers have been updated to reflect the sheet numbering of the final set of plans.

The Design-Builder shall submit to GDOT, as part of the Record Design Documents, bound field notes per the requirements set out in TP Section 9 (Surveying and Mapping).

4.4 Design Document Submittal Requirements

Design Document Submittals shall include all component packages with all Plan sheets, reports, studies, calculations, and specifications per the indexes depicted in the Design-Builder's Submittal Packaging Plan for a given staged Design Document Submittal. Design Document Submittals shall comply with the requirements in this TP Section 4.4.

The Design-Builder shall include in all Design Document Submittals a QC certification statement that the Submittal complies with all terms and conditions of the Design-Build Agreement, signed by the EOR and the DQCM. GDOT will reject any submittal with which the QC certification statement is not included.

4.4.1 Plan Presentation Requirements

Unless otherwise specified by the Design-Build Documents, the Design-Builder shall provide all Plan Submittals in a format consistent with GDOT's PPG. The Plans shall be fully dimensioned in English units, and all elevations necessary for construction shall be shown. All Plans shall be prepared using the scales according to GDOT's PPG. Plan Submittals shall include Plans, reports, and calculations for all elements adjacent to or impacting the submitted components so that the Submittal can be reviewed holistically. Plan Submittals shall be commensurate with the level of detail pertinent to the Design Document Submittal type. Final Design Document and RFC Design Document Submittals shall be fully detailed and include all required back-up calculations and documentation.

4.4.2 Computations

As part of each Design Document Submittal, the Design-Builder shall provide all supporting calculations, design computations, computer printouts, and tabulations. A complete tabulation of the drainage analysis, along with the calculations used to determine the size of drainage structures, shall be provided. All calculations, design computations, computer printouts and tabulations shall be neatly recorded, fully checked, titled, numbered, indexed, and dated.

4.4.3 Detailed Summary of Quantities

As part of each Final Design Document Submittal, the Design-Builder shall provide a detailed PDF summary of quantities with the Design Documents that identifies standardized item numbers, item descriptions, units, and estimated quantities for the Project.

4.4.4 Specifications

The Design-Builder shall prepare, maintain, and update a Project Specifications Book using the procedures set forth herein. The Project Specifications Book shall include specifications, Construction Standards, and Construction Details for Construction Work not covered in TP Attachment 1-4 (Project Standards) and for Design-Builder Provided Specifications, when used, in accordance with TP Attachment 1-4 (Project Standards). Design-Builder-Provided Specifications shall be derived from source documents that are in current use by a U.S. Department of Transportation or an equivalent standard setting body such as AASHTO, ASTM, ACI, or FHWA.

Specifications for work not covered in TP Attachment 1-4 (Project Standards) or modified as part of a Design-Builder Provided Specifications shall include the following requirements:

1. Shall define the methods, processes, and procedures that will enable the Design-Builder to meet the requirements of the Design-Build Documents.

2. Shall include the appropriate combination of: “method specifications”; “material and equipment requirements”; “construction requirements”; “end result specifications”; “quality assurance specifications”; “performance-related specifications”; and “performance-based specifications” as those terms are defined in AASHTO Highway Subcommittee on Construction's Major Types of Transportation Construction Specifications: A Guideline to Understanding Their Evolution and Application, published August 2003.
3. Shall be drafted using terminology consistent with the defined terms from the requirements set out in the Design-Build Documents and the Transportation Research Board of the National Academies Glossary of Highway Quality Assurance Terms—Third Update, published May 2005.
4. Shall correctly define the roles of the Design-Builder and the EOR, avoiding the use of terms such as “contractor” and “subcontractor.”
5. Where adopting construction specifications used by GDOT or any other state highway Governmental Entity, the Design-Builder shall incorporate necessary amendments to all defined terms and shall omit sections that are not applicable to the Project.

The Project Specifications Book shall contain three sections:

1. Specifications:
    a. An index listing all specification section numbers, titles, and current version/date of each specification contained in the book. Except where individual sections are not applicable to the Project, the specification book numbering, specification titles, and the Work activities/materials covered by each section of the Project Specifications Book shall follow the sequence and format set forth in GDOT’s Standard Specifications Construction of Transportation Systems and GDOT Policy 2445-1a.
    b. Definitions of abbreviations and terms used.
    c. For each section and Work activity/material, the Design-Builder shall provide:
        1) A detailed description of the Work included.
        2) A detailed description of the materials to be used in the Work. This includes all material related requirements, such as gradation parameters, material properties or characteristics, any alternate materials, material sources, and any prohibited materials.
        3) A detailed description of the means, methods, processes, planned production rates and any related requirements such as lift thicknesses, specific equipment to be used, and number of passes with a specified roller.
        4) Construction requirements such as tolerances, density requirements, temperature restrictions, moisture limitations, evaporation rate limitations, and spread rates.
        5) List and detailed description of all associated submittal requirements for Design Documents and Construction Documents pertaining to the section and Work activity/material with all related references clearly identified.
        6) A detailed description of the required Design-Builder Quality Management documentation to provide assurance that the workmanship and materials satisfy the requirements of the Design-Build Documents. Documentation of materials

shall include provisions to provide assurance that the actual quantity of required materials installed equals or exceeds the plan quantity of materials required.

2. Construction Standards:
    a. An index listing all Construction Standards numbers, titles, and current version/date of all Construction Standards applicable to the Project. Each Construction Standard provided or modified by the Design-Builder shall be noted on the index.
    b. A plan sheet of all Construction Standards that were provided or modified by the Design-Builder.
3. Construction Details:
    a. An index listing all Construction Details numbers, titles, and current version/date of all Construction Standards applicable to the Project. Each Construction Detail provided or modified by the Design-Builder shall be noted on the index.
    b. A plan sheet of all Construction Details that were provided or modified by the Design-Builder.

The Project Specifications Book shall be submitted as part of the Design-Builder's initial staged Design Documents Submittal and shall thereafter be maintained and updated throughout the period from NTP1 through Final Acceptance and submitted as part of each Design Documents Submittal.

The Design-Builder shall ensure a fully updated Project Specifications Book is maintained at the Site and available immediately upon request by GDOT.

4.4.5 Submittal Contents

Unless otherwise specified by the Design-Build Documents, each Design Document Submittal shall be provided to GDOT in the following formats:

1. Electronic delivery via the PMCS as well as electronic storage on a medium and in a format acceptable to GDOT containing:
    a. All electronic design files (e.g., MicroStation/InRoads or OpenRoads Designer files) with naming convention per the GDOT Electronic Data Guidelines applicable to the CAD software used for the Plans.
    b. All electronic calculations, design computations, computer printouts and tabulations, etc. in letter-sized (8.5-inch by 11-inch) or tabloid-sized (11-inch by 17-inch) PDF and in the native file format.
    c. Full-sized (11-inch by 17-inch) PDF containing the entire Plan set.
        1) RFC Design Documents, As-Built Record Design Documents, and Field Design Changes shall also include full-sized (11-inch by 17-inch) PDF of each Plan sheet – one sheet per file.
    d. Letter-sized (8.5-inch by 11-inch) PDF of the Project Specifications Book.
    e. Updated Basis of D&C Submittal inclusive of complete and up-to-date documentation in PDF for all design criteria, design parameters, and design decisions pertaining to the particular Design Document Submittal. Preliminary Design Document Submittals shall include a list of Design Exceptions, Design Variances, and Design Deviations

incorporated into the design of the Project. Final Design Document and RFC Design Document Submittals shall include signed Design Exceptions and Design Variances, and completed Design Deviations. Record Design Document Submittals shall include finalized and comprehensive documentation in PDF for all design criteria, design parameters, and design decisions.

f. Design reports, studies, and related data in the format and with the contents specified in these Technical Provisions.

g. All required support documentation, such as responses to previously provided GDOT review comments.

2. Hardcopy format:

   a. Preliminary Design Documents and Final Design Documents.

      1) No hardcopies required.

   b. Released for Construction Design Documents, Record Design Documents, and Field Design Changes.

      1) One set (11-inch by 17-inch) of appropriately bound Plan sheets.

      2) One set (24-inch by 36-inch) of appropriately bound Plan sheets.

      3) One set of letter sized (8.5-inch by 11-inch) or tabloid sized (11-inch by 17-inch) and appropriately bound calculations, design computations, computer printouts and tabulations, etc.

      4) One set of letter-sized (8.5-inch by 11-inch) and appropriately bound Project Specifications Book.

4.4.6 Final Set of Plans Submittal Contents

The Design-Builder shall compile and provide to GDOT a final complete set of Plans for the Project:

1. After all individual RFC design document submittals have been released for construction.
2. upon completion of the Construction Work as part of the Record Design Documents.

These Plan sets shall meet the following requirements:

1. Scalable tabloid-sized (11-inch by 17-inch) PDF of each Plan sheet; one sheet per file.
2. PDF files shall be named AAAAAAA_##X-YYYYZZZ.pdf, where:

   a. AAAAAAA is the GDOT P.I. No.

   b. ## is the Plan section number as defined in Section 1.2.1 of the GDOT PPG.

   c. X, if applicable, is the letter sequencing of segments.

   d. YYYY is sequentially numbered in increments of 0001.

   e. ZZZ, if applicable, is the letter sequencing of sheets (i.e., “A” sheets).

   f. For staging and erosion Plan sheets, Design-Builder shall use the format AAAAAAA_##X-**.YYYYZZZ.pdf where ** is the applicable stage/phase.

3. Record Design Document Submittal Plan sheets shall correspond to the RFC Design Document Plan set. Additional sheets, including all approved Shop Drawings, shall utilize the ZZZ to supplement the RFC Design Document numbering.
4. The Design-Builder shall ensure the set is signed and sealed per the requirements in TP Attachment 4-2 (PE Signing and Sealing) and all sheet numbers have been updated to reflect the sheet numbering of the final set of plans, including all approved Shop Drawings.

After all individual RFC Design Document Submittals have been released for construction, the Design-Builder shall submit to GDOT a 3D model of the Project. The 3D model shall be a compilation of all RFC Design Documents to reflect the proposed Work, as designed at the time of the final RFC Design Document Submittal, at the conclusion of construction.

4.5 Changes to RFC Design Documents

Design changes are changes to the Work that were not included in the RFC Design Documents. Design changes may be initiated by an FDC or NDC as further described herein.

4.5.1 Field Design Changes

A FDC encompasses any situation where design changes are initiated in the field that necessitate a change to one or more Plan sheets or specifications of the Design Documents that have been released for construction. Modifications to the RFC Design Documents that are initiated by the Design-Builder to address field conditions shall be classified based on the impact of change as follows:

1. Level 1 — These changes may or may not materially affect design, but require confirmation as to the impact on design. At the discretion of the EOR, Design Documents that incorporate level 1 changes shall be signed and sealed by the EOR.
2. Level 2 — These changes may or may not materially affect design, but require modification to the Design Documents. FDCs requiring re-design, modification of design, or additional design, such that revision of the RFC Design Documents is necessary for construction, shall be deemed level 2. Design Documents incorporating level 2 changes shall follow the process specified for a NDC, including being signed and sealed by the EOR.

Once an FDC is determined necessary, the Design-Builder shall notify GDOT in writing of the nature of the field change and the level of FDC required. The Design-Builder shall identify any other affected design disciplines or elements of the Work requiring additional coordination.

The Design-Builder shall then complete the process for the specified level of FDC. The Design-Builder shall submit the completed FDC package, including documentation of the field request and the set of affected drawings or specifications indicating the field changes signed and sealed by the EOR. These can be hand-marked corrections or comments that explain or show the field change. All FDCs shall provide enough information to communicate the field change for inclusion in the Record Design Documents.

All FDC which include a new or revised EOR signature shall follow the requirements in TP Attachment 4-2 (PE Signing and Sealing) for plan revisions.

4.5.2 Notice of Design Changes

An NDC encompasses any situation where design changes are initiated by the EOR that necessitate a change to one or more Plan sheets or specifications of the Design Documents that have been released for construction.

Once an NDC is determined necessary, the Design-Builder shall notify GDOT in writing of the nature of the design change. The Design-Builder shall include supporting and clarifying information to document the NDC, including the set of affected drawings or specifications indicating the design changes. These can be hand-marked corrections or comments that explain or show the design change. The Design-Builder shall identify any other affected design disciplines or elements of the Work requiring additional coordination.

The Design Documents revised as a result of an NDC shall be signed and sealed by the EOR. The Design-Builder shall reference the design change in the revision block of the sheets in the affected Design Documents. All NDC updated plan sets shall follow the requirements in TP Attachment 4-2 (PE Signing and Sealing) for plan revisions in regards to updating the PE signatures. The Submittal of the revised Design Documents shall be subject to the same requirements as the initial RFC Design Document Submittal.

TP Section 4 Attachments

Attachment No.	***Title***
Attachment 4-1	Shop Drawing Requirements
Attachment 4-2	PE Signing and Sealing

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 4-1

Shop Drawing Requirements

Attachment 4-1: Shop Drawing Requirements

1 Terminology

- Falsework — Includes any Temporary Works used to support the installation of the permanent structure until it becomes self-supporting, such as steel or timber beams, girders, columns, piles, foundations, and any proprietary equipment or adjustable support structures.
- Temporary shoring — Includes Temporary Works used as retaining structures such as sheet piling, anchor walls, or post and lagging configurations.
- Formwork — Includes any structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Formwork comprises common materials such as wood or metal sheets, battens, soldiers and walers, ties, proprietary forming systems such as stay-in-place metal forms, and proprietary supporting bolts, hangers, and brackets.
- Scaffolding — An elevated work platform used to support workers, materials, and equipment, but is not intended to support the structure.
- Construction affecting public safety — Construction that may jeopardize public safety, such as structures spanning functioning vehicular roadways, pedestrian walkways, railroads, navigation channels of navigable waterways, and walls or other structure foundations located in embankments immediately adjacent to functioning roadways.

2 Work Items Requiring Shop Drawings

The Design-Builder shall submit Shop Drawings for items of Work not fully detailed in the Plans that require additional drawings and coordination prior to constructing the item, including:

1. Bridge components not fully detailed in the Plans (e.g., segments, steel girder details, post-tensioning details, handrails, etc.). The Design-Builder shall furnish the following:
    a. Shop Drawings for structural steel and miscellaneous metals. Shop Drawings shall consist of working, Shop, and erection drawings; welding procedures; and other working Plans showing details, dimensions, sizes of material, and other information necessary for the complete fabrication and erection of the metal work.
    b. Shop Drawings for precast concrete components.
    c. Shop Drawings for all details that are required for the effective prosecution of the concrete components of the Permanent Works, including: masonry layout diagrams, diagrams for bending reinforcing steel, and any details required for concrete components of the Permanent Works.
    d. Erection plans for curved steel bridges.
2. Retaining wall systems.
3. Precast box culverts.
4. Building structures.
5. Drainage structures, attenuators, and other nonstructural items.
6. Design and structural details furnished by the Design-Builder in compliance with the requirements set out in the Design-Build Agreement.

7. Permanent formwork such as stay-in-place metal or concrete forms.
8. Temporary Works for construction affecting public safety and for major and unusual structures. For work that meets either of these classifications, the Design-Builder shall furnish Shop Drawings for Temporary Works, including special erection equipment, temporary shoring, falsework, temporary formwork, scaffolding, etc.

3 Shop Drawing Contents

Shop Drawing contents shall include drawings and accompanying documents including a transmittal letter with pertinent tracking information as further described herein.

3.1 Drawings

The Design-Builder shall submit the Shop Drawings electronically in PDF via the PMCS. In addition to the electronic delivery, the Design-Builder shall furnish four sets of printed Shop Drawings to GDOT for review and shall consecutively number each sheet in the Submittal series, indicating the total number in the series (e.g., 1 of 12, 2 of 12, etc.).

Included on each sheet shall be the following items as a minimum requirement:

1. For bridge Elements, bridge numbers, including Design-Builder-designated numbering and national bridge inventory numbering
2. Drawing title and number
3. A title block showing the names of the fabricator or producer, Contractor, and the Design-Builder for which the Work is being done
4. The initials of the persons responsible for the drawing
5. The date on which the drawing was prepared
6. The location of the Element within the Project
7. The signature and seal of the Shop Drawing Engineer
8. The EOR’s approval stamp with date and initials

The Design-Builder shall indicate on each series of drawings the specification section and page or drawing number of the RFC Design Documents to which the submission applies. The Design-Builder shall indicate on the Shop Drawings all changes from the RFC Design Documents and itemize all changes in a transmittal letter. Likewise, whenever a Shop Drawing Submittal conforms to the RFC Design Documents, the Design-Builder shall clearly state so in the transmittal letter.

3.2 Other Documents

For accompanying documents, the Design-Builder shall:

1. Provide four sets of original documents or clearly legible photographic or xerographic copies of documents other than drawings, such as trade literature, catalogue information, calculations, and manuals. The Design-Builder shall clearly label and number each sheet in the Submittal to indicate the total number of sheets in the series (e.g., 1 of 12, 2 of 12, etc.).

2. Provide an additional three sets of documentation for items involved with precast pre-stressed components and an additional two sets of documentation for items involving structural steel components.
3. Submit appropriately prepared and checked calculations and manuals that clearly outline the design criteria.
4. Include on the individual sheets the initials of the persons responsible for preparing and checking the document.
5. Clearly label trade literature and catalogue information on the front cover with the title, date, and name of the firm and persons responsible for that document.
6. Bind and submit all documents with a table of contents and a cover sheet listing the total number of pages and appendices, and including a title referencing:
    a. The Submittal items.
    b. The name of the firm and persons responsible for the preparation of the document.
    c. The signature and seal of the Shop Drawing Engineer.
    d. EOR's approval stamp with date and initials.

4 Additional Shop Drawing Requirements

4.1 Responsibility for Accuracy of Shop Drawings

The Design-Builder shall ensure that each sheet of the Shop Drawings and the cover sheet of the applicable calculations are signed and sealed by a Shop Drawing Engineer and shall ensure Shop Drawings and applicable calculations are reviewed and approved. The Design-Builder shall coordinate, review, date, stamp, accept, and sign all Shop Drawings prepared by the Shop Drawing Engineer and approved by the EOR prior to submitting them to GDOT for review. Submittal of the drawings confirms verification of the Work requirements, units of measurement, field measurements, construction criteria, sequence of assembly and erection, access and clearances, catalog numbers, and other applicable data.

For construction affecting public safety, the Design-Builder shall make an independent design review of all relevant Shop Drawings and similar documents, including a review of Shop Drawings for overall structural adequacy of the item to support the imposed loads and intended use.

4.2 Scope of Review and Approval by the EOR

The EOR's review and approval of the Shop Drawings is for the intent of the design. The Design-Builder shall not proceed with construction of the Permanent Works until receiving the EOR's approval.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 4-2

PE Signing and Sealing

Georgia Department of Transportation

Interoffice Memo

DATE: September 23, 2022

FROM: Christopher Rudd P.E., State Design Policy Engineer

TO: Divisions of Engineering, Field Services, P3, and Program Delivery; Offices of Construction Bidding Administration, Engineering Services, Intermodal, Local Grants, Maintenance, Traffic Operations, and Utilities

SUBJECT: PPG and Workspace Revisions for PE Signing and Sealing

Effective September 13, 2022, Rule 180-12-.02. (6) of the Georgia Rules and Regulations was amended to allow the use of a summary sheet for signing and sealing. This removes the need to sign and seal each drawing sheet.

The Office of Design Policy and Support has therefore revised the Plan Presentation Guide and the MicroStation V7, MicroStation V8i, and OpenRoads Design CE workspaces to include updated guidance on the signing and sealing of consultant designed plans and updated cells to match the guidance in the PPG. The revised PPG language is attached and will be incorporated into the full PPG directly. The revised workspaces are available now for download and immediate use at the discretion of the signing and sealing consultant engineer and the firm for which they work.

The chief engineer will continue to sign the Construction Plans Cover Sheet as well as sign and seal the Erosion, Sedimentation, and Pollution Control Plans Cover Sheet for all projects. The chief engineer will sign and seal the Construction Plans Cover Sheet for all GDOT designed projects. Please see the attached PPG language for further detail.

Consultant designed projects or portions of projects will be required to adhere to the new signing and sealing guidance effective with the January 2023 letting. Consultant designed Right of Way Plans submitted for acceptance after December 31, 2022 will be required to adhere to the new PPG.

For questions, please contact Frank Flanders at (404) 631-1663 or fflanders@dot.ga.gov

RCR:FBF

cc: Meg Pirkle, Chief Engineer

Revised PPG Language for PE Signing and Sealing

01.002 Required Information – Cover Drawing (Relevant Revised Item Only)

- Designation for "Plans prepared by:" (Design Engineer, Name only or Consultant Name)
    - "/Professional Engineer's Stamp/Signature for Final Plans" removed after "… or Consultant Name")

01.005 General – Signature Drawing

The Signature Drawing:

- Is required for consultant designed projects and is used to define an engineer's area of responsibility for the portions of the plans being digitally signed.
- Is required for plans that will be signed by a single professional engineer or by more than one professional engineer.
- Is required on GDOT designed projects if the plan set contains component drawings submitted by an external entity (e.g., Section 44).
- Is to be located directly behind the last Cover Drawing.

Revisions: In the event of revisions being submitted, a separate revision Signature Drawing shall be submitted with the revised drawings and shall be numbered xxA, xxB, etc. Only the professionals required to sign and seal the revision are to be included on the Signature Drawing. The revision Signature Drawing will be placed directly behind the original Signature Drawing(s) or the previous revision Signature Drawing, whichever is applicable. Where the same PE as the original Signature Drawing is signing and sealing a revision and the original Signature Drawing is editable and has the needed space, the PE may add the required information to the original Signature Drawing, provided it is listed among the revised drawings in the index of revised drawing that are being signed and sealed.

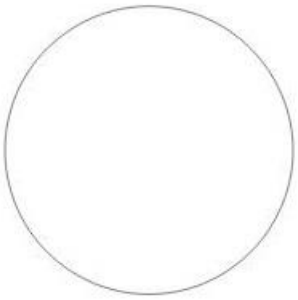
01.006 Required Information – Signature Drawing

- For Final Plans only, signature and seal of the professional(s) of record (1.5" in diameter on the record plan size)
- Statement of Responsibility (if there are multiple PE's responsible for a drawing to define the licensed professional's limits of responsibility and any required explanatory language)
- Index (list of drawings that the licensed professional is responsible for signing and sealing)
    - All Sections designed by a consultant (except those addressed in the following bullets) shall include a signature and seal in the Signature Drawing(s) of Section 01.
    - Sections 40, 41, 52, and 56 will not be covered by PE signature and seal. These sections are produced by GDOT. The signature drawing shall include the cell noting this.
    - Section 38 should not be included in the drawing list of the Signature Drawing unless the special details were developed by a consultant.

- Section 50 requires a signature and seal. See Section 50 for cover drawing signature and seal requirements.
- See Section 60 in Chapter 3 for separate signature and seal requirements. Section 60 shall have its own Signature Drawing regardless of its inclusion in the Final Plans.

Revised PPG Language for PE Signing and Sealing

- **01.007 Drawing Layout – Signature Drawing**



THE DRAWINGS AS LISTED BELOW
HAVE BEEN SIGNED AND SEALED BY

REGISTERED ENGINEER
PE No 0000000

ENGINEERING FIRM
STREET ADDRESS
CITY, GA 12345
CERTIFICATE OF AUTHORIZATION #:
CERTIFICATE OF AUTHORIZATION EXPIRATION DATE:

202X.XX.XX

DRAWING No.	DRAWING DESCRIPTION
01-0001	COVER SHEET
01-0002	SIGNATURE SHEET
02-0001	INDEX SHEET
03-0001 - 03-0010	REVISION SUMMARY DRAWING
04-0001 - 04-0010	GENERAL NOTES
05-0001 - 05-0010	TYPICAL SECTIONS
06-0001 - 06-0010	SUMMARY OF QUANTITIES
07-0001 - 07-0010	QUANTITIES REQUIRED BY AMENDMENT DRAWING
08-0001 - 08-0010	QUANTITIES REQUIRED ON CONSTRUCITON DRAWING
09-0001 - 09-0010	DETAILED ESTIMATE DRAWING
10-0001 - 10-0010	TRAFFIC DIAGRAM DRAWINGS
11-0001 - 11-0010	CONSTRUCTION LAYOUT DRAWING/STAKEOUT DRAWING
12-0001 - 12-0010	CORRIDOR LOCATION MAP/AERIAL PHOTO MOSAICS
13-0001 - 13-0010	MAINLINE PLAN DRAWINGS
14-0001 - 14-0010	CROSSROAD PLAN DRAWINGS
15-0001 - 15-0010	MAINLINE PROFILE DRAWINGS
16-0001 - 16-0010	CROSSROAD PROFILE DRAWINGS
17-0001 - 17-0010	DRIVEWAY PROFILE DRAWINGS
18-0001 - 18-0010	SPECIAL GRADING DRAWINGS
19-0001 - 19-0010	CONSTRUCTION STAGING PLAN/CROSS SECTION DRAWINGS
20-0001 - 20-0010	CONSTRUCTION STAGING DETAILS
21-0001 - 21-0010	DRAINAGE AREA MAP
22-0001 - 22-0010	DRAINAGE PROFILES
23-0001 - 23-0010	CROSS SECTIONS
24-0001 - 24-0010	UTILITY PLANS
25-0001 - 25-0010	LIGHTING PLANS AND DETAILS
26-0001 - 26-0010	SIGNING AND MARKING PLANS AND DETAILS
27-0001 - 27-0010	SIGNAL PLANS
28-0001 - 28-0010	ATMS/ITS PLANS
29-0001 - 29-0010	LANDSCAPING PLANS AND DETAILS
30-0001 - 30-0010	MITIGATION PLANS
31-0001 - 31-0010	RETAINING WALL ENVELOPES
32-0001 - 32-0010	RETAINING WALL PLANS
33-0001 - 33-0010	NOISE BARRIER ENVELOPES
34-0001 - 34-0010	NOISE BARRIER PLANS
35-0001 - 35-0010	BRIDGE PLANS
36-0001 - 36-0010	BRIDGE CULVERT PLANS
37-0001 - 37-0010	MISCELLANEOUS STRUCTURAL PLANS
39-0001 - 39-0010	SPECIAL DESIGN BOX CULVERTS
44-0001 - 44-0010	UTILITY RELOCATION PLANS
51-0001 - 51-0010	EROSION, SEDIMENTATION AND POLLUTION CONTROL GENERAL NOTES DRAWING
53-0001 - 53-0010	ESPCP DRAINAGE AREA MAP
54-0001 - 54-0010	CONSTRUCTION BMP LOCATION DETAILS
55-0001 - 55-0010	EROSION CONTROL WATERSHED MAP AND SITE MONITORING LOCATION

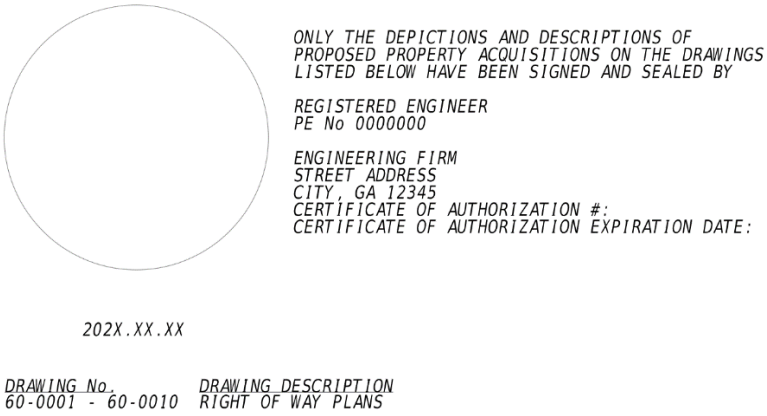
NOTE: DRAWINGS IN SECTIONS 40, 41, 52, AND 56
ARE GDOT STANDARDS AND DETAILS AND ARE NOT
COVERED BY THIS SIGNATURE AND SEAL. DRAWINGS
IN SECTION 38 CONTAIN GDOT SPECIAL DESIGN DETAILS
AND ARE NOT COVERED BY THIS SIGNATURE AND SEAL
UNLESS OTHERWISE LISTED IN THE ABOVE DRAWING LIST.

Revised PPG Language for PE Signing and Sealing

60.001 Required Information – General Projects

Right of Way Plans Signature Drawing

- The Right of Way Plans Signature Drawing:
  - Is required for consultant designed projects and is used to define an engineer's area of responsibility for the portions of the plans being digitally signed.
  - Is required for plans that will be signed by a single professional engineer or by more than one professional engineer.
  - Is to be located directly behind the last Right of Way Plans Cover Drawing.
- Revisions: In the event of revisions being submitted, a separate revision Signature Drawing shall be submitted with the revised drawings and shall be numbered xxA, xxB, etc. Only the professionals required to sign and seal the revision are to be included on the Signature Drawing. The revision Signature Drawing will be placed directly behind the original Signature Drawing(s) or the previous revision Signature Drawing, whichever is applicable. Where the same PE as the original Signature Drawing is signing and sealing a revision and the original Signature Drawing is editable and has the needed space, the PE may add the required information to the original Signature Drawing, provided it is listed among the revised drawings in the index of revised drawing that are being signed and sealed.
- For Final Right of Way Plans only, signature and seal of the professional(s) of record (1.5" in diameter on the record plan size)
- Statement of Responsibility: "ONLY THE DEPICTIONS AND DESCRIPTIONS OF PROPOSED PROPERTY ACQUISITIONS ON THE DRAWINGS LISTED BELOW HAVE BEEN SIGNED AND SEALED BY"
- Index (list of drawings that the licensed professional is responsible for signing and sealing)
- Example:



5 ENVIRONMENTAL

5.1 General Requirements

This TP Section 5 describes environmental requirements, including the description of the Design-Builder's responsibility to develop plans, to provide staff, and to execute and comply with all Laws and Governmental Approvals.

5.2 Administrative Requirements

5.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 5 in accordance with the Project Standards.

5.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

5.2.2.1 NEPA Specialist

The NEPA Specialist requirements and duties, in addition to those described herein, are set forth in TP Attachment 2-1 (Key Personnel and Required Personnel).

If the NEPA Specialist, in consultation with the CPM, the CQCM, and GDOT, is unable to reach satisfactory resolution of any violation of Environmental Law or environmental Noncompliance Event, the process set forth in DBA Section 17.8 (Dispute Resolution Procedures) shall be followed.

The NEPA Specialist shall perform or shall oversee and direct the Work of the Required Personnel specified in TP Attachment 2-1 (Key Personnel and Required Personnel) in the performance of environmental Work, including the following:

1. Preparation of Submittals to GDOT to support re-evaluation, amendments, and supplements to the Provided Environmental Approvals in accordance with the requirements of DBA Section 6.2.11 (Provided Environmental Approval Re-evaluation), the FHWA, and other Governmental Entities.
2. Providing environmental inputs and contractual durations and maintain active participation in the development of the Project Schedule.
3. Preparation and submittal of environmental documents and monitoring reports to the appropriate Governmental Entities routed through GDOT unless otherwise noted, as needed to obtain and maintain compliance with the Environmental Approvals.

5.2.2.2 Worksite Erosion Control Supervisor

In addition to the requirements in Standard Specification Section 161 and TP Attachment 2-1 (Key Personnel and Required Personnel), the Worksite Erosion Control Supervisor (WECS) shall maintain certification and perform the following duties:

1. Be available 24 hours a day and have access to the equipment, personnel, and materials needed to maintain erosion control, and to the extent practicable, flooding control. An approved representative can be substituted for the WECS in regard to 24-

hour availability. This representative shall be at least GSWCC Level IA, or higher, but is not required to be certified as a WECS.

2. Inform GDOT in writing whenever the alternate WECS will assume project responsibilities for more than 3 days.
3. Ensure that erosion control deficiencies are corrected within 72 hours.
4. Ensure that erosion control deficiencies that resulted in sediment deposition into waters of the State are corrected.
5. Attend the site within three hours after receiving notification of a potential or actual erosion control event, prepared to correct any deficient conditions encountered.
6. Ensure deficiencies that interfere with traffic flow, safety, or downstream turbidity are corrected immediately.
7. Ensure records are submitted and retained.

5.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings set forth in TP Table 5-1 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 5-1 (Required Project Meetings). See additional requirements in TP Section 2.2.3 (Required Meetings).

Table 5-1: Required Project Meetings

Meeting and Section Reference	*Frequency*	*Minimum Design-Builder Attendees*
Meeting to determine whether the Provided Environmental Approvals require re-evaluation, amendment or supplement TP Section 5.3.4.2 (Determining Scope of Re-evaluation)	After acceptance of Basis of D&C and as required	NEPA Specialist, CPM
Noise Vote Meeting	As required	NEPA Specialist, CPM, Noise Specialist
Environmental Coordination Meeting, and validation that scope and re-evaluation meeting results remain accurate	Every other week after NTP1	NEPA Specialist

5.3 Overview of Environmental Obligations

5.3.1 Design-Builder's Environmental Obligations

During the Term, the Design-Builder shall perform the following:

1. Comply with all conditions imposed by, undertake all actions required by, and undertake all actions necessary to maintain in full force and effect all Environmental Approvals, except to the extent specified in TP Section 5.3.2 (GDOT Retained Environmental Responsibilities).
2. Perform all the Environmental Commitments as described in TP Attachment 5-2 (Environmental Commitments), except to the extent specified in TP Section 5.3.2 (GDOT Retained Environmental Responsibilities).

In the performance of the Work, the Design-Builder shall:

1. Adhere to the requirements in the applicable Special Provision 107.23H and Special Provision 165.3.05.
2. Provide documents and schedule, and participate in all meetings to support GDOT in determination of circumstances where the Provided Environmental Approvals may require re-evaluation, amendment, or supplement, as further described in TP Section 5.3.4 (Amendments to Provided Environmental Approvals).
3. Make submittals to GDOT to support Environmental Approvals, including re-evaluation, amendment, or supplement to Provided Environmental Approvals that must be applied for in GDOT's name as further described in TP Section 5.3.4.3 (Design-Builder Submittals to Support Re-evaluation).
4. Obtain all Environmental Approvals and make submittals to Governmental Entities for those permits that may be applied for in the Design-Builder's name or GDOT's name, as further described in TP Section 5.3.6 (Design-Builder-Led Environmental Approvals), including the purchase of all required mitigation credits for the Project, except for those mitigation credits associated with the extinguishment of the Restrictive Covenant on Parcels 6 and 7.
5. Monitor and document Work activities so that documents providing evidence for compliance, including photo documentation and other appropriate methods, are available to FHWA, Governmental Entities, and GDOT for inspection at any time.
6. Notify GDOT of any breach of Environmental Laws, a failure to comply with an Environmental Approval, or failure to perform any Environmental Commitment as set forth in this TP Section 5.
7. Incorporate the use of environmentally sustainable practices and materials in the development of the Project.

The Design-Builder shall incorporate all permanent environmental protection features into the Work at the earliest practicable time. Temporary environmental protection measures shall be used to correct conditions that develop during Construction Work that were not foreseen during design; that are needed prior to installation of environmental protection features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the Project.

The Design-Builder shall implement temporary environmental protections that may include control measures outside the Project Limits where such protection is necessary as a direct result of Construction Work.

5.3.2 GDOT Retained Environmental Responsibilities

During the Term, GDOT will be responsible for the following:

1. All conditions imposed by Environmental Approvals that are GDOT's responsibility, as set out in TP Attachment 5-3 (Environmental Document Responsibility Matrix).
2. All activities of GDOT that are required for the Design-Builder to achieve its Environmental Commitments, as set out in TP Section 5.3.2.1 (GDOT Retained Environmental Commitments).

5.3.2.1 GDOT Retained Environmental Commitments

Upon receipt of Design-Builder's documentation supporting the Environmental Commitments based on the Provided Environmental Approvals, GDOT will perform the following activities:

1. Submit the completed application and supporting documentation to the USACE and serve as the applicant, including submittals of application of USACE permit and notification of USACE comments or approvals to the Design-Builder.
2. Submit the completed EPD Buffer Variance application and supporting documentation to the EPD, including submittals of application of EPD Buffer Variance and notification of EPD comments or approvals to the Design-Builder.
3. Conduct public outreach with property owners and tenants of benefited receptors and be responsible for the voting regarding proposed noise abatement, per GDOT's March 2020 Policy, after issuance of NTP2.
4. Complete Section 106 mitigation and agency consultation in fulfillment of the stipulations outlined in the ratified Section 106 Memorandum of Agreement.

5.3.3 Provided Environmental Approvals

TP Table 5-2 (Provided Environmental Approvals) sets out the Provided Environmental Approvals comprised of approved environmental studies and reports and the anticipated dates by which GDOT will provide such approvals or concurrences by Governmental Entities.

Table 5-2: Provided Environmental Approvals

Provided Environmental Approval	***Approval Date***
FONSI	9/5/2025
Environmental Assessment	3/14/2025
Ecological Assessment of Effects Report (EAOER)	12/27/2024
EAOER Addendum 1	5/23/2025
Cultural Resources Assessment of Effects (CRAOE) Report	11/27/2024
Section 106 Memorandum of Agreement	8/19/2025
Noise Impact Assessment (NIA) Report	1/22/2025
Air Quality Impact Assessment Report for CO, MSAT and PM 2.5	1/22/2025
Environmental Commitments Table (ECT)	1/31/2025
Archaeology Resources Phase 1 Report	3/4/2022
Archaeology Short Report Addendum 1	1/26/2023
Archaeology Short Report Addendum 2	6/13/2024
Archaeology Short Report Addendum 3	4/21/2025
Archaeology Reevaluation Memo	6/17/2025
Historic Resources Survey Report (HRSR)	3/15/2022
Approved ESA and Environmental Survey Boundary (ESB) per TP Attachment 5-4 (Environmental Resource Exhibit)	3/15/2024

5.3.4 Amendments to Provided Environmental Approvals

5.3.4.1 Circumstances Requiring Environmental Re-evaluation

DBA Section 6.2.11 (Provided Environmental Approval Re-evaluation) sets out when re-evaluation, amendment, or supplement of a Provided Approval is required. Such re-evaluation, amendment, or supplement may be conducted on all or a portion of the Project.

5.3.4.2 Determining Scope of Re-evaluation

As part of the Basis of D&C described in TP Attachment 2-2 (Basis of D&C Requirements), the Design-Builder shall identify those parts of the Design-Builder's Schematic Plan of Project and other Design Documents which are impacted by circumstances as identified in DBA Section 6.2.11 (Provided Environmental Approval Re-evaluation). The entire Project or a portion of the Project may be the subject of the re-evaluation, amendment, or supplement.

To support FHWA's or the relevant Governmental Entity's assessment as to whether the Provided Environmental Approvals require re-evaluation, amendment, or supplement, the Design-Builder shall schedule and facilitate a meeting with GDOT to discuss differences between the evolving design specified in TP Attachment 5-1 (Environmental Resource Impact Table), and the assumptions in the Provided Environmental Approvals and Basic Configuration, and to discuss any Change in Law. The meeting shall also include discussion on any differences to construction means and methods specified in TP Attachment 5-2 (Environmental Commitments) or any additions required to the environmental commitments. As available, the Design-Builder shall provide the supporting Design-Builder's Schematic Plan of Project and other Design Documents showing the changes to environmental resource impacts. The determination of the scope and type of re-evaluation will follow the process set forth in DBA Section 6.2.11 (Provided Environmental Approval Re-evaluation).

5.3.4.3 Design-Builder Submittals to Support Re-evaluation

The Design-Builder shall prepare and submit to GDOT all documentation necessary to support revisions to environmental studies. The documentation shall be consistent with the level of detail for technical report studies established in the original NEPA Approval. Such documentation will be assembled and transmitted by GDOT to the applicable Governmental Entities.

The Design-Builder shall submit a Re-evaluation Support Package which shall include the following:

1. Narrative report identifying changes as identified in TP Section 5.3.4.1 (Circumstances Requiring Environmental Re-evaluation) with reasons and justification.
2. Construction means and methods for the Project consistent with TP Attachment 5-2 (Environmental Commitments).
3. Plan sheets and associated electronic design files showing impacts to ESAs consistent with the Final Design and as required for permit applications.
4. Updates to TP Attachment 5-1 (Environmental Resource Impact Table) depicting impacts to all ESAs and updated impacts associated with each of the Design-Builder's Construction Phases and stages throughout the D&C Period. This table shall be updated during the D&C Period with any changes to impacts or the Design-Builder's Construction Phasing and Staging Plan. Any increased impacts to a resource labeled as an impact

freeze area shall be coordinated with GDOT to discuss potential impacts to the environmental re-evaluation.

5. Documentation supporting status of TP Attachment 5-2 (Environmental Commitments) requirements upon completion of each commitment as applicable.

The Design-Builder shall provide design information to support the development of amendments to Provided Environmental Approvals conducted by GDOT.

When reassessing impacts and submitting information to GDOT for incorporation into re-evaluation reports and studies, the Design-Builder shall follow all requirements under Environmental Laws and Project Standards.

5.3.5 Time Periods for Amendments to Provided Environmental Approvals

Where the Provided Environmental Approvals require re-evaluation, amendment, or supplement and the Design-Builder has provided the supporting documentation as described in TP Section 5.3.4 (Amendments to Provided Environmental Approvals), the time periods required for actions by GDOT and the anticipated time periods for action by Governmental Entities are set forth in TP Table 5-3 (GDOT-Led Environmental Preparation and Approval) and TP Attachment 5-3 (Environmental Document Responsibility Matrix). These time periods do not include any required public comment period or time for responding to the public comments.

Upon receipt of acceptable Submittals by the Design-Builder, GDOT will develop the technical report addenda and NEPA Approval re-evaluations and initiate communication and consultation with the relevant Governmental Entities within the time periods set forth in TP Table 5-3 (GDOT-Led Environmental Preparation and Approval). The review and issuance time periods set forth in TP Table 5-3 (GDOT-Led Environmental Preparation and Approval) per Governmental Entity shall be consecutive and may not occur concurrently. The time periods for the development of the technical studies and NEPA Approval re-evaluation by GDOT may exceed the periods shown if the extent of change to design or means and methods proposed by the Design-Builder, compared to the Provided Environmental Approvals is extensive.

Table 5-3: GDOT-Led Environmental Preparation and Approval

Document	***Governmental Entity Approval Time Frame (Calendar Days)***	***Reviewing Governmental Entity***
NEPA Approval re-evaluation	Prepare Document: 30 days (from receipt of acceptable technical report addenda)	GDOT
	Revise Document: seven days (after each GDOT or Governmental Entity review period)	GDOT
	Review period 1: 30 days Review period 2: 14 days	GDOT
	Review period 1: 30 days Review period 2: 14 days	FHWA

Document	***Governmental Entity Approval Time Frame (Calendar Days)***	***Reviewing Governmental Entity***
Ecology Report and Addendum	Prepare Survey and Report Addendum: 30 days (from receipt of acceptable Design-Builder's preliminary design plans, change description, and calculated impacts to resources)	GDOT
	Revise Addendum: seven days (after each GDOT or Governmental Entity review period)	GDOT
	Review period 1: 30 days Review period 2: 14 days	GDOT
	30 days	FHWA
	45 days (informal Section 7, after FHWA review)	USFWS
	135 days (for formal Section 7, after FHWA review)	USFWS
	45 days (for protected species — for Fish and Wildlife Coordination Act concurrence, after FHWA review)	USFWS
HRSR Addendum	Prepare HRSR Addendum: 21 days (from receipt of acceptable Design-Builder's preliminary design plans, change description, and calculated impacts to resources)	GDOT
	Review period 1: 30 days Review period 2: 14 days	GDOT
	Revise HRSR Addendum: seven days (for each GDOT or Governmental Entity review period)	GDOT
	30 days	SHPO
Phase 1 Archaeology Addendum	Prepare Phase 1 Archaeology Addendum: 21 days (from receipt of acceptable Design-Builder's preliminary design plans, change description, and calculated impacts to resources)	GDOT
	Review period 1: 30 days Review period 2: 15 days	GDOT
	Revise Phase 1 Archaeology Addendum: seven days (for each GDOT or Governmental Entity review period)	GDOT
	30 days	SHPO
Cultural Resources AOE Addendum (With draft MOA if needed)	Prepare AOE Addendum: 21 days (from receipt of acceptable Design-Builder's preliminary design plans, change description, and calculated impacts to resources)	GDOT
	Review period 1: 30 days Review period 2: 14 days	GDOT
	Revise AOE Addendum: seven days (for each GDOT or Governmental Entity review period)	GDOT
	30 days	SHPO

Document	***Governmental Entity Approval Time Frame (Calendar Days)***	***Reviewing Governmental Entity***
MOA Amendment	Prepare MOA Amendment: 21 days (from receipt of acceptable Design-Builder's preliminary design plans, change description, and calculated impacts to resources)	GDOT
	Review period 1: 30 days Review period 2: 14 days	GDOT
	Revise MOA Amendment: seven days (for each GDOT or Governmental Entity review period)	GDOT
	30 days	SHPO (Concurrence)
	MOA Ratification – 15 days	GDOT
	MOA Ratification – 15 days	SHPO
	MOA Ratification – 30 days	FHWA
PDOH	Prepare Document: 30 days prior to PDOH (from receipt of the Design-Builder detour plan)	GDOT
Public involvement for noise barrier voting	Logistics, fieldwork, voting, ballot, tally, and dry run: 45 days (after acceptable validation of noise wall effectiveness resulting from relocation of walls proposed by the Design-Builder)	GDOT
	30 days	GDOT
	15 days	FHWA
Noise Impact Assessment Report and Addendum	Prepare Document: 30 days (from acceptance of Preliminary Plans and acceptance of horizontal/vertical roadway plans for Traffic Noise Model (TNM))	GDOT
	Review period 1: 30 days Review period 2: 14 days	GDOT
	Revise noise report: seven days (after each GDOT or Governmental Entity review period)	GDOT
	30 days	FHWA
Air Quality Report and Addendum	Prepare Document: Memo to file for no change: seven days	GDOT
	30 days	GDOT
	Revise air memo: seven days (after each GDOT or Governmental Entity review period)	GDOT
	30 days	FHWA
Traffic Report and Addendum	Prepare Document: 60 days (following major project changes, such as begin/end limits or operational changes)	GDOT
	Review period 1: 45 days Review period 2: 15 days	GDOT
	Revise traffic document: 14 days (after each GDOT or Governmental Entity review period)	GDOT
	30 days	FHWA

5.3.6 Design-Builder-Led Environmental Approvals

The Design-Builder shall prepare all information for Design-Builder-Led Environmental Approvals, including those set forth in TP Table 5-4 (Design-Builder-Led Environmental Permit Approval). The Design-Builder shall provide to GDOT copies of receipts of delivery of the applications and paid fees to the Governmental Entities. For Notices of Termination (NOT), the Design-Builder shall provide to GDOT a copy of the acknowledgement of receipt of the NOT by EPD.

The Design-Builder shall obtain all Design-Builder-Led Environmental Approvals, including required mitigation purchases and Environmental Approvals not included in TP Table 5-4 (Design-Builder-Led Environmental Permit Approval) necessary to perform the Work in accordance with the Design-Build Documents. Where the applicant is listed as the Design-Builder, the Design-Builder shall provide to GDOT a copy of each permit application or permit modification prior to the Design-Builder's submittal to the appropriate Governmental Entities.

The Governmental Entity review time periods for certain Design-Builder-Led Environmental Approvals is set forth in TP Table 5-4 (Design-Builder-Led Environmental Permit Approval). The review and issuance time periods set forth in TP Table 5-4 (Design-Builder-Led Environmental Permit Approval) for Design-Builder-Led Environmental Approvals do not include time for revisions to such Governmental Approvals necessitated due to any re-evaluation, assessment, or supplement of a Provided Environmental Approval under DBA Section 6.2.11 (Provided Environmental Approval Re-evaluation).

The permits and review times in TP Table 5-4 (Design-Builder-Led Environmental Permit Approval) do not contemplate activities on Temporary Interests that the Design-Builder may propose for use in construction or other non-permanent construction.

Review and issuance time periods will commence once a completed permit package complying with the Design-Build Documents requirements is accepted by GDOT and submitted to the issuing Governmental Entity. Review and issuance time periods will end once the permit is issued by the appropriate Governmental Entity. The Design-Builder shall schedule sufficient periods prior to Governmental Entity submittal to ensure proper planning to accomplish the entire process for each required permit. For Submittals in TP Table 5-4 (Design-Builder-Led Environmental Permit Approval) with GDOT listed as the applicant, each initial GDOT review period shall be 30 days. Should the Submittal be incomplete or rejected, each subsequent review period will be an additional 15 days.

The Design-Builder shall obtain photogrammetric or geographic information system (GIS) data for the Project that depict any impaired waters as listed by EPD. The Design-Builder shall conduct topographic or environmental surveys for information not available from other sources.

Table 5-4: Design-Builder-Led Environmental Permit Approval

Permit Required	***Governmental Entity Review and Issuance Time Period (Calendar Days)***	***Listed Applicant***	***Preparer of Application***
United States Army Corps of Engineers (USACE) Section 404 General Permit[1]	90	GDOT	Design-Builder
USACE Section 404 Individual Permit[2]	240	GDOT	Design-Builder

Permit Required	*Governmental Entity Review and Issuance Time Period (Calendar Days)*	*Listed Applicant*	*Preparer of Application*
USACE Section 404 Individual Permit Modifications	90	GDOT	Design-Builder
Surface testing of all Underground Storage Tanks and Hazardous Materials	150	GDOT	Design-Builder
National Pollutant Discharge Elimination System (NPDES) Construction General Permit (GAR100002), NOI	14	Design-Builder	Design-Builder
NPDES Construction General Permit (GAR100003), NOI for Georgia Work	14	Design-Builder	Design-Builder
Georgia Stream Buffer Variance[3]	150	GDOT	Design-Builder
404 and Stream Buffer Variance Mitigation Credits Proof of Purchase	N/A	GDOT	Design-Builder

Notes:

1. This applies to Section 404 permitting and if additional impacts are incurred after the permit has been approved, a new permit that covers all impacts is required and the original review times apply to the new permit. No Work is authorized in the areas of the previous permit until the new permit is approved and construction authorization is received.
2. This applies to Section 404 permitting impacts which may exceed the cumulative threshold for a General Permit.
3. Mitigation credits for Georgia Stream Buffer Variance shall be obtained by the Design-Builder.

5.4 Noise Barriers

5.4.1 Design-Builder Support Noise Impact Analysis

The Design-Builder shall design, construct, and maintain the GDOT-identified Noise Barrier Baseline Requirements applicable to the Basic Configuration as identified in TP Table 5-5 (Noise Barrier Baseline Requirements) and as described in TP Section 22 (Noise Barriers), except where a GDOT Change is approved in accordance with DBA Section 14.6.3 (Noise Barrier-Related). Final noise barrier wall heights or elevations will be determined by the GDOT-performed noise abatement analysis and in compliance with TP Attachment 1-4 (Project Standards).

Table 5-5: Noise Barrier Baseline Requirements

Barrier No.	*General Location*	*Length (ft)*	*Area (ft^2)[1]*	*Benefitted Receptors*
1	West side of I-75: Beginning 450 feet north of Eagle's Brooke Apartment Homes and ending 900 feet south of the Bethlehem Elementary School	3,500	87,010	229

Notes:

1. Area is measured from final ground line to top of barrier and does not include any required embedded depths

5.4.2 Design-Builder Proposed Noise Barrier Location Changes

The Design-Builder shall follow the requirements set forth in DBA Section 14.6.3.2 (Design-Builder-Proposed Noise Barrier-Related Changes) for any proposed changes to the Noise Barrier Baseline Requirements. The changes can occur on a per noise barrier prospective to advance the noise vote.

The Design-Builder shall provide a Design-Builder Noise Barrier Change Memorandum that includes written technical justification for any noise barrier reduction in size, elimination of, or alternative to any noise barrier shown in the Noise Barrier Baseline Requirements. The Design-Builder shall provide an updated Noise Impact Analysis based on any proposed modification to the Basic Configuration. The modifications shall be consistent with the GDOT Highway Noise Abatement Policy for Federal-Aid Projects.

Following GDOT's acceptance of the Design-Builder Noise Barrier Change, the Design-Builder shall submit the following information to support the Change Request:

1. Necessary material to support GDOT's preparation of a Noise Addendum. Such addendum will follow the noise impact assessment process conducted by GDOT for the applicable Environmental Approvals.
2. Any changes to the preliminary TNM that was used by GDOT to support the noise impact assessment used for NEPA Approval, inclusive of FHWA Traffic Noise Model Version 2.5 (TNM 2.5) sound-level input, barrier table and TNM 2.5 barrier segment descriptions.
3. Final Design Documents from which GDOT can run the TNM using FHWA TNM 2.5 for all adjusted noise barriers. The TNM will be run for noise barriers between any two overpasses or underpasses where the alignment adjustment exceeds the criteria detailed in this TP Section 5.4.2.

If GDOT issues a Design-Builder Change Order under DBA Section 14.6.3.2 (Design-Builder-Proposed Noise Barrier-Related Changes) in respect of a Design-Builder Change under DBA Section 14.6.3.2 (Design-Builder-Proposed Noise Barrier-Related Changes), the Design-Builder shall submit a noise barrier design consistent with the supporting information provided with the Design-Builder Change Request.

Modifications (if any) to the Noise Barrier Baseline Requirements shall be subject to the cost share provisions set forth in DBA Section 14.6.3 (Noise Barrier-Related).

Where the baseline noise barrier is impractical to build due to final design constraints, the Design-Builder shall evaluate alternative solutions to achieve the receptor benefits listed in TP Table 5-5 (Noise Barrier Baseline Requirements).

Proposed noise barrier location adjustments shall be in accordance with DBA Section 14.6.3 (Noise Barrier-Related).

5.4.3 GDOT Noise Barrier Change

Coordination with impacted property owners and dwellers who will benefit from a possible noise barrier must be completed by GDOT prior to noise barrier Final Design as set forth in TP Section 22 (Noise Barriers). Property owners and dwellers must vote on the noise barrier per GDOT Highway Noise Abatement Policy for Federal-Aid Projects. If a noise barrier shown in TP

Table 5-5 (Proposed Noise Barrier Baseline Requirements) is reduced in size or eliminated as a result of a vote by property owners and dwellers, and not as a result of a Design-Builder Change Request, this change shall be subject to the provisions of DBA Section 14.6.3 (Noise Barrier-Related).

5.5 Reserved

5.6 Submittals

With respect to environmental requirements described in this TP Section 5, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 5 Attachments

Attachment No.	*Title*
Attachment 5-1	Environmental Resource Impact Table
Attachment 5-2	Environmental Commitments
Attachment 5-3	Environmental Document Responsibility Matrix
Attachment 5-4	Environmental Resource Exhibit

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 5-1

Environmental Resource Impact Table

Environmental Resources Impact Table

These resources and the restrictions listed are governed by state and federal law.

Resource Name (from Section A of the ECT)	Location			Permitted Construction Activity (from Section A of the ECT)	Special Provision? (from Section B of the ECT)	Comments (from Section C of the ECT, comments only)
	Beginning STA	Ending STA	Side			
Wetland (WL) 1	119+07	121+54	LT	No activity	-	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource.
Perennial Stream (PS) 2	N/A	N/A	N/A	"	-	"
PS2 Buffer	N/A	N/A	N/A	No activity	-	"
PS3/Bethlehem Bottoms	121+64	123+62	LT & RT	72 linear feet (LF) (0.03 acre [ac]) of permanent fill impact	Yes, SP 165.3.05	"
PS3/Bethlehem Bottoms Buffer	121+25	123+89	LT & RT	Activities within 100 feet of roadway drainage structure are exempt	-	"
PS4	116+47	119+34	LT	"	-	"
PS4 Buffer	115+73	119+34	LT	"	-	"
PS5	119+03	121+43	LT	"	-	"
PS5 Buffer	119+03	121+43	LT	"	-	"
WL6	121+68	128+76	LT & RT	1.91 ac of permanent fill impact	-	"
WL7	143+19	146+49	RT	No activity	-	"
PS8	293+78	294+04	LT	137 lf (0.022 ac) of permanent fill impact	-	"
PS8 Buffer	293+52	294+31	LT	Activities within 50 feet of roadway drainage structure are exempt	-	"
PS8a	N/A	N/A	N/A	No activity	-	"
PS8a Buffer	N/A	N/A	N/A	No activity	-	"
PS9	210+41	210+80	RT	156 lf (0.022 ac) of permanent fill impact	-	"
PS9 Buffer	210+16	211+19	RT	Activities within 50 feet of roadway drainage structure are exempt	-	"
PS10	1030+69	1039+36	LT & RT	635 lf (0.071 ac) of permanent fill impact	-	"
PS10 Buffer	1030+25	1039+66	LT & RT	Activities within 50 feet of roadway drainage structure and drainage structure are exempt	-	"
WL11	1020+40	1021+52	RT	0.102 ac of permanent fill impact	-	"
Intermittent Stream (IS) 12	1044+47	1045+62	RT	88 lf (0.006 ac) of permanent fill impact	-	"
IS12 Buffer	1044+17	1045+62	RT	Activities within 50 feet of roadway drainage structure and drainage structure are exempt	-	"
Ephemeral Channel (EC) 13	1045+61	1046+84	RT	299 lf (0.014 ac) of permanent fill impact	-	"
IS14	1041+07	1041+50	RT	No activity	-	"
IS14 Buffer	1041+13	1041+75	RT	"	-	"
IS15	1041+40	1041+90	RT	"	-	"
IS15 Buffer	1041+15	1041+93	RT	"	-	"
PS16	1067+84	1068+20	RT	230 lf (0.049 ac) of permanent fill impact	-	"

Resource Name (from Section A of the ECT)	Location			Permitted Construction Activity (from Section A of the ECT)	Special Provision? (from Section B of the ECT)	Comments (from Section C of the ECT, comments only)
	Beginning STA	Ending STA	Side			
PS16 Buffer	1067+59	1068+45	RT	Activities within 50 feet of roadway drainage structure are exempt	-	"
PS16a	1090+46	1093+05	RT	57 lf (0.18 ac) of permanent fill impact	-	"
PS16a Buffer	1090+12	1093+19	RT	Activities within 50 feet of roadway drainage structure are exempt	-	"
PS17	1072+54	1073+72	RT	256 lf (0.047 ac) of permanent fill impact	-	"
PS17 Buffer	1072+34	1073+97	RT	Activities within 50 feet of roadway drainage structure are exempt	-	"
IS17a	1089+22	1090+48	RT	No activity	-	"
IS17a Buffer	1089+00	1090+44	RT	"	-	"
IS17b	1091+61	1093+05	RT	"	-	"
IS17b Buffer	1091+66	1093+19	RT	"	-	"
WL18	1067+99	1068+68	RT	0.054 ac of permanent fill impact	-	"
IS19	1064+06	1066+96	RT	No activity	-	"
IS19 Buffer	1063+81	1066+62	RT	"	-	"
EC20	1065+87	1066+38	RT	"	-	"
WL21	1066+10	1066+47	RT	"	-	"
IS22	168+17	168+86	RT	"	-	"
IS22 Buffer	168+00	169+11	RT	"	-	"
IS23	179+12	180+83	RT	"	-	"
IS23 Buffer	179+29	181+08	RT	"	-	"
IS24	179+16	180+19	RT	"	-	"
IS24 Buffer	179+53	180+42	RT	"	-	"
EC 25	16+17	17+46	LT	"	-	"
IS26	17+44	17+72	LT	"	-	"
IS26 Buffer	17+19	17+97	LT	"	-	"
Buffered State Water (BSW) A1	1001+42	1005+88	RT	No activity	-	"
Listed Species				Roadway construction, such that harm to protected species is minimized.	SP107.23H	N/A
The Watkins House	1060+36	1060+94	LT	No activity	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource.
Norfolk Southern Railroad	40+23	48+62	RT	"	"	"
Resource 1	132+15	135+26	LT	No activity	N/A	The contractor will ensure that no construction-related activities or access occur beyond the Orange Barrier Fencing protecting this resource.
Resource 2	146+28	148+65	LT	"	"	"
Resource 3	598+65	602+25	LT	"	"	"
Resource 4	127+11	131+44	LT	"	"	"
Resource 5	1035+32	1035+97	RT	"	"	"
Resource 6	1072+44	1075+01	LT	"	"	"
404 Permits and Variances (from Section D of the ECT)		**Expiration dates** (if applicable) Contact GDOT OES 6 months prior to expiration, if work will extend beyond this date.				
Notice of Intent (NOI) for National Pollution Elimination Discharge Systems (NPDES)		The Design-Build Team shall submit an NOI for NPDES General Permit to the Georgia Environmental Protection Division (EPD) following award of the contract but prior to construction activities.				
Section 404 Permit(s)		The Georgia Department of Transportation (Georgia DOT) and Design-Build Team shall apply for a Section 404 Permit from the U.S. Army Corps of Engineers (USACE). This permit shall be obtained prior to any construction activities impacting waters of the U.S.				

Resource Name (from Section A of the ECT)	Location			Permitted Construction Activity (from Section A of the ECT)	Special Provision? (from Section B of the ECT)	Comments (from Section C of the ECT, comments only)
	Beginning STA	Ending STA	Side			
Stream Buffer Variance	The Georgia Department of Transportation (Georgia DOT) and Design-Build Team shall obtain a stream buffer variance from Georgia Environmental Protection Division (EPD) prior to any construction activities involving non-exempt buffer impacts.					

If there are no resources, indicate "None" in the first row. Include this table in the General Notes section of the plans as always.

ECT = Environmental Commitments Table, AKA "Green Sheet".

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 5-2

Environmental Commitments

Attachment 5-2: Environmental Commitments

1 General Commitments

1.1 USACE Section 404 Permits

The Design-Builder shall complete the appropriate Section 404 Permit application and all required supporting documentation for the appropriate permit from the USACE for the Project.

The Design-Builder shall complete all permitted activities per the Section 404 Permit within duration established by permit authorization.

The Design-Builder shall obtain the permit prior to land disturbing activities for impacts to the Waters of the U.S. as listed in Table 1 (USACE Section 404 Permit and Mitigation).

The Design-Builder shall conduct in-water Work in accordance with the Section 404 Permit authorization upon USACE issuing the authorization for proposed impacts to Waters of the U.S.

Table 1: USACE Section 404 Permit and Mitigation

Permit, Variance, etc.		***Additional Info (permit expiration date, number of credits needed, etc.)***
C-2	USACE Section 404 Individual Permit	The Georgia Department of Transportation (Georgia DOT) and Design-Builder shall apply for a Section 404 Permit from the USACE. This permit shall be obtained prior to any construction activities impacting jurisdictional waters.
C-3	Stream Mitigation Credits	The proposed 1,930 linear feet of jurisdictional stream impacts listed in the Provided Environmental Approvals shall be mitigated through the purchase of compensatory mitigation credits from a USACE-approved commercial mitigation bank servicing HUC 03070103. 1,335.38 (2018) credits/15,169.50 (legacy) credits would be needed for proposed stream impacts listed in the Provided Environmental Approvals.
C-4	Wetland Mitigation Credits	The proposed 2.066 acres of jurisdictional wetland impacts listed in the Provided Environmental Approvals shall be mitigated through the purchase of compensatory mitigation credits from a USACE-approved commercial mitigation bank servicing HUC 03070103. It is estimated that 1.55 (2018) credits/12.40 (legacy) credits would be needed for proposed wetland impacts listed in the Provided Environmental Approvals.
D-4	USACE Section 404 Nationwide Permit	The Georgia DOT and Design-Builder shall apply for a Section 404 Permit from the USACE for a Nationwide Permit 6 for geotechnical services at Bethlehem Bottoms.

1.2 Limited Access Fencing Requirements for Environmentally Sensitive Areas

Where required by TP Section 11.3.4.1 (Control of Access Fencing), the installation and maintenance of all limited access fencing located in Environmentally Sensitive Areas (ESAs) shall be installed and maintained by hand. Vegetation shall be cleared by hand, the ground shall not be grubbed, and no mulching of removed vegetation shall be permitted in ESAs. The clearing of vegetation within ESAs for the installation and maintenance of limited access fencing shall be kept to the minimum needed to install or maintain the fencing. Use of equipment that disturbs soil or grubs the ground outside of fence post holes shall not be permissible. In areas along streams, fence postings shall be located at least 5 feet from stream top of bank.

Additionally, the Design-Builder shall prepare a Limited Access Fencing Removal and Installation Plan for all ESAs. This plan shall be provided to GDOT Office of Environmental Services for review and approval at least 60 days in advance of limited access fencing work in ESAs.

1.3 GaEPD Buffer Variance

The Design-Builder shall complete the appropriate application, and all required supporting documentation for the appropriate buffer variance from Georgia Environmental Protection Division (GaEPD) for the Project.

The Design-Builder shall obtain the buffer variance prior to issuance of NTP3 associated with proposed impacts based on Provided Environmental Approvals and as listed in Table 2 (GA EPD Buffer Variances and Mitigation).

The Design-Builder shall conduct Work in State buffers in accordance with the buffer variance application and authorization.

Table 2: GA EPD Buffer Variances and Mitigation

Permit, Variance, etc.		***Additional Info (permit expiration date, number of credits needed, etc.)***
C-7	EPD Buffer Variance	The Design-Builder shall obtain a stream buffer variance from Georgia Environmental Protection Division (GaEPD) prior to any construction activities involving non-exempt buffer impacts.
C-6	Buffer Mitigation Credits	Anticipated mitigation for non-exempt impacts to Perennial Stream (PS) 10, Intermittent Stream (IS) 12 and PS17 – Number of credits will be determined with final plans by the Design-Builder.

1.4 NPDES Permit

The Design-Builder shall complete the NPDES Checklist to submit the Notice of Intent (NOI) for the Project.

The Design-Builder shall complete the NOIs for the Project and submit to GaEPD through the GaEPD Online System (GEOS).

The Design-Builder shall provide the Project Schedule and Final Erosion, Sedimentation, and Pollution Control Plans (ESPCP) to GaEPD through the GEOS.

The Design-Builder shall complete the Notice of Termination (NOTs) for the Project and submit to file and close out within allowable days of completing construction activity. The Design-Builder shall submit the NOT forms, including related certifications, to GaEPD through GEOS.

1.5 Restricted Access Areas

1.5.1 Environmental Resources Plan Label

The Design-Builder shall include the following note on all plan sheets with resources delineated as ESAs: “See Environmental Resources Impact Table in the General Notes for Construction Restrictions.” The Design-Builder shall ensure that no construction related activities, other than those shown on the approved plans, occur within the boundary of this resource. Any impacts to this resource proposed beyond the orange barrier fence or Required ROW will require an

environmental re-evaluation. The Design-Builder shall delineate ESAs with orange barrier fencing.

2 After Issuance of NTP2 – Pre-Construction

2.1 Public Involvement

The Design-Builder shall continue Public Involvement (PI) efforts to notify the public of design changes and traffic access/pattern changes prior to land-disturbing activities.

See also TP Attachment 2-3 (Public Information and Communications) and TP Section 18 (Traffic Control).

2.2 FEMA

The Design-Builder shall complete the hydraulic analysis for final design to acquire No Rise Certifications for the protection of floodplains and coordinate with local Governmental Entities to acquire CLOMR/LOMR, as needed. See also TP Section 12 (Drainage).

2.3 Noise Barriers

The Design-Builder shall develop a plan for the construction of noise barriers and submit to GDOT for review and acceptance. See also TP Section 22 (Noise Barriers) and TP Attachment 2-3 (Public Information and Communications).

2.4 Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was completed for the Project in April 2023 for sites that may contain Hazardous Materials, including soil or water contaminated by Hazardous Materials. The ESA was performed in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) International Practice E1527-13. Four sites were identified with Recognized Environmental Conditions (REC). The sites are listed in Table 3 (Sites Assessed).

Table 3: Sites Assessed

Facility/Site Name	*Location*	*Site Type*	*Effects*
Lafarge Concrete Plant	110 Michaels Drive	REC	No concentrations of VOCs or SVOCs were detected above their laboratory detection limits in groundwater.
Valero	2630 Highway 42S	REC	No concentrations of BTEX or PAHs were detected above their laboratory detection limits in groundwater.
Peek	125 Bethlehem Rd	REC	No concentrations of VOCs or SVOCs were detected above their laboratory detection limits in groundwater.
Wooded (tire fire)	Bethlehem Rd	REC	Groundwater was not encountered at this site.

Soil and groundwater sampling were recommended as a part of the Phase I ESA. Accordingly, a Phase II ESA was performed and the sampling conducted at four sites.

The Design-Builder shall conduct additional Phase I and Phase II ESAs per the requirements in TP Section 8.3.3.6 (Environmental Site Assessment).

2.5 Lighting

All new, permanent, lighting fixtures on the Project (with the exception of pedestrian lighting fixtures) shall use downward-facing, full cut-off lens lights (with approximately same intensity or less for replacement lighting).

3 After Issuance of NTP3 – During Construction

3.1 Wildlife and Habitat

No less than 30 days prior to the start of Work on any bridges, the Design-Builder shall notify the Animal and Plant Health Inspection Service (APHIS) Biologist of the Work that is scheduled to begin. The APHIS Biologist will develop an action plan that will address nest prevention and removal.

The Design-Builder shall not use exclusionary barriers on any bridges.

The Design-Builder shall install and maintain exclusionary barriers on any box culverts included in the Work. Exclusionary barriers must be deployed on the box culverts prior to March 15, but at no time between March 15 and August 31 unless the GDOT State Environmental Liaison provides written authorization.

If culvert inspections were not completed by a GDOT ecologist or Consultant prequalified in Area Class 1.06(h) or prequalified in Area Class 1.06(e) with documented completion of the GADNR/USFWS “Bats in Bridges” training in the appropriate season (December 1 to February 28) within the two years prior to RFP, and work (construction/demolition/maintenance) is to occur on any existing culverts that are 36 inches or greater in diameter and not composed of corrugated metal, then the Design-Builder shall adhere to the following conditions:

1. To avoid effects to roosting bats, culverts shall be inspected by a Consultant prequalified in Area Class 1.06(h) or prequalified in Area Class 1.06(e) with documented completion of the GADNR/USFWS “Bats in Bridges” training no more than 14 days before work to determine the presence of federally listed bats. If species identification is uncertain, presence of federally listed bats should be assumed. The contract ecologist shall document the findings of his/her inspection by completing a Georgia Bat in Bridges Datasheet inspection form. Within two Business Days of completing the inspection, the contract ecologist shall submit a copy of the inspection form to the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services via the Ecology submittals inbox (Ecology_submittals@dot.ga.gov). This email shall be formatted with “Bat Inspection Report: PI No. XXXXXXX” in the subject line. The State Environmental Administrator in turn will provide the inspection form to U.S. Fish and Wildlife Service, Georgia Department of Natural Resources, and the lead Federal Agency within five Business Days of receipt.
2. If culvert construction activities must be performed outside of the active season of April 1 to October 15 or if federally listed bats are present at any time of year, and the culvert assessment surveys indicate the presence of less than five federally listed bats, work may be completed where construction materials do not enter the culvert or work inside of the culvert is conducted away from roosting bats and does not involve percussives or noise levels above general traffic (e.g., wing-wall work, scour, or pier concrete repair). If

the presence of bats is assumed, the culvert assessment suggests the presence of federally listed bats, five or more federal bats are found, or if less than five federal bats are present but the proposed work activities do not meet the previously described criteria, then demolition, maintenance, and/or construction activities shall cease construction pending consultation by the Department with the USFWS and the lead Federal Agency.

If bridge inspections were not completed by a GDOT ecologist or Consultant prequalified in Area Class 1.06(h) or prequalified in Area Class 1.06(e) with documented completion of the GADNR/USFWS "Bats in Bridges" training within the two years prior to RFP, and work (construction/demolition/maintenance) is to occur on any bridges, then the Design-Builder shall adhere to the following conditions:

1. To avoid effects to roosting bats, bridges shall be inspected by a Consultant prequalified in Area Class 1.06(h) or Area Class 1.06(e) with documented completion of the GADNR/USFWS "Bats in Bridges" training no more than 14 days before work to determine the presence of federally listed bats. If species identification is uncertain, presence of federally listed bats should be assumed. The contract ecologist shall document the findings of their inspection by completing a Georgia Bat in Bridges Datasheet inspection form. Within two Business Days of completing the inspection, the contract ecologist shall submit a copy of the inspection form to the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services via the ecology submittals inbox (Ecology_submittals@dot.ga.gov). This email shall be formatted with "Bat Inspection Report: PI No. XXXXXXX" in the subject line. The State Environmental Administrator in turn will provide the inspection form to U.S. Fish and Wildlife Service, Georgia Department of Natural Resources, and the lead Federal Agency within five Business Days of receipt.
2. If bridge removal, replacement, and/or maintenance work must be performed during the non-volant pup season (April 1–July 31) or if federally listed bats are present at any time of year, and the bridge assessment surveys suggest presence of less than five federally listed bats and no pups are present, work may generally be conducted with the presence of bats under the following circumstances: above deck construction where equipment/materials do not extend to the underside of deck (e.g., materials that may drip down to underside of deck); activities do not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work); below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair); or required joint replacement and copolymer overlay following the procedure provided in Appendix A of the *December 2023 Collaborative Programmatic Agreement for Federally Listed and State Protected Bat Species in Georgia*.
3. If the bridge assessment does not suggest the presence of any federally listed bats, bridge demolition, maintenance, and/or construction activities may proceed. If the presence of federally listed bats is assumed, the bridge assessment suggests the presence of five or more federally listed bats or the presence of any pups, or the bridge assessment suggests the presence of less than five federally listed bats but proposed work activities are not consistent with the circumstances described above, then demolition, maintenance, and/or construction activities shall cease pending consultation by the Department with the USFWS and the lead Federal Agency.

3.2 Reserved

3.3 Roadway Signage

The Design-Builder shall place any required roadway or trail blazing signage outside Pavement Limits outside of any waters of the U.S.

3.4 Hazardous Materials

The Design-Builder shall be responsible for the development of a Spill Prevention, Control, and Countermeasure Plan prior to start of construction. In the event of spills or releases of petroleum products and other hazardous liquids or solid materials, the Design-Builder shall take immediate action to contain and eliminate the spill release, including the deployment of environmental protection measures to prevent the migration of the spill into the Waters of the U.S. and worker exposure protection measures. The Design-Builder shall notify GDOT immediately of all instances involving the spill, discharge, dumping, or any other releases or discovery of Hazardous Materials into the Environment and shall provide all required notifications and response actions.

The Design-Builder shall manage solid waste, hazardous waste, and Hazardous Materials in accordance with all applicable federal, state, and local environmental regulations and shall implement good housekeeping, waste minimization, and pollution prevention practices.

The Design-Builder shall be responsible for the management, treatment, handling, storage, monitoring, remediation, removal, transport, and disposal of any Hazardous Materials in concentrations or quantities that require removal or remediation in accordance with the Design-Build Documents or applicable Law located in, on, or under the Project ROW where Work is performed. The Design-Builder shall obtain all Governmental Approvals relating to remedial actions. The Design-Builder shall be solely responsible for compliance with such Governmental Approvals and applicable Laws concerning or relating to Hazardous Materials.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 5-3

Environmental Document Responsibility Matrix

Attachment 5-3
Environmental Document Responsibility Matrix

Legend	
Design-Builder Provides	A
Design-Builder Submits	B
GDOT Provides	C
GDOT Transmits	D
FHWA Provides	E
USACE Provides	F
EPD Provides	G

Timing
NTP1
NTP2
NTP3

Environmental Document Type	Activities Description	Responsibility					Timing	Duration (Days)	Comments
		Design-Builder	GDOT	FHWA	USACE	EPD			
Ecology Report and Addendum	Combined Ecology Resource Survey and Assessment of Effects Report		C				NTP1	0	GDOT provided Environmental Approvals
	ERIT and Change Narrative	B					NTP2	(X)	
	Design plans (DGN)	B					NTP2	(X)	
	Ecology Resource Survey and Assessment of Effects Report Addendum		C, D				NTP2	81	GDOT prepares, reviews, accepts based on Design-Builder-led Environmental Approval Permit
	FHWA Acceptance			E			NTP2	21	GDOT Transmits to FHWA transmits to USFWS for concurrence
	USFWS Concurrence			E			NTP2	21	
	Approved Ecology Resource Survey and Assessment of Effects Report Addendum		C				NTP2	1	GDOT provides to Design-Builder for 404 Permit and Stream Buffer Variance
USACE Section 404 Permit	Combined Ecology Resource Survey and Assessment of Effects Report		C				NTP1	0	GDOT provided Environmental Approvals
	ERIT and Change Narrative	B					NTP2	(X)	
	Design Plans (DGN)	B					NTP2	(X)	Design-Builder Provided Plans for Permit: •Cover Sheet •Index (Section 2) •General Notes (Section 4) •Typical Sections (Section 5) •Mainline Roadway Plans (Section 13) •Mainline Roadway Profiles (Section 15) •Crossroad Profiles (Section 16) •Construction Staging Sheets (Sections 18, 19, and 20) •Cross-Sections (Section 23) •Utility Plans (Section 24) •Bridge Plans (Sections 35, 36, 37, and 39) •Erosion Control Plans (Sections 50-55) •Stream cross-sections and longitudinal profiles (Section 13, 15, 19 and 23) only for projects proposing new culverts on perennial streams •Culvert for perennial streams (Section 36, 39)
	Draft 404 Permit Application	B					NTP2	(X)	
	Ecology Report and Addendum Revision(s)		C				NTP2	1	GDOT transmits with 404 Permit to USACE for approval (See durations above for Ecology Report and Addm)
	GDOT-Accepted 404 Permit		D				NTP2	30	GDOT accepts Design-Builder 404 Permit and transmits to USACE for approval
	USACE-Approved 404 Permit				F		NTP2	240	USACE review duration after GDOT acceptance
	USACE-Approved 404 Permit		C				NTP2	1	GDOT provides USACE-Approved 404 Permit to Design-Builder for NTP3 compliance
Notice of Intent (NOI)	Ecology Resource Survey and Assessment of Effects Report Addendum		C				NTP1	1	See durations above for Ecology Report and Addendum
	ERIT and Change Narrative	B					NTP2	(X)	
	ESPCP	B					NTP2	(X)	Design-Builder submits Signed & Sealed ESPCP to EPD
	EPD Approved NOI for ESPCP					G	NTP2	14	EPD review duration

Environmental Document Type	Activities Description	Responsibility					Timing	Duration (Days)	Comments
		Design-Builder	GDOT	FHWA	USACE	EPD			
Stream Buffer Variance	Combined Ecology Resource Survey and Assessment of Effects Report		C				NTP1	1	See durations above for Ecology Report and Addendum
	ERIT and Change Narrative	B					NTP2	(X)	
	Design plans (DGN)	B					NTP2	(X)	Final ESPCP and signed & sealed ESPCP
	Draft Buffer Variance Application	B					NTP2	(X)	
	Ecology Report and Addendum Revision(s)		C				NTP2	1	GDOT transmits with BV to EPD for approval (See durations above for Ecology Report and Addm)
	GDOT-Accepted Buffer Variance		D				NTP2	30	GDOT transmits to EPD for approval
	EPD Approved Buffer Variance					G	NTP2	150	EPD review duration after GDOT acceptance
	EPD Approved Buffer Variance		C				NTP2	1	GDOT provides to Design-Builder for NTP3 compliance
History and Archaeology Report Addenda, Cultural Resources AOE Addendum	Cultural Resources AOE and Section 106 Memorandum of Agreement (MOA)		C				NTP1	0	GDOT provided Environmental Approvals
	HRSR and Section 106 Notification		C				NTP1	0	GDOT provided Environmental Approvals
	Archaeology Resource Phase I Report		C				NTP1	0	GDOT provided Environmental Approvals
	ERIT and Change Narrative	B					NTP2	(X)	
	Design plans (DGN)	B					NTP2	(X)	
	HRSR Addendum		C, D				NTP2	72	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits to SHPO
	Phase I Archaeological Survey Report Addendum		C, D				NTP2	72	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits to SHPO
	Cultural Resources AOE Addm		C, D				NTP2	72	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits to SHPO
	SHPO Concurrence		C				NTP2	30	SHPO provides Concurrence to GDOT for NEPA Reeval
	MOA Ratification		C, D	E			NTP2	60	Includes 15 days for GDOT, 15 days for SHPO, and 30 days for FHWA
Section 4(f) Analysis	Draft 4(f) Analysis		C, D				NTP2	150	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits to FHWA
	Stakeholder Involvement		C, D				NTP2	40	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits
	DOI Review		C, D				NTP2	40	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits
	Final 4(f) Analysis with FHWA Approval		C, D				NTP2	92	GDOT prepares, reviews, accepts based on Design-Builder Change and transmits to FHWA
Noise Report and Addendum	Type III Noise Assessment		C				NTP1	0	GDOT provided Environmental Approvals
	Design-Builder Noise Barrier Change Memorandum	B					NTP2	(X)	Design-Builder prepares and submits Noise Barrier Change Memorandum
	TNM 2.5 Sound Results Table	B					NTP2	(X)	Demonstrates equal number of benefitted receivers (compared to NIA "With Barrier" results) and meets GDOT Noise Policy
	TNM 2.5 Barrier Input Table	B					NTP2	(X)	
	TNM 2.5 Barrier Description Table	B					NTP2	(X)	
	Roadway plans (DGN)	B					NTP2	(X)	Preliminary Design Documents
	Elevation Data (DTM)	B					NTP2	(X)	Preliminary Design Documents
	Concurrence on Sound Results		C				NTP2	2	
	Final Heights		C				NTP2	14	Final noise barrier heights based on Design-Builder-proposed horizontal alignment
	Shop drawings and RFC noise barrier plans	B					NTP2	(X)	Concurrent with activities below
	Noise Vote Process		C				NTP2	1	See NEPA Reevaluation for Noise Vote Process
	GDOT-Accepted Noise Addendum		D				NTP2	81	GDOT prepares, review, and accepts
	FHWA Approved Noise Addendum			E			NTP2	30	
Air Quality Report and Addendum	Air Quality Impact Assessment Report for CO and MSAT		C				NTP1	0	GDOT provided Environmental Approvals
	Change Narrative	B					NTP2	(X)	GDOT Traffic Approval dependent for Substantial Changes
	Air Quality Report and Addendum Memo to file		C				NTP2	37	GDOT prepares, review, and accepts
	FHWA Approved Air Quality Addendum			E			NTP2	30	As needed, if Memo to file is not accepted.
Traffic Report and Addendum	Traffic Report		C				NTP1	0	GDOT provided Environmental Approvals
	Change Narrative	B					NTP2	1	Design-Builder Submits after Basis of D&C Acceptances
	Traffic Report and Addendum		C				NTP2	120	
	FHWA Approved Traffic Report and Addendum			E			NTP2	30	

Environmental Document Type	Activities Description	Responsibility					Timing	Duration (Days)	Comments
		Design-Builder	GDOT	FHWA	USACE	EPD			
NEPA Reevaluation	Approved Ecology Resource Survey and Assessment of Effects Report Addendum		C				NTP1	1	See durations above for Ecology Report and Addendum
	USACE-Approved 404 Permit		C				NTP1	1	See durations above for 404 Permit approval
	EPD Approved NOI for ESPCP	A					NTP1	(X)	See durations above for NOI approval
	EPD Approved Buffer Variance		C				NTP1	1	See durations above for Buffer Variance approval
	NEPA Approval		C				NTP1	0	GDOT provided Environmental Approvals
	GDOT-Accepted Scope of Reevaluation		C				NTP1	10	Scope of Reevaluation meeting; after Basis of D&C Acceptances & any additional Changes
	ERIT and Change Narrative	B					NTP2	(X)	
	Buffer Variance	B					NTP2	(X)	Design-Builder provides for documentation of Env Commitment completion
	Permit	B					NTP2	(X)	Design-Builder provides for documentation of Env Commitment completion
	Noise Vote Process		C, D	E			NTP2	90	GDOT and FHWA Acceptance of Vote
	Noise Addendum		D				NTP2	1	See durations above for FHWA approval of Noise Addendum
	GDOT-Accepted NEPA Reevaluation		D				NTP2	81	
	GDOT Transmits to FHWA		D				NTP2	1	
	FHWA Reviews NEPA Reevaluation			E			NTP2	30	
	FHWA Approval			E			NTP2	1	

Notes:

(X) Denotes time durations to be provided by the Design-Builder for the development, review and acceptance of Design-Builder provided documents to support the environmental documents

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 5-4

Environmental Resource Exhibit

Medline Pl
Greenwood Industrial Pkwy
Greenwood Pl
Highway 42 S
John R Wi
Lincoln Log Way
Iris Lake Rd
Grant Ave
Harris Dr
Bethlehem Elementary School
Academic Pkwy
Resource 6
Resource 3
Norfolk Southern Railroad
Highway 42
Bethlehem Rd
The Watkins House
Resource 1
Resource 4
Resource 2
Resource 5
PS2
PS4
PS5
WL1
PS3/Bethlehem Bottoms
WL6
WL7
PS16a
IS17b
IS17a
PS17
PS16
WL18
WL21
EC20
IS19
IS24
IS23
PS10
IS22
EC13
IS12
IS15
IS14
IS26
EC25
Pine Grove Rd
23
Eagles Brooke Dr
Indian Creek
Lester Mill Rd
Price Dr
PS9
WL11
PS8
BSWa1
PS8a
Colvin Dr
75
GDOT PI 0017182
Project Roadway
Cemetery
Place of Worship
School
Railroad
ESA Boundary
Buffered State Waters
Ephemeral Channel
Intermittent Streams
Perennial Streams
Wetlands
NRHP Eligible Properties
Restrictive Covenant
Parcel Boundary
Environmental Survey Boundary
Attachment 5-4
0 0.13 0.25 0.5 Miles
N

6 RIGHT OF WAY

6.1 General Requirements

This TP Section 6 sets forth the Design-Builder's obligations for Acquisition Services and requirements applicable to the Work assigned to the Design-Builder related to Pre Acquisition Services and Post Acquisition Services.

To assist with the Design-Builder's understanding of the ROW process, TP Attachment 6-1 (Acquisition Services Workflow) is provided but shall only be used if there are parcels in DBA Exhibit 4 (Parcel Acquisition Table) identified as State Proposed/Design-Builder Acquired (SP/DA).

6.1.1 ROW Service Classes

The Design-Builder shall perform, or cause to be performed, the Acquisition Services using only contractors and personnel on GDOT's pre-approved ROW consultant list for those ROW Service Classes described in TP Table 6-1 (ROW Service Class) and online at https://www.dot.ga.gov/GDOT/pages/business.aspx.

The Design-Builder may include additional ROW Service Classes in the ROW Acquisition Plan provided the Design-Builder only utilizes contractors and personnel on GDOT's pre-approved ROW consultant list.

Table 6-1: ROW Service Class

ROW Service Class		***Requirement***
A: ROW Services-Relocation		
A-1	Conceptual Stage Study	Required if NEPA Approval re-evaluation, amendment or supplement required in accordance with DBA Section 6.2 (Governmental Approvals and Third Party Agreements) and TP Section 5 (Environmental)
A-2	Relocation Benefits Package	Required
B: ROW- Pre/Post Project Preparation		
B-1	ROW Acquisition Plan Review	Required
C: ROW Services-Valuation		
C-1	Appraisal Report	Required
C-3	Cost to Cure Report	Required
C-4	Trade Fixture Report	Required
C-5	Sign Appraisal	Required
C-6	Environmental Assessment Report	Required
C-7	Septic Tank/Well Estimator	Required if septic tank or well impacted
C-8	Timber Report	Required if Design-Builder Proposed/Design-Builder Acquired ROW impacts timber
C-9	Detailed ROW Cost Estimator	Required
C-10	Preliminary ROW Cost Estimator	Required
C-11	Concept Team Meeting	Required

ROW Service Class		***Requirement***
D: ROW Services-Acquisition		
D-1	ROW Project Manager	Required
D-2	Pre-Acquisition Agent	Required
D-3	Acquisition Manager	Required
D-4-B	Negotiation Agent 1	Required based on Parcel type
D-4-C	Negotiation Agent 2	Required based on Parcel type
D-4-D	Negotiation Agent 3	Required based on Parcel type
D-5	Relocation Negotiation Agent	Required
D-7	Interpreter	Required where the acquisition of a Parcel involves non-English speaking
E: ROW Services-Property Management		
E-1	Asbestos Inspection	Required
E-2	Asbestos Abatement	Required
E-3	Demolition	Required
E-4	UST Removal	Required if underground storage tank is impacted
E-5	Site Inspector	Required
F: ROW Services-Court Coordinator		
F-1	Court Coordinator	Required

6.1.2 Schedule

The Design-Builder shall ensure that the Project Schedule is consistent with the anticipated and actual acquisition dates in the Parcel Acquisition Table and the actions being performed by the SAAG and FHWA as described in TP Section 6.1.3 (Responsibilities of the Office of Attorney General).

In developing the schedule, the Design-Builder shall prioritize acquisitions that have substantial impact or are most significant to the Project Schedule or Critical Path and include adequate time for GDOT review of Acquisition Packages, Condemnation Packages, and revisions thereof.

6.1.3 Responsibilities of the Office of Attorney General

The SAAG, with the assistance of the Design-Builder and in coordination with GDOT shall have the following responsibilities in connection with acquisition of State Proposed/Design-Builder Acquired ROW and if required, Design-Builder Proposed/Design-Builder Acquired ROW:

1. Prepare ownership verifications and preliminary title certificates including all pertinent deeds or documents relating to each Parcel.
2. Review ROW Plans/Maps for property line discrepancies or errors.
3. Analyze recommended Parcel values and appraisal issues.
4. Coordinate with GDOT on legal matters concerning acquisition processes, including all negotiated legal settlements.
5. Conduct closings within 90 days of GDOT's execution of an Option Agreement.
6. Prepare final title opinions required for closings.

7. Prepare and file condemnation petitions in accordance with DBA Section 2.5 (State Proposed/Design-Builder Acquired Right of Way) and DBA Article 2 (Grant of GDOT and Right of Way).
8. Represent GDOT as attorney of record.
9. Prepare, obtain, and file all necessary legal documentation for eviction of property owners or tenants.
10. Implement jury trials including determination of expert witnesses and all appeals (if required).

6.2 Administrative Requirements

6.2.1 Project Standards

The Design-Builder shall perform ROW Services and other ROW requirements governed by this TP Section 6, along with all related Work, in accordance with applicable State and federal laws, practices, guidelines, procedures, methods and terms and conditions set forth in the following:

1. TP Attachment 1-4 (Project Standards)
2. The GDOT Right-of-Way Policies & Procedures

6.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

6.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings in TP Table 6-2 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 6-2 (Required Project Meetings). The Design-Builder shall invite the necessary staff from GDOT and its representatives and shall cause to attend each meeting the necessary Key Personnel, Required Personnel, and other staff having responsibility for the subject matter, authority to make decisions, and ability to implement actions arising at the meeting. The Design-Builder is encouraged to combine meetings when appropriate. The Design-Builder shall lead and facilitate the meetings, prepare and distribute meeting agendas a minimum of 24 hours in advance, and prepare and distribute meeting minutes within three Business Days after the meeting. The Design-Builder shall hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. At a minimum, meeting minutes shall clearly identify the following:

1. Date, time, location, and purpose of meeting
2. Meeting attendees
3. Action items and issues
4. Parties responsible for each action item
5. Due dates for identified action items
6. Status of action items and issues (once completed, note “completed” in next meeting minutes before removing from subsequent minutes)

Table 6-2: Required Project Meetings

Meeting and Section Reference	*Frequency*	*Minimum Design-Builder Attendees*
ROW Project Status Meeting	Monthly until the date that is the earlier of Final Acceptance or GDOT's acceptance of a Request for Parcel Certification Release for all Parcels in the Project Limits.	ROW PM
Parcel Owners Meeting TP Section 6.3.4 (Parcel Owners Meeting)	Once, within 30 days of acceptance of the ROW Acquisition Plan.	ROW PM, ROW Acquisition Manager, ROW Relocation Assistance Specialist ROW negotiators

Note 1: The meetings set out in this TP Table 6-2 are in addition to any meetings required in the GDOT Right-of-Way Policies & Procedures.

6.2.4 Correspondence and Documentation

The Design-Builder shall be responsible for all documentation required in relation to the Design-Builder services described in this TP Section 6. In addition to submitting documents through the PMCS, the Design-Builder shall maintain parcel-by-parcel records and information for each Design-Builder acquired ROW Parcel. The Design-Builder shall follow GDOT naming conventions for all documentation, including electronic files and field reports.

All documentation relating to the acquisition of a Parcel shall include a heading with, at minimum, the following information:

1. County
2. P.I. number
3. Parcel number
4. Name and address of owners of record, tenant, or other interest holder

All correspondence with Parcel Owners and Parcel Displacees shall be on GDOT letterhead and provided through the PMCS to GDOT for acceptance prior to delivery and shall include a heading with the following minimum information:

1. County
2. P.I. number
3. Parcel number
4. Name and address of owners of record, tenant, or other interest holder
5. Name and contact information of the ROW Acquisition Manager

6.2.5 Monthly Acquisition Services Status Report

When there is Design-Builder Acquired ROW, the Design-Builder shall prepare and submit to GDOT, on a monthly basis, an Acquisition Services Status Report regarding Acquisition Services that includes:

1. Detailed summary of Acquisition Services by activity type.
2. Purchase prices by Parcel.

3. Remaining survey and mapping.
4. Utility cost estimates and updates.
5. Title services.
6. Appraisal services and review.
7. Negotiations.
8. Closing services.
9. Relocation assistance.
10. Clearance and demolition of ROW.
11. Environmental due diligence.
12. ROW administration management.
13. ROW quality management.
14. Proposed Parcels, including:
    a. Offers.
    b. Counter offers.
    c. Expedited services.
    d. Date of agreements.
15. Summary of condemnation proceedings, including proceedings anticipated, in progress, and completed.
16. Summary of the status of all ROW Submittals.
17. Parcel Acquisition Table:
    a. Specify whether the Parcel is State Proposed/State Acquired ROW, State Proposed/Design-Builder Acquired ROW, Design-Builder Proposed/Design-Builder Acquired ROW, or Design-Builder Proposed/State Acquired ROW.
    b. Specify the actual and anticipated acquisition dates for each Parcel of the State Proposed/Design-Builder Acquired ROW and Design-Builder Proposed/Design-Builder Acquired ROW.
    c. Include any acquisition updates provided by GDOT in accordance with DBA Section 2.4 (State Proposed/State Acquired Right of Way) for the State Proposed/State Acquired ROW and DBA Section 2.7 (Design-Builder Proposed/State Acquired Right of Way) for the Design-Builder Proposed/State Acquired ROW.
    d. Specify the anticipated date for submittal of Request for Parcel Certification Release.
18. Information requested by GDOT to populate GDOT's T-Pro system. Information will be provided by redlining GDOT provided T-Pro Status reports with updated information.

6.3 Pre-Acquisition Services

This TP Section 6.3 applies to Design-Builder Acquired ROW only.

Following acceptance by GDOT of the ROW Acquisition Plan and as a condition to commencing the Parcel Acquisition Services for each Parcel, the Design-Builder shall provide the documents

and comply with such other requirements as set out in the GDOT Right-of-Way Policies & Procedures Chapter 5, Section 5.1 (Pre-Acquisition).

6.3.1 ROW Acquisition Plan

The Design-Builder shall prepare and submit to GDOT for review and approval, a ROW Acquisition Plan for each Parcel. ROW Plans/Maps shall be prepared in accordance with the requirements set forth in the PPG and GDOT Right-of-Way Policies & Procedures Chapter 7, Section 7.4. The Design-Builder may submit ROW Plans/Maps to GDOT by constructible segment as identified in the Design-Builder's Construction Phasing and Staging Plan.

The Design-Builder shall perform surveying and mapping in accordance with TP Section 9 (Surveying and Mapping) and GDOT Automated Survey Manual Section 2.18 (Requirements for Right-of-Way Stakeout).

The ROW Acquisition Plan shall set forth:

1. The Design-Builder's organization, including names, titles, and contact information for personnel performing Acquisition Services.
2. The Design-Builder's contractual obligations with subcontractors, affiliates, and consultants.
3. Acquisition Services the Design-Builder will perform and those that will be subcontracted.
4. Environmental controls, including Hazardous Materials specified in DBA Section 7.8 (Hazardous Materials Management) and DBA Section 7.9 (Environmental Compliance), demolition, and Acquisition Services.
5. Description of how principal activities will be performed during Acquisition Services.
6. Approach to coordinate and manage GDOT Staff, Key Personnel, subcontractors, and consultants.
7. The ROW Service Classes applicable to the Design-Builder Proposed/Design-Builder Acquired ROW based on the Design-Builder's Schematic Plan of Project and documentation of the pre-qualification status of all personnel performing Acquisition Services.
8. The Design-Builder's approach to managing Acquisition Services in a manner that demonstrates an understanding of the requirements in the GDOT ROW Manual:
    a. The approach shall describe how the Design-Builder will conduct meetings required by this TP Section 6, including meetings set forth in the GDOT ROW Manual that are required to acquire any Parcel.
    b. The approach shall be consistent with the roles and responsibilities assigned to the Design-Builder, GDOT, and the SAAG pursuant to DBA Article 2 (Grant of GDOT and Right of Way), this TP Section 6, and the GDOT ROW Manual.
    c. The approach shall demonstrate an efficient process for coordination with GDOT and the SAAG.
    d. The approach shall describe the form of report to be provided to GDOT as required by TP Section 6.2.5 (Monthly Acquisition Services Status Report).

e. The approach shall describe a level of effort that is consistent with the size and complexity of the Project.

f. The approach shall include detailed workflows for the following phases of Acquisition Services. The workflows shall demonstrate the Design-Builder's understanding of the process for acquiring a Parcel as specified in DBA Article 2 (Grant of GDOT and Right of Way) and this TP Section 6, including:

1) The SP/DA ROW Workflow shown in TP Attachment 6-1 (Acquisition Services Workflow).

2) Pre-Acquisition Services in TP Section 6.3 (Pre-Acquisition Services).

3) Parcel Acquisition Services in TP Section 6.4 (Parcel Acquisition Services).

4) Post-Acquisition Services in TP Section 6.5 (Post-Acquisition Services).

9. The Design-Builder's approach to integrating Acquisition Services into the Project Baseline Schedule including Acquisition Services on a Parcel-by-Parcel basis.

10. The Design-Builder's approach to document management:

a. The approach shall describe the Design-Builder's understanding of and ability to integrate with and use the PMCS.

b. The approach shall describe an efficient and transparent method for tracking the progress of Acquisition Services.

After the initial ROW Acquisition Plan has been accepted by GDOT, the Design-Builder shall update the ROW Acquisition Plan regularly (at least quarterly, and when required to keep the information current and record any changes to personnel).

6.3.2 Title Services

Following GDOT's acceptance of the ROW Acquisition Plan, the Design-Builder shall provide GDOT an 11-inch by 17-inch set of printed preliminary ROW Plans/Maps to enable the SAAG to prepare owner verifications and obtain preliminary title reports prior to commencement of Parcel Acquisition Services.

6.3.3 Project Field Review and Inspection Checklist

Following GDOT's acceptance of the ROW Acquisition Plan and approval of the environmental technical studies the Design-Builder shall schedule a Preliminary Project Field Review (PPFR) for each Parcel with the Design-Builder's ROW PM, GDOT PM, and GDOT's ROW Lead. The PPFR shall be held a minimum of 16 weeks prior to commencement of pre-acquisition activities.

The Design-Builder shall provide GDOT such assistance as required in order for GDOT to prepare the Review Appraiser's Project Inspection Checklist (as such term is defined in GDOT ROW Manual Chapter 4, Section 4.8D) for each Parcel. The Project Inspection Checklist shall define the type and scope of appraisal required for each Parcel and any necessary Specialty Reports the Design-Builder is required to procure.

6.3.4 Parcel Owners Meeting

The Design-Builder shall schedule the Parcel Owners meeting, mail notices to all Parcel Owners informing them of time, date, and location of the meeting, and attend and coordinate all activities required for the meeting in accordance with the requirements of GDOT ROW Manual, Chapter 5.

Written correspondence shall comply with the requirements set forth in TP Section 6.2.4 (Correspondence and Documentation).

The Design-Builder shall provide translation for Parcel Owners or Parcel Displacees that are unable to read or understand the notices.

6.3.5 Appraisal Services and Specialty Reports

6.3.5.1 Appraisal Services

Appraisal services shall be performed in accordance with the procedures and requirements set forth in GDOT ROW Manual Chapter 4.

The Design-Builder shall provide GDOT with market value appraisals (each an "Appraisal") prepared by Appraisers selected from GDOT's pre-qualified list of Appraisers, and in accordance with Review Appraiser's Project Inspection Checklist, used to determine the detailed scope of work for each Parcel to be appraised.

Following GDOT's acceptance of the ROW Acquisition Plan and the Design-Builder's selection of an Appraiser, the Design-Builder, with respect to each Parcel, shall:

1. Identify the Parcel to be appraised and order title report.
2. Establish pre-appraisal contact with each Parcel Owner.
3. Contact Parcel owners (or their or its designated representative) in writing to offer them the opportunity to accompany the Appraiser on the Appraiser's inspection of the Parcel and maintain record of all contact and attempts of contact.
4. Cause the Appraiser to prepare an Appraisal for each Parcel to be acquired that complies with the format for Appraisal requirements set forth in GDOT Right-of-Way Policies & Procedures Chapter 4.
5. Provide to GDOT through the PMCS, a fair market value appraisal for each Parcel prepared by an Appraiser for review.
6. Provide GDOT Review Appraiser a hard copy fair market value appraisal for each Parcel for review.
7. If GDOT provides any comments or rejects an Appraisal in accordance with DBA Section 6.3 (Submittal Review; GDOT Oversight; Quality Posture), the Design-Builder shall perform the following:
    a. Coordinate with GDOT and the Appraiser regarding any corrections and additional information that may be required for a particular Appraisal.
    b. Cause the Appraiser to prepare a revised Appraisal.
    c. Prepare the revised Appraisal in accordance with DBA Section 6.3 (Submittal Review; GDOT Oversight; Quality Posture).

6.3.5.2 Specialty Reports

If special analyses, studies, or reports (each a "Specialty Report" and collectively, "Specialty Reports") are required to complete an Appraisal, each Specialty Report shall be made part of such Appraisal. Specialty Reports shall be performed in accordance with the procedures and requirements set forth in GDOT ROW Manual Chapter 4.

6.3.5.3 Appraisal Review

Appraisal reviews are performed by GDOT's Review Appraiser in accordance with the process and procedures more accurately set forth in GDOT ROW Manual Chapter 4. In connection with appraisal review, the Design-Builder shall:

1. Determine in consultation with GDOT and the Appraiser if Specialty Reports are required.
2. Review each Appraisal including Specialty Reports and supporting documents for consistency and compliance with this TP Section 6.3 and the requirements set forth in GDOT Right-of-Way Policies & Procedures Chapters 4 and 5.
3. Inspect the Parcels in comparison with the Appraisals to determine the Appraisal is complete and accurate.

6.4 Parcel Acquisition Services

6.4.1 State Proposed/State Acquired ROW and State Proposed/ Design-Builder Acquired ROW

6.4.1.1 ROW Acquisition

DBA Exhibit 4 (Parcel Acquisition Table) identifies those State Proposed/State Acquired ROW Parcels that are scheduled to be acquired by GDOT. The Design-Builder will be updated regularly on the status of the acquisition for each Parcel.

TP Attachment 6-3 (State Proposed ROW Plans) depicts boundary lines, existing and required ROW lines, and easements for construction and maintenance of slopes of the State Proposed/State Acquired Right of Way and State Proposed/Design-Builder Acquired ROW.

6.4.1.2 Design Contingent ROW Parcels

DBA Exhibit 4 (Parcel Acquisition Table) identifies all Design Contingent Parcels, if any. If GDOT has identified Design Contingent Parcels, the Design-Builder shall complete Acquisition Services for those Parcels and coordinate the scheduling of all remaining Parcel acquisitions.

For each Design Contingent Parcel recorded in the Parcel Acquisition Table, the Design-Builder shall:

1. Provide an updated Parcel Acquisition Table.
2. Submit an update to the ROW Plans/Maps in accordance with TP Section 6.3.1 (ROW Acquisition Plan) for each State Proposed/State Acquired ROW (Design Contingent) Parcel, if any, the Design-Builder identifies as required per DBA Section 2.4 (State Proposed/State Acquired Right of Way).

Delivery of the updated Parcel Acquisition Table to GDOT shall serve as notice in accordance with DBA Section 2.4 (State Proposed/State Acquired Right of Way) regarding the Design-Builder's acquisition of each Design Contingent Parcel.

In performing Parcel Acquisition Services, the Design-Builder shall:

1. Prepare for Negotiations
2. Prepare appropriate Negotiation Package

3. Contact the Parcel Owner or owner's representative to schedule appointment
4. Commence Negotiations and maintain accurate, written negotiation records for each Parcel Owner and Parcel Displacee (separate from relocation files)

6.4.2 Design-Builder Acquired ROW

Following the Design-Builder's completion of the Pre-Acquisition Services for each Parcel, the Design-Builder shall provide the pre-acquisition documents and comply with such other requirements as set forth in GDOT ROW Manual Chapter 5 (Acquisition).

In performing the Parcel Acquisition Services, the Design-Builder shall:

1. Provide timely (not more than five Business Days after inquiry) response to the verbal or written inquiries of any Parcel Owner or Parcel Displacee.
2. Create and maintain a complete negotiation Parcel file for each Parcel Owner and Parcel Displacee (separate from the relocation files), and in conformance with GDOT ROW Manual, Chapter 5, retain and properly secure all original Parcel documents in the Project Office (or as otherwise notified by GDOT).
3. Ensure all original Parcel documents are accessible by GDOT upon request.

6.4.2.1 Design-Builder Proposed/Design-Builder Acquired Temporary Easement

If an additional driveway easement is required per TP Section 11.3.1 (General Design Requirements), it shall be a compensatory temporary easement. Such temporary easement if needed shall be the responsibility of the Design-Builder and shall be acquired in accordance with DBA Section 2.6 (Design-Builder Proposed/Design-Builder Acquired Right of Way).

6.4.3 Design-Builder Acquired ROW Negotiations

Following completion of the Pre-Acquisition Services for the relevant Parcels, the Design-Builder may commence negotiations with relevant Parcel Owners. In preparation for negotiations, the Design-Builder shall:

1. Provide survey staking of proposed limits of the acquisition, including easements.
2. Prepare a Negotiation Package. The Negotiation Package (as such term is defined in GDOT Right-of-Way Policies & Procedures Chapter 5) shall state the fair market value, as specified in the accepted Appraisal, using the appropriate offer letter on GDOT's letterhead and including the following documents:
    a. Summary Statement Basis for Just and Adequate Compensation and supporting attachments.
    b. Draft Option Agreement with colored plats attached.
    c. Limited Access Acknowledgement Form.
    d. Receipt for Right of Way Plans/Maps.
    e. GDOT Right of Way Brochure and accepted brochure form.
    f. Incidental payment claim form.
    g. To-scale ROW Acquisition Plan sheets, cross-section, and driveway profiles pertaining to subject Parcel.

3. Ensure the title report prepared in accordance with TP Section 6.3.2 (Title Services) is no more than six months old and the Appraisal is no more than 12 months old at the initiation of negotiations. The Design-Builder shall prepare a revised Appraisal and coordinate with the SAAG to prepare an updated title report if the Appraisal or title report do not meet these requirements.

6.4.3.1 Requirements During Negotiations

During negotiations with Parcel Owners, the Design-Builder shall:

1. Present the respective Owner with the Design-Builder prepared Negotiation Package and Appraisal, and make a fair market value (FMV) Offer to the Parcel Owner.
2. Comply with the requirements of each Negotiation Package.
3. Make no less than four negotiation contacts with each Parcel Owner, (or their designated representative). The Design-Builder's ROW Acquisition Manager shall make the last contact.
4. Provide each Parcel Owner a written copy of the GDOT informational brochure "What Happens If Your Property Is Needed for A Transportation Facility."
5. Maintain a Negotiation Record in accordance with GDOT Right-of-Way Policies & Procedures and 49 CFR 24.9. A separate Negotiation Record shall be maintained for each individual interest when an offer is made. It is vital that a detailed Negotiation Record be kept for every parcel, whether negotiations were successful or not. The records need to reflect every aspect of the negotiation, outlining the entire process in detail.

6.4.3.2 Acquisitions Involving Displacements and Relocations

If the acquisition of any Parcel causes the displacement and relocation of an owner, tenant or business, the Design-Builder shall:

1. Prepare (by a ROW Relocation Benefits Package Specialist pre-qualified in the A-2 ROW Service Class), a Relocation Benefits Package, including all moving estimates, associated forms, letters, and documentation in GDOT-accepted format and in accordance with GDOT ROW Manual Chapter 11 (Relocation). The Relocation Benefits Package shall include:
    a. A detailed calculation sheet of all the costs associated with the Relocation Benefits Package.
    b. Calculation of increased interest payments on the mortgage of Parcels which are owner-occupied dwellings, as required.
    c. In the event the actual, eligible relocation costs differ from initial estimates, the Design-Builder shall calculate replacement supplement benefits.
2. Locate information and evaluate and maintain files on comparable available housing, commercial, retail, and industrial sites in accordance with of GDOT ROW Manual Chapter 11.
3. Provide each Parcel Displacee a written copy of the GDOT informational brochure "What Happens If Your Property Is Needed for A Transportation Facility."

4. Perform relocation interviews; complete and maintain interview forms; discuss general eligibility requirements, programs, and services with potential Parcel Displacees; and maintain a thorough written record of all contacts with Parcel Displacees in accordance with GDOT ROW Manual Chapter 11.
5. Prepare a Relocation Benefits Claim Form based on the Relocation Benefits Package and submit to GDOT.
6. Provide the Relocation Benefits Claim Form to the Parcel Displacee and notify GDOT of the relocation benefit (including the details of replacement housing) the Parcel Displacee elects to exercise based on the Relocation Benefits Claim Form.
7. Perform and complete a decent, safe, and sanitary dwelling inspection on all replacement housing selected by the Parcel Displacees to ensure that the replacement housing meets requirements of the Law.
8. Deliver to each Parcel Displacee a 90-day notice of eligibility letter simultaneous with the delivery of the Relocation Benefits Claim Form along with the location of the comparable property used to compute the supplement benefits in the Relocation Benefits Package.

6.4.3.3 Offers and Counter Offers

If the Parcel Owner accepts the FMV Offer, the Design-Builder shall notify GDOT within five Business Days and GDOT shall then enter into an Option Agreement in accordance with DBA Article 2 (Grant of GDOT and Right of Way).

If the Parcel Owner provides the Design-Builder with a Counter Offer:

1. The Design-Builder shall be open to all reasonable Counter Offers from Parcel Owners that are feasible and that help expedite the acquisition of the Parcels for the Project. The Design-Builder acknowledges that GDOT and FHWA encourage solutions that satisfy the Parcel Owners and promote the success of the Project.
2. The Design-Builder shall provide such Counter Offer to GDOT within five business days of the Design-Builder receiving the Counter Offer.

The Design-Builder shall notify the Parcel Owner (as applicable) within five days of GDOT's acceptance or rejection of the Counter Offer. If GDOT accepts a Counter Offer, GDOT shall then enter into an Option Agreement in accordance with DBA Article 2 (Grant of GDOT and Right of Way).

If GDOT rejects a Counter Offer, the Design-Builder may continue negotiations with the Parcel Owner in accordance with TP Section 6.4.3 (Design-Builder Acquired ROW Negotiations).

6.4.4 Administrative Review Request

If GDOT undertakes administrative review regarding a Parcel, the Design-Builder shall provide such support as reasonably requested by GDOT.

Where the Design-Builder is unable to a) reach an agreement with the Parcel Owner during negotiations; or b) fails to obtain GDOT’s acceptance of a Counter Offer within 90 days from GDOT’s acceptance of the ROW Acquisition Plan, the Design-Builder may initiate Administrative Review. The Design-Builder may submit a request for Administrative Review and an Administrative Review Package. The Design-Builder shall include with the request:

1. Details of the Design-Builder's ROW Acquisition Manager's final or last contact with the Parcel Owner.
2. A copy of the Design-Builder's negotiation file for such Parcel and such other supporting documents.

If GDOT undertakes administrative review in respect of a Parcel, the Design-Builder shall support the administrative review efforts undertaken by GDOT and provide such support as reasonably requested by GDOT.

6.4.4.1 Design-Builder Administrative Review Request

If during Negotiations the Design-Builder is unable to reach an agreement with a Parcel Owner as more accurately described in DBA Section 2.5 (State Proposed/Design-Builder Acquired Right of Way) and DBA Section 2.6 (Design-Builder Proposed/Design-Builder Acquired Right of Way), the Design-Builder may request for GDOT to undertake administrative review of a parcel in accordance with DBA Section 2.6 (Design-Builder Proposed/Design-Builder Acquired Right of Way).

The Design-Builder shall act in accordance with DBA Section 2.5 (State Proposed/Design-Builder Acquired Right of Way) and DBA Article 2 (Grant of GDOT and Right of Way) when informing the Parcel Owner (as applicable) of the impending administrative review process and condemnation process.

6.4.4.2 Parcel Owner Administrative Review Request

If following receipt of the Design-Builder's 10-day administrative letter specified in DBA Section 2.5 (State Proposed/Design-Builder Acquired Right of Way), the Parcel Owner (as applicable) requests an administrative review of the Parcel acquisition, the Design-Builder shall prepare and submit to GDOT an Administrative Review Package.

The Administrative Review Package shall include:

1. Details of the Design-Builder's ROW Acquisition Manager's final or last contact with the Parcel Owner
2. A copy of the Design-Builder's negotiation file for such Parcel
3. The appraisal and any Specialty Reports
4. Comparable sales data
5. Any counter offers previously made by the Parcel Owner
6. ROW Plans/Maps, Construction Plans, cross-sections, and driveway profiles that involve such Parcel
7. Relocation assistance
8. Any forms and reports regarding such Parcel

6.4.5 Early Condemnation

Early condemnation may be applicable to Design-Builder Proposed/Design-Builder Acquired ROW that GDOT has exercised the discretionary decision to exercise condemnation powers pursuant to DBA Section 2.6.9 (Design-Builder Proposed/Design-Builder Acquired Right of Way).

If the Design-Builder determines that a Parcel's Acquisition Services has extenuating circumstances that justify a variance of the requirements set out in TP Section 6.4.3 (Design-Builder Acquired ROW Negotiations), and condemnation of the property without completion of the requirements set out in TP Section 6.4.3 (Design-Builder Acquired ROW Negotiations) should be considered, the Design-Builder may make a request for GDOT to consider early condemnation. GDOT will accept or reject the request in its sole discretion.

6.4.6 Closings

6.4.6.1 Design-Builder Coordination with SAAG

The Design-Builder shall coordinate with and assist the SAAG in conducting the closing for each Parcel and comply with the closing procedures and requirements set forth in GDOT ROW Manual Chapter 5 Sections 5.2 and 12. The Design-Builder shall provide the closing package in accordance with and including the requirements set forth in the GDOT ROW Manual Chapter 5.

To assist the SAAG the Design-Builder shall:

1. Ensure the ROW Relocation Assistance Specialist attends all closings involving relocation.
2. Ensure the ROW Relocation Assistance Specialist properly coordinates and oversees all relocation assistance payments made to the relevant Parcel Displacee.
3. Assist the SAAG, the Parcel Owner, and all other appropriate parties to clear any title exceptions or exclusions on the Parcel not acceptable to GDOT.
4. Provide transportation assistance to all Parcel Owners and Parcel Displacees needing transportation services to or from the closing.
5. Provide documents to support the closing, including appropriate information from the Parcel file, legal description, Parcel plat, and data tables.
6. Deliver to GDOT all post-closing documents including an executed deed in the name of GDOT, closing statement for disposition of proceeds, escrow documents, lien releases, affidavits, and real estate tax forms.

6.4.6.2 Design-Builder Closing Relocation Assistance

If a closing involves the relocation of a Parcel Displacee, the Design-Builder shall coordinate and perform the administrative requirements necessary to relocate any Parcel Displacees and their personal property from each Parcel. The Design-Builder shall:

1. Assist with reasonable GDOT requests regarding relocation assistance.
2. Coordinate and communicate notices between GDOT and Parcel Displacees.
3. Ensure that a ROW Relocation Assistance Specialist administers the relocation assistance benefits the Parcel Displacee elected to receive during the negotiations.
4. Ensure the GDOT accepted format for relocation assistance is used and demonstrated in all forms, letters, and documentation associated with relocation assistance.
5. Coordinate moves with Parcel Displacees or moving companies.
6. Attend all closings on replacement properties and administer any supplemental payments from GDOT to the relevant Parcel Displacee (if any) in a timely manner.

7. Track and maintain detailed records of all relocation activities that occur after title is secured by condemnation.
8. On the date of closing or within one day of closing, deliver via registered mail a 60-day notice to vacate letter to the relevant Parcel Displacee. The Parcel Displacee shall have 60 days beginning from the date of mailing to vacate the Parcel. The Design-Builder shall notify GDOT immediately if a Parcel Displacee has not vacated the Parcel after the 60 days from the notice to vacate letter.
9. Secure dwellings and structures no later than 14 days after vacancy and protect the Parcel following acquisition and relocation.
10. Be available for any appeals or hearings regarding relocation assistance.
11. Assist the SAAG with eviction proceedings:
    a. Serve notice of eviction proceedings to Parcel Displacees who have not complied with move dates.
    b. Coordinate the eviction process with the local authorities.
    c. Accompany the sheriff's department when carrying out evictions.
    d. Prepare and distribute all correspondence to the Parcel Displacees or their representatives on the GDOT-accepted letterhead for GDOT.
12. Maintain a complete file (include records of all communications and assistance provided), separate from acquisition files for each Parcel, on each Parcel Displacee at the Project Office and make such files available to GDOT upon request.

6.4.7 Condemnation Requests and Support

6.4.7.1 Condemnation Request

Where the Design-Builder has made a request to GDOT to commence an administrative review with respect to any Parcel and is unable to conclude a settlement to acquire a Parcel pursuant to the administrative review process described in DBA Article 2 (Grant of GDOT and Right of Way), the Design-Builder shall prepare and submit to GDOT a Condemnation Package that contains:

1. Detailed description of the Design-Builder's previous efforts to acquire the Parcels
2. Reasonable evidence to support the Condemnation Request
3. Information required by GDOT ROW Manual Chapter 5

If GDOT accepts the Design-Builder's Condemnation Package, then GDOT will prepare a petition for condemnation for the relevant Parcels in accordance with DBA Section 2.5 (State Proposed/Design-Builder Acquired Right of Way) and the Design-Builder shall perform Parcel Acquisition Services set forth in this TP Section 6.4.

6.4.7.2 Condemnation Support

If GDOT files a petition for condemnation in respect to a Parcel in accordance with DBA Article 2 (Grant of GDOT and Right of Way), the Design-Builder shall provide Condemnation Support to the SAAG for a period 12 months after the filing date appearing on the condemnation petition, however, support shall not continue after Final Acceptance.

The Design-Builder shall support condemnation efforts undertaken by the SAAG, including:

1. Coordinate with the SAAG on all applicable eminent domain/condemnation activities.
2. Procure and make available a Condemnation Court Coordinator to provide Condemnation Support including:
    a. Assist the SAAG in making arrangements for conferences with witnesses prior to trial.
    b. Accompany SAAG at court hearings.
    c. Perform any other duties necessary in eminent domain proceedings.
3. Assist the SAAG with procuring revised appraisals and Specialty Reports, as required for condemnation proceedings, and as acceptable to GDOT and the SAAG.
4. Assist the SAAG with arranging for any necessary expert witnesses as required by GDOT and the SAAG.
5. Assist the SAAG with arranging for the appearance of all expert witnesses or fact witnesses when requested by the SAAG.
6. Assist the SAAG with procuring the condemnation valuation expert witness as according to the process in GDOT ROW Manual Chapter 5.

6.5 Post-Acquisition Services

6.5.1 Property Management

The Design-Builder shall provide property management documents through the PMCS meeting the requirements in the GDOT ROW Manual, Chapter 9.

6.5.2 ROW Commitments

The Design-Builder shall comply with the ROW commitments included in TP Attachment 6-4 (ROW Commitments) which have been negotiated on State Proposed/ State Acquired.

The Design-Builder shall also track and comply with any ROW commitments negotiated on Design-Builder Proposed/Design-Builder Acquired Parcels.

6.5.3 Parcel Certification and Release

This TP Section 6.5.3 applies to all State Proposed/State Acquired ROW, Design-Builder Proposed/ State Acquired ROW, and Design-Builder Proposed/ Design-Builder Acquired ROW.

DBA Exhibit 4 (Parcel Acquisition Table) sets out the anticipated Parcels for the State Proposed/State Acquired ROW and State Proposed/Design-Builder Acquired ROW. The Design-Builder shall request the release of State Proposed/State Acquired ROW to GDOT that corresponds to the RFC drawings. Such request shall be on or after the anticipated Parcel Availability Date.

For State Proposed/State Acquired ROW and Design-Builder Proposed/State Acquired ROW, at the completion of all Acquisition Services, the Design-Builder may request the release of Parcels.

For Design-Builder Proposed/Design-Builder Acquired ROW, at the completion of all Acquisition Services, the Design-Builder may request the release of Parcels by submitting the Final Parcel File in accordance with TP Section 6.5.5 (Final Parcel File).

GDOT shall release requested parcels within seven days upon receipt of a complete Parcel Certification Release Request.

6.5.3.1 Request for Parcel Certification Release

The Design-Builder's Request for Parcel Certification Release shall be in accordance with the GDOT ROW Manual Chapter 5, Section 5.4 (Project Certification and Project Transition Meeting).

6.5.4 Clearance & Demolition of Parcels

This TP Section 6.5.4 applies to State Proposed/State Acquired ROW in accordance with TP Attachment 6-2 (SP/SA Required Clearance).

The Design-Builder shall be responsible for the clearance (including removal and demolition) of all improvements (including fixtures, buildings, structures, and other encroachments) on the Parcels.

Following the acquisition of each Parcel with an improvement, but prior to the removal or demolition of any improvement, the Design-Builder shall:

1. Provide to GDOT photographs of each Parcel and all improvements on such Parcel, including any existing encroachments, personal property, fixtures, and any other items of dispute. Photographs shall be of a quality suitable for presentation as evidence in court and clearly marked for identification.
2. Secure and protect the buildings, improvements, and fixtures on the Parcel until such time they are removed or demolished.
3. Coordinate with Parcel Owners and Parcel Displacees to assure the clearance of personal property from the Parcel.
4. Obtain all Governmental Approvals required for demolition or removal of improvements, including preparing any environmental surveys or tests as may be required by the relevant Governmental Entity, in accordance with TP Section 5 (Environmental) and DBA Section 6.2 (Governmental Approvals and Third Party Agreements). The Design-Builder shall notify GDOT in writing of all such activities.
5. Coordinate all property management activities with the GDOT ROW Property Management Demolition/Removal Unit.
6. Properly disconnect all Utility services including power, water, gas (meter pulls), and sewer (sewer caps), at the required Parcel prior to any demolition or removal of any improvements. The Design-Builder shall provide GDOT written notice of the exact location of these Utility disconnects in a format that can be used to easily locate them in the field (e.g., northing/easting, parcel number).
7. Provide for any insect and rodent control and initiate extermination as required to protect adjacent parcels and rid the Parcel of infestations.

8. Process all required forms, documents, and permit applications in order to proceed with the removal or demolition of any improvements.
9. Perform demolition and removal of all improvements that are located on the Parcel.
10. Notify GDOT upon the completion of the demolition and clearance of the Parcel.

6.5.5 Final Parcel File

The Design-Builder's ROW Project Manager shall conduct a thorough review of all negotiation files for each Parcel following completion of acquisition for the Parcel (closed or condemned) and shall submit such files to GDOT (each a “Final Parcel File” and collectively, the “Final Parcel Files”).

Final Parcels Files shall include monthly status reports, appraisals, acquisition and relocation status of each parcel and activities related to ROW acquisition, acquisition and disposition of additional Parcels, and acquisition and disposition of temporary easements or other property interests.

6.6 Submittals

With respect to the Acquisition Services and other requirements described in this TP Section 6, the Design-Builder shall comply with TP Section 2.9 (Submittals). Submittals exceeding the requirements below will be delayed up to 30 days.

The Design-Builder shall ensure that:

1. No more than eight Specialty Reports are provided to GDOT within a 15-day period.
2. No more than eight Appraisals are provided to GDOT within a 15-day period.
3. No more than four Relocation Benefits Claim Forms are provided to GDOT within a 15-day period.
4. No more than four Administrative Review Packages are submitted to GDOT within a 30-day period.
5. No more than eight Condemnation Packages are submitted to GDOT within a 30-day period.

TP Section 6 Attachments

Attachment No.	*Title*
Attachment 6-1	Acquisition Services Workflow
Attachment 6-2	SP/SA Required Clearance
Attachment 6-3	State Proposed ROW Plans
Attachment 6-4	ROW Commitments

Georgia Department of Transportation

Technical Provisions

For

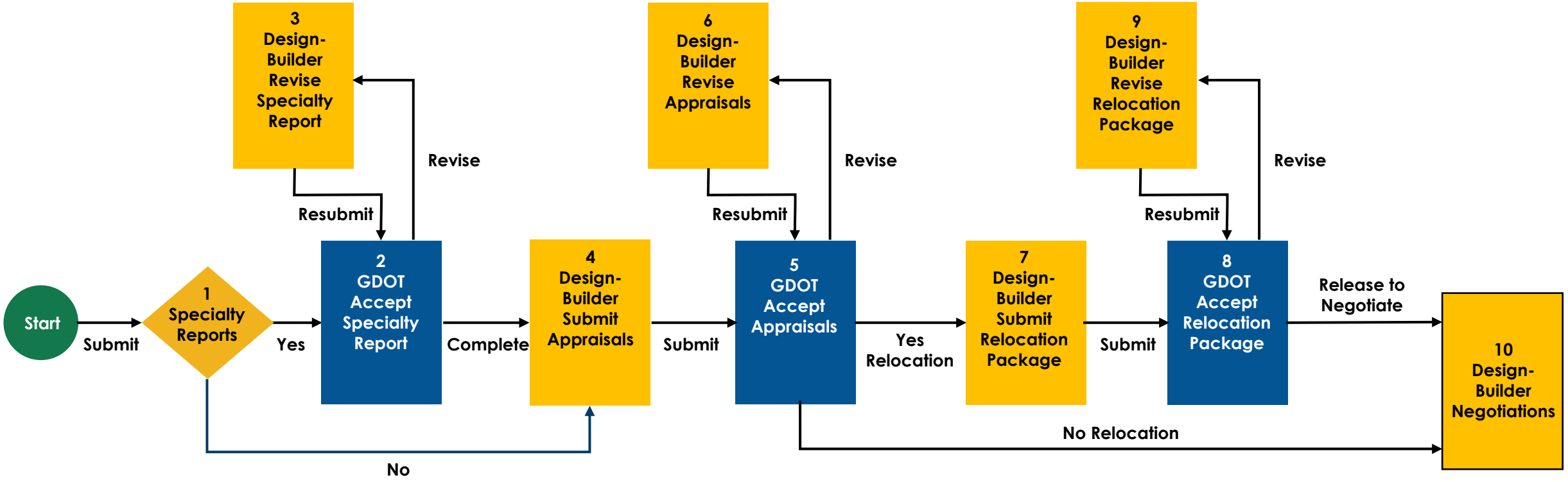
Design-Build Agreement

P.I. No. 0017182

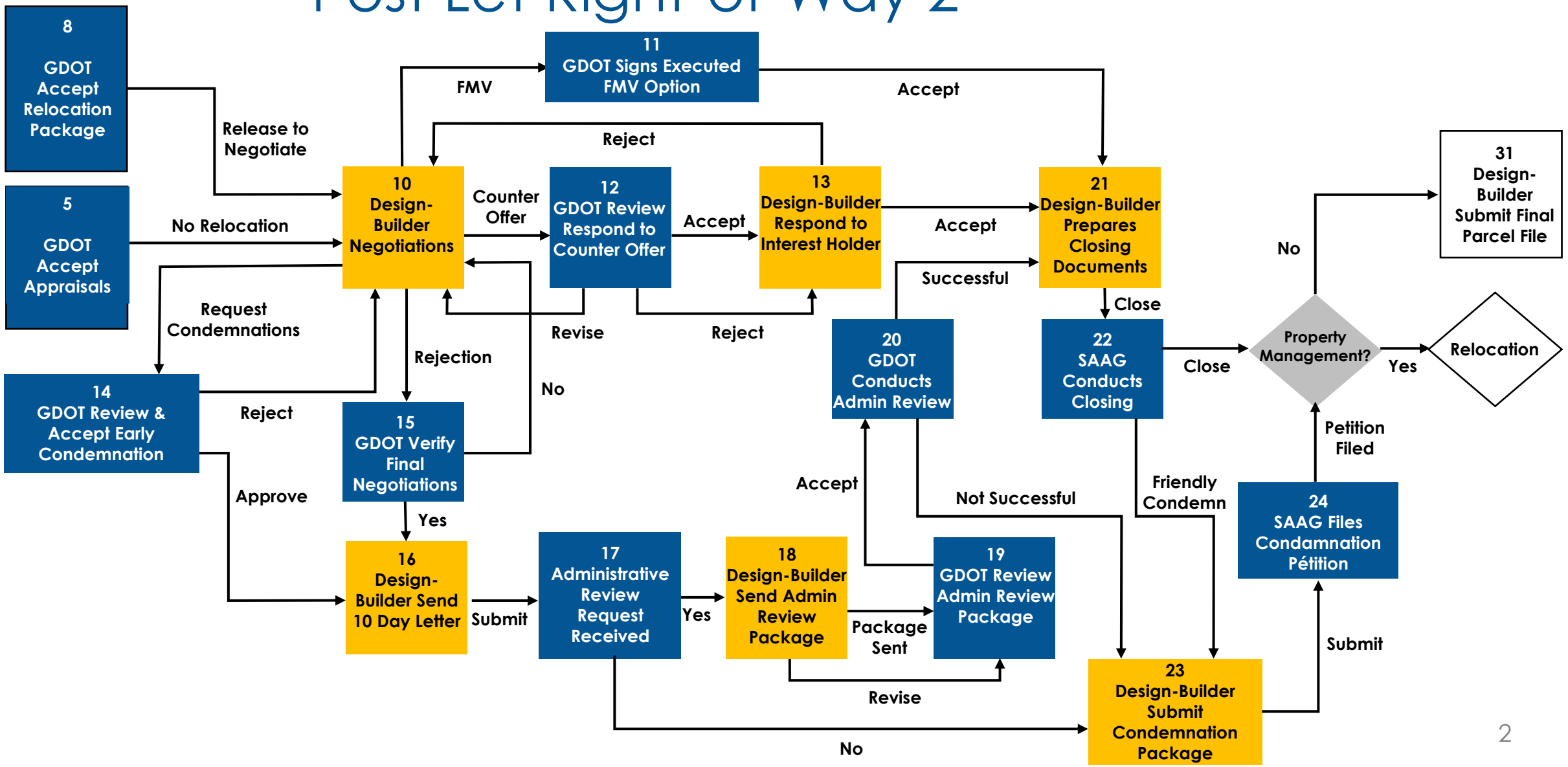
Attachment 6-1

Acquisition Services Workflow

Post Let Right-of-Way 1



Post Let Right-of-Way 2



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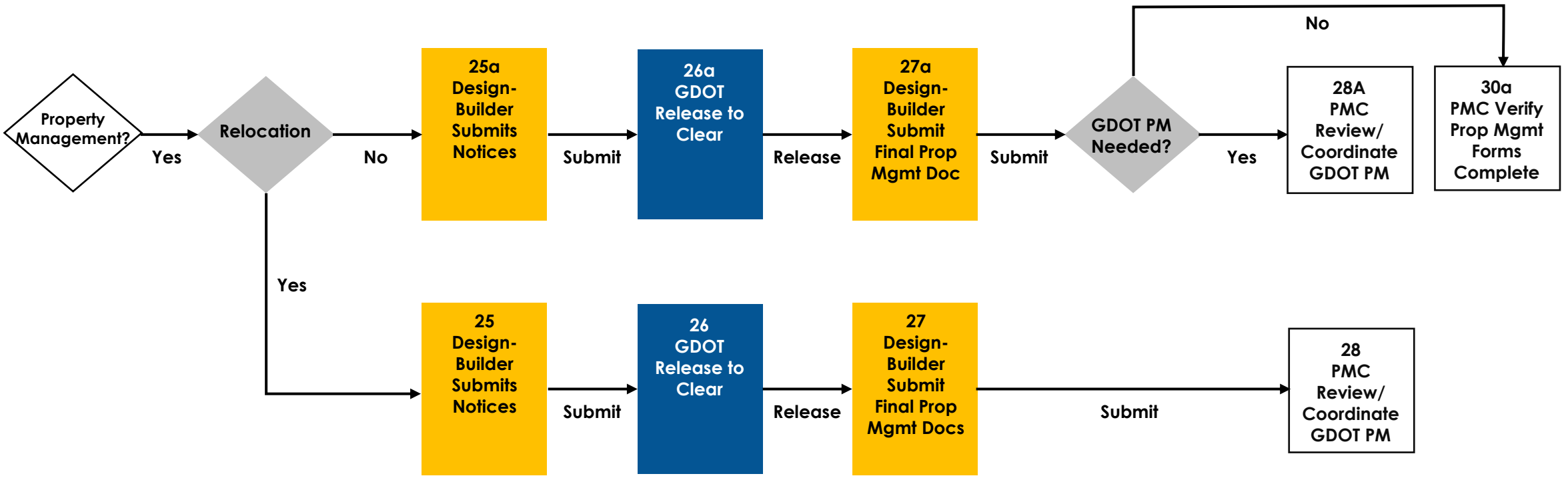
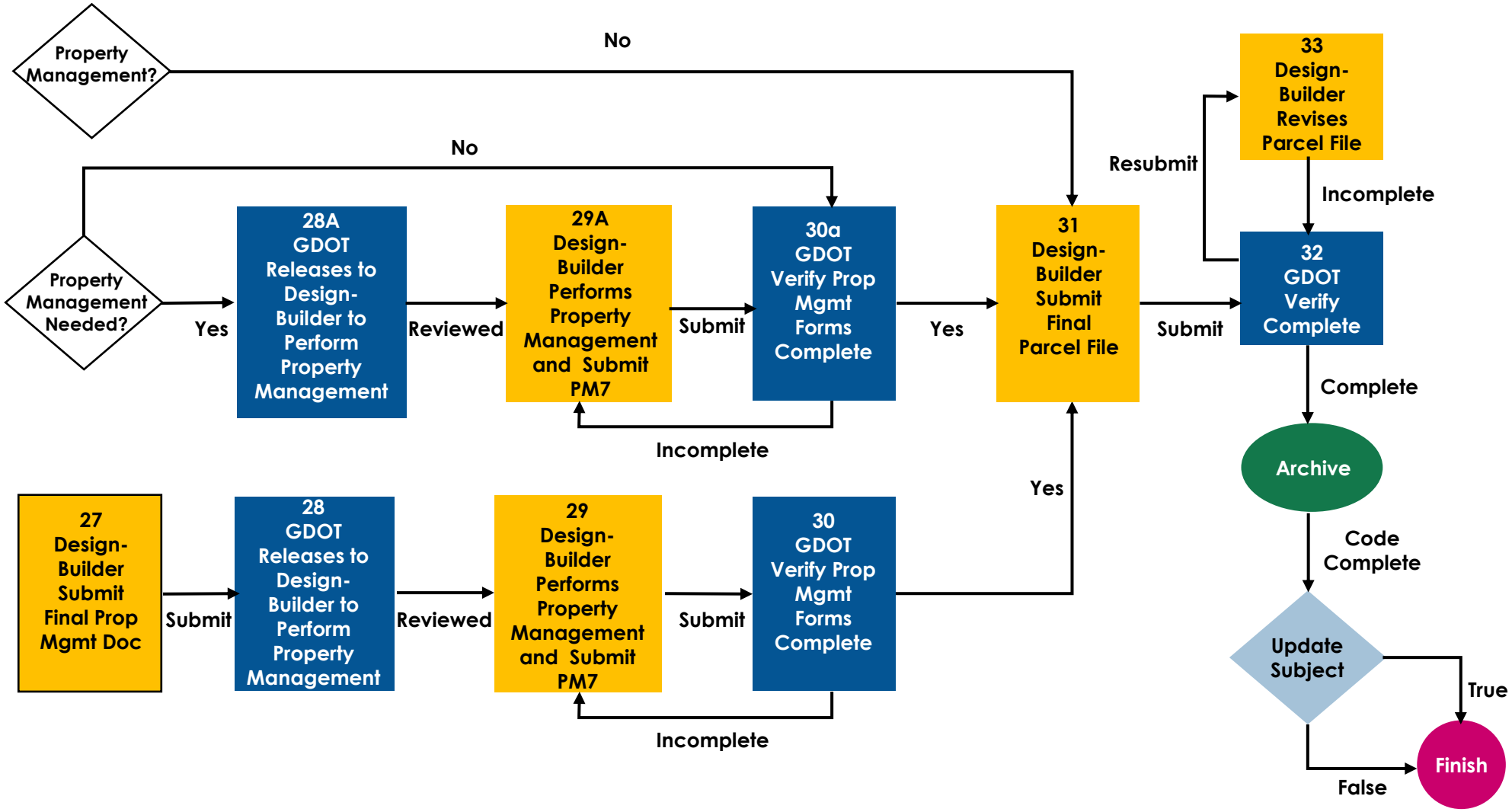


Post Let Right-of-Way 4



Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 6-2

SP/SA Required Clearance

Attachment 6-2: SP/SA Required Clearance

1 Parcels Requiring Clearance

There are no parcels requiring clearance on this Project.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

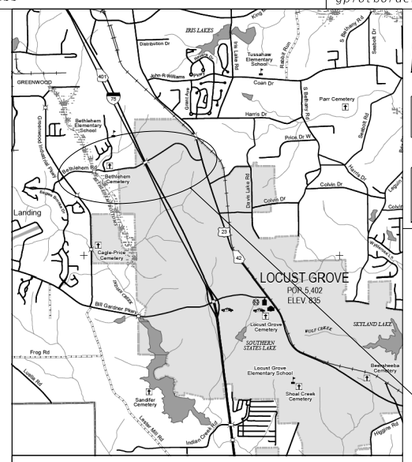
Attachment 6-3

State Proposed ROW Plans

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RIGHT OF WAY OF PROPOSED
I-75 @ CR 312/BETHLEHEM ROAD INTERCHANGE
HENRY COUNTY
FEDERAL AID PROJECT
PI NO. 0017182

FEDERAL ROUTE No.: US 401
STATE ROUTE No.: SR 42
P.I. No.: 0017182



LOCATION SKETCH

PROJECT LOCATION

NOTE: THE CO-ORDINATES LISTED ARE WEST ZONE GRID CO-ORDINATES BASED ON THE GA. STATE PLANE CO-ORDINATE SYSTEM OF 1983.
HORIZONTAL DATUM : NAD 83/86 HARN
VERTICAL DATUM : NAVD 88

PROJECT MIDPOINT
STA 145+62.76
BETHLEHEM RD
N 1227959.764
E 2304410.130

CONVENTIONAL SIGNS

LAND LOT LINE		
PROPERTY LINE		
RIGHT OF WAY LINE	EXISTING	
	REQUIRED	
	EXISTING LIMIT OF ACCESS	
	REQD LIMIT OF ACCESS	
	EXISTING LIMIT OF ACCESS & R/W	
	REQD LIMIT OF ACCESS & R/W	
	R/W MARKERS	
FENCE		

LIMIT OF R/W ACQUISITION STA 523+40.00 SB OFF RAMP

LIMIT OF R/W ACQUISITION STA 127+19.27 PRICE DR

LIMIT OF R/W ACQUISITION STA 25+75.00 GREENWOOD RD

BEGIN R/W ACQUISITION STA 39+70.00 EAGLES BROOKE DR

LIMIT OF R/W ACQUISITION STA 10+50.07 LESTER MILL RD

LIMIT OF R/W ACQUISITION STA 119+66.22 PRICE DR

LIMIT OF R/W ACQUISITION STA 305+50.00 SB ON RAMP

LIMIT OF R/W ACQUISITION STA 226+46.18 NB OFF RAMP

LIMIT OF R/W ACQUISITION STA 426+25.30 NB ON RAMP

LIMIT OF R/W ACQUISITION STA 44+67.04 SR 42

END R/W ACQUISITION STA 191+06.43 BETHLEHEM RD

LIMIT OF R/W ACQUISITION STA 595+69.32 OLD BETHLEHEM RD

LIMIT OF R/W ACQUISITION STA 15+00.00 SR 42

ESA BOUNDARY
REQD R/W
ESA BOUNDARY
REQD TESMT
DWESMT
REQD R/W
REQD PESMT
EXIST R/W
SR 42
ESA BOUNDARY
NB OFF RAMP
REQD R/W & L/A
ESA BOUNDARY
EXIST R/W
ESA BOUNDARY
SB ON RAMP
NB ON RAMP
SB OFF RAMP
EXIST R/W
EXIST R/W
EXIST R/W
EXIST R/W
EAGLES BROOKE DR
LESTER MILL RD
PRICE DR
GREENWOOD RD
REQD R/W
REQD R/W
REQD R/W
DWESMT
DWESMT
APPROX L.L.L.
APPROX L.L.L.
APPROX L.L.L.
APPROX L.L.L.
APPROX L.L.L.
APPROX L.L.L.
APPROX L.L.L.
APPROX L.L.L.
41+00
105+00
110+00
120+00
130+00
140+00
150+00
160+00
170+00
180+00
190+00

SCALE IN FEET
0 1000 2000 4000

GMD 576
LAND LOTS 233-236,246-248,251
LAND DISTRICTS 2,7

LENGTH OF RIGHT OF WAY PROJECT	COUNTY NO. 151
	MILES
NET LENGTH OF RIGHT OF WAY	1.721
NET LENGTH OF BRIDGES	0.000
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF RIGHT OF WAY	1.721

PI NO. 0017182
HENRY COUNTY

THIS PROJECT IS LOCATED 100% IN HENRY COUNTY AND CONGRESSIONAL DISTRICT 10.

PLANS PREPARED BY
ARCADIS

UNDER THE SUPERVISION OF

OFFICE OF DESIGN

APPROVED:

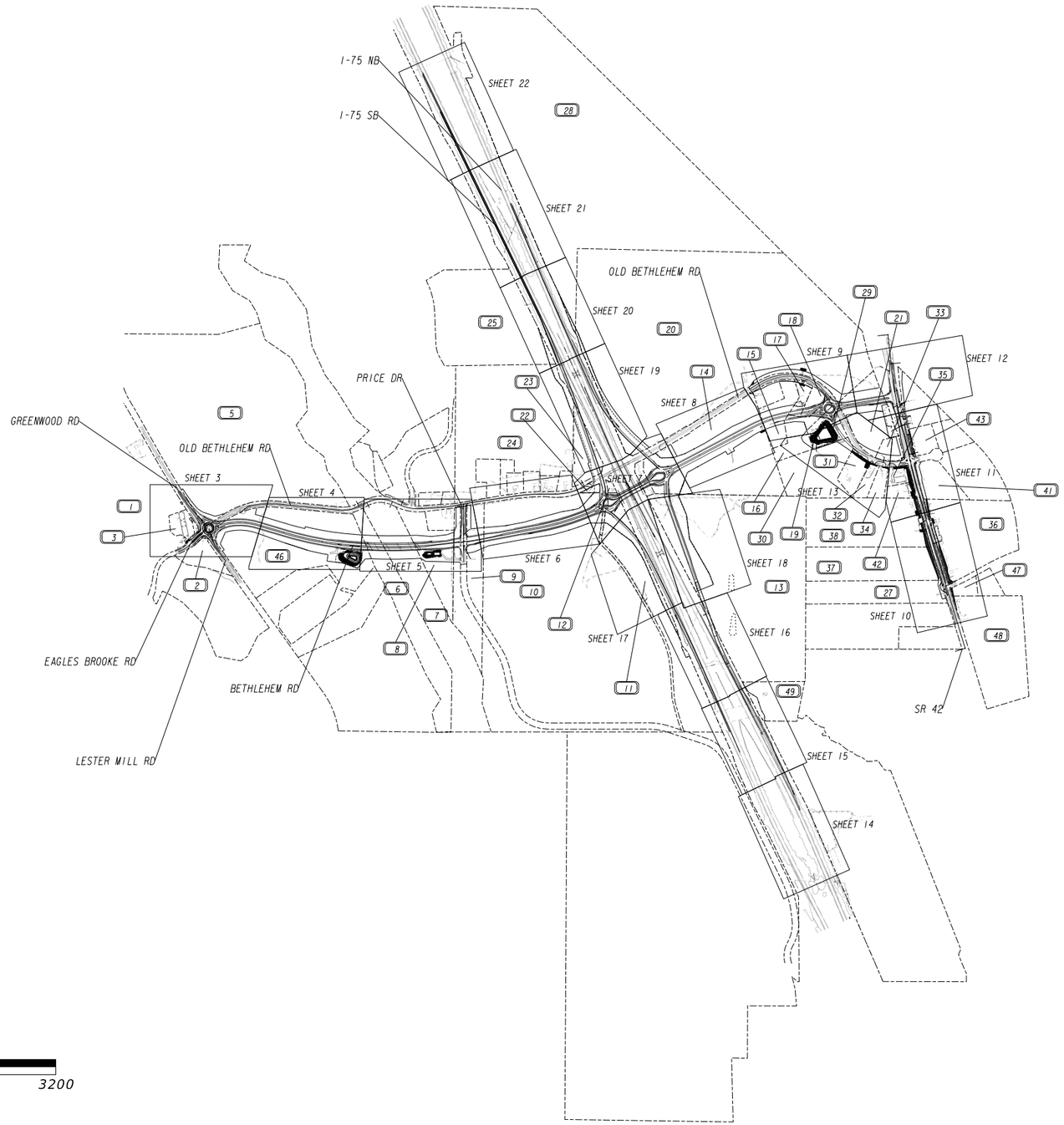
KEVIN YORK STATE RIGHT OF WAY ADMINISTRATOR DATE

LOCATION AND DESIGN APPROVAL DATE:

PLANS COMPLETED DATE: MAY 24, 2024

REVISIONS:

DRAWING No. 60-0001



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
PROPERTY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236, 246-248, 251
LAND DISTRICT: N/A
GMD 576
DATE 5/24/24 SH 1A OF 32

DRAWING No. 60-0001A

DATE	DRAWING NO.	REVISION

DATE	DRAWING NO.	REVISION

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

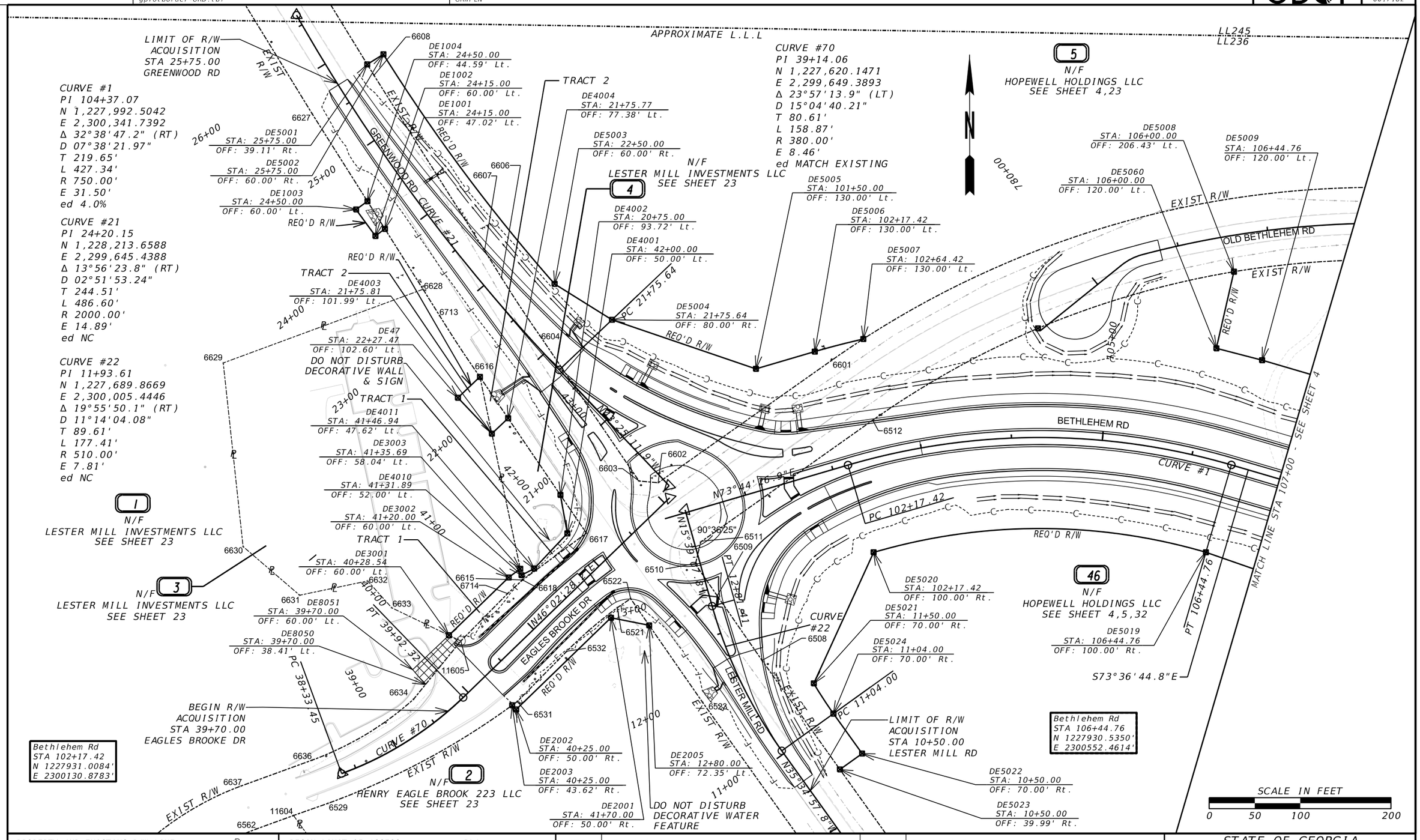
DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY REVISIONS

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 2 OF 32

DRAWING No.
60-0002

GRWPLN-CE
11/05/2020



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 3 OF 32

DRAWING No. 60-0003

GRWPLN-CE

N

5
N/F
HOPEWELL HOLDINGS LLC
SEE SHEET 3,23

6599 | 785+00 | 790+00 | LL236 | LL235 | 800+00

EXIST R/W
OLD BETHLEHEM ROAD
EXIST R/W

6514 | 6598 | 6566 | 6565 | 6473 | 6477 | 6491 | 6515 | 6490 | 6489

Bethlehem Rd
STA 118+50.00
N 1227667.7125'
E 2301726.0032'

7
N/F
HENRY COUNTY WATER &
SEWERAGE AUTHORITY
SEE SHEET 5,23

6
N/F
HENRY COUNTY WATER &
SEWERAGE AUTHORITY
SEE SHEET 5,23

MATCH LINE STA 107+00 - SEE SHEET 3

REQ'D R/W

DE5010
STA: 110+50.00
OFF: 120.00' Lt.

110+00

PC 110+50.00

DE5011
STA: 112+50.00
OFF: 120.00' Lt.

DE5012
STA: 112+50.00
OFF: 145.00' Lt.

CURVE #2
PI 114+51.31
N 1,227,702.9812
E 2,301,326.2438
Δ 11°20'44.5" (LT)
D 01°25'05.56"
T 401.31'
L 800.00'
R 4040.00'
E 19.88'
ed 2.0%

APPROXIMATE L.L.L

115+00

REQ'D R/W

S73°36'44.8"E

DE5013
STA: 118+50.00
OFF: 145.00' Lt.

PCC 118+50.00

DE5014
STA: 119+97.75
OFF: 145.00' Lt.

MATCH LINE STA 120+00 - SEE SHEET 5

BETHLEHEM ROAD

CURVE #2

CURVE #3

DE5018
STA: 110+50.00
OFF: 120.00' Rt.

REQ'D R/W

DE5017
STA: 113+50.00
OFF: 140.00' Rt.

46
N/F
HOPEWELL HOLDINGS LLC
SEE SHEET 3,5,32

CURVE #3
PI 126+80.24
N 1,227,594.7484
E 2,302,553.0297
Δ 15°45'22.8" (LT)
D 00°57'17.75"
T 830.24'
L 1650.00'
R 6000.00'
E 57.17'
ed NC

DE50090
STA: 116+00.00
OFF: 147.40' Rt.

DE50091
STA: 116+00.00
OFF: 230.00' Rt.

℄ 6505 ℄

DE50094
STA: 117+87.57
OFF: 230.00' Rt.

REQ'D R/W

DE50053
STA: 119+73.24
OFF: 279.45' Rt.

Bethlehem Rd
STA 110+50.00
N 1227816.2046'
E 2300941.2348'

SCALE IN FEET
0 50 100 200

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 4 OF 32

DRAWING No. 60-0004

GRWPLN-CE

EXIST R/W
OLD BETHLEHEM ROAD
ACADEMIC PKWY
CEMETERY
Bethlehem Rd
STA 130+00.00
N 1227676.7109'
E 2302874.2117'
LIMIT OF R/W ACQUISITION
STA 127+19.27
PRICE DR
805°00'00"
TRACT 2
TRACT 1
TRACT 3
PRICE DRIVE
REQ'D R/W
MATCH LINE STA 120+00 - SEE SHEET 4
MATCH LINE STA 135+00 - SEE SHEET 6
N00°09'54.1"W
81°13'30"
7
N/F
HENRY COUNTY WATER & SEWERAGE AUTHORITY
SEE SHEET 4,23
6
N/F
HENRY COUNTY WATER & SEWERAGE AUTHORITY
SEE SHEET 4,23
8
N/F
PATRICK LAKEITHA
SEE SHEET 24
9
N/F
CRG ACQUISITIONS LLC
SEE SHEET 8,24
46
N/F
HOPEWELL HOLDINGS LLC
SEE SHEET 3,4,32
CURVE #3
PI 126+80.24
N 1,227,594.7484
E 2,302,553.0297
Δ 15°45'22.8" (LT)
D 00°57'17.75"
T 830.24'
L 1650.00'
R 6000.00'
E 57.17'
ed NC
BETHLEHEM ROAD
Bethlehem Rd
STA 125+00.00
N 1227645.7379'
E 2302375.3169'
DE7001 STA: 122+04.67 OFF: 145.00' Lt.
DE8002 STA: 129+00.00 OFF: 115.00' Lt.
DE7003 STA: 126+24.07 OFF: 145.00' Lt.
DE8001 STA: 127+00.00 OFF: 145.00' Lt.
DE9002 STA: 131+00.00 OFF: 116.48' Lt.
DE38 STA: 131+93.59 OFF: 135.80' Lt.
DE37 STA: 124+45.00 OFF: 94.87' Lt.
STA 133+09.70 BETHLEHEM RD = STA 0+02.85 PRICE DR
DE9005 STA: 126+85.36 OFF: 96.12' Lt.
DE9006 STA: 127+19.27 OFF: 90.02' Rt.
DE9007 STA: 124+19.04 OFF: 90.49' Rt.
DE7201 STA: 121+09.37 OFF: 40.20' Rt.
DE9001 STA: 134+00.00 OFF: 150.00' Rt.
DE8852 STA: 119+77.81 OFF: 39.87' Rt.
DE5015 STA: 121+35.29 OFF: 150.00' Rt.
DE50055 STA: 120+57.56 OFF: 155.79' Rt.
DE6002 STA: 123+71.82 OFF: 150.00' Rt.
DE50099 STA: 128+00.00 OFF: 190.51' Rt.
DE8003 STA: 119+99.33 OFF: 128.29' Lt.
DE8850 STA: 119+96.51 OFF: 40.08' Lt.
DE8851 STA: 119+66.22 OFF: 40.16' Lt.
DE7004 STA: 127+44.69 OFF: 150.00' Rt.
LIMIT OF R/W ACQUISITION STA 119+66.22 PRICE DR
DEDICATED CITY OF LOCUST GROVE R/W
SCALE IN FEET
0 50 100 200
120+00
121+00
122+00
123+00
124+00
125+00
126+00
127+00
130+00
135+00

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

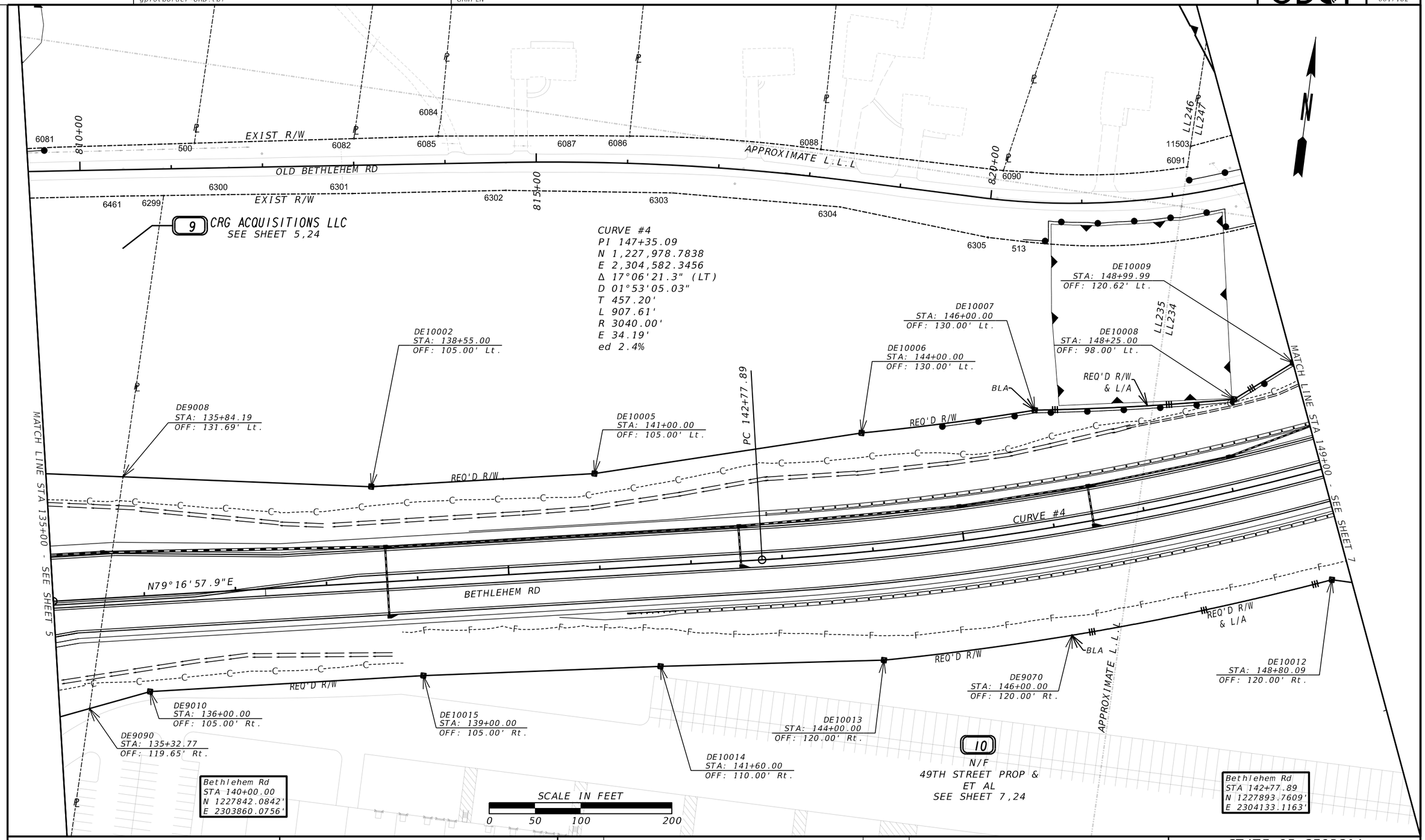
DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 5 OF 32

DRAWING No. 60-0005

GRWPLN-CE



PROPERTY AND EXISTING R/W LINE	P	BEGIN LIMIT OF ACCESS.....BLA	
REQUIRED R/W LINE		END LIMIT OF ACCESS.....ELA	
CONSTRUCTION LIMITS	C F	EXISTING LIMIT OF ACCESS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES		REQ'D LIMIT OF ACCESS	
EASEMENT FOR CONSTR OF SLOPES		EXISTING LIMIT OF ACCESS & R/W	
EASEMENT FOR CONSTR OF DRIVES		REQ'D LIMIT OF ACCESS & R/W	
		ORANGE BARRIER FENCE	
		ESA - ENV. SENSITIVE AREA	

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO:0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 6 OF 32

DRAWING No. 60-0006

GRWPLN-CE

9/12/2025	GPLOT-ORD	0017182_60-0007.dgn	GDOT	P.I. No.
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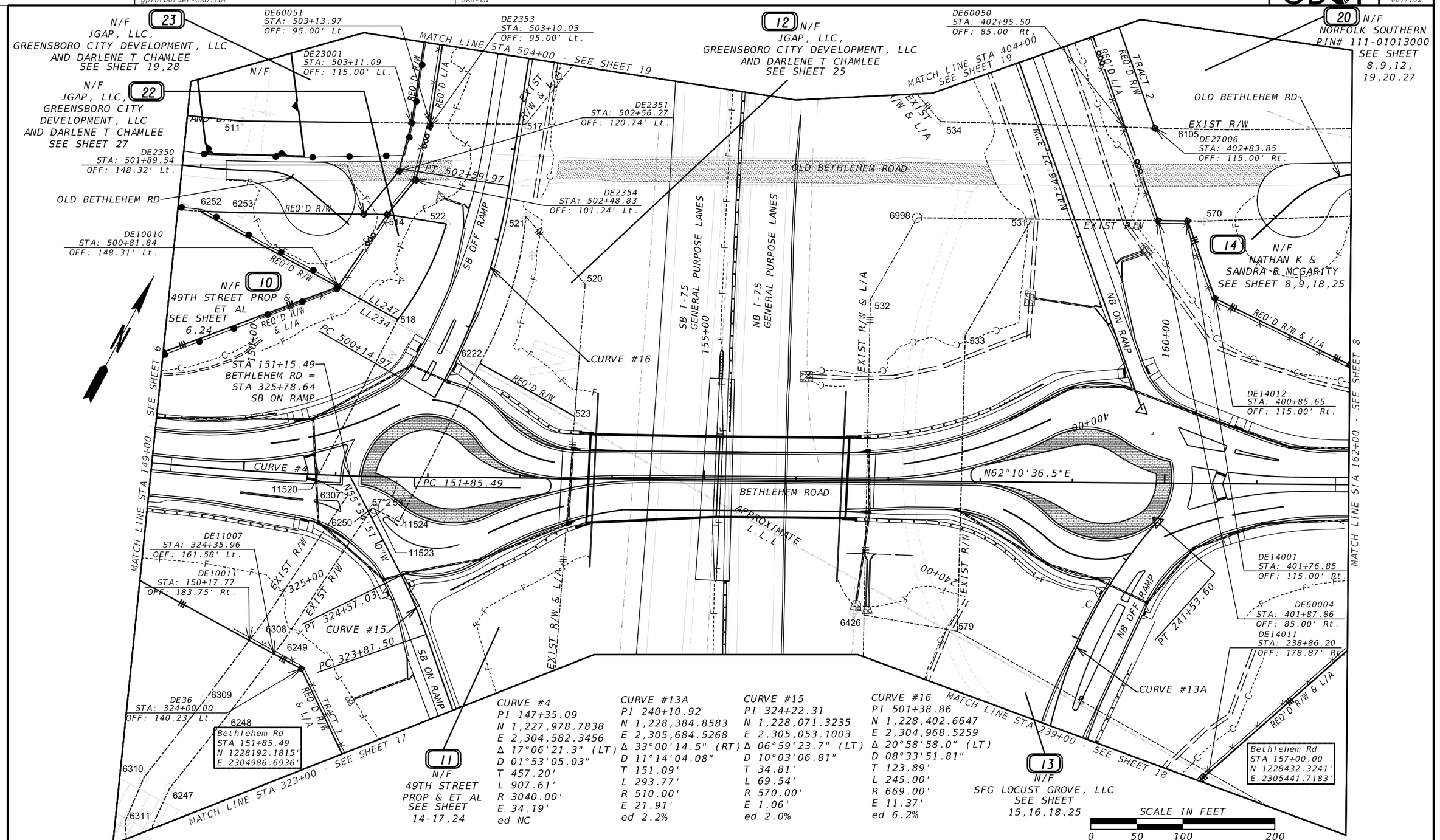


CURVE #4
PI 147+35.09
N 1,227,978.7838
E 2,304,582.3456
Δ 17°06'21.3" (LT)
D 01°53'05.03"
T 457.20'
L 907.61'
R 3040.00'
E 34.19'
ed NC

CURVE #13A
PI 240+10.92
N 1,228,384.8583
E 2,305,684.5268
Δ 33°00'14.5" (RT)
D 11°14'04.08"
T 151.09'
L 293.77'
R 510.00'
E 21.91'
ed 2.2%

CURVE #15
PI 324+22.31
N 1,228,071.3235
E 2,305,053.1003
Δ 06°59'23.7" (LT)
D 10°03'06.81"
T 34.81'
L 69.54'
R 570.00'
E 1.06'
ed 2.0%

CURVE #16
PI 501+38.86
N 1,228,402.6647
E 2,304,968.5259
Δ 20°58'58.0" (LT)
D 08°33'51.81"
T 123.89'
L 245.00'
R 669.00'
E 11.37'
ed 6.2%

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 7 OF 32

DRAWING No.
60-0007

GRWPLN-CE

20
N/F
NORFOLK SOUTHERN
SEE SHEET
7,9,12,19,20,27

585+00

590

EXIST R/W

OLD BETHLEHEM ROAD

EXIST R/W

11531

6103

6221

530

DE14014
STA: 162+45.00
OFF: 293.55' Lt.

REQ'D R/W

DE14050
STA: 161+99.99
OFF: 130.00' Lt.

DE1450
STA: 162+45.00
OFF: 122.50' Lt.

DE12051
STA: 163+50.00
OFF: 105.00' Lt.

REQ'D R/W & L/A

DE9071
STA: 165+00.00
OFF: 105.00' Lt.

165+00

ELA

DE14052
STA: 166+40.00
OFF: 105.00' Lt.

REQ'D R/W

170+00

DE14055
STA: 170+40.00
OFF: 130.00' Lt.

DE14003
STA: 172+00.00
OFF: 120.00' Lt.

DE14004
STA: 172+50.50
OFF: 120.00' Lt.

REQ'D R/W

MATCH LINE STA 162+00 - SEE SHEET 7

MATCH LINE STA 174+00 - SEE SHEET 9

CURVE #5

BETHLEHEM ROAD

REQ'D R/W

REQ'D R/W & L/A

ELA

DE9072
STA: 165+00.00
OFF: 115.79' Rt.

DE14010
STA: 162+66.97
OFF: 120.00' Rt.

CURVE #5
PI 174+95.59
N 1,229,270.4061
E 2,307,029.7245
Δ 18°05'09.0" (RT)
D 03°43'13.82"
T 245.09'
L 486.11
R 1540.00
E 19.38
ed 3.4%

Bethlehem Rd
STA 165+00.00
N 1228805.7197'
E 2306149.2320'

14
N/F
NATHAN K & SANDRA B
MCGARITY
SEE SHEET 7,9,18,25

SCALE IN FEET
0 50 100 200

DE14009
STA: 168+20.00
OFF: 110.00' Rt.

DE14008
STA: 168+20.00
OFF: 155.00' Rt.

DE57
STA: 169+20.00
OFF: 120.00' Rt.

DE56
STA: 169+20.00
OFF: 155.00' Rt.

DE14007
STA: 172+50.50
OFF: 90.00' Rt.

DE60
STA: 173+25.00
OFF: 90.00' Rt.

DE63
STA: 173+25.00
OFF: 110.00' Rt.

DE14006
STA: 173+98.92
OFF: 90.00' Rt.

DE62
STA: 173+97.40
OFF: 110.00' Rt.

Bethlehem Rd
STA 172+50.50
N 1229156.0095'
E 2306812.9646'

15
N/F SEE SHEET
Z & Z 9,13,26
CONSTRUCTION CO

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

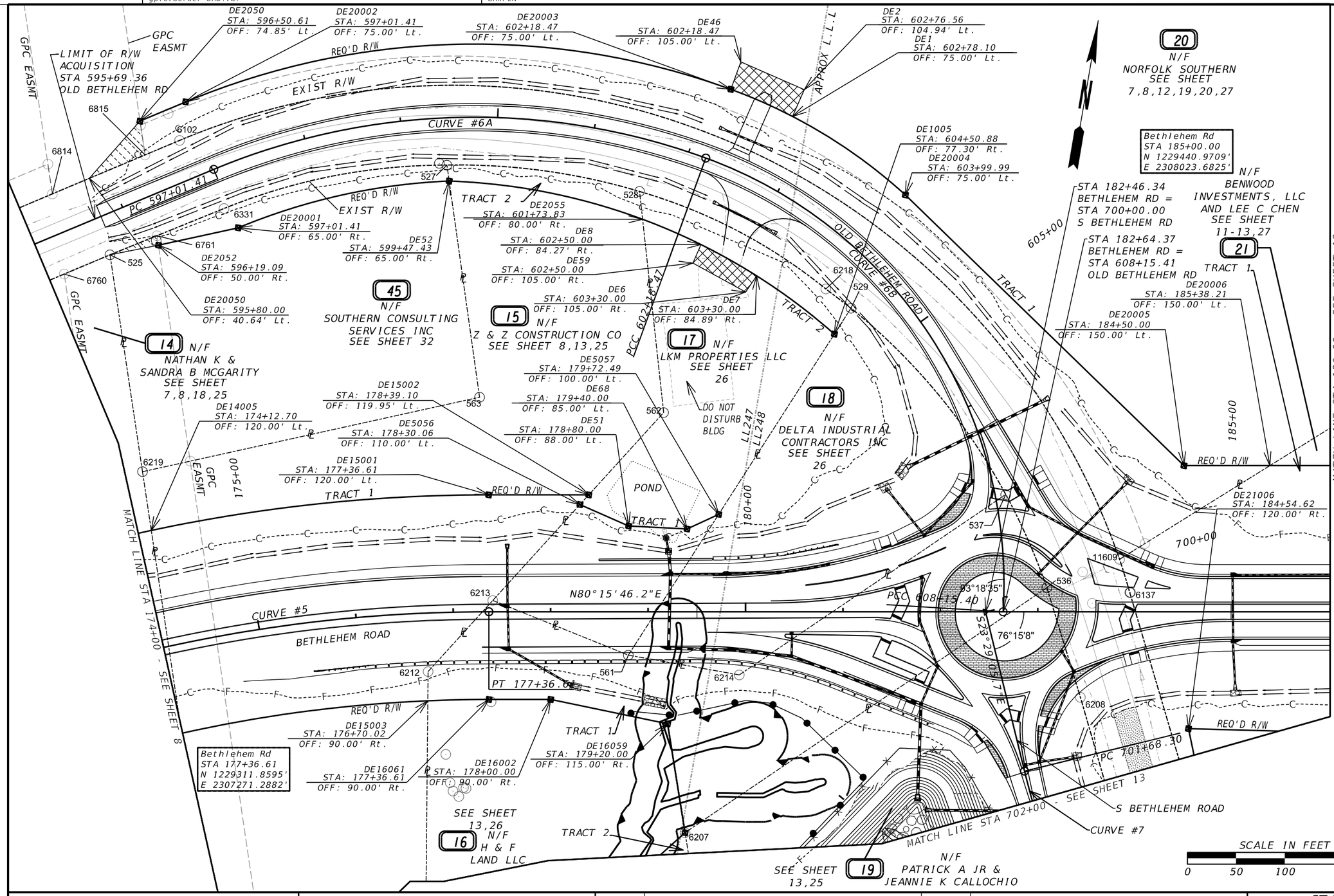
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 8 OF 32

DRAWING No.
60-0008

GRWPLN-CE



CURVE #5
PI 174+95.59
N 1,229,270.4061
E 2,307,029.7245
Δ 18°05'09.0" (RT)
D 03°43'13.82"
T 245.09'
L 486.11'
R 1540.00'
E 19.38'
ed 3.4%

CURVE #6A
PI 599+72.56
N 1,229,856.7435
E 2,307,145.1060
Δ 42°37'36.3" (RT)
D 08°14'38.43"
T 271.16'
L 517.06'
R 695.00'
E 51.02'
ed 5.0%

CURVE #6B
PI 605+66.03
N 1,229,746.6181
E 2,307,753.9440
Δ 73°33'08.2" (RT)
D 12°19'18.12"
T 347.56'
L 596.93'
R 465.00'
E 115.54'
ed 5.8%

CURVE #7
PI 708+48.56
N 1,228,619.7706
E 2,308,111.8358
Δ 75°24'34.0" (LT)
D 06°30'39.18"
T 680.26'
L 1158.21'
R 880.00'
E 232.27'
ed 4.4%

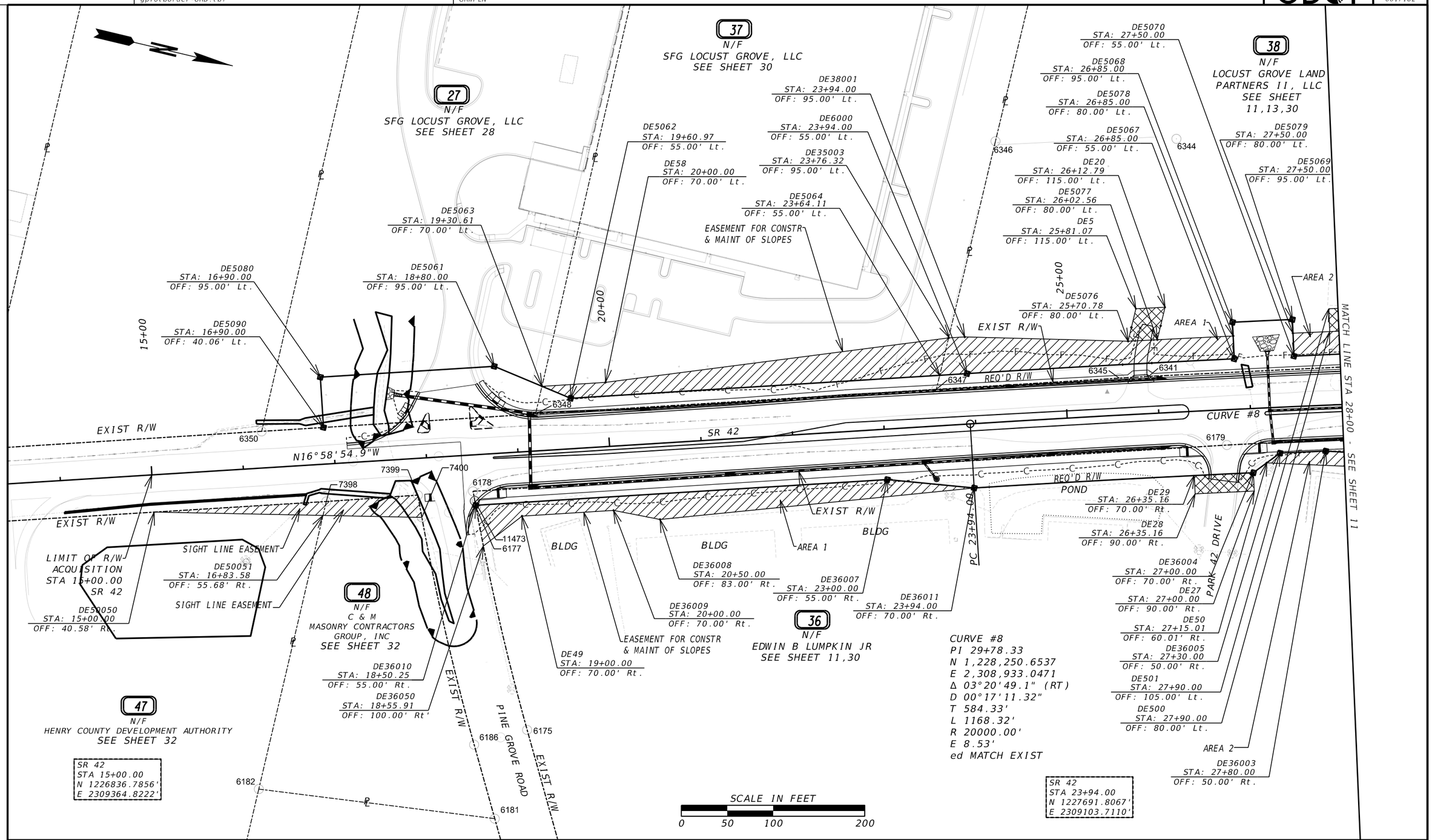
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 9 OF 32
DRAWING No. 60-0009

GRWPLN-CE



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 10 OF 32

DRAWING No. 60-0010

GRWPLN-CE

38 N/F LOCUST GROVE LAND PARTNERS II, LLC SEE SHEET 10,13,30

N/F 42 AP LIQUOR LLC SEE SHEET 31

N/F 35 WBJ GLOBAL INDEMNITY INC SEE SHEET 13,29

N/F 21 BENWOOD INVESTMENTS, LLC AND LEE C CHEN SEE SHEET 9,12,13,27

33 N/F DARLENE T CHAMLEE SEE SHEET 13,29

43 N/F BLUE FLAME GAS CO SEE SHEET 31

41 N/F ARGOS READY MIX LLC SEE SHEET 31

36 N/F EDWIN B LUMPKIN JR SEE SHEET 10,30

MATCH LINE STA 28+00 - SEE SHEET 10

MATCH LINE STA 711+00 - SEE SHEET 13

MATCH LINE STA 41+00 - SEE SHEET 12

SEE SHEET 13

DE42 STA: 31+00.00 OFF: 95.00' Lt.
DE43 STA: 31+00.00 OFF: 70.00' Lt.
DE44 STA: 31+00.00 OFF: 55.00' Lt.
DE502 STA: 28+50.00 OFF: 105.00' Lt.
DE42001 STA: 30+30.00 OFF: 95.00' Lt.
DE5073 STA: 30+30.00 OFF: 80.00' Lt.
DE5071 STA: 30+30.00 OFF: 55.00' Lt.
DE40001 STA: 30+13.24 OFF: 80.00' Lt.
DE503 STA: 28+50.00 OFF: 80.00' Lt.
DE5072 STA: 30+06.34 OFF: 55.00' Lt.
DE40 STA: 32+17.10 OFF: 83.50' Lt.
DE54 STA: 32+15.08 OFF: 55.00' Lt.
DE42003 STA: 31+90.00 OFF: 85.00' Lt.
DE23 STA: 711+48.74 OFF: 58.45' Rt.
DE26 STA: 711+50.00 OFF: 80.00' Rt.
DE24 STA: 712+50.00 OFF: 45.53' Rt.
DE35002 STA: 712+68.91 OFF: 45.05' Rt.
DE25 STA: 712+50.00 OFF: 70.00' Rt.
DE45 STA: 33+83.21 OFF: 75.12' Lt.
DE35001 STA: 33+88.12 OFF: 55.00' Lt.
DE33001 STA: 712+43.02 OFF: 90.00' Lt.
DE21003 STA: 38+19.42 OFF: 105.00' Lt.
DE41003 STA: 32+00.00 OFF: 80.00' Rt.
DE41002 STA: 32+50.00 OFF: 90.00' Rt.
DE41 STA: 712+70.06 OFF: 68.75' Rt.
DE41001 STA: 33+90.00 OFF: 90.00' Rt.
DE36002 STA: 29+61.43 OFF: 68.00' Rt.
DE36001 STA: 29+57.84 OFF: 80.00' Rt.
DE5091 STA: 34+35.24 OFF: 130.00' Rt.
DE43101 STA: 36+62.11 OFF: 65.66' Rt.
DE43102 STA: 36+62.20 OFF: 80.00' Rt.
DE43100 STA: 36+22.11 OFF: 65.92' Rt.
DE43103 STA: 36+22.20 OFF: 80.00' Rt.
DE43001 STA: 38+71.73 OFF: 80.00' Rt.
DE43002 STA: 35+62.32 OFF: 80.00' Rt.
DE4 STA: 35+51.46 OFF: 64.38' Rt.
DE43050 STA: 35+51.46 OFF: 80.00' Rt.
DE43003 STA: 35+15.90 OFF: 80.00' Rt.

EASEMENT FOR CONSTR & MAINT OF SLOPES
EASEMENT FOR THE CONST OF SLOPES
EASEMENT FOR THE CONSTR AND MAINT OF SLOPES (PI 0013995 SR 42 PARCEL 2)
EASEMENT FOR THE CONSTR AND MAINT OF SLOPES (PI 0013995 SR 42 PARCEL 6A)
EASEMENT FOR CONSTR & MAINT OF SLOPES
EASEMENT FOR THE CONSTR AND MAINT OF SLOPES (PI 0013995 SR 42 PARCEL 4)

REQD R/W (PI 0013995 SR 42 PARCEL 5A)
POND BY OTHERS (PI 0013995)
APPROX L.L.L
S BETHLEHEM ROAD
CURVE #7
EXIST R/W
REQ'D R/W
REQ'D R/W
AREA 1
AREA 2
POND
CURVE #8
CURVE #9
SR 42 N81°06'20.3"E
PT 713+26.50
N13°38'05.8"W
PT 35+62.32
PC 39+42.04
94°57'57"
STA 34+71.32 SR 42 = STA 713+59.89 S BETHLEHEM RD

SR 42 STA 40+06.52 N 1229250.1966' E 2308690.5870'
SR 42 STA 35+62.32 N 1228818.5114' E 2308795.3013'

CURVE #7
PI 708+48.56
N 1,228,619.7706
E 2,308,111.8358
Δ 75°24'34.0" (LT)
D 06°30'39.18"
T 680.26'
L 1158.21'
R 880.00'
E 232.27'
ed 4.4%

CURVE #8
PI 29+78.33
N 1,228,250.6537
E 2,308,933.0471
Δ 03°20'49.1" (RT)
D 00°17'11.32"
T 584.33'
L 1168.32'
R 20000.00'
E 8.53'
ed MATCH EXIST

CURVE #9
PI 43+36.93
N 1,229,571.2906
E 2,308,612.6989
Δ 07°37'10.9" (RT)
D 00°57'58.33"
T 394.89'
L 788.62'
R 5930.00'
E 13.13'
ed MATCH EXIST

SCALE IN FEET
0 50 100 200

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 11 OF 32

DRAWING No. 60-0011

GRWPLN-CE

7009
EXIST R/W
7008
7007
7006
7005
45+00
190+00
SR 42
EXIST R/W
N06°00'54"E
PT 47+30.66
11484
6142
6141
11485
EXIST NS RR R/W
NS RR
CURVE #9
90°11'37"

20
N/F
NORFOLK SOUTHERN
SEE SHEET
7,8,9,19,20,27

21
N/F
BENWOOD
INVESTMENTS, LLC
AND LEE C CHEN
SEE SHEET
9,11,13,27

LIMIT OF R/W
ACQUISITION
STA 44+67.04
SR 42

STA 191+15.82
BETHLEHEM RD =
STA 43+07.51
SR 42

SR 42
STA 190+00.00
N 1229730.8047'
E 2308578.6563'

CURVE #9
PI 43+36.93
N 1,229,571.2906
E 2,308,612.6989
Δ 07°37'10.9" (RT)
D 00°57'58.33"
T 394.89'
L 788.62'
R 5930.00'
E 13.13'
ed MATCH EXIST

DE21002
STA: 189+35.82
OFF: 163.24' Lt.

DE21001
STA: 189+20.00
OFF: 150.00' Lt.

DE550
STA: 189+94.17
OFF: 71.94' Rt.

DE21004
STA: 189+21.77
OFF: 76.73' Rt.

DE19
STA: 189+25.63
OFF: 154.71' Rt.

DE21005
STA: 188+36.20
OFF: 130.00' Rt.

TRACT 1
REQ'D R/W
REQD R/W
(PI 0013995 SR 42 PARCEL 5A)
REQD R/W
(PI 0013995 SR 42 PARCEL 6A)
EASEMENT FOR THE CONSTR
AND MAINT OF SLOPES
(PI 0013995 SR 42 PARCEL 6A)
POND BY OTHERS
(PI 0013995)

N80°15'46.2"E
BETHLEHEM ROAD

Bethlehem Rd
STA 191+06.43
N 1229543.5360'
E 2308621.3787'

Bethlehem Rd
STA 187+00.00
N 0.0000'
E 0.0000'

MATCH LINE STA 186+00 - SEE SHEET 9
MATCH LINE STA 41+00 - SEE SHEET 11

SCALE IN FEET
0 50 100 200

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 12 OF 32

DRAWING No. 60-0012

GRWPLN-CE

TRACT 1

21
N/F
BENWOOD INVESTMENTS, LLC
AND LEE C CHEN
SEE SHEET 9,11,12,27

REQD R/W
(PI 0013995 SR 42 PARCEL 5A)

REQ'D R/W

33
N/F
CHARLENE T CHAMLEE
SEE SHEET 11,29

565

TRACT 1

DE3
STA: 705+75.73
OFF: 90.00' Lt.

DE21050
STA: 704+34.80
OFF: 132.14' Lt.

REQ'D R/W

EXIST R/W

705+00

DE16
STA: 710+20.00
OFF: 65.54' Rt.

710+00

DE18
STA: 710+20.00
OFF: 80.00' Rt.

DE21009
STA: 709+09.08
OFF: 90.00' Lt.

DE31058
STA: 706+06.65
OFF: 40.00' Rt.

MATCH LINE STA 702+00 - SEE SHEET 9

6206

EXIST R/W

541

DE31001
STA: 707+53.44
OFF: 40.00' Rt.

TRACT 2

REQ'D R/W

545

MATCH LINE STA 711+00 - SEE SHEET 11

6193

6203

542

BETHLEHEM ROAD

CURVE #7

6200

6204

6196

DO NOT
DISTURB
SIGN

549

DE17
STA: 710+89.20
OFF: 80.00' Rt.

29
N/F
GARY CAMPBELL
PROPERTIES LLC
SEE SHEET 28

6197

544

REQ'D R/W

DE30006
STA: 704+08.04
OFF: 96.30' Rt.

DE31080
STA: 708+20.26
OFF: 80.10' Rt.

35
N/F
WBJ GLOBAL INDEMNITY INC
SEE SHEET 11,29

6205

DE30001
STA: 705+71.72
OFF: 60.00' Rt.

DE31081
STA: 708+25.29
OFF: 145.00' Rt.

6192

N/F
Z & Z CONSTRUCTION CO
SEE SHEET 8,9,25

DE6001
STA: 706+10.19
OFF: 60.90' Rt.

DE15
STA: 708+70.82
OFF: 80.00' Rt.

15

6202

34
N/F
STREET PAWS. INC
SEE SHEET 29

DE31082
STA: 708+64.03
OFF: 145.00' Rt.

19
N/F
PATRICK A JR &
JEANNIE K CALLOCHIO
SEE SHEET 9,26

DE30002
STA: 706+48.65
OFF: 63.60' Rt.

DE13
STA: 709+55.00
OFF: 64.34' Rt.

42
N/F
AP LIQUOR LLC
SEE SHEET 11,31

6334

6333

DE14
STA: 709+55.00
OFF: 80.00' Rt

30
N/F
ALBANY AMUSEMENT LLC
SEE SHEET 28

APPROX L.L.L

564

DE71
STA: 700+32.87
OFF: 392.74' Rt.

31
N/F
FORTSON LAND CO LLLP
SEE SHEET 29

32
N/F
RAYMOND H &
RHONDA J SHAW
SEE SHEET 29

38
N/F
LOCUST GROVE LAND
PARTNERS II, LLC
SEE SHEET
10,11,30

6336

6335

DE16062
STA: 701+90.00
OFF: 455.00' Rt.

TRACT 2

DE16063
STA: 702+30.00
OFF: 455.00' Rt.

6211

16
N/F
H & F LAND LLC
SEE SHEET 9,26

LL248
LL247

Old Bethlehem Rd
STA 705+00.00
N 1228971.2254'
E 2308026.4868'

CURVE #7
PI 708+48.56
N 1,228,619.7706
E 2,308,111.8358
Δ 75°24'34.0" (LT)
D 06°30'39.18"
T 680.26'
L 1158.21'
R 880.00'
E 232.27'
ed 4.4%

557

SCALE IN FEET
0 50 100 200

6337

556

LL248
LL233

Old Bethlehem Rd
STA 710+00.00
N 1228734.7750'
E 2308459.4274'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 13 OF 32

DRAWING No.
60-0013

GRWPLN-CE

EXIST R/W & L/A

6437

6438

11

49TH STREET
PROP LP & ET AL
SEE SHEET 7,15,16,17,24

SB I-75
GENERAL PURPOSE LANES

MATCH LINE - SEE SHEET 15

CURVE #11
PI 201+35.59
N 1,224,823.2031
E 2,307,192.4240
Δ 05°09'12.1" (LT)
D 00°29'53.61"
T 517.52'
L 1034.35'
R 11500.00'
E 11.64'
ed NC%

195+00

200+00

POB 194+71.93

PC 196+18.07

NB I-75
GENERAL PURPOSE LANES

N22°08'02.2"W

NB OFF RAMP

CURVE #11

MATCH LINE STA 201+00 - SEE SHEET 15

EXIST R/W & L/A

6365

EXIST R/W & L/A

6366

6367

181

181

REQ'D R/W & L/A
(PI 0014203 CVL PARCEL 182)

NO REQUIRED RIGHT OF WAY THIS SHEET
FOR INFORMATION PURPOSES ONLY

NB Off Ramp
STA 196+18.07
N 1224343.8185'
E 2307387.4128'

NB Off Ramp
STA 200+00.00
N 1224695.1516'
E 2307237.6624'

SCALE IN FEET
0 50 100 200

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

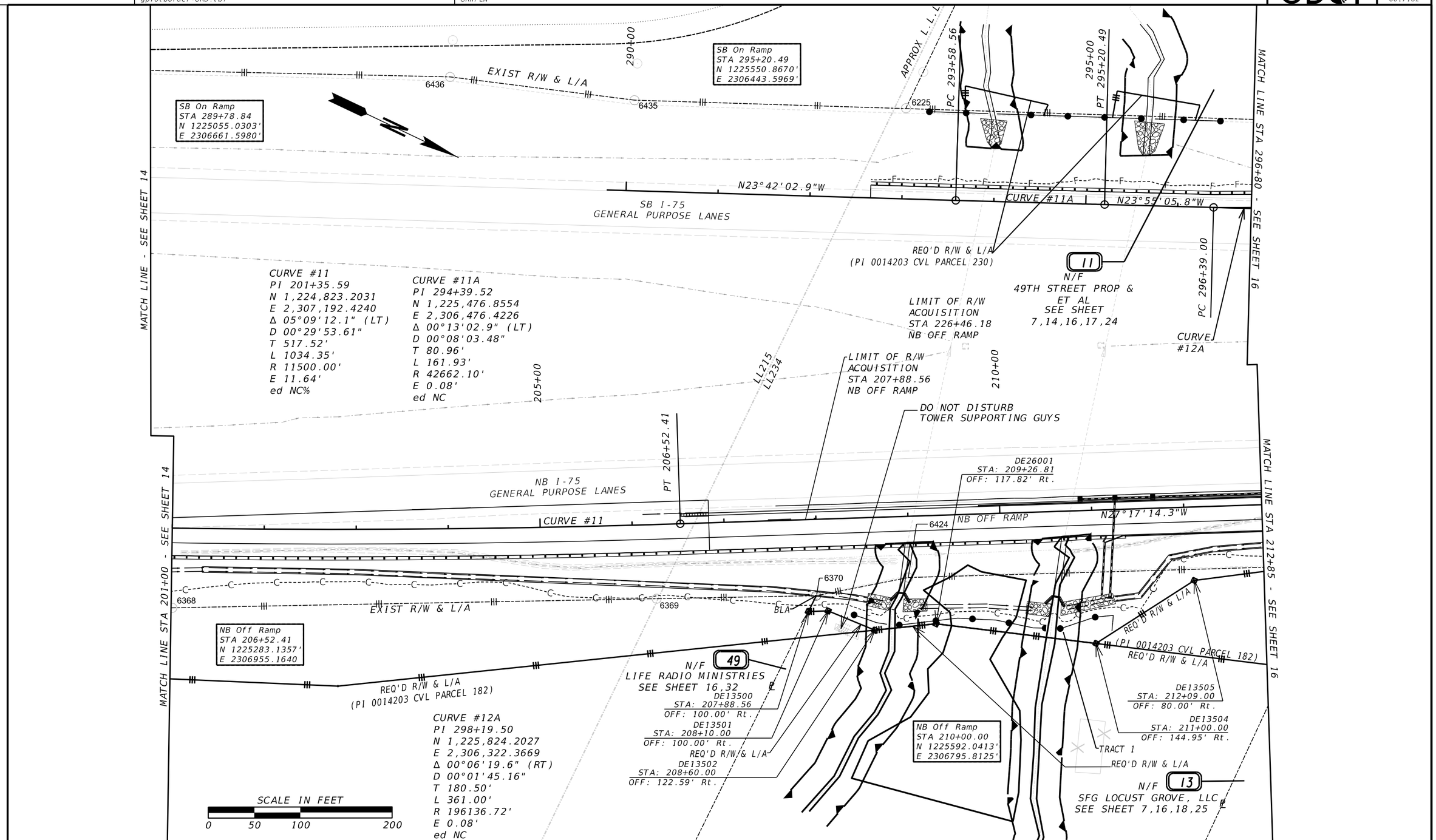
DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO:233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 14 OF 32

DRAWING No. 60-0014

GRWPLN-CE



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

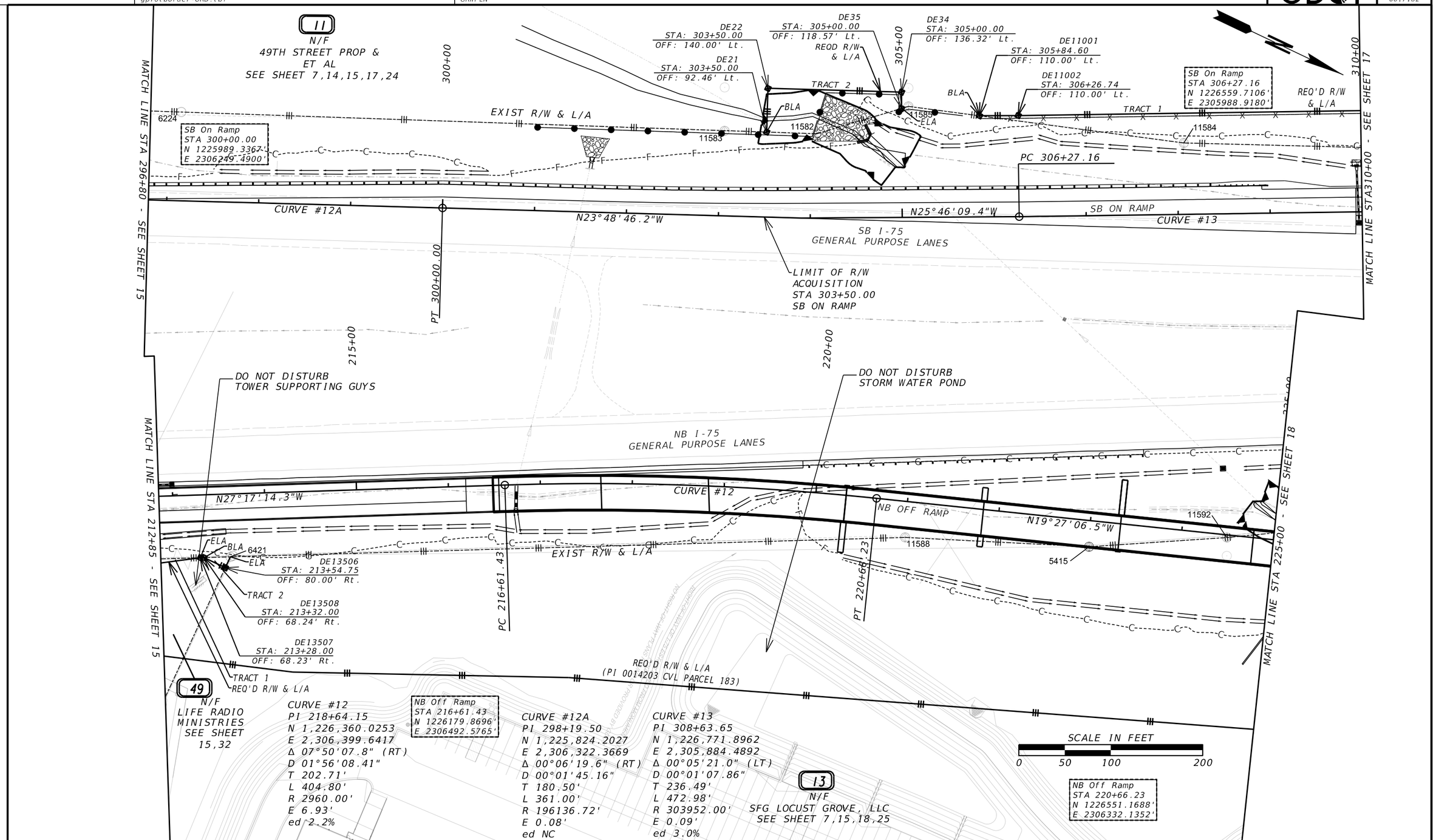
DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 15 OF 32

DRAWING No. 60-0015

GRWPLN-CE



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 16 OF 32
DRAWING No. 60-0016

GRWPLN-CE

SB On Ramp
STA 311+00.14
N 1226983.9191'
E 2305779.7303'

SB On Ramp
STA 322+41.18
N 1227949.2089'
E 2305186.8675'

CURVE #13
PI 308+63.65
N 1,226,771.8962
E 2,305,884.4892
Δ 00°05'21.0" (LT)
D 00°01'07.86"
T 236.49'
L 472.98'
R 303952.00'
E 0.09'
ed 3.0%

CURVE #14
PI 319+60.10
N 1,227,755.1950
E 2,305,399.3949
Δ 21°21'30.0" (LT)
D 03°45'16.70"
T 287.77'
L 568.85'
R 1526.00'
E 26.90'
ed 7.8%

6236 6237 6238 6239 6240 6241 6242 6243 6244 6245 6312 6313 6314 6315 6316 6317 6318 6319 6320 6321

PRICE DR

MATCH LINE STA 323+00 - SEE SHEET 7

N47°36'26.6"W

PT 322+41.18

DE11005
STA: 320+00.00
OFF: 80.00' Lt.

320+00

11

N/F
49TH STREET PROP &
ET AL
SEE SHEET 7,14-16,24

315+00

PC 316+72.33

DE11004
STA: 316+72.33
OFF: 80.00' Lt.

11601

PT 311+00.14

DE11003
STA: 311+00.14
OFF: 110.00' Lt.

310+00

MATCH LINE STA 310+00 - SEE SHEET 16

REQ'D R/W
& L/A

TRACT 1

EXIST R/W & L/A

CURVE #14

SB ON RAMP

N26°14'56.6"W

CURVE #13

SB I-75
GENERAL PURPOSE LANES

NB I-75
GENERAL PURPOSE LANES

SCALE IN FEET
0 50 100 200

MATCH LINE - SEE SHEET 18

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 17 OF 32

DRAWING No. 60-0017

GRWPLN-CE

MATCH LINE - SEE SHEET 17

NB I-75
GENERAL PURPOSE LANES

230+00

235+00

EXIST R/W & L/A

5416

183

END BRIDGE 3
STA 227+58.00

END APPROACH SLAB
STA 227+88.00

11593

DE13003
STA: 233+00.01
OFF: 110.00' Rt.

CURVE #13A

N19°27'06.5"W

NB OFF RAMP

PC 238+59.83

MATCH LINE STA 225+00 - SEE SHEET 16

REQ'D R/W

REQ'D R/W & L/A

BLA (PI 0017182)

REQ'D R/W & L/A
(PI 0014203 CVL PARCEL 183)

DE13001
STA: 238+53.74
OFF: 160.00' Rt.

DE13002
STA: 236+00.01
OFF: 175.00' Rt.

DE13004
STA: 228+00.01
OFF: 200.00' Rt.

DE13005
STA: 226+55.44
OFF: 202.76' Rt.

END REQ'D R/W & L/A
(PI 0014203 CVL PARCEL 182)

MATCH LINE STA 239+00 - SEE SHEET 7

13
N/F
SFG LOCUST GROVE, LLC
SEE SHEET 7,15,16,25

LL234
LL247

APPROXIMATE L.L.L

14
N/F
NATHAN K & SANDRA B MCGARITY
SEE SHEET 7,8,9,25

NB Off Ramp
STA 230+00.00
N 1227431.6416'
E 2306021.1766'

CURVE #13A
PI 240+10.92
N 1,228,384.8583
E 2,305,684.5268
Δ 33°00'14.5" (RT)
D 11°14'04.08"
T 151.09'
L 293.77'
R 510.00'
E 21.91'
ed 2.2%

NB Off Ramp
STA 238+59.83
N 1228242.3938'
E 2305734.8413'

SCALE IN FEET
0 50 100 200

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 18 OF 32

DRAWING No. 60-0018

GRWPLN-CE

MATCH LINE STA 504+00 - SEE SHEET 7

DE60000
STA: 504+20.00
OFF: 95.00' Lt.

DE23002
STA: 505+00.00
OFF: 115.00' Lt.

DE23003
STA: 505+00.00
OFF: 95.00' Lt.

DE60001
STA: 504+97.46
OFF: 75.00' Lt.

505+00

REQ'D R/W

23 N/F
JGAP, LLC,
GREENSBORO CITY
DEVELOPMENT, LLC
AND DARLENE T CHAMLEE
SEE SHEET 7,28

LL246
LL247

DE23004
STA: 510+95.57
OFF: 95.00' Lt.

510+00

℄

DE24007
STA: 512+39.77
OFF: 95.00' Lt.

DE60003
STA: 512+25.00
OFF: 95.00' Lt.

DE60002
STA: 512+25.00
OFF: 75.00' Lt.

REQ'D R/W

REQ'D L/A

PC 512+39.77

CURVE #17
PI 514+66.61
N 1,229,657.3632
E 2,304,525.7709
Δ 02°20'17.2" (LT)
D 00°30'55.57"
T 226.84'
L 453.62'
R 11116.00'
E 2.31'
ed RC

N/F 24
WOODFIN WATKINS
SEE SHEET 20,28

PT 516+93.39

515+00

DE24002
STA: 516+50.00
OFF: 140.00' Lt.

DE24001
STA: 515+15.00
OFF: 95.00' Lt.

REQ'D R/W & L/A

6069

11567

11566

N19°26'12.5"W

SB OFF RAMP

EXIST R/W & L/A

575

CURVE #17

DE60052
STA: 511+48.49
OFF: 75.00' Lt.

DE24005
STA: 517+70.00
OFF: 140.00' Lt.

SB I-75
GENERAL PURPOSE LANES

410+00

415+00

N21°46'29.7"W

APPROXIMATE L.L.L

NB I-75
GENERAL PURPOSE LANES

MATCH LINE STA 518+00 - SEE SHEET 20

405+00

535

N24°00'04.3"W NB ON RAMP

11544

11547

6094

EXIST R/W & L/A

CURVE #18

TRACT 2

REQ'D R/W & L/A

REQ'D L/A

REQ'D R/W

PT 413+80.86

DE60006
STA: 412+61.01
OFF: 80.80' Rt.

DE60007
STA: 412+61.41
OFF: 110.79' Rt.

DE27004
STA: 414+15.35
OFF: 109.00' Rt.

DE27003
STA: 414+40.97
OFF: 109.02' Rt.

MATCH LINE STA 404+00 - SEE SHEET 7

PC 404+63.89

N47°46'27.3"W

NB On Ramp
STA 404+63.89
N 1228942.7389'
E 2305304.2000'

DE60005
STA: 404+59.83
OFF: 85.00' Rt.

DE27005
STA: 404+59.83
OFF: 115.00' Rt.

20 N/F
NORFOLK SOUTHERN
SEE SHEET
7,8,9,12,20,27

CURVE #18
PI 409+29.07
N 1,229,255.3629
E 2,304,959.7350
Δ 23°46'23.0" (RT)
D 02°35'33.25"
T 465.18'
L 916.97'
R 2210.00'
E 48.43'
ed 6.2%

NB On Ramp
STA 413+80.86
N 1229680.3196'
E 2304770.5215'

SCALE IN FEET
0 50 100 200

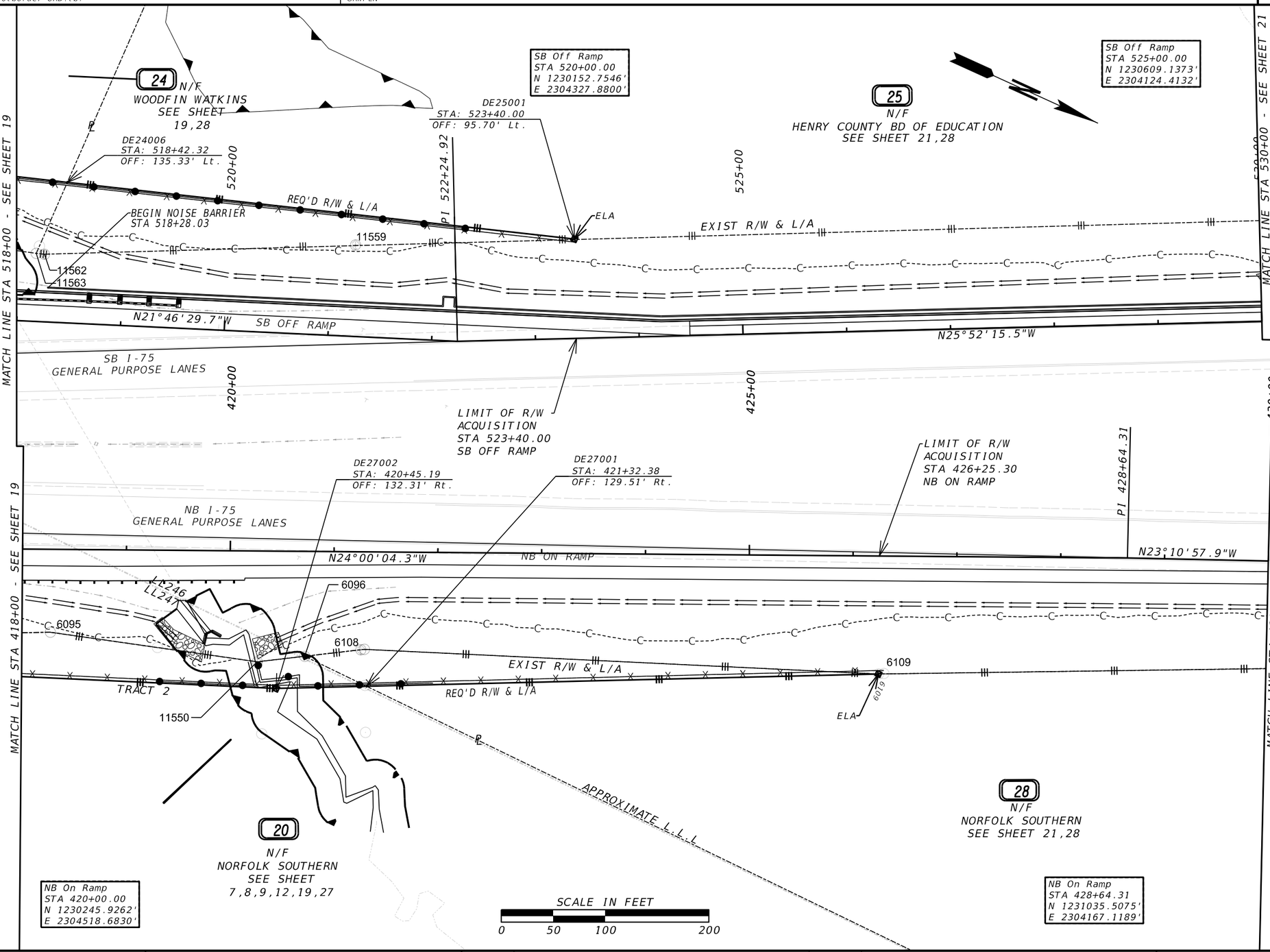
PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 19 OF 32

DRAWING No. 60-0019

GRWPLN-CE



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 20 OF 32

DRAWING No. 60-0020

GRWPLN-CE

25
N/F
HENRY COUNTY
BD OF EDUCATION
SEE SHEET 20,28

MATCH LINE STA 530+00 - SEE SHEET 20

MATCH LINE STA 545+00 - SEE SHEET 22

MATCH LINE STA 430+00 - SEE SHEET 20

535+00

540+00

435+00

LL246
LL251

SB Off Ramp
STA 535+00.00
N 1231508.9162'
E 2303688.0671'

SB Off Ramp
STA 540+00.00
N 1231958.8057'
E 2303469.8940'

EXIST R/W & L/A

6128

SB OFF RAMP

N25°52'15.5"W

SB I-75
GENERAL PURPOSE LANES

APPROXIMATE L.L.L

POE 439+00.00

N23°10'57.9"W

NB ON RAMP

NB I-75
GENERAL PURPOSE LANES

6110

6111

EXIST R/W & L/A

28
N/F
NORFOLK SOUTHERN
SEE SHEET 20,28

NB On Ramp
STA 430+00.00
N 1231160.2389'
E 2304113.7035'

NB On Ramp
STA 439+00.00
N 1231986.8675'
E 2303759.7047'

NO REQUIRED RIGHT OF WAY THIS SHEET
FOR INFORMATION PURPOSES ONLY

SCALE IN FEET
0 50 100 200

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

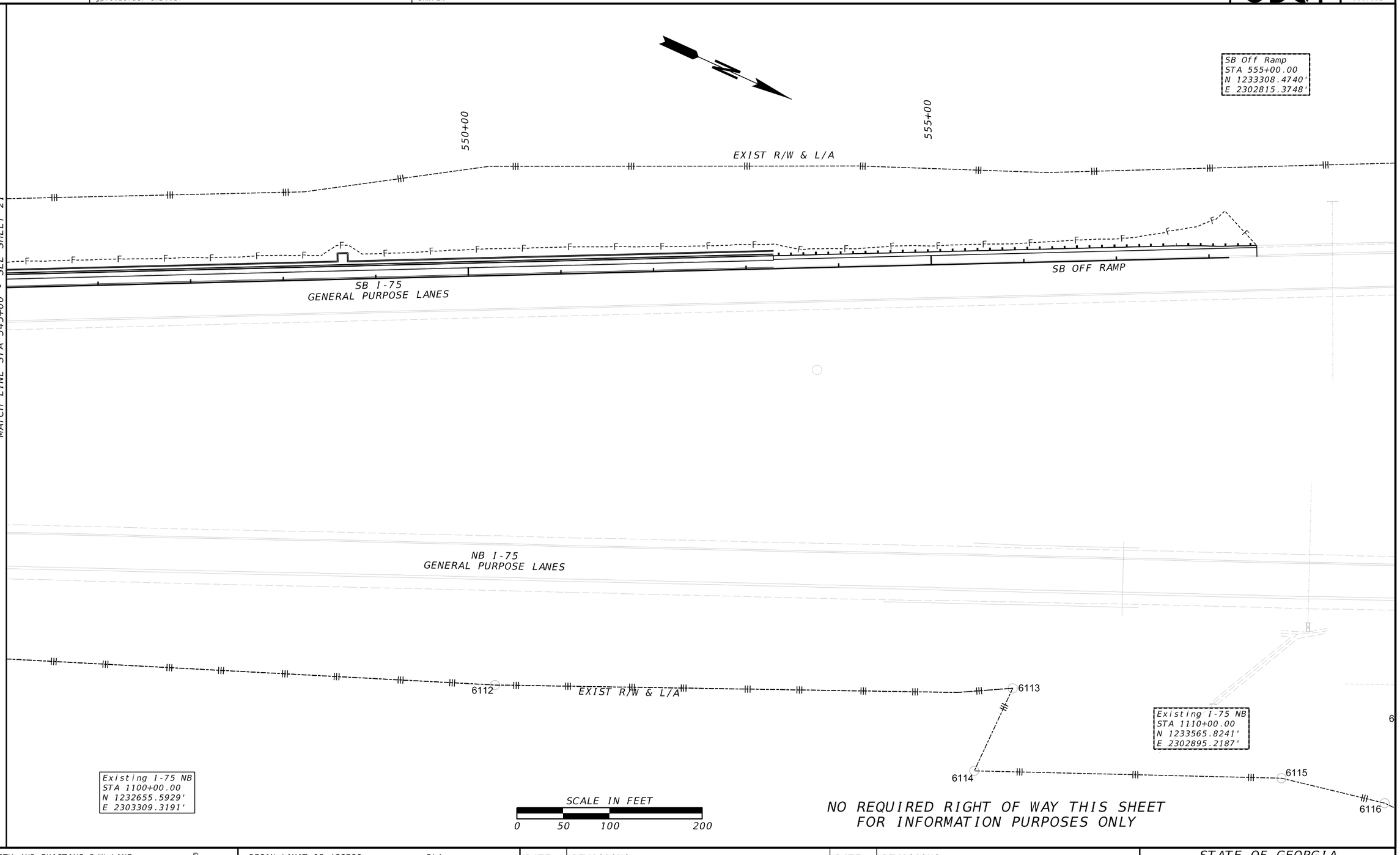
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 21 OF 32

DRAWING No.
60-0021

GRWPLN-CE



NO REQUIRED RIGHT OF WAY THIS SHEET
FOR INFORMATION PURPOSES ONLY

PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	EXISTING LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	EXISTING LIMIT OF ACCESS & R/W
EASEMENT FOR CONSTR OF DRIVES	REQ'D LIMIT OF ACCESS & R/W
	ORANGE BARRIER FENCE
	ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP

PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 22 OF 32

DRAWING No. 60-0022

GRWPLN-CE

PARCEL 1
DE101
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE1001	47.02	L	24+15.00	Greenwood Road
	12.98		S53°26'13.38"W	
DE1002	60.00	L	24+15.00	Greenwood Road
	36.05		N36°03'41.81"W	
DE1003	60.00	L	24+50.00	Greenwood Road
	15.41		N54°26'23.01"E	
DE1004	44.59	L	24+50.00	Greenwood Road
	35.88		S32°11'00.71"E	
DE1001	47.02	L	24+15.00	Greenwood Road

REQD R/W = 510.076 SF
REQD R/W = 0.012 ACRES
REMAINDER = +/- 63 ACRES

PARCEL 1
DW101
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE8050	38.41	L	39+70.00	Eagles Brooke Drive
	21.59		N40°35'37.03"W	
DE8051	60.00	L	39+70.00	Eagles Brooke Drive
	55.01		N46°36'57.35"E	
DE3001	60.00	L	40+28.54	Eagles Brooke Drive
	14.49		S64°19'35.01"E	
11605	46.41	L	40+33.58	Eagles Brooke Drive
	61.76		S39°08'58.21"W	
DE8050	38.41	L	39+70.00	Eagles Brooke Drive

REQD EASMT = 1028.332 SF
REQD EASMT = 0.024 ACRES

PARCEL 2
DE201
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE2003	43.62	R	40+25.00	Eagles Brooke Drive

ARC LENGTH = 6.98
CHORD BEAR = N53°41'30.57"E
LNTH CHORD = 6.98
RADIUS = 814.00
DEGREE = 07°02'19.8"

6531	44.55	R	40+31.92	Eagles Brooke Drive

ARC LENGTH = 77.60
CHORD BEAR = N44°40'10.77"E
LNTH CHORD = 77.60
RADIUS = 3.36E+10
DEGREE = 00°00'00.0"

6532	42.69	R	41+09.50	Eagles Brooke Drive

ARC LENGTH = 73.36
CHORD BEAR = N49°16'24.67"E
LNTH CHORD = 73.28
RADIUS = 456.50
DEGREE = 12°33'04.0"

6521	46.82	R	41+82.66	Eagles Brooke Drive
	17.82		N55°54'23.57"E	
6522	49.88	R	42+00.22	Eagles Brooke Drive
	35.78		S34°39'17.44"E	
DE2005	72.35	L	12+80.00	Lestermill Road
	42.83		N78°44'32.18"W	
DE2001	50.00	R	41+70.00	Eagles Brooke Drive
	145.00		S46°02'28.25"W	
DE2002	50.00	R	40+25.00	Eagles Brooke Drive
	6.38		N43°57'31.75"W	
DE2003	43.62	R	40+25.00	Eagles Brooke Drive

REQD R/W = 1551.724 SF
REQD R/W = 0.036 ACRES
REMAINDER = +/- 3.3 ACRES

PARCEL 3 TRACT 1
DE301
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
11605	46.41	L	40+33.58	Eagles Brooke Drive
	14.49		N64°19'35.01"W	
DE3001	60.00	L	40+28.54	Eagles Brooke Drive
	91.46		N46°02'28.25"E	
DE3002	60.00	L	41+20.00	Eagles Brooke Drive
	15.81		N53°09'58.30"E	
DE3003	58.04	L	41+35.69	Eagles Brooke Drive
	12.48		S11°42'56.33"E	
6615	47.48	L	41+29.05	Eagles Brooke Drive
	22.34		S47°47'23.77"W	
6714	48.16	L	41+06.71	Eagles Brooke Drive
	73.15		S44°40'10.37"W	
11605	46.41	L	40+33.58	Eagles Brooke Drive

REQD R/W = 1268.501 SF
REQD R/W = 0.029 ACRES

PARCEL 3 TRACT 2
DE302
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE4003	101.99	L	21+75.81	Greenwood Road
	54.30		N43°19'20.34"W	
DE47	102.60	L	22+27.47	Greenwood Road
	33.32		N46°40'39.66"E	
6616	69.29	L	22+28.25	Greenwood Road
	63.71		S11°47'19.06"E	
DE4003	101.99	L	21+75.81	Greenwood Road

REQD R/W = 904.720 SF
REQD R/W = 0.021 ACRES

REQD R/W PAR 3 TRACT 1 = 1268.501 SF (0.029 AC)
REQD R/W PAR 3 TRACT 2 = 904.720 (0.021 AC)

TOTAL REQD R/W PAR 3 = 2173.221 SF (0.050 AC)

REMAINDER = +/- 1.9 ACRES

PARCEL 4 TRACT 1
DE401
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6618	47.48	L	41+29.03	Eagles Brooke Drive
	5.34		N11°37'05.61"W	
DE4010	52.00	L	41+31.89	Eagles Brooke Drive
	15.68		N62°16'23.98"E	
DE4011	47.62	L	41+46.94	Eagles Brooke Drive
	53.11		N43°28'08.82"E	
DE4001	50.00	L	42+00.00	Eagles Brooke Drive
	42.97		N10°11'28.61"W	
DE4002	93.72	L	20+75.00	Greenwood Road
	50.80		S34°12'36.89"E	
6617	35.66	L	42+15.28	Eagles Brooke Drive
	87.06		S53°51'00.68"W	
6618	47.48	L	41+29.03	Eagles Brooke Drive

REQD R/W = 994.916 SF
REQD R/W = 0.023 ACRES

PARCEL 4 TRACT 2
DE402
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6616	69.29	L	22+28.25	Greenwood Road
	55.00		S34°12'36.89"E	
DE4004	77.38	L	21+75.77	Greenwood Road
	24.61		S46°40'39.67"W	
DE4003	101.99	L	21+75.81	Greenwood Road
	63.71		N11°47'19.06"W	
6616	69.29	L	22+28.25	Greenwood Road

REQD R/W = 668.237 SF
REQD R/W = 0.015 ACRES

REQD R/W PAR 4 TRACT 1 = 994.916 SF (0.023 AC)
REQD R/W PAR 4 TRACT 2 = 668.237 (0.015 AC)

TOTAL REQD R/W PAR 4 = 1663.153 SF (0.038 AC)

REMAINDER = +/- 0.17 ACRES

PARCEL 5
DE501
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5001	39.11	R	25+75.00	Greenwood Road
	20.89		N58°01'14.56"E	
DE5002	60.00	R	25+75.00	Greenwood Road

ARC LENGTH = 315.25
CHORD BEAR = S36°38'04.46"E
LNTH CHORD = 314.90
RADIUS = 1940.00
DEGREE = 02°57'12.2"

DE5003	60.00	R	22+50.00	Greenwood Road
	74.49		S57°55'38.24"E	
DE5004	80.00	R	21+75.64	Greenwood Road
	167.15		S71°06'34.41"E	
DE5005	130.00	L	101+50.00	Bethlehem_ML
	67.42		N73°44'26.94"E	
DE5006	130.00	L	102+17.42	Bethlehem_ML

ARC LENGTH = 55.15
CHORD BEAR = N75°32'11.05"E
LNTH CHORD = 55.14
RADIUS = 880.00
DEGREE = 06°30'39.2"

DE5007	130.00	L	102+64.42	Bethlehem_ML

ARC LENGTH = 42.06
CHORD BEAR = S56°01'46.52"W
LNTH CHORD = 42.05
RADIUS = 1032.82
DEGREE = 05°32'51.1"

6601	115.61	L	102+30.46	Bethlehem_ML
	233.30		S54°52'04.00"W	
6602	40.01	L	100+11.71	Bethlehem_ML
	21.31		N84°42'39.00"W	
6603	50.35	L	99+91.89	Bethlehem_ML
	193.62		N34°12'36.89"W	
6604	10.04	R	22+18.04	Greenwood Road

ARC LENGTH = 76.52
CHORD BEAR = N33°20'18.76"W
LNTH CHORD = 76.51
RADIUS = 1286.11
DEGREE = 04°27'17.9"

6606	20.39	R	22+94.43	Greenwood Road
	34.85		N32°00'50.71"W	
6607	24.94	R	23+29.38	Greenwood Road
	227.80		N32°11'00.71"W	
6608	38.95	R	25+60.57	Greenwood Road
	14.15		N31°31'14.71"W	
DE5001	39.11	R	25+75.00	Greenwood Road

REQD R/W = 39667.716 SF
REQD R/W = 0.911 ACRES
REMAINDER = +/- 103 ACRES

PARCEL 6
DE601
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5014	145.00	L	119+97.75	Bethlehem_ML

ARC LENGTH = 201.92
CHORD BEAR = S87°21'25.43"E
LNTH CHORD = 201.91
RADIUS = 5855.00
DEGREE = 00°58'42.9"

DE7001	145.00	L	122+04.67	Bethlehem_ML
	339.07		S28°41'31.02"E	
DE6002	150.00	R	123+71.82	Bethlehem_ML

ARC LENGTH = 242.45
CHORD BEAR = N88°48'42.75"W
LNTH CHORD = 242.43
RADIUS = 6150.00
DEGREE = 00°55'53.9"

DE5015	150.00	R	121+35.29	Bethlehem_ML
	162.80		N22°02'48.00"W	
6488	2.07	R	120+68.15	Bethlehem_ML
	162.69		N22°01'07.00"W	
DE5014	145.00	L	119+97.75	Bethlehem_ML

REQD R/W = 65578.971 SF
REQD R/W = 1.505 ACRES

REMAINDER LEFT = +/- 1.2 ACRES
REMAINDER RIGHT = +/- 13 ACRES

PARCEL 7
DE701
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE7001	145.00	L	122+04.67	Bethlehem_ML

ARC LENGTH = 409.27
CHORD BEAR = N89°39'08.87"E
LNTH CHORD = 409.19
RADIUS = 5855.00
DEGREE = 00°58'42.9"

DE7003	145.00	L	126+24.07	Bethlehem_ML
	318.71		S25°10'24.00"E	
DE7004	150.00	R	127+44.69	Bethlehem_ML

ARC LENGTH = 382.19
CHORD BEAR = S88°16'42.43"W
LNTH CHORD = 382.13
RADIUS = 6150.00
DEGREE = 00°55'53.9"

DE6002	150.00	R	123+71.82	Bethlehem_ML
	339.07		N28°41'31.02"W	
DE7001	145.00	L	122+04.67	Bethlehem_ML

REQD R/W = 116699.534 SF
REQD R/W = 2.679 ACRES

REMAINDER LEFT = +/- 3.8 ACRES
REMAINDER RIGHT = +/- 19 ACRES

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 23 OF 32
DRAWING No. 60-0023

GRWPLN-CE
11/05/2020

PARCEL 8
DE901
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE7003	145.00	L	126+24.07	Bethlehem_ML
ARC LENGTH = 74.09				
CHORD BEAR = N87°17'14.8"E				
LNTH CHORD = 74.09				
RADIUS = 5855.00				
DEGREE = 00°58'42.9"				
DE8001	145.00	L	127+00.00	Bethlehem_ML
	197.95		S85°18'50.8"E	
DE8002	115.00	L	129+00.00	Bethlehem_ML
	196.14		N83°37'42.6"E	
DE9002	116.48	L	131+00.00	Bethlehem_ML
	93.63		N70°44'59.3"E	
DE38	135.80	L	131+93.59	Bethlehem_ML
	375.41		S00°45'49.3"W	
DE8003	128.29	L	119+99.33	Price Drive
	354.78		N88°20'22.5"W	
DE50099	190.51	R	128+00.00	Bethlehem_ML
	69.83		N58°18'35.1"W	
DE7004	150.00	R	127+44.69	Bethlehem_ML
	318.71		N25°10'24.0"W	
DE7003	145.00	L	126+24.07	Bethlehem_ML
REQD R/W = 156681.23 SF				
REQD R/W = 3.597 ACRES				

REMAINDER LEFT = +/- 2.5 ACRES
REMAINDER RIGHT = +/- 3.6 ACRES

PARCEL 9 TRACT 1
DE1001
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE38	135.80	L	131+93.59	Bethlehem_ML
	75.44		N21°04'38.2"E	
DE37	94.87	L	124+45.00	Price Drive
	240.36		N00°27'43.0"W	
DE9005	96.12	L	126+85.36	Price Drive
	58.93		N78°33'57.4"E	
705	38.32	L	126+96.88	Price Drive
	700.36		S00°01'15.2"E	
DE8850	40.08	L	119+96.51	Price Drive
	88.25		N88°20'22.5"W	
DE8003	128.29	L	119+99.33	Price Drive
	375.41		N00°45'49.3"E	
DE38	135.80	L	131+93.59	Bethlehem_ML
REQD R/W = 51151.84 SF				
REQD R/W = 1.174 ACRES				

PARCEL 9 TRACT 2
DE1002
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE8851	40.16	L	119+66.22	Price Drive
	730.66		N00°01'15.2"W	
705	38.32	L	126+96.88	Price Drive
	3.41		N78°33'57.4"E	
6459	34.97	L	126+97.54	Price Drive
	77.84		N79°58'32.4"E	
704	41.71	R	127+10.87	Price Drive
	733.07		S00°01'15.2"E	
DE8852	39.87	R	119+77.81	Price Drive
	80.86		S81°35'42.3"W	
DE8851	40.16	L	119+66.22	Price Drive
REQD R/W = 58552.47 SF				
REQD R/W = 1.344 ACRES				

PARCEL 9 TRACT 3
DE1003
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE7701	40.20	R	121+09.37	Price Drive
	601.50		N00°01'15.22"W	
704	41.71	R	127+10.87	Price Drive
	49.03		N79°58'32.45"E	
DE9006	90.02	R	127+19.27	Price Drive
	300.23		S00°15'14.64"E	
DE9007	90.49	R	124+19.04	Price Drive
	167.12		N84°55'20.27"E	
DE9008	131.69	L	135+84.19	Bethlehem_ML
	256.54		S00°50'35.45"W	
DE9090	119.65	R	135+32.77	Bethlehem_ML
	138.45		S66°59'09.25"W	
DE9001	150.00	R	134+00.00	Bethlehem_ML
ARC LENGTH = 85.79				
CHORD BEAR = S80°38'24.17"W				
LNTH CHORD = 85.79				
RADIUS = 6150.00				
DEGREE = 00°55'53.9"				
DE7701	40.20	R	121+09.37	Price Drive
REQD R/W = 76047.661 SF				
REQD R/W = 1.746 ACRES				

REQD R/W PAR 9 TRACT 1 = 51151.84 SF (1.174 AC)
REQD R/W PAR 9 TRACT 2 = 58552.47 SF (1.344 AC)
REQD R/W PAR 9 TRACT 3 = 76047.661 SF (1.746 AC)

TOTAL REQD R/W PAR 9 = 185751.97 SF (4.264 AC)

REMAINDER LEFT = +/- 1.3 ACRES
REMAINDER RIGHT = +/- 9.7 ACRES

PARCEL 10
DE1101
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE9008	131.69	L	135+84.19	Bethlehem_ML
	272.13		N84°54'38.42"E	
DE10002	105.00	L	138+55.00	Bethlehem_ML
	245.00		N79°16'57.88"E	
DE10005	105.00	L	141+00.00	Bethlehem_ML
	296.01		N73°58'54.75"E	
DE10006	130.00	L	144+00.00	Bethlehem_ML
ARC LENGTH = 191.45				
CHORD BEAR = N75°05'47.52"E				
LNTH CHORD = 191.41				
RADIUS = 2910.00				
DEGREE = 01°58'08.1"				
DE10007	130.00	L	146+00.00	Bethlehem_ML
ARC LENGTH = 218.91				
CHORD BEAR = N79°29'35.14"E				
LNTH CHORD = 218.86				
RADIUS = 2893.92				
DEGREE = 01°58'47.5"				
DE10008	98.00	L	148+25.00	Bethlehem_ML
	75.74		N50°53'33.88"E	
DE10009	120.62	L	148+99.99	Bethlehem_ML
	202.57		N41°12'52.18"E	
DE10010	148.31	L	500+81.84	SB OFF RAMP1
	73.99		S89°33'51.18"E	
518	74.52	L	500+75.13	SB OFF RAMP1
	194.63		S01°13'37.86"E	
11520	4.98	R	150+79.07	Bethlehem_ML
	38.38		N88°48'13.49"E	
6307	21.17	R	151+13.73	Bethlehem_ML
	168.39		S05°28'01.71"W	
6308	309.85	L	497+07.80	SB OFF RAMP1
	22.06		S08°32'29.45"W	
DE10011	183.75	R	150+17.77	Bethlehem_ML
	157.97		N89°34'22.02"W	
DE10012	120.00	R	148+80.09	Bethlehem_ML
ARC LENGTH = 499.04				
CHORD BEAR = S72°27'25.43"W				
LNTH CHORD = 498.52				
RADIUS = 3160.00				
DEGREE = 01°48'47.4"				
DE10013	120.00	R	144+00.00	Bethlehem_ML
	244.90		S81°01'34.41"W	
DE10014	110.00	R	141+60.00	Bethlehem_ML
	260.05		S80°23'04.02"W	
DE10015	105.00	R	139+00.00	Bethlehem_ML
	300.00		S79°16'57.88"W	
DE9010	105.00	R	136+00.00	Bethlehem_ML
	68.80		S66°59'09.25"W	
DE9090	119.65	R	135+32.77	Bethlehem_ML
	256.54		N00°50'35.45"E	
DE9008	131.69	L	135+84.19	Bethlehem_ML
REQD R/W = 372939.309 SF				
REQD R/W = 8.562 ACRES				

REMAINDER LEFT = +/- 7.9 ACRES
REMAINDER RIGHT = +/- 119 ACRES

PARCEL 10
REQ'D R/W & L/A LEFT RWLA1001

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE10007	130.00	L	146+00.00	Bethlehem_ML
ARC LENGTH = 218.91				
CHORD BEAR = N79°29'35.14"E				
LNTH CHORD = 218.86				
RADIUS = 2893.92				
DEGREE = 01°58'47.5"				
DE10008	98.00	L	148+25.00	Bethlehem_ML
	75.74		N50°53'33.88"E	
DE10009	120.62	L	148+99.99	Bethlehem_ML
	202.57		N41°12'52.18"E	
DE10010	148.31	L	500+81.84	SB OFF RAMP1

REQ'D R/W & L/A PARCEL 10 LEFT = 497.22 LF

PARCEL 10
REQ'D R/W & L/A RIGHT RWLA1002

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE9070	120.00	R	146+00.00	Bethlehem_ML
ARC LENGTH = 291.15				
CHORD BEAR = N70°34'20.41"E				
LNTH CHORD = 291.04				
RADIUS = 3160.00				
DEGREE = 01°48'47.4"				
DE10012	120.00	R	148+80.09	Bethlehem_ML
	157.97		S89°34'22.02"E	
DE10011	183.75	R	150+17.77	Bethlehem_ML

REQ'D R/W & L/A PARCEL 10 RIGHT = 449.12 LF

PARCEL 11 TRACT 1
DE1202
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE11001	110.00	L	305+84.60	SB ON RAMP
	42.15		N25°46'09.39"W	
DE11002	110.00	L	306+26.74	SB ON RAMP
ARC LENGTH = 472.39				
CHORD BEAR = N26°14'56.76"W				
LNTH CHORD = 472.39				
RADIUS = 303798.91				
DEGREE = 00°01'07.9"				
DE11003	110.00	L	311+00.14	SB ON RAMP
	573.06		N23°15'00.56"W	
DE11004	80.00	L	316+72.33	SB ON RAMP
ARC LENGTH = 310.49				
CHORD BEAR = N32°24'01.51"W				
LNTH CHORD = 309.89				
RADIUS = 1446.00				
DEGREE = 03°57'44.5"				
DE11005	80.00	L	320+00.00	SB ON RAMP
	385.66		N53°54'23.13"W	
DE36	140.23	L	324+00.00	SB ON RAMP
	33.97		N89°34'22.02"W	
DE11007	161.58	L	324+35.96	SB ON RAMP
	19.60		N08°36'55.45"E	
6249	144.31	L	324+48.65	SB ON RAMP
	171.65		N05°26'08.88"E	
6250	34.22	R	151+40.71	Bethlehem_ML
	2.29		N88°31'10.46"E	
11523	35.20	R	151+42.76	Bethlehem_ML
	30.11		N88°31'12.82"E	
11524	48.30	R	151+69.50	Bethlehem_ML
	192.90		N01°14'27.54"W	
6222	124.25	L	152+55.56	Bethlehem_ML
	117.75		S88°57'33.51"E	
523	67.40	L	153+58.69	Bethlehem_ML
	903.65		S23°55'50.36"E	
11601	41.82	L	317+04.67	SB ON RAMP
	897.21		S23°58'57.02"E	
11584	77.72	L	308+07.25	SB ON RAMP
	224.04		S17°51'22.12"E	
DE11001	109.99	L	305+84.70	SB ON RAMP
REQD R/W = 181298.545 SF				
REQD R/W = 4.162 ACRES				

PARCEL 11 TRACT 2
DE1201
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE21	92.46	L	303+50.00	SB ON RAMP
	47.54		S66°11'13.84"W	
DE22	140.00	L	303+50.00	SB ON RAMP
	145.28		N23°48'46.16"W	
DE34	136.32	L	305+00.00	SB ON RAMP
	17.75		N64°13'50.61"E	
DE35	118.57	L	305+00.00	SB ON RAMP
	96.41		S42°01'32.27"E	
11582	91.58	L	304+07.44	SB ON RAMP
	54.31		S23°27'22.23"E	
DE21	92.46	L	303+50.00	SB ON RAMP
REQD R/W = 5589.840 SF				
REQD R/W = 0.128 ACRES				

REQD R/W PAR 11 TRACT 1 = 181298.545 SF (4.162 AC)
REQD R/W PAR 11 TRACT 2 = 5589.840 (0.128 AC)

TOTAL REQD R/W PAR 11 = 186888.385 SF (4.290 AC)

REMAINDER = +/- 0.17 ACRES

PARCEL 11
REQ'D R/W & L/A RWLA1101

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE11001	110.00	L	305+84.60	SB ON RAMP
	42.15		N25°46'09.39"W	
DE11002	110.00	L	306+26.74	SB ON RAMP
ARC LENGTH = 472.39				
CHORD BEAR = N26°14'56.76"W				
LNTH CHORD = 472.39				
RADIUS = 303798.91				
DEGREE = 00°01'07.9"				
DE11003	110.00	L	311+00.14	SB ON RAMP
	573.06		N23°14'53.58"W	
DE11004	80.00	L	316+72.33	SB ON RAMP
ARC LENGTH = 310.49				
CHORD BEAR = N32°24'01.51"W				
LNTH CHORD = 309.89				
RADIUS = 1446.00				
DEGREE = 03°57'44.5"				
DE11005	80.00	L	320+00.00	SB ON RAMP
	385.66		N53°54'23.13"W	
DE36	140.23	L	324+00.00	SB ON RAMP
	33.97		N89°34'22.02"W	
DE11007	161.58	L	324+35.96	SB ON RAMP

REQ'D R/W & L/A (1) PARCEL 11 = 1817.72 LF

PARCEL 11
REQ'D R/W & L/A RWLA1102

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE21	92.46	L	303+50.00	SB ON RAMP
	47.54		S66°11'13.8"W	
DE22	140.00	L	303+50.00	SB ON RAMP
	145.28		N23°48'46.2"W	
DE34	136.32	L	305+00.00	SB ON RAMP
	17.75		N64°13'50.6"E	
DE35	118.57	L	305+00.00	SB ON RAMP

REQ'D R/W & L/A (2) PARCEL 11 = 210.57 LF

TOTAL REQ'D R/W & L/A PARCEL 11 = 2028.29 LF

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 24 OF 32
DRAWING No. 60-0024

GRWPLN-CE 11/05/2020

PARCEL 12
DE1301
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6222	26.28	R	500+69.51	SB OFF RAMP1
ARC LENGTH = 168.21				
CHORD BEAR = N10°52'24.95"W				
LNTH CHORD = 166.92				
RADIUS = 392.34				
DEGREE = 14°36'12.3"				
521	23.80	R	502+30.78	SB OFF RAMP1
	97.65		S69°26'22.42"E	
520	103.57	R	501+79.25	SB OFF RAMP1
	143.88		S23°40'53.49"E	
523	143.77	R	500+62.47	SB OFF RAMP1
	117.75		N88°57'33.51"W	
6222	26.28	R	500+69.51	SB OFF RAMP1
REQD R/W = 13647.381 SF				
REQD R/W = 0.313 ACRES				
REMAINDER = TOTAL TAKE				

PARCEL 13
DE1401
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
579	126.83	L	239+62.20	NB OFF RAMP
	313.26		S88°55'16.9"E	
DE14011	178.87	R	238+86.20	NB OFF RAMP
	30.19		S20°19'04.8"W	
DE13001	160.00	R	238+53.74	NB OFF RAMP
	254.17		S22°50'06.3"E	
DE13002	175.00	R	236+00.01	NB OFF RAMP
	306.96		S07°13'36.1"E	
DE13003	110.00	R	233+00.01	NB OFF RAMP
	508.04		S29°39'20.8"E	
DE13004	200.00	R	228+00.01	NB OFF RAMP
	144.60		S20°32'38.7"E	
DE13005	202.76	R	226+55.44	NB OFF RAMP
	240.27		S68°20'21.1"W	
11593	37.33	L	226+46.18	NB OFF RAMP
	649.36		N27°25'44.0"W	
5416	127.45	L	232+89.26	NB OFF RAMP
	705.00		N26°42'16.6"W	
6426	227.78	L	239+49.31	NB OFF RAMP
	102.42		N71°33'41.6"E	
579	126.83	L	239+62.20	NB OFF RAMP
REQD R/W = 373090.40 SF				
REQD R/W = 8.565 ACRES				
REMAINDER = +/- 68 ACRES				

PARCEL 13
REQ'D R/W & L/A RWLA1301

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE13005	202.76	R	226+55.44	NB OFF RAMP
	144.60		N20°32'38.7"W	
DE13004	200.00	R	228+00.01	NB OFF RAMP
	508.04		N29°39'20.8"W	
DE13003	110.00	R	233+00.01	NB OFF RAMP
	306.96		N07°13'36.1"W	
DE13002	175.00	R	236+00.01	NB OFF RAMP
	254.17		N22°50'06.3"W	
DE13001	160.00	R	238+53.74	NB OFF RAMP
	30.19		N20°19'04.8"E	
DE14011	178.87	R	238+86.20	NB OFF RAMP

REQ'D R/W & L/A PARCEL 13 = 1243.97 LF

PARCEL 14
DE1501
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6426	145.86	R	156+75.19	Bethlehem_WL
	342.57		N27°11'37.3"W	
532	196.69	L	156+78.95	Bethlehem_WL
	102.40		N01°26'21.0"E	
6998	286.02	L	157+29.01	Bethlehem_WL
	124.49		N62°22'17.5"E	
531	43.81	L	402+35.11	NB ON RAMP
	169.16		N62°22'17.5"E	
DE14001	115.00	R	401+76.85	NB ON RAMP
	17.66		N62°22'17.5"E	
570	284.96	L	160+40.32	Bethlehem_WL
	204.86		N59°46'24.9"E	
DE14014	293.55	L	162+45.00	Bethlehem_WL
	171.05		S27°49'23.5"E	
DE1450	122.50	L	162+45.00	Bethlehem_WL
	106.45		N71°38'19.0"E	
DE12051	105.00	L	163+50.00	Bethlehem_WL
	290.00		N62°10'36.5"E	
DE14052	105.00	L	166+40.00	Bethlehem_WL
	400.78		N58°36'01.7"E	
DE14055	130.00	L	170+40.00	Bethlehem_WL
	160.31		N65°45'08.3"E	
DE14003	120.00	L	172+00.00	Bethlehem_WL
	50.50		N62°10'46.2"E	
DE14004	120.00	L	172+50.50	Bethlehem_WL
ARC LENGTH = 174.84				
CHORD BEAR = N65°11'39.1"E				
LNTH CHORD = 174.76				
RADIUS = 1660.00				
DEGREE = 03°27'05.6"				
DE14005	120.00	L	174+12.70	Bethlehem_WL
	210.46		S18°15'17.7"E	
DE14006	90.00	R	173+98.92	Bethlehem_WL
ARC LENGTH = 139.75				
CHORD BEAR = S64°56'16.5"W				
LNTH CHORD = 139.70				
RADIUS = 1450.00				
DEGREE = 03°57'05.2"				
DE14007	90.00	R	172+50.50	Bethlehem_WL
	331.85		S56°59'24.5"W	
DE57	120.00	R	169+20.00	Bethlehem_WL
	35.00		S27°49'23.5"E	
DE56	155.00	R	169+20.00	Bethlehem_WL
	100.00		S62°10'36.5"W	
DE14008	155.00	R	168+20.00	Bethlehem_WL
	45.00		N27°49'23.5"W	
DE14009	110.00	R	168+20.00	Bethlehem_WL
	320.05		S61°08'27.2"W	
DE9072	115.79	R	165+00.00	Bethlehem_WL
	233.07		S61°08'27.2"W	
DE14010	120.00	R	162+66.97	Bethlehem_WL
	290.67		S20°19'04.8"W	
DE14011	178.87	R	238+86.20	NB OFF RAMP
	313.26		N88°55'16.9"W	
579	126.83	L	239+62.20	NB OFF RAMP
	102.42		S71°33'41.6"W	
DE60	90.00	R	173+25.00	Bethlehem_WL
ARC LENGTH = 69.60				
CHORD BEAR = N66°19'26.0"E				
LNTH CHORD = 69.59				
RADIUS = 1450.00				
DEGREE = 03°57'05.2"				
DE14006	90.00	R	173+98.92	Bethlehem_WL
	20.05		S18°15'17.7"E	
DE62	110.00	R	173+97.40	Bethlehem_WL
	67.22		S66°17'43.9"W	
DE63	110.00	R	173+25.00	Bethlehem_WL
	20.00		N25°03'04.5"W	
DE60	90.00	R	173+25.00	Bethlehem_WL
REQD R/W = 550441.60 SF				
REQD R/W = 12.636 ACRES				

REMAINDER LEFT = +/- 6.2 ACRES
REMAINDER RIGHT = +/- 15 ACRES

PARCEL 14
DE1503
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60	90.00	R	173+25.00	Bethlehem_WL
ARC LENGTH = 69.60				
CHORD BEAR = N66°19'25.97"E				
LNTH CHORD = 69.59				
RADIUS = 1450.00				
DEGREE = 03°57'05.2"				
DE14006	90.00	R	173+98.92	Bethlehem_WL
	20.05		S18°15'17.71"E	
DE62	110.00	R	173+97.40	Bethlehem_WL
	67.22		S66°17'43.94"W	
DE63	110.00	R	173+25.00	Bethlehem_WL
	20.00		N25°03'04.50"W	
DE60	90.00	R	173+25.00	Bethlehem_WL
REQD EASMT = 1385.941 SF				
REQD EASMT = 0.032 ACRES				

PARCEL 14
REQ'D R/W & L/A LEFT RWLA1401

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60004	85.00	R	401+87.86	NB ON RAMP
	31.96		N62°22'17.5"E	
DE14001	115.00	R	401+76.85	NB ON RAMP
	89.20		S47°46'27.3"E	
DE14012	115.00	R	400+87.65	NB ON RAMP
	163.23		N88°01'33.9"E	
DE14050	130.00	L	161+99.99	Bethlehem_WL
	152.08		N71°38'19.0"E	
DE12051	105.00	L	163+50.00	Bethlehem_WL
	150.00		N62°10'36.5"E	
DE9071	105.00	L	165+00.00	Bethlehem_WL

REQ'D R/W & L/A PARCEL 14 LEFT = 586.47 LF

PARCEL 14
REQ'D R/W & L/A RIGHT RWLA1402

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE14011	178.87	R	242+16.23	NB_OFF_RAMP
	290.67		N20°19'04.84"E	
DE14010	120.00	R	162+66.97	Bethlehem_WL
	233.07		N61°08'27.24"E	
DE9072	115.79	R	165+00.00	Bethlehem_WL

REQ'D R/W & L/A PARCEL 14 RIGHT = 843.79 LF

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 25 OF 32
DRAWING No. 60-0025

GRWPLN-CE
11/05/2020

PARCEL 15 TRACT 1
DE1601
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE14005	120.00	L	174+12.70	Bethlehem_ML
ARC LENGTH = 349.15				
CHORD BEAR = N74°14'13.6"E				
LNTH CHORD = 348.51				
RADIUS = 1660.00				
DEGREE = 03°27'05.6"				
DE15001	120.00	L	177+36.61	Bethlehem_ML
	102.50		N80°17'27.0"E	
DE15002	119.95	L	178+39.10	Bethlehem_ML
	146.48		S32°32'38.3"W	
6213	11.57	L	177+40.56	Bethlehem_ML
	98.58		S32°32'38.3"W	
6212	60.05	R	176+71.68	Bethlehem_ML
	29.99		S09°10'09.7"E	
DE15003	90.00	R	176+70.02	Bethlehem_ML
ARC LENGTH = 255.26				
CHORD BEAR = S72°44'31.9"W				
LNTH CHORD = 254.93				
RADIUS = 1450.00				
DEGREE = 03°57'05.2"				
DE14006	90.00	R	173+98.92	Bethlehem_ML
	210.46		N18°15'17.7"W	
DE14005	120.00	L	174+12.70	Bethlehem_ML
REQD R/W = 71866.44 SF				
REQD R/W = 1.650 ACRES				

PARCEL 15 TRACT 2
DE1602
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
527	48.54	R	599+45.68	CL N BETHLEHEM
ARC LENGTH = 200.41				
CHORD BEAR = N88°01'59.4"E				
LNTH CHORD = 199.62				
RADIUS = 648.09				
DEGREE = 08°50'26.6"				
528	53.33	R	601+61.89	CL N BETHLEHEM
	28.77		S15°57'10.9"E	
DE2055	80.00	R	601+73.83	CL N BETHLEHEM
ARC LENGTH = 203.31				
CHORD BEAR = N88°34'00.5"W				
LNTH CHORD = 202.43				
RADIUS = 630.00				
DEGREE = 09°05'40.4"				
DE52	65.00	R	599+47.43	CL N BETHLEHEM
	16.54		N17°45'18.3"W	
527	48.54	R	599+45.68	CL N BETHLEHEM
REQD R/W = 4291.97 SF				
REQD R/W = 0.099 ACRES				

REQD R/W PAR 15 TRACT 1 = 71866.440 SF (1.650 AC)
REQD R/W PAR 15 TRACT 2 = 4291.97 (0.099 AC)

TOTAL REQD R/W PAR 15 = 76158.41 SF (1.749 AC)

REMAINDER LEFT = +/- 1.9 ACRES
REMAINDER RIGHT = +/- 1.4 ACRES

PARCEL 16 TRACT 1
DE1701
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6213	11.57	L	177+40.56	Bethlehem_ML
	150.05		S77°46'19.31"E	
561	44.55	R	178+79.71	Bethlehem_ML
	115.72		S89°39'09.98"E	
6214	64.81	R	179+93.64	Bethlehem_ML
	330.20		N46°09'07.19"E	
537	120.36	L	182+67.03	Bethlehem_ML
ARC LENGTH = 104.64				
CHORD BEAR = S33°33'13.81"E				
LNTH CHORD = 104.52				
RADIUS = 630.70				
DEGREE = 09°05'04.1"				
536	24.75	L	183+09.24	Bethlehem_ML
	448.42		S46°09'07.19"W	
6207	226.72	R	179+37.97	Bethlehem_ML
	113.16		N18°52'21.21"W	
DE16059	115.00	R	179+20.00	Bethlehem_ML
	122.58		N87°58'07.95"W	
DE16002	90.00	R	178+00.00	Bethlehem_ML
	63.39		S80°15'46.21"W	
DE16061	90.00	R	177+36.61	Bethlehem_ML
ARC LENGTH = 62.69				
CHORD BEAR = S79°04'10.85"W				
LNTH CHORD = 62.69				
RADIUS = 1627.98				
DEGREE = 03°31'010.0"				
DE15003	90.00	R	176+70.02	Bethlehem_ML
	29.94		N09°10'09.69"W	
6212	60.05	R	176+71.68	Bethlehem_ML
	98.58		N32°32'38.31"E	
6213	11.57	L	177+40.56	Bethlehem_ML
REQD R/W = 64846.923 SF				
REQD R/W = 1.489 ACRES				

PARCEL 16 TRACT 2
DE1702
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6207	353.41	R	701+46.91	CL S BETHLEHEM
	248.55		S18°50'30.8"E	
564	393.80	R	703+25.51	CL S BETHLEHEM
	154.13		N53°58'09.9"W	
DE16063	455.00	R	702+30.00	CL S BETHLEHEM
	60.68		N26°12'00.3"W	
DE16062	455.00	R	701+90.00	CL S BETHLEHEM
	114.84		N38°17'34.2"E	
6207	353.41	R	701+46.91	CL S BETHLEHEM
REQD R/W = 14165.89 SF				
REQD R/W = 0.325 ACRES				

REQD R/W PAR 16 TRACT 1 = 64846.923 SF (1.489 AC)
REQD R/W PAR 16 TRACT 2 = 14165.89 (0.325 AC)

TOTAL REQD R/W PAR 16 = 79012.813 SF (1.814 AC)

REMAINDER = +/- 3.0 ACRES

PARCEL 17 TRACT 1
DE1801
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6213	11.57	L	177+40.56	Bethlehem_ML
	133.03		N32°32'38.3"E	
DE5056	110.00	L	178+30.06	Bethlehem_ML
	54.57		S75°57'50.1"E	
DE51	88.00	L	178+80.00	Bethlehem_ML
	60.07		N83°07'30.9"E	
DE68	85.00	L	179+40.00	Bethlehem_ML
	35.78		N55°28'46.5"E	
DE5057	100.00	L	179+72.49	Bethlehem_ML
	171.76		S22°57'21.3"W	
561	44.55	R	178+79.71	Bethlehem_ML
	150.05		N77°46'19.3"W	
6213	11.57	L	177+40.56	Bethlehem_ML
REQD R/W = 18302.35 SF				
REQD R/W = 0.420 ACRES				

PARCEL 17 TRACT 2
DE1802
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
528	53.33	R	601+61.89	CL N BETHLEHEM
ARC LENGTH = 217.19				
CHORD BEAR = S72°06'38.3"E				
LNTH CHORD = 215.76				
RADIUS = 545.48				
DEGREE = 10°30'13.5"				
6218	51.24	R	604+05.12	CL N BETHLEHEM
	32.59		S62°18'29.9"E	
529	46.82	R	604+41.23	CL N BETHLEHEM
	31.60		S22°57'21.3"W	
DE1005	77.30	R	604+50.88	CL N BETHLEHEM
ARC LENGTH = 230.73				
CHORD BEAR = N68°49'48.2"W				
LNTH CHORD = 229.44				
RADIUS = 630.00				
DEGREE = 09°05'40.4"				
DE2055	80.00	R	601+73.83	CL N BETHLEHEM
	28.77		N15°57'10.9"W	
528	53.33	R	601+61.89	CL N BETHLEHEM
REQD R/W = 7078.81 SF				
REQD R/W = 0.163 ACRES				

REQD R/W PAR 17 TRACT 1 = 18302.35 SF (0.420 AC)
REQD R/W PAR 17 TRACT 2 = 7078.81 (0.163 AC)

TOTAL REQD R/W PAR 17 = 25381.16 SF (0.583 AC)

REMAINDER = +/- 0.92 ACRES

PARCEL 17
DE1805
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE8	84.27	R	602+50.00	CL N BETHLEHEM
ARC LENGTH = 65.40				
CHORD BEAR = S70°23'53.9"E				
LNTH CHORD = 65.37				
RADIUS = 630.00				
DEGREE = 09°05'40.4"				
DE7	84.89	R	603+30.00	CL N BETHLEHEM
	20.11		S23°59'41.6"W	
DE6	105.00	R	603+30.00	CL N BETHLEHEM
	61.86		N70°56'01.7"W	
DE59	105.00	R	602+50.00	CL N BETHLEHEM
	20.73		N14°08'15.1"E	
DE8	84.27	R	602+50.00	CL N BETHLEHEM
REQD EASMT = 1331.25 SF				
REQD EASMT = 0.031 ACRES				

PARCEL 18
DE1901
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
529	46.82	R	604+41.23	CL N BETHLEHEM
ARC LENGTH = 250.14				
CHORD BEAR = S49°26'40.63"E				
LNTH CHORD = 248.51				
RADIUS = 632.52				
DEGREE = 09°03'29.8"				
537	10.69	L	606+96.49	CL N BETHLEHEM
	330.20		S46°09'07.19"W	
6214	64.81	R	179+93.64	Bethlehem_ML
	115.72		N89°39'09.98"W	
561	44.55	R	178+79.71	Bethlehem_ML
	423.13		N22°57'21.34"E	
529	46.82	R	604+41.23	CL N BETHLEHEM
REQD R/W = 65480.597 SF				
REQD R/W = 1.503 ACRES				
REMAINDER = TOTAL TAKE				

PARCEL 19
DE2001
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
536	24.75	L	183+09.24	Bethlehem_ML
	117.74		S26°47'46.6"E	
6208	73.79	L	701+08.42	CL S BETHLEHEM
	124.92		S25°50'23.6"E	
6206	76.29	L	702+39.48	CL S BETHLEHEM
	328.77		S71°18'15.6"W	
6205	249.32	R	701+97.51	CL S BETHLEHEM
	199.92		S25°08'06.6"E	
6202	267.75	R	703+51.58	CL S BETHLEHEM
	131.04		S71°19'01.1"W	
564	393.80	R	703+25.51	CL S BETHLEHEM
	248.55		N18°50'30.8"W	
6207	353.41	R	701+46.91	CL S BETHLEHEM
	448.42		N46°09'07.2"E	
536	24.75	L	183+09.24	Bethlehem_ML
REQD R/W = 86782.10 SF				
REQD R/W = 1.992 ACRES				
REMAINDER = TOTAL TAKE				

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 26 OF 32

DRAWING No. 60-0026

GRWPLN-CE
11/05/2020

PARCEL 20 TRACT 1
DE2101
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6815	40.81	L	596+42.02	CL N BETHLEHEM
	35.11		N18°12'46.83"W	
DE2050	74.85	L	596+50.61	CL N BETHLEHEM
	50.80		N57°27'21.90"E	
DE20002	75.00	L	597+01.41	CL N BETHLEHEM

ARC LENGTH = 572.86
CHORD BEAR = N78°56'21.58"E
LNTH CHORD = 559.74
RADIUS = 770.00
DEGREE = 07°26'27.6"

DE20003	75.00	L	602+18.47	CL N BETHLEHEM

ARC LENGTH = 210.80
CHORD BEAR = S68°33'50.86"E
LNTH CHORD = 209.46
RADIUS = 540.00
DEGREE = 10°36'37.3"

DE20004	75.00	L	603+99.99	CL N BETHLEHEM
	398.61		S55°34'09.24"E	
DE20005	150.00	L	184+50.00	Bethlehem_ML
	88.21		N80°15'46.21"E	
DE20006	150.00	L	185+38.21	Bethlehem_ML
	181.78		S48°18'51.14"W	
11609	53.81	L	183+83.96	Bethlehem_ML

ARC LENGTH = 1183.74
CHORD BEAR = N75°43'18.73"W
LNTH CHORD = 1056.34
RADIUS = 724.33
DEGREE = 07°54'36.7"

6102	40.92	L	596+80.48	CL N BETHLEHEM
	38.46		S57°27'56.88"W	
6815	40.81	L	596+42.02	CL N BETHLEHEM

REQD R/W = 62519.096 SF
REQD R/W = 1.435 ACRES

PARCEL 20 TRACT 2
DE2102
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
534	101.75	L	403+68.04	NB ON RAMP
	95.01		N69°04'59.0"W	
535	136.27	L	404+56.55	NB ON RAMP
	999.25		N23°23'43.8"W	
11544	76.33	R	414+27.52	NB ON RAMP
	99.80		N23°32'20.8"W	
11547	77.14	R	415+27.32	NB ON RAMP
	192.42		N22°19'03.5"W	
6094	82.79	R	417+19.66	NB ON RAMP
	107.73		N25°32'11.7"W	
6095	79.90	R	418+27.35	NB ON RAMP
	201.34		N16°19'54.7"W	
11550	106.77	R	420+26.89	NB ON RAMP
	46.02		N31°04'41.9"W	
6096	101.10	R	420+72.56	NB ON RAMP
	66.23		N01°23'48.3"E	
DE27001	129.51	R	421+32.38	NB ON RAMP
	87.23		S25°50'39.6"E	
DE27002	132.31	R	420+45.19	NB ON RAMP
	604.67		S21°47'37.7"E	
DE27003	109.02	R	414+40.97	NB ON RAMP
	25.62		S23°57'02.3"E	
DE27004	109.00	R	414+15.35	NB ON RAMP

ARC LENGTH = 908.54
CHORD BEAR = S35°51'44.8"E
LNTH CHORD = 901.99
RADIUS = 2183.17
DEGREE = 02°37'28.0"

DE27005	115.00	R	404+59.83	NB ON RAMP
	175.98		S47°46'27.3"E	
DE27006	115.00	R	402+83.85	NB ON RAMP
	232.52		S63°27'10.9"W	
534	101.75	L	403+68.04	NB ON RAMP

REQD R/W = 152756.76 SF
REQD R/W = 3.507 ACRES

REQD R/W PAR 20 TRACT 1 = 62519.096 SF (1.435 AC)
REQD R/W PAR 20 TRACT 2 =152756.760 (3.507 AC)

TOTAL REQD R/W PAR 20 = 215275.856 SF (4.942 AC)

REMAINDER = +/- 143 ACRES

PARCEL 20
DE2104
EASM'T. FOR CONST. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE20050	40.64	L	595+80.00	CL N BETHLEHEM
	78.46		N31°46'23.9"E	
DE2050	74.85	L	596+50.61	CL N BETHLEHEM
	35.11		S18°12'46.8"E	
6815	40.81	L	596+42.02	CL N BETHLEHEM
	62.02		S57°27'56.9"W	
DE20050	40.64	L	595+80.00	CL N BETHLEHEM

REQD EASMT = 1054.76 SF
REQD EASMT = 0.024 ACRES

PARCEL 20
DE2103
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE20003	75.00	L	602+18.47	CL N BETHLEHEM
	30.00		N10°15'09.66"E	
DE46	105.00	L	602+18.47	CL N BETHLEHEM
	71.16		S76°07'23.59"E	
DE2	104.94	L	602+76.56	CL N BETHLEHEM
	30.00		S13°59'24.79"W	
DE1	75.00	L	602+78.10	CL N BETHLEHEM

ARC LENGTH = 69.25
CHORD BEAR = N76°04'24.95"W
LNTH CHORD = 69.20
RADIUS = 540.00
DEGREE = 10°36'37.3"

DE20003	75.00	L	602+18.47	CL N BETHLEHEM

REQD EASMT = 2052.011 SF
REQD EASMT = 0.047 ACRES

PARCEL 20
REQ'D R/W & L/A RWLA2001

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60007	110.79	R	412+61.41	NB ON RAMP

ARC LENGTH = 148.01
CHORD BEAR = N25°52'57.9"W
LNTH CHORD = 147.99
RADIUS = 2183.17
DEGREE = 02°37'28.0"

DE27004	109.00	R	414+15.35	NB ON RAMP
	25.62		N23°57'02.3"W	
DE27003	109.02	R	414+40.97	NB ON RAMP
	604.67		N21°47'37.7"W	
DE27002	132.31	R	420+45.19	NB ON RAMP
	87.23		N25°50'39.6"W	
DE27001	129.51	R	421+32.38	NB ON RAMP

REQ'D R/W & L/A PARCEL 20 = 865.53 LF

PARCEL 20
REQ'D L/A LA2002

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60050	85.00	R	402+95.50	NB ON RAMP
	164.33		N47°46'27.3"W	
DE60005	85.00	R	404+59.83	NB ON RAMP

ARC LENGTH = 770.97
CHORD BEAR = N37°48'16.9"W
LNTH CHORD = 767.08
RADIUS = 2213.17
DEGREE = 02°35'19.9"

DE60006	80.80	R	412+61.01	NB ON RAMP
	30.00		N62°10'29.9"E	
DE60007	110.79	R	412+61.41	NB ON RAMP

REQ'D L/A PARCEL 20 = 965.30 LF

PARCEL 21 TRACT 1
DE2201
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
11609	53.81	L	183+83.96	Bethlehem_ML
	181.78		N48°18'51.1"E	
DE20006	150.00	L	185+38.21	Bethlehem_ML
	381.79		N80°15'46.2"E	
DE21001	150.00	L	189+20.00	Bethlehem_ML
	20.63		N40°20'19.4"E	
DE21002	163.24	L	189+35.82	Bethlehem_ML
	242.31		S23°40'22.0"E	
DE550	71.94	R	189+94.17	Bethlehem_ML
	72.56		S76°28'32.6"W	
DE21004	76.73	R	189+21.77	Bethlehem_ML
	78.07		S12°34'16.3"E	
DE19	154.71	R	189+25.63	Bethlehem_ML
	92.78		N84°17'40.4"W	
DE21005	130.00	R	188+36.20	Bethlehem_ML
	381.71		S81°45'50.5"W	
DE21006	120.00	R	184+54.62	Bethlehem_ML
	225.44		S21°32'40.7"E	
DE21050	132.14	L	704+34.80	CL S BETHLEHEM
	375.83		N26°10'33.7"W	
6137	19.80	L	183+94.39	Bethlehem_ML

ARC LENGTH = 35.57
CHORD BEAR = N26°46'54.2"W
LNTH CHORD = 35.57
RADIUS = 722.35
DEGREE = 07°55'54.7"

11609	53.81	L	183+83.96	Bethlehem_ML

REQD R/W = 149541.39 SF
REQD R/W = 3.433 ACRES

PARCEL 21 TRACT 2
DE2202
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE3	90.00	L	705+75.73	CL S BETHLEHEM

ARC LENGTH = 299.26
CHORD BEAR = S60°51'51.17"E
LNTH CHORD = 297.48
RADIUS = 790.00
DEGREE = 07°15'09.5"

DE21009	90.00	L	709+09.08	CL S BETHLEHEM
	70.95		S24°03'10.66"W	
545	19.38	L	709+01.79	CL S BETHLEHEM

ARC LENGTH = 317.22
CHORD BEAR = N47°46'01.75"W
LNTH CHORD = 311.87
RADIUS = 497.43
DEGREE = 11°31'05.7"

DE3	90.00	L	705+75.73	CL S BETHLEHEM

REQD R/W = 12944.617 SF
REQD R/W = 0.297 ACRES

REQD R/W PAR 21 TRACT 1 =149541.39 SF (3.433 AC)
REQD R/W PAR 21 TRACT 2 =12944.617 (0.297 AC)

TOTAL REQD R/W PAR 21 = 162486.00 SF (3.730 AC)

REMAINDER LEFT = +/- 1.0 ACRES
REMAINDER RIGHT = +/- 4.2 ACRES

PARCEL 22
DE2301
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6252	318.36	L	501+08.08	SB OFF RAMP1
	45.05		N63°44'47.68"E	
6253	275.68	L	501+34.07	SB OFF RAMP1
	158.38		N62°23'39.41"E	
514	123.45	L	501+97.24	SB OFF RAMP1
	64.92		N70°52'19.28"E	
522	58.76	L	502+03.53	SB OFF RAMP1

ARC LENGTH = 117.19
CHORD BEAR = S01°21'48.87"E
LNTH CHORD = 116.49
RADIUS = 307.61
DEGREE = 18°37'33.9"

518	74.52	L	500+75.13	SB OFF RAMP1
	244.87		N89°33'51.18"W	
6252	318.36	L	501+08.08	SB OFF RAMP1

REQD R/W = 15542.858 SF
REQD R/W = 0.357 ACRES
REMAINDER = TOTAL TAKE

PARCEL 22
REQ'D R/W & L/A RWLA2201

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE10010	148.31	L	500+81.84	SB OFF RAMP1
	95.13		N05°57'54.23"E	
514	123.45	L	501+97.24	SB OFF RAMP1

REQ'D L/A PARCEL 22 = 95.13 LF

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 27 OF 32
DRAWING No. 60-0027

GRWPLN-CE
11/05/2020

PARCEL 23
DE2401
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
575	65.89	R	504+30.55	SB OFF RAMP1
	117.40		S10°24'49.52"W	
517	7.46	R	503+28.73	SB OFF RAMP1
	123.72		S62°22'07.27"W	
DE23001	115.00	L	503+11.09	SB OFF RAMP1
	188.90		N19°26'12.46"W	
DE23002	115.00	L	505+00.00	SB OFF RAMP1
	20.00		N70°32'35.63"E	
DE23003	95.00	L	505+00.00	SB OFF RAMP1
	595.56		N19°26'12.46"W	
DE23004	95.00	L	510+95.57	SB OFF RAMP1
	210.22		N01°15'59.72"E	
6069	20.56	L	512+92.31	SB OFF RAMP1
	866.00		S25°10'26.59"E	
575	65.89	R	504+30.55	SB OFF RAMP1

REQD R/W = 111941.972 SF
REQD R/W = 2.570 ACRES
REMAINDER = +/- 2.6 ACRES

PARCEL 23
REQ'D L/A LA2301

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60051	95.00	L	503+13.97	SB OFF RAMP1
	106.03		N19°26'12.5"W	
DE60000	95.00	L	504+20.00	SB OFF RAMP1
	80.00		N04°57'35.6"W	
DE60001	75.00	L	504+97.46	SB OFF RAMP1
	651.02		N19°26'12.5"W	
DE60052	75.00	L	511+48.49	SB OFF RAMP1

REQ'D L/A PARCEL 23 = 837.05 LF

PARCEL 24
DE2501
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE23004	95.00	L	510+95.57	SB OFF RAMP1
	144.20		N19°26'12.46"W	
DE24007	95.00	L	512+39.77	SB OFF RAMP1

ARC LENGTH = 272.88
CHORD BEAR = N20°08'46.01"W
LNTH CHORD = 272.87
RADIUS = 11021.00
DEGREE = 00°31'11.6"

DE24001	95.00	L	515+15.00	SB OFF RAMP1
	140.95		N39°49'16.41"W	
DE24002	140.00	L	516+50.00	SB OFF RAMP1
	119.45		N21°44'05.31"W	
DE24005	140.00	L	517+70.00	SB OFF RAMP1
	72.47		N18°04'57.27"W	
DE24006	135.33	L	518+42.32	SB OFF RAMP1
	74.62		N89°11'35.43"E	
11563	65.65	L	518+15.62	SB OFF RAMP1
	193.48		S16°43'12.68"E	
11567	82.47	L	516+22.36	SB OFF RAMP1
	105.70		S44°40'06.57"E	
11566	40.31	L	515+24.89	SB OFF RAMP1
	232.78		S25°10'26.62"E	
6069	20.56	L	512+92.31	SB OFF RAMP1
	210.22		S01°15'59.72"W	
DE23004	95.00	L	510+95.57	SB OFF RAMP1

REQD R/W = 40748.385 SF
REQD R/W = 0.935 ACRES
REMAINDER = +/- 45 ACRES

PARCEL 24
REQ'D R/W & L/A RWLA2401

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60003	95.00	L	512+25.00	SB OFF RAMP1
	14.77		N19°26'12.5"W	
DE24007	95.00	L	512+39.77	SB OFF RAMP1

ARC LENGTH = 272.88
CHORD BEAR = N20°08'46.0"W
LNTH CHORD = 272.87
RADIUS = 11021.00
DEGREE = 00°31'11.6"

DE24001	95.00	L	515+15.00	SB OFF RAMP1
	140.95		N39°49'16.4"W	
DE24002	140.00	L	516+50.00	SB OFF RAMP1
	119.45		N21°44'05.3"W	
DE24005	140.00	L	517+70.00	SB OFF RAMP1
	72.47		N18°04'57.3"W	
DE24006	135.33	L	518+42.32	SB OFF RAMP1

REQ'D R/W & L/A PARCEL 24 = 620.52 LF

PARCEL 24
REQ'D L/A LA2402

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE60052	75.00	L	511+48.49	SB OFF RAMP1
	76.51		N19°26'12.5"W	
DE60002	75.00	L	512+25.00	SB OFF RAMP1
	20.00		S70°33'47.5"W	
DE60003	95.00	L	512+25.00	SB OFF RAMP1

REQ'D L/A PARCEL 24 = 96.51 LF

PARCEL 25
DE2601
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
11563	65.65	L	518+15.62	SB OFF RAMP1
	74.62		S89°11'35.43"W	
DE24006	135.33	L	518+42.32	SB OFF RAMP1
	491.57		N18°04'55.97"W	
DE25001	95.70	L	523+40.00	SB OFF RAMP1
	211.01		S26°00'02.57"E	
11559	88.12	L	521+22.44	SB OFF RAMP1
	299.72		S26°11'14.17"E	
11562	65.07	L	518+23.61	SB OFF RAMP1
	8.01		S17°34'43.45"E	
11563	65.65	L	518+15.62	SB OFF RAMP1

REQD R/W = 17714.177 SF
REQD R/W = 0.407 ACRES
REMAINDER = +/- 34 ACRES

PARCEL 25
REQ'D R/W & L/A RWLA2501

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE24006	135.33	L	518+42.32	SB OFF RAMP1
	491.57		N18°04'55.97"W	
DE25001	95.70	L	523+40.00	SB OFF RAMP1

REQ'D R/W & L/A PARCEL 25 = 491.57 LF

PARCEL 27
DE3501
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5090	40.06	L	16+90.00	SR 42
	54.94		S73°01'05.08"W	
DE5080	95.00	L	16+90.00	SR 42
	190.00		N16°58'54.92"W	
DE5061	95.00	L	18+80.00	SR 42
	56.45		N09°18'23.54"E	
DE5063	70.00	L	19+30.61	SR 42
	31.02		N89°34'58.00"E	
6348	40.27	L	19+21.77	SR 42
	231.77		S17°02'04.25"E	
DE5090	40.06	L	16+90.00	SR 42

REQD R/W = 12429.426 SF
REQD R/W = 0.285 ACRES
REMAINDER = +/- 11 ACRES

PARCEL 28
DE2701
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6096	101.10	R	420+72.56	NB ON RAMP
	57.88		N31°05'55.8"W	
6108	93.95	R	421+29.99	NB ON RAMP
	495.70		N21°43'26.7"W	
6109	113.65	R	426+25.30	NB ON RAMP
	493.17		S25°50'39.6"E	
DE27001	129.51	R	421+32.38	NB ON RAMP
	66.23		S01°23'48.3"W	
6096	101.10	R	420+72.56	NB ON RAMP

REQD R/W = 9812.04 SF
REQD R/W = 0.225 ACRES
REMAINDER = +/- 156 ACRES

PARCEL 28
REQ'D R/W & L/A RWLA2801

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE27001	129.51	R	421+32.38	NB ON RAMP
	493.17		N25°50'39.6"W	
6109	113.65	R	426+25.30	NB ON RAMP

REQ'D R/W & L/A PARCEL 28 = 493.17 LF

PARCEL 29
DE2801
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6206	76.29	L	702+39.48	CL S BETHLEHEM
	200.40		S26°05'56.45"E	
6203	44.86	L	704+52.59	CL S BETHLEHEM
	332.17		S71°19'01.06"W	
6202	267.75	R	703+51.58	CL S BETHLEHEM
	199.92		N25°08'06.62"W	
6205	249.32	R	701+97.51	CL S BETHLEHEM
	328.77		N71°18'15.58"E	
6206	76.29	L	702+39.48	CL S BETHLEHEM

REQD R/W = 65661.066 SF
REQD R/W = 1.507 ACRES
REMAINDER = TOTAL TAKE

PARCEL 30
DE2901
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6203	44.86	L	704+52.59	CL S BETHLEHEM
	60.50		S26°10'33.6"E	
6204	26.38	L	705+12.64	CL S BETHLEHEM

ARC LENGTH = 90.50
CHORD BEAR = S30°31'51.9"E
LNTH CHORD = 90.41
RADIUS = 580.38
DEGREE = 09°52'19.7"

6200	1.91	R	705+99.77	CL S BETHLEHEM
	59.97		S27°43'04.7"W	
DE6001	60.90	R	706+10.19	CL S BETHLEHEM
	41.12		N49°45'04.5"W	
DE30001	60.00	R	705+71.72	CL S BETHLEHEM
	181.59		N55°54'07.2"W	
DE30006	96.30	R	704+08.04	CL S BETHLEHEM
	311.36		S71°19'01.1"W	
DE71	392.74	R	703+32.87	CL S BETHLEHEM
	10.71		N39°38'06.7"W	
564	393.80	R	703+25.51	CL S BETHLEHEM
	463.22		N71°19'01.1"E	
6203	44.86	L	704+52.59	CL S BETHLEHEM

REQD R/W = 20894.65 SF
REQD R/W = 0.480 ACRES
REMAINDER = +/- 11 ACRES

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 28 OF 32
DRAWING No. 60-0028

GRWPLN-CE
11/05/2020

PARCEL 31
DE3001
REQ'D R/W

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
6200	1.91 R	705+99.77	CL S BETHLEHEM
ARC LENGTH = 162.17			
CHORD BEAR = S43°00'11.83"E			
LNTH CHORD = 161.64			
RADIUS = 580.38			
DEGREE = 09°52'19.6"			
DE31001	40.00 R	707+53.44	CL S BETHLEHEM
ARC LENGTH = 153.46			
CHORD BEAR = N56°48'15.29"W			
LNTH CHORD = 153.28			
RADIUS = 920.00			
DEGREE = 06°13'40.1"			
DE31058	40.00 R	706+06.65	CL S BETHLEHEM
	38.74	N27°43'04.68"E	
6200	1.91 R	705+99.77	CL S BETHLEHEM
REQD R/W = 2672.119 SF			
REQD R/W = 0.061 ACRES			
REMAINDER = +/- 2.9 ACRES			

PARCEL 31
DE3002
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
DE31058	40.00 R	706+06.65	CL S BETHLEHEM
ARC LENGTH = 153.46			
CHORD BEAR = S56°48'15.3"E			
LNTH CHORD = 153.28			
RADIUS = 920.00			
DEGREE = 06°13'40.1"			
DE31001	40.00 R	707+53.44	CL S BETHLEHEM
ARC LENGTH = 128.01			
CHORD BEAR = S57°19'37.0"E			
LNTH CHORD = 127.75			
RADIUS = 580.38			
DEGREE = 09°52'19.7"			
6197	58.17 R	708+73.31	CL S BETHLEHEM
	87.44	S27°42'40.7"W	
DE31082	145.00 R	708+64.03	CL S BETHLEHEM
	45.13	N67°31'19.3"W	
DE31081	145.00 R	708+25.29	CL S BETHLEHEM
	65.14	N18°54'42.0"E	
DE31080	80.10 R	708+20.26	CL S BETHLEHEM
ARC LENGTH = 186.35			
CHORD BEAR = N55°17'00.1"W			
LNTH CHORD = 186.06			
RADIUS = 965.00			
DEGREE = 05°56'14.6"			
DE30002	63.60 R	706+48.65	CL S BETHLEHEM
	41.26	N49°45'04.5"W	
DE6001	60.90 R	706+10.19	CL S BETHLEHEM
	21.23	N27°43'04.7"E	
DE31058	40.00 R	706+06.65	CL S BETHLEHEM
REQD EASMT = 10975.58 SF			
REQD EASMT = 0.252 ACRES			

PARCEL 32
DE3101
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
6197	58.17 R	708+73.31	CL S BETHLEHEM
ARC LENGTH = 87.65			
CHORD BEAR = S68°00'49.05"E			
LNTH CHORD = 87.56			
RADIUS = 572.89			
DEGREE = 10°00'04.4"			
DE13	64.34 R	709+55.00	CL S BETHLEHEM
	15.66	S15°17'37.81"W	
DE14	80.00 R	709+55.00	CL S BETHLEHEM
	91.80	N71°57'56.63"W	
DE15	80.00 R	708+70.82	CL S BETHLEHEM
	21.99	N27°42'40.71"E	
6197	58.17 R	708+73.31	CL S BETHLEHEM
REQD EASMT = 1578.373 SF			
REQD EASMT = 0.036 ACRES			

TOTAL PARCEL AREA 2.055 ACRES

PARCEL 33
DE3202
REQ'D R/W

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
545	19.38 L	709+01.79	CL S BETHLEHEM
	70.95	N24°03'10.7"E	
DE21009	90.00 L	709+09.08	CL S BETHLEHEM
ARC LENGTH = 299.78			
CHORD BEAR = S82°35'14.9"E			
LNTH CHORD = 297.99			
RADIUS = 790.00			
DEGREE = 07°15'09.5"			
DE33001	90.00 L	712+43.02	CL S BETHLEHEM
	245.97	N14°48'21.4"W	
DE21003	105.00 L	38+19.42	SR 42
	35.72	N76°00'53.9"E	
6998	69.28 L	38+19.63	SR 42
	0.29	S23°04'59.1"E	
10004	69.23 L	38+19.35	SR 42
	114.25	S13°32'15.5"E	
10003	69.43 L	37+05.09	SR 42
	166.89	S14°42'36.3"E	
10002	60.29 L	712+85.31	CL S BETHLEHEM
	34.00	S75°47'06.2"W	
10001	54.87 L	712+49.39	CL S BETHLEHEM
	19.82	S14°09'20.3"E	
10000	35.37 L	712+53.07	CL S BETHLEHEM
	48.88	S80°10'06.0"W	
6143	29.11 L	712+02.74	CL S BETHLEHEM
ARC LENGTH = 295.67			
CHORD BEAR = N82°55'26.4"W			
LNTH CHORD = 291.40			
RADIUS = 501.01			
DEGREE = 11°26'09.7"			
545	19.38 L	709+01.79	CL S BETHLEHEM
REQD R/W = 32004.19 SF			
REQD R/W = 0.735 ACRES			
REMAINDER = +/- 1.1 ACRES			

PARCEL 34
DE3301
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
DE16	65.54 R	710+20.00	CL S BETHLEHEM
ARC LENGTH = 74.95			
CHORD BEAR = S82°57'10.77"E			
LNTH CHORD = 74.90			
RADIUS = 581.01			
DEGREE = 09°51'40.9"			
6193	63.26 R	710+89.78	CL S BETHLEHEM
	16.75	S08°40'12.12"W	
DE17	80.00 R	710+89.20	CL S BETHLEHEM
	75.48	N81°11'28.09"W	
DE18	80.00 R	710+20.00	CL S BETHLEHEM
	14.46	N11°03'42.34"E	
DE16	65.54 R	710+20.00	CL S BETHLEHEM
REQD EASMT = 1111.810 SF			
REQD EASMT = 0.026 ACRES			

TOTAL PARCEL AREA 1.529 ACRES

PARCEL 35
DE3401
REQ'D R/W

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
11469	40.30 L	32+14.03	SR 42
	14.74	S79°26'57.69"W	
DE54	55.00 L	32+15.08	SR 42
ARC LENGTH = 173.51			
CHORD BEAR = N14°22'54.66"W			
LNTH CHORD = 173.51			
RADIUS = 20054.99			
DEGREE = 00°17'08.5"			
DE35001	55.00 L	33+88.12	SR 42
ARC LENGTH = 70.48			
CHORD BEAR = N55°00'39.63"W			
LNTH CHORD = 64.65			
RADIUS = 49.39			
DEGREE = 115°59'53.0"			
DE35002	45.05 R	712+68.91	CL S BETHLEHEM
	19.89	S84°06'43.12"W	
DE24	45.53 R	712+50.00	CL S BETHLEHEM
	77.52	N80°25'04.93"E	
11468	41.10 R	713+23.78	CL S BETHLEHEM
	220.01	S14°10'56.56"E	
11469	40.30 L	32+14.03	SR 42
REQD R/W = 3836.224 SF			
REQD R/W = 0.088 ACRES			
REMAINDER = +/- 1.4 ACRES			

PARCEL 35
DE3402
EASM'T. FOR CONST. OF CURB & GUTTER

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
DE54	55.00 L	32+15.08	SR 42
	28.57	S79°26'57.50"W	
DE40	83.50 L	32+17.10	SR 42
	166.98	N11°30'30.41"W	
DE45	75.12 L	33+83.21	SR 42
ARC LENGTH = 43.22			
CHORD BEAR = N53°22'32.03"W			
LNTH CHORD = 39.01			
RADIUS = 27.83			
DEGREE = 205°54'50.3"			
DE41	68.75 R	712+70.06	CL S BETHLEHEM
	21.68	S82°07'30.03"W	
DE25	70.00 R	712+50.00	CL S BETHLEHEM
	24.47	N03°54'47.78"W	
DE24	45.53 R	712+50.00	CL S BETHLEHEM
	19.89	N84°06'43.12"E	
DE35002	45.05 R	712+68.91	CL S BETHLEHEM
ARC LENGTH = 70.48			
CHORD BEAR = S55°00'39.63"E			
LNTH CHORD = 64.65			
RADIUS = 49.39			
DEGREE = 115°59'53.0"			
DE35001	55.00 L	33+88.12	SR 42
ARC LENGTH = 173.51			
CHORD BEAR = S14°22'54.66"E			
LNTH CHORD = 173.51			
RADIUS = 20054.99			
DEGREE = 00°17'08.5"			
DE54	55.00 L	32+15.08	SR 42
REQD EASMT = 5854.411 SF			
REQD EASMT = 0.134 ACRES			

PARCEL 35
DE3403
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST	STATION/ BEARING	ALIGNMENT
DE23	58.45 R	711+48.74	CL S BETHLEHEM
ARC LENGTH = 70.44			
CHORD BEAR = N83°38'32.44"E			
LNTH CHORD = 70.39			
RADIUS = 581.01			
DEGREE = 09°51'40.9"			
6195	49.99 R	712+14.58	CL S BETHLEHEM
	37.61	N80°25'05.11"E	
DE24	45.53 R	712+50.00	CL S BETHLEHEM
	24.47	S03°54'47.78"E	
DE25	70.00 R	712+50.00	CL S BETHLEHEM
	108.92	S84°04'59.02"W	
DE26	80.00 R	711+50.00	CL S BETHLEHEM
	21.59	N00°58'41.05"W	
DE23	58.45 R	711+48.74	CL S BETHLEHEM
REQD EASMT = 2365.729 SF			
REQD EASMT = 0.054 ACRES			

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 29 OF 32
DRAWING No. 60-0029

GRWPLN-CE
11/05/2020

PARCEL 36
DE3601
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6178	39.66	R	18+48.43	SR 42
	823.49		N16°55'46.70"W	
6179	38.48	R	26+72.46	SR 42

ARC LENGTH = 297.51
CHORD BEAR = N15°57'15.94"W
LNTH CHORD = 297.51
RADIUS = 19219.14
DEGREE = 00°17'53.2"

552	37.46	R	29+70.53	SR 42
	31.86		S88°46'41.54"E	
DE36002	68.00	R	29+61.43	SR 42
	181.78		S09°56'06.01"E	
DE36003	50.00	R	27+80.00	SR 42
	49.87		S15°56'51.86"E	
DE36005	50.00	R	27+30.00	SR 42
	35.98		S49°49'54.81"E	
DE36004	70.00	R	27+00.00	SR 42

ARC LENGTH = 304.93
CHORD BEAR = S16°32'37.01"E
LNTH CHORD = 304.92
RADIUS = 19930.01
DEGREE = 00°17'14.9"

DE36011	70.00	R	23+94.00	SR 42
	95.19		S07°54'56.27"E	
DE36007	55.00	R	23+00.00	SR 42
	449.75		S16°58'54.92"E	
DE36010	55.00	R	18+50.25	SR 42
	15.44		S66°16'02.30"W	
6178	39.66	R	18+48.43	SR 42

REQD R/W = 23461.016 SF
REQD R/W = 0.539 ACRES
REMAINDER = +/- 20 ACRES

PARCEL 36 AREA 1
DE3602
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE36010	55.00	R	18+50.25	SR 42
	449.75		N16°58'54.9"W	
DE36007	55.00	R	23+00.00	SR 42
	95.19		N07°54'56.3"W	
DE36011	70.00	R	23+94.00	SR 42
	344.25		S19°08'46.1"E	
DE36008	83.00	R	20+50.00	SR 42
	51.66		S02°24'27.7"E	
DE36009	70.00	R	20+00.00	SR 42
	100.00		S16°58'54.9"E	
DE49	70.00	R	19+00.00	SR 42
	53.33		S51°12'58.8"E	
DE36050	100.00	R	18+55.91	SR 42
	45.36		S65°50'26.9"W	
DE36010	55.00	R	18+50.25	SR 42

REQD EASMT = 10716.13 SF
REQD EASMT = 0.246 ACRES

PARCEL 36 AREA 2
DE3603
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE50	60.01	R	27+15.01	SR 42
	17.99		N49°49'54.81"W	
DE36005	50.00	R	27+30.00	SR 42
	49.87		N15°56'51.86"W	
DE36003	50.00	R	27+80.00	SR 42
	181.78		N09°56'06.01"W	
DE36002	68.00	R	29+61.43	SR 42
	12.52		S88°47'45.71"E	
DE36001	80.00	R	29+57.84	SR 42
	242.81		S10°59'27.95"E	
DE50	60.01	R	27+15.01	SR 42

REQD EASMT = 3259.957 SF
REQD EASMT = 0.075 ACRES

REQD EASMT PARCEL 36 AREA 1 = 10716.13 SF (0.246 AC)
REQD EASMT PARCEL 36 AREA 2 = 3259.957 SF (0.075 AC)

TOTAL REQD EASMT PARCEL 36 = 13976.09 SF (0.321 AC)

PARCEL 36
DE3604
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE29	70.00	R	26+35.16	SR 42

ARC LENGTH = 64.61
CHORD BEAR = N16°11'53.46"W
LNTH CHORD = 64.61
RADIUS = 19930.05
DEGREE = 00°17'14.9"

DE36004	70.00	R	27+00.00	SR 42
	20.00		N73°53'40.91"E	
DE27	90.00	R	27+00.00	SR 42
	64.55		S16°11'53.46"E	
DE28	90.00	R	26+35.16	SR 42
	20.00		S73°42'32.18"W	
DE29	70.00	R	26+35.16	SR 42

REQD EASMT = 1292.774 SF
REQD EASMT = 0.030 ACRES

PARCEL 37
DE3701
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6348	40.27	L	19+21.77	SR 42
	31.02		S89°34'58.00"W	
DE5063	70.00	L	19+30.61	SR 42
	33.87		N09°18'23.54"E	
DE5062	55.00	L	19+60.97	SR 42
	403.13		N16°58'54.92"W	
DE5064	55.00	L	23+64.11	SR 42
	15.82		N90°00'00.00"E	
6347	39.87	L	23+59.49	SR 42
	437.72		S16°55'46.70"E	
6348	40.27	L	19+21.77	SR 42

REQD R/W = 6799.480 SF
REQD R/W = 0.156 ACRES
REMAINDER = +/- 16 ACRES

PARCEL 37
DE3702
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5063	70.00	L	19+30.61	SR 42
	69.39		N16°58'54.92"W	
DE58	70.00	L	20+00.00	SR 42
	377.15		N20°46'57.47"W	
DE35003	95.00	L	23+76.32	SR 42
	41.82		N90°00'00.00"E	
DE5064	55.00	L	23+64.11	SR 42
	403.13		S16°58'54.92"E	
DE5062	55.00	L	19+60.97	SR 42
	33.87		S09°18'23.54"W	
DE5063	70.00	L	19+30.61	SR 42

REQD EASMT = 10917.681 SF
REQD EASMT = 0.251 ACRES

PARCEL 38
DE3801
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6347	39.87	L	23+59.49	SR 42
	15.82		S90°00'00.0"W	
DE5064	55.00	L	23+64.11	SR 42
	29.90		N16°58'54.9"W	
DE6000	55.00	L	23+94.00	SR 42

ARC LENGTH = 291.80
CHORD BEAR = N16°33'54.4"W
LNTH CHORD = 291.80
RADIUS = 20055.00
DEGREE = 00°17'08.5"

DE5067	55.00	L	26+85.00	SR 42
	40.00		S73°51'06.2"W	
DE5068	95.00	L	26+85.00	SR 42

ARC LENGTH = 65.31
CHORD BEAR = N16°03'18.6"W
LNTH CHORD = 65.31
RADIUS = 20094.97
DEGREE = 00°17'06.4"

DE5069	95.00	L	27+50.00	SR 42
	40.00		N74°02'16.6"E	
DE5070	55.00	L	27+50.00	SR 42

ARC LENGTH = 257.04
CHORD BEAR = N15°35'41.6"W
LNTH CHORD = 257.04
RADIUS = 20055.01
DEGREE = 00°17'08.5"

DE5072	55.00	L	30+06.34	SR 42
	12.39		S89°43'23.7"E	
11470	43.06	L	30+03.03	SR 42
	412.89		S16°09'54.5"E	
6341	40.63	L	25+91.00	SR 42
	31.99		S16°55'46.7"E	
6345	40.37	L	25+59.08	SR 42
	199.93		S16°55'46.7"E	
6347	39.87	L	23+59.49	SR 42

REQD R/W = 11790.47 SF
REQD R/W = 0.271 ACRES
REMAINDER = +/- 21 ACRES

PARCEL 38 AREA 1
DE3802
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5064	55.00	L	23+64.11	SR 42
	41.82		N90°00'00.0"W	
DE35003	95.00	L	23+76.32	SR 42
	17.68		N16°58'54.9"W	
DE38001	95.00	L	23+94.00	SR 42
	178.18		N11°53'58.8"W	
DE5076	80.00	L	25+70.78	SR 42

ARC LENGTH = 114.68
CHORD BEAR = N16°18'42.8"W
LNTH CHORD = 114.68
RADIUS = 20080.00
DEGREE = 00°17'07.2"

DE5078	80.00	L	26+85.00	SR 42
	25.00		N73°51'06.2"E	
DE5067	55.00	L	26+85.00	SR 42

ARC LENGTH = 291.80
CHORD BEAR = S16°33'54.4"E
LNTH CHORD = 291.80
RADIUS = 20055.00
DEGREE = 00°17'08.5"

DE6000	55.00	L	23+94.00	SR 42
	29.90		S16°58'54.9"E	
DE5064	55.00	L	23+64.11	SR 42

REQD EASMT = 9558.89 SF
REQD EASMT = 0.219 ACRES

PARCEL 38 AREA 2
DE3803
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5070	55.00	L	27+50.00	SR 42
	25.00		S74°02'16.6"W	
DE5079	80.00	L	27+50.00	SR 42

ARC LENGTH = 264.30
CHORD BEAR = N15°35'06.0"W
LNTH CHORD = 264.30
RADIUS = 20080.00
DEGREE = 00°17'07.2"

DE40001	80.00	L	30+13.24	SR 42
	25.94		S89°43'23.3"E	
DE5072	55.00	L	30+06.34	SR 42

ARC LENGTH = 257.04
CHORD BEAR = S15°35'41.6"E
LNTH CHORD = 257.04
RADIUS = 20055.01
DEGREE = 00°17'08.5"

DE5070	55.00	L	27+50.00	SR 42

REQD EASMT = 6516.75 SF
REQD EASMT = 0.150 ACRES

REQD EASMT PARCEL 38 AREA 1 = 9558.89 SF (0.219 AC)
REQD EASMT PARCEL 38 AREA 2 = 6516.748 SF (0.150 AC)

TOTAL REQD EASMT PARCEL 38 = 16075.64 SF (0.369 AC)

PARCEL 38
DE3804
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5076	80.00	L	25+70.78	SR 42
	36.50		N90°00'00.00"W	
DE5	115.00	L	25+81.07	SR 42
	31.90		N16°24'02.10"W	
DE20	115.00	L	26+12.79	SR 42
	36.48		N90°00'00.00"E	
DE5077	80.00	L	26+02.56	SR 42
	31.90		S16°25'47.92"E	
DE5076	80.00	L	25+70.78	SR 42

REQD EASMT = 1116.575 SF
REQD EASMT = 0.026 ACRES

PARCEL 38
DE3805
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE500	80.00	L	27+90.00	SR 42
	25.00		S74°09'09.1"W	
DE501	105.00	L	27+90.00	SR 42
	60.31		N15°45'41.5"W	
DE502	105.00	L	28+50.00	SR 42
	25.00		N74°19'27.9"E	
DE503	80.00	L	28+50.00	SR 42

ARC LENGTH = 60.24
CHORD BEAR = S15°45'41.5"E
LNTH CHORD = 60.24
RADIUS = 20080.00
DEGREE = 00°17'07.2"

DE500	80.00	L	27+90.00	SR 42

REQD EASMT = 1506.03 SF
REQD EASMT = 0.035 ACRES

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 30 OF 32
DRAWING No. 60-0030

PARCEL 41
DE4101
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
552	37.46	R	29+70.53	SR 42
	91.82		N15°08'49.21"W	
6161	37.54	R	30+62.52	SR 42
	104.64		N14°43'53.34"W	
6162	37.88	R	31+67.36	SR 42
	158.45		N14°19'11.33"W	
6163	38.48	R	33+26.11	SR 42
	109.53		N13°36'52.33"W	
6164	39.52	R	34+35.85	SR 42
	90.49		N76°23'07.67"E	
DE5091	130.00	R	34+35.24	SR 42
	60.20		S27°34'22.31"W	
DE41001	90.00	R	33+90.00	SR 42
ARC LENGTH = 139.37				
CHORD BEAR = S14°19'44.88"E				
LNTH CHORD = 139.37				
RADIUS = 19910.00				
DEGREE = 00°17'16.0"				
DE41002	90.00	R	32+50.00	SR 42
	50.78		S03°14'39.63"E	
DE41003	80.00	R	32+00.00	SR 42
ARC LENGTH = 241.19				
CHORD BEAR = S15°01'11.19"E				
LNTH CHORD = 241.19				
RADIUS = 19920.00				
DEGREE = 00°17'15.5"				
DE36001	80.00	R	29+57.84	SR 42
	44.39		N88°46'59.64"W	
552	37.46	R	29+70.53	SR 42
REQD R/W = 22661.034 SF				
REQD R/W = 0.520 ACRES				
REMAINDER = +/- 4.5 ACRES				

PARCEL 42
DE4201
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
11470	43.06	L	30+03.03	SR 42
	12.39		N89°43'23.69"W	
DE5072	55.00	L	30+06.34	SR 42
ARC LENGTH = 209.32				
CHORD BEAR = N14°55'43.35"W				
LNTH CHORD = 209.32				
RADIUS = 20055.00				
DEGREE = 00°17'08.5"				
DE54	55.00	L	32+15.08	SR 42
	14.74		N79°26'57.69"E	
11469	40.30	L	32+14.03	SR 42
	211.46		S14°11'07.49"E	
11470	43.06	L	30+03.03	SR 42
REQD R/W = 2844.380 SF				
REQD R/W = 0.065 ACRES				
REMAINDER = +/- 1.4 ACRES				

PARCEL 42
DE4202
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5072	55.00	L	30+06.34	SR 42
	25.94		N89°43'23.33"W	
DE40001	80.00	L	30+13.24	SR 42
ARC LENGTH = 16.83				
CHORD BEAR = N15°11'02.10"W				
LNTH CHORD = 16.83				
RADIUS = 20079.98				
DEGREE = 00°17'07.2"				
DE5073	80.00	L	30+30.00	SR 42
	25.00		N74°50'24.33"E	
DE5071	55.00	L	30+30.00	SR 42
ARC LENGTH = 23.73				
CHORD BEAR = S15°11'37.72"E				
LNTH CHORD = 23.73				
RADIUS = 20054.44				
DEGREE = 00°17'08.5"				
DE5072	55.00	L	30+06.34	SR 42
REQD EASMT = 506.991 SF				
REQD EASMT = 0.012 ACRES				

PARCEL 42
DE4203
EASM'T. FOR CONST. OF CURB & GUTTER

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE44	55.00	L	31+00.00	SR 42
	15.00		S75°02'26.21"W	
DE43	70.00	L	31+00.00	SR 42
	91.59		N24°15'24.88"W	
DE42003	85.00	L	31+90.00	SR 42
	27.26		N11°30'30.41"W	
DE40	83.50	L	32+17.10	SR 42
	28.57		N79°26'57.50"E	
DE54	55.00	L	32+15.08	SR 42
ARC LENGTH = 115.40				
CHORD BEAR = S14°47'40.37"E				
LNTH CHORD = 115.40				
RADIUS = 20054.99				
DEGREE = 00°17'08.5"				
DE44	55.00	L	31+00.00	SR 42
REQD EASMT = 2795.083 SF				
REQD EASMT = 0.064 ACRES				

PARCEL 42
DE4204
REQ'D DRWY. EASM'T.

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE5071	55.00	L	30+30.00	SR 42
	40.00		S74°50'24.33"W	
DE42001	95.00	L	30+30.00	SR 42
ARC LENGTH = 70.33				
CHORD BEAR = N15°03'34.73"W				
LNTH CHORD = 70.33				
RADIUS = 20094.89				
DEGREE = 00°17'06.5"				
DE42	95.00	L	31+00.00	SR 42
	40.00		N75°02'26.21"E	
DE44	55.00	L	31+00.00	SR 42
ARC LENGTH = 70.19				
CHORD BEAR = S15°03'34.73"E				
LNTH CHORD = 70.19				
RADIUS = 20054.90				
DEGREE = 00°17'08.5"				
DE5071	55.00	L	30+30.00	SR 42
REQD EASMT = 2810.317 SF				
REQD EASMT = 0.065 ACRES				

PARCEL 43 REQ'D R/W DE4301

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6990	52.51	R	35+51.46	SR 42
	27.49		N76°20'02.2"E	
DE43050	80.00	R	35+51.46	SR 42
	35.41		S13°43'01.2"E	
DE43003	80.00	R	35+15.90	SR 42
	14.67		S76°22'02.8"W	
6989	65.33	R	35+15.94	SR 42
	37.66		N33°37'06.9"W	
6990	52.51	R	35+51.46	SR 42
REQD R/W = 746.42 SF				
REQD R/W = 0.017 ACRES				
REMAINDER = +/- 2.5 ACRES				

PARCEL 43 AREA 2
DE4303
EASM'T. FOR CONST. AND MAINT. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE4	65.25	R	35+51.46	SR 42
	257.87		N13°40'46.6"W	
6992	65.05	R	38+09.36	SR 42
	62.36		N13°36'52.2"W	
11466	65.07	R	38+71.72	SR 42
	14.93		N76°20'55.6"E	
DE43001	80.00	R	38+71.73	SR 42
	209.52		S13°38'05.8"E	
DE43102	80.00	R	36+62.20	SR 42
	14.34		S75°59'13.6"W	
DE43101	65.66	R	36+62.11	SR 42
	40.00		S14°00'46.4"E	
DE43100	65.92	R	36+22.11	SR 42
	14.08		N75°59'13.6"E	
DE43103	80.00	R	36+22.20	SR 42
	59.88		S13°38'05.8"E	
DE43002	80.00	R	35+62.32	SR 42
ARC LENGTH = 10.82				
CHORD BEAR = S13°39'01.8"E				
LNTH CHORD = 10.82				
RADIUS = 19925.26				
DEGREE = 00°17'15.2"				
DE43050	80.00	R	35+51.46	SR 42
	14.75		S76°20'02.2"W	
DE4	65.25	R	35+51.46	SR 42
REQD EASMT = 4192.14 SF				
REQD EASMT = 0.096 ACRES				

REQD EASMT PARCEL 43 AREA 1 = 3481.53 SF (0.080 AC)
REQD EASMT PARCEL 43 AREA 2 = 4192.14 SF (0.096 AC)

TOTAL REQD EASMT PARCEL 43 = 7673.67 SF (0.176 AC)

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 31 OF 32

DRAWING No. 60-0031

GRWPLN-CE
11/05/2020

PARCEL 45
DE4501
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6761	40.41	R	596+21.52	CL N BETHLEHEM
	74.19		N58°08'42.67"E	
6331	41.08	R	596+95.72	CL N BETHLEHEM

ARC LENGTH = 234.50
CHORD BEAR = N69°15'19.13"E
LNTH CHORD = 233.04
RADIUS = 604.76
DEGREE = 09°28'27.1"

527	48.54	R	599+45.68	CL N BETHLEHEM
	16.54		S17°45'18.31"E	
DE52	65.00	R	599+47.43	CL N BETHLEHEM

ARC LENGTH = 223.01
CHORD BEAR = S67°46'01.07"W
LNTH CHORD = 221.85
RADIUS = 630.00
DEGREE = 09°05'40.7"

DE20001	65.00	R	597+01.41	CL N BETHLEHEM
	83.68		S67°57'08.54"W	
DE2052	50.00	R	596+19.09	CL N BETHLEHEM
	9.90		N18°06'40.21"W	
6761	40.41	R	596+21.52	CL N BETHLEHEM

REQD R/W = 6028.928 SF
REQD R/W = 0.138 ACRES
REMAINDER = +/- 1.9 ACRES

PARCEL 45
DE4502
EASM'T. FOR CONST. OF SLOPES

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
525	39.94	R	595+69.36	CL N BETHLEHEM
	52.17		N58°08'42.7"E	
6761	40.41	R	596+21.52	CL N BETHLEHEM
	9.90		S18°06'40.2"E	
DE2052	50.00	R	596+19.09	CL N BETHLEHEM
	50.73		S69°03'58.4"W	
525	39.94	R	595+69.36	CL N BETHLEHEM

REQD EASMT = 250.70 SF
REQD EASMT = 0.006 ACRES

PARCEL 46
DE4601
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6511	6.94	R	13+52.60	Lestermill Road
	231.81		N54°46'57.1"E	
6512	40.66	L	102+55.33	Bethlehem_ML

ARC LENGTH = 433.08
CHORD BEAR = N67°43'26.6"E
LNTH CHORD = 429.41
RADIUS = 960.00
DEGREE = 05°58'05.9"

DE5008	206.43	L	106+00.00	Bethlehem_ML
	86.43		S12°58'05.1"W	
DE5060	120.00	L	106+00.00	Bethlehem_ML
	51.91		S75°19'19.9"E	
DE5009	120.00	L	106+44.76	Bethlehem_ML
	405.24		S73°36'44.8"E	
DE5010	120.00	L	110+50.00	Bethlehem_ML

ARC LENGTH = 194.06
CHORD BEAR = S75°01'50.5"E
LNTH CHORD = 194.04
RADIUS = 3920.00
DEGREE = 01°27'41.9"

DE5011	120.00	L	112+50.00	Bethlehem_ML
	25.00		N13°33'03.9"E	
DE5012	145.00	L	112+50.00	Bethlehem_ML

ARC LENGTH = 578.46
CHORD BEAR = S80°42'12.7"E
LNTH CHORD = 577.93
RADIUS = 3895.00
DEGREE = 01°28'15.6"

DE5013	145.00	L	118+50.00	Bethlehem_ML

ARC LENGTH = 144.18
CHORD BEAR = S85°39'49.1"E
LNTH CHORD = 144.18
RADIUS = 5855.00
DEGREE = 00°58'42.9"

DE5014	145.00	L	119+97.75	Bethlehem_ML
	162.69		S22°01'07.0"E	
6488	2.07	R	120+68.15	Bethlehem_ML
	162.80		S22°02'48.0"E	
DE5015	150.00	R	121+35.29	Bethlehem_ML
	79.92		S88°31'53.6"W	
DE50055	155.79	R	120+57.56	Bethlehem_ML
	151.41		S38°42'34.9"W	
DE50053	279.45	R	119+73.24	Bethlehem_ML
	200.92		N70°57'01.6"W	
DE50094	230.00	R	117+87.57	Bethlehem_ML
	198.23		N82°44'33.9"W	
DE50091	230.00	R	116+00.00	Bethlehem_ML
	82.60		N08°35'14.4"E	
DE50090	147.40	R	116+00.00	Bethlehem_ML

ARC LENGTH = 259.00
CHORD BEAR = N78°00'11.7"W
LNTH CHORD = 258.96
RADIUS = 4180.00
DEGREE = 01°22'14.6"

DE5017	140.00	R	113+50.00	Bethlehem_ML
	310.23		N72°02'45.7"W	
DE5018	120.00	R	110+50.00	Bethlehem_ML
	405.73		N70°47'13.1"W	
DE5019	100.00	R	106+44.76	Bethlehem_ML

ARC LENGTH = 370.36
CHORD BEAR = N89°56'08.4"W
LNTH CHORD = 365.37
RADIUS = 650.00
DEGREE = 08°48'53.0"

DE5020	100.00	R	102+17.42	Bethlehem_ML
	158.40		S24°36'37.8"W	
DE5021	70.00	R	11+50.00	Lestermill Road

ARC LENGTH = 39.68
CHORD BEAR = S32°59'56.1"E
LNTH CHORD = 39.67
RADIUS = 440.00
DEGREE = 13°01'18.4"

DE5024	70.00	R	11+04.00	Lestermill Road
	54.00		S35°34'57.8"E	
DE5022	70.00	R	10+50.00	Lestermill Road
	30.01		S54°25'02.2"W	
DE5023	39.99	R	10+50.00	Lestermill Road
	147.29		N35°27'27.2"W	
6508	31.14	R	12+04.00	Lestermill Road
	86.65		N34°39'17.4"W	
6509	8.43	R	12+90.93	Lestermill Road
	41.99		N34°39'17.4"W	
6510	5.24	L	13+30.63	Lestermill Road
	25.13		N13°21'46.0"E	
6511	6.94	R	13+52.60	Lestermill Road

REQD R/W = 547692.68 SF
REQD R/W = 12.573 ACRES

REMAINDER LEFT = +/- 6.2 ACRES
REMAINDER RIGHT = +/- 26 ACRES

PARCEL 47
DE4701
SIGHT LINE EASEMENT

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE50050	40.58	R	15+00.00	SR 42
	188.09		N16°56'00.0"W	
7398	40.74	R	16+88.09	SR 42
	15.61		N89°47'34.0"E	
DE50051	55.68	R	16+83.58	SR 42
	184.20		S12°16'38.4"E	
DE50050	40.58	R	15+00.00	SR 42

REQD EASMT = 1406.17 SF
REQD EASMT = 0.032 ACRES

TOTAL PARCEL AREA = 22.244 ACRES

PARCEL 48
DE4801
SIGHT LINE EASEMENT

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
7398	40.74	R	16+88.09	SR 42
	99.97		N17°21'54.1"W	
7399	40.07	R	17+88.06	SR 42
	24.62		N66°16'02.3"E	
7400	64.52	R	17+90.95	SR 42
	107.74		S12°16'38.4"E	
DE50051	55.68	R	16+83.58	SR 42
	15.61		S89°47'34.0"W	
7398	40.74	R	16+88.09	SR 42

REQD EASMT = 2045.74 SF
REQD EASMT = 0.047 ACRES

TOTAL PARCEL AREA = 1.336 ACRES

PARCEL 49 TRACT 1
DE4801
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6424	66.63	R	208+98.26	NB OFF RAMP
	429.74		N27°04'26.1"W	
DE13507	68.23	R	213+28.00	NB OFF RAMP
	119.58		S32°56'09.4"E	
DE13505	80.00	R	212+09.00	NB OFF RAMP
	126.88		S58°04'34.5"E	
DE13504	144.95	R	211+00.00	NB OFF RAMP
	175.31		S18°23'06.6"E	
DE26001	117.82	R	209+26.81	NB OFF RAMP
	66.98		S31°22'28.5"E	
DE13502	122.59	R	208+60.00	NB OFF RAMP
	54.87		S02°58'12.2"E	
DE13501	100.00	R	208+10.00	NB OFF RAMP
	21.44		S27°17'14.3"E	
DE13500	100.00	R	207+88.56	NB OFF RAMP
	19.23		N89°12'41.1"W	
6370	83.04	R	207+97.61	NB OFF RAMP
	101.98		N36°32'44.3"W	
6424	66.63	R	208+98.26	NB OFF RAMP

REQD R/W = 22236.17 SF
REQD R/W = 0.510 ACRES

PARCEL 49 TRACT 2
DE4902
REQ'D R/W

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE13508	68.25	R	213+32.00	NB OFF RAMP
	28.63		N27°04'26.1"W	
6421	68.35	R	213+60.62	NB OFF RAMP
	13.05		N89°28'58.3"E	
DE13506	80.00	R	213+54.75	NB OFF RAMP
	25.61		S00°02'13.2"W	
DE13508	68.25	R	213+32.00	NB OFF RAMP

REQD R/W = 167.05 SF
REQD R/W = 0.004 ACRES

REQD R/W PAR 49 TRACT 1 = 22236.17 SF (0.510 AC)
REQD R/W PAR 49 TRACT 2 = 167.05 (0.004 AC)

TOTAL REQD R/W PAR 49 = 22403.22 SF (0.514 AC)

REMAINDER = +/- 6.5 ACRES

PARCEL 49
REQ'D R/W & L/A RWLA4901

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
6370	83.04	R	207+97.61	NB OFF RAMP
	19.23		S89°12'41.1"E	
DE13500	100.00	R	207+88.56	NB OFF RAMP
	21.44		N27°17'14.3"W	
DE13501	100.00	R	208+10.00	NB OFF RAMP
	54.87		N02°58'12.2"W	
DE13502	122.59	R	208+60.00	NB OFF RAMP
	66.98		N31°22'28.5"W	
DE26001	117.82	R	209+26.81	NB OFF RAMP
	175.31		N18°23'06.6"W	
DE13504	144.95	R	211+00.00	NB OFF RAMP
	126.88		N58°04'34.5"W	
DE13505	80.00	R	212+09.00	NB OFF RAMP
	119.58		N32°56'09.4"W	
DE13507	68.23	R	213+28.00	NB OFF RAMP

REQ'D R/W & L/A (1) PARCEL 49 = 582.27 LF

PARCEL 49
REQ'D R/W & L/A RWLA4902

PNT	OFFSET/ DIST		STATION/ BEARING	ALIGNMENT
DE13508	68.25	R	213+32.00	NB OFF RAMP
	25.61		N00°02'13.2"E	
DE13506	80.00	R	213+54.75	NB OFF RAMP
	13.05		S89°28'58.3"W	
6421	68.35	R	213+60.62	NB OFF RAMP

REQ'D R/W & L/A (2) PARCEL 49 = 38.65 LF

TOTAL REQ'D R/W & L/A PARCEL 49 = 620.92 LF

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: 0017182
COUNTY: HENRY
LAND LOT NO: 233-236,246-248,251
LAND DISTRICT:
GMD 576
DATE 5/24/24 SH 32 OF 32
DRAWING No. 60-0032

GRWPLN-CE
11/05/2020

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 6-4

ROW Commitments

Attachment 6-4: ROW Commitments

1 Do Not Disturb

The Design-Builder shall not impact items as noted in Table 1 (Do Not Disturb) and as further delineated in TP Attachment 6-3 (State Proposed ROW Plans).

Table 1: Do Not Disturb

Parcel Number	*Requirements*
#2	Do not disturb decorative water feature
#4	Do not disturb decorative wall and sign
#34	Do not disturb sign
#49	Do not disturb tower supporting guys
#183-PI 0014203	Do not disturb storm water pond

2 Other ROW Commitments

There are no other ROW Commitments on this Project.

7 UTILITY ADJUSTMENTS

7.1 General Requirements

This TP Section 7 sets out the requirements for Utility Adjustment Work, coordination with Utility Owners, and compliance with the Official Code of Georgia regarding Utilities in the Public Right of Way. Forms and manuals are available online at https://www.dot.ga.gov/GDOT/Pages/Utilities.aspx.

7.2 Administrative Requirements

7.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 7 in accordance with the Project Standards.

7.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

7.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings set forth in TP Table 7-1 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 7-1 (Required Project Meetings). The Design-Builder shall invite the necessary staff from GDOT and its representatives and shall cause to attend each meeting the necessary Key Personnel, Required Personnel, and other staff having responsibility for the subject matter, authority to make decisions, and ability to implement actions arising at the meeting. The Design-Builder is encouraged to combine meetings when appropriate. The Design-Builder shall lead and facilitate the meetings, prepare and distribute meeting agendas a minimum of 24 hours in advance, and prepare and distribute meeting minutes within three Business Days after the meeting. The Design-Builder shall hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. At a minimum, meeting minutes shall clearly identify the following:

1. Date, time, location, and purpose of meeting
2. Meeting attendees
3. Action items and issues
4. Parties responsible for each action item
5. Due dates for identified action items
6. Status of action items and issues (once completed, note “completed” in next meeting minutes before removing from subsequent minutes)

The Utility Kick-off Meeting shall include all Utility Owners with facilities located within the Project Limits. The meeting agenda shall cover: the scope of the Work, the Design-Builder's phasing plans, timeline, Utility Submittal requirements, Utility coordination processes, future meetings, any design changes (to include accepted ATCs as applicable) that may potentially cause a Utility Conflict, and what the Utility Owners can expect for the duration of the Project. At this meeting the Design-Builder shall distribute the Emergency Utility Response Information

(EURI) forms for completion, the GDOT accepted Utility Relocation Procedure Notification (URPN) Letter 1 to start validation of the Utility Plans in TP Section 7.3.2 (Verification of Utility Plans and SUE Investigations). URPN example letters are available on the GDOT Utilities Website. The Design-Builder shall invite the GDOT District Utilities Office and the State Subsurface Utilities Engineer as optional attendees.

The Utility Coordination Meetings may be with an individual Utility Owner or the meetings may be combined based on efficiency. GDOT may participate in these meetings if requested by the Utility Owner or the Design-Builder, or otherwise as GDOT deems appropriate to monitor the progress of Utility Adjustments per DBA Section 7.5 (Utility Adjustments). During the meeting, the agenda shall include a review, and updates as necessary, of the EURI contacts and other pertinent information.

Table 7-1: Required Project Meetings

Meeting and Section Reference	***Frequency***	***Minimum Design-Builder Attendees***
Utility Coordination Meetings	As needed to communicate and resolve conflicts between Utilities and the Work with the participation of the Utility Owners	UM, UDC, WUCS
Utility Kick-off Meeting	Within 15 days of NTP1	UM, UDC, WUCS
Utility Closeout Meeting	At the completion of all Utility Adjustments	DBPM, UM, UDC, WUCS

7.2.4 Communications

7.2.4.1 Communication with Utility Owners

The Design-Builder shall communicate with each Utility Owner as necessary to efficiently accomplish the Utility Adjustments in compliance with the Design-Build Documents.

7.2.4.2 External Communication

The Design-Builder shall communicate and cooperate with GDOT, potentially impacted and impacted property owners, Governmental Entities, impacted businesses, and potentially affected third parties as necessary in the performance of Utility Adjustments. The Design-Builder shall provide advance notification to all impacted local Governmental Entities, businesses, and property owners for any planned disruption of service per the requirements in TP Attachment 2-3 (Public Information and Communications).

7.2.4.3 Record Keeping

The Design-Builder shall obtain and maintain deeds, design, construction and inspection, and other Utility-related records. All documents shall be turned over to GDOT at the conclusion of the Work.

7.2.5 Memorandum of Understanding

TP Attachment 7-2 (Executed Utility MOUs) includes copies of the Utility Memorandum of Understanding (MOU) GDOT has entered into with Utility Owners.

7.2.6 Utility Management Plan

The Design-Builder shall prepare a Utility Management Plan (UMP) that meets the requirements of this TP Section 7.2.6. The Design-Builder shall obtain GDOT acceptance of the UMP prior to

starting any Utility Adjustment Work. The Design-Builder shall update the UMP as required in TP Attachment 2-10 (Submittal Requirements Database).

The UMP shall include the following:

1. The Design-Builder's organization, including names, titles, and contact information for Project Management personnel, and the Required Personnel included in TP Attachment 2-1 (Key Personnel and Required Personnel).
2. The Design-Builder's approach to managing Utility Adjustments in a manner that demonstrates an understanding of the requirements in the GDOT Utility Accommodation Policy and Standards Manual (UAM), the Design-Build Documents, this TP Section 7, and TP Attachment 1-4 (Project Standards). The approach shall:
    a. Describe how the Design-Builder will conduct meetings required by TP Section 7.2.3 (Required Meetings).
    b. Demonstrate an efficient process for coordination with GDOT and the Utility Owners, acknowledge the specific requirements in the Utility MOUs and GDOT requirements, and describe how the Design-Builder will meet them.
    c. Describe any change(s) to the Utility Status Report template and how the report will be maintained and provided to GDOT as set out in TP Section 7.3.3.2 (Utility Status Report).
3. The Design-Builder's approach to integrating Utility Adjustments into the Project Schedule.
4. The Design-Builder's approach to including Utility Adjustments in the Design Work and Construction Work.
5. The Design-Builder's methodology to manage and store documents.
6. The Design-Builder's approach to quality for Utility Adjustments by referencing the processes in the CQMP for effective QC, QA, and auditing as required in TP Section 3 (Design-Build Quality Program) with any added detail specific to Utility Adjustments.

7.2.7 Pre-Construction Coordination

Upon issuance of NTP1, and until the Construction Work for the Utility Adjustment Work commences, the Design-Builder shall perform the following:

1. Contact each Utility Owner to obtain supplemental verification of the locations of existing Utilities using the URPN Letter 1.
2. Perform overhead and underground (Subsurface Utility Engineering (SUE)) investigations as needed to determine the need for Utility Adjustments.
3. Perform all coordination efforts necessary for Utility Adjustments.
4. Review all Utility permits issued by Governmental Entities within the Site.
5. Notify the Utility Owners that a Georgia Permit Application System (GPAS) Permit is required for any Utilities which require Adjustment.
6. Review the ROW Plans/Maps and TP Attachment 6-2 (SP/SA Required Clearance) and TP Attachment 6-4 (ROW Commitments) for meters, vaults, and backflow preventors which are a Conflict and require relocation from the GDOT ROW onto private property.

7.2.8 Real Property Matters

GDOT has endeavored to identify and acquire property sufficient to accommodate Utility Adjustments. If a Utility Adjustment is required outside of the Project Limits based on the Design-Builder's design, the Design-Builder shall acquire the New Interest unless the Utility Owner takes responsibility for acquiring any New Interests necessary for its Utility Adjustments. This New Interest includes a right of entry for the relocation of a meter, vault, or backflow preventor from the GDOT ROW onto private property.

If the Utility Owner is responsible for acquiring a New Interest, the Design-Builder shall include in a Utility Work Plan, described in TP Section 7.3.7 (Utility Work Plan), a request to acquire the New Interest. The determination as to the need for the New Interest shall be made through GDOT's acceptance of a Utility Work Plan which contains a request for a New Interest. When the Utility Owner acquires the replacement ROW or easement the Design-Builder shall obtain written notification from the Utility Owner of such decision, notify GDOT, and provide a copy in the Utility Owner's Work Plan.

Design-Builder acquisition of New Interest shall be acquired concurrently with the acquisition of ROW for the Project. If the Design-Builder will acquire the New Interest outside the Project Limits, the Design-Builder shall provide GDOT, for review and acceptance, the required property interest and the recommended instrument (i.e., deed, quitclaim deed, easement limited agreement, etc.) to be used to acquire or transfer such interests. If GDOT accepts the Design-Builder's request to acquire any New Interest, DBA Section 2.6 (Design-Builder Proposed/Design-Builder Acquired Right of Way) shall apply to the acquisition of such New Interest and any reference to Design-Builder Proposed/Design-Builder Acquired Right of Way therein shall be applicable to such New Interest.

7.2.8.1 Documentation of Existing Interests – Affidavits

Where GDOT has accepted the Utility Owner's Existing Interest in accordance with DBA Section 7.5.5 (Utility Existing Interests), the Design-Builder shall ensure that the Utility Owner executes an Affidavit of Property Interest on the standard form GDOT provides at the Utility Owner's request.

7.2.9 Emergency Utility Response Plan

The Design-Builder's WUCS shall prepare an Emergency Utility Response Plan (EURP) and submit it to GDOT prior to beginning SUE A investigations or corresponding field work. The Design-Builder shall obtain an Emergency Utility Response Information (EURI) form from each Utility Owner for the Project to ensure appropriate communication and quick response. The EURI shall meet GDOT requirements found at the State of Georgia, Office of Utilities webpage along with the Emergency Utility Response Information Template. All EURIs shall be included in the EURP. The WUCS shall clearly mark and highlight the gas, water, and other pressurized pipeline shut-off valves and other Utility services including overhead switch locations on the Utility plans; and prepare a chart to indicate the location of each site (street address or intersections), and the name of the Utility company or operator of the facility.

In the event of interruption to gas, water, or other Utility services as a result of accidental breakage or as a result of being exposed or unsupported, the WUCS shall promptly notify the appropriate emergency officials, the Georgia Utilities Protection Center, and the appropriate Utility facility company or operator, if known. The WUCS shall also notify GDOT and other entities in a timely manner utilizing the report in TP Attachment 7-6 (Utility Damage Report).

Until such time as the damage has been repaired, no person shall engage in excavating or blasting activities that may cause further damage to the Utility facility.

The Design-Builder shall post the EURP in an area readily accessible to GDOT and all Project personnel and distribute copies of EURP by e-mail and hard copy to GDOT. The Design-Builder shall also provide the EURP to the PM, Project superintendent, Subcontractors who are performing Work in the vicinity of Utilities, and personnel of each facility/owner/operator who has Utilities within the Project Limits.

7.3 Design Requirements

7.3.1 When Utility Adjustment is Required

The Design-Builder shall avoid Conflicts with Utilities when feasible and minimize impacts where Conflicts cannot be avoided. A Conflict is defined as occurring when a Utility facility requires Adjustment to avoid damage or disruption, to comply with any Utility regulations, to remove a meter, vault, and/or backflow preventor from GDOT ROW onto private property, or as defined in the GDOT Utility Accommodation Policy and Standards Manual (UAM).

The limits of Utility Adjustments will extend as necessary to replace, relocate, or remove the existing Utility, whether inside or outside of the Project ROW or easement. TP Section 7.2.8 (Real Property Matters) includes provisions for the acquisition of New Interests for Utilities relocated outside the ROW.

Where there is no Conflict identified and a Utility Adjustment is not required, the Design-Builder shall collect from the Utility Owner a no conflict letter and retain the no conflict GPAS Permit after it is executed.

7.3.2 Verification of Utility Plans and SUE Investigations

TP Attachment 7-3 (Utility Plans) are the Quality Level B SUE Plans developed during the planning phase of the Project by GDOT. These plans reflect the foreseeable existing Utilities within the Project Limits. Utilities which could not be explicitly verified during the QL-B process (e.g. due to depths of the utility) retain the QL-D label. The Design-Builder shall verify the information on these Plans with the Utility Owners and perform additional field investigations as necessary to define the need for and scope of Utility Adjustments.

The Utility Plans verified by the Design-Builder shall be submitted to GDOT for review and acceptance.

Quality Level A SUE Investigations (QL-A) may be performed at the discretion of the Design-Builder based on the nature of the Work and potential Conflict. If a QL-A investigation is performed the Design-Builder shall submit the resulting Test Hole Data Sheet to becomes part of the Utility As-Builts.

7.3.3 Utility Reports

7.3.3.1 Utility Impact Analysis

To document the SUE Investigations the Design-Builder shall create and maintain a Utility Impact Analysis (UIA) using the template in TP Attachment 7-4 (UIA Template) and as described in the GDOT UAM. The UIA shall be submitted with the verified Utility Plans and again after completion of QL-A investigations.

7.3.3.2 Utility Status Report

The Design-Builder shall prepare and maintain a Utility Status Report(USR), using the template in TP Attachment 7-5 (USR Template), outlining the status of each Utility Adjustment. The report shall be submitted to GDOT every two weeks.

7.3.4 Utility Retention Request

The Utility Owner is required to submit to GDOT a Retention Request form (available online) for each Utility that is located under pavement in accordance with UAM Section 2.8.B. If the Utility Owner pursues a Retention Request the Design-Builder shall assist by providing information requested by the Utility Owner. When a Retention Request is approved by GDOT, the Design-Builder shall be responsible for Protection in Place of these Utilities as necessary for the continued safe operation and structural integrity of the Utilities.

7.3.5 Utility Adjustment Plans

Utility Adjustment Preliminary Plans (UAPP) and Utility Adjustment Plans (UAP) may be broken up into multiple Plan sets for each Utility Owner or individual Utility Adjustment location based on the complexity of the Work and how the information may be clearly shown. After GDOT has provided the Design-Builder with Utility Plan review comments and acceptance, preparation of the UAPP may begin.

The Design-Builder shall be responsible for the completion, in accordance with the terms of the Design-Build Documents and this TP Section 7, of any necessary Design Work to be performed by Utility Owners, Subcontractors, and the Utility Owner's consultants and contractors.

The Design-Builder shall reflect the UAP in its Design Documents and the Erosion, Sedimentation, and Pollution Control Plans (ESPCP) required in Section 1.4 (NPDES Permit) of TP Attachment 5-2 (Environmental Commitments).

Whether prepared by the Design-Builder, or by the Utility Owner the UAP shall meet the following requirements:

1. The applicable requirements of the Design-Build Documents, including TP Section 7.2.1 (Project Standards), specifically the UAM.
2. Reflect all existing Utilities and indicate those remaining, and proposed Utility Adjustments to avoid Conflicts, in the same vicinity.
3. Indicate any approvals required from Governmental Entities.
4. Indicate any approvals required from third parties necessary for such Work.
5. Shall be the UAPP developed into final drawings as the UAP.
6. Include miscellaneous general notes required for coordination of Utilities with the Construction Work.
7. Include issued GPAS Permit numbers on the Plans.
8. Include certification from the Design-Builder stating that the proposed Utility Adjustment will not create a Conflict with the Project or another Utility.
9. Indicate on the Utility Adjustment Plans the party responsible for the Utility Adjustment Work.

10. Include accommodations for Utility crossings and attachments for bridge Plans, if applicable.

The Design-Builder shall ensure that all Utility Adjustment Work facilitates the Project's Construction Phasing and Staging Plans and Erosion, Sedimentation, and Pollution Control Plan.

7.3.5.1 Plans Prepared by the Design-Builder

If the Design-Builder or a consultant hired by the Design-Builder is preparing the UAPP, the UAPP shall be approved in writing by the applicable Utility Owners prior to submitting to GDOT for review. UAPP shall meet the requirements of the UAP at a concept level of completion (approximately 35 percent). Following GDOT's written acceptance of the UAPP, the Design-Builder shall complete the UAP and, in so preparing the UAP, address any comments raised by GDOT during its review of the UAPP.

Concurrently with the Utility Owner acceptance of the UAPP, the Design-Builder shall submit the Utility Relocation Procedure Notification (URPN) Letter 2 to GDOT for review and acceptance. After GDOT acceptance, the Design-Builder shall provide the URPN Letter 2 to the Utility Owner with the UAP when it is completed.

Once the UAP has been completed by the Design-Builder, the Design-Builder shall submit to GDOT for review and have an authorized representative of the applicable Utility Owner sign the Plans as "reviewed and approved for construction."

The Design-Builder shall transmit any GDOT comments to the UAPP and/or UAP to each applicable Utility Owner and then complete any modification, obtain re-approval by each applicable Utility Owner, and re-submit to GDOT as necessary to obtain GDOT's acceptance.

The Design-Builder shall also furnish the GDOT accepted UAP to each Utility Owner to incorporate into the applicable GPAS Permit.

7.3.5.2 Plans Prepared by the Utility Owner

The Design-Builder shall provide each Utility Owner with roadway design Plans and any other Plans related to an identified Conflict as soon as the Plans have reached a level of completeness adequate to allow the Utility Owner to fully understand how the Project creates a Conflict to their Utilities. If the Utility Owner is preparing the UAP, the UAPP is not required. The Design-Builder shall be responsible for coordinating each Utility Owner's preparation of its UAP in accordance with the requirements of the Design-Build Documents and this TP Section 7. Design-Builder shall submit the Utility Relocation Procedure Notification (URPN) Letter 2a to GDOT prior to issuance thereof to a Utility Owner. After GDOT acceptance, the Design-Builder shall provide the URPN Letter 2a to the Utility Owner to start the development of the UAP.

The Design-Builder shall review the UAP to confirm compliance with the applicable requirements for Utility Adjustments as stated in this TP Section 7. After Design-Builder review and acceptance of the UAP, the Design-Builder shall submit the UAP to GDOT.

The Design-Builder shall transmit any GDOT comments on the UAP to any applicable Utility Owner and then verify modification of the UAP, review by each applicable Utility Owner, and re-submit the UAP to GDOT as necessary to obtain GDOT's acceptance.

7.3.5.3 Plan Sheet Requirements

UAPs shall meet the requirements of Section 44 of the PPG (Utility Relocation Plans).

UAP sheet layout shall meet the following requirements:

1. Information and graphic data not necessary to depict the disposition of Utilities found within the Project Limits shall be hidden by turning off the appropriate CAD levels on which the data is stored. Examples of extraneous information would include items such as horizontal curve data, super elevation data, roadway dimensions, miscellaneous text, etc. All background information such as pavement limits, existing structures, etc. shall be screened. All text, line work, details, and symbols shall be clear and legible when Plans are reduced to half-size (11- by 17-inches).
2. To maintain Plan clarity, all applicable general notes, tables, details, and the Utility legend shall be placed separately from the Utility Plan sheets. A Utility Plan cover sheet shall be provided for UAPs. A recommended Utility sheet schedule is provided below:
    a. Utility Sheet 1 (cover sheet) — Utility general notes, Utility legend, miscellaneous details.
    b. Utility Sheet 2 (required as needed) — Additional miscellaneous details, pole data table.
    c. Utility Plan Sheets — Display Utilities plan view with respect to Project elements.
    d. Utility Profile and Cross-Sections Sheets — Proposed Utility profiles and cross-sections (as required).
    e. Miscellaneous Utilities Sheets — Miscellaneous proposed Utility details (as required).

The Design-Builder shall follow the above sheet schedule for all separate UAPs.

7.3.5.4 UAP Changes

Any changes to UAPs previously approved by a Utility Owner shall require written approval of such Utility Owner. The Design-Builder shall obtain all such Utility Owner approvals as well as GDOT acceptance.

7.3.6 Utility Adjustment Schedule

If the Utility Owner is self-performing a Utility Adjustment (design and/or construction), the Design-Builder shall coordinate with the Utility Owner in their completion of the UAS to ensure schedule compatibility. The UAS shall meet requirements as stated in the GPAS Permit available online.

No UAS is required when the Design-Builder is performing the Utility Adjustment Work, including through a pre-approved contractor of the Utility Owner, unless there is a dependent activity by the Utility Owner to facilitate the Utility Adjustment Work.

7.3.7 Utility Work Plan

The Design-Builder shall prepare a Utility Work Plan that addresses each Utility Adjustment, Utilities requiring Protection in Place, and any Utility remaining in place and not requiring any Protection in Place and submit it to GDOT for review and acceptance.

The Design-Builder shall manage preparation of all components of each Utility Work Plan with the Utility Owner or Utility Owner's design consultant.

The Design-Builder shall complete the review and comment process for the applicable Utility Work Plan, including obtaining GDOT acceptance, before a Post-Let Utility Certification will be issued.

The Design-Builder shall transmit any GDOT comments on the Utility Work Plan to each applicable Utility Owner, execute with each applicable Utility Owner any modification to the plan, and review any Utility Owner modifications to the Utility Work Plan prior to re-submittal to GDOT, as necessary to resolve all GDOT comments.

The Design-Builder shall address all Utility Adjustments in a single full Utility Work Plan.

The Utility Work Plan shall include the following:

1. Utility Adjustment Plans
2. Material and construction specifications
3. Utility Owner approval of the UAP
4. GPAS Permit number (provided by Utility Owner)
5. Retention Requests (if needed)
6. Easement document if required for the Utility Adjustment

The Design-Builder shall prepare a revised Utility Work Plan, in accordance with the UAM, after becoming aware of a previously unknown Utility Adjustment necessary to accommodate the Project.

7.3.8 Post-Let Utility Certification

Upon receipt of the accepted Utility Work Plan, GDOT will issue the Post-Let Utility Certification for the first submitted Utility Adjustment to proceed with construction. All subsequent certifications will be issued by the GDOT PM.

7.4 Construction Requirements

7.4.1 General Construction Criteria

The Design-Builder shall verify that all Utility Adjustment Work performed by each Utility Owner conforms to the requirements described below:

1. All criteria identified in TP Section 7.3 (Design Requirements).
2. The Utility Work Plans accepted by GDOT (other than Utility Adjustment Field Modifications complying with this TP Section 7.4).
3. Overall Project Schedule.
4. The installed, abandoned, excavated, or relocated Utilities within the Project Limits are all locatable. Locatable means that the line can be field located using SUE Quality Level B (QLB) methodology and is detailed in the UAM.

7.4.2 Traffic Control

The Design-Builder shall provide all traffic control necessary for Utility Adjustment Work, whether the Utility Adjustment Work is performed by the Design-Builder or by the Utility Owner. Traffic control for Utility Adjustments shall comply with the requirements of TP Section 18 (Traffic Control).

7.4.3 Utility Adjustment Field Modification Procedures

The Design-Builder shall submit to GDOT procedures to be followed when a Utility Adjustment Field Modification is proposed by either the Design-Builder or a Utility Owner after the UAP has been approved. The procedures shall be accepted by GDOT prior to the Design-Builder submitting a Utility Work Plan to GDOT. The procedures shall include, at minimum, the following:

1. The procedure for Utility Owner review and approval of a Utility Adjustment Field Modification proposed by the Design-Builder, and Design-Builder review and approval of a Utility Adjustment Field Modification proposed by the Utility Owner.
2. Process for transmittal of Utility Adjustment Field Modifications to the appropriate construction field personnel.
3. Procedure to include any Utility Adjustment Field Modifications in the Utility As-Builts.

The Design-Builder shall cause the procedures set forth in this TP Section 7.4.3 to be followed for all Utility Adjustment Field Modifications, whether the construction is performed by the Design-Builder or by the Utility Owner.

7.4.4 Inspection of Utility Construction

The Utility Owner or Utility Owner's consultant/contractor shall have the right to visit and inspect the Work at any time and advise the Design-Builder and GDOT of any observed discrepancies or potential issues in respect of the Utility Adjustment Work. The Design-Builder shall notify the Utility Owner when a Utility Adjustment is completed and ready for final inspection and acceptance.

7.4.5 Utility As-Builts

7.4.5.1 Utility As-Built Requirements

The Design-Builder shall manage, ensure the accuracy of, and deliver all Utility As-Builts. It is the responsibility of the Design-Builder to monitor and record Utility as-built information when the Utility work is being self-performed by the Utility Owner.

The Utility As-Builts shall include the following:

1. All underground Utility Adjustments within the Project Limits surveyed by construction layout personnel and then reviewed and confirmed by a Professional Land Surveyor at the time of installation to determine the exact location and position of the Utility, including:
    a. The outside diameter of pipe or width of duct banks and configuration of either encased or non-encased multi-conduit systems.
    b. The Utility's structural material composition and condition.

c. Identification of at least 2 benchmarks or control points used to determine elevations with an accuracy of +/- 0.02 feet and certified accurate to the benchmark or control point.

d. Bore logs for bored in facilities.

e. Horizontal data accurate to the survey standards in TP Section 9 (Surveying and Mapping).

f. Recording and labeling of the average depth below the surface of each run, all change of direction points, and all surface or underground components such as valves, manholes, drop inlets, clean outs, and meters as follows:

1) For wet facilities - at 100-foot intervals.

2) For dry facilities - at 25 to 50-foot intervals, depending on the vertical alignment.

2. All resulting abandoned or excavated underground Utilities within the Project Limits are clearly delineated and labeled as abandoned or removed.

3. All aerial Utility Adjustments recorded to include the following:

a. Utility Owner.

b. Age.

c. Size.

d. Height.

e. Number.

f. Material type.

g. General condition of the Utility.

h. Horizontal location surveyed to the same accuracies and precision as is required for the topographic data.

i. Aerial Utility Owners ID tag attached to the pole.

j. Horizontal connectivity of the Utilities between the poles, including major service drops (substations or industrial facilities).

7.4.5.2 Utility As-Built Plan Requirements

The Design-Builder shall submit Utility As-Built information in GDOT's current CAD format (MicroStation and InRoads) and PDF in accordance with GDOT's current EDG and PPG.

The Design-Builder shall ensure the Utility As-Built information is submitted as follows with "As-Built" labeled on each sheet:

1. CAD Files:

a. All points/data are placed in one CAD file per Utility Owner.

b. DGN files are named using the naming convention "1234567UTLAB_XYZ.dgn" (where "1234567" represents the PI# and "XYZ" the Owner's UPC code).

c. One empty, overall file using the naming convention "1234567UTLEAB.dgn" is created with all individual files named "1234567UTLAB_XYZ.dgn" attached as reference files.

d. All UTLAB files follow the conventions set forth in the EDG for the UTLE file.

e. Sheet files, using GDOT's title block, are created for each Utility Owner in accordance with Section 24, and Section 44 (if required) of GDOT's PPG; levels are correctly turned on/off/grayed back to enable future printing if needed.

f. The Project scale is maintained.

g. Relocated poles are numbered.

h. All street names are labeled.

i. All easements and Project Limits are labeled.

j. The location and elevation of the referenced benchmark or control point is identified and labeled; if the referenced benchmark or control point is not within the Project Limits, then a complete description of its location will be provided to assist in future locating.

k. Any changes in details of design and/or additional supporting information, such as approved placement details, pipe sizes, material changes, geo-coded photos, etc., are be labeled.

2. PDF Files:

a. Create PDFs of the CAD sheet files for each Utility Owner in accordance with Section 24, and Section 44 (if required) of the GDOT PPG; levels must be correctly turned on/off/grayed back to enable future printing.

b. Include the name, address, and telephone number of the firm preparing the drawing in the title block.

c. Include the date the as-built data is collected in the revision block of the title block.

d. Include the Professional Land Surveyor's stamp and statement certifying that Utility As-Builts reflect the true conditions in the field. Certification applies to new as-built information (not to the existing Utility information provided by GDOT).

e. Provide the Contractors' statement (with an original signature and Project Number on the cover sheet and transmittal letter) verifying that all construction specifications and product qualities have been met.

7.4.5.3 Interim Utility As-Builts

Interim Utility As-Builts are defined to include the surveyed information gathered during the Utility Adjustment Work, be stamped by a Professional Land Surveyor, and meet the requirements of TP Section 7.4.5.1 (Utility As-Built Requirements) for survey information. The Interim Utility As-Builts shall be submitted to GDOT after completion of the Utility Adjustment Work covered by a UAP.

7.4.5.4 Final Utility As-Builts

Final Utility As-Builts shall be submitted to GDOT for review and acceptance with the submittal of the Record Design Documents. The Final Utility As-Builts shall meet the following requirements:

1. The Design-Builder shall have reviewed Utility Owner completed CAD files and PDFs of the Utility As-builts.

2. Utility As-Builts are not considered complete until the Utility Owner has responded to all comments from these reviews to the satisfaction of the Design-Builder.
3. Prior to submitting the Final Utility As-Builts to the Utility Owners, the Design-Builder shall provide GDOT with CAD and PDF copies of each of the major Utilities (Water/Sewer, Gas, Telecom, and Electric) for preliminary review and acceptance. After GDOT comments have been addressed and closed by GDOT, no further preliminary review will be required.
4. The Design-Builder shall provide to each Utility Owner whose Utility was the subject of Utility Adjustment work a PDF and CAD copy of the Utility As-Builts for review and acceptance.
5. The Design-Builder shall submit the combined Final Utility As-Builts to GDOT as follows:
    a. One overall, final CAD file in GDOT's current CAD software with each Utility Owner's file appropriately attached as a reference file per GDOT's PPG and EDG.
    b. One PDF set of Utility Plans and UAP for each Utility (if not already provided).
    c. GDOT will review all deliverables to determine compliance with GDOT's EDG and PPG before final acceptance by GDOT.

7.4.6 Utility Facility Relocation Acceptance Form

The Design-Builder shall complete and sign the TP Attachment 7-1 (Utility Facility Relocation Acceptance Form) as soon as possible after completion of the Utility Adjustment. The form shall also be signed by an authorized representative of the applicable Utility Owner and GDOT to be fully executed.

Execution of the Utility Facility Relocation Acceptance Form by the Design-Builder, Utility Owner, and GDOT provides acknowledgement that the Utility Adjustment Work accomplished by the Design-Builder has been visually inspected and accepted by the Utility Owner and constructed in accordance with the Utility Owner approved UAP, their current specifications, and the requirements of the Utility MOU as executed by the Utility Owner.

Execution of the Utility Facility Relocation Acceptance Form by GDOT does not confer legitimacy and accuracy, or in any way transfer liability for errors or omissions made by the Design-Builder in preparation of the document.

7.5 Submittals

With respect to Utility Adjustment requirements described in this TP Section 7, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 7 Attachments

Attachment No.	*Title*
Attachment 7-1	Utility Facility Relocation Acceptance Form
Attachment 7-2	Executed Utility MOUs
Attachment 7-3	Utility Plans
Attachment 7-4	UIA Template
Attachment 7-5	USR Template
Attachment 7-6	Utility Damage Report

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 7-1

Utility Facility Relocation Acceptance Form

Utility Facility Relocation Acceptance Form

Project PI Number:_____

County(ies):_____

Project Description:_____

Utility Owner Name:_____

Type of Utility Facilities Installed by Contractor:_____

Type of Utility Work Described Herein (Circle One): Initial Utility Adjustment or Revised Utility Adjustment

Station Limits:_____

General Description of Utility Facilities Installed by Contractor:_____

_____

_____

Utility Work Completion Date:_____

This Utility Facility Relocation Acceptance Form shall be completed by the Contractor's Worksite Utility Coordination Supervisor (WUCS). It shall also be signed by an authorized representative of the Utility Owner and by the Department's Project PM upon completion and acceptance of the work described herein.

Execution of this Utility Facility Relocation Acceptance Form by the parties below provides acknowledgement that the contract work described above, has been visually inspected and accepted by the Utility Owner as to having been constructed in accordance with the Utility Owner approved Utility Adjustment Plans and their current specifications and the requirements of the Memorandum of Understanding (MOU) as executed by the Utility Owner. Further, the Contractor's WUCS shall provide the Utility Owner with a complete set of "As-Built Plans" for review and approval reflecting the utility work performed by the Contractor. Upon completion of this form and the exchange of the final Utility Owner approved "As-Built Plans", all parties agree the Utility Owner will operate and maintain the installed facilities covered by this document going forward based on the date of execution by GDOT. However, any items inadvertently overlooked and as identified in a subsequent utility punch list shall still be the responsibility of the Contractor to correct and provide up to date "As-Built Plans" to the Utility Owner.

Acceptance of this form by GDOT does not confer legitimacy and accuracy or in any way transfers liability for errors or omissions made by the preparer.

Contractor's WUCS:

Printed Name: _____ Date: _____

Signature: _____ Title: _____

Utility Owner Representative:

Printed Name: _____ Date: _____

Signature: _____ Title: _____

GDOT Project PM:

Printed Name: _____ Date: _____

Signature: _____ Title: _____

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 7-2

Executed Utility MOUs

Georgia DOT Project:
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Central Georgia EMC (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

Draft

1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☐ Sanitary Sewer facilities and/or Storm Drainage System
☒ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☒ Telecommunications facilities and equipment
☐ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

Draft

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☒
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☐

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments Click or tap here to enter text.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☐
Construction ☐

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

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an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled "Build America, Buy America Certificate of Compliance for Construction Materials" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

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[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:

George L. Weaver
(Signature)

Click or tap to enter a date.
(10/04/2024)

George L. Weaver
President/CEO

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

_____
(Signature)

Click or tap to enter a date.
(Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Pike Electric, LLC
Address: 100 Pike Way, Mount Airy, NC 27030
Phone: 770-514-1849
Contact Person: Daniel P. Wright
E-Mail: Click or tap here to enter text.

Company Name: LineTec Services, LLC
Address: 4600 Industrial Access Road, Douglasville, GA 30134
Phone: 337-307-0872
Contact Person: Roy Harrington
E-Mail: rharrington@ltspower.com

Company Name: Gridco
Address: 4000 Eagle Point Corporate Dr. unit 250 Birmingham, AL 35242
Phone: 678-477-8504
Contact Person: Millwood
E-Mail: imillwood@gridcompany.com

Please provide a minimum of three.

OWNER Pre-Approved Design Consultant List

Company Name: Cappstone Energy Group, LLC.
Address: 10135 Dearing Street SE, Covington, GA 30014
Phone: 770-815-7092
Contact Person: Brad Capps
E-Mail: bcapp@cappstonegroup.com

Company Name: Patterson @ Dewar Engineers, Inc.
Address: 850 Center Way, Norcross, GA 30071
Phone: 770-453-1410
Contact Person: Robert Penna
E-Mail: rpenna@pdengineers.com

Company Name: TRC Companies, Inc
Address: 6095 Professional Parkway, Suite 102B, Douglasville, GA 30134
Phone: 770-947-4272
Contact Person: David McCullogh
E-Mail: dmccullough@trccompanies.com

Please provide a minimum of three.

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Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____
(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or
$2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____ My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Draft

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Charter (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☐ Sanitary Sewer facilities and/or Storm Drainage System
☐ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☐ Telecommunications facilities and equipment
☒ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

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The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☐
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☒

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments Click or tap here to enter text.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☒
Construction ☐

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The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

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an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled "Build America, Buy America Certificate of Compliance for Construction Materials" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

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[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:

_____*Jonathan Mitchell*_____ 3/17/2025

(Signature) (Date)

Jonathan Mitchell

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

_____ Click or tap to enter a date.

(Signature) (Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Bigham
Address: 101 Mayo Royal Drive, Newnan, GA 30263
Phone: 706-416-5159
Contact Person: Jacob Smith
E-Mail: jacob.smith@bigham.com

Company Name: Ficoa
Address: 1300 Ross Road, Shady Dale, GA 31085
Phone: 607-237-9009
Contact Person: Pat Holton
E-Mail: pat.holton@ficoa.com

Company Name: GTS
Address: 230 Mountain Brook Ct, Canton, GA 30115
Phone: 770-345-1670
Contact Person: Michael Jordan
E-Mail: Mjordan@gts-yes.com

Please provide a minimum of three.

OWNER Pre-Approved Design Consultant List

Company Name: Click or tap here to enter text.
Address: Click or tap here to enter text.
Phone: Click or tap here to enter text.
Contact Person: Click or tap here to enter text.
E-Mail: Click or tap here to enter text.

Company Name: Click or tap here to enter text.
Address: Click or tap here to enter text.
Phone: Click or tap here to enter text.
Contact Person: Click or tap here to enter text.
E-Mail: Click or tap here to enter text.

Company Name: Click or tap here to enter text.
Address: Click or tap here to enter text.
Phone: Click or tap here to enter text.
Contact Person: Click or tap here to enter text.
E-Mail: Click or tap here to enter text.

Please provide a minimum of three.

Draft

Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Draft

We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Georgia Power Company - Distribution (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☐ Sanitary Sewer facilities and/or Storm Drainage System
☒ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☐ Telecommunications facilities and equipment
☐ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

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The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☒
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☒

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments Click or tap here to enter text.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☐
Construction ☐

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

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an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled “Build America, Buy America Certificate of Compliance for Construction Materials” is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

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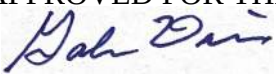
[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:



_____ 9/24/2024

(Signature) (Date)

Galen Davis – Project Manager DOT/Franchise

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

_____ Click or tap to enter a date.

(Signature) (Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Linetec Services, LLC
Address: 6411 Masonic Dr., Alexandria, LA 71301
Phone: 346-337-0950
Contact Person: Grace Sawyer
E-Mail: gsawyer@ltspower.com

Company Name: Pike Electric
Address: P.O. Box 868,100 Pike Way Mount Airy, NC 27030
Phone: 770-601-2358
Contact Person: Jim McCloud
E-Mail: JMcCloud@pike.com

Company Name: Service Electric
Address: 1631 East 25th Street, PO Box 3656, Chattanooga, TN 37404
Phone: 423-265-3161
Contact Person: Brian Imsand
E-Mail: BImsand@serviceelectricco.com

Company Name: Sumter Utilities
Address: 1151 North Pike West Sumter, SC 29151
Phone: 843-725-9521
Contact Person: Mikell Murray
E-Mail: jmmurray@suimail.com

Company Name: Utilicon
Address: 13275 Highway 231, Davisboro, Ga 31018
Phone: 478-348-3233
Contact Person: Jimmy Glover
E-Mail: j.glover@utilicon.net

Company Name: Williams Electric
Address: P.O. Box 2367, Shelby, NC 28151
Phone: 704-484-1881
Contact Person: Rick Falls
E-Mail: rick.falls@4weco.com

Please provide a minimum of three.

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OWNER Pre-Approved Design Consultant List

Company Name: Current Edge Solutions
Address: 4332 Wheeler Rd, Suite 102, Augusta, GA 30907
Phone: 706-755-4362
Contact Person: Wendy Brown
E-Mail: wendy@currentedgesolutions.com

Company Name: Enercon
Address: Click or tap here to enter text.

Phone: 813-418-2263
Contact Person: Bryan Phillips
E-Mail: bphillips@enercon.com

Company Name: McLean Engineering
Address: 1954 Airport Road, Suite 214, Chamblee GA 30341
Phone: 404-520-0288
Contact Person: Sean Knowles
E-Mail: sean.knowles@mcleanengineering.com

Company Name: Storm Services
Address: Click or tap here to enter text.
Phone: 228-297-9557
Contact Person: Andrew Evans
E-Mail: andrew.evans@stormsl.com

Company Name: Leidos
Address: Click or tap here to enter text.
Phone: 470-991-9924
Contact Person: Rich McDonnell
E-Mail: Click or tap here to enter text.

Company Name: Pike Engineering
Address: 200 Cobb Pkwy N, Ste 428, Marietta, GA 30062
Phone: 336-448-8564
Contact Person: Justin Simmons
E-Mail: jrsimmons@pike.com

Please provide a minimum of three.

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Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or
$2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

Draft

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Henry County Water Authority (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☒ Domestic water mains and distribution lines and associated appurtenances
☒ Sanitary Sewer facilities and/or Storm Drainage System
☐ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☐ Telecommunications facilities and equipment
☐ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

Draft

The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☒
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☒

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments Click or tap here to enter text.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☐
Construction ☐

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

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an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled “Build America, Buy America Certificate of Compliance for Construction Materials” is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

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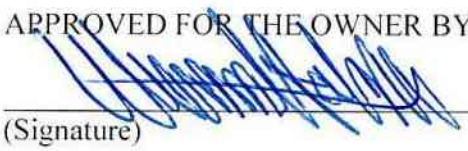
[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:



(Signature) Click or tap to enter a date. (Date) 10/10/24

Click or tap here to enter text.

(Printed Name and Title)

WARREN HOLDER
CHAIRMAN BOARD

APPROVED FOR THE DEPARTMENT BY:

(Signature) Click or tap to enter a date. (Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Professional Pipeline, LLC
Address: 2742 Autumn Maple Drive – Braselton, GA 30517
Phone: 678-878-7314
Contact Person: Chris Opolka
E-Mail: chris@professionalpipeline.net

Company Name: Strack, Inc.
Address: 125 Laser Industrial Court – Fairburn, GA 30213
Phone: 770-969-1591
Contact Person: Jonathan Strack
E-Mail: info@strackinc.com

Company Name: Brent Scarbrough & Company
Address: 45 East Aviation Way – Newnan, GA 30263
Phone: 770-451-8603
Contact Person: Shane Waters
E-Mail: info@brent.us

Please provide a minimum of three.

OWNER Pre-Approved Design Consultant List

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Company Name: Barge Design Solutions
Address: 1201 Front Avenue, Suite F / Columbus, Ga 31901
Phone: 706-321-4590
Contact Person: Ben Adams, PE
E-Mail: ben.adams@bargedesign.com

Company Name: River To Tap (R2T)
Address: 580 W. Crossville Rd. Suite 101 Roswell, Ga. 30075
Phone: 470-563-7176
Contact Person: Andy Rankin, PE
E-Mail: andy.rankin@r2tinc.com

Company Name: Engineering Strategies, Inc.
Address: 3855 Shallowford Road, Suite 525 / Marietta, Ga 30062
Phone: 770-429-0001
Contact Person: Scott Hennessey, PE
E-Mail: shennessey@esi-ga.com

Please provide a minimum of three.

Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

Draft

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD MEMORANDUM OF UNDERSTANDING

between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Hopewell Holdings, LLC (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, I-75 at CR312/Bethlehem Rd which will provide a new interchange on I-75 in order to relieve congestion at exits 212 and 216 and additional point of access will be created between SR 155 and Bill Gardner Parkway exits in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☒ Sanitary Sewer facilities and/or Storm Drainage System
☐ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☐ Telecommunications facilities and equipment
☐ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

Option 1: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☒
Construction ☐

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Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☒

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☒

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments Click or tap here to enter text.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☐
Construction ☐

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

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an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled "Build America, Buy America Certificate of Compliance for Construction Materials" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

Draft

[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:

HOPEWELL HOLDINGS, LLC, a Georgia limited liability company

(Signature) 12/2/2024 (Date)

Timothy J. Trankina Manager - Member

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

(Signature) Click or tap to enter a date. (Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Click or tap here to enter text.
Address: Click or tap here to enter text.
Phone: Click or tap here to enter text.
Contact Person: Click or tap here to enter text.
E-Mail: Click or tap here to enter text.

Company Name: Click or tap here to enter text.
Address: Click or tap here to enter text.
Phone: Click or tap here to enter text.
Contact Person: Click or tap here to enter text.
E-Mail: Click or tap here to enter text.

Company Name: Click or tap here to enter text.
Address: Click or tap here to enter text.
Phone: Click or tap here to enter text.
Contact Person: Click or tap here to enter text.
E-Mail: Click or tap here to enter text.

Please provide a minimum of three.

OWNER Pre-Approved Design Consultant List

Company Name: Falcon Design Consultants
Address: 235 Corporate Center Dr. #200, Stockbridge, GA 30281
Phone: 770-389-8666
Contact Person: John Palmer
E-Mail: jpalmer@fdc-llc.com

Company Name: Moore Bass Consulting
Address: 1350 Keys Ferry Ct, McDonough, GA 30253
Phone: (770) 914-9394
Contact Person: Steve Moore
E-Mail: smoore@moorebass.com

Company Name: Precision Planning
Address: 400 Pike Boulevard Lawrenceville, GA 30046
Phone: (770) 338-8000
Contact Person: Ken Wood
E-Mail: kwood@pecatl.com

Please provide a minimum of three.

Draft

Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. , Description, County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Draft

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20____

We, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"). as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. XXXXXXX- DESCRIPTION

XXXXXXXXXX COUNTY

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Atlanta Gas Light (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☐ Sanitary Sewer facilities and/or Storm Drainage System
☐ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☒ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☐ Telecommunications facilities and equipment
☐ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

N/A

The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

Draft

The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☐
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☒

Excluded Items N/A

Comments N/A

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☒
Construction ☐

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

Draft

an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled “Build America, Buy America Certificate of Compliance for Construction Materials” is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

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[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:

(Signature)

11/09/2024
Click or tap to enter a date.
(Date)

Nichole D. Miles-Sullivan – VP, Operations - AGLC

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

(Signature)

Click or tap to enter a date.
(Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Limitations	First Name	Last Name	Company Name	City	State	Title	Work Phone	WorkExtn	Email Name
Generally will not work projects outside NW GA & TN.	Brooks	Ballard	Hiwassee Construction Company, Inc.	Calhoun	TN	Director of Operations	(423) 622-4296		brooksb@hiwasseeconstruction.com
	Todd	Newman		Calhoun	TN	President of Operations	423-667-0576		toddn@hiwasseeconstruction.com
no steel pipe greater than 4" & 1500 feet in length.	Eugene	McCallie	Hunter Utility	Birchwood	TN	VP Operations	423-240-9896		Hunterutility@aol.com
no plastic pipe	Dooley	Eaves	Troy Construction, LLC	Commerce	GA	Vice President	706-336-0063		deaves@troyconstruction.com
	Casey	Colbey		Commerce	GA	Estimating/Project Management	706-336-0063		ccolbey@troyconstruction.com
no steel pipe larger than 6"	Tony	Pittman	Southern Pipeline, Inc.	Winder	Georgia	President of Operations	770-589-5184		tpittman@southernpipeline.org
	Chad	Bishop		Winder	Georgia	Estimator	678-897-7615		cbishop@southernpipeline.org
	Jhonny	Phommaly		Winder	Georgia	Construction Operations	678-963-5676		jphommaly@southernpipeline.org
no limitations	Matt	McCoy	Pride Utility	Gainesville	Georgia	Project Manager	678-951-5153		matt.mccoy@prim.com
	Matt	Pridemore		Gainesville	Georgia	President of Operations	770-532-0086		Matt.Pridemore@prim.com
no limitations	Bryan	Boyd	Gunter Construction Company, Inc.	Lawrenceville	Georgia	President of Operations	770-963-7760	201	bboyd@gunterconst.com
	Joe	Peters		Lawrenceville	Georgia	VP of Operations	770-963-7760		JPeters@gunterconst.com
no limitations	Scott	Warren	Southeast Connections	Conyers	GA	VP of Operations	404-659-1422		Scott@seconnections.com
	Rob	Cline		Conyers	GA	Project Manager	770-842-7703		RobC@seconnections.com
no limitations	Doug	Greene	Benton-Georgia, LLC	Douglasville	GA	President of Operations	770-942-8180	120	dgreene@benton-georgia.com
	Scott	Bailey		Douglasville	GA	Estimator	770-942-8180		sbailey@benton-georgia.com
	Eric	Bonner		Douglasville	GA	Estimator	770-942-8180		ebonner@benton-georgia.com
no limitations	Jason	Aldredge	Diversified Utility Services	MORROW	GA	VP of Operations	678-618-4696		jason.aldredge@dusllc.com
	Brian	Leavell		MORROW	GA	President of Operations	(678) 878-6682		brian.leavell@dusllc.com

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Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____
(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

Draft

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
BellSouth Telecommunications LLC d/b/a AT&T Georgia (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☐ Sanitary Sewer facilities and/or Storm Drainage System
☐ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☒ Telecommunications facilities and equipment
☐ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

Draft

The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☒
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☒

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments While the DB Contractor will be able to perform much of the design and construction, only AT&T union personnel can pull cable/fiber, perform splicing/tie-in work, some technical design work and do pole attachments (AT&T) will be responsible for these cost). The DB Team can install any required ducts, poles and vaults/manholes/hand holes, enclosures and bridge attachments and will be responsible for the cost of the design and construction (including materials). In the MOU, AT&T has selected design and construction under 3B, option 1. AT&T has also selected 3C design and construction. AT&T will be responsible for some cost as indicated above and the DB Contractor will be responsible for the remaining cost. AT&T will provide an invoice for any material purchased and provided by AT&T and will be reimbursed by the DB Contractor.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☒
Construction ☒

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.

4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.

5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products

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that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

   a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

   b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

   c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled "Build America, Buy America Certificate of Compliance for Construction Materials" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

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[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:

_____ 9/17/2024
(Signature) (Date)

LeRoy Matthews

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

_____ Click or tap to enter a date.
(Signature) (Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Ansco & Associates, LLC
Address: 736 Park North Blvd, STE 100, Clarkston, GA 30021
Phone: 404-508-5720
Contact Person: Lynn Ward
E-Mail: lynn.ward@anscollc.com

Company Name: Marie Smith DBA Smith Co
Address: 5829 Swinging Gate Rd, Gainesville, GA 30506
Phone: 706-201-8363
Contact Person: Joe Smith
E-Mail: smithco1991@att.net

Company Name: Mike Blackburn Contractors, Inc
Address: 320 Wake Robin Drive, Sunset, SC 29685
Phone: 864-380-6479
Contact Person: Mike Blackburn
E-Mail: keowee3@aol.com

Please provide a minimum of three.

OWNER Pre-Approved Design Consultant List

Company Name: Byers Engineering Co
Address: 6285 Barfield Rd, Atlanta, GA 30328
Phone: 404-497-1510 or 404-497-1957
Contact Person: Connie Parker or Tim Parker
E-Mail: acas@byers.com

Company Name: SourceOne Corporation
Address: Click or tap here to enter text.
Phone: 678-594-5100 or 678-524-0821
Contact Person: Bryan McBrearty
E-Mail: bmcbrearty@sourceonecorp.com

Company Name: RTS Associates, LLC
Address: 200 Cobb Pkwy N, Bldg 100 Suite 132, Marietta, GA 30062
Phone: 770-270-1212 ext 7004
Contact Person: Lecretia “Coo” Jones
E-Mail: boo.jones@rtsaccociates.net

Please provide a minimum of three.

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Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

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We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____
(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Draft

Georgia DOT Project: I-75 at CR 312/Bethlehem Road
GDOT P.I. 0017182

DESIGN-BUILD
MEMORANDUM OF UNDERSTANDING
between the
Georgia Department of Transportation (hereinafter the DEPARTMENT)
and
Comcast (hereinafter the OWNER)

Whereas the DEPARTMENT proposes to undertake a design-build project hereinafter referred to as the PROJECT, a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42 in Henry County, Georgia by contract as authorized by O.C.G.A. § 32-2-81; and,

Whereas the DEPARTMENT will accomplish the PROJECT through (i) a Design Builder, hereinafter referred to as CONTRACTOR, which will enter into a contract, hereinafter referred to as the CONTRACT, to design and build the PROJECT and will subcontract certain work to a combination of contractors, design consultants (or a design consultant team), and other entities working together to design and build the PROJECT; and (ii) the OWNER, and

Whereas, pursuant to O.C.G.A. § 32-6-170(b), DEPARTMENT is authorized to pay or participate in the payment of the costs of removal, relocation, protection, or adjustment of OWNER'S facilities, hereinafter referred to as the UTILITY ADJUSTMENT WORK, where the DEPARTMENT has made the determination that (i) the type of facility is one of those delineated in Section 1. below; (ii) such payments are in the best interest of the public and necessary in order to expedite the staging of the PROJECT; and (iii) the costs of the UTILITY ADJUSTMENT WORK are included as part of the PROJECT; and

Whereas, the OWNER may elect for the UTILITY ADJUSTMENT WORK to be carried out (i) by the OWNER; or (ii) by the CONTRACTOR under the CONTRACT either utilizing the OWNER'S pre-approved design consultants and contractors or utilizing the CONTRACTOR'S own design consultants and contractors.

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1. Type of Utility

The OWNER has the following utility facilities in respect of which UTILITY ADJUSTMENT WORK may need to be carried out as a result of the proposed PROJECT:

Type of facility or facilities of the OWNER: [*Check to signify*]

☐ Domestic water mains and distribution lines and associated appurtenances
☐ Sanitary Sewer facilities and/or Storm Drainage System
☐ Electrical Distribution (overhead and underground) wires, poles, etc.
☐ Electrical Transmission (overhead and underground) wires, poles, etc.
☐ Natural Gas Distribution Facilities (underground)
☐ Natural Gas Transmission Facilities (underground)
☐ Petroleum Pipeline (underground)
☐ Telecommunications facilities and equipment
☒ Cable TV facilities
☐ Street Lighting
☐ Internet Data Service
☐ Other Facilities contemplated under O.C.G.A. § 32-6-170(b) (Description) Click or tap here to enter text.

2. New Utility Facilities Proposed (Betterment)

The OWNER desires the following to be installed as new additional facilities within the PROJECT right of way, hereinafter referred to as a BETTERMENT:

[Insert here or attach a detailed description of proposed new additional utility installations]

Click or tap here to enter text.
Click or tap here to enter text.
The OWNER acknowledges and agrees that (i) any BETTERMENT will be subject to terms to be mutually agreed between the CONTRACTOR and the OWNER and documented pursuant to a separate betterment agreement between the CONTRACTOR and the OWNER, a copy of which betterment agreement must be provided to the DEPARTMENT; (ii) any such BETTERMENT will be subject to the same standards and requirements as if it were necessary UTILITY ADJUSTMENT WORK; and (iii) the OWNER will be responsible for all costs relating to any BETTERMENT and the DEPARTMENT will have no obligation to pay for or facilitate any such BETTERMENT.

3. Assignment of Responsibilities for Design and Construction

The OWNER hereby acknowledges and agrees that (i) prior to the award of the CONTRACT, the DEPARTMENT will not have in its possession final plans to be utilized to determine exact locations of the UTILITY ADJUSTMENT WORK; (ii) Overhead/Subsurface Utility Engineering (SUE) investigations plans exist providing the best information and signifying the layout of known existing facilities; and (iii) the OWNER has used the SUE plans for developing its determination of commitments as indicated below.

The CONTRACTOR-developed plans will be developed by the CONTRACTOR and provided to the OWNER after the CONTRACT is awarded by GDOT. The OWNER hereby acknowledges and agrees that if option 3A below has been selected (i) the CONTRACTOR-developed plans shall be used by the DEPARTMENT as the final basis for the Standard Utility Agreement; and (ii) the OWNER will enter into the Standard Utility Agreement on the basis of such CONTRACTOR-developed plans.

Draft

The OWNER hereby makes the following commitments with regard to the PROJECT and the UTILITY ADJUSTMENT WORK:

3A. The OWNER, at the DEPARTMENT'S cost, pursuant to a Standard Utility Agreement, will provide the following services in respect of the UTILITY ADJUSTMENT WORK for the properties for which it has established prior rights: [*Check to signify*]

Design ☐
Construction ☐

The OWNER must provide documented proof of the prior right and that documentation must be verified and approved by the DEPARTMENT prior to execution of this MEMORANDUM OF UNDERSTANDING.

3B. The OWNER elects for the following services in respect of the UTILITY ADJUSTMENT WORK to be placed into the DEPARTMENT'S CONTRACT for the following services (Regardless of Prior Rights) pursuant to O.C.G.A. § 32-6-170(b). The UTILITY ADJUSTMENT WORK will be included in the scope of the CONTRACT and the costs of the UTILITY ADJUSTMENT WORK will be included in the overall PROJECT costs under the CONTRACT:

<u>Option 1</u>: Work to be performed by the OWNER's pre-approved Design Consultants and/or Contractors identified in attached "Exhibit A": [*Check to signify*]

Design ☒
Construction ☒

Option 2: Work to be performed by the CONTRACTOR at the CONTRACTOR'S cost: [*Check to signify*]:

Design ☐
Construction ☐

[*If both are checked under Option 2, please leave Exhibit A blank*].

As per this section, all work necessary for the UTILITY ADJUSTMENT WORK in accordance with the plans, when approved, shall be included in the CONTRACT and accomplished by the CONTRACTOR except as follows [*Check none or list any work items to be performed by the OWNER and identify whether such work items will be at the DEPARTMENT's cost pursuant to a Standard Utility Agreement under option 3A above or at the OWNER's cost under option 3C below.*]

None ☐

Excluded Items Click or tap here to enter text.
Click or tap here to enter text.

Comments Click or tap here to enter text.
Click or tap here to enter text.

3C. OWNER, at OWNER'S cost, will provide the following services: [*Check to signify*]

Design ☐
Construction ☐

Draft

The following is hereby mutually agreed to and understood by both parties:

1. The identification of existing facilities including preparation of Overhead/Subsurface Utility Engineering (SUE) investigations plans will be accomplished by the DEPARTMENT prior to award of the CONTRACT and thereafter supplemented by the CONTRACTOR.
2. The CONTRACTOR shall coordinate reviews of the utility relocation information and obtain acceptance from the OWNER and the DEPARTMENT when required. The OWNER shall apply for and obtain any required permits from the DEPARTMENT and perform any final design or proprietary design needed to administer its own relocation work if the work will not be included in the CONTRACT. If the preliminary plans indicate that no conflict exists, and the OWNER concurs with this information, the OWNER shall provide a letter of "no conflict" to the CONTRACTOR and submit a No Conflict GPAS Permit.
3. All construction engineering and contract supervision shall be the responsibility of the DEPARTMENT and the CONTRACTOR to ensure that all UTILITY ADJUSTMENT WORK included in the CONTRACT is accomplished in accordance with the PROJECT's plans and specifications. The CONTRACTOR will consult with the OWNER before authorizing any changes or deviations which affect the OWNER's facility.
4. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the CONTRACTOR shall ensure that the design, construction, and installation of the OWNER'S facilities is performed by the OWNER'S pre-approved design consultant and/or contractor (if option 3B, Option 1 has been selected) and/or by the CONTRACTOR (if option 3B, Option 2 has been selected). Only the DEPARTMENT has the authority to stop work once commenced with the exception where the work poses a safety hazard or operational issue.
5. For UTILITY ADJUSTMENT WORK included in the CONTRACT, the OWNER or the OWNER's consultant shall have the right to visit and inspect the work at any time and advise the CONTRACTOR and the DEPARTMENT'S Engineer of any observed discrepancies or potential issues. The DEPARTMENT agrees to notify the OWNER when all UTILITY ADJUSTMENT WORK is completed and ready for final inspection by the OWNER.

6. Upon completion of the UTILITY ADJUSTMENT WORK included in the CONTRACT and upon certification by the DEPARTMENT'S project manager and the OWNER that the work has been completed in accordance with the plans and specifications, the OWNER will accept the adjusted, relocated, and additional facilities and will thereafter operate and maintain said facilities located within the PROJECT right of way subject to the DEPARTMENT'S "Utility Accommodations Policy and Standards Manual (UAM), current edition" and any agreements in effect without further cost to the DEPARTMENT or the CONTRACTOR. Final acceptance of the UTILITY ADJUSTMENT WORK shall be accomplished by the execution of the Utility Facility Relocation Acceptance Form. The CONTRACTOR shall provide the OWNER with a complete set of "As-Built Plans" for review and approval reflecting the UTILITY ADJUSTMENT WORK performed by the CONTRACTOR. Upon completion of the Utility Facility Relocation Acceptance Form and the exchange of the final OWNER approved "As-Built Plans", the OWNER will operate and maintain the installed facilities going forward based on the date of execution of the Utility Facility Relocation Acceptance Form by the DEPARTMENT.

7. For all coordination, work, services, reimbursement and other matters in respect of UTILITY ADJUSTMENT WORK under this MEMORANDUM OF UNDERSTANDING, the OWNER shall comply with all requirements under the DEPARTMENT'S UAM and shall cooperate with the CONTRACTOR in the same manner as if coordinating directly with the DEPARTMENT in accordance with the laws of the State of Georgia, the DEPARTMENT'S UAM and any agreements in effect between the DEPARTMENT and the OWNER. The OWNER agrees to cooperate in good faith with the CONTRACTOR and to respond to all requests for information or meetings required to reach a resolution of any disputed items.

8. All UTILITY ADJUSTMENT WORK performed by the OWNER, at the DEPARTMENT's cost, through a Standard Utility Agreement under option 3A above and all UTILITY ADJUSTMENT WORK included in the CONTRACT under option 3B above shall be performed in accordance with the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410). All manufacturing processes for steel, iron and manufactured products furnished for permanent incorporation into the work on this PROJECT shall occur in the United States. The only exceptions to this requirement are (i) the production of pig iron and the processing, pelletizing and reduction of iron ore, which may occur in another country and, (ii) manufactured products that do not include steel and iron components. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

   a. Products of steel include, but are not limited to, such products as structural steel piles, reinforcing steel, structural plate, steel culverts, guardrail, steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron frames and grates and ductile iron pipe. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not limited to this clause, only the application process.

   b. A Certificate of Compliance shall be furnished for steel and iron products as part of the backup information with the billing. The form for this certification entitled "Buy America Certificate of Compliance" is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the RAILROAD/UTILITIES and the DEPARTMENT for this certification shall include a signed mill test report and/or a signed certification by a supplier, distributor, fabricator, or manufacturer that has handled the steel or iron product affirming that every process, including the application of a coating, performed on the steel or iron product has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the steel and/or iron product or nonpayment of the work.

   c. The requirements of said law and regulations do not prevent the use of miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct the above products, manufactured products that are not predominantly steel or iron, or a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

9. In addition to the BUY AMERICA requirements of the Federal regulations (23 U.S.C. 313 and 23 CFR 635.410) outlined in Section 8 above, the BUILD AMERICA, BUY AMERICA ACT ("BABA") set forth under the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52, extends coverage of BUY AMERICA to include construction materials used for this PROJECT. Under BABA all construction materials furnished for permanent incorporation into the work on this PROJECT shall be manufactured in the United States. The White House Office of Management and Budget (OMB) Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, defines a "construction material" as

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an article, material, or supply that is or consists primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Items excluded from construction materials under OMB Memo M-22-11 are: items of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

a. Items that consist of two or more of the above-listed construction materials that have been combined together through a manufacturing process, and items that include at least one of the above-listed construction materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. Manufactured products that do not contain steel and iron components are not subject to BUY AMERICA requirements as set forth under Section 8 above.

b. The BUY AMERICA preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to this PROJECT. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of this PROJECT (e.g., temporary aluminum scaffolding). Additionally, the BUY AMERICA preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the PROJECT, or an integral part of the structure (e.g., movable chairs, desks, or computer equipment).

c. A Certificate of Compliance shall be furnished for Construction Materials, as part of the backup information with the billing and on material furnished according to the actual cost account agreement. The form for this certification entitled “Build America, Buy America Certificate of Compliance for Construction Materials” is attached hereto for reference purposes and shall be provided to the DEPARTMENT upon completion of 80% of the CONTRACT amount. Records to be maintained by the COMPANY and the DEPARTMENT for this certification shall include a signed mill test report and/or documentation by a supplier, distributor, fabricator, or manufacturer that has handled the construction materials affirming that all manufacturing, to include at least the final manufacturing process and the immediately preceding manufacturing stage has been carried out in the United States of America, except as allowed by this Section. The lack of these certifications will be justification for rejection of the construction materials or nonpayment of the work.

Draft

[signature page follows]

This MEMORANDUM OF UNDERSTANDING will be incorporated into the CONTRACT by reference or exhibit.

APPROVED FOR THE OWNER BY:

_____ Click or tap to enter a date.
(Signature) (Date)

Click or tap here to enter text.

(Printed Name and Title)

APPROVED FOR THE DEPARTMENT BY:

_____ Click or tap to enter a date.
(Signature) (Date)

STATE UTILITIES ADMINISTRATOR

Draft

Exhibit A

OWNER Pre-Approved Contractor List

Company Name: Cable East
Address: 1940 Statham Drive, Statham, GA 30666
Phone: 706-202-3653
Contact Person: Dale Massingill
E-Mail: dale.massingill@cable-east.com

Company Name: Mastec
Address: 3745 Atlanta Industrial Dr, NW, Atlanta, GA 30331
Phone: 678-677-2085
Contact Person: Thomas Evans
E-Mail: thomas.thomas@mastec.com

Company Name: Quanta Telecom
Address: 11695 Farmer Rd NW, Conyers, GA 30012
Phone: 770-761-9940
Contact Person: Rick Inscoe
E-Mail: rinscoe@quantelecom.com

Please provide a minimum of three.

OWNER Pre-Approved Design Consultant List

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Company Name: DTEC
Address: 197 Welborn Dr, Gillsville, GA 30543
Phone: 770-361-8202
Contact Person: David Wood
E-Mail: dwood@dtecinc.com

Company Name: CCI
Address: 105 Kent St, Iron Mountain, MI 49801
Phone: 800-338-9299
Contact Person: Robert Sereday
E-Mail: robert.sereday@ccisystems.com

Company Name: TrueNet Communications
Address: 7666 Blanding Blvd, Jacksonville, FL 32244
Phone: 904-777-9052
Contact Person: Jeff Groat / David Harris
E-Mail: jgroat@trenetcommunications.com / dharris@truenetcommunications.com

Company Name: Quasar, Inc.
Address: 108 Wiley Hills Trail, Woodstock, GA 30188
Phone: 404-913-4143
Contact Person: Steven Georgalis
E-Mail: sgeorgalis@quasar.us

Company Name: Advanced 1
Address:
Phone: 210-872-7201
Contact Person: Brian Derstine
E-Mail: bderstine@advanced1.net

Please provide a minimum of three.

Draft

Exhibit B
To be completed after the Project is awarded

Original 5/17/2013
Revised 1/28/2015

GEORGIA
DEPARTMENT OF TRANSPORTATION
BUY AMERICA

CERTIFICATE OF COMPLIANCE

Date _____, 20____

WE, _____

(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "Buy America" requirements of the Federal regulations 23 U.S.C. 313 and 23 CFR 635.410 of this project.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42, Henry County

As required, we will maintain all records and documents pertinent to the Buy America requirement, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the Buy America requirement are delivered during invoicing, then we will maintain all records and documents pertinent to the Buy America requirement for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Draft

We further certify that the total value of foreign steel as described in the Buy America requirements for this project does not exceed one-tenth of one percent (0.1%) of the total contract price or $2,500.00, whichever is greater.

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this ____day of _____, _____.

_____My Commission Expires: _____
Notary Public/Justice of the Peace

Exhibit C
To be completed after the Project is awarded

Original 12/22/2022

BUILD AMERICA, BUY AMERICA
CERTIFICATE OF COMPLIANCE
FOR CONSTRUCTION MATERIALS

Date _____, 20_____

We, _____
(UTILITY/RAILROAD OWNER)

Address: _____

Hereby certify that we are in compliance with the "BUILD AMERICA, BUY AMERICA" ("BABA") requirements of the Infrastructure Investment and Jobs Act ("IIJA"), as set forth under Pub. L. No. 117-58, §§ 70901-52, and that all construction materials as defined under BABA furnished for the referenced project, have been produced in the United States of America.

P.I. No. 0017182 - a new interchange at Interstate 75 and County Road (CR) 312/Bethlehem Road including realigning and widening Bethlehem Road from Greenwood Road / Lester Mill Road to State Route (SR) 42.

Henry COUNTY

We further certify that as required, we will maintain all records and documents pertinent to the BABA requirements, at the address given above, for not less than 3 years from the date of project completion and acceptance, if we do not provide the records and documents during invoicing. If all records and documents pertinent to the BABA requirements are delivered during invoicing, then we will maintain all records and documents pertinent to the BABA requirements for not less than three (3) years from the date conditional final payment has been received by the COMPANY. These files will be available for inspection and verification by the Department and/or FHWA.

Draft

Signed by _____ Title _____
(Officer of Organization)

Subscribed and sworn to before me this _____day of _____, _____.

_____
Notary Public/Justice of the Peace My Commission Expires: _____

Georgia Department of Transportation

Technical Provisions

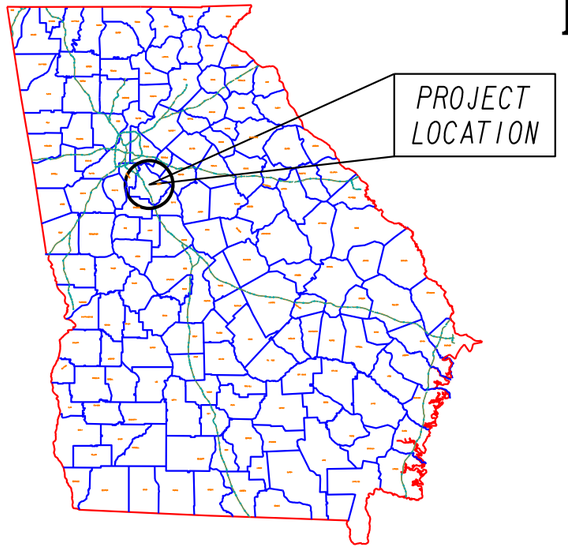
For

Design-Build Agreement

P.I. No. 0017182

Attachment 7-3

Utility Plans



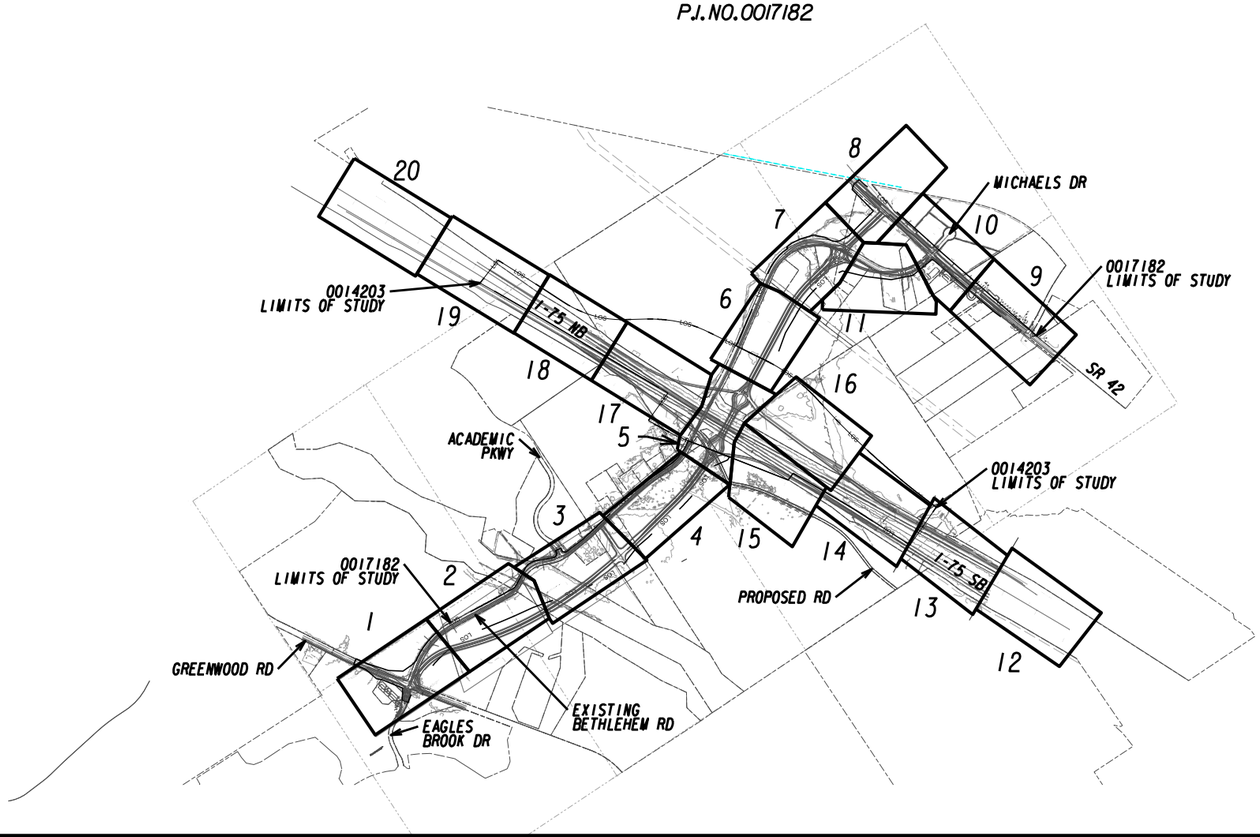
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OVERHEAD/SUBSURFACE UTILITY ENGINEERING

I-75 @ CR 312/ BETHLEHEM ROAD

FEDERAL AID PROJECT

FEDERAL ROUTE * US 401/I-75
STATE ROUTE * SR 42
P.I.NO.0017182



GEORGIA REGISTERED No. 3184 LAND SURVEYOR BYRON T. FREEMAN

08/01/2025

INDEX OF SHEETS	DRAWING NO.
COVER PAGE	24-0000
GENERAL NOTES	24-000A
UTILITY LEGEND	24-000B
POLE DATA SHEETS	24-000C-000D
PLAN SHEETS	24-0001-24-0020

P.I. 0017182

PRIME: ARCADIS

PG PROJECT NUMBER: 1013-012

PG CONTACT: MATTHEW JONES

GEORGIA811 Utilities Protection Center, Inc
Know what's below. Call before you dig.

PG
PLATINUMgeomatics
5039 B U Bowman Drive, Suite 400 | Buford, Georgia 30518 | 678-288-9869

SCALE IN FEET
0 1000 2000 4000

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/ BETHLEHEM ROAD
HENRY COUNTY P.I. 0017182

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0000
CORRECTED:		DATE:		
VERIFIED:		DATE:		

GPLN-CE 11/05/2020

GENERAL NOTES:

(1) WHERE INDICATED, UTILITY PIPE SIZE AND MATERIAL ARE BASED ON VISUAL EVIDENCE OR RECORD PLANS.

(2) EMPTY CONDUITS, OVERHEAD COMMERCIAL LIGHTING, TRAFFIC CONTROL SENSORS IN PAVING, IRRIGATION/SPRINKLER, AND OTHER PRIVATELY OWNED UTILITY LINES WERE NOT INCLUDED IN THIS SUE PROJECT.

(3) ALL UNDERGROUND TELEPHONE LINES ARE DIRECT-BURIED UNLESS OTHERWISE NOTED.

(4) ALL FIRE HYDRANT CONNECTION MATERIAL SIZES AND TYPES ARE UNKNOWN UNLESS OTHERWISE NOTED ON THE PLANS.

SUE INVESTIGATION DESCRIPTION:

A QL-B OVERHEAD/SUBSURFACE UTILITY ENGINEERING INVESTIGATION (SUE) WAS PERFORMED AND COMPLETED BY PLATINUM GEOMATICS ON 11/1/2024 FOR THIS PROJECT. THE EXISTING OVERHEAD AND UNDERGROUND FACILITIES SHOWN HEREON WERE INCLUDED IN THIS SUE INVESTIGATION. THE PRESENCE OF THESE UTILITY FACILITIES HAS BEEN THOROUGHLY INVESTIGATED AND THE METHOD OF DETERMINING THEIR LOCATION IS INDICATED AS SHOWN IN THE PLANS. UTILITIES THAT HAVE BEEN INSTALLED AFTER THE DATE ABOVE HAVE NOT BEEN INCLUDED IN THIS INVESTIGATION AND SHOULD BE CONSIDERED AS FROM RECORD DRAWING ONLY. ALL OTHER EXISTING TOPOGRAPHIC FEATURES DEPICTED HEREON HAVE BEEN REFERENCED FROM A TOPOGRAPHIC / MAPPING SURVEY AND CONTROL PACKAGE PROVIDED BY PLATINUM GEOMATICS AND DATED JANUARY 2023.

UTILITY SUMMARY:

ALL THE FOLLOWING UTILITY OWNERS WERE REPORTED TO HAVE FACILITIES WITHIN THE VICINITY OF THIS PROJECT AT THE TIME OF THE SUE INVESTIGATION. UTILITIES FOUND WITHIN THE LOS AT THE TIME OF THE SUE INVESTIGATION ARE NOTED OR EACH UTILITY OWNER LISTED AND ARE SHOWN ON THE PLANS HEREON.

(ROF) = RECORDS ON FILE
(RNA) = RECORDS NOT AVAILABLE

AMERICAN TELEPHONE & TELEGRAPH / D (ATT) - TELECOMMUNICATION DISTRIBUTION
NOTE: ALL TELECOMMUNICATIONS LINES FOUND WITHIN THE LOS ARE OWNED BY AMERICAN TELEPHONE & TELEGRAPH UNLESS OTHERWISE NOTED ON THE PLANS. (ROF)

ATLANTA GAS LIGHT (AGL) - NATURAL GAS
NOTE: ALL NATURAL GAS LINES FOUND WITHIN THE LOS ARE OWNED BY ATLANTA GAS LIGHT. (ROF)

CENTRAL GEORGIA EMC (CGEMC) - ELECTRICAL DISTRIBUTION
NOTE: ALL ELECTRICAL DISRIBUTION FOUND WITHIN THE LOS ARE OWNED BY CENTRAL GEORGIA EMC UNLESS OTHERWISE NOTED ON THE PLANS. (ROF)

CENTRAL GEORGIA EMC (CGEMC-T) - TELECOMMUNICATIONS
NOTE: ALL TELECOMMUNICATION LINES FOUND WITHIN THE LOS THAT ARE OWNED BY CENTRAL GEORGIA EMC ARE NOTED ON THE PLANS. (ROF)

CHARTER (CHR) - TELEVISION
NOTE: ALL TELEVISION LINES FOUND WITHIN THE LOS ARE OWNED BY CHARTER UNLESS OTHERWISE NOTED ON THE PLANS. (ROF)

CITY OF LOCUST GROVE (COLG) -SEWER
NOTE: CITY OF LOCUST GROVE REPORTED TO HAVE NO FACILITIES WITHIN THE LOS. (ROF)

COMCAST (COM) - TELEVISION
NOTE: ALL TELEVISION LINES FOUND WITHIN THE LOS THAT ARE OWNED BY COMCAST ARE NOTED ON THE PLANS. (ROF)

THE GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) - TRAFFIC CONTROL
NOTE: ALL TRAFFIC CONTROL FACILITIES FOUND WITHIN THE LOS ARE OWNED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION UNLESS OTHERWISE NOTED ON THE PLANS. (ROF)

GEORGIA POWER COMPANY (GPC) - ELECTRICAL DISTRIBUTION
NOTE: ALL ELECTRICAL DISTRIBUTION LINES FOUND WITHIN THE LOS THAT ARE OWNED BY GEORGIA POWER COMPANY ARE NOTED ON THE PLANS. (ROF)

GEORGIA TRANSMISSION CORPORATION (GTC) - ELECTRICAL TRANSMISSION
NOTE: ALL ELECTRICAL TRANSMISSION LINES FOUND WITHIN THE LOS ARE OWNED BY GEORGIA TRANSMISSION CORPORATION AND NOTED ON THE PLANS. (ROF)

HENRY COUNTY WATER AUTHORITY (HCWA) - WATER & SEWER
NOTE: ALL WATER & SEWER LINES FOUND WITHIN THE LOS ARE OWNED BY HENRY COUNTY WATER AUTHORITY UNLESS OTHERWISE NOTED ON THE PLANS. (ROF)

P.I. 0017182

PRIME: ARCADIS

PG PROJECT NUMBER: 1013-012

PG CONTACT: MATTHEW JONES

PG
PLATINUMgeomatics
5039 B U Bowman Drive, Suite 400 | Buford, Georgia 30518 | 678-288-9869

GDOT Georgia Department of Transportation

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/
BETHLEHEM ROAD
HENRY COUNTY P.I. 0017182

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-000A
CORRECTED:		DATE:		
VERIFIED:		DATE:		

GPLN-CE
11/05/2020

UTILITY LINECODES

	EXISTING	TO BE REMOVED	PROPOSED	TYPE OF UTILITY
OVERHEAD	E	E	E	ELECTRIC
	E-T	E-T	E-T	ELECTRIC/TELECOMMUNICATIONS
	E-TV	E-TV	E-TV	ELECTRIC/CABLE TV
	E-TC	E-TC	E-TC	ELECTRIC/TRAFFIC CONTROL
	E-T-TV	E-T-TV	E-T-TV	ELECTRIC/TELECOMMUNICATIONS/CABLE TV
	E-T-TV-TC	E-T-TV-TC	E-T-TV-TC	ELECTRIC/TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
	E-TV-TC	E-TV-TC	E-TV-TC	ELECTRIC/CABLE TV/TRAFFIC CONTROL
	E-T-TC	E-T-TC	E-T-TC	ELECTRIC/TELECOMMUNICATIONS/TRAFFIC CONTROL
	GW	GW	GW	GUY WIRE
	T	T	T	TELECOMMUNICATIONS
	T-TC	T-TC	T-TC	TELECOMMUNICATIONS/TRAFFIC CONTROL
	T-TV-TC	T-TV-TC	T-TV-TC	TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
	T-TV	T-TV	T-TV	TELECOMMUNICATIONS/CABLE TV
	TV	TV	TV	CABLE TV
	TV-TC	TV-TC	TV-TC	CABLE TV/TRAFFIC CONTROL
	TC	TC	TC	TRAFFIC CONTROL
UNDERGROUND	E	E	E	ELECTRIC (QL-D)
	E(C)	E(C)		ELECTRIC (QL-C)
	E(B)	E(B)		ELECTRIC (QL-B)
	T	T	T	TELECOMMUNICATIONS (QL-D)
	T(C)	T(C)		TELECOMMUNICATIONS (QL-C)
	T(B)	T(B)		TELECOMMUNICATIONS (QL-B)
	TV	TV	TV	CABLE TV (QL-D)
	TV(C)	TV(C)		CABLE TV (QL-C)
	TV(B)	TV(B)		CABLE TV (QL-B)
	W	W	W	WATER (QL-D)
	W(C)	W(C)		WATER (QL-C)
	W(B)	W(B)		WATER (QL-B)
	**"W"	**"W"	**"W"	WATER FOR LABELED PIPE SIZES (QL-D)
	**"W(C)	**"W(C)		WATER FOR LABELED PIPE SIZES (QL-C)
	**"W(B)	**"W(B)		WATER FOR LABELED PIPE SIZES (QL-B)
	NW	NW	NW	NON-POTABLE WATER (QL-D)
	NW(C)	NW(C)		NON-POTABLE WATER (QL-C)
	NW(B)	NW(B)		NON-POTABLE WATER (QL-B)
	**"NW"	**"NW"	**"NW"	NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-D)
	**"NW(C)	**"NW(C)		NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-C)
	**"NW(B)	**"NW(B)		NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-B)
	STM	STM	STM	STEAM (QL-D)
	STM(C)	STM(C)		STEAM (QL-C)
	STM(B)	STM(B)		STEAM (QL-B)
	**"STM	**"STM	**"STM	STEAM FOR LABELED PIPE SIZES (QL-D)
	**"STM(C)	**"STM(C)		STEAM FOR LABELED PIPE SIZES (QL-C)
	**"STM(B)	**"STM(B)		STEAM FOR LABELED PIPE SIZES (QL-B)
	SS	SS	SS	SANITARY SEWER WITH FLOW DIRECTION (QL-D)
	SS(C)	SS(C)		SANITARY SEWER WITH FLOW DIRECTION (QL-C)
	SS(B)	SS(B)		SANITARY SEWER WITH FLOW DIRECTION (QL-B)
	Σ**"SS	Σ**"SS	Σ**"SS	SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-D)
	Σ**"SS(C)	Σ**"SS(C)		SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-C)
	Σ**"SS(B)	Σ**"SS(B)		SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-B)
	SFM	SFM	SFM	SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-D)
	SFM(C)	SFM(C)		SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-C)
	SFM(B)	SFM(B)		SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-B)
	CS	CS		COMBINED SANITARY SEWER WITH FLOW DIRECTION
	G	G	G	GAS (QL-D)
	G(C)	G(C)		GAS (QL-C)
	G(B)	G(B)		GAS (QL-B)
	**"G	**"G	**"G	GAS FOR LABELED PIPE SIZES (QL-D)
	**"G(C)	**"G(C)		GAS FOR LABELED PIPE SIZES (QL-C)
	**"G(B)	**"G(B)		GAS FOR LABELED PIPE SIZES (QL-B)
	P	P	P	PETROLEUM (QL-D)
	P(C)	P(C)		PETROLEUM (QL-C)
	P(B)	P(B)		PETROLEUM (QL-B)
	**"P	**"P	**"P	PETROLEUM FOR LABELED PIPE SIZES (QL-D)
	**"P(C)	**"P(C)		PETROLEUM FOR LABELED PIPE SIZES (QL-C)
	**"P(B)	**"P(B)		PETROLEUM FOR LABELED PIPE SIZES (QL-B)
	TC			TRAFFIC CONTROL (QL-D)
	TC(C)			TRAFFIC CONTROL (QL-C)
	TC(B)			TRAFFIC CONTROL (QL-B)
	UNK(B)	UNK(B)		UNKNOWN UTILITY FOUND IN SUE INVESTIGATION (QL-B)

FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS

UTILITY SYMBOLS

EXISTING	PROPOSED	TEMPORARY	
			UTILITY POLE/GUY POLE
			VENT
			GUY ANCHOR
			LIGHT POLE
E	E	E	ELECTRIC MANHOLE
HE	HE	HE	ELECTRIC HAND HOLE
E	E	E	TRANSFORMER
E	E	E	ELECTRIC METER
E	E	E	ELECTRIC LINE MARKER U/G
E	E	E	ELECTRIC BOX
E			ELECTRIC YARD LIGHT POLE
T T	T T	T T	TRANSMISSION TOWER
T	T	T	TELECOMMUNICATIONS MANHOLE
HT	HT	HT	TELECOMMUNICATIONS HANDHOLE
T	T	T	TELECOMMUNICATIONS PEDESTAL
T	T	T	TELECOMMUNICATIONS LINE MARKER U/G
X	X	X	SPLICE BOX
SLC	SLC	SLC	SUBCRIBER LOOP CARRIER (aka "SLICK")
			PHONE BOOTH
			TELECOMMUNICATIONS CABINET
TV	TV	TV	CABLE TV CABINET
TV	TV	TV	CABLE TV MANHOLE
HTV	HTV	HTV	CABLE TV HANDHOLE
			CABLE TV PEDESTAL
			CABLE TV LINE MARKER U/G
			SATELLITE DISH
			GAS YARD LIGHT POLE
G	G	G	GAS VALVE
			GAS VALVE MARKER
G	G	G	GAS METER
G	G	G	GAS MANHOLE
GPR	GPR	GPR	GAS PRESSURE REGULATOR
G	G	G	GAS VAULT
GTS	GTS	GTS	GAS TEST STATION
G	G	G	GAS LINE MARKER U/G

EXISTING	PROPOSED	TEMPORARY	
P	P	P	PETROLEUM VALVE
P	P	P	PETROLEUM VALVE MARKER
P	P	P	PETROLEUM LINE MARKER U/G
W	W	W	WATER VALVE
W	W	W	WATER VALVE MARKER
W	W	W	WATER METER
W	W	W	WATER MANHOLE
			FIRE HYDRANT ASSEMBLY (INCLUDES ASSOCIATED VALVE)
BFP	BFP	BFP	BACKFLOW PREVENTER
PIV	PIV	PIV	PRESSURE INDICATOR VALVE
ARV	ARV	ARV	AIR RELEASE VALVE
W	W	W	WATER VAULT
			STAND PIPE
W	W	W	WATER LINE MARKER U/G
CI	CI	CI	CLEANOUT
SS	SS	SS	SANITARY SEWER MANHOLE
ARV	ARV	ARV	AIR RELEASE VALVE
GT	GT	GT	GREASE TRAP
S	S	S	SANITARY SEWER FORCE MAIN LINE MARKER U/G
S	S	S	SANITARY SEWER FORCE MAIN VALVE
S	S	S	SANITARY SEWER FORCE MAIN VALVE MARKER
TC			TRAFFIC CONTROL MANHOLE/ ELECTRIC COMMUNICATIONS BOX
			TRAFFIC CONTROL PEDESTRIAN SIGNAL/BUTTON POST
			TRAFFIC CONTROL CABINET
HTC			TRAFFIC CONTROL HANDHOLE/PULLBOX

FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS

MISCELLANEOUS

- LIMITS OF OVERHEAD AND SUBSURFACE UTILITY INVESTIGATION
- TH — TEST HOLE (QL-A ONLY)
- 123 — POLE ID
- EOI — END OF INFORMATION
- A01 — SANITARY SEWER MANHOLE (SSMH) ID
- QUALITY LEVEL (QL) DELINEATION
- C123 — CONFLICT LOCATION (UTILITY IMPACT ANALYSIS (UIA) ONLY)

QUALITY LEVELS AND DEFINITIONS

QL-D DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-C EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-B INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. QL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

QL-A OBTAIN PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE BY EXCAVATING A TEST HOLE. THE TEST HOLE SHALL BE DONE USING VACUUM EXCAVATION OR COMPARABLE NONDESTRUCTIVE EQUIPMENT IN A MANNER AS TO CAUSE NO DAMAGE TO THE UTILITY LINE. AFTER EXCAVATING A TEST HOLE, A FIELD SURVEY SHALL BE PERFORMED TO DETERMINE THE EXACT LOCATION AND POSITION OF THE UTILITY LINE.

ABBREVIATIONS LEGEND

AATUR	ABANDONED ACCORDING TO UTILITY RECORDS	OVHD	OVERHEAD
AATFO	ABANDONED ACCORDING TO FIELD OBSERVATION	PE	POLYETHYLENE PIPE
ACP	ASBESTOS CONCRETE PIPE	PLAS	PLASTIC PIPE
ARV	AIR RELEASE VALVE	PR	PAIR
CIP	CAST IRON PIPE	PVC	POLYVINYL CHLORIDE PIPE
COND	CONDUIT	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	STL	STEEL PIPE
FO	FIBER OPTIC	STR	STRAND
FDC	FIRE DEPARTMENT CONNECTION	SVC	SERVICE, UNKNOWN SIZE/TYPE
GALV	GALVANIZED PIPE	TEL	TELECOMMUNICATIONS
HDPE	HIGH DENSITY POLYETHYLENE	UG	UNDERGROUND
HP	HIGH PRESSURE		
MP	MEDIUM PRESSURE		
NURIA	NO UTILITY RECORD INFORMATION AVAILABLE		

TELEPHONE PAIR SIZE TABLE

TELEPHONE PAIR SIZE	TELEPHONE CABLE DIAMETER
5 - 100	0.50 TO 2.00 IN
101 - 2400	UP TO 3.50 IN

P.I. 0017182

PRIME: ARCADIS

PG PROJECT NUMBER: 1013-012

PG CONTACT: MATTHEW JONES

PG PLATINUMgeomatics
5039 B U Bowman Drive, Suite 400 | Buford, Georgia 30518 | 678-288-9869

GDOT Georgia Department of Transportation

REVISION DATES

UTILITY PLANS

I-75 @ CR 312/BETHLEHEM ROAD HENRY COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-000B
CORRECTED:		DATE:		
VERIFIED:		DATE:		

GPLN-CE 11/05/2020

POLE #	POLE ID	POLE OWNER	UTILITY OWNERS ATTACHED					NORTHING	EASTING	HT.	DIA.	MAT'L	MISC.
			ELEC	TELE COM	CABLE TV	TRAFFIC	OTHER						
101	211745	CGEMC	CGEMC	CGEMC–T	COM			1228598.0	2299382.9	43'	12"	WOOD	
102	211746	CGEMC	CGEMC	CGEMC–T	COM			1228397.0	2299497.5	36'	12"	WOOD	3 ANCHORS
103	211714	CGEMC	CGEMC	CGEMC–T	COM			1228148.5	2299653.2	38'	12"	WOOD	6 ANCHORS
104	211715	CGEMC	CGEMC	CGEMC–T	COM			1228186.5	2299720.3	28'	12"	WOOD	7 ANCHORS
105	211716	CGEMC	CGEMC	CGEMC–T ATT	COM			1227909.2	2299903.2	35'	12"	WOOD	3 ANCHORS
106	207140	CGEMC	CGEMC	CGEMC–T				1227712.4	2300042.4	22'	12"	WOOD	4 ANCHORS
107	207154	CGEMC	CGEMC	CGEMC–T				1227497.2	2300194.0	24'	12"	WOOD	
108	211717	CGEMC	CGEMC	CGEMC–T ATT	COM			1227931.4	2299936.7	37'	12"	WOOD	5 ANCHORS
109	211718	CGEMC	CGEMC	CGEMC–T ATT	COM			1228047.2	2300113.1	18'	12"	WOOD	3 ANCHORS
110	211719	CGEMC	CGEMC	CGEMC–T ATT	COM			1228162.3	2300325.6	43'	12"	WOOD	4 ANCHORS
111	211723	CGEMC	CGEMC	CGEMC–T ATT	COM			1228213.5	2300539.6	47'	12"	WOOD	8 ANCHORS
112	211724	CGEMC	CGEMC	CGEMC–T ATT	COM			1228153.9	2300829.8	40'	12"	WOOD	4 ANCHORS
113	211725	CGEMC	CGEMC	CGEMC–T ATT	COM			1228128.1	2301126.4	37'	12"	WOOD	
114	211726	CGEMC	CGEMC	CGEMC–T ATT	COM			1228103.3	2301407.2	39'	12"	WOOD	4 ANCHORS
115	211727	CGEMC	CGEMC	CGEMC–T ATT	COM			1228158.1	2301655.5	42'	12"	WOOD	5 ANCHORS
116	211728	CGEMC	CGEMC	CGEMC–T ATT	COM			1228167.2	2301949.3	36'	12"	WOOD	
117	211729	CGEMC	CGEMC	CGEMC–T ATT	COM			1228177.5	2302283.1	33'	12"	WOOD	
118	211491	CGEMC	CGEMC	CGEMC–T ATT	COM			1228186.7	2302613.6	34'	12"	WOOD	
119	244295	CGEMC	CGEMC	CGEMC–T ATT				1228196.2	2302913.4	25'	12"	WOOD	4 ANCHORS
120	244295	CGEMC	CGEMC					1228060.9	2302895.2	24'	8"	WOOD	LIGHT POLE
121	244299	CGEMC	CGEMC	CGEMC–T ATT				1228217.4	2303050.7	38'	12"	WOOD	1 ANCHOR, TRANSFORMER
122	244298	CGEMC	CGEMC	ATT				1228122.3	2303056.3	27'	10"	WOOD	
123	244297	CGEMC	CGEMC					1228072.2	2303059.6	18'	8"	WOOD	LIGHT POLE
124		ATT		ATT				1228150.3	2303093.2	20'	10"	WOOD	NETWORK INTERFACE
125		ATT		ATT				1228248.3	2303794.7	11'	8"	WOOD	
126	211814	CGEMC	CGEMC	ATT				1228332.4	2303788.3	21'	8"	WOOD	LIGHT
127	211815	CGEMC	CGEMC	CGEMC–T ATT				1228360.5	2303945.3	39'	15"	WOOD	TRANSFORMER, RECLOSER, ANTENNA
128	211826	CGEMC	CGEMC	CGEMC–T ATT				1228391.8	2304133.9	43'	15"	WOOD	3 ANCHORS, LIGHT, TRANSFORMER
129		ATT		ATT				1228281.8	2304131.3	24'	8"	WOOD	NETWORK INTERFACE
130	351527	CGEMC	CGEMC	CGEMC–T				1228102.1	2304287.0	36'	10"	WOOD	
131	351316	CGEMC	CGEMC	CGEMC–T				1227752.7	2304476.9	38'	10"	WOOD	
132		GTC	GTC					1230018.5	2306691.0	91'	12"x12"	METAL	8 ANCHORS, TRANSMISSION POLE
133		GPC	GPC					1229740.1	2306822.5	40'	12"	WOOD	
134		GPC	GPC					1229510.4	2306898.3	48'	12"	WOOD	
135		GPC	GPC					1229278.2	2306976.1	44'	12"	WOOD	
136		GPC	GPC					1229070.3	2307044.7	43'	12"	WOOD	
137		GTC	GTC					1229028.8	2307015.3	98'	12"x12"	METAL	8 ANCHORS, TRANSMISSION POLE
138	211478	CGEMC	CGEMC	CGEMC–T ATT				1229840.8	2307110.8	23'	12"	WOOD	2 ANCHORS
139	211477	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229851.0	2307368.8	39'	12"	WOOD	4 ANCHORS
140	211476	CGEMC	CGEMC		CHR			1229754.5	2307383.8	29'	12"	WOOD	2 ANCHORS, LIGHT
141	211475	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229773.9	2307598.0	38'	12"	WOOD	2 ANCHORS
142	211474	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229632.1	2307794.5	43'	12"	WOOD	3 ANCHORS
143	211473	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229439.4	2307929.3	32'	12"	WOOD	3 ANCHORS
144	211472	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229240.0	2308028.9	37'	12"	WOOD	3 ANCHORS
145	211471	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229034.2	2308022.3	34'	12"	WOOD	6 ANCHORS
146	211470	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228904.9	2308100.3	40'	12"	WOOD	3 ANCHORS, LIGHT
147	211468	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228714.1	2308317.1	37'	12"	WOOD	4 ANCHORS, LIGHT
148	211467	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228653.1	2308540.2	38'	12"	WOOD	3 ANCHORS, TRANSFORMER, LIGHT
149	249534	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228662.4	2308626.0	37'	12"	WOOD	RECLOSER, LIGHT
150	211466	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228674.6	2308741.6	38'	12"	WOOD	4 ANCHORS
151	211465	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228656.0	2308784.7	39'	12"	WOOD	2 ANCHORS, TRANSFORMER
152	206254	CGEMC	CGEMC	CGEMC–T	CHR			1228726.8	2308953.9	40'	12"	WOOD	2 ANCHORS,3 TRANSFORMERS
153	206474	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229959.7	2308630.9	54'	12"	WOOD	9 ANCHORS
154	206473	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229699.9	2308666.0	47'	12"	WOOD	
155	206470	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229458.0	2308698.2	48'	12"	WOOD	8 ANCHORS, TRANSFORMER, NETWORK INTERFACE
156	206471	CGEMC	CGEMC					1229393.2	2308784.7	34'	10"	WOOD	LIGHT POLE
157	206469	CGEMC	CGEMC	CGEMC–T ATT	CHR			1229231.1	2308642.4	45'	12"	WOOD	6 ANCHORS
158	206468	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228946.4	2308712.6	38'	12"	WOOD	RECLOSER, TRANSFORMER, E BOX
159	206252	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228459.7	2308833.6	49'	12"	WOOD	LIGHT
160	206251	CGEMC	CGEMC	CGEMC–T ATT	CHR			1228271.1	2308879.9	45'	12"	WOOD	2 ANCHORS, TRANSFORMER, LIGHT

Total Central Georgia EMC – Electric Distribution (CGEMC) Poles	88
Total American Telephone & Telegraph – Telephone (ATT) Poles	6
Total Georgia Power Company – Electric Distribution (GPC) Poles	6
Total Georgia Transmission Company – Electric Transmission (GTC) Poles	3
Total Georgia Department of Transportation – Traffic (GDOT) Poles	5
Total Pole Count	108

P.I. 0017182

PRIME: ARCADIS

PG PROJECT NUMBER: 1013-012

PG CONTACT: MATTHEW JONES

GEORGIA811 Utilities Protection Center, Inc. Know what's below. Call before you dig.

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REVISION DATES

UTILITY PLANS

I-75 @ CR 312/BETHLEHEM ROAD

HENRY COUNTY

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POLE #	POLE ID	POLE OWNER	UTILITY OWNERS ATTACHED					NORTHING	EASTING	HT.	DIA.	MAT'L	MISC.
			ELEC	TELE COM	CABLE TV	TRAFFIC	OTHER						
161		CGEMC	CGEMC	CGEMC–T ATT	CHR			1227909.1	2308981.3	44'	12"	WOOD	3 ANCHORS, NETWORK INTERFACE
162	206232	CGEMC	CGEMC					1227870.3	2309103.9	31'	12"	WOOD	1 ANCHOR
163	273720	CGEMC	CGEMC	CGEMC–T ATT	CHR			1227640.8	2309064.8	43'	12"	WOOD	
164	273719	CGEMC	CGEMC	CGEMC–T ATT	CHR			1227392.8	2309140.9	38'	12"	WOOD	
165	273718	CGEMC	CGEMC	CGEMC–T ATT	CHR			1227087.4	2309233.0	48'	12"	WOOD	6 ANCHORS
166	206307	CGEMC	CGEMC	ATT	CHR			1227196.5	2309453.3	46'	12"	WOOD	
167	273717	CGEMC	CGEMC	CGEMC–T ATT	CHR			1226843.8	2309310.5	45'	15"	WOOD	
168		CGEMC						1227753.9	2299728.6	15'	5"	PLAS	LIGHT POLE
169		CGEMC						1227696.1	2299786.4	15'	5"	PLAS	LIGHT POLE
171		CGEMC	CGEMC	CGEMC–T ATT				1228319.6	2303716.6	35'	12"	WOOD	1 ANCHOR, TRANSFORMER
224		GDOT						1228705.8	2305107.7	70'	22"	CONC	CAMERA
234	211840	CGEMC	CGEMC	CGEMC–T ATT				1228686.1	2304925.9	52'	14"	WOOD	5 ANCHORS, TRANSFORMER
235	211485	CGEMC					GUY	1229053.3	2305979	30'	9"	WOOD	1 ANCHOR
236	211484	CGEMC	CGEMC	CGEMC–T ATT			GUY	1229143.2	2305925.3	39'	12"	WOOD	
237	211486	CGEMC	CGEMC	CGEMC–T ATT				1229036.9	2305735.5	39'	12"	WOOD	
238	211487	CGEMC	CGEMC	CGEMC–T ATT				1228929.9	2305545.6	39'	12"	WOOD	
239	211488	CGEMC	CGEMC	CGEMC–T ATT				1228818.1	2305349	44'	12"	WOOD	6 ANCHORS
240	211841	CGEMC	CGEMC	CGEMC–T ATT				1228876.7	2305219.9	52'	14"	WOOD	6 ANCHORS
241		ATT		ATT				1228550.5	2304988.2	23'	8"	WOOD	1 ANCHOR
242		ATT		ATT				1228719.2	2305305	29'	8"	WOOD	1 ANCHOR
382	211483	CGEMC	CGEMC	CGEMC–T ATT				1229263.7	2306115.5	39'	12"	WOOD	
383	6	ATT		ATT				1228322.3	2304610.1	25'	10"	WOOD	
384	211489	CGEMC	CGEMC					1228582.7	2304868.5	39'	12"	WOOD	2 ANCHORS
385		CGEMC	CGEMC	CGEMC–T ATT				1228562.2	2304591.3	43'	12"	WOOD	TRANSFORMER
386	211836	CGEMC	CGEMC	ATT				1228587.2	2304683.6	29'	12"	WOOD	LIGHT
387	211838	CGEMC	CGEMC	CGEMC–T ATT				1228625.5	2304761.9	47'	12"	WOOD	
388	272895	CGEMC	CGEMC					1228697.3	2304576.5	35'	12"	WOOD	1 ANCHOR
389	272896	CGEMC	CGEMC					1228997.3	2304545.3	35'	12"	WOOD	1 ANCHOR
390	211490	CGEMC	CGEMC					1228391.1	2304975.5	39'	10"	WOOD	1 ANCHOR, LIGHT, TRANSFORMER
391		CGEMC	CGEMC	CGEMC–T ATT				1229619.8	2306677.2	24'	10"	WOOD	
392		CGEMC	CGEMC	CGEMC–T ATT				1229738.2	2306862.0	26'	10"	WOOD	1 ANCHOR, LIGHT, TRANSFORMER
393		GPC	GPC					1230002.5	2306737.8	43'	12"	WOOD	
394		GPC	GPC					1228774.4	2307139.8	52'	12"	WOOD	
396		CGEMC						1227959.7	2309149.5	17'	5"	PLAS	LIGHT POLE
397		GTC	GTC					1227673.8	2307459.8	90'	12"X12"	METAL	6 ANCHORS, TRANSMISSION POLE
398		GDOT	CEMC			GDOT		1228686.4	2308767.5	34'	12"	WOOD	TRAFFIC POLE
399		GDOT				GDOT		1228773.2	2308765.4	35'	12"	WOOD	TRAFFIC POLE, 1 ANCHOR, TRAFFIC DETECTION DEVICE, LIGHT
400		GDOT				GDOT		1228799.2	2308841.7	39'	12"	WOOD	TRAFFIC POLE, 1 ANCHOR, TRAFFIC DETECTION DEVICE

POLE #	POLE ID	POLE OWNER	UTILITY OWNERS ATTACHED					NORTHING	EASTING	HT.	DIA.	MAT'L	MISC.
			ELEC	TELE COM	CABLE TV	TRAFFIC	OTHER						
401		GDOT				GDOT		1228706.3	2308865.1	35'	12"	WOOD	TRAFFIC POLE, 1 ANCHOR
402		CGEMC						1228732.1	2308964.1	29'	10"	WOOD	ABANDONED, TOPPED
403		CGEMC	CGEMC	CGEMC–T	CHR			1228732.5	2308967.2	40'	12"	WOOD	TRANSFORMER
404		CGEMC	CGEMC		CHR			1228661.9	2309022.4	35'	10"	WOOD	E METER
405		CGEMC	CGEMC	CGEMC–T	CHR			1228842.7	2309230.9	34'	12"	WOOD	2 ANCHORS, LIGHT
406		CGEMC	CGEMC	CGEMC–T ATT	CHR			1230074.2	2308741.8	54'	12"	WOOD	
407		CGEMC	CGEMC		CHR			1229392.2	2308923.6	45'	12"	WOOD	TRANSFORMER
408		CGEMC	CGEMC	CGEMC–T ATT	CHR			1228279.2	2303452.3	34'	12"	WOOD	
409		CGEMC	CGEMC	CGEMC–T ATT				1228491.5	2304399.0	44'	12"	WOOD	
1363	272897	CGEMC	CGEMC					1229344.0	2308741.8	35'	12"	WOOD	1 ANCHOR, TRANSFORMER

P.I. 0017182

PRIME: ARCADIS

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REVISION DATES

UTILITY PLANS
I-75 @CR 312/BETHLEHEM ROAD
HENRY COUNTY

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DRAWING No. 24-000D

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11/05/2020

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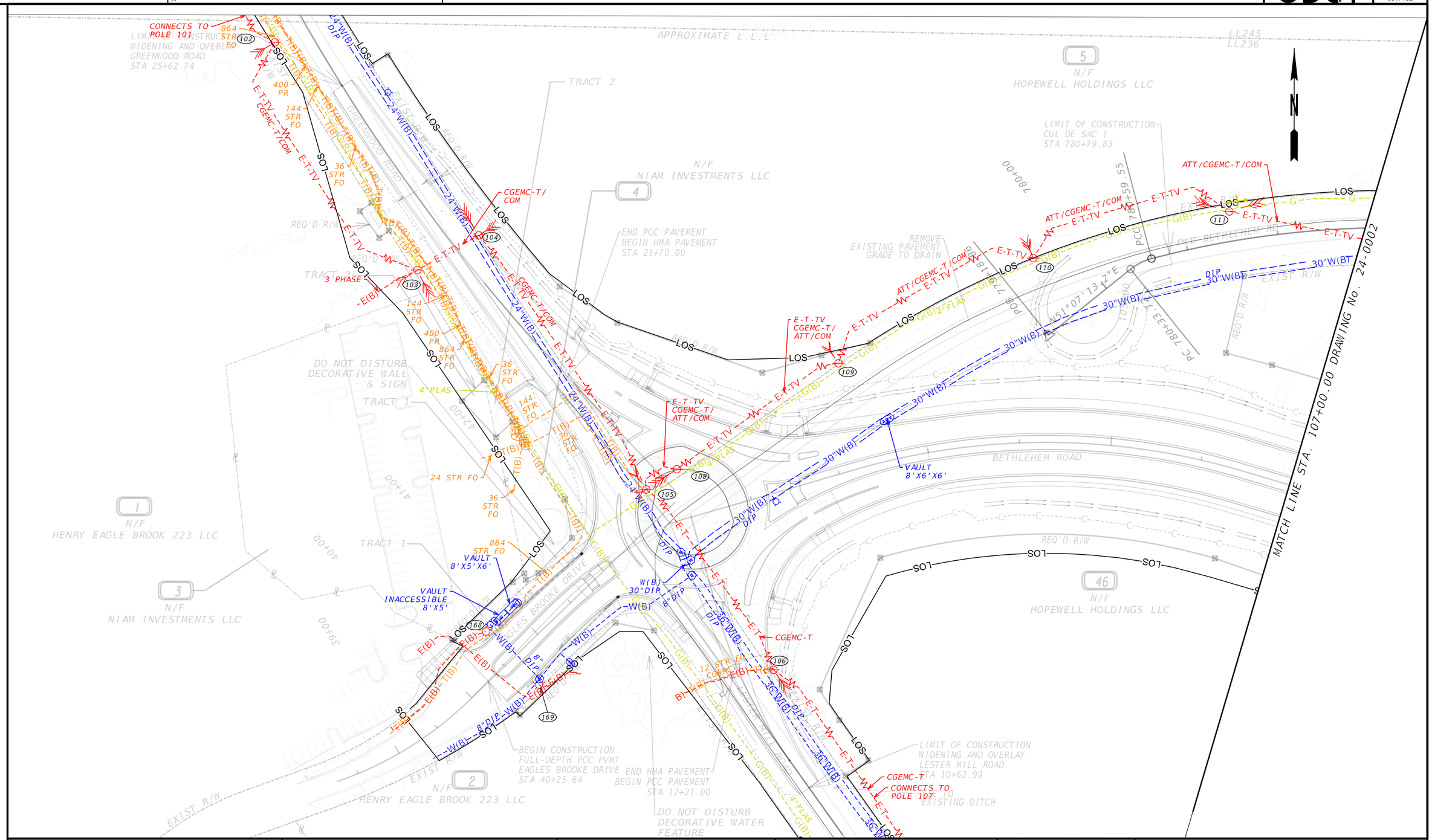

PROPERTY AND EXISTING R/W LINE
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CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

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REVISION DATES		

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I-75 @ CR 312/BETHLEHEM ROAD
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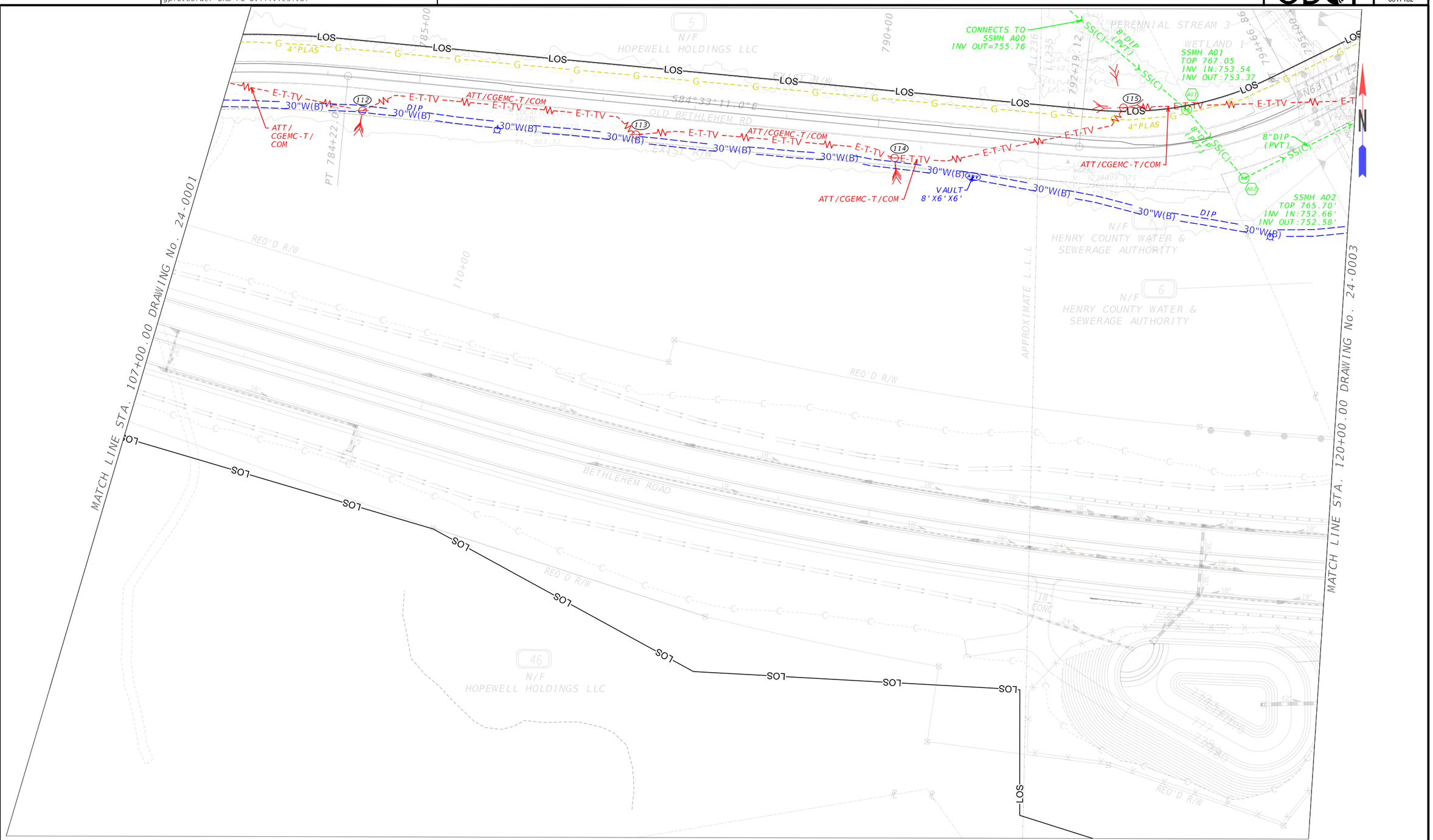

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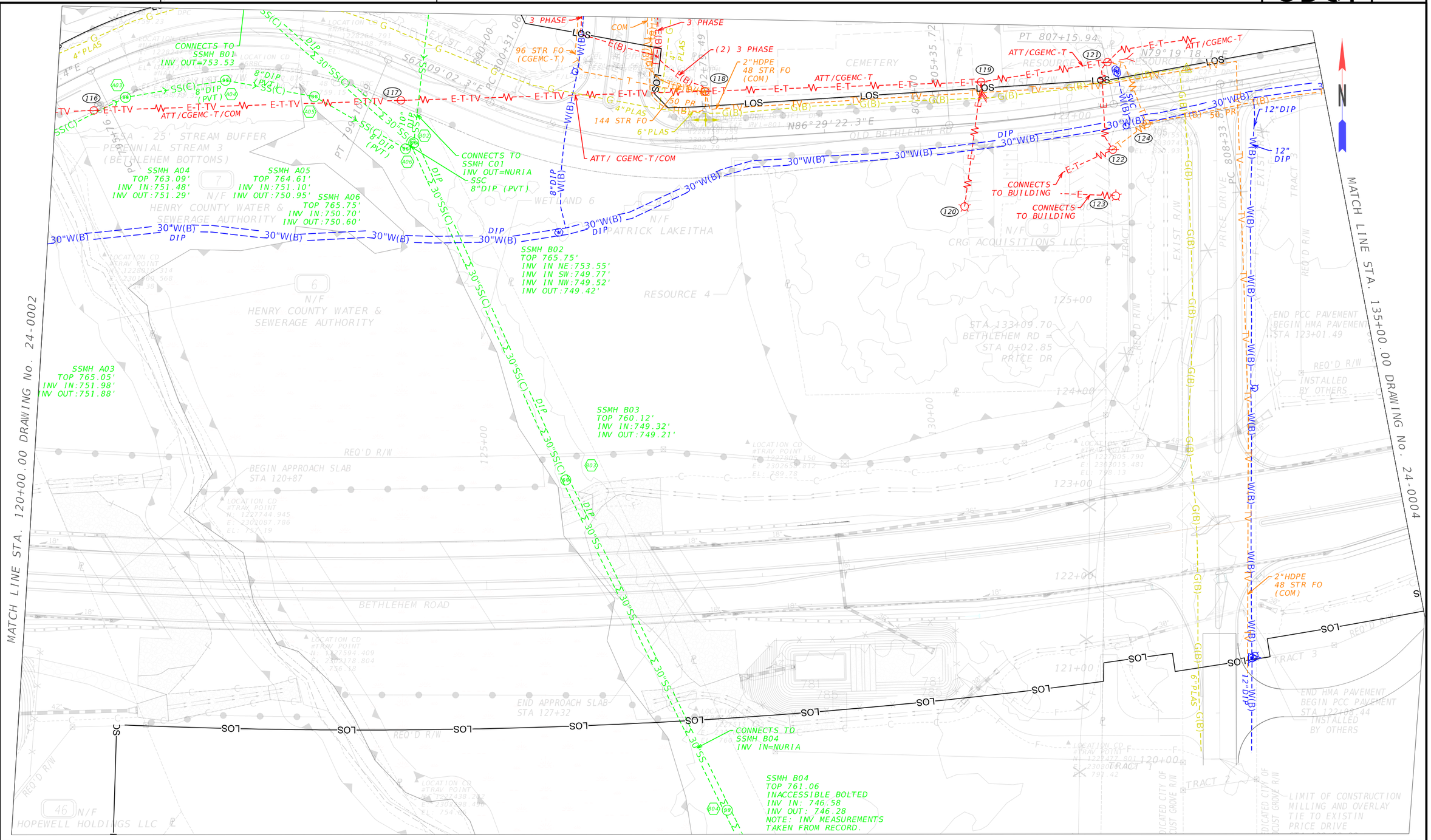

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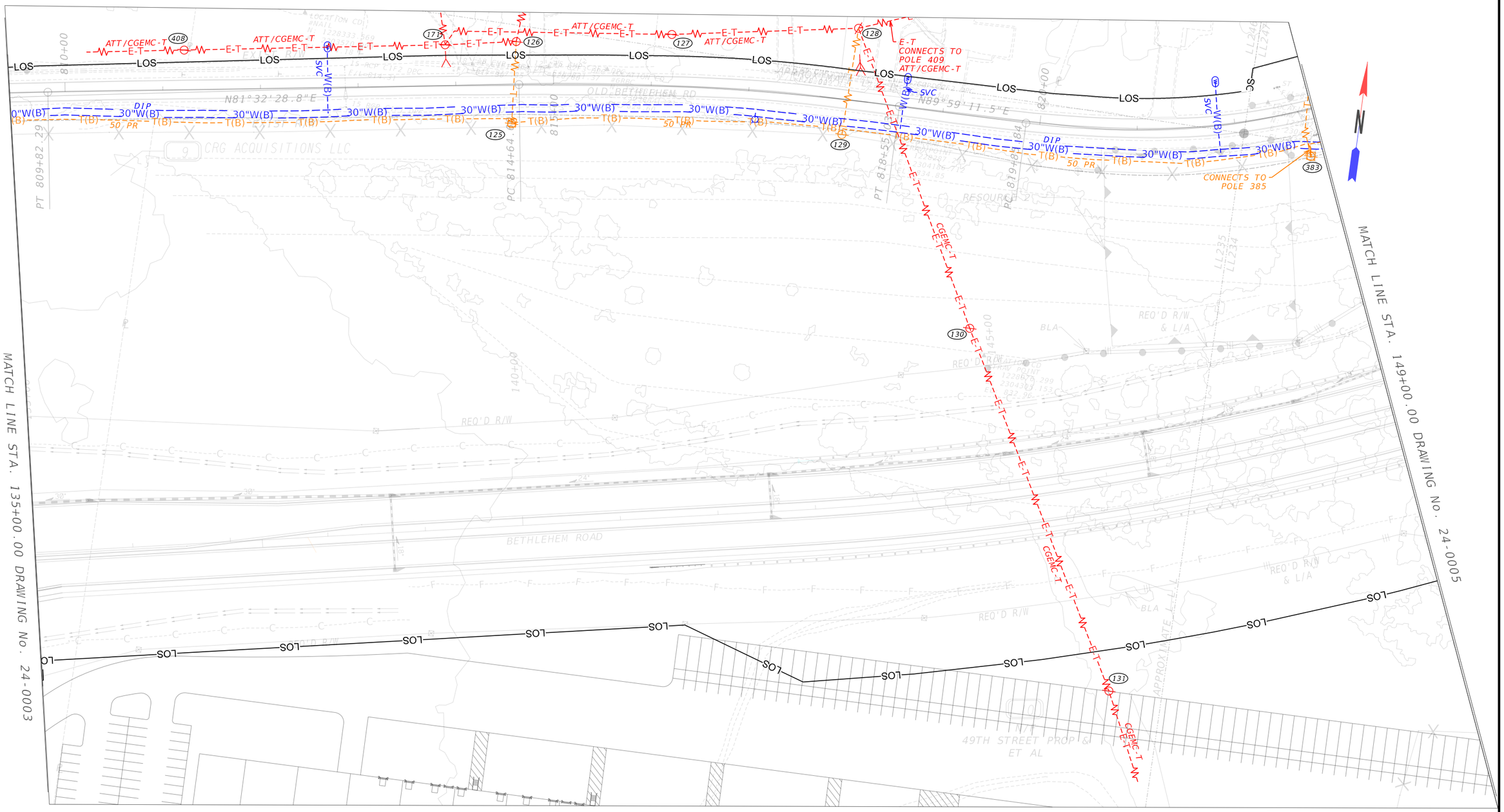

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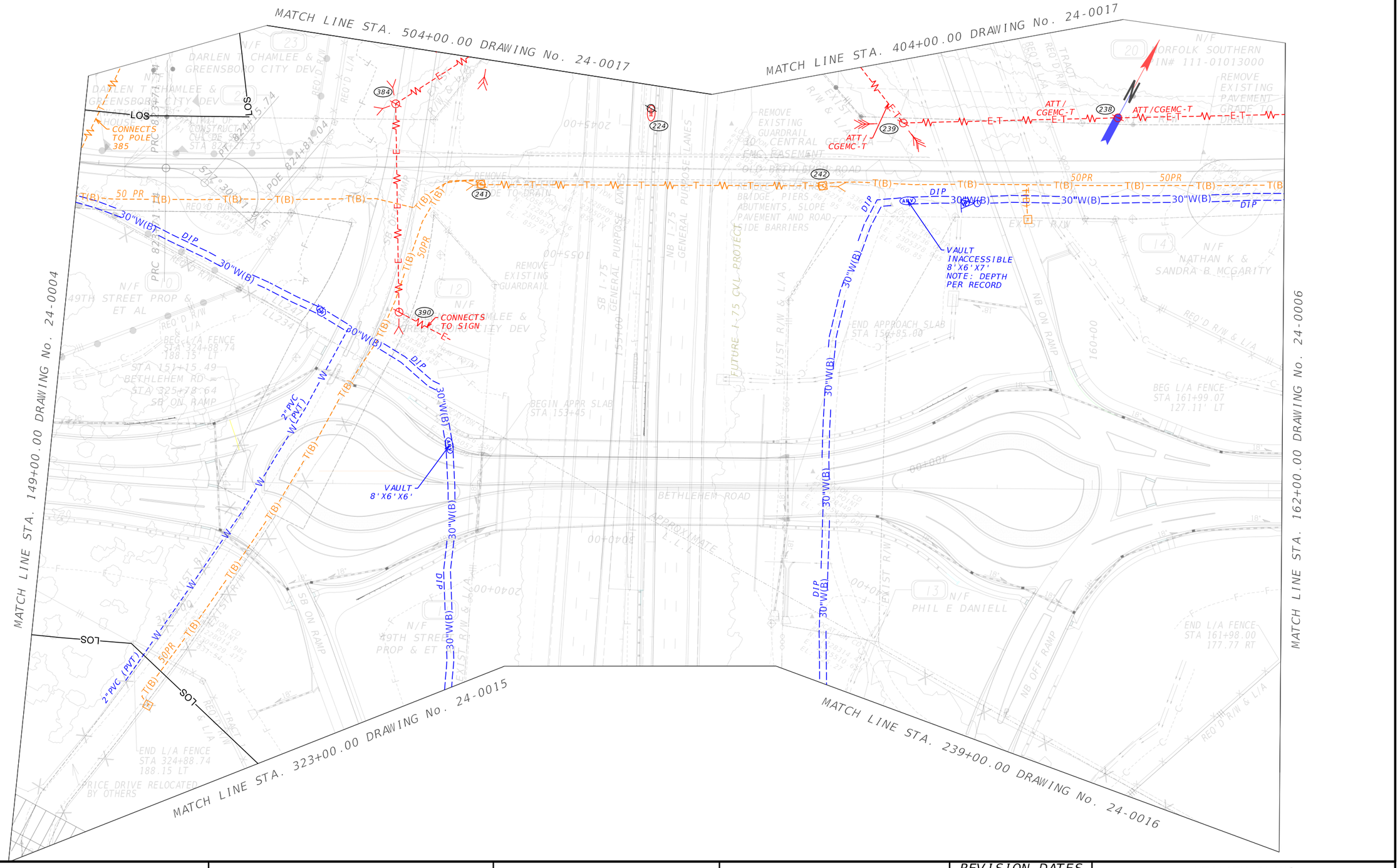

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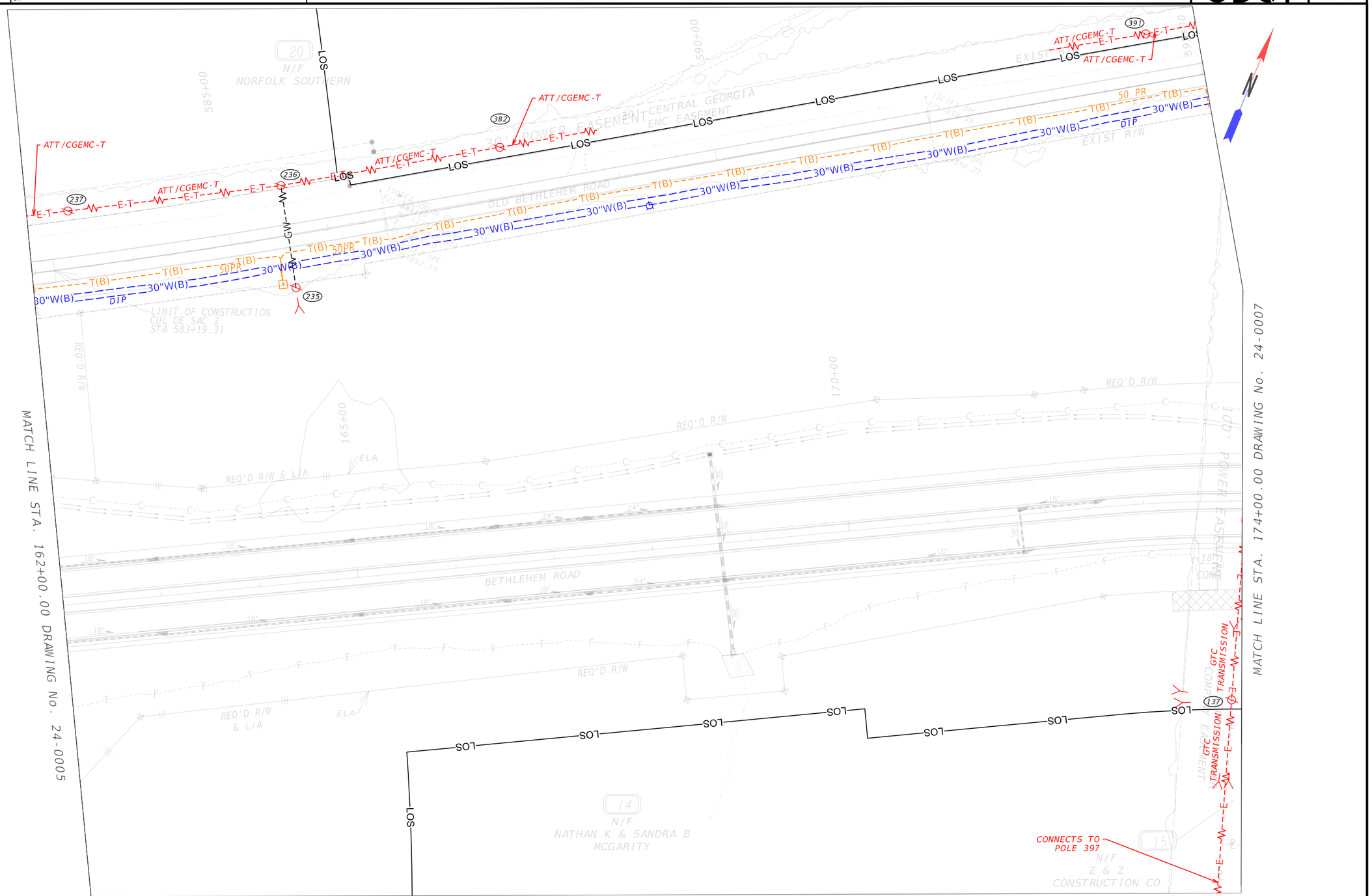

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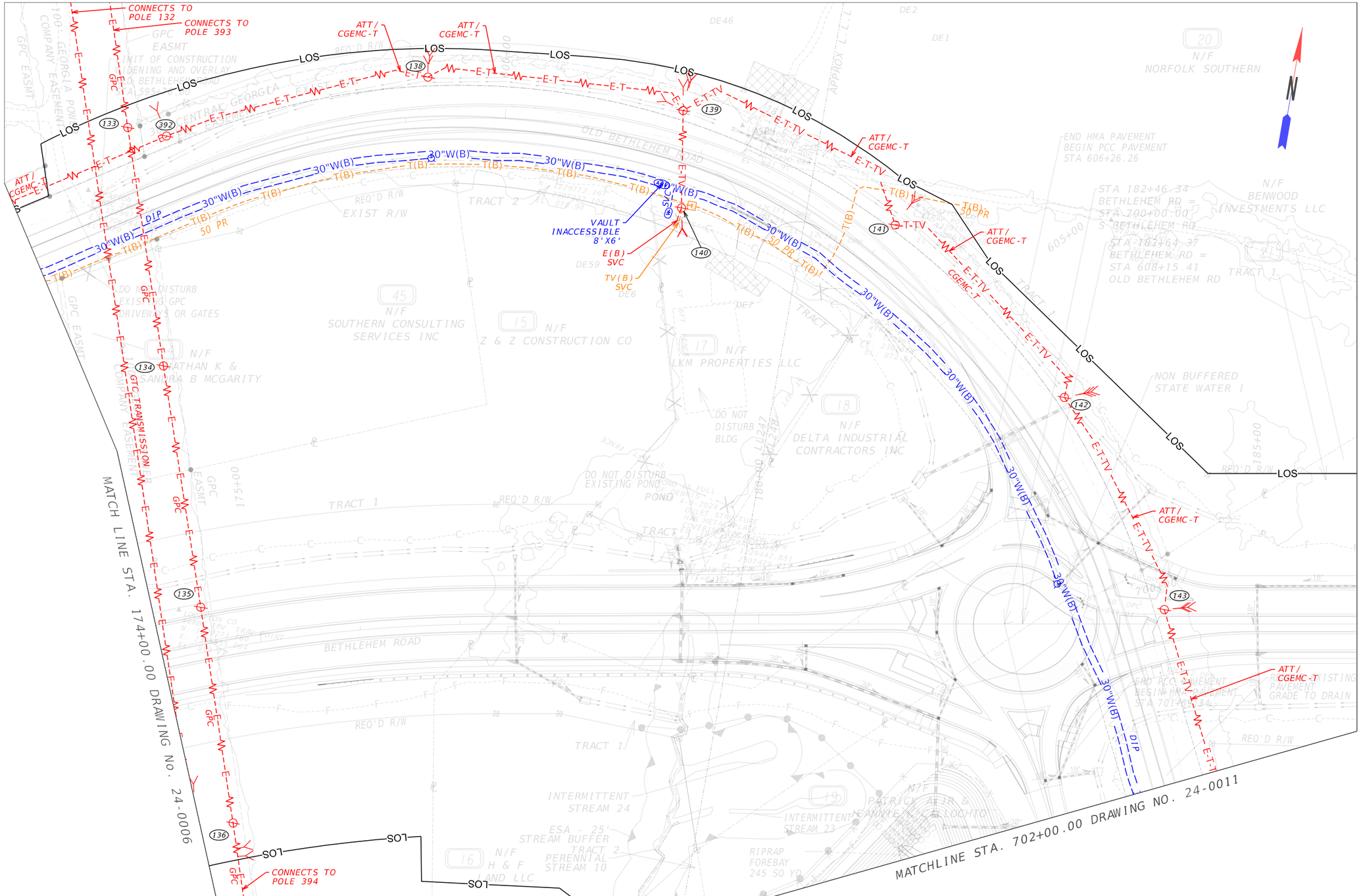

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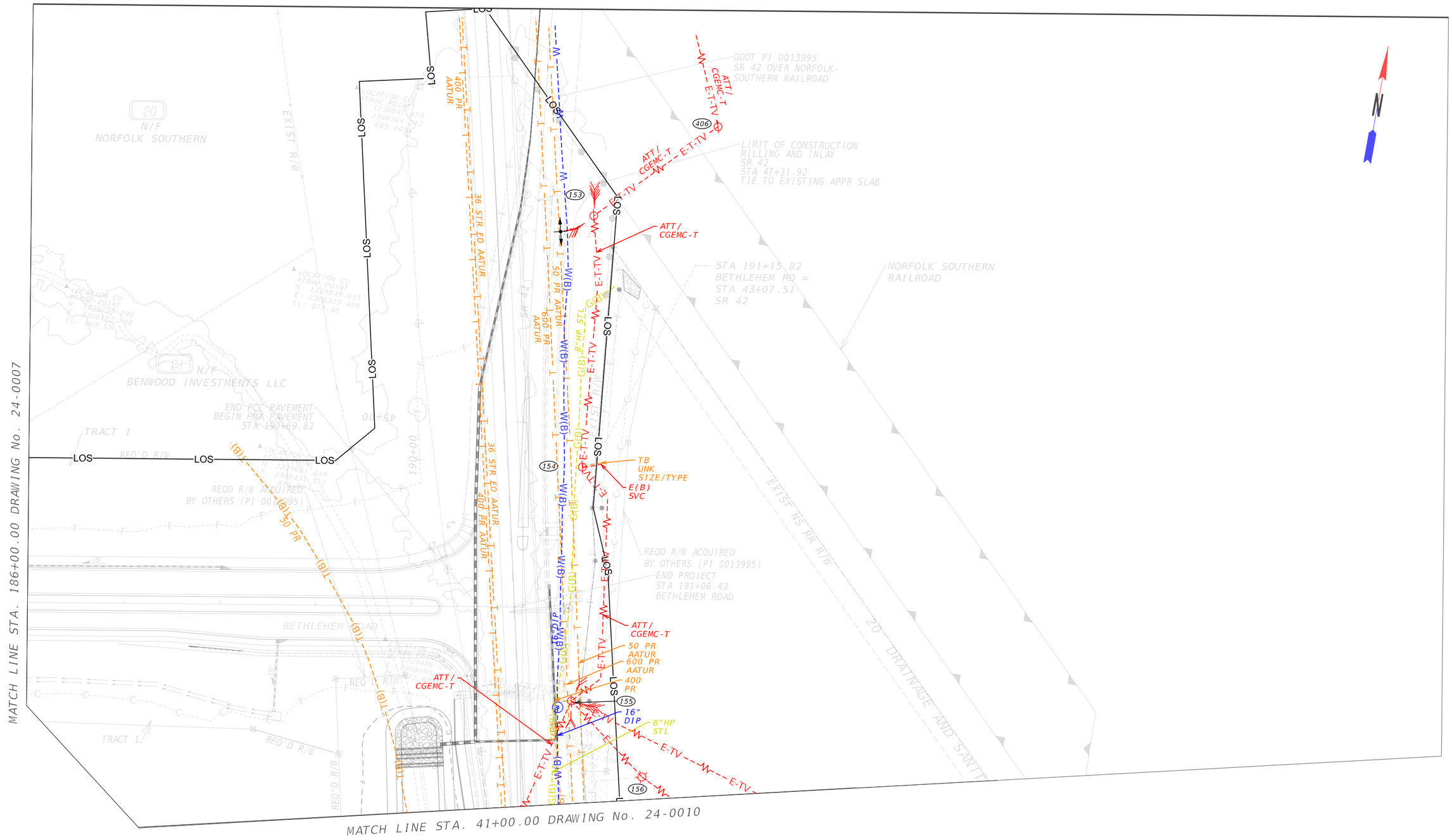

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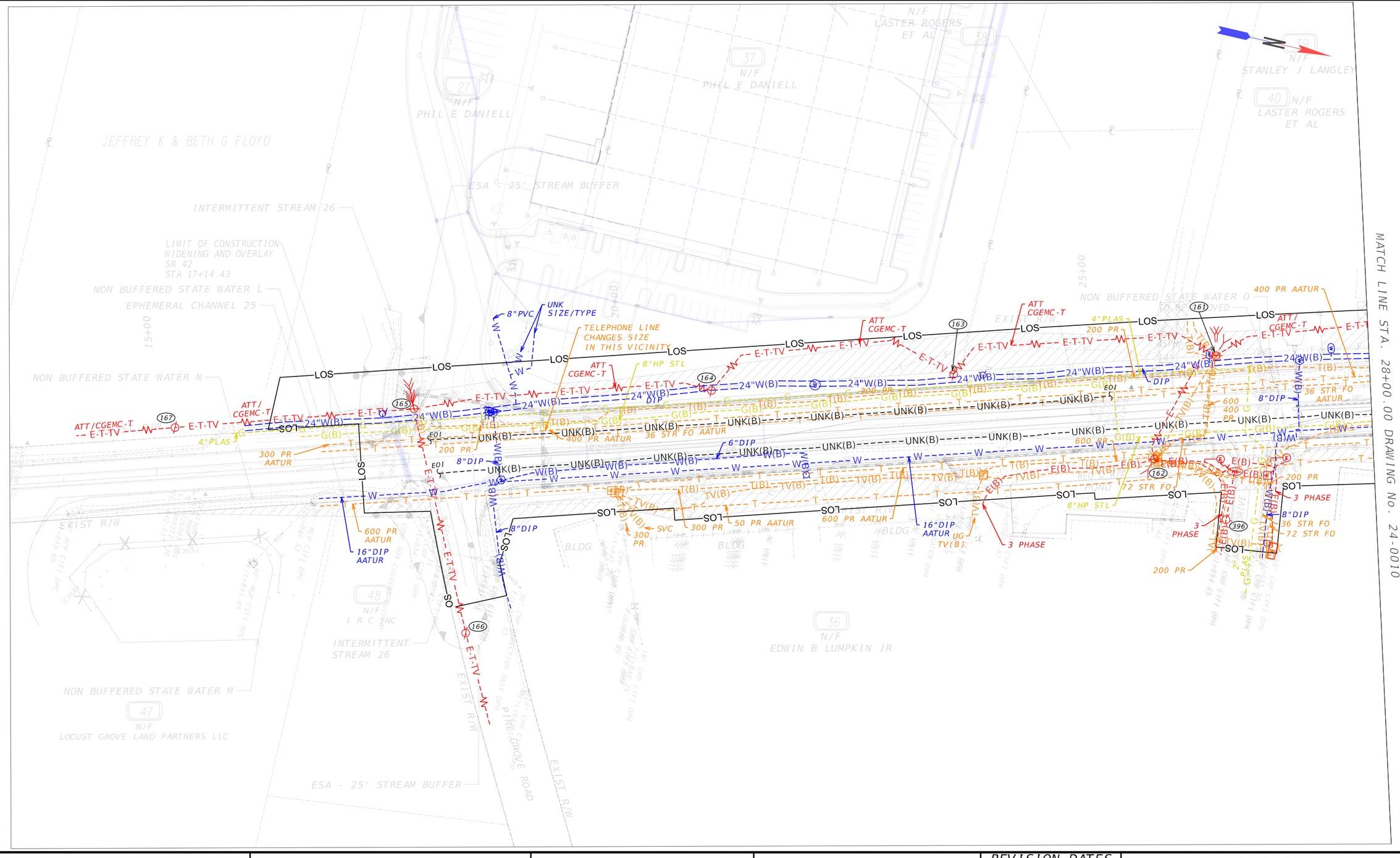

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0009
CORRECTED:		DATE:		
VERIFIED:		DATE:		

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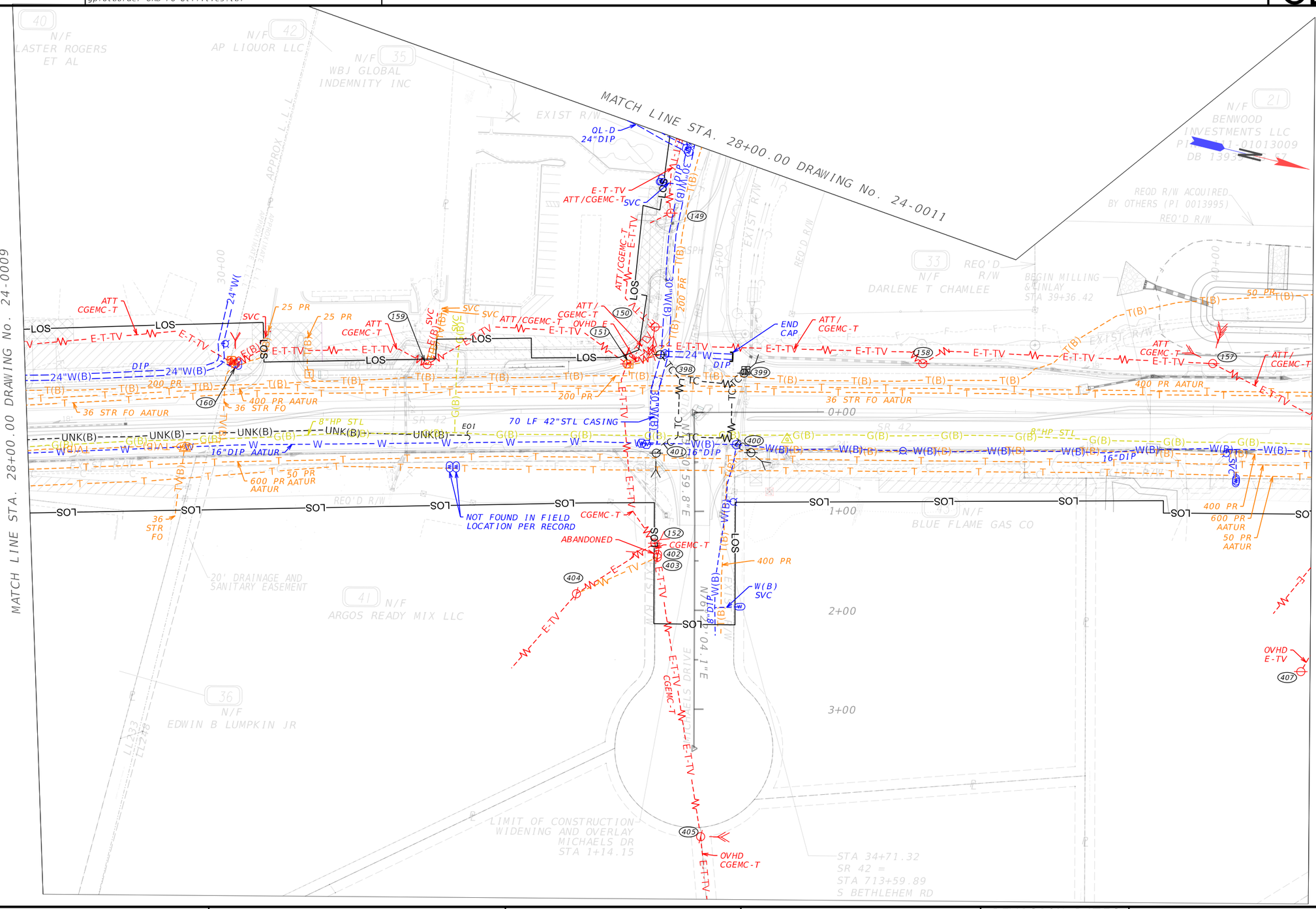

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
EXISTING LIMIT OF ACCESS	
REQ'D LIMIT OF ACCESS	
EXISTING LIMIT OF ACCESS & R/W	
REQ'D LIMIT OF ACCESS & R/W	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA	

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 24-0010

GPLN-CE 11/05/2020

MATCHLINE STA. 702+00.00 DRAWING NO. 24-0007

MATCHLINE STA. 711+00.00 DRAWING NO. 24-0010

TRACT 1

TRACT 2

21 N/F BENWOOD INVESTMENTS LLC

REQD R/W ACQUIRED BY OTHERS (PI 0013995)

33 N/F DARLENE T CHAMLEE

REMOVE EXISTING PAVEMENT GRADE TO DRAIN

EXISTING PAVEMENT GRADE TO DRAIN

REQ'D R/W

EXIST R/W

REQ'D R/W TO BE REMOVED

705+00

710+00

OLD BETHLEHEM ROAD

CONC

144 E-T-TV ATT/CGEMC-T

145 E-T-TV ATT/CGEMC-T

146 E-T-TV ATT/CGEMC-T

147 E-T-TV ATT/CGEMC-T

148 E-T-TV ATT/CGEMC-T

30"W(B) DIP

T(B) 200 PR

TB 50 PR

TV(B)

TB 25 PR

(2)25 PR SVC

SOT SC SOT SOT SOT SOT SOT SOT SOT

29 N/F CARY CAMPBELL PROPERTIES LLC

19 N/F PATRICK A JR & JEANNIE K CALLOCHIO

30 N/F ALBANY AMUSEMENT LLC

31 N/F FORTSON LAND CO LLLP

32 N/F RAYMOND H & RHONDA J SHAW

34 N/F ANGELA COX & MARCUS HALL

35 N/F WBJ GLOBAL INDEMNITY INC

42 N/F AP LIQUOR LLC

16 N/F H & F LAND LLC

DRY DETENTION BASIN OUTLET STRUCTURE

ESA - 25' STREAM BUFFER

PERENNIAL STREAM 10

APPROX L.L.L.

LL248

LL247

LL233

NON BUFFERED STATE WATER K

NON BUFFERED STATE WATER J

LOCATION CD #NAIL N: 1228846.211 E: 2307814.431 EL: 844.82

LOCATION CD #NAIL N: 1228394.732 E: 2307992.334 EL: 841.39

LOCATION CD #TRAV POINT N: 1228612.139 E: 2308018.784 EL: 859.51

LOCATION CD #TRAV POINT N: 1228760.170 E: 2308305.719 EL: 841.79

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

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SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

CHECKED: DATE:
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VERIFIED: DATE:

DRAWING No.
24-0011

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11/05/2020

NO UTILITIES DETECTED
THIS SHEET

PERENNIAL STREAM 8A
ESA - 25' STREAM BUFFER
WATER SURFACE ELEV =797.20
48"RCP C1F1 INV=803.98
FLUME
FIELDWIRE
EXIST R/W & L/A
49TH STREET
PROP LP & ET AL
SB I-75 GENERAL PURPOSE LANES
1000+00
I-75 SB PGL
1005+00
1010+00
2000+00
I-75 CL
LIMIT OF CONSTRUCTION NB OFF RAMP STA 195+89.49
195+00
200+00
2" RCP C1F1 INV=811.44
NB I-75 GENERAL PURPOSE LANES
NB OFF RAMP
FUTURE I-75 CVL PROJECT
CP #D167 5/8" REBAR FOUND N=1223586.647 E=2307747.541 EL=838.846
CP #D188 5/8" REBAR FOUND N=1224309.173 E=2307343.096 EL=822.508
REQ'D R/W & L/A (PI 0014203 CVL PARCEL 182)
BUFFERED STATE WATER A1
ESA - 25' STREAM BUFFER
LOS
MATCH LINE STA. 1012+00.00 DRAWING No. 24-0013

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

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SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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VERIFIED:		DATE:		

GPLN-CE
11/05/2020

MATCH LINE STA. 1012+00.00 DRAWING No. 24-0012

MATCH LINE STA. 1024+00.00 DRAWING No. 24-0014

GEORGIA POWER SERVICE EASEMENT
EXIST R/W & L/A
PERENNIAL STREAM 8
APPROX. L.L.
PERENNIAL STREAM 9
ESA - 25' STREAM BUFFER
LIMIT OF CONSTRUCTION SB ON RAMP STA 292+65.86
SB I-75 GENERAL PURPOSE LANES
I-75 SB PGL
REQ'D R/W & L/A (PI 0014203 CVL PARCEL 230)
N/F 49TH STREET PROP & ET. AL
SSMH B05 TOP=767.59 INV IN=743.34 INV OUT=743.09
I-75 CL
5' FULL DEPTH SHOULDER REPLACEMENT
I-75 NB PGL
DO NOT DISTURB TOWER SUPPORTING GUYS
8"DIP 560 LF +/- 24"STL CASING PER RECORD
NB I-75 GENERAL PURPOSE LANES
NB OFF RAMP
FUTURE I-75 CVL PROJECT
SS(C) 8"DIP
SSMH B04 TOP=787.91 INV IN=766.71 INV OUT=766.26
CELL TOWER WMVV-FM (PVT)
SSMH B03 TOP=789.77 INV IN=775.97 INV OUT=775.77
E(B) SVC
T(B) UNK FO (CGEMC-T)
N/F LIFE RADIO MINISTRIES
REQ'D R/W & L/A (PI 0014203 CVL PARCEL 182)
END HMA PAVEMENT BEGIN PCC PAVEMENT STA 206+83.46
PERENNIAL STREAM 8
ESA - 25' STREAM BUFFER TRACT 1
N/F PHILLIP DANIELL
LOS

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
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REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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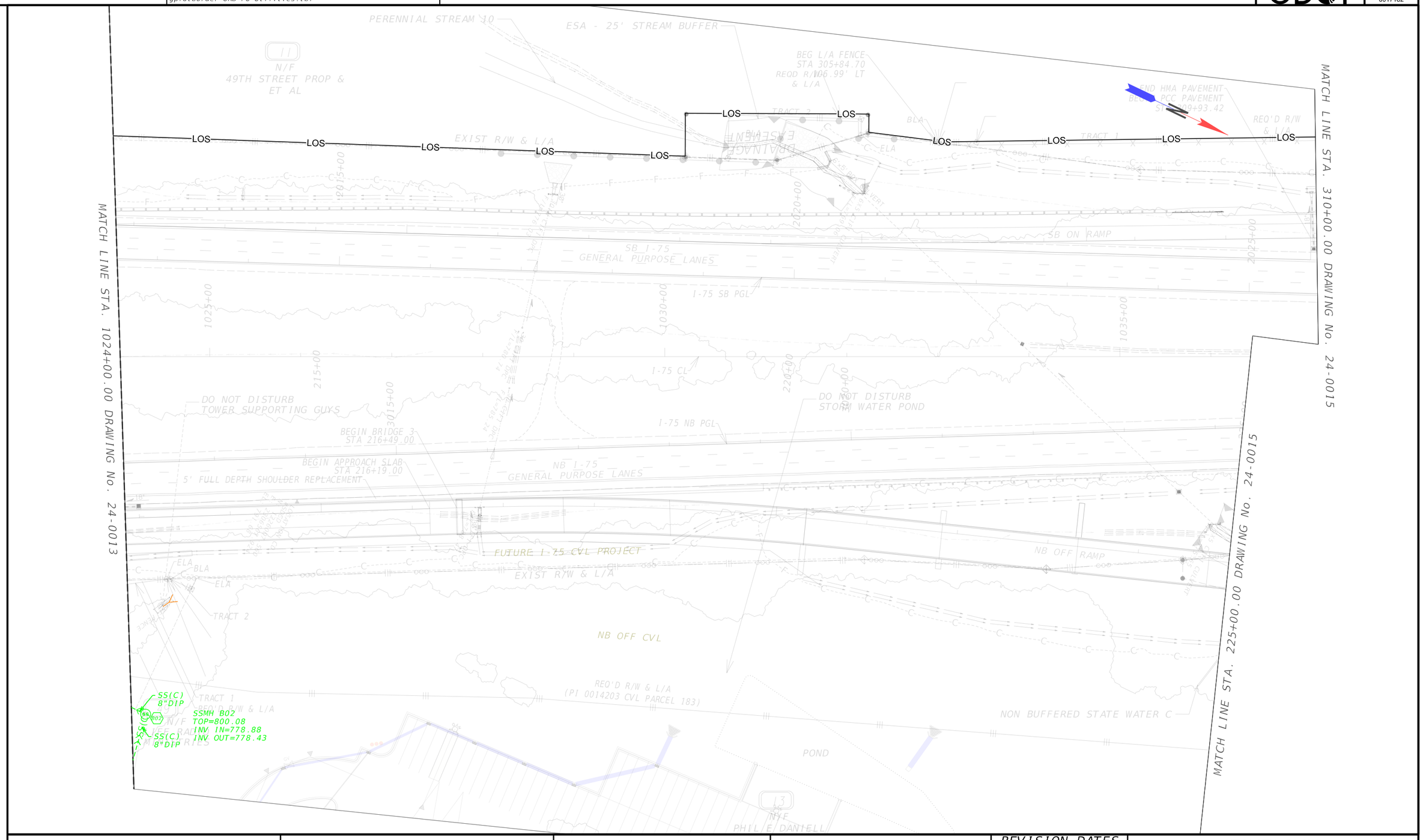

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0014
CORRECTED:		DATE:		
VERIFIED:		DATE:		

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11/05/2020

MATCH LINE STA. 310+00.00 DRAWING No. 24-0014

MATCH LINE STA. 323+00.00 DRAWING No. 24-0005

LOS

PRICE DRIVE RELOCATED BY OTHERS

N/F 49TH STREET PROP & ET AL

EXIST R/W & L/A

REQ'D R/W & L/A

TRACT 1

L/A FENCE

SB ON RAMP

SB I-75 GENERAL PURPOSE LANES

I-75 SB PGL

I-75 NB PGL

NB I-75 GENERAL PURPOSE LANES

I-75 CL

DIP

30"W(B)

30"DIP W/ +/- 355 LF 42"STL CASING

REMOVE EXISTING MEDIAN CROSSOVER AND GRADE TO DRAIN

FUTURE I-75 CVL PROJECT

PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

BEGIN LIMIT OF ACCESS	BLA
END LIMIT OF ACCESS	ELA
EXISTING LIMIT OF ACCESS	
REQ'D LIMIT OF ACCESS	
EXISTING LIMIT OF ACCESS & R/W	
REQ'D LIMIT OF ACCESS & R/W	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA	

Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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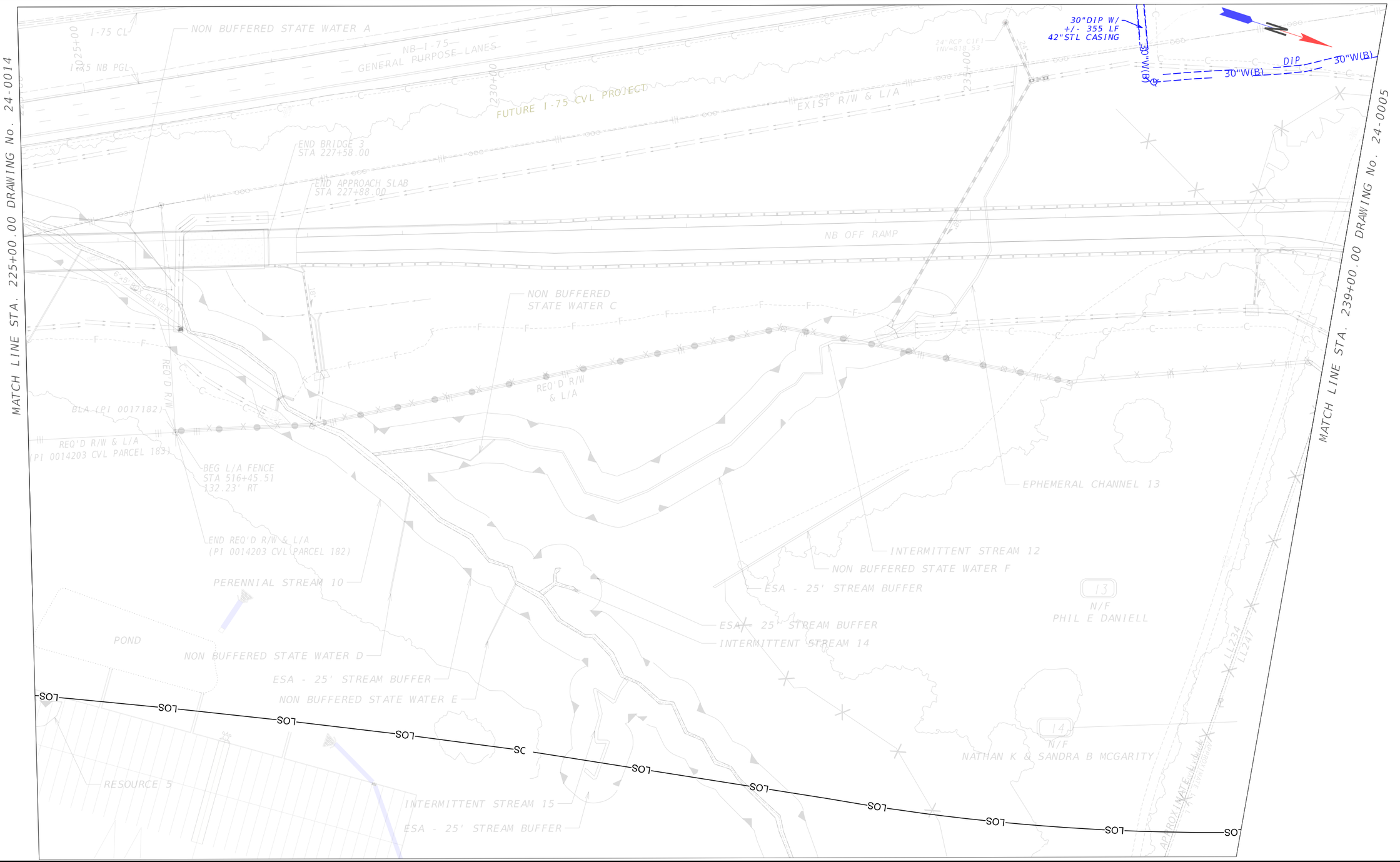
11/05/2020



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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BACKCHECKED:		DATE:		24-0016
CORRECTED:		DATE:		
VERIFIED:		DATE:		

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11/05/2020

MATCH LINE STA. 504+00.00 DRAWING No. 24-0005

MATCH LINE STA. 404+00.00 DRAWING No. 24-0005

MATCH LINE STA. 1071+00.00 DRAWING No. 24-0018

CONNECTS TO POLE 385 ATT/CGEMC-T

CONNECTS TO POLE 388

ATT/ CGEMC-T

OVHD E

ATT/CGEMC-T

ATT/ CGEMC-T

SSMH 4
NOT FOUND IN FIELD
TOP:NURIA
INV.IN:NURIA
INV.OUT:NURIA

SSMH 3
TOP:807.33
INV.IN8"DIP:786.46
INV.OUT8"DIP:786.27

SSMH 4
TOP:808.25
INV.OUT8"DIP:792.35

8"DIP
340 L.F.
60"CONCRETE TUNNEL

8"DIP

N/F DARLEN T CHANLEE & GREENSBORO CITY DEV

N/F WOODFIN WATKINS

N/F NORFOLK SOUTHERN

TRACT 2

EXIST R/W & L/A

REQ'D R/W & L/A

REQ'D L/A

REQ'D R/W

L/A FENCE

SB I-75 GENERAL PURPOSE LANES

NB I-75 GENERAL PURPOSE LANES

I-75 SB PGL

I-75 NB PGL

I-75 CL

SB OFF RAMP

NB ON RAMP

CVL AUX LANE GORE
N 1229343.4610
E 2304889.8180

END PCC PAVEMENT
BEGIN HMA PAVEMENT
STA 411+50.00

END PCC PAVEMENT/BEGIN HMA PAVEMENT
STA 517+77.93

FUTURE I-75 CVL PROJECT

APPROXIMATE L.L.L

PERENNIAL STREAM 16

PERENNIAL STREAM 17

INTERMITTENT STREAM 19

NON BUFFERED STATE WATER G

WETLAND 18

ESA - 25' STREAM BUFFER

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

Georgia Department of Transportation

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0 50 100 200

REVISION DATES

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I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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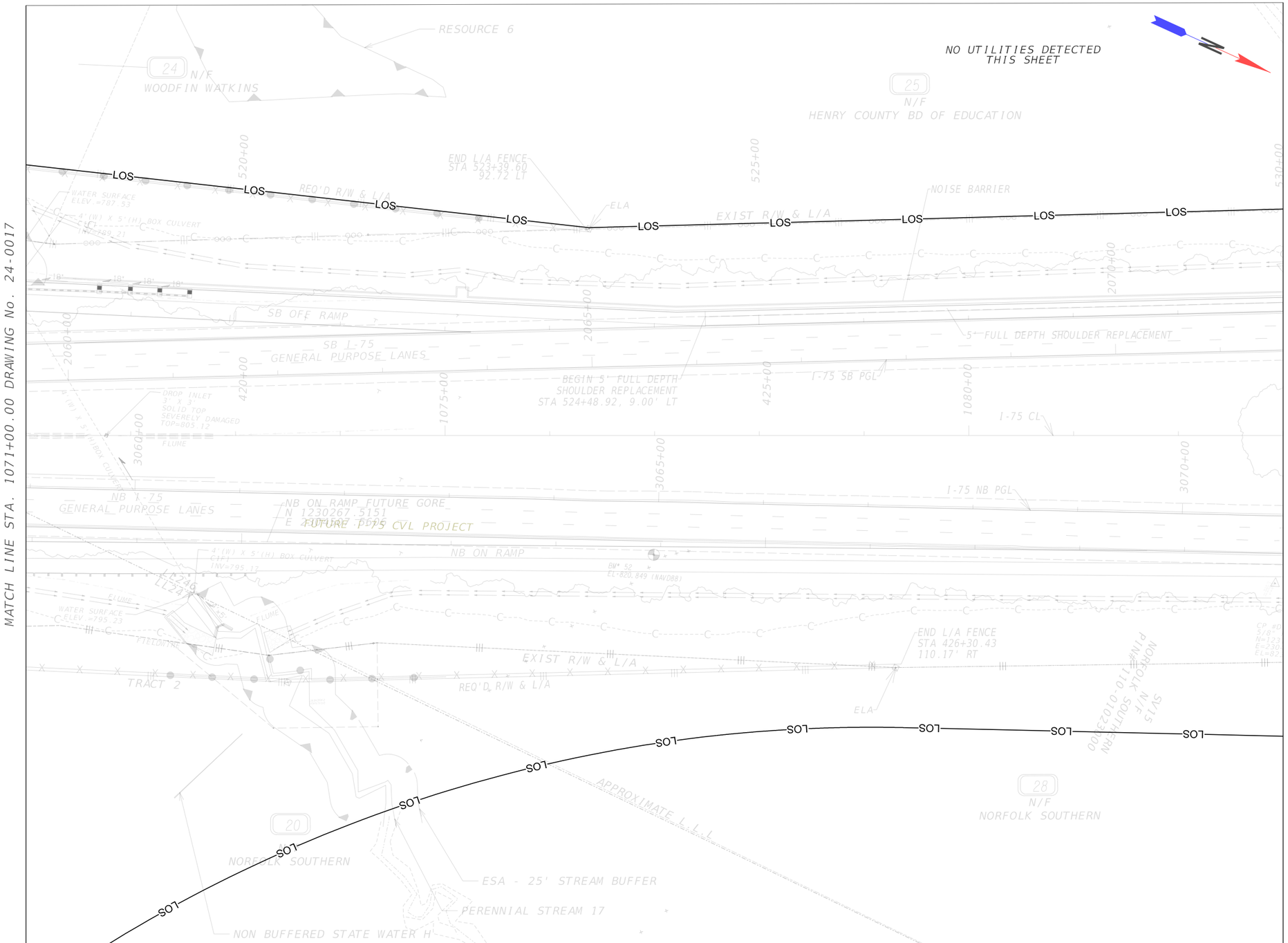

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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CORRECTED:		DATE:		
VERIFIED:		DATE:		

GPLN-CE
11/05/2020

NO UTILITIES DETECTED
THIS SHEET

NON BUFFERED STATE WATER H1
ESA - 25' STREAM BUFFER
NON BUFFERED STATE WATER H2
PERENNIAL STREAM 16A
25 N/F HENRY COUNTY BD OF EDUCATION
WATER SURFACE ELEV.=797.43
5'(W) X 4'(H) BOX CULVERT
INV=798.93
EXIST R/W & L/A
LL246
LL251
535+00
540+00
545+00
2075+00
2080+00
36"RCP C1F1 INV=814.34
5' FULL DEPTH SHOULDER REPLACEMENT
SB I-75 GENERAL PURPOSE LANES
I-75 SB PGL
430+00
1085+00
435+00
1090+00
1095+00
FLUME
36"RCP C1F1 INV=817.96
36"RCP C1F1 INV=819.93
APPROXIMATE L.L.L
3075+00
3080+00
DROP INLET DIRECT DROP INTO CULVERT TOP=813.93 INV. IN(NE)=802.60 INV OUT(SW)=802.59
5'(W) X 4'(H) BOX CULVERT
I-75 NB PGL
I-75 CL
LIMIT OF CONSTRUCTION NB ON RAMP STA 439+00.00
3085+00
NB I-75 GENERAL PURPOSE LANES
FUTURE I-75 CVL PROJECT
APRON
36"RCP C1F1 INV=821.63
BM# 53 EL=841.124 (NAVD88)
3 REBAR FOUND 159.8615 45.0400 096
EXIST R/W & L/A
5'(W) X 4'(H) BOX CULVERT
INV=806.10
WATER SURFACE ELEV.=806.23
PERENNIAL STREAM 16A
INTERMITTENT STREAM 17B
INTERMITTENT STREAM 17A
28 N/F NORFOLK SOUTHERN
NON BUFFERED STATE WATER H1
ESA - 25' STREAM BUFFER
ESA - 25' STREAM BUFFER
ESA - 25' STREAM BUFFER

MATCH LINE STA. 1083+00.00 DRAWING No. 24-0018
MATCH LINE STA. 1098+00.00 DRAWING No. 24-0020

LOS

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

GDOT Georgia Department of Transportation

ARCADIS Design & Consultancy for natural and built assets

SCALE IN FEET
0 50 100 200

REVISION DATES

UTILITY PLANS
I-75 @ CR 312/BETHLEHEM ROAD
HENRY COUNTY

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GPLN-CE 11/05/2020

NO UTILITIES DETECTED
THIS SHEET

MATCH LINE STA. 1098+00.00 DRAWING No. 24-0019

EXIST R/W & L/A

LOS

550+00

555+00

1100+00

1105+00

1110+00

5' FULL DEPTH
SHOULDER REPLACEMENT

END 5' FULL DEPTH
SHOULDER REPLACEMENT
BEGIN 4' S-4 PAVEMENT
STA 553+29.83, 10.00' LT

END 4' S-4 PAVEMENT
STA 558+51.78, 10.00' LT

36"RCP C1F1
INV=831.65

36"RCP C1F1
INV=838.63

30"RCP C1F1
INV=842.52

30"RCP C1F1
INV=851.45

FLUME

24"RCP
C1F1
INV=858.54

24"RCP
C1F1
INV=860.19

FUTURE I-75 CVL PROJECT

CP #D174
5/8" REBAR FOUND
N=1232700.001
E=2303471.345
EL=851.673

CP #D175
5/8" REBAR FOUND
N=1233694.769
E=2303084.961
EL=857.712

EXIST R/W & L/A

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
EXISTING LIMIT OF ACCESS
REQ'D LIMIT OF ACCESS
EXISTING LIMIT OF ACCESS & R/W
REQ'D LIMIT OF ACCESS & R/W
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA

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Georgia Department of Transportation

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SCALE IN FEET
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I-75 @ CR 312/BETHLEHEM ROAD
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GPLN-CE
11/05/2020

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 7-4

UIA Template

Attachment 7-4 Utility Impact Analysis Template (P.I. XXXXXXXX-Project) (Date)

Purpose statement: The use of this Utility Impact Analysis provides the advantage of tracking conflicts with existing utilities and proposed roadway design and is intended to follow the life of the project. This document is used to assist with utility coordination by identifying utility conflicts, the need for SUE QL-A, mitigation measures, and cost/time estimates.

INSTRUCTIONS:

1	The remaining columns will be used to assist with on-going coordination as needed.
2	"Station & Offset" column: Provide the main line or side street base line station and offset, as appropriate. For side streets only: include street name.
3	"Utility Type": Provide the type of utility and color code according to utility. The color code can be found on the Georgia Utilities Protection Center website at www.georgia811.com.
4	"Utility Company": Provide the name of type of utility. The Utility Owners list are examples only. Provide abbreviations as shown in the plans and appropriate for the project.
5	"Existing Utility" column: Show the size, & material type; i.e. 4" steel.
6	"Identified Conflict" column: Please include the size of proposed pipe, cut/fill depths and length, structure ID number, erosion control measure type (i.e. Sd1-C), etc.
7	"TH (Y/N)#" column: Reserved for the decisions made during PURP Meeting or coordinating with GDOT, designer, and/or utility owner.
8	"TH#" column: Reserved for the decisions made once test holes are performed and should correspond to the test hole number in the plans.
9	"Utility Impact (A*s designed)":* Provide approximate impact to cost and/or time. To be completed during PURP or coordinated between Utility Coordinator and utility owner.
10	"Recommended resolution": Provide recommendations that were made at PURP, FPR, or through other coordination efforts (i.e. utility avoidance, utility relocation, etc.). Recommended to be completed by the Designer.
11	"Benefit of resolution": Provide cost savings and/or time savings benefits. Recommended to be completed by the Utility Coordinator.
12	For conflicts that have a range provide same conflict number at begin point and end point. (ex. Telecom is in conflict with cut limits from station 20+00 to 40+00 so there should be a conflict circle at both stations with the same conflict number.)
13	For places where there are multiple utilities at one point of conflict, provide a separate entry for each utility with the same conflict number. Provide one conflict circle on the plans and multiple rows for each conflict in the matrix.

PI# UTILITY IMPACT ANALYSIS (UIA)
CONFLICT MATRIX

C#	Station & Offset	Utility Type	Utility Company	Existing Utility	Identified Conflict	TH (Y/N)	TH#	Utility Impact ("As-designed")		Recommended Resolution	Benefit of Resolution (cost and/or time)		Comment
								Cost	Time		Cost	Time	

Project Description
County

PI# UTILITY IMPACT ANALYSIS (UIA)
CONFLICT MATRIX

Consultant Company Name
Date

Utility Impact Analysis (UIA)

C#	Station & Offset	Utility Type	Utility Company	Existing Utility	Identified Conflict	TH (Y/N)	TH#	Utility Impact ("As-designed")		Recommended Resolution	Benefit of Resolution (cost and/or time)		Comment
								Cost	Time		Cost	Time	

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 7-5

USR Template

Utility Status Report (USR) Template (Date)

Revised 7/26/2024

Schedule #	Roadway	Station	Crossing Roadway	Utility Owner	Overhead / Underground/ Bridge Attachment	UAPP Submittal Date to GDOT (Estimated)	UAPP Approval Date (Estimated)	UAP Submittal Date to GDOT (Estimated)	UAP Approval Date (Estimated)	Date for Utility Owner to Submit GPAS (Estimated)	GPAS Permit Approved and Received from GDOT (Estimated)	UWP Submittal Date to GDOT (Estimated)	UWP Approval Date (Estimated)	Start Date of Utility Relocation (Estimated)	Completion Date of Utility Relocation (Estimated)	Interim As-Build Submitted to GDOT (60 days from completion)	Final As-Build Submitted to GDOT	Final As-Build Approval Date	Utility Facility Relocation Acceptance Form Signed and Approved	Comments

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 7-6

Utility Damage Report

UTILITY DAMAGE REPORT

PI#_____ **Date of damage** _____ **Time of damage** _____

Contractor name _____ **Contractor Involved** _____

Person completing form _____ **Title** _____

Address or description of location _____

Operator's name _____ **Spotter's name** _____

Part B – Affected Utility

☐ **Electric** ☐ **Natural Gas** ☐ **Sewer** ☐ **Water** ☐ **Telephone** ☐ **Cable TV**

Description/size of utility _____ **Service interrupted for any customers?** ☐ **Yes** ☐ **No**

What type of service?
☐ **Service/Drop** ☐ **Main** ☐ **Fiber Optic** **Depth of damaged facility** ____ **ft**

Part C – Locating and Marking

Was the One-Call Center notified? ☐ **Yes** ☐ **No** If Yes, provide the locate ticket number _____
Were facility marks visible in the area of the excavation? ☐ **Yes** ☐ **No**
Were facility marks accurate? ☐ **Yes** ☐ **No**
Facilities were marked with: ☐ **Paint** ☐ **Flags** ☐ **Paint & Flags**
If paint, what type of locate marks were present?
☐ **Duct Bank** (Diamond Pattern) ☐ **Single Line** (With Buffer) ☐ **Single Line** (Without Buffer)

Have you taken photos (Required) ☐ **Yes** ☐ **No** **What is the distance between the locate marks?** ____ **ft**

Part D – Excavation Information

Type of Excavation Equipment?

☐ **Backhoe** ☐ **Excavator** ☐ **Boring** ☐ **Auger** ☐ **Trencher** ☐ **Directional Drill** ☐ **Drilling**

☐ **Hand Tools** ☐ **Probing Device**

Type of work Performed?

☐ **Installing Gas Pipeline** ☐ **Installing Electric Cable** ☐ **Joint Trench** ☐ **Installing Telephone**

☐ **Installing Cable TV** ☐ **Installing Poles** ☐ **Installing Anchors** ☐ **Other***

*** Please specify** _____

Location of Excavation ☐ **Private Property** ☐ **Utility Easement** ☐ **Project Right-Of-Way**

Part E – Describe how the incident occurred (if service was interrupted, indicate time of restoration)

8 GEOTECHNICAL

8.1 General Requirements

The Design-Builder shall perform all geotechnical investigations, laboratory testing, research, analyses, and field monitoring necessary to effectively evaluate existing conditions within the Project Limits and surface and subsurface geotechnical conditions within the Property. The Design-Builder shall ensure the geotechnical investigations and analyses are thorough and complete, so as to provide accurate information for the design of roadways, pavements, earthwork, foundations, structures, and other facilities. The Design-Builder shall use this information to design and construct the Project.

8.2 Administrative Requirements

8.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 8 in accordance with the Project Standards.

TP Attachment 8-1 (Status of Geotechnical Design Policy and Guides) lists GDOT's Geotechnical Design Policies and Guides and identifies the Design-Builder's obligation to comply with each such document in performance of the Work.

The Design-Builder shall update all Special Provisions listed in TP Attachment 8-1 (Status of Geotechnical Design Policy and Guides) per the recommendations of the Geotechnical Engineering Reports. All Special Provisions shall be submitted with the Design Documents prior to use.

8.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

8.3 Investigation and Reporting Requirements

To the extent the Design-Builder is satisfied with the suitability, sufficiency, and accuracy of the geotechnical data for meeting the geotechnical requirements of the Project, the Design-Builder may incorporate preliminary geotechnical data in TP Attachment 8-5 (Preliminary Borings) into the reports described in this TP Section 8.

8.3.1 Subsurface Geotechnical Investigation by the Design-Builder

The Design-Builder shall determine the locations, frequency, and scope of all subsurface geotechnical investigations, testing, research, and any additional analysis the Design-Builder considers necessary to support its design approach and construction methods, and to provide safe and reliable roadways, pavements, earthwork, foundations, structures, and other facilities for the Project.

The Design-Builder shall locate borings on the basis of field observations, design considerations, and the minimum criteria specified in GDOT's Geotechnical Design Policy and Guides as defined in TP Attachment 8-1 (Status of Geotechnical Design Policy and Guides). All

Wall Foundation Investigations (WFI) require borings a minimum of every 200 feet on both the active and passive side of the wall. For structures where minimum boring requirements are not addressed in the GDOT Geotechnical Design Policy and Guides, AASHTO LRFD Bridge Design Specifications shall be used.

All borings included in the Design-Builder's geotechnical reports shall be geolocated to include northing/easting and/or latitude/longitude coordinates.

The Design-Builder shall submit a subsurface exploration and testing program identifying all field and laboratory testing to be performed by the Design-Builder in establishing the geotechnical conditions and parameters to be used for design and analysis. The Submittal shall include a rationale for the development of the program, parameter selection, and descriptions of the methods of analyses.

The soil and rock samples obtained by the Design-Builder for the geotechnical investigations shall become the property of GDOT. Samples shall be retained by the Design-Builder until Final Acceptance. The Design-Builder shall catalog, properly store, and make all samples available to GDOT. The Design-Builder shall coordinate with GDOT for the delivery of all samples to a location designated by GDOT when requested.

Prior to any drilling activities, the Design-Builder shall have Utilities located in accordance with TP Section 1.7 (Existing Utility).

8.3.2 Laboratory Testing

After collecting soil and rock samples, the Design-Builder shall perform sufficient laboratory tests of representative samples of soil strata for site characterization with respect to soil or rock geology, classification, strength, compressibility, and electrochemical properties. The results of the laboratory testing shall be used to establish material properties for use in design. Sufficient testing shall be performed so that the Design-Builder is satisfied that the test results are representative of and characterize the in-situ conditions. All standard soil and rock sample laboratory testing shall be performed in laboratories that have competency recognized by the AASHTO Accreditation Program (AAP) (http://www.aashtoresource.org/aap/overview). Laboratory testing and reporting using AASHTO or ASTM standards shall be conducted only in laboratories that have AASHTO accreditation for the test being conducted. Only laboratories that have AASHTO accreditation are acceptable to conduct and report GDOT Test Methods in accordance with GDOT standards presented in the Sampling, Testing, & Inspection (STI) website (https://www.dot.ga.gov/GDOT/pages/TheSourceSamplingTestingInspection.aspx). GDOT uses a soil classification system established in Section 810.2 of the Standard Specifications and shall be defined as presented in GDOT Geotechnical Design Policy and Guides Sections 4.5.5 (Soil Classifications) and 4.5.6 (Soil Classes).

8.3.3 Geotechnical Engineering Reports

The Design-Builder shall submit Geotechnical Engineering Reports documenting the assumptions, conditions, and results of the geotechnical investigation and analysis, including:

1. The geology of the Project area, including soil and/or rock types, drainage characteristics, and water table variability.

2. Field investigation test records and laboratory test results used to characterize conditions including:
    a. Moisture content.
    b. Plasticity index.
    c. Gradations for each major soil strata change.
    d. Levels of shrink/swell potential.
    e. Soil compressibility parameters for immediate settlement and consolidation settlement.
    f. Short-term and long-term soil shear strength.
    g. Compressive rock strength tests.
    h. Split tensile strength of intact rock specimens, if applicable.
    i. Field description of rock core runs including photographic log of rock cores, rock recovery percentages, and rock quality designation.
    j. Electrochemical properties of groundwater and/or surface water for culvert type selection.
    k. Test boring records.
    l. In-situ testing records.
    m. The subsurface investigation shall include a boring layout plan of field testing and sampling, profile of boring logs and other field data, test boring records, in-situ testing records, summary of laboratory tests, and other pertinent information.
    n. SPT Hammer Energy Calibration conducted within the past 24 months.
3. Design and construction parameters resulting from the geotechnical investigation and analysis including parameters for the design of deep foundations, shallow foundations, walls, pipes, culverts, roadway embankments, and pavements.
4. A discussion of conditions and results with reference to specific locations within the Project Limits, including structural excavation requirements, dewatering requirements, and impacts on nearby structures.
5. Plan view locations of field sampling, profile of boring logs and other field data, laboratory test results, calculations, and analyses that support design decisions considering down-drag on piles and lateral squeeze in high embankments.

If environmentally-sensitive conditions are encountered during the subsurface exploration activities, the Design-Builder shall notify GDOT immediately. Environmentally-sensitive conditions include discovery of Hazardous Materials and discovery of archaeological remains. The Design-Builder shall take appropriate actions for Hazardous Materials in accordance with DBA Section 7.8 (Hazardous Materials Management). Archaeological remains include any antiquities, fossils, coins, articles of value, precious minerals, cultural artifacts, human burial sites, paleontological and human remains, and other similar remains of archaeological, paleontological, or cultural interest discovered within the Project Limits.

8.3.3.1 Wall Foundation Investigation

The Design-Builder shall perform a WFI for all new walls and wall extensions that are not GDOT Standard Barriers. All investigations shall be consistent with the Load and Resistance Factor Design (LRFD) requirements for foundation and geotechnical design.

Wherever a pipe or box culvert penetrate a wall, a boring is required at the location where the culvert penetrates the wall.

Soil cohesion shall not be used for global stability analysis without supporting documentation included in the WFI. Supporting Documentation shall be selected from the following:

1. Laboratory Testing:
    a. ASTM D2166;
    b. ASTM D2435;
    c. ASTM D2850;
    d. ASTM D3080;
    e. ASTM D4648;
    f. ASTM D4767;
    g. ASTM D5778;
    h. ASTM D6528;
    i. ASTM D7181;
    j. ASTM D7608;
2. Field Testing:
    a. ASTM D2573;
    b. ASTM D3441;
    c. ASTM D5778;
    d. ASTM D6635; or
3. Other testing as approved by GDOT Office of Materials and Testing.

8.3.3.2 Bridge Foundation Investigation

The Design-Builder shall perform a Bridge Foundation Investigation (BFI) for each new bridge and bridge widening in the Project. All investigations shall be consistent with the LRFD requirements for foundation and geotechnical design.

8.3.3.3 Light Tower Foundation Investigation

The Design-Builder shall perform a Light Tower Foundation Investigation and provide a report to determine the foundation type to be used at each high-mast light tower location. Assuming no rock is encountered and soil conditions are suitable, minimum caissons are 4 feet in diameter and 20 feet deep. Light poles installed integral to walls shall be designed for the specific application and wall type and shall meet MASH and GDOT Standard Specification Section 920 requirements. As part of the report, the Design-Builder shall assess minimum foundation

embedment depth required for overturning resistance and the need to address groundwater if present at the proposed tower location.

8.3.3.4 Other Structure Foundation Investigation

The Design-Builder shall perform a Culvert Foundation Investigation for all new box culverts and all extensions of existing box culverts.

The Design-Builder shall perform investigations for other Project specific structures such as three-sided culverts, buildings, etc. All investigations shall be consistent with the LRFD requirements for foundation and geotechnical design and shall be in accordance with the GDOT Geotechnical Design Policy and Guides.

8.3.3.5 Soil Survey Report

The Design-Builder shall perform a Soil Survey Report to provide geotechnical recommendations for the design of roadway foundations, embankments, pipes and other issues as described in the GDOT Geotechnical Design Policy and Guides. The Soil Survey Report shall define settlement requirements including, if required, any settlement monitoring and settlement monitoring termination criteria. Any settlement termination criteria shall be met prior to constructing the roadway subbase.

8.3.3.6 Environmental Site Assessment

The Design-Builder shall perform a Phase I Environmental Site Assessment for all Design-Builder Proposed/Design-Builder Acquired ROW and any State Proposed ROW not previously covered by a Project-specific Phase I Environmental Site Assessment report. If recommended in the Phase 1 Environmental Site Assessment report, the Design-Builder shall perform a Phase II Environmental Site Assessment report for all sites identified as either a Recognized Environmental Condition (REC) or a Business Environmental Risk (BER) that are located within the Project Limits not previously covered by a Project-Specific Phase II Environmental Site Assessment report. The Phase I and II Environmental Site Assessments shall be performed in accordance with the GDOT Geotechnical Design Policy and Guides. Where a Phase II Environmental Site Assessment identifies contaminated sites, the Design-Builder shall comply with the subsections to this TP Section 8.3.3.6.

8.3.3.6.1 HSRA Requirements

For release of hazardous substances in soil and groundwater above regulatory thresholds the property owners shall be notified via letters to complete the notification package(s) to the Georgia Environmental Protection Division (GA EPD) Hazardous Site Response Program. The notification form and guidelines will be included with the letter and can be found at the GA EPD's website. All Work shall be done in accordance with Hazardous Site Response Act Rule 391-3-19 and GA EPD Hazardous Site Response Program requirements.

8.3.3.6.2 Solid Waste and Underground Storage Tank Managements

For release of petroleum products in soil and groundwater above regulatory thresholds, notifications shall be made to the GA EPD Underground Storage Tank Management Program (USTMP). Notifications may be submitted via email by the conductor of the Phase II Environmental Site Assessment. It should include a copy of the Phase II Environmental Site Assessment report and a completed USTMP notification form for each site. The notification form and guidelines can be found at the GA EPD's website. Soil and groundwater that is disturbed or

removed during construction may be considered a category of solid waste by the Georgia Comprehensive Solid Waste Management Act. Furthermore, Underground Storage Tank (UST) systems that are encountered during construction must be handled and disposed of per Section 217 of the GDOT Standard Specification. The generation, collection, transportation, storage, treatment, and disposal of solid wastes are regulated under the Georgia Comprehensive Solid Waste Management Act (SWMA) and administered by the Georgia EPD. These solid waste materials will require appropriate excavation, handling, and disposal techniques in accordance with Solid Waste Management (SWM) regulations.

8.3.3.6.3 Recovered Material

According to GA EPD rule 391-3-4-.01 (60), soils impacted with constituent concentrations less than applicable regulatory thresholds can be reused on-site as recovered material if the area to be filled has similar constituent concentrations. Soils impacted with constituent concentrations greater than applicable regulatory thresholds, that are disturbed during construction, will be considered a category of solid waste and must be disposed of off-site in accordance with SWM regulations.

8.3.3.6.4 Off-Site Disposal — Soil

Impacted soils with constituent concentrations more than applicable regulatory thresholds that are removed from the site will be considered a category of solid waste by the GA EPD. Regulations allow the removal and transportation of such soils to a facility permitted to handle impacted soils, such as a “Subtitle D” landfill (non-hazardous) or “Subtitle C” landfill (hazardous). Excavation of impacted soils, including soils from beneath the groundwater table, shall be performed by a specialized contractor experienced with handling and disposal of similar materials, and with the OSHA regulations pertaining to waste removal activities.

8.3.3.6.5 Off-Site Disposal — Water

Impacted groundwater may be stored, transported, and disposed of at an approved off-site treatment facility. Discharge into the City of Atlanta’s Combined Sewer Overflow (CSO) system shall require permitting and may necessitate pre-treatment, based on effluent limitations of the receiving public owned treatment works (POTW).

8.4 Design Requirements

8.4.1 Pile Foundation

The Design-Builder shall design pilings in accordance with GDOT Geotechnical Design Policy and Guides and LRFD limit state design. Pile foundation design shall include foundation selection, minimum foundation penetration, estimated foundation depth, and required pile resistance. The required pile resistance shall include the effects of scour, downdrag, pilot holes, and resistance factor.

The Design-Builder shall not use pile restrikes to mitigate downdrag forces.

The Design-Builder shall perform dynamic pile testing in accordance with ASTM D4945-17 and the recommendations of the accepted BFI. Upon completion of a dynamic pile test, the Design-Builder shall submit a dynamic pile testing report that shall include pile driving analyzer (PDA) field monitoring data and results of Case Pile Wave Analysis Program (CAPWAP) computer analyses. Immediately following each dynamic pile test the EOR shall determine whether the dynamic pile test results validate the design assumptions to allow production piling to proceed.

The geotechnical engineer who developed the BFI shall review the dynamic testing report and develop pile driving installation and acceptance criteria along with the dynamic testing report.

8.4.2 Drilled Caisson

The Design-Builder shall design and construct drilled caissons in accordance with the BFI recommendations. When sound rock is encountered, drilled caissons shall be embedded per the BFI recommendations with a minimum embedment depth of 7 feet into sound rock required. Sound rock shall be defined as material that cannot be drilled with a conventional earth auger, requires the use of special rock augers, core barrels, air tools, blasting, or other methods of excavation, and material on which the rock auger penetration is equal to or less than 2 inches per five minutes of drilling with the auger subjected to a torque of 600,000 inch-pounds with a down thrust of 37,000 pounds.

Skin friction drilled shafts in partially weathered rock (PWR) shall be permitted with resistance achieved solely through the use of either skin friction or end bearings. Resistance shall not be achieved with the combined effects of skin friction and end bearing nor by relying on partial or full resistance from both methods based on shaft settlement. Drilled shafts shall be embedded per BFI recommendations with a minimum embedment depth of 15 feet into PWR required. The Design-Builder shall include evidence of adequate lateral stability in the BFI report. The Design-Builder shall submit load testing reports and calculations for each bridge with drilled shafts in PWR to verify resistance can be achieved.

The Design-Builder may use square columns on drilled shaft foundations.

8.4.3 Spread Footings

The Design-Builder shall design spread footings in accordance with GDOT Geotechnical Design Policy and Guides, GDOT Bridge and Structures Design Manual, and LRFD limit state design. The design shall account for bearing capacity and settlement on soil or rock foundation soils.

Spread footings on soil shall be limited to pedestrian bridges. Spread footings for roadway bridges shall be founded on PWR or rock.

The use of spread footing shall consider the effects of performance due to poor soil conditions, settlement, and/or scour on the performance of the structure. Top of footing shall be a minimum of 2 feet below the top of final grade. Spread footings shall bear below the scour line, if applicable.

Spread footings for bridges shall not be permitted in engineered soils and shall only be permitted in in-situ existing ground.

8.4.4 Embankments

The Design-Builder shall evaluate stability of embankment and excavation slopes including both short-term (undrained) and long-term (drained) conditions, and discuss design measures undertaken to ensure stability and safety of all slopes. The slope stability analysis shall consider the potential for long-term surficial slide failures common to high-plasticity clays in Georgia, and the Design-Builder shall provide specific recommendations to minimize occurrence of failures. The Design-Builder shall analyze internal and external stability for walls supporting fill/cut within the Project.

Where the Design-Builder constructs a slope less than 70 feet but greater than 35 feet in height, the Design-Builder shall construct a berm at approximately one-half of the slope height. Where the Design-Builder constructs a slope greater than 70 feet in height, the Design-Builder shall construct a berm every 35 feet. The Design-Builder shall slope berms to drain and connect to concrete flumes to remove water from slope.

8.4.5 Walls

With the exception of GDOT Standard Barriers, the Design-Builder shall evaluate retaining walls for bearing resistance, overturning, settlement, differential settlement, lateral squeeze of high embankments over soft soils, and for internal and external stability. With the exception of GDOT Standard Barriers, external global stability analyses shall also be required for retaining walls constructed in fill or cut applications within the Project. The slope stability analysis for embankment and excavation slopes shall address both short-term (undrained) and long-term (drained) conditions, and discussion of design measures undertaken to ensure stability and safety of all slopes. Differential settlement for walls shall meet the requirements in the applicable LRFD specification. With the exception of GDOT Standard Barriers, walls are not required to be founded in natural ground.

GDOT Standard Barriers shall only be used as depicted in and subject to the conditions of the GDOT Construction Standards with the following additional requirements:

1. Against a paved or graded shoulder per the requirements in TP Section 8.4.6 (Pavement Design).
2. Within the soil parameters defined in the GDOT Construction Standards.
    a. Where no soil parameters are defined:
        1) Median barrier shall use the soil parameters defined in GDOT Construction Standard 4941B.
        2) Side Barriers shall use the soil parameters defined in GDOT Construction Standard 4949B.
    b. The Design-Builder shall verify the soil parameters for the Project in the soil survey report. A soil survey boring shall be completed within 10 feet of each individual GDOT Standard Barrier.
3. With a minimum of 5 feet of cover between the bottom of the foundation and the natural groundwater elevation.
4. Side barriers shall be founded in in-situ existing ground. The existing ground shall not be steeper than 4:1. The 4:1 or flatter slope shall extend a minimum distance of 1.5 times the height of the wall.
5. GDOT Standard 4949C shall tie into existing ground that is a maximum slope of 2:1. The maximum 2:1 slope shall exist for a minimum of 40 feet beyond the wall as measured perpendicular to the wall.

The use of the GDOT Standard Barrier details in other applications shall be considered a Design-Builder designed cast-in-place wall and shall not be considered a GDOT Standard Barrier.

8.4.6 Pavement Design

For concrete pavement, longitudinal joints (existing or new) shall not fall within the wheel path of the proposed travel-ways, except where joints cross from one side of a wheel path to the other within a distance of 150 feet or less. Wheel paths shall be defined as shown in TP Attachment 8-3 (Wheel Path Definition).

New concrete pavement shall be tined.

All transverse (perpendicular to direction of travel) transitions between asphalt and concrete shall utilize a rigid to flexible pavement transition providing an overlap between the asphalt and concrete sections. TP Attachment 8-4 (Concrete to Asphalt Pavement Transition Detail) provides an example of this transition and shall be modified based on the Project's pavement designs.

On limited access facilities, all auxiliary lanes shall use the same proposed pavement design as the mainline. All ramps shall match the pavement design of the mainline until the physical gore. Ramp pavement type and thickness may vary from the mainline beyond the physical gore.

Where the Design-Builder widens an existing shoulder, including where a section has been removed for the construction of foundation elements under the pavement, the Design-Builder shall either match the pavement design of the normal shoulder or use the Georgia Construction Detail S-4 pavement structure. The Design-Builder may use class B concrete widening detail where widening existing pavements less than 5 feet against a concrete barrier or curb and gutter. Where widening an existing shoulder on a limited access facility, the Design-Builder shall mill and inlay the entire shoulder width.

The Design-Builder shall design new and full-width replacement shoulder pavement per the following requirements:

1. On limited access facilities:
    a. All shoulder pavement shall match the design of the adjacent travel lane.
2. On non-limited access facilities:
    a. Shoulder widths less than or equal to 4 feet in width shall match the design of the adjacent travel lane.
    b. Shoulder widths wider than 4 feet in width may either match the adjacent travel lane or may use a partial depth design consisting of the surface course, binder course, and 6 inches of GAB.

Where a surface drainage course (OGFC) is used, the drainage course shall overlap into the shoulders per Georgia Construction Detail T-30 (Shoulder Rumble Strip: Asphalt Freeway) on all facilities.

Where the distance between normal paved shoulder width and front face of new walls, including GDOT Standard Barriers, is less than or equal to 10 feet, the Design-Builder shall extend the shoulder paving to the face of the wall. The Design-Builder shall extend the shoulder paving to the face of all concrete median barriers within the clear zone. Where water flows against the barrier/wall, the Design-Builder shall extend the shoulder paving to the face of the wall. The Design-Builder shall not be permitted to have a grassed shoulder between two sections of paved shoulder. The Design-Builder may use a grassed shoulder between the normal paved

shoulder width and walls within the clear zone in all other cases provided that the slope between the travel lanes and the wall does not exceed 10:1.

Where additional paved shoulder width is required beyond the normal paved shoulder width (e.g., to the face of guardrail or other roadside safety device), the Design-Builder shall either match the pavement design of the normal shoulder or use the Georgia Construction Detail S-4 pavement structure. The Design-Builder may use class B concrete widening detail where widening existing pavements less than 5 feet against a concrete barrier or curb and gutter. Where widening an existing shoulder on a limited access facility, the Design-Builder shall mill and inlay the entire shoulder width.

The Design-Builder shall widen existing I-75 shoulders between the ramps to the minimum criteria defined in TP Attachment 11-1 (Design Criteria). The Design-Builder may use the Georgia Construction Detail S-4 pavement structure for this widening of the existing shoulder.

The Design-Builder shall provide GDOT Construction Detail P-7 Pavement Edge Treatments on all existing and proposed unsupported shoulders within the Pavement Limits, including on I-75 between the ramps.

The Design-Builder shall not be permitted to use the existing shoulder pavement as a permanent travel lane. The Design-Builder shall remove the shoulders where widening of the travel way is required.

8.4.6.1 Specified Roadway Pavement Designs

The Design-Builder shall provide pavements in accordance with the designs set forth in TP Table 8-1 (Specified Roadway Pavement Designs) for each identified roadway.

Table 8-1: Specified Roadway Pavement Designs

All Roundabouts, Bethlehem Road, Eagles Brooke Drive, I-75 Ramps within 250 Feet of the Roundabouts – Rigid Pavement	
Material	***Spread Rate/Thickness***
Jointed Plain Concrete Pavement (JPCP)	11 inches
Recycled Asph Conc 19 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	3 inches
Graded Aggregate Base incl Matl	8 inches

I-75 – Asphalt Pavement	
Material	***Spread Rate/Thickness***
Asph Conc 12.5 mm OGFC, GP 2 only, Incl Polymer-Modified Bitum Matl & H lime	100 lb/sy
Recycled Asph Conc 12.5 mm, SMA, GP 2 only, Incl Polymer-Modified Bitum Matl & H. Lime	2 inches
Recycled Asph Conc 19 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	2 inches
Recycled Asph Conc 25 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	11 inches
Graded Aggregate Base incl Matl	12 inches

SR 42, Michaels Drive, Park 42 Drive, Stonemont Development Driveway, and Pine Grove Road – Asphalt Pavement	
Material	***Spread Rate/Thickness***
Recycled Asph Conc 12.5 mm Superpave, GP 2 only, Incl Polymer-Modified Bitum Matl & H. Lime	1.5 inches
Recycled Asph Conc 19 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	2 inches
Recycled Asph Conc 25 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	6 inches
Graded Aggregate Base incl Matl	12 inches

Old Bethlehem Road, Greenwood Road, Lester Mill Road, and Price Drive – Asphalt Pavement	
Material	***Spread Rate/Thickness***
Recycled Asph Conc 12.5 mm Superpave, GP 2 only, Incl Bitum Matl & H. Lime	1.5 inches
Recycled Asph Conc 19 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	2 inches
Recycled Asph Conc 25 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	4 inches
Graded Aggregate Base incl Matl	10 inches

I-75 Ramps (Except within 250 Feet of the Roundabouts) – Asphalt Pavement	
Material	***Spread Rate/Thickness***
Asph Conc 12.5 mm OGFC, GP 2 only, Incl Polymer-Modified Bitum Matl & H lime	100 lb/sy
Recycled Asph Conc 12.5 mm, SMA, GP 2 only, Incl Polymer-Modified Bitum Matl & H. Lime	2 inches
Recycled Asph Conc 19 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	2 inches
Recycled Asph Conc 25 mm Superpave, GP 1 or 2, Incl Bitum Matl & H Lime	6 inches
Graded Aggregate Base incl Matl	12 inches

The pavement designs provided in TP Table 8-1 (Specified Roadway Pavement Designs) are based on an assumed soil support value of 2.5, a regional factor of 1.6, and a sub-grade modulus (k) of 130 pci. If the site-specific soil support value, regional factor, or sub-grade modulus, as determined from the site-specific Soil Survey Report, provides less support than the assumed values, the Design-Builder shall prepare and submit revised pavement designs for GDOT's approval reflecting the actual geotechnical conditions. The revised pavement designs shall be considered a GDOT Change pursuant to DBA Article 14 (GDOT Changes; Design-Builder Changes; Directive Letters).

If full depth reconstruction is required on a roadway not listed in TP Table 8-1 (Specified Roadway Pavement Designs), the Design-Builder shall prepare and submit a pavement design for GDOT's approval.

Pavement design reports shall document the assumptions, considerations, and decisions contributing to the proposed pavement design and meet the requirements of the Project

Standards. Pavement design Submittals shall include the latest GDOT Pavement Design Package Submittal Checklist and all applicable items included on the checklist.

Roundabouts shall use a consistent pavement structure for the entirety of the circulatory roadway. All legs of the roundabout shall use the same pavement structure as the circulatory roadway to the greater of:

1. End of the raised splitter island;
    a. Where a roadway typical includes a continuous raised median, including a raised median between adjacent roundabouts, the end of the raised splitter island criteria does not apply.
2. Design year queue length; or
3. 250 feet (including on the I-75 ramps).

The Design-Builder may retain existing concrete pavement provided that the Design-Builder diamond grind the existing pavement prior to placing final striping. The Design-Builder shall verify that diamond grinding operation does not reduce the cover of the pavement reinforcement below that required in the Project Standards.

The Design-Builder may retain existing asphalt pavement provided that the Design-Builder mill and inlay/overlay the existing pavement prior to placing final striping. Mill and inlay/overlay shall not reduce the final pavement thickness. Where milling for striping revisions, the Design-Builder shall mill at least half a travel lane. Where the Design-Builder mills a pavement with existing drainage course, the Design-Builder shall replace the drainage course as part of the inlay/overlay operation.

Pavement operations shall not increase the pavement height against a GDOT Standard Barrier.

On limited access facilities, the Design-Builder shall use high-strength pavement reinforcement fabric strips at the joint between existing and new asphalt in all asphalt widening sections, including where widening an existing shoulder. On all other routes, the Design-Builder shall use pavement reinforcement fabric strips in all asphalt widening sections including where widening an existing shoulder.

Where GAB is used as the pavement base and curb and gutter is required, the Design-Builder shall design and construct graded aggregate base or class B concrete under the curb and gutter. The graded aggregate base or class B concrete shall extend 6 inches beyond the curb and gutter.

8.4.6.2 Driveway Pavement Designs

For driveway horizontal geometrics, refer to TP Section 11.3.4 (Control of Access). All impacted driveways with over 11-percent grade shall be paved with concrete. All other impacted driveways shall be restored as follows:

1. Asphalt for asphalt
2. Concrete for concrete
3. Earth/gravel drives
    a. The Design-Builder shall pave with asphalt to the ROW

b. The Design-Builder may replace in-kind from the ROW to the tie-in point

The Design-Builder shall provide pavement in accordance with the designs set forth in TP Table 8-2 (Driveway Pavement Designs) for driveways unless TP Table 8-1 (Specified Roadway Pavement Designs) specifies a more robust pavement section for a specific driveway.

Table 8-2: Driveway Pavement Designs

Material	***Spread Rate***
Residential Asphaltic Concrete Driveways	
Recycled Asph Conc 12.5 mm Superpave, GP 2 Only, incl Bitum Matl and H Lime	165 lb/sy
Graded Aggregate Base Course – 6 inch depth incl Matl	N/A
Residential Concrete Driveways	
Driveway Concrete – 6 inches thick	N/A
Concrete Valley Gutter, 6 inch (from roads with curb and gutter)	N/A
Agricultural/Commercial/Maintenance Access Asphaltic Concrete Driveways	
Recycled Asph Conc 12.5 mm Superpave, GP 2 Only, incl Bitum Matl and H Lime	165 lb/sy
Recycled Asph Conc 19 mm Superpave, GP 1 or 2, incl Bitum Matl and H Lime	220 lb/sy
Graded Aggregate Base Course – 6 inch depth incl Matl	N/A
Agricultural/Commercial Concrete Driveways	
Driveway Concrete – 8 inches thick	N/A
Concrete Valley Gutter, 8 inch (from roads with curb and gutter)	N/A

8.4.7 Underdrains

The Design-Builder shall replace all underdrains impacted by construction. The Design-Builder shall install new underdrains per the recommendations in the soil survey.

8.5 Construction Requirements

8.5.1 Blasting

The Design-Builder shall submit to GDOT blasting plans for all proposed blasting. Blasting shall be performed in accordance with the Law and TP Attachment 8-2 (Blasting Requirements).

8.5.2 Lightweight Fill

Lightweight fill may be used in lieu of soil fills in embankments and MSE walls. Lightweight fill may also be placed in lieu of soil fills where the roadway profile will be raised or widened over existing culverts, minimizing the adverse impacts to existing culverts that were not originally designed for the higher soil fill loads.

The Design-Builder shall ensure that environmental concerns are evaluated for any lightweight fill options considered, and evaluate the feasibility of the material for the site conditions present. Any lightweight fill product that is negatively impacted by petroleum products shall be designed with protective measures such as adequate cover, concrete slabs, membranes, or other protection as required to ensure no damage to the system from petroleum leaks or spills near the lightweight fill material. Lightweight fill design shall be certified by the EOR for internal stability and other aspects of design related to pavement, installation, and specification details. Test results from a nationally accredited laboratory shall be furnished to GDOT as evidence that the lightweight fill material meets the required material properties.

The Design-Builder shall submit a Design-Builder Provided Specification detailing the specifications for the lightweight fill material. The specifications shall include design details for:

1. Load reduction
2. Bearing capacity
3. Shear strength
4. Compressibility
5. Lateral pressures
6. Drainage characteristics
7. Construction in adverse weather
8. Effects of extreme weather conditions
9. Seismic considerations

8.5.3 Temporary Asphalt Overlays of Concrete Pavements

Temporary asphalt overlays of concrete pavement shall be permitted, per the requirements in TP Section 18 (Traffic Control), during the staging of the Work, provided the overlays are milled after the staging is complete and the concrete pavement is free of Maintenance Defects.

8.6 Submittals

With respect to geotechnical requirements described in this TP Section 8, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 8 Attachments

Attachment No.	*Title*
Attachment 8-1	Status of Geotechnical Design Policy and Guides
Attachment 8-2	Blasting Requirements
Attachment 8-3	Wheel Path Definition
Attachment 8-4	Concrete to Asphalt Pavement Transition Detail
Attachment 8-5	Preliminary Borings

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 8-1

Status of Geotechnical Design Policy and Guides

Attachment 8-1: Status of Geotechnical Design Policy and Guides

The following list includes the status of how each section of the GDOT Geotechnical Design Policy and Guides shall be used for the Project:

N/A	Not Applicable
INF	Reference Information
PS	Project Standard for All Elements
U	Update per Recommendations of Geotechnical Engineering Reports Prior to Use

Section	***Description***	***Status***
01.0	Introduction	N/A
01.1	Forward	INF
01.2	Preface	INF
01.3	Consultant as an Extension of GDOT Staff	INF
01.4		N/A
01.5		N/A
02.0	Geotechnical Practices General	N/A
02.1	Geotechnical Practices General Intro	INF
02.2	Guidelines for Project Notifications	INF
02.3	Private Property Work	PS
02.3.1	Right-of-Entry letter	PS
02.3.2		N/A
02.4	Erosion Control revised 09182013	PS
02.5	Limitations of Liability	INF
02.6	Unanticipated Subsurface Conditions	N/A
02.7	Sample Retention Disposal Guidelines	INF
03.0	Bridge Foundation Investigation Guidelines	N/A
03.1	BFI Intro	PS
03.1.1	BFI Reconnaissance Form	PS
03.2	Typical Software for BFIs	INF
03.3	Foundation Drilling and Sampling Guide	PS
03.3.1	BFI Report Template	N/A
03.3.2	Sample BFI Report Coastal Plain Region	N/A
03.3.3	Sample BFI Report Piedmont or Valley Ridge Region	N/A
03.4	Supplemental BFI Information	N/A

Section	*Description*	*Status*
03.4.1	General Guidelines for Foundation Types Within Georgia	INF
03.4.10	Tower Pile Bent	INF
03.4.2	Guidelines for Selecting Minimum Tips Elevations	INF
03.4.3	Sample Boring layout with Cross-Section	INF
03.4.4	Sample Boring log	INF
03.4.5	Bridge Foundation Types	INF
03.4.6	Pile Bent	INF
03.4.7	Concrete Bent with Pile Footing	INF
03.4.8	Concrete Bent with Pedestal Footing	INF
03.4.9	Concrete Bent with Spread Footing	INF
03.5	BFI Checklist	INF
03.6	Guidelines for Scope Workbooks	N/A
03.6.1	BFI Personnel Job Descriptions	N/A
03.6.2	BFI and Other Structures Cost Proposal Worksheets	N/A
04.0	Soil Survey Guidelines	N/A
04.1	Soil Survey Intro	INF
04.2	Field Reconnaissance Form for Soil Survey	INF
04.3	Drilling and Sampling Guidelines	PS
04.4	Soil Survey Summary Report	N/A
04.4.1	Soil Survey Report Template	PS
04.4.2	Sample Coastal Plain Soil Survey Report	N/A
04.4.3	Sample SS Report Pied Valley or Valley and Ridge Region	INF
04.4.4	County Map Soils Memo revised 12122013	N/A
04.4.5	Soil Survey Before PFPR County Map	N/A
04.4.6	Guidelines for Subgrade Treatment	INF
04.5	Supplemental Soil Survey Information	N/A
04.5.1	Physiographic Regions of Georgia	INF
04.5.10	Sample Laboratory Testing Report	INF
04.5.11	Sample Detail for Rock Cut	INF
04.5.12	Sample Removal Detail	INF
04.5.13	Soil Support Correlation Chart	INF
04.5.14	Regional Factors for Use in Flexible Pavement Design	INF
04.5.15	K Values	INF
04.5.16	Base Uses in Georgia	INF

Section	*Description*	*Status*
04.5.17	Sample Rock Embankment Slope Detail	INF
04.5.18	Sample Soil Reinforcement Details	INF
04.5.19	Berm Detail for Cuts or Fills over 35 Feet	PS
04.5.2	Erosion Index	INF
04.5.20	Slope Underdrain Detail	INF
04.5.21	Sample Underdrain Placement Detail for High Groundwater Table Areas	INF
04.5.22	Sample Fabric and Surcharge Detail	INF
04.5.23	Sample Drainage Detail for Reconstructed Cut Section	INF
04.5.24	Shrink Factor	INF
04.5.25	Recommended Shrinkage Factor by Counties	INF
04.5.26	Pipe Culvert Material Alternates	PS
04.5.27	Now Obsolete Use 4.5.26	N/A
04.5.28	Benching Detail	PS
04.5.29	Guidelines for Base Thickness Recommendations	INF
04.5.3	Historical pH and Resistivity Values	INF
04.5.30	Serrated Slope Detail	INF
04.5.31	Sample Wick Drain Detail	INF
04.5.32	Sample Soil Survey Location Map	INF
04.5.33	Guidelines for Lime Stabilization	INF
04.5.34	Filter fabric Detail	INF
04.5.35	Filter fabric and Embankment Detail	INF
04.5.4	Sample Roadway Profile	INF
04.5.5	Soil Classifications	PS
04.5.6	Soil Classes	PS
04.5.7	Counties with Acid-Producing Rock	INF
04.5.8	Sample Field Book Entries	INF
04.5.9	Erosion Index Chart	INF
04.6	Soil Survey Checklist	INF
04.7	Soil Survey Reference Software	INF
04.8	Guidelines for Scope and Cost Estimate Workbooks	N/A
04.8.1	Personnel Job Descriptions	N/A
04.8.2	Soil Survey Cost Worksheet	N/A
05.0	Retaining Wall Guidelines	N/A
05.1	Retaining Wall Introduction	INF

Section	*Description*	*Status*
05.2	Wall foundation Drilling and Sampling Guide	PS
05.2.1	Retaining Wall boring layouts for 5.2.1 and 5.3.12	INF
05.3	Supplemental Retaining Wall Information	N/A
05.3.1	Retaining Wall Types used Georgia DOT	N/A
05.3.10	Details of Retaining Walls Typical Sections Redrawn	INF
05.3.11	Typical Section of a Permanently Anchored Retaining Wall	INF
05.3.12	Page removed or obsolete	N/A
05.3.2	Typical Section for Retaining Walls 18' high	INF
05.3.3	Typical Section for Retaining Walls 18’ high	INF
05.3.4	This page has been removed or obsolete	N/A
05.3.5	Retaining Wall Panel Shapes	INF
05.3.6	Proposed MSE Wall Panel Shapes	INF
05.3.7	Soil Nailing Description	INF
05.3.8	This page is now obsolete	N/A
05.3.9	Insert Wall Description	INF
05.4	Retaining Wall Report Template	N/A
05.4.1	Sample Stand-Alone Retaining Wall Report	INF
05.4.2	Sample Retaining Wall Report Included with BFI Report	INF
05.5	Wall Structure Checklist	INF
05.6	Retaining Wall Cost Estimate Refer to BFI Other Structures Worksheets	N/A
06.0	Other Structures Guidelines	N/A
06.1	Other Structures Guidelines	INF
06.2	Sample Other Structure Reports	N/A
06.2.1	Sample Light Tower Foundation Report	INF
06.2.2	Sample Rest Area Foundation Report	INF
06.2.3	Sample Culvert Foundation Report as Part of Soil Survey	INF
06.3	Refer to 3.6.2	N/A
07.0	Pavement Conditions and Thickness Design Guidelines	N/A
07.1	Pavement Condition and Thickness Design Guidelines Introduction	N/A
07.2	Pavement Supplemental Information Cover Page	N/A
07.2.1	PACES Link	N/A
08.0	Special Provisions	N/A
08.1	Special Provision Introduction	INF
08.2	Sample Special Provisions	N/A

Section	*Description*	*Status*
08.2.1	SP205- Roadway Excavation	U
08.2.10	SP523 PDA Contractor Provided Non-LRFD	U
08.2.11	SP524- Drilled Caisson Foundations Wet	U
08.2.12	SP524 Drilled Caisson Foundations Dry	U
08.2.13	SP572 Slope Underdrains	U
08.2.14	SP809 Geogrid Materials	U
08.2.15	SP881 Fabrics Multiple fabric layers	U
08.2.16	SP881 Fabrics	U
08.2.17	SP 154 Vibration Monitoring	N/A
08.2.18	SP520 Modified Pilot Holes	U
08.2.19	SP999 Geotechnical Test Coring	U
08.2.2	SP208 Embankments	U
08.2.3	SP209 Subgrade Construction	U
08.2.4	SP209 Subgrade Construction	U
08.2.5	SP457 Reinforced Slopes	U
08.2.5	SP457 Reinforced Slopes Geogrid Reinforced Slope Embankment Internal Drainage Details (page 7)	U
08.2.6	SP457 Geogrid Reinforced Slopes Dept Or Consultant Design	U
08.2.7	SP457 Geogrid Reinforcement Embankment Stabilization Only	U
08.2.8	SP520 Piling Option to Pre Drill	U
08.2.9	SP520 Piling Pilot Holes	U
09.0	LRFD for BFI	N/A
09.1	LRFD BFI Introduction	INF
09.2	Bridge Foundation Investigation Report Template Guidelines LRFD	PS
09.2.1	Bridge Foundation investigation Report Template LRFD	PS
09.2.2	GDOT Process for Corrosion Resistant PSC Pile Recommendation in BFI-LRFD Reports	PS
09.2.3	BFI LRFD Checklist	PS
09.3	Special Provisions	N/A
09.3.1	SP 523 PDA Contractor Provided LRFD	U
09.3.2	SP520 Piling LRFD Determine Driving Resistance	U
09.4	Sample Foundation Recommendation Letters	N/A
09.4.1	Sample Foundation Recommendation Letters to Bridge Office	N/A
09.4.2	Sample Answer letter From Bridge Office to Foundation Recommendation Letter from G.E.P. Engineer	N/A
09.4.3	Sample Bridge Office LRFD Pile Loads Letter	N/A

Section	*Description*	*Status*
09.4.4	Drilled Shaft Self Weight Check	INF
09.5	GDOT WFI-LRFD Process	INF
09.5.1	WFI-LRFD Soil Parameter Recommendation Template	PS
09.6	Wall Foundation Investigation Report Template LRFD	PS
09.6.1	WFI LRFD Checklist	PS
09.6.2	LTP Detail for MSE Wall at Bridge Abutment	INF
09.6.3	LTP Detail for MSE Wall - Section along Wall	INF
09.6.4	LTP Detail for Cantilever Wall without Key	INF
09.6.5	LTP Detail for Cantilever Wall with Key	INF
09.7	GDOT LRFD Bearing Capacity and Settlement Design Spreadsheets for Shallow Foundations	N/A
09.7.1	Guidelines and Example for GDOT LRFD Shallow Foundations Spreadsheet using SPT Data	INF
09.7 2	GDOT LRFD Shallow Foundations Bearing Capacity and Settlement Design with SPT Data	INF
09.7.3	Guidelines and Example for GDOT LRFD Shallow Foundations Spreadsheet using CPT Data	INF
09.7.4	GDOT LRFD Shallow Foundations Bearing Capacity and Settlement Design with CPT Data	INF
09.7.5	Guidelines and Example for GDOT LRFD Shallow Foundations Spreadsheet using DMT Data	INF
09.7.6	GDOT LRFD Shallow Foundations Bearing Capacity and Settlement Design with DMT Data	INF
10.0	Environmental Testing Branch	N/A
10.1	Environmental Testing Branch Introduction	INF
10.2	GDOT Policy 5525-1 UST and Hazardous Waste Site Investigation Procedure	PS
10.3	UST. HW Transmittal Request Guidelines and Templates	N/A
10.3.1	Environmental Site Assessment Phase I Guidelines	PS
10.3.2	Environmental Site Assessment Phase II Guidelines	PS
10.3.2.1	Page has been removed or is obsolete	N/A
10.3.2.2	Page has been removed or is obsolete	N/A
10.3.2.3	Page has been removed or is obsolete	N/A
10.3.2.4	Page has been removed or is obsolete	N/A
10.4	This page intentionally left blank for future use	N/A
10.5	USTHW Correspondence Samples	N/A
10.5.1	Sample Internal Phase II ESA Investigation Request	INF
10.5.2	Sample Internal Phase II ESA Investigation Report	INF

Section	***Description***	***Status***
10.5.3	Sample Contamination Letters to the EPD & Property Owner	INF
10.6	Phase II ESA Drilling and Sampling Guidelines	PS
11.0	References	N/A
11.1	Reference Documents	INF

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 8-2

Blasting Requirements

Attachment 8-2: Blasting Requirements

When the use of explosives is necessary for the prosecution of the Work, the Design-Builder shall exercise the utmost care not to endanger life or property, and shall obey all State, Federal, and other Governmental regulations applying to transportation, storage, use, and control of such explosives. The Design-Builder shall be completely responsible for any and all damage resulting from the transportation, storage, use, and control of explosives in the prosecution of the Work by the Design-Builder, the Design-Builder's agents, or employees; and shall hold GDOT harmless from all claims of damages resulting in any manner therefrom.

The Design-Builder shall notify each Utility Owner having structures or other installations, above or below ground, near the site of the Work where there is intention to use explosives. Such notice shall be given sufficiently in advance, but no less than 60 days prior to any blasting activities, to enable the Utility Owners to take such steps as they may deem necessary to protect their property from damage. Such notice shall not relieve the Design-Builder of responsibility for all damages resulting from blasting operations.

All explosives shall be stored securely in compliance with all Laws and all such storage facilities shall be clearly marked "Dangerous Explosives." Explosives and detonators shall be stored in separate storage facilities in separate areas. Where no Laws apply, locked storage shall be provided satisfactory to the EOR, never closer than 1,000 feet from any travel-road, building, or camping area.

In all cases where the transport, storage, or use of explosives is undertaken, such activities shall be controlled and directed by fully qualified representatives of the Design-Builder.

Whenever electric detonators are used, all radio transmitters shall be turned off within a radius of 500 feet. No blasting supplies shall be transported in vehicles with two-way radio unless the transmitter is turned off, or extra shielding precautions are taken. Appropriate signs shall be placed so as to give ample warning to anyone driving a vehicle equipped with two-way radio. Electrical detonators shall not be used within 500 feet of a railroad or MARTA facility.

The Design-Builder shall submit a Blasting Plan prior to use of explosives that provides details of the proposed Blasting Plan, including, but not limited to, the type and number of explosives, the shot sequence, the description of and distance to the closest inhabitable structure, and other information as requested by GDOT. Submission of Blasting Plans does not relieve the Design-Builder of the responsibility for the adequate and safe performance of the blasting.

Georgia Department of Transportation

Technical Provisions

For

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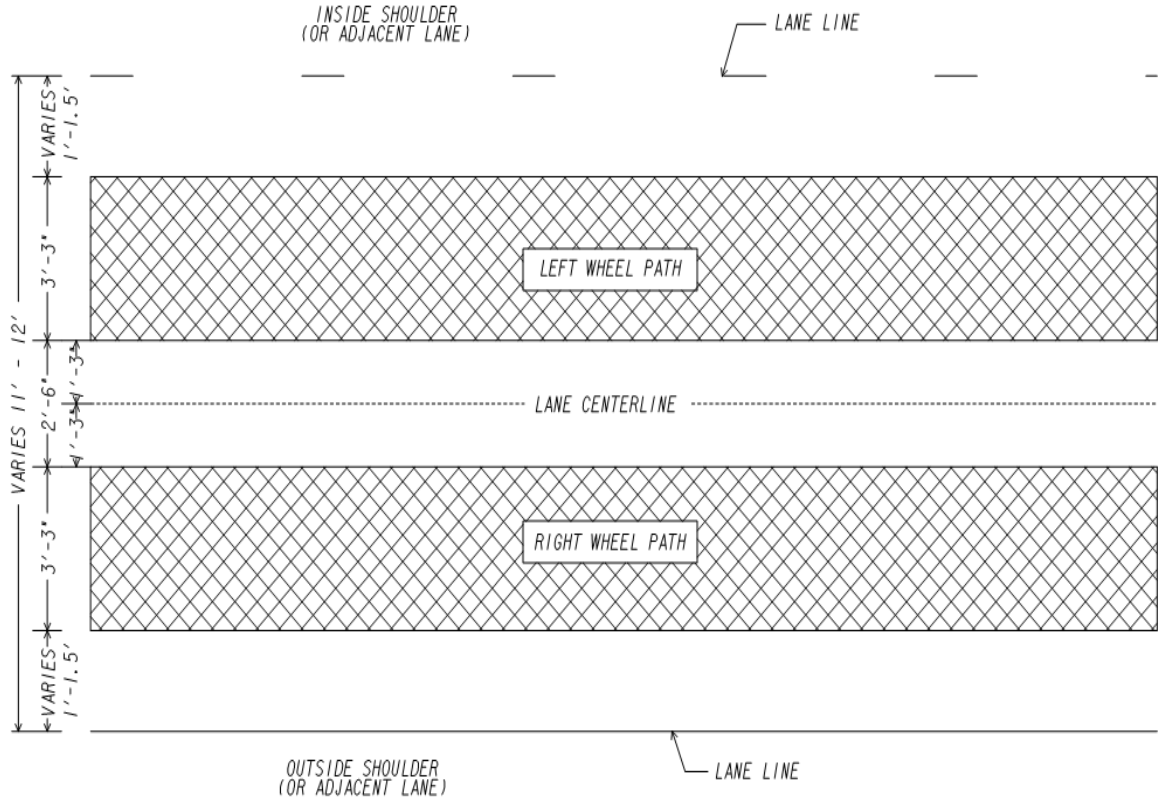
P.I. No. 0017182

Attachment 8-3

Wheel Path Definition

Attachment 8-3: Wheel Path Definition



Georgia Department of Transportation

Technical Provisions

For

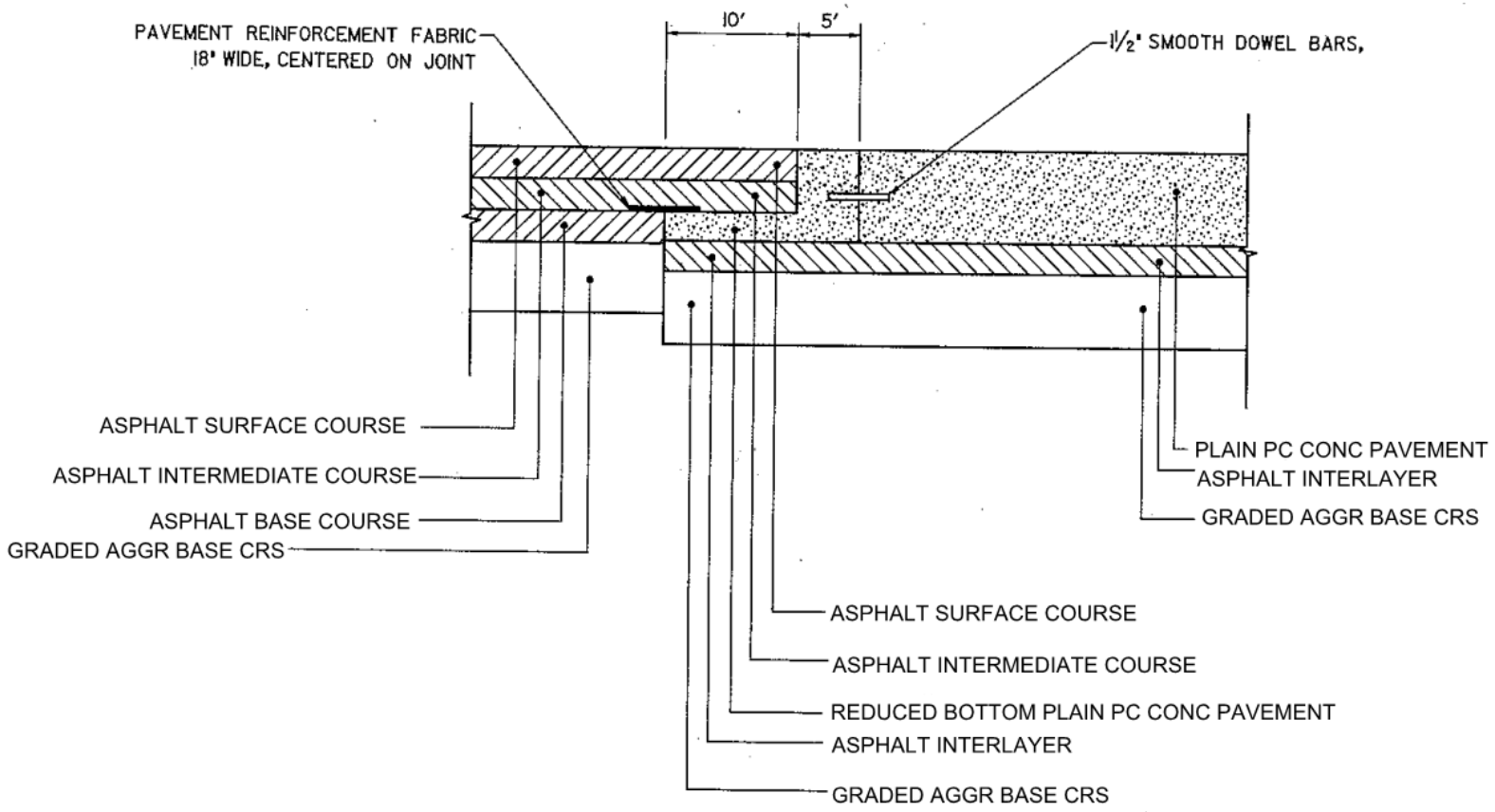
Design-Build Agreement

P.I. No. 0017182

Attachment 8-4

Concrete to Asphalt Pavement Transition Detail

Attachment 8-4: Concrete to Asphalt Pavement Transition Detail



*Pavement reinforcement fabric shall be high strength on limited access facilities

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 8-5

Preliminary Borings

Preliminary Geotechnical Exploration Data Report
GDOT PI No. 0017182
I-75 at CR 312/Bethlehem Road
Henry County, Georgia

Prepared for:
State of Georgia
Department of Transportation
Geotechnical Engineering Bureau
Office of Materials and Testing
15 Kennedy Drive
Forest Park, GA 30297

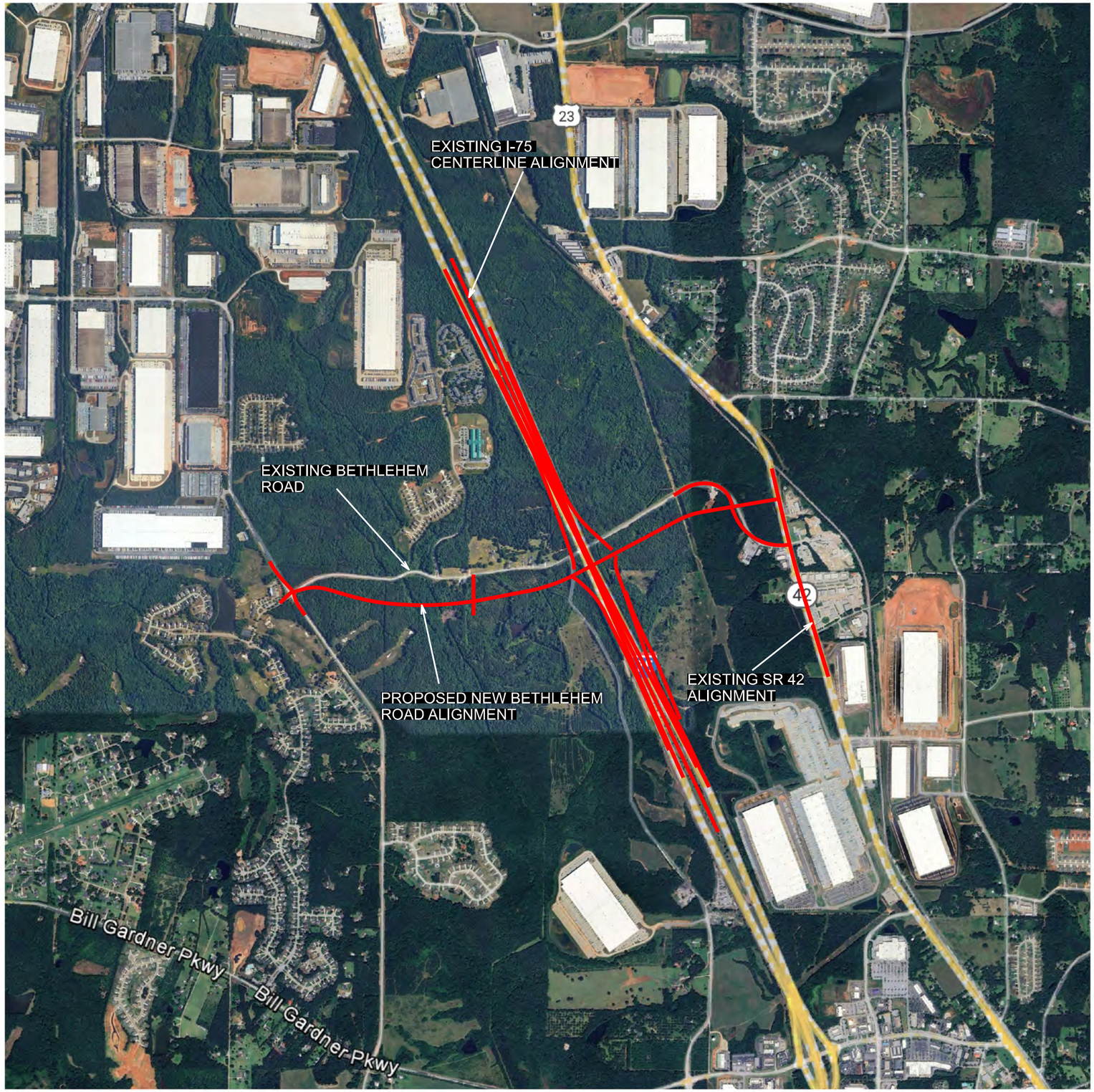
Subconsultant to:
Arcadis US, Inc.
2839 Paces Ferry Road
Suite 900
Atlanta, GA 30339

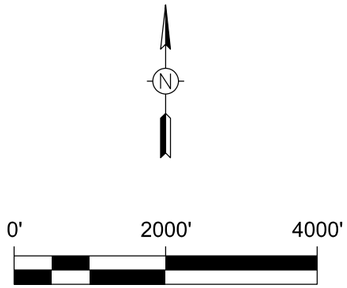
Prepared by:
EGSci Consulting Inc.
1455 Lincoln Parkway
Suite 500
Atlanta, GA 30346

February 7, 2025
Revision 2

ARCADIS

EGSci consulting inc
Engineering, Geophysics & Geosciences





LEGEND:

APPROXIMATE PROPOSED ROAD ALIGNMENTS/INVESTIGATION AREA

NOTES:

1. ROAD ALIGNMENTS PROVIDED BY ARCADIS (SEPTEMBER 13 AND 16, 2024); DGN FILES "0017182GEOM-75, 0017182GEOM-CROSS STREETS, 0017182GEOM-New_Bethlehem, 0017182GEOM-Old_Bethlehem East, 0017182GEOM-RAMPS, 0017182GEO SR42."
2. REFER TO FIGURE 4 FOR STATIONING ALONG THE PROPOSED ROAD ALIGNMENTS.

SOURCE: GOOGLE EARTH IMAGERY, 2024.

Consultant

EGSci consulting inc

Client

ARCADIS

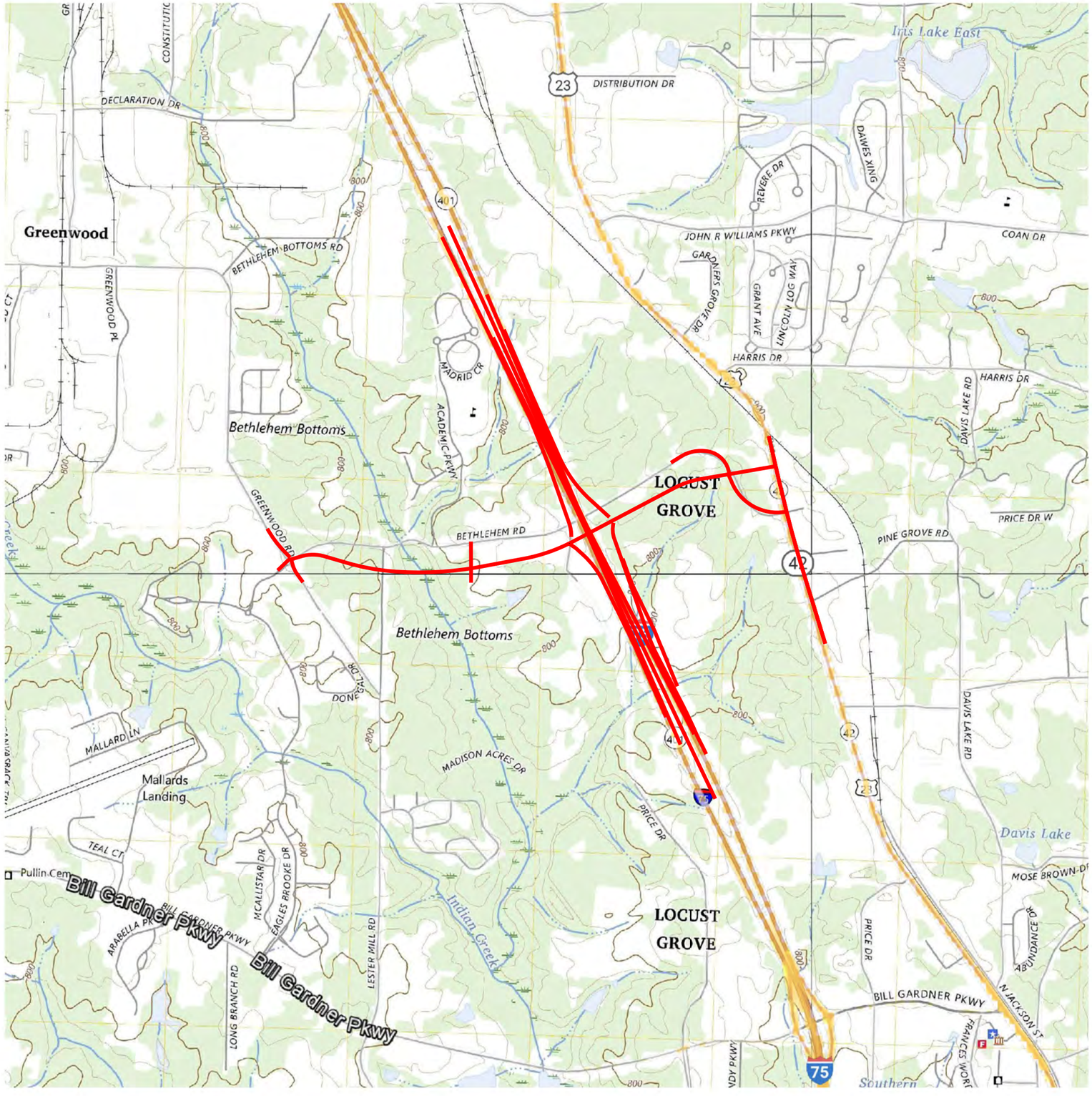
PROJECT NUMBER	PROJECT
PI NO. 0017182	I-75 @ CR 312/BETHLEHEM ROAD

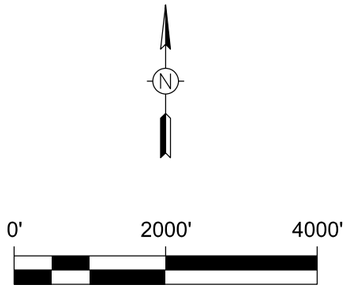
LOCATION

HENRY COUNTY, GEORGIA

SITE LOCATION MAP

FIGURE	SCALE
1	1" = 2000'





LEGEND:

APPROXIMATE PROPOSED ROAD ALIGNMENTS/INVESTIGATION AREA

NOTES:

1. ROAD ALIGNMENTS PROVIDED BY ARCADIS (SEPTEMBER 13 AND 16, 2024); DGN FILES "0017182GEOM-75, 0017182GEOM-CROSS STREETS, 0017182GEOM-New_Bethlehem, 0017182GEOM-Old_Bethlehem East, 0017182GEOM-RAMPS, 0017182GEOM-SR42."
2. THE TOPOGRAPHIC AND ELEVATION DATA SHOWN HEREIN WERE OBTAINED FROM USGS AND ARE NOT CERTIFIED AS CORRECT BY THIS ENGINEER. USERS OF THIS DATA DO SO AT THEIR OWN RISK.
3. REFER TO FIGURE 4 FOR STATIONING ALONG THE PROPOSED ROAD ALIGNMENTS.

SOURCE:

USGS TOPOGRAPHIC MAPS
MCDONOUGH, LUELLA, LOCUST GROVE, OLA, GA; YEAR 2020
(SCALE 1:24,000)

Consultant

EGSci consulting inc

Client

ARCADIS

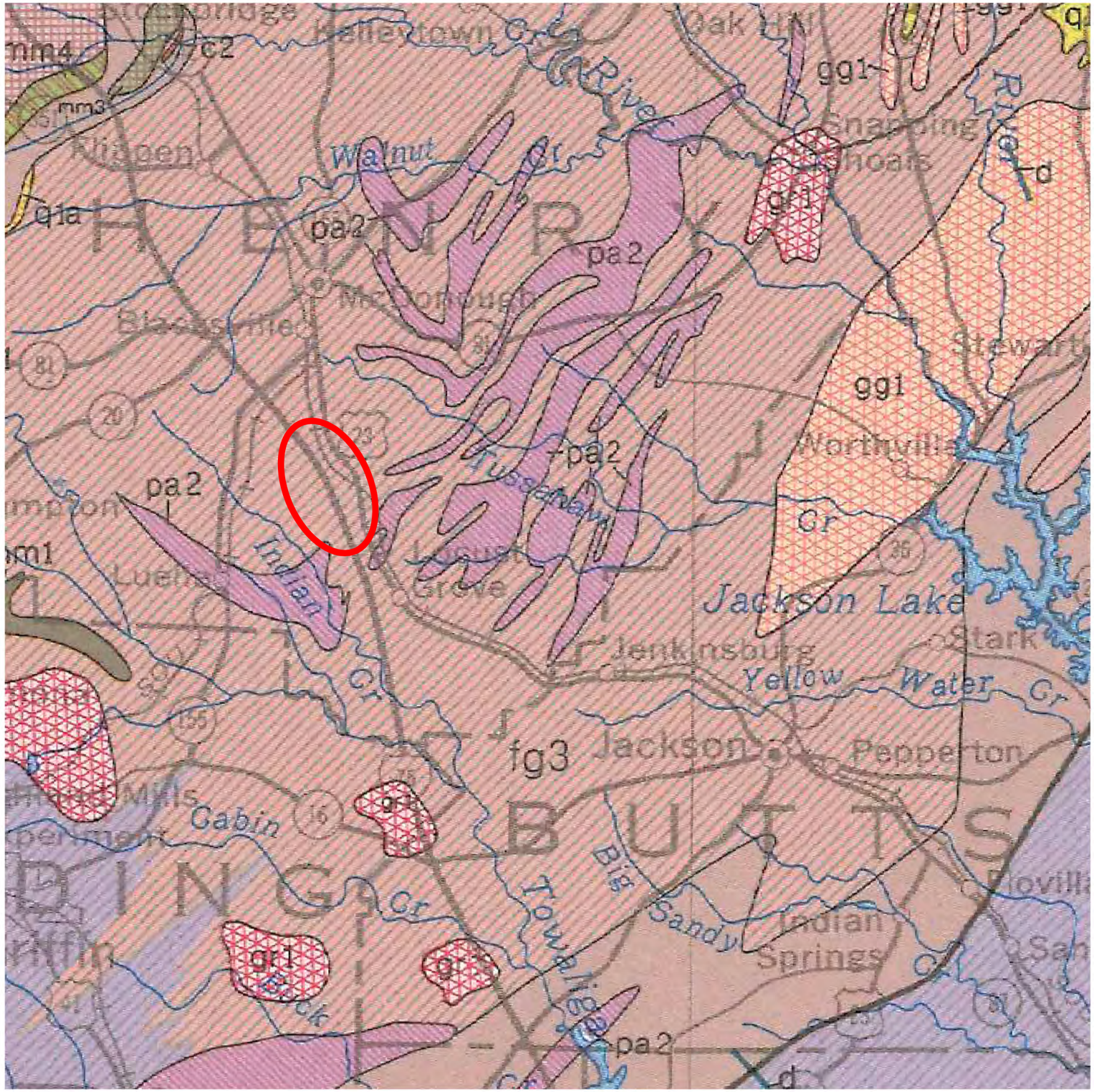
PROJECT NUMBER	PROJECT
PI NO. 0017182	I-75 @ CR 312/BETHLEHEM ROAD

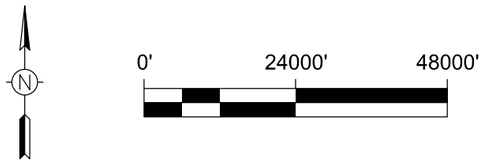
LOCATION

HENRY COUNTY, GEORGIA

TOPOGRAPHIC MAP

FIGURE	SCALE
2	1" = 2000'





LEGEND:

APPROXIMATE LIMITS OF INVESTIGATION AREA

fg3 — BIOTITE GNEISS/ MICA SCHIST/ AMPHIBOLITE

pa2 — SILLIMANITE SCHIST

gr1 — GRANITE UNDIFFERENTIATED

ggl — GRANITIC GNEISS UNDIFFERENTIATED

q1a — QUARTZITE/ MICA SCHIST

NOTES:

1. ONLY LITHOSTRATIGRAPHIC UNITS IN THE GENERAL PROXIMITY AND REPRESENTATIVE OF THE PROJECT AREA ARE SHOWN; PLEASE REFER TO THE REFERENCED MAP IN THIS FIGURE FOR MORE DETAIL.

SOURCE:

GEOLOGIC MAP OF GEORGIA (SCALE 1:500,000), GEORGIA DEPARTMENT OF NATURAL RESOURCES, GEOLOGIC AND WATER RESOURCES DIVISION, GEORGIA GEOLOGICAL SURVEY, 1976 (REPRINTED 1997). BASE MAP BY USGS.

Consultant

EGSci consulting inc

Client

ARCADIS

PROJECT NUMBER	PROJECT
PI NO. 0017182	I-75 @ CR 312/BETHLEHEM ROAD

LOCATION

HENRY COUNTY, GEORGIA

GEOLOGIC MAP

FIGURE	SCALE
3	1" = 24000'

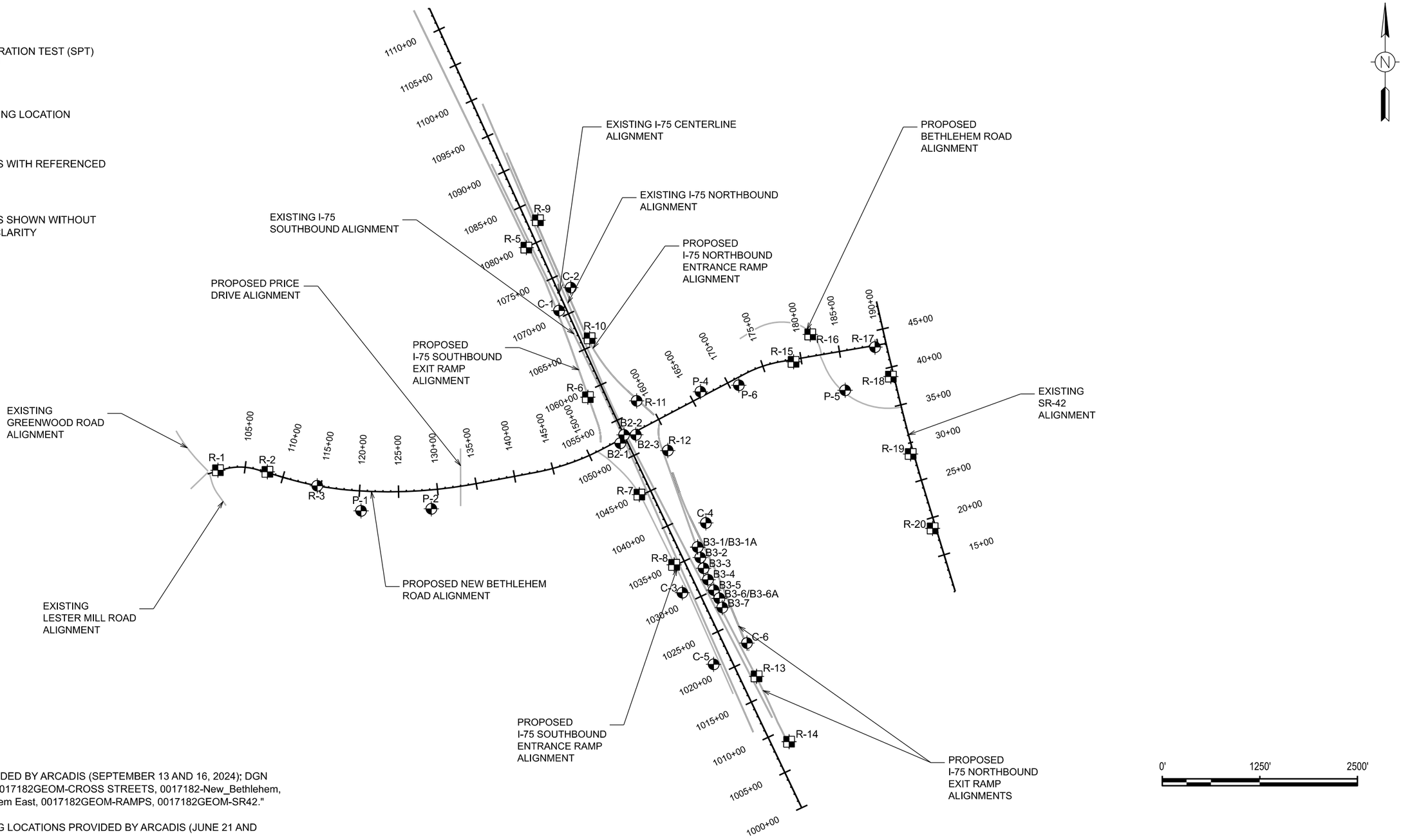
LEGEND:

C-1
STANDARD PENETRATION TEST (SPT) BORING LOCATION

R-5
HAND AUGER BORING LOCATION

1000+00
ROAD ALIGNMENTS WITH REFERENCED STATIONING

ROAD ALIGNMENTS SHOWN WITHOUT STATIONING FOR CLARITY



NOTES:

1. ROAD ALIGNMENTS PROVIDED BY ARCADIS (SEPTEMBER 13 AND 16, 2024); DGN FILES "0017182GEOM-75, 0017182GEOM-CROSS STREETS, 0017182-New_Bethlehem, 0017182GEOM-Old_Bethlehem East, 0017182GEOM-RAMPS, 0017182GEOM-SR42."

2. SURVEY DATA FOR BORING LOCATIONS PROVIDED BY ARCADIS (JUNE 21 AND OCTOBER 9, 2024).

CONSULTANT	EGSci consulting inc	CLIENT	ARCADIS	PROJECT NUMBER	PI NO. 0017182	LOCATION	HENRY COUNTY, GEORGIA
				PROJECT	I-75 @ CR 312/BETHLEHEM ROAD		

BORING LOCATION PLAN

SCALE	1"=1250'
FIGURE	4

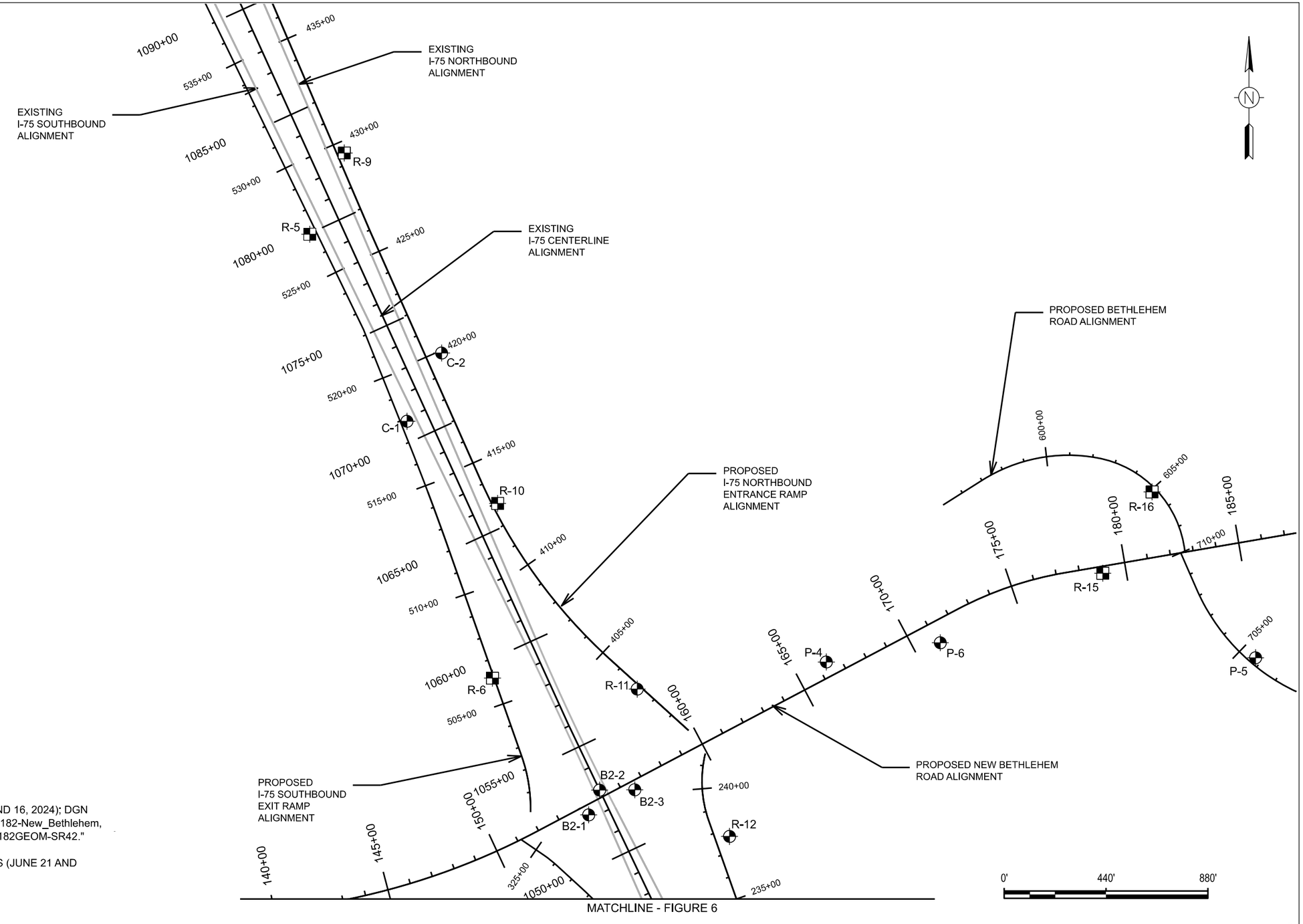
LEGEND:

C-1
STANDARD PENETRATION TEST (SPT) BORING LOCATION

R-5
HAND AUGER BORING LOCATION

1000+00
ROAD ALIGNMENTS WITH REFERENCED STATIONING

ROAD ALIGNMENTS SHOWN WITHOUT STATIONING FOR CLARITY



MATCHLINE - FIGURE 6

NOTES:

1. ROAD ALIGNMENTS PROVIDED BY ARCADIS (SEPTEMBER 13 AND 16, 2024); DGN FILES "0017182GEOM-75, 0017182GEOM-CROSS STREETS, 0017182-New_Bethlehem, 0017182GEOM-Old_Bethlehem East, 0017182GEOM-RAMPS, 0017182GEOM-SR42."
2. SURVEY DATA FOR BORING LOCATIONS PROVIDED BY ARCADIS (JUNE 21 AND OCTOBER 9, 2024).
3. REFER TO FIGURE 4 FOR FULL PROJECT LIMITS.

CONSULTANT: EGSci consulting inc	CLIENT: ARCADIS	PROJECT NUMBER	PI NO. 0017182	LOCATION	HENRY COUNTY, GEORGIA	BORING LOCATION PLAN - NORTH	SCALE: 1"=440'
		PROJECT	I-75 @ CR 312/BETHLEHEM ROAD				FIGURE: 5

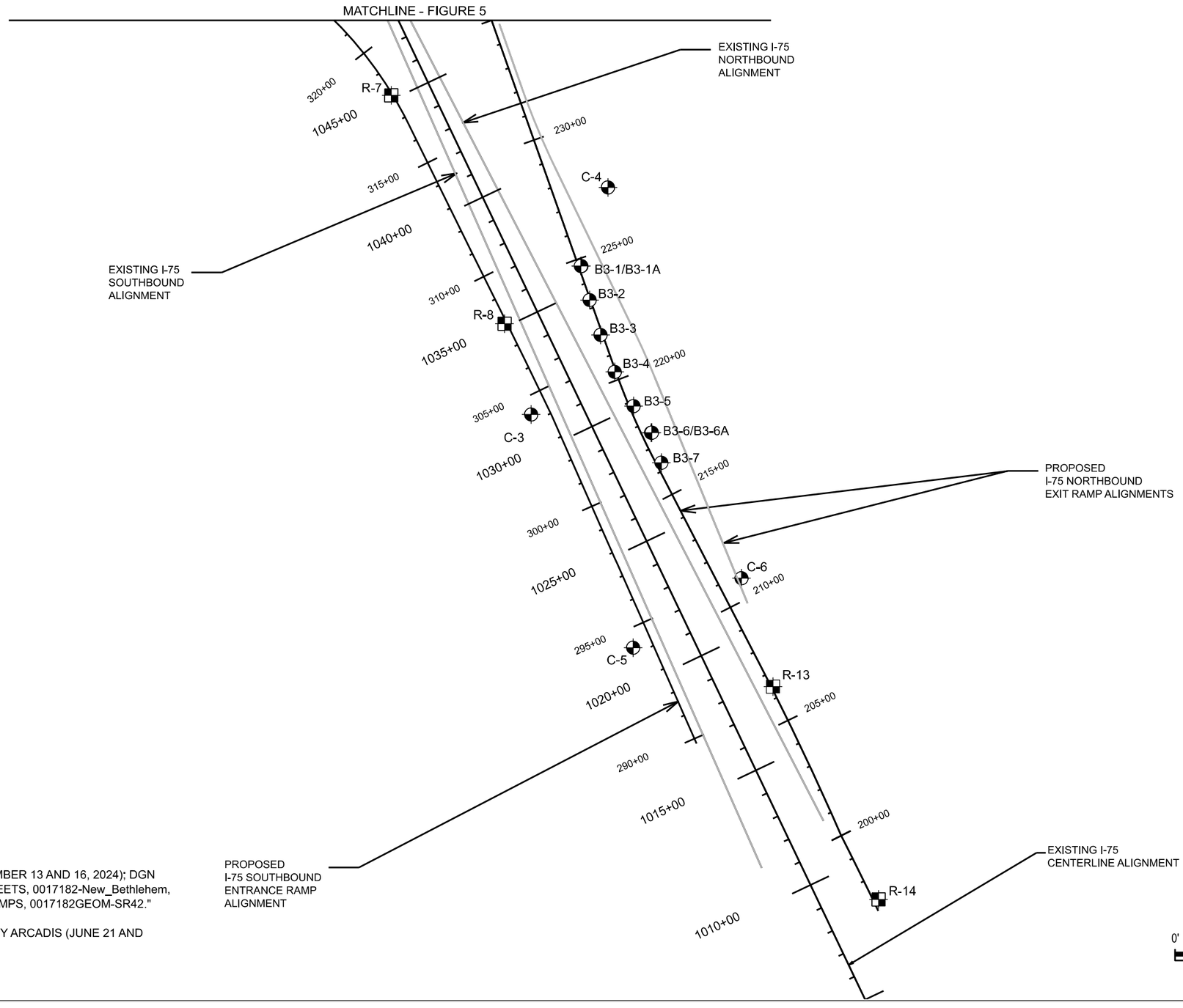
LEGEND:

C-1
STANDARD PENETRATION TEST (SPT) BORING LOCATION

R-5
HAND AUGER BORING LOCATION

1000+00
ROAD ALIGNMENTS WITH REFERENCED STATIONING

ROAD ALIGNMENTS SHOWN WITHOUT STATIONING FOR CLARITY



NOTES:

1. ROAD ALIGNMENTS PROVIDED BY ARCADIS (SEPTEMBER 13 AND 16, 2024); DGN FILES "0017182GEOM-75, 0017182GEOM-CROSS STREETS, 0017182-New_Bethlehem, 0017182GEOM-Old_Bethlehem East, 0017182GEOM-RAMPS, 0017182GEOM-SR42."
2. SURVEY DATA FOR BORING LOCATIONS PROVIDED BY ARCADIS (JUNE 21 AND OCTOBER 9, 2024).
3. REFER TO FIGURE 4 FOR FULL PROJECT LIMITS.

CONSULTANT: EGSci consulting inc	CLIENT: ARCADIS	PROJECT NUMBER	PI NO. 0017182	LOCATION	HENRY COUNTY, GEORGIA	BORING LOCATION PLAN - SOUTH	SCALE: 1"=440'
		PROJECT	I-75 @ CR 312/BETHLEHEM ROAD				FIGURE: 6

APPENDIX A

SUBSURFACE EXPLORATION RECORDS

APPENDIX A-1

BORING SUMMARY TABLE

BORING SUMMARY TABLE

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER	LATITUDE[1]	LONGITUDE[1]	STATION[2] (APPROX.)	OFFSET[2] (FT) (APPROX.)	ELEVATION[1] (FT)	TOTAL DEPTH (FT)
B2-1	33.376699	-84.138386	154+23	41.5' R	831.7	75.0
B2-2	33.376992	-84.138231	155+15	31.0' L	835.7	75.0
B2-3	33.376997	-84.137734	156+50	38.5' R	828.6	78.6
B3-1	33.373040	-84.135145	1035+89	232.5' R	783.5	71.0
B3-1A[1]	33.373040	-84.135138	1035+88	234.0' R	784	5.5
B3-2	33.372672	-84.135032	1034+54	206.0' R	787.7	55.5
B3-3	33.372294	-84.134891	1033+11	185.5' R	790.5	73.6
B3-4[1]	33.371894	-84.134708	1031+56	173.5' R	795.2	73.7
B3-5	33.371524	-84.134465	1030+02	182.5' R	799.7	74.3
B3-6	33.371235	-84.134240	1028+78	199.5' R	798.1	38.8
B3-6A	33.371237	-84.134230	1028+77	202.5' R	798.8	73.9
B3-7	33.370911	-84.134107	1027+54	185.5' R	791.6	73.7
C-1	33.381370	-84.140955	1070+87	92.0' L	815.6	50.0
C-2	33.382180	-84.140465	1072+93	166.0' R	800.0	25.0
C-3	33.371433	-84.135786	1031+46	195.5' L	773.8	25.0
C-4	33.373890	-84.134795	1038+23	462.0' R	787.1	25.0
C-5	33.368909	-84.134472	1021+44	228.5' L	763.9	23.9
C-6	33.369660	-84.133075	1022+08	274.5' R	770.9	25.0
P-1	33.374321	-84.149267	120+34	254.0' R	795.7	20.0
P-2	33.374390	-84.146317	129+00	242.0' R	779.6	20.0
P-4	33.378513	-84.135022	166+39	63.5' L	843.7	20.0
P-5	33.378561	-84.128950	38+50	649.0' L	858.5	20.0
P-6	33.378740	-84.133410	171+13	93.0' R	848.4	20.0
R-1	33.375752	-84.155272	101+48	10.0' L	826.9	7.0
R-2	33.375692	-84.153198	107+90	10.5' L	808.8	5.0
R-3	33.375202	-84.151107	114+54	0.5' R	814.7	30.0
R-5	33.383591	-84.142329	1079+96	139.5' L	814.6	5.0
R-6	33.378322	-84.139746	1059+25	215.0' L	851.8	5.0
R-7	33.374888	-84.137589	1045+17	152.0' L	834.3	5.0
R-8	33.372415	-84.136129	1035+14	136.5' L	801.7	5.0
R-9	33.384555	-84.141842	1082+54	141.0' R	823.7	7.0
R-10	33.380395	-84.139673	1066+02	117.5' R	818.1	7.0
R-11	33.378191	-84.137699	1056+17	334.0' R	861.6	20.0
R-12	33.376442	-84.136393	1048+71	420.5' R	825.3	60.0
R-13	33.368487	-84.132669	1017+69	202.5' R	792.7	5.0
R-14	33.366184	-84.131308	1008+34	217.5' R	823.3	5.0

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BORING SUMMARY TABLE

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER	LATITUDE[1]	LONGITUDE[1]	STATION[2] (APPROX.)	OFFSET[2] (FT) (APPROX.)	ELEVATION[1] (FT)	TOTAL DEPTH (FT)
R-15	33.379565	-84.131112	178+99	30.0' R	835.9	5.0
R-16	33.380530	-84.130413	181+69	280.5' L	862.7	5.0
R-17	33.380081	-84.127697	189+58	20.5' R	873.1	30.0
R-18	33.379042	-84.127030	38+82	38.5' L	872.4	5.0
R-19	33.376317	-84.126203	28+60	38.5' L	857.5	5.0
R-20	33.373696	-84.125280	18+67	42.0' L	841.2	5.0

NOTES:

1. Boring locations and ground surface elevations are based on survey data provided by Arcadis on June 21 and October 9, 2024. *The location for offset Boring B3-1A was not surveyed, and coordinates should be considered approximate; the ground surface elevation for offset Boring B3-1A was estimated based on data from the U.S. Geological Survey Elevation Service and should be considered approximate. The surveyed location for Boring B3-4 was estimated by field personnel after drilling (stake denoting boring location was no longer present at the time of surveying); surveyed location and elevation should therefore be considered approximate.*
2. Stations and Offsets were estimated based on drawings provided by Arcadis on September 13 and 16, 2024 and survey data provided by Arcadis on June 21 and October 9, 2024. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.

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APPENDIX A-2

BORING LOGS

Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-1

Sheet 1 of 4

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **154+23, 41.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376699, -84.138386**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **831.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
831.7	0										
	0.3				TOPSOIL						
					RESIDUAL SILTY SAND: loose, moist, red, fine to coarse, with trace Organics.	SM					
		DO	S1	12			1-3-3	6	23.6		
											AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS.
	3.5				S2: red and white.						
		DO	S2	11			3-3-5	8			
826.7	5										
	6				SILTY SAND: loose, moist, red and white, fine to coarse.	SM					
		DO	S3	13			4-3-4	7	26.7		[% Fines: 36.5]
		DO	S4	14			3-3-5	8			
821.7	10										
	13.5				SILTY SAND: loose, moist, red, tan, and gray, fine to coarse, with few Gravel.	SM					13.8 ft. BGS after 21.5 hrs.
		DO	S5	16			4-3-5	8	27.6		[% Fines: 32.9]
816.7	15										
	18.5				S6: medium dense, red, tan, and brown, no Gravel.						Borehole caved in at 18.9 ft. BGS at drilling completion.
		DO	S6	16			4-4-7	11			
811.7	20										

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B2-1** Sheet 2 of 4
Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **154+23, 41.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376699, -84.138386**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **831.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
811.7	20					SILTY SAND: medium dense, moist, red, tan, and brown, fine to coarse.	SM					
	23.5		DO	S7	14	S7: red, tan, and white.		4-5-6	11			
806.7	25											Borehole caved in at 27.3 ft. BGS after 21.5 hrs.
	28.5		DO	S8	14	S8: red, brown, and gray.		3-4-7	11			
801.7	30											
	33.5		DO	S9	15	SILTY SAND: dense, moist, red and brown, fine to coarse.	SM	9-15-17	32	23.2		[% Fines: 21.2]
796.7	35											Increased drilling resistance observed at approx. 36 ft. BGS.
	38.5		DO	S10	14	SILTY SAND: medium dense, moist, red, brown, and tan, fine to coarse.	SM	4-10-16	26			
791.7	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-1

Sheet 3 of 4

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **154+23, 41.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376699, -84.138386**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **831.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
791.7	40					SILTY SAND: medium dense, moist, red, brown, and tan, fine to coarse.	SM					
			DO	S11	16			6-13-10	23			
786.7	45											
	48.5											
			DO	S12	15	SILTY SAND: medium dense, moist, red, brown, and tan, fine to coarse.	SM	10-13-13	26	23.0		[% Fines: 25.5]
781.7	50											
	53.5											
			DO	S13	14	SILTY SAND: dense, moist, tan and white, fine to coarse.	SM	7-13-18	31			
776.7	55											
	58.5											
			DO	S14	15	S14: medium dense, tan, white, and gray.		7-11-19	30			
771.7	60											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-1

Sheet 4 of 4

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **154+23, 41.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376699, -84.138386**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **831.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
771.7	60					SILTY SAND: medium dense, moist, tan, white, and gray, fine to coarse.	SM					
	63.5		DO	S15	15	SILTY SAND: medium dense, moist, tan, red, and gray, fine to coarse.	SM	14-14-16	30	25.0		[% Fines: 25.9]
766.7	65											
	68.5		DO	S16	9	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray, brown, and white, fine to coarse, slightly micaceous.	SM	36-50/3"	50/3"			
761.7	70											
	73.5		DO	S17	15	SILTY SAND: very dense, moist, gray, brown, and white, fine to coarse.	SM	31-35-40	75			
756.7	75					Boring terminated at 75.0 ft. BGS. Backfilled with cuttings after 21.5 hrs.						
751.7	80											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**	# BORING B2-2 Sheet 1 of 4

Drilling Date(s): **6/6/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **155+15, 31.0 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376992, -84.138231**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **835.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 median**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
835.7	0											
	0.3					TOPSOIL						
						FILL SANDY LEAN CLAY: firm, moist, red, fine to coarse, with trace Organics.	CL					
			DO	S1	16			3-3-4	7	20.8		[% Fines: 56.7]
												AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS.
	3.5					S2: stiff, red, brown, and tan.						
			DO	S2	14			4-6-6	12			
830.7	5											
	6					RESIDUAL SILTY SAND: medium dense, moist, red and brown, fine to coarse.	SM					
			DO	S3	13			3-5-6	11	26.2		[% Fines: 40.1]
	8.5					SILTY SAND: loose, moist, red and brown, fine to coarse.	SM					
			DO	S4	14			3-4-5	9			
825.7	10											
	13.5					S5: white, red, and brown.						Depth to groundwater could not be established during drilling due to mud rotary drilling. Borehole backfilled upon completion.
			DO	S5	11			3-3-4	7			
820.7	15											
	18.5					S6: white, red, and brown.						
			DO	S6	16			2-4-6	10			
815.7	20											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B2-2** Sheet 2 of 4
Drilling Date(s): **6/6/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **155+15, 31.0 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376992, -84.138231**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **835.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 median**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
815.7	20					SILTY SAND: loose, moist, white, red, and brown, fine to coarse.	SM					
	23.5											
	24.5		DO	S7	16	SANDY LEAN CLAY: very stiff, moist, white and brown.	CL	6-9-8	17	19.7		[S7_bottom % Fines: 26.3]
810.7	25					SILTY SAND: medium dense, moist, red and brown, fine to coarse.	SM					
	28.5		DO	S8	16	SILTY SAND: medium dense, moist, red and brown, fine to coarse.	SM	5-8-10	18			
805.7	30											Borehole caved in at 30.5 ft. BGS at drilling completion.
	33.5		DO	S9	18	S9: red, brown, and gray.		4-6-10	16			
800.7	35											
	38.5		DO	S10	18	S10: red, gray, white, and brown.		8-11-12	23			
795.7	40											

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EGSci Consulting Inc.
1455 Lincoln Parkway
Suite 500
Atlanta, GA 30346

Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-2

Sheet 3 of 4

Drilling Date(s): **6/6/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **155+15, 31.0 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376992, -84.138231**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **835.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 median**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
795.7	40					SILTY SAND: medium dense, moist, red, gray, white, and brown, fine to coarse.	SM					
			DO	S11	14			6-6-10	16	27.8		[% Fines: 28.2]
790.7	45											Increased drilling resistance observed at approx. 46 ft. BGS.
	48.5											
			DO	S12	10	SILTY SAND: medium dense, moist, red, gray, white, and brown, fine to coarse.	SM	6-13-17	30			
785.7	50											
	53.5											
			DO	S13	16	SILTY SAND: dense, moist, red, brown, and black, fine to coarse, slightly micaceous.	SM	12-15-18	33			
780.7	55											
	58.5											
			DO	S14	15	SILTY SAND: medium dense, moist, red, brown, white, and gray, fine to coarse.	SM	7-14-14	28			
775.7	60											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B2-2** Sheet 4 of 4
Drilling Date(s): **6/6/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **155+15, 31.0 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376992, -84.138231**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **835.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **75.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 median**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
775.7	60					SILTY SAND: medium dense, moist, red, brown, white, and gray, fine to coarse.	SM					
	63.5		DO	S15	14	S15: dense, slightly micaceous.		16-20-25	45	20.8		[% Fines: 32.6]
770.7	65											Increased drilling resistance observed at approx. 67 ft. BGS.
	68.5		DO	S16	11	S16: medium dense, brown, black, and white.		4-12-50/4"	62/10"			
	69.5					PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, brown, black, and white, fine to coarse.	SM					
765.7	70											
	73.5		DO	S17	17	SILTY SAND: dense, moist, brown, black, and white, fine to coarse, with few Gravel.	SM	19-20-26	46			
760.7	75					Boring terminated at 75.0 ft. BGS. Backfilled with cuttings and bentonite upon completion.						
755.7	80											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-3

Sheet 1 of 4

Drilling Date(s): **5/21/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **156+50, 38.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376997, -84.137734**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **828.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **78.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
828.6	0										
	0.2				TOPSOIL	SM					
					FILL SILTY SAND: medium dense, moist, red, fine to coarse, with trace Organics.						
		DO	S1	16			5-7-9	16	16.3		[% Fines: 47.9] AS-1: bulk sample collected in offset boring from 0 to 5.0 ft. BGS. [% Moisture: 13.0; % Fines: 47.0; GDOT Classification: IIB3]
	3.5										
		DO	S2	14	FILL SANDY ELASTIC SILT: stiff, moist, brown and red.	MH	2-5-8	13	20.2		[% Fines: 50.6]
823.6	5										
	6	DO	S3	16	S3: light brown, with trace Organics.		5-6-8	14			
	8.5										
		DO	S4	15	RESIDUAL SILTY SAND: medium dense, moist, gray and light brown, fine to coarse.	SM	6-8-8	16			
818.6	10										11.5 ft. BGS after 24+ hrs.
	13.5										
		DO	S5	14	SILTY SAND: loose, moist, brown and tan, fine to coarse, with trace Gravel.	SM	2-3-4	7	27.1		[% Fines: 27.5]
813.6	15										
		US	ST1						18.5		[% Fines: 41.1; LL: NV; PL: NP]
		DO	S6	10			4-4-5	9			
808.6	20										

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-3

Sheet 2 of 4

Drilling Date(s): **5/21/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **156+50, 38.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376997, -84.137734**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **828.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **78.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
808.6	20					SILTY SAND: loose, moist, brown and tan, fine to coarse, with trace Gravel.	SM					
	23.5		DO	S7	10	SILTY SAND: medium dense, moist, brown and tan, fine to coarse.	SM	7-13-13	26			
803.6	25											
	28.5		DO	S8	14	S8: brown and black.		10-11-10	21	17.3		[% Fines: 18.0]
798.6	30											Borehole caved in at 32.2 ft. BGS after 24+ hrs.
	33.5		DO	S9	12	SILTY SAND WITH GRAVEL: medium dense, moist, brown and gray, fine to coarse.	SM	12-12-15	27			
793.6	35											
	38.5		DO	S10	18	SILTY SAND: medium dense, moist, brown and gray, fine to medium.	SM	9-12-15	27			
788.6	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-3

Sheet 3 of 4

Drilling Date(s): **5/21/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **156+50, 38.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376997, -84.137734**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **828.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **78.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
788.6	40					SILTY SAND: medium dense, moist, brown and gray, fine to medium.	SM					Borehole caved in at 41.2 ft. BGS at drilling completion.
	43.5		DO	S11	16	SILTY SAND: dense, moist, brown and gray, fine to medium.	SM	9-11-21	32			
783.6	45											
	48.5		DO	S12	17	SILTY SAND: medium dense, moist, brown and gray, fine to medium.	SM	10-7-11	18			
778.6	50											
	53.5		DO	S13	15	S13: dense, fine to coarse.		6-14-30	44	24.1		[% Fines: 22.4]
773.6	55											Increased drilling resistance observed at approx. 55 ft. BGS.
	58.5		DO	S14	17	S14: dense, gray, brown, and black, fine to coarse, saprolitic.		16-24-25	49			
768.6	60											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B2-3

Drilling Date(s): **5/21/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **156+50, 38.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376997, -84.137734**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **828.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **78.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
768.6	60					SILTY SAND: dense, gray, brown, and black, fine to coarse, saprolitic.	SM					
	63.5		DO	S15	3	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, gray, brown, and black, fine to coarse.	SM	50/3"	50/3"			Increased drilling resistance observed from approx. 61 ft. to 78.5 ft. BGS.
763.6	65											
	68.5		DO	S16	11	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, white, black, brown, and orange, fine to coarse.	SM	43-50/5"	50/5"	18.0		[% Fines: 25.6]
758.6	70											
	73.5		DO	S17	16	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, gray, white, and brown, fine to coarse.	SM	45-31-50/4"	81/10"	16.6		[% Fines: 27.6]
753.6	75											
	78.6		DO	S18	0	S18: no SPT recovery; material inferred continuous from above.		50/1"	50/1"			
748.6	80					Boring terminated at 78.6 ft. BGS. Backfilled with cuttings after 24+ hrs.						

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-1

Sheet 1 of 4

Drilling Date(s): **5/21/2024 - 5/22/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1035+89, 232.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.373040, -84.135145**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **783.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **71.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
783.5	0											
	0.3					TOPSOIL						
						RESIDUAL CLAYEY SAND: loose, moist, red and brown, fine to coarse, with trace Organics.	SC					
			DO	S1	16			3-3-3	6	12.7		AS-1: bulk sample collected in offset boring from 0 to 5.0 ft. BGS.
	3.5											
			DO	S2	15	S2: brown.		3-2-3	5	16.5		[% Fines: 40.0; LL: 36; PL: 21]
778.5	5											
	6											
			DO	S3	15	CLAYEY SAND: loose, moist, red and brown, fine to coarse, with trace Gravel.	SC	3-3-3	6	19.2		[% Fines: 47.5] ▼ 6.8 ft. BGS after 23 hrs.
	8.5											
			DO	S4	14	SILTY SAND: loose, moist, gray, fine to coarse, with trace Organics.	SM	3-2-3	5	17.9		[% Fines: 34.2]
773.5	10											
			US	ST1								
	13.5											
			DO	S5	16	SILTY SAND: medium dense, moist, black and brown, fine to coarse, with few Gravel.	SM	3-4-10	14			
768.5	15											
	18.5											
			DO	S6	10	SILTY SAND WITH GRAVEL: medium dense, moist, black, brown, and purple, fine to coarse.	SM	6-11-14	25	13.2		[% Fines: 25.7]
763.5	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-1

Drilling Date(s): **5/21/2024 - 5/22/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1035+89, 232.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.373040, -84.135145**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **783.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **71.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
763.5	20					SILTY SAND WITH GRAVEL: medium dense, moist, black, brown, and purple, fine to coarse.	SM					
	21					PARTIALLY WEATHERED ROCK, sampled as SANDY SILT WITH GRAVEL: very dense, moist, black, white, and purple, fine to coarse.	ML					Increased drilling resistance observed from approx. 21 ft. to 43.5 ft. BGS.
			DO	S7	5			50/5"	50/5"	18.0		[% Fines: 61.4]
758.5	25											
	28.5		DO	S8	0	S8: no SPT recovery; material inferred continuous from above.		50/1"	50/1"			
753.5	30											
	33.5		DO	S9	1	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND WITH GRAVEL: very dense, moist, gray, black, and purple, fine to coarse.	SM	50/1"	50/1"			
748.5	35											
	38.5		DO	S10	3	S10: gray, black, white, and purple.		50/3"	50/3"			
743.5	40											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**	**BORING B3-1** Sheet 3 of 4

Drilling Date(s): **5/21/2024 - 5/22/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1035+89, 232.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.373040, -84.135145**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **783.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **71.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
743.5	40					PARTIALLY WEATHERED ROCK, sampled as SILTY SAND WITH GRAVEL: very dense, moist, gray, black, white, and purple, fine to coarse.	SM					PWR = PARTIALLY WEATHERED ROCK
			DO	S11	1			50/1"	50/1"			
743.1	43.6					PWR, sampled as SILTY GRAVEL WITH SAND: very dense, moist, gray, black, white, and purple, fine to coarse.	GM					Auger refusal encountered at 43.5 ft. BGS. Began NQ2 rock coring at 43.6 ft. BGS.
738.5	45		RC	RC1		GNEISS and interbedded AMPHIBOLITE: dark gray, white, and black, fine- to coarse-grained, very thin-bedded to thickly laminated, intensely to moderately fractured, weak to medium strong, slightly weathered.		REC: 86% RQD: 55%				
	46											
	47					GNEISS: dark gray, white, and black, fine- to coarse-grained, thickly laminated, intensely fractured, weak, moderately to slightly weathered.						
			RC	RC2		AMPHIBOLITE and interbedded GRANITE: gray, black, white, and pink, fine- to coarse-grained, thickly laminated to massive, moderately to slightly fractured, strong, slightly weathered to fresh.		REC: 98% RQD: 72%				RC2a (49.0 to 49.6 ft. BGS): UCS of 13,365 psi
733.5	50											
	51					AMPHIBOLITE: white, gray, and black, fine- to coarse-grained, very thin-bedded, moderately fractured, medium strong to strong, fresh.						Reduction in coring fluid return from approx. 48 ft. to 54 ft. BGS.
	53.5		RC	RC3		GNEISS: dark gray, white, and black, fine- to coarse-grained, thinly laminated, very intensely to intensely fractured, very weak to weak, highly weathered.		REC: 82% RQD: 47%				RC3a (51.0 to 51.6 ft. BGS): UCS of 7,048 psi
728.5	55											
	56					RC4: light gray, white, and black, thickly laminated, intensely to moderately fractured.						Complete loss of coring fluid return from approx. 54 ft. to 71 ft. BGS.
	57					AMPHIBOLITE: gray, white, and black, fine- to coarse-grained, very thin-bedded, intensely fractured, strong, slightly weathered.						
	58		RC	RC4		GNEISS: light gray, white, and black, fine- to coarse-grained, thickly laminated, intensely to moderately fractured, very weak to weak, highly weathered.		REC: 97% RQD: 43%				RC4a (58.2 to 58.7 ft. BGS): UCS of 810 psi
723.5	60											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-1

Sheet 4 of 4

Drilling Date(s): **5/21/2024 - 5/22/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1035+89, 232.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.373040, -84.135145**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **783.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **71.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
723.5	60		RC	RC4		GNEISS: light gray, white, and black, fine- to coarse-grained, thickly laminated, intensely to moderately fractured, very weak to weak, highly weathered.		REC: 97% RQD: 43%				RC4a (58.2 to 58.7 ft. BGS): UCS of 810 psi
	61					GNEISS and interbedded AMPHIBOLITE: dark gray, white, and black, fine- to coarse-grained, very thin-bedded to thickly laminated, intensely fractured, very weak to strong, slightly to highly weathered.						
			RC	RC5				REC: 100% RQD: 63%				
718.5	65											
	66					RC6: moderately to slightly fractured, moderately weathered to fresh.						Borehole caved in at 68.9 ft. BGS at coring completion and at 68.3 ft. BGS after 23 hrs.
			RC	RC6				REC: 97% RQD: 63%				
713.5	70											
	71					Boring terminated at 71.0 ft. BGS. Backfilled with cuttings after 23 hrs.						
708.5	75											
703.5	80											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-1A

Sheet 1 of 1

Drilling Date(s): **5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1035+88, 234.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.373040, -84.135138 (approx.)**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **784 ft. (approx.)**
Logged By: **L. O'Rourke**	Completion Depth: **5.5 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound, offset 2 ft. east of Boring B3-1**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
784	0					Blind drill to 3.5 ft. BGS to collect undisturbed shelby tube sample.						
	3.5											
			US	ST1		SILTY CLAYEY SAND: moist, brown.	SC-SM			20.5		[% Fines: 24.2; LL: 26; PL: 19]
779	5											
	5.5					Boring terminated at 5.5 ft. BGS. Backfilled with cuttings upon completion.						
774	10											
769	15											
764	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-2

Sheet 1 of 3

Drilling Date(s): **5/23/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1034+54, 206.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372672, -84.135032**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **787.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **55.5 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
787.7	0											
	0.3					TOPSOIL						
			DO	S1	16	FILL SANDY LEAN CLAY: very stiff to hard, dry, red, with trace Organics.	CL	8-9-9	18	18.0	4.5	[% Fines: 61.4; LL: 46; PL: 25]
	3.5											
			DO	S2	15	RESIDUAL SILTY SAND: medium dense, moist, red and brown, fine to coarse.	SM	6-9-11	20			
782.7	5											
	6		DO	S3	14	SILTY SAND: medium dense, moist, light brown, fine to coarse.	SM	4-5-7	12			
	8.5											
			DO	S4	16	CLAYEY SAND: loose, moist, gray, brown, and red, fine to coarse.	SC	3-3-3	6	29.0	1.5	[% Fines: 34.8] ▼ 9.2 ft. BGS after 24+ hrs.
777.7	10											
	13.5											
			DO	S5	15	SILTY SAND: medium dense, moist, brown, black, and gray, fine to medium, saprolitic.	SM	4-6-8	14			
772.7	15											
	18.5											
			DO	S6	14	SILTY SAND WITH GRAVEL: medium dense, moist, black, brown, and red, fine to coarse, saprolitic.	SM	5-10-18	28	20.7		[% Fines: 25.2]
767.7	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-2

Sheet 2 of 3

Drilling Date(s): **5/23/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1034+54, 206.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372672, -84.135032**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **787.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **55.5 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
767.7	20					SILTY SAND WITH GRAVEL: medium dense, moist, black, brown, and red, fine to coarse, saprolitic.	SM					
	23.5		DO	S7	16	SILTY SAND: dense, moist, black, brown, and red, fine to coarse, saprolitic.	SM	17-14-36	50			
762.7	25											Increased drilling resistance observed at approx. 25 ft. BGS.
	28.5		DO	S8	4	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray and brown, fine to coarse.	SM	50/5"	50/5"			
757.7	30											
			DO	S9	3			50/3"	50/3"			
	34.7		DO	S10	0			50/0"	50/0"			Auger refusal encountered at 34.7 ft. BGS. SPT performed upon refusal. Began NQ2 rock coring.
752.7	35		RC	RC1		GNEISS and interbedded AMPHIBOLITE: gray, white, and black, fine- to coarse-grained, very thin-bedded to thickly laminated, intensely fractured, weak to strong, slightly weathered to fresh.		REC: 83% RQD: 42%				
	35.5											
	35.8		RC	RC2		AMPHIBOLITE and interbedded GNEISS: dark gray, white, and black, fine- to coarse-grained, thin-bedded to thickly laminated, very intensely to intensely fractured, very weak to weak, highly weathered. 35.8 ft. to 36.3 ft. BGS: layer of white, fine- to coarse-grained, massive, strong Quartzite.		REC: 55% RQD: 13%				Reduction in coring fluid return from approx. 35.5 ft. to 50.5 ft. BGS.
747.7	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-2

Sheet 3 of 3

Drilling Date(s): **5/23/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1034+54, 206.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372672, -84.135032**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary; NQ2 Rock Core**	Elevation: **787.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **55.5 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
747.7	40		RC	RC2		AMPHIBOLITE and interbedded GNEISS: dark gray, white, and black, fine- to coarse-grained, thin-bedded to thickly laminated, very intensely to intensely fractured, very weak to weak, highly weathered.		REC: 55% RQD: 13%				
	40.5											
			RC	RC3		RC3: dark gray and white, very weak to medium strong, highly to moderately weathered.		REC: 80% RQD: 15%				
742.7	45											
	45.5					GNEISS and interbedded AMPHIBOLITE: dark gray, white, and black, fine- to coarse-grained, thin-bedded to thickly laminated, moderately fractured, weak to strong, slightly to moderately weathered.						Borehole caved in at 50.0 ft. BGS at coring completion and at 43.3 ft. BGS after 24+ hrs.
			RC	RC4				REC: 97% RQD: 72%				RC4a (48.0 to 48.5 ft. BGS): UCS of 3,737 psi
737.7	50											
	50.5					RC5: moderately to slightly fractured, weak to strong, slightly to moderately weathered.						
			RC	RC5				REC: 100% RQD: 68%				RC5a (53.7 to 54.2 ft. BGS): UCS of 3,602 psi
732.7	55											
	55.5					Boring terminated at 55.5 ft. BGS. Backfilled with cuttings after 24+ hrs.						
727.7	60											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-3** Sheet 1 of 4
Drilling Date(s): **5/24/2024; 5/28/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1033+11, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372294, -84.134891**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **790.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
790.5	0											
	0.2					TOPSOIL	SM					
			DO	S1	16	FILL SILTY SAND: medium dense, moist, red, fine to coarse, with trace Organics.		6-6-10	16	14.6		
	3.5											
			DO	S2	15	FILL SANDY ELASTIC SILT: very stiff to hard, moist, red, with trace Organics.	MH	6-8-11	19	26.5	4.5	[% Fines: 73.3; LL: 67; PL: 38]
785.5	5											
	6		DO	S3	15	S3: very stiff, red.		5-7-10	17	24.0		[% Fines: 51.6]
	8.5											
			DO	S4	15	RESIDUAL SILTY SAND: medium dense, moist, red, tan, and black, fine to coarse, saprolitic.	SM	4-6-8	14			
780.5	10											12.1 ft. BGS after 24 hrs.
	13.5		DO	S5	13	S5: loose, brown, gray, and black.		4-4-6	10	31.7		[% Fines: 25.1]
775.5	15											
	18.5		DO	S6	14	S6: brown, gray, and black.		5-7-11	18			
770.5	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-3

Drilling Date(s): **5/24/2024; 5/28/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1033+11, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372294, -84.134891**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **790.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
770.5	20					SILTY SAND: medium dense, moist, brown, gray, and black, fine to coarse, saprolitic.	SM					
	23.5		DO	S7	16	SILTY SAND: very dense, moist, brown, black, and tan, fine to coarse, saprolitic.	SM	14-22-31	53			Increased drilling resistance observed at approx. 22 ft. BGS.
765.5	25											
			DO	S8	16			20-35-42	77			
760.5	30											
	33.5		DO	S9	17	S9: with trace to few Gravel.		16-26-35	61			
755.5	35											Borehole caved in at 34.6 ft. BGS after 24 hrs.
	38.5		DO	S10	18	S10: with trace Gravel.		13-30-37	67			
750.5	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-3

Drilling Date(s): **5/24/2024; 5/28/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1033+11, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372294, -84.134891**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **790.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
750.5	40					SILTY SAND: very dense, moist, brown, black, and tan, fine to coarse, with few Gravel, saprolitic.	SM					
	43.5		DO	S11	5	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, black, white, and brown, fine to coarse, with few Gravel.	SM	50/5"	50/5"			
745.5	45											
	48.5		DO	S12	16	S12: with trace Gravel.		21-33-50/4"	83/10"	15.9		[% Fines: 40.0]
740.5	50											
	53.5		DO	S13	4	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, black and white, fine to coarse, with trace Gravel.	SM	50/6"	50/6"			Borehole caved in at 52.9 ft. BGS at drilling completion.
735.5	55											
	58.5		DO	S14	18	SILTY SAND: dense, moist, white, brown, and black, fine to coarse, with trace Gravel.	SM	17-23-20	43	20.3		[% Fines: 40.5]
730.5	60											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-3** Sheet 4 of 4
Drilling Date(s): **5/24/2024; 5/28/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1033+11, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.372294, -84.134891**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **790.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.6 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
730.5	60					SILTY SAND: dense, moist, white, brown, and black, fine to coarse, with trace Gravel.	SM					
	63.5		DO	S15	3	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, black and white, fine to medium, with trace Gravel.	SM	50/3"	50/3"			
725.5	65											
	68.5		DO	S16	2	PARTIALLY WEATHERED ROCK, sampled as SILTY GRAVEL WITH SAND: very dense, moist, black and white, fine.	GM	50/2"	50/2"			
720.5	70											
	73.58		DO	S17	1	Boring terminated at 73.6 ft. BGS. Backfilled with cuttings after 24 hrs.		50/1"	50/1"			
715.5	75											
710.5	80											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-4** Sheet 1 of 4
Drilling Date(s): **5/29/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1031+56, 173.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371894, -84.134708 (approx.)**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **795.2 ft. (approx.)**
Logged By: **L. O'Rourke**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
795.2	0											
	0.2					TOPSOIL						
						FILL SANDY LEAN CLAY: very stiff to hard, moist, red, with trace Organics.	CL					
			DO	S1	16			6-7-9	16	23.4	4.5	[% Fines: 69.3; LL: 47; PL: 24]
	3.5											
			DO	S2	18	FILL SILTY SAND: medium dense, moist, red and brown, fine to coarse, with trace Organics.	SM	6-11-13	24	17.4		[S2_top % Fines: 36.9; LL: 51; PL: 31]
	4.5					RESIDUAL SILTY SAND: medium dense, moist, brown, fine to coarse.	SM					
790.2	5											
			DO	S3	13			7-12-13	25			
	8.5					S4: brown, tan, and red.						
			DO	S4	15			5-11-15	26			
785.2	10											
	13.5					S5: very dense, fine to medium.						
			DO	S5	14			7-32-29	61			
780.2	15											16.8 ft. BGS after 24+ hrs.
	18.5					S6: loose, brown and black, fine to medium.						Borehole caved in at 19.5 ft. BGS after 24+ hrs.
			DO	S6	14			3-3-4	7			
775.2	20											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-4** Sheet 2 of 4
Drilling Date(s): **5/29/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1031+56, 173.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371894, -84.134708 (approx.)**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **795.2 ft. (approx.)**
Logged By: **L. O'Rourke**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
775.2	20					SILTY SAND: loose, moist, brown and black, fine to medium.	SM					
	23.5		DO	S7	15	S7: dense, fine to coarse.		8-12-29	41			
770.2	25											
	28.5		DO	S8	14	S8: dense, brown, tan, and gray, fine to coarse, with trace Gravel.		16-16-28	44	23.3		[% Fines: 35.4]
765.2	30											
	33.5		DO	S9	12	S9: dense, brown, tan, and gray, fine to coarse, with few Gravel.		11-17-17	34			
760.2	35											
	38.5		DO	S10	15	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, brown, tan, and gray, fine to coarse, with few Gravel.	SM	11-34-50/3"	84/9"			Borehole caved in at 38.9 ft. BGS at drilling completion.
755.2	40											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-4** Sheet 3 of 4
Drilling Date(s): **5/29/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1031+56, 173.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371894, -84.134708 (approx.)**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **795.2 ft. (approx.)**
Logged By: **L. O'Rourke**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
755.2	40					PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, brown, tan, and gray, fine to coarse, with few Gravel.	SM					Increased drilling resistance observed at approx. 40 ft. BGS.
	43.5		DO	S11	16	SILTY SAND: very dense, moist, brown, white, and red, fine to coarse.	SM	16-45-50	95	18.6		[% Fines: 23.3]
750.2	45											
	48.5		DO	S12	0	PARTIALLY WEATHERED ROCK (inferred); no SPT recovery. Material inferred similar to below.	SM	50/1"	50/1"			
745.2	50											
	53.5		DO	S13	5	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray and white, fine to coarse, with trace Gravel.	SM	50/5"	50/5"			
740.2	55											
			DO	S14	15			30-36-50/4"	86/10"			
735.2	60											

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Atlanta, GA 30346

Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-4

Sheet 4 of 4

Drilling Date(s): **5/29/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1031+56, 173.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371894, -84.134708 (approx.)**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **795.2 ft. (approx.)**
Logged By: **L. O'Rourke**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
735.2	60					PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray and white, fine to coarse, with trace Gravel.	SM					
	63.5		DO	S15	1	PARTIALLY WEATHERED ROCK, sampled as POORLY GRADED GRAVEL WITH SAND: very dense, moist, gray and white, fine to coarse.	GP	50/2"	50/2"			
730.2	65											
	68.5		DO	S16	6	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray and white, fine to coarse, with few Gravel.	SM	50/6"	50/6"	9.7		[% Fines: 30.7]
725.2	70											
	73.7		DO	S17	1	Boring terminated at 73.7 ft. BGS. Backfilled with cuttings after 24+ hrs.		50/2"	50/2"			
720.2	75											
715.2	80											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-5

Sheet 1 of 4

Drilling Date(s): **5/29/2024 - 5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1030+02, 182.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371524, -84.134465**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **799.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **74.3 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
799.7	0											
	0.2					TOPSOIL	CH					
						FILL FAT CLAY WITH SAND: hard, moist, red, with trace Organics.						
			DO	S1	15			7-13-19	32	18.9		[% Fines: 70.6; LL: 51; PL: 26]
	3.5											
			DO	S2	11	FILL SILTY SAND: medium dense, moist, red, brown, and tan, fine to coarse.	SM	9-13-15	28			
794.7	5											
			DO	S3	13			7-10-8	18			
	8.5											
			DO	S4	12	RESIDUAL SILTY SAND: medium dense, moist, red, brown, and tan, fine to coarse.	SM	7-7-8	15	20.0		[% Fines: 27.5]
789.7	10											
			DO	S5	10			6-11-14	25			
784.7	15											
			DO	S6	10			6-13-17	30			
779.7	20											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-5** Sheet 2 of 4
Drilling Date(s): **5/29/2024 - 5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1030+02, 182.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371524, -84.134465**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **799.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **74.3 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
779.7	20					SILTY SAND: medium dense, moist, red, brown, and tan, fine to coarse.	SM					▼ 21.0 ft. BGS after 24+ hrs. Borehole caved in at 22.0 ft. BGS at drilling completion.
	23.5		DO	S7	16	SILTY SAND WITH GRAVEL: medium dense, moist, gray and brown, fine to coarse.	SM	10-12-16	28			
774.7	25											
	28.5		DO	S8	16	SILTY SAND: very dense, moist, brown and tan, fine to coarse.	SM	9-12-42	54			
769.7	30											
	33.5		DO	S9	17	S9: medium dense, brown, tan, and red.		2-7-8	15	16.9		[% Fines: 25.8]
764.7	35											Borehole caved in at 34.8 ft. BGS after 24+ hrs.
	38.5		DO	S10	17	SILTY SAND: very dense, moist, brown, gray, and red, fine to coarse.	SM	10-17-50	67			
759.7	40											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING B3-5** Sheet 3 of 4
Drilling Date(s): **5/29/2024 - 5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1030+02, 182.5 ft. R (approx.)** **[I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371524, -84.134465**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **799.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **74.3 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
759.7	40					SILTY SAND: very dense, moist, brown, gray, and red, fine to coarse.	SM					
	43.5		DO	S11	16	SILTY SAND: medium dense, moist, gray, brown, and white, fine to coarse.	SM	4-8-13	21			
754.7	45											
	48.5		DO	S12	14	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray, brown, and white, fine to coarse.	SM	20-26-50/5"	76/11"	20.3		[% Fines: 22.8]
749.7	50											
	53.5		DO	S13	17	SILTY SAND: dense, moist, gray and brown, fine to coarse.	SM	20-20-19	39			
744.7	55											Increased drilling resistance observed at approx. 50 ft. BGS.
	58.5		DO	S14	16	S14: brown and black, with few Gravel.		13-15-18	33	21.1		[% Fines: 24.0]
739.7	60											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-5

Sheet 4 of 4

Drilling Date(s): **5/29/2024 - 5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1030+02, 182.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371524, -84.134465**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **799.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **74.3 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
739.7	60					SILTY SAND: dense, moist, brown and black, fine to coarse, with few Gravel.	SM					
	63.5		DO	S15	14	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, moist, gray and brown, fine to medium.	SM	21-32-50/3"	82/9"	17.3		[% Fines: 27.1]
734.7	65											
	68.5		DO	S16	14	S16: brown, gray, and tan, fine to coarse.		22-22-50/4"	72/10"			
729.7	70											
	73.5		DO	S17	8	S17: brown, gray, and tan., fine to coarse		31-50/3"	50/3"			
	74.3					Boring terminated at 74.3 ft. BGS. Backfilled with cuttings after 24+ hrs.						
724.7	75											
719.7	80											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-6

Sheet 1 of 2

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1028+78, 199.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.371235, -84.134240**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **798.1 ft.**
Logged By: **J. Grigsby**	Completion Depth: **38.8 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
798.1	0											
	0.2					TOPSOIL	SM					
						FILL SILTY SAND: medium dense, dry to moist, brown-red, with trace Organics.						
			DO	S1	16			5-7-11	18	15.8		
	3.5											
			DO	S2	15	S2: moist, brown, no Organics.		4-5-6	11			
793.1	5											
	6					FILL SILTY SAND: medium dense, moist, brown, fine to coarse, with trace Organics.	SM					
			DO	S3	16			4-6-6	12	22.0		[% Fines: 37.4; LL: NV; PL: NP]
			DO	S4	15			2-5-7	12			
	9.7											
788.1	10					RESIDUAL SILTY SAND: medium dense, moist, light brown and tan, fine to coarse, saprolitic.	SM					
			DO	S5	14			6-7-7	14	22.9		[% Fines: 36.9; LL: NV; PL: NP]
783.1	15											
	18.5											▼ 18.5 ft. BGS after 24+ hrs.
			DO	S6	16	SILTY SAND: medium dense, moist, tan and light brown, fine to medium, saprolitic.	SM	6-8-10	18	15.1		[% Fines: 39.9]
778.1	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-6

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1028+78, 199.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.371235, -84.134240**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **798.1 ft.**
Logged By: **J. Grigsby**	Completion Depth: **38.8 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
778.1	20					SILTY SAND: medium dense, moist, tan and light brown, fine to medium, saprolitic.	SM					
	23.5		DO	S7	15	SILTY SAND: medium dense, moist, tan and light brown, fine to coarse, saprolitic.	SM	7-5-8	13			
773.1	25											
	28.5		DO	S8	14	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, dark brown, fine to coarse.	SM	18-33-50/5"	83/11"			Borehole caved in at 28.9 ft. BGS after 24+ hrs.
768.1	30											Increased drilling resistance observed from approx. 30 ft. to 32 ft. BGS.
	33.5		DO	S9	16	SILTY SAND: very dense, moist, brown, fine to coarse.	SM	8-29-50	79			
763.1	35											Increased drilling resistance observed at approx. 36 ft. BGS.
	38.5		DO	S10	3	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, dark brown, fine to coarse.	SM	50/3"	50/3"			Borehole caved in at 37.0 ft. BGS at drilling completion. No groundwater observed in borehole after cave-in.
	38.8					Boring terminated at 38.8 ft. BGS. Backfilled with cuttings after 24+ hrs.						
758.1	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-6A

Sheet 1 of 4

Drilling Date(s): **5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1028+77, 202.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371237, -84.134230**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **798.8 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.9 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound, offset 2.0 ft. north of Boring B3-6**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
798.8	0					Blind drill to 38.5 ft. BGS (no sampling performed).						
793.8	5											
788.8	10											
783.8	15											18.6 ft. BGS after 24+ hrs.
778.8	20											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**	**BORING B3-6A** Sheet 2 of 4

Drilling Date(s): **5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1028+77, 202.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371237, -84.134230**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **798.8 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.9 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound, offset 2.0 ft. north of Boring B3-6**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
778.8	20					Blind drill to 38.5 ft. BGS (no sampling performed).						
773.8	25											
768.8	30											
763.8	35											
38.5			DO	S10	11	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, dark brown and tan, fine to coarse, with few Gravel.	SM	40-39-50/4"	89/10"			
758.8	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-6A

Drilling Date(s): **5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1028+77, 202.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371237, -84.134230**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **798.8 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.9 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound, offset 2.0 ft. north of Boring B3-6**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
758.8	40					PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, dark brown and tan, fine to coarse, with few Gravel.	SM					
	43.5		DO	S11	13	SILTY SAND: dense, moist, dark brown, fine to coarse.	SM	25-22-20	42	14.5		[% Fines: 42.3]
753.8	45											
	48.5		DO	S12	4	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, brown, tan, and red, fine to coarse.	SM	50/4"	50/4"			Borehole caved in at 48.7 ft. BGS after 24+ hrs.
748.8	50											
	53.5		DO	S13	9	S13: dark brown and red.		31-50/3"	50/3"			
743.8	55											
	58.5		DO	S14	3	S14: black and white.		50/3"	50/3"			
738.8	60											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-6A

Sheet 4 of 4

Drilling Date(s): **5/30/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1028+77, 202.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371237, -84.134230**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **798.8 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **73.9 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound, offset 2.0 ft. north of Boring B3-6**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
738.8	60					PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, black and white, fine to coarse.	SM					Increased drilling resistance observed from approx. 61 ft. to 67 ft. BGS.
	63.5		DO	S15	3	PARTIALLY WEATHERED ROCK sampled as SILTY SAND WITH GRAVEL: very dense, moist, red, black, and white, fine to coarse.	SM	50/3"	50/3"	16.2		[% Fines: 20.1]
733.8	65											
	68.5		DO	S16	15	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, red, brown, and gray, fine to coarse, slightly micaceous.	SM	34-30-50/4"	80/10"			Borehole caved in at 68.5 ft. BGS after 4 hrs.
728.8	70											
	73.9		DO	S17	5	Boring terminated at 73.9 ft. BGS. Backfilled with cuttings after 24+ hrs.		50/5"	50/5"			
723.8	75											
718.8	80											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**	**BORING B3-7** Sheet 1 of 4

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1027+54, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.370911, -84.134107**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **791.6 ft.**
Logged By: **J. Grigsby**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
791.6	0											
	0.2					TOPSOIL						
						FILL SANDY LEAN CLAY: stiff to very stiff, moist, brown and tan, with trace Gravel, and trace Organics.	CL					
			DO	S1	18			6-12-6	18	15.2		[% Fines: 53.7; LL: 37; PL: 21] AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS.
	3.5					RESIDUAL SILTY SAND: medium dense, moist, brown, fine to coarse, saprolitic.	SM					
			DO	S2	17			3-8-9	17	24.7		[% Fines: 47.0]
786.6	5					S2: with trace Organics.						
			DO	S3	15			3-5-5	10	27.7		[% Fines: 34.7]
	8.5					8.5 ft. BGS: transitions to brown and tan.						
			DO	S4	10			5-7-6	13			
781.6	10											12.5 ft. BGS after 24+ hrs.
			DO	S5	15			14-10-9	19			
776.6	15											Borehole caved in at 17.0 ft. BGS at drilling completion. No groundwater observed in borehole after cave-in.
			DO	S6	13			11-15-13	28			
771.6	20											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-7

Sheet 2 of 4

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1027+54, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.370911, -84.134107**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **791.6 ft.**
Logged By: **J. Grigsby**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
771.6	20					SILTY SAND: medium dense, moist, brown and tan, fine to coarse, saprolitic.	SM					Borehole caved in at 21.5 ft. BGS after 24+ hrs.
			DO	S7	16			4-6-9	15	34.0		[% Fines: 36.5]
766.6	25											
	28.5		DO	S8	17	S8: dark brown.		7-8-12	20			Increased drilling resistance observed at approx. 30 ft. BGS.
761.6	30											
	33.5		DO	S9	14	33.5 ft. BGS: transitions to dense, light brown and tan.		18-18-15	33			
756.6	35											
			DO	S10	16			7-16-19	35			
751.6	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-7

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1027+54, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.370911, -84.134107**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **791.6 ft.**
Logged By: **J. Grigsby**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
751.6	40					SILTY SAND: dense, moist, light brown and tan, fine to coarse, saprolitic.	SM					Increased drilling resistance observed at approx. 42 ft. BGS.
	43.5		DO	S11	10	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, light brown and tan, fine to coarse.	SM	40-50/3"	50/3"			
746.6	45											
	48.5		DO	S12	18	SILTY SAND: very dense, moist, light brown and tan, fine to coarse.	SM	16-35-42	77			
741.6	50											
	53.5		DO	S13	17	S13: dense, brown, tan, and white, saprolitic.		10-12-26	38			
736.6	54.9 55					54.9 ft. BGS: approx. 1-inch Quartz Sand layer.						
	58.5		DO	S14	17	S14: dense, dark brown, with trace Gravel, saprolitic.		6-15-33	48	24.3		[% Fines: 34.5]
731.6	60											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING B3-7

Sheet 4 of 4

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1027+54, 185.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.370911, -84.134107**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **791.6 ft.**
Logged By: **J. Grigsby**	Completion Depth: **73.7 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
731.6	60					SILTY SAND: dense, moist, dark brown, fine to coarse, with trace Gravel, saprolitic.	SM					
	63.5		DO	S15	17	S15: very dense, brown and gray.		28-27-34	61	16.8		[% Fines: 29.9]
726.6	65											
	68.5		DO	S16	4	PARTIALLY WEATHERED ROCK sampled as SILTY SAND: very dense, moist, brown, fine to coarse, with few Gravel.	SM	50/4"	50/4"			
721.6	70											Increased drilling resistance observed at 71.0 ft. BGS.
	73.5											
	73.7		DO	S17	2	S17: with trace Gravel. Boring terminated at 73.7 ft. BGS. Backfilled with cuttings after 24+ hrs.		50/2"	50/2"			
716.6	75											
711.6	80											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-1

Sheet 1 of 3

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1070+87, 92.0 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.381370, -84.140955**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **815.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **50.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 Southbound, west shoulder**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
815.6	0					ASPHALT (8-in.)						
	0.7					FILL/GRADED AGGREGATE	SP					Depth to groundwater could not be established during drilling due to mud rotary drilling. Borehole backfilled upon completion.
			DO	S1	18	POORLY GRADED SAND: medium dense, moist, gray, fine to coarse, with trace Gravel, and trace Fines.		6-6-6	12		3.0	
	2					FILL	MH					
						SANDY ELASTIC SILT: very stiff to hard, moist, red.						
	3.5		DO	S2	9	S2: red and brown, with trace Gravel.		3-3-6	9		4.5	
810.6	5											
	6		DO	S3	12	FILL SILTY SAND: loose, moist, red and brown, fine to coarse.	SM	4-4-5	9			
			DO	S4	14			5-3-6	9			
805.6	10											
	13.5		DO	S5	14	FILL ELASTIC SILT WITH SAND: stiff to very stiff, moist, red and brown.	MH	3-5-5	10		2.0	
800.6	15											
	18.5		DO	S6	14	FILL SILTY SAND: medium dense, moist, gray, fine to coarse, with trace Gravel.	SM	4-5-7	12	10.2		[% Fines: 25.0]
795.6	20											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-1

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1070+87, 92.0 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.381370, -84.140955**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **815.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **50.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 Southbound, west shoulder**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
795.6	20					FILL SILTY SAND: medium dense, moist, gray, fine to coarse, with trace Gravel.	SM					
	23.5		DO	S7	14	S7: loose.		3-3-3	6			
790.6	25											
	28.5		DO	S8	15	RESIDUAL SILTY SAND: medium dense, moist, brown, red, tan, and black, fine to coarse, slightly micaceous.	SM	3-7-11	18			
785.6	30											
			DO	S9	18			3-6-10	16	25.1		[% Fines: 34.3]
780.6	35											Increased drilling resistance observed at approx. 36 ft. BGS.
	38.5		DO	S10	16	S10: dense, brown, red, and black.		11-19-16	35			
775.6	40											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-1

Sheet 3 of 3

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1070+87, 92.0 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.381370, -84.140955**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **815.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **50.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **I-75 Southbound, west shoulder**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
775.6	40					SILTY SAND: dense, moist, brown, red, and black, fine to coarse, slightly micaceous.	SM					
	43.5		DO	S11	17	S11: non-micaceous.		12-15-15	30	17.0		[% Fines: 18.6]
770.6	45											Borehole caved in at 47.7 ft. BGS at drilling completion.
	48.5		DO	S12	12	SILTY SAND: medium dense, moist, brown, gray, and white, fine to coarse.	SM	6-11-13	24			
765.6	50					Boring terminated at 50.0 ft. BGS. Backfilled with cuttings, bentonite cap, and asphalt cold patch upon completion.						
760.6	55											
755.6	60											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-2

Sheet 1 of 2

Drilling Date(s): **6/3/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1072+93, 166.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.382180, -84.140465**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **800.0 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
800	0										
	0.2				TOPSOIL	MH					
					FILL SANDY ELASTIC SILT: firm to stiff, moist, brown, with trace Organics.						
		DO	S1	17			4-4-2	6	26.0	1.0	[% Fines: 50.1]
	3.5				FILL SILTY SAND: very loose, moist, brown, fine to coarse, with trace Organics (wood debris).	SM					
		DO	S2	4			2-1-2	3			
795	5										
	6				FILL SILTY SAND WITH GRAVEL: very loose, wet, gray and white, fine to coarse, with trace Organics.	SM					
		DO	S3	11			WOH-2-5	7	23.5		[S3_top % Fines: 30.7]
	7				RESIDUAL SILTY SAND: loose, wet, brown, fine to coarse.	SM					▽ 8.0 ft. BGS at completion.
	8.5				S4: brown, red, and tan, slightly micaceous.						
		DO	S4	15			2-3-5	8	28.8		[% Fines: 35.4]
790	10										Borehole caved in at 11.3 ft. BGS at drilling completion.
	13.5				S5: medium dense, brown and red.						
		DO	S5	18			4-5-7	12			
785	15										
	18.5				S6: medium dense, brown, red, white, and gray.						
		DO	S6	18			4-4-9	13	7.8		[% Fines: 30.1]
780	20										

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-2

Sheet 2 of 2

Drilling Date(s): **6/3/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1072+93, 166.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.382180, -84.140465**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **800.0 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
780	20					SILTY SAND: medium dense, wet, brown, red, white, and gray, fine to coarse.	SM					
	23.5		DO	S7	18	S7: brown, gray, and white.		3-5-7	12			
775	25					Boring terminated at 25.0 ft. BGS. Backfilled with cuttings upon completion.						
770	30											
765	35											
760	40											

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING C-3** Sheet 1 of 2
Drilling Date(s): **6/4/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1031+46, 195.5 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371433, -84.135786**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **773.8 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
773.8	0										
	0.2				TOPSOIL						
					FILL CLAYEY SAND: loose, moist, red, fine to coarse, with trace Organics.	SC					
		DO	S1	15			4-3-2	5	11.5		
	3.5				S2: brown, no Organics.						
		DO	S2	14			2-3-3	6			
768.8	5										
	6				S3: very loose, brown.				27.7		[S3_top % Fines: 45.5]
		DO	S3	18			1-1-2	3			▼ 6.8 ft. BGS after 24+ hrs.
	7.1				7.1 ft. BGS: wet, gray, with few Gravel.						
	8.5				RESIDUAL SILTY SAND: loose, wet, gray, fine to coarse.	SM					
		DO	S4	11			2-3-3	6	24.0		[% Fines: 23.5]
763.8	10										
	13.5				S5: moist, brown and gray.						
		DO	S5	16			3-4-5	9			
758.8	15										▽ 16.5 ft. BGS at completion.
	18.5										Borehole caved in at 18.7 ft. BGS after 24+ hrs.
		DO	S6	18	S6: medium dense, moist, black, white, and brown.		6-9-9	18	17.6		[% Fines: 26.9]
753.8	20										

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-3

Sheet 2 of 2

Drilling Date(s): **6/4/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1031+46, 195.5 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.371433, -84.135786**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **773.8 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
753.8	20					SILTY SAND: medium dense, moist, black, white, and brown, fine to coarse.	SM					Borehole caved in at 21.1 ft. BGS at drilling completion.
	23.5		DO	S7	14	S7: brown, black, white, and red, with trace Gravel.		8-7-10	17			
748.8	25					Boring terminated at 25.0 ft. BGS. Backfilled with cuttings after 24+ hrs.						
743.8	30											
738.8	35											
733.8	40											

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Project Number: **PI No. 0017182**	**BORING C-4**
Project: **I-75 at CR 312/Bethlehem Road**	Sheet 1 of 2
Location: **Henry County, Georgia**	

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1038+23, 462.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.373890, -84.134795**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **787.1 ft.**
Logged By: **J. Grigsby**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
787.1	0											
	0.2					TOPSOIL	MH					
						FILL SANDY ELASTIC SILT: firm to stiff, moist, light to dark brown, with trace Organics.						
			DO	S1	17			4-4-4	8	14.3		[% Fines: 50.6]
	3.5											
			DO	S2	15	S2: moist to wet, brown and red-tan, no Organics.		3-4-5	9	21.8		
782.1	5											
	6											
			DO	S3	17	FILL SILTY SAND: medium dense, moist, tan and gray, fine to coarse, with trace Gravel.	SM	1-5-7	12	27.2		▼ 6.5 ft. BGS after 24+ hrs. [% Fines: 27.2]
	8.5											
			DO	S4	14	RESIDUAL SILTY SAND: loose, moist, dark brown, fine to coarse, with trace Gravel, saprolitic.	SM	3-2-3	5	31.4		[% Fines: 28.1]
777.1	10											Increased drilling resistance observed at approx. 11 ft. BGS.
	13.5											
			DO	S5	16	S5: brown.		3-4-24	28			
	14.7									8.3		[S5_bottom % Fines: 9.0]
772.1	15					POORLY GRADED SAND WITH SILT AND GRAVEL: medium dense to dense, moist, brown, tan, and white, fine to coarse.	SP-SM					Borehole caved in at 15.5 ft. BGS after 24+ hrs.
	18.5											
			DO	S6	15	SILTY SAND: medium dense, moist, dark brown, fine to coarse, with trace Gravel.	SM	9-7-13	20			
767.1	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-4

Sheet 2 of 2

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1038+23, 462.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.373890, -84.134795**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **787.1 ft.**
Logged By: **J. Grigsby**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
767.1	20					SILTY SAND: medium dense, moist, dark brown, fine to coarse, with trace Gravel.	SM					
	23.5		DO	S7	15	S7: no Gravel.		9-12-13	25			Borehole caved in at 24.3 ft. BGS at drilling completion.
762.1	25					Boring terminated at 25.0 ft. BGS. Backfilled with cuttings after 24+ hrs.						
757.1	30											
752.1	35											
747.1	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-5

Sheet 1 of 2

Drilling Date(s): **6/4/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1021+44, 228.5 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.368909, -84.134472**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **763.9 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **23.9 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
763.9	0				TOPSOIL						
	0.3				FILL SANDY SILT: very loose, moist, red, with trace Organics.	ML					
		DO	S1	13			2-1-2	3	22.2		[S1_top % Fines: 56.8; LL: 49; PL: 32]
	2				FILL SILTY SAND: very loose to loose, wet, gray, fine to coarse, with trace Gravel, and trace Organics.	SM					
	3.5				S2: dark gray and black, with few Gravel.						▼ 4.1 ft. BGS after 24+ hrs.
		DO	S2	16			WOH-1-3	4	29.0		[% Fines: 23.7]
758.9	5										▽ 5.5 ft. BGS at completion.
	6				RESIDUAL POORLY GRADED SAND WITH GRAVEL: medium dense, wet, tan, fine to coarse, with trace Fines.	SP					
		DO	S3	10			4-5-16	21	10.9		[% Fines: 4.1] Borehole caved in at 7.5 ft. BGS after 24+ hrs.
	8.5				SILTY SAND: medium dense, moist, brown and orange, fine to coarse, with trace Gravel, saprolitic.	SM					
		DO	S4	9			5-9-15	24			
753.9	10										
	13.5				S5: brown and tan.						
		DO	S5	18			4-11-11	22	12.5		[% Fines: 24.6]
748.9	15										
	18.5				S6: wet, brown, black, and gray.						
		DO	S6	12			6-12-16	28			Borehole caved in at 18.0 ft. BGS at drilling completion.
743.9	20										

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-5

Drilling Date(s): **6/4/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1021+44, 228.5 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.368909, -84.134472**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **763.9 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **23.9 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
743.9	20					SILTY SAND: medium dense, wet, brown, black, and gray, fine to coarse, with trace Gravel.	SM					
	23.5		DO	S7	5	PARTIALLY WEATHERED ROCK, sampled as SILTY SAND: very dense, wet, brown, fine to coarse, with few Gravel.	SM	50/5"	50/5"	14.0		[% Fines: 19.1]
	23.9					Boring terminated at 23.9 ft. BGS. Backfilled with cuttings after 24+ hrs.						
738.9	25											
733.9	30											
728.9	35											
723.9	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-6

Sheet 1 of 2

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1022+08, 274.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.369660, -84.133075**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **770.9 ft.**
Logged By: **J. Grigsby**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
770.9	0										
	0.2				TOPSOIL	SC					
					FILL CLAYEY SAND: loose, moist, brown, fine to coarse, with trace Organics.						
		DO	S1	18			1-3-5	8	21.7		
	3.5				S2: light brown and tan, no Organics.						
		DO	S2	10			1-3-3	6			
765.9	5										
	6										▼ 6.0 ft. BGS after 24+ hrs.
		DO	S3	16	FILL CLAYEY SAND: very loose, wet, gray, brown, and tan, fine to coarse, with trace Organics.	SC	WOH/18"	WOH/ 18"	24.4		[S3_top % Fines: 12.5]
	7.2				ALLUVIUM SILTY SAND: very loose to loose, wet, gray, brown, and tan, fine to coarse, with few Gravel.	SM					
		DO	S4	15			1-4-4	8			Borehole caved in at 8.8 ft. BGS. after 24+ hrs.
760.9	9.9 10				RESIDUAL SILTY SAND: loose, moist, brown, fine to coarse, with few Gravel, saprolitic.	SM					
	13.5										
		DO	S5	9	SILTY SAND WITH GRAVEL: loose, moist, brown, fine to coarse, saprolitic.	SM	2-4-3	7	29.9		[% Fines: 31.3]
755.9	15										
	18.5										
		DO	S6	15	SILTY SAND: medium dense, moist, light brown and tan, fine to coarse, with trace Gravel.	SM	5-5-7	12			
750.9	20										

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING C-6

Sheet 2 of 2

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **1022+08, 274.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.369660, -84.133075**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **770.9 ft.**
Logged By: **J. Grigsby**	Completion Depth: **25.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
750.9	20					SILTY SAND: medium dense, moist, light brown and tan, fine to coarse, with trace Gravel.	SM					
	23.5		DO	S7	15	S7: dark brown.		6-10-11	21			Borehole caved in at 24.2 ft. BGS. at drilling completion.
745.9	25					Boring terminated at 25.0 ft. BGS. Backfilled with cuttings after 24+ hrs.						
740.9	30											
735.9	35											
730.9	40											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING P-1

Sheet 1 of 1

Drilling Date(s): **6/3/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **120+34, 254.0 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.374321, -84.149267**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **795.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
795.7	0					TOPSOIL						
	0.3					FILL SANDY FAT CLAY: very stiff, dry, red, with trace Gravel, and trace Organics.	CH					
			DO	S1	15			5-9-11	20	23.1		[% Fines: 65.4; LL: 51; PL: 22]
	3.5					RESIDUAL SILTY SAND: dense, moist, brown and red, fine to coarse.	SM					
			DO	S2	18			11-21-15	36			
790.7	5					S2: with trace Organics.						
	6		DO	S3	18	S4: medium dense, with few Gravel, saprolitic, slightly micaceous.		11-12-11	23			
	8.5		DO	S4	18	S4: medium dense, gray, brown, and red, with trace Gravel.		6-9-10	19	15.2		[% Fines: 35.9]
785.7	10											
	13.5		DO	S5	18	S5: medium dense, gray, brown, and red, fine to medium, no Gravel, saprolitic, slightly micaceous.		11-12-14	26			Borehole caved in at 17.3 ft. BGS at drilling completion and at 17.1 ft. BGS after 24+ hrs. No groundwater observed in borehole after cave-in at drilling completion, and no groundwater observed in borehole after 24+ hrs.
780.7	15											Increased drilling resistance observed from approx. 17 ft. to 18.5 ft. BGS.
	18.5		DO	S6	18	S6: very dense, gray, brown, and red, fine to medium, no Gravel, saprolitic, slightly micaceous.		14-24-30	54			*Backfilled with cuttings after 24+ hrs.
775.7	20					Boring terminated at 20.0 ft. BGS.*						

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING P-2

Sheet 1 of 1

Drilling Date(s): **6/10/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **129+00, 242.0 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.374390, -84.146317**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **779.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Cleared area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
779.6	0					TOPSOIL						
	0.3					FILL SANDY LEAN CLAY: firm to stiff, moist, red.	CL					
			DO	S1	14			3-3-5	8	25.9		[% Fines: 69.8]
	3.5					RESIDUAL SILTY SAND: medium dense, moist, brown and red, fine to coarse, with trace Gravel, slightly micaceous.	SM					
			DO	S2	15			4-8-10	18	20.1		[% Fines: 43.1]
774.6	5											
	6					SILTY SAND: loose, moist, brown and red, fine to coarse.	SM					
			DO	S3	16			5-5-5	10	18.7		[% Fines: 33.6]
	8.5					S4: medium dense, saprolitic.						
			DO	S4	13			4-5-7	12			
769.6	10											
	13.5					S5: medium dense, brown, gray, and orange, saprolitic.						
			DO	S5	18			7-8-8	16			Borehole caved in at 17.1 ft. BGS at drilling completion and at 16.6 ft. BGS after 24+ hrs. No groundwater observed in borehole after cave-in at drilling completion, and no groundwater observed in borehole after 24+ hrs.
764.6	15											
	18.5					S6: brown, gray, and orange, saprolitic.						
			DO	S6	18			3-4-5	9			*Backfilled with cuttings after 24+ hrs.
759.6	20					Boring terminated at 20.0 ft. BGS.*						

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING P-4

Sheet 1 of 1

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **166+39, 63.5 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.378513, -84.135022**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **843.7 ft.**
Logged By: **J. Grigsby**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
843.7	0					TOPSOIL						
	0.3					FILL	MH					
			DO	S1	16	SANDY ELASTIC SILT: very stiff, moist, brown and red, with trace Organics.		5-8-10	18	20.4		[% Fines: 54.3; LL: 64; PL: 35]
	3.5					RESIDUAL	SM					AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS.
			DO	S2	14	SILTY SAND: medium dense, moist, brown and tan, fine to coarse, saprolitic.		7-11-13	24			
838.7	5					S2: with trace Organics.						
	6		DO	S3	16	S3: with trace Gravel.		5-6-7	13			
			DO	S4	17			3-5-9	14			
833.7	10											
	13.5		DO	S5	13	S5: brown, with trace Gravel, slightly micaceous.		5-4-7	11	25.1		[% Fines: 49.2]
828.7	15											Borehole caved in at 16.0 ft. after 24+ hrs. No groundwater observed after 24+ hrs.
	18.5		DO	S6	16	S6: brown, slightly micaceous.		4-5-7	13			Borehole caved in at 18.4 ft. at drilling completion. *Backfilled with cuttings after 24+ hrs.
823.7	20					Boring terminated at 20.0 ft. BGS.*						

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING P-5

Sheet 1 of 1

Drilling Date(s): **6/11/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **38+50, 649.0 ft. L (approx.) [SR 42]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.378561, -84.128950**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **858.5 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Grass shoulder southwest of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
858.5	0					TOPSOIL						
	0.3					FILL SANDY ELASTIC SILT: stiff to very stiff, moist, red.	MH					
			DO	S1	12			3-4-8	12	35.8	3.5	[% Fines: 69.6; LL: 83; PL: 54] AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS [% Moisture: 24.6; % Fines: 54.3; LL: 60; PL: 49; GDOT Classification: IIB4].
	3.5					RESIDUAL SANDY ELASTIC SILT: stiff to very stiff, moist, red.	MH					
			DO	S2	17			3-4-6	10	38.7	2.5	[% Fines: 57.9; LL: 94; PL: 46]
853.5	5											
	6					SILTY SAND: loose, moist, red and tan, fine to coarse, slightly micaceous.	SM					
			DO	S3	18			2-3-4	7	45.0		[% Fines: 39.7; LL: 73; PL: 59]
	8.5					SANDY SILT: loose, moist, red, tan, and white.	ML					
			DO	S4	18			2-3-4	7	46.2		[% Fines: 62.6]
848.5	10											
	13.5					S5: red and tan, slightly micaceous.						
			DO	S5	18			3-2-4	6			▼ 14.4 ft. BGS after 24+ hrs.
843.5	15											Borehole caved in at 14.7 ft. BGS after 24+ hrs. Borehole caved in at 17.7 ft. BGS at drilling completion. No groundwater observed in borehole after cave-in. *Backfilled with cuttings after 24+ hrs.
	18.5					SILTY SAND: loose, moist, brown, red, and white, fine to coarse, with trace Gravel, moderately micaceous.	SM					
			DO	S6	18			2-3-5	8	25.7		[% Fines: 20.5]
838.5	20					Boring terminated at 20.0 ft. BGS.*						

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING P-6

Sheet 1 of 1

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **171+13, 93.0 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.378740, -84.133410**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **848.4 ft.**
Logged By: **J. Grigsby**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
848.4	0											
	0.1					TOPSOIL	SC					
						FILL CLAYEY SAND: medium dense, moist, reddish brown, fine to coarse, with few Gravel, and trace Organics.						AS-1: bulk sample collected in offset boring from 0 to 3.0 ft. BGS. [% Moisture: 17.5; % Fines: 34.1; LL: 41; PL: 24; GDOT Classification: IIB2]
			DO	S1	11			7-8-10	18			
	3.5					RESIDUAL SILTY SAND: very dense, moist, brown, fine to coarse, with few Gravel, saprolitic.	SM					
			DO	S2	14			10-28-24	52	11.7		[% Fines: 27.0]
843.4	5											
	6					S3: dense, slightly micaceous.						
			DO	S3	13			15-20-20	40			
	8.5					S4: dense, no Gravel, slightly micaceous.						
			DO	S4	14			10-21-14	35			
838.4	10											
	13.5					S5: dense, no Gravel, slightly micaceous.						
			DO	S5	14			8-13-22	35			Increased drilling resistance observed at approx. 15 ft. BGS.
833.4	15											Borehole caved in at 16.0 ft. BGS after 24+ hrs. No groundwater observed after 24+ hrs.
	18.5					S6: medium dense, no Gravel, slightly micaceous.						Borehole caved in at 18.9 ft. BGS at drilling completion.
			DO	S6	16			10-12-16	28			*Backfilled with cuttings after 24+ hrs.
828.4	20					Boring terminated at 20.0 ft. BGS.*						

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-1

Sheet 1 of 1

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **101+48, 10.0 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.375752, -84.155272**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **826.9 ft.**
Logged By: **J. Henderson**	Completion Depth: **7.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Grass shoulder south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
826.9	0					FILL SANDY ELASTIC SILT: moist, red and brown, with trace Gravel.	MH					AS-1: bulk sample collected from 0 to 1.3 ft. BGS. [% Moisture: 19.9; % Fines: 56.4; GDOT Classification: IIB3]
	1.3					RESIDUAL SILTY SAND: moist, brown, tan, and red, fine to coarse, with trace Gravel.	SM					S2: auger sample collected from 1.3 to 5.0 ft. BGS.
821.9	5					S3: brown, white, and pink, no Gravel.						S3: auger sample collected from 5.0 to 7.0 ft. BGS.
	7					Boring terminated at 7.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in the borehole.
816.9	10											
811.9	15											

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Suite 500
Atlanta, GA 30346

Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-2

Sheet 1 of 1

Drilling Date(s): **5/23/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **107+90, 10.5 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.375692, -84.153198**
Driller: **S. Hickman**	Drilling Method(s): **Hand Auger**	Elevation: **808.8 ft.**
Logged By: **S. Hickman**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary; T. Angioni**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
808.8	0					TOPSOIL						AS-1: bulk sample collected from 0.2 to 1.5 ft. BGS. [% Moisture: 18.1; % Fines: 51.0; LL: 35; PL: 23; GDOT Classification: IIB3]
	0.2					FILL SANDY LEAN CLAY: moist, brownish red, with trace Gravel, and trace Organics.	CL					
	1.5					FILL SANDY LEAN CLAY WITH GRAVEL: moist, brownish red, with trace Organics.	CL					S2: auger sample collected from 1.5 to 2.0 ft. BGS.
	2					FILL SILTY SAND: moist, brownish red, fine to coarse, with trace Organics.	SM					S3: auger sample collected from 2.0 to 4.5 ft. BGS [% Moisture: 20.0; % Fines: 35.0; LL: 51; PL: 38].
	4.5					RESIDUAL SILTY SAND: moist, brown, fine to coarse, with few Gravel, and trace Organics.	SM					S4: auger sample collected from 4.5 to 5.0 ft. BGS [% Moisture: 5.4; % Fines: 22.1].
803.8	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in borehole.
798.8	10											
793.8	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-3

Sheet 1 of 2

Drilling Date(s): **5/30/2024 - 5/31/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **114+54, 0.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.375202, -84.151107**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **814.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **30.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
814.7	0										
	0.2				TOPSOIL						
					RESIDUAL	MH					
		DO	S1	13	SANDY ELASTIC SILT: very stiff, moist, red, with trace Organics.		5-8-10	18			AS-1: bulk sample collected from 1.0 to 5.0 ft. BGS [% Moisture: 19.2; % Fines: 64.9; LL: 55; PL: 31; GDOT Classification: IIB4].
	3.5										
		DO	S2	16	ELASTIC SILT WITH SAND: very stiff, moist, red, with trace Organics.	MH	7-9-14	23	26.2		[% Fines: 75.8; LL: 66; PL: 38]
809.7	5										
	6										
		DO	S3	17	SILTY SAND: loose, moist, red and tan, fine to coarse.	SM	3-4-6	10			
	8.5										
		DO	S4	16	S4: red, tan, and black, fine to medium.		3-4-5	9			
804.7	10										
	13.5										
		DO	S5	18	S5: medium dense, red, tan, and brown, fine to medium.		11-11-12	23			
799.7	15										
	18.5										
		DO	S6	15	S6: medium dense, dark brown and black, with trace Gravel.		7-7-9	16	17.9		[% Fines: 36.7]
794.7	20										

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-3

Sheet 2 of 2

Drilling Date(s): **5/30/2024 - 5/31/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **114+54, 0.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.375202, -84.151107**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **814.7 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **30.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
794.7	20					SILTY SAND: medium dense, moist, dark brown and black, fine to coarse, with trace Gravel.	SM					Increased drilling resistance observed at approx. 22 ft. BGS.
			DO	S7	16			7-7-5	12			
789.7	25											Borehole caved in at 27.5 ft. BGS after 24+ hrs. No groundwater observed after 24+ hrs.
	28.5											Borehole caved in at 28.7 ft. BGS at drilling completion. No groundwater observed in borehole after cave-in.
			DO	S8	16	SILTY SAND WITH GRAVEL: medium dense, moist, brown, white, and tan, fine to coarse.	SM	36-18-9	27	13.5		[% Fines: 21.6]
784.7	30					Boring terminated at 30.0 ft. BGS. Backfilled with cuttings after 24+ hrs.						
779.7	35											
774.7	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-5

Sheet 1 of 1

Drilling Date(s): **6/5/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1079+96, 139.5 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.383591, -84.142329**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **814.6 ft.**
Logged By: **L. O'Rourke; J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Grass shoulder west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
814.6	0											
	0.2					TOPSOIL						
						FILL SILTY SAND: moist, brown, fine to coarse, with trace Gravel.	SM					AS-1: bulk sample collected from 1.0 to 1.5 ft. BGS [% Moisture: 20.8; % Fines: 49.9; GDOT Classification: IIIC3].
												Groundwater was not observed in borehole.
809.6	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						
804.6	10											
799.6	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-6

Sheet 1 of 1

Drilling Date(s): **5/24/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1059+25, 215.0 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.378322, -84.139746**
Driller: **S. Hickman**	Drilling Method(s): **Hand Auger**	Elevation: **851.8 ft.**
Logged By: **S. Hickman**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary; T. Angioni**	Boring Location: **Forested area west of I-75, north of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
851.8	0					TOPSOIL						S1: auger sample collected from 0.2 to 1.0 ft. BGS [% Moisture: 14.7].
	0.2					FILL SANDY ELASTIC SILT: moist, brownish red, with trace Organics.	MH					
	1					FILL SILTY SAND: moist, brown, fine to coarse, with trace to few Organics.	SM					S2: auger sample collected from 1.0 to 1.5 ft. BGS [% Moisture: 6.6].
	1.5					FILL SANDY ELASTIC SILT: moist, brownish red, with trace Gravel, and trace Organics.	MH					AS-3: bulk sample collected from 1.5 to 5.0 ft. BGS. [% Moisture: 29.1; % Fines: 63.5; LL: 57; PL: 36; GDOT Classification: IIB4]
846.8	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in borehole.
841.8	10											
836.8	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-7

Sheet 1 of 1

Drilling Date(s): **6/6/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1045+17, 152.0 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.374888, -84.137589**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **834.3 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
834.3	0											
	0.1					TOPSOIL	CL					
						FILL SANDY LEAN CLAY: moist, red, with trace Gravel, and trace Organics.						AS-1: bulk sample collected from 0 to 5.0 ft. BGS [% Moisture: 25.3; % Fines: 68.3; GDOT Classification: IIB4].
												Groundwater was not observed in borehole.
829.3	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						
824.3	10											
819.3	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-8

Sheet 1 of 1

Drilling Date(s): **6/6/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1035+14, 136.5 ft. L (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.372415, -84.136129**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **801.7 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Right-of-Way west of I-75 Southbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
801.7	0											
	0.2					TOPSOIL						
						FILL SILTY SAND: moist, red, fine to coarse, with trace Gravel, and trace Organics.	SM					AS-1: bulk sample collected from 0 to 5.0 ft. BGS [% Moisture: 23.0; % Fines: 47.2; GDOT Classification: IIIC2].
												Groundwater was not observed in borehole.
796.7	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						
791.7	10											
786.7	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-9

Sheet 1 of 1

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1082+54, 141.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.384555, -84.141842**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **823.7 ft.**
Logged By: **J. Henderson**	Completion Depth: **7.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
823.7	0											
	0.2					TOPSOIL						
						FILL SILTY SAND: moist, red and brown, fine to coarse, with trace Gravel, and trace Organics.	SM					S1: auger sample collected from 0.2 to 1.0 ft. BGS [% Moisture: 15.2].
	1					FILL SANDY ELASTIC SILT: moist, white, tan, and red, with trace Gravel, and trace Organics.	MH					AS-2: bulk sample collected from 1.0 to 4.5 ft. BGS. [% Moisture: 34.9; % Fines: 53.3; LL: 59; PL: 41; GDOT Classification: IIB4]
	4.5					RESIDUAL SANDY ELASTIC SILT: moist, red, purple, brown, and white.	MH					S3: auger sample collected from 4.5 to 7.0 ft. BGS [% Moisture: 28.3; % Fines: 53.1; LL: 56; PL: 38].
818.7	5											
	7					Boring terminated at 7.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in borehole.
813.7	10											
808.7	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-10

Sheet 1 of 1

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1066+02, 117.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.380395, -84.139673**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **818.1 ft.**
Logged By: **J. Henderson**	Completion Depth: **7.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
818.1	0					FILL SILTY SAND: moist, red, brown, and tan, fine to coarse, with trace Gravel, and trace Organics.	SM					AS-1: bulk sample collected from 0 to 7.0 ft. BGS [% Moisture: 18.8; % Fines: 42.3; GDOT Classification: IIB2].
813.1	5											
	7					Boring terminated at 7.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in the borehole.
808.1	10											
803.1	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-11

Sheet 1 of 1

Drilling Date(s): **6/11/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1056+17, 334.0 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.378191, -84.137699**
Driller: **P. McCain**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **861.6 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Bethlehem Road Westbound travel lane**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
861.6	0					ASPHALT (6-in.) GRADED AGGREGATE BASE (2-in.)						
	0.7		DO	S1	16	FILL CLAYEY SAND: loose, moist, red and brown, fine to coarse.	SC	5-6-4	10	16.8	3.5	AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS.
	3.5		DO	S2	17	S2: with few Gravel, and trace Organics.		6-5-4	9	12.4	2.5	[% Fines: 47.3]
856.6	5											
	6		DO	S3	15	S3: medium dense, with trace Organics.		3-4-7	11			
	8.5		DO	S4	16	S4: medium dense, with trace Organics.		3-6-7	13			
851.6	10											
	13.5		DO	S5	17	FILL SANDY ELASTIC SILT: very stiff to hard, moist, red.	MH	5-6-11	17	26.0	4.5	[% Fines: 69.6; LL: 67; PL: 42]
846.6	15											Borehole caved in at 16.5 ft. BGS at drilling completion. No groundwater observed in borehole after cave-in.
	18.5		DO	S6	17	RESIDUAL SILTY SAND: medium dense, moist, red, tan, and brown, fine to coarse.	SM	4-7-7	14			*Backfilled with cuttings and asphalt cold patch upon completion.
841.6	20					Boring terminated at 20.0 ft. BGS.*						

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Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		**BORING R-12** Sheet 1 of 3
Drilling Date(s): **5/20/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1048+71, 420.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376442, -84.136393**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **825.3 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **60.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Pasture east of I-75 Northbound, south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
825.3	0					TOPSOIL						
	0.3					FILL SANDY ELASTIC SILT: very stiff, dry, red.	MH					
			DO	S1	16	S1: with trace Organics.		4-9-11	20	16.2		AS-1: bulk sample collected in offset boring from 0 to 5.0 ft. BGS.
	3.5		DO	S2	16	S2: moist.		5-8-12	20	34.8		[% Fines: 55.8; LL: 68; PL: 47]
820.3	5											
	6					RESIDUAL SANDY SILT: medium dense, moist, red.	ML					
			DO	S3	14			4-5-7	12			
	8.5		DO	S4	16	S4: loose, tan, black, white, and red.		4-4-6	10			
815.3	10											
	13.5		DO	S5	15	SILTY SAND: loose, moist, tan, black, white, and red, fine to coarse. S5: with trace Organics.	SM	2-2-6	8			▼ 14.4 ft. BGS after 24+ hrs.
810.3	15											Borehole caved in at 15.5 ft. BGS at drilling completion. No groundwater observed in the borehole after cave-in.
	18.5		DO	S6	16	S6: medium dense, tan, black, white, and brown, slightly micaceous.		4-8-7	15			
805.3	20											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-12

Sheet 2 of 3

Drilling Date(s): **5/20/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1048+71, 420.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376442, -84.136393**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **825.3 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **60.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Pasture east of I-75 Northbound, south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
805.3	20					SILTY SAND: medium dense, moist, tan, black, white, and brown, fine to coarse. S6: slightly micaceous.	SM					
	23.5		DO	S7	12	S7: tan, black, and brown, with trace Gravel.		5-12-13	25			
800.3	25											Borehole caved in at 25.5 ft. BGS after 24+ hrs.
	28.5		DO	S8	13	S8: brown and white, with trace Gravel, saprolitic.		13-8-14	22	17.9		[% Fines: 26.9]
795.3	30											
	33.5		DO	S9	17	S9: brown and white, saprolitic.		7-7-9	16			
790.3	35											
	38.5		DO	S10	16	S10: brown and white, with trace Gravel.		10-9-13	22			
785.3	40											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-12

Drilling Date(s): **5/20/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 405184)**	Station, Offset: **1048+71, 420.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.376442, -84.136393**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **825.3 ft.**
Logged By: **L. O'Rourke**	Completion Depth: **60.0 ft.**	Benchmark: **N/A**
Reviewed By: **S. Keary**	Boring Location: **Pasture east of I-75 Northbound, south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
785.3	40					SILTY SAND: medium dense, moist, brown and white, fine to coarse, with trace Gravel.	SM					
	43.5		DO	S11	12	S11: no Gravel.		6-7-7	14			
780.3	45											
	48.5		DO	S12	18	S12: saprolitic.		9-11-11	22	20.1		[% Fines: 23.2]
775.3	50											
	53.5		DO	S13	15	S13: black and brown, no Gravel.		7-10-13	23			
770.3	55											Increased drilling resistance observed at approx. 55 ft. BGS.
	58.5		DO	S14	15	S14: very dense, gray, black, and white, with few Gravel.		21-27-40	67	15.7		*Backfilled with cuttings after 24+ hrs. [% Fines: 21.7]
765.3	60					Boring terminated at 60.0 ft. BGS.*						

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-13

Sheet 1 of 1

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1017+69, 202.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.368487, -84.132669**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **792.7 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
792.7	0					FILL SANDY SILT: moist, red, brown, and tan, with trace Gravel, and trace Organics.	ML					AS-1: bulk sample collected from 0 to 5.0 ft. BGS [% Moisture: 20.8; % Fines: 50.6; GDOT Classification: IIB3].
												Groundwater was not observed in the borehole.
787.7	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						
782.7	10											
777.7	15											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-14

Sheet 1 of 1

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **1008+34, 217.5 ft. R (approx.) [I-75 Centerline]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.366184, -84.131308**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **823.3 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Right-of-Way east of I-75 Northbound**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
823.3	0					TOPSOIL						
	0.2					FILL SANDY ELASTIC SILT: moist, red and brown, with trace Gravel, and trace Organics.	MH					AS-1: bulk sample collected from 0.3 to 2.0 ft. BGS. [% Moisture: 17.5; % Fines: 52.9; GDOT Classification: IIB3]
	2					FILL SILTY SAND: moist, purple, tan, and white, fine to coarse.	SM					S2: auger sample collected from 2.0 to 5.0 ft. BGS.
818.3	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in borehole.
813.3	10											
808.3	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-15

Sheet 1 of 1

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **178+99, 30.0 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.379565, -84.131112**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **835.9 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
835.9	0					FILL SILTY SAND: moist, red, brown, fine to coarse, with trace Gravel, and trace Organics.	SM					S1: auger sample collected from 0 to 1.0 ft. BGS [% Moisture: 18.1].
	1					S2: no Gravel.						▼ 1.3 ft. BGS after 24+ hrs*
	2					S3: wet, dark gray.						*significant rain event on 5/9/24. S2: auger sample collected from 1.0 to 2.0 ft. BGS [% Moisture: 24.6].
												▽ 3.0 ft. BGS at completion.
												AS-3: bulk sample collected from 2.0 to 5.0 ft. BGS. [% Moisture: 13.8; % Fines: 43.4; GDOT Classification: IIB2]
830.9	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings after 24+ hours.						Borehole caved in at 4.1 ft. BGS after 24+ hrs.
825.9	10											
820.9	15											

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Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-16

Sheet 1 of 1

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **181+69, 280.5 ft. L (approx.) [New Bethlehem Road]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.380530, -84.130413**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **862.7 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Grass shoulder south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
862.7	0					FILL SILTY SAND: moist, red, brown, and tan, fine to coarse, with trace Gravel, and trace Organics.	SM					AS-1: bulk sample collected from 0 to 1.8 ft. BGS [% Moisture: 4.5].
	1.8					RESIDUAL SILTY SAND: moist, brown, tan, and white, fine to coarse, with few Gravel, and trace Organics. S3: tan and brown, no Gravel, no Organics.	SM					S2: auger sample collected from 1.8 to 3.5 ft. BGS. S3: auger sample collected from 3.5 to 5.0 ft. BGS. Groundwater was not observed in borehole.
	3.5											
857.7	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						
852.7	10											
847.7	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-17

Sheet 1 of 2

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **189+58, 20.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.380081, -84.127697**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **873.1 ft.**
Logged By: **J. Grigsby**	Completion Depth: **30.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area west of SR-42**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
873.1	0										
	0.1				ASPHALT (1-in.)	ML					
					FILL SANDY SILT: medium dense, moist, brown.						
		DO	S1	15			5-7-10	17	21.3		[% Fines: 53.2; LL: 41; PL: 31]
	3.5				RESIDUAL SILTY SAND: medium dense, moist, dark brown, fine to coarse.	SM					
		DO	S2	15			4-6-7	13			AS-1: bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS.
868.1	5										
	6				S3: loose.						
		DO	S3	15			2-4-5	9	25.8		[% Fines: 48.7]
	8.5				S4: tan.						
		DO	S4	18			3-5-6	11			
863.1	10										
	13.5				S5: loose, dark brown and purple, saprolitic.						
		DO	S5	18			3-4-5	9			
858.1	15										Increased drilling resistance observed from approx. 17 ft. to 18 ft. BGS.
	18.5				S6: loose.						
		DO	S6	18			3-4-6	10			
853.1	20										

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-17

Sheet 2 of 2

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer (SN 282584)**	Station, Offset: **189+58, 20.5 ft. R (approx.) [New Bethlehem Road]**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **78.6%**	Latitude, Longitude: **33.380081, -84.127697**
Driller: **P. McCain**	Drilling Method(s): **Mud Rotary**	Elevation: **873.1 ft.**
Logged By: **J. Grigsby**	Completion Depth: **30.0 ft.**	Benchmark: **N/A**
Reviewed By: **T. Angioni; S. Keary**	Boring Location: **Forested area west of SR-42**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches or Rock Core Recovery and RQD	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
853.1	20					SILTY SAND: medium dense, moist, dark brown, fine to coarse.	SM					Borehole caved in at 23.0 ft. BGS after 24+ hrs. No groundwater observed after 24+ hrs.
			DO	S7	18			4-4-7	11			
848.1	25											Borehole caved in at 26.3 ft. BGS at drilling completion.
	28.5		DO	S8	18	S8: brown and tan, saprolitic.		5-7-9	16			
843.1	30					Boring terminated at 30.0 ft. BGS. Backfilled with cuttings after 24+ hrs.						
838.1	35											
833.1	40											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-18

Sheet 1 of 1

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **38+82, 38.5 ft. L (approx.) [SR 42]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.379042, -84.127030**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **872.4 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Grass shoulder west of State Route of 42**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
872.4	0					FILL SILTY SAND WITH GRAVEL: moist, red and brown, fine to coarse, with trace Organics.	SM					S1: auger sample collected from 0 to 1.0 ft. BGS [% Moisture: 5.1].
	1					FILL SILTY SAND: moist, brown and red, fine to coarse, with trace Gravel.	SM					AS-2: bulk sample collected from 1.0 to 2.7 ft. BGS. [% Moisture: 10.9; % Fines: 35.6; GDOT Classification: IIB2]
	2.7					FILL SILTY SAND WITH GRAVEL: moist, tan, red and gray, fine to coarse.	SM					S3: auger sample collected from 2.7 to 3.2 ft. BGS.
	3.2					FILL SILTY SAND: moist, red, fine to coarse, with trace Organics.	SM					S4: auger sample collected from 3.2 to 4.0 ft. BGS.
	4					S5: gray and tan, with few Gravel, no Organics.						S5: auger sample collected from 4.0 to 5.0 ft. BGS. Increased hand auger resistance at 4.0 ft. BGS.
867.4	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in borehole.
862.4	10											
857.4	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-19

Sheet 1 of 1

Drilling Date(s): **5/7/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **28+60, 38.5 ft. L (approx.) [SR 42]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.376317, -84.126203**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **857.5 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Grass shoulder west of State Route of 42**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
857.5	0					FILL SANDY ELASTIC SILT: moist, red and brown, with trace Gravel, and trace Organics.	MH					AS-1: bulk sample collected from 0 to 4.5 ft. BGS. [% Moisture: 17.6; % Fines: 61.5; LL: 67; PL: 41; GDOT Classification: IIB4]
	4.5											Groundwater was not observed in borehole.
852.5	5					RESIDUAL SILTY SAND: moist, purple, red, and brown, fine to coarse.	SM					S2: auger sample collected from 4.5 to 5.0 ft. BGS.
						Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						
847.5	10											
842.5	15											

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Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-20

Sheet 1 of 1

Drilling Date(s): **5/8/2024**	Drill Rig and Hammer Type: **Hand Auger**	Station, Offset: **18+67, 42.0 ft. L (approx.) [SR 42]**
Drilling Company: **EGSci Consulting Inc.**	Hammer Efficiency: **N/A**	Latitude, Longitude: **33.373696, -84.125280**
Driller: **J. Henderson**	Drilling Method(s): **Hand Auger**	Elevation: **841.2 ft.**
Logged By: **J. Henderson**	Completion Depth: **5.0 ft.**	Benchmark: **N/A**
Reviewed By: **L. O'Rourke; T. Angioni**	Boring Location: **Grass shoulder west of State Route of 42**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	DCP Blows (seating and per 1.75-in.)	Correlated N-Value (bpf)	Moisture (%)	Atterberg Limits (LL/PI)	Additional Remarks
841.2	0					FILL SILTY SAND: moist, red, and brown, fine to coarse, with trace Gravel, and trace Organics.	SM					AS-1: bulk sample collected from 0 to 5.0 ft. BGS [% Moisture: 21.4; % Fines: 49.7; GDOT Classification: IIB3].
836.2	5					Boring terminated at 5.0 ft. BGS. Backfilled with cuttings upon completion.						Groundwater was not observed in borehole.
831.2	10											
826.2	15											

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APPENDIX B

LABORATORY TESTING DATA

APPENDIX B-1

LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

LABORATORY TEST RESULTS SUMMARY
GDOT 810.2

810.2 TEST NUMBER		1	2 [Note 3]	3	4	5	6 [Note 3]	7 [Note 3]	8
BORING NUMBER		B2-3	P-5	P-6	R-1	R-2	R-3	R-5	R-6
STATION (APPROXIMATE)		156+50	38+50	171+13	101+48	107+90	114+54	1079+96	1059+25
OFFSET (FT) (APPROXIMATE)		38.5' R	649.0' L	93.0' R	10.0' L	10.5' L	0.5' R	139.5' L	215.0' L
DEPTH (FT)		0.0-5.0	1.0-5.0	0.0-3.0	0.0-1.3	0.2-1.5	1.0-5.0	1.0-1.5	1.5-5.0
% PASSING	1 - 1/2" SIEVE	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	3/4" SIEVE	100.0	100.0	96.3	99.8	100.0	100.0	99.9	100.0
	#10 SIEVE	97.6	98.8	80.6	97.6	98.0	97.2	98.4	98.6
	#40 SIEVE	86.8	82.6	70.0	87.3	84.3	90.8	85.0	87.7
	#60 SIEVE	73.0	72.1	57.2	76.2	69.3	83.3	73.4	77.8
	#200 SIEVE	47.0	54.3	34.1	56.4	51.0	64.9	49.9	63.5
% CLAY		26.8	22.2	18.0	30.9	24.9	40.1	13.9	44.6
FOR MATERIAL PASSING #10 SIEVE	% VOL. CHANGE	7.1	21.8	8.5	16.0	7.2	14.8	35.6	12.9
	% SWELL	4.9	18.6	8.7	13.3	5.0	8.8	33.0	8.5
	% SHRINKAGE	2.3	3.4	1.4	3.0	2.3	6.3	3.1	4.5
	MAX DRY DENSITY (PCF)	114.3	100.4	114.4	106.3	113.5	103.0	107.6	98.6
	% OPT. MOISTURE	14.3	20.1	14.0	19.1	13.4	20.0	16.2	21.0
LIQUID LIMIT		-	60	41	-	35	55	-	57
PLASTIC LIMIT		-	49	24	-	23	31	-	36
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
SOIL SUPPORT VALUE		-	-	-	-	3.7	-	-	2.8
CBR [Note 4]		-	-	-	-	8	-	-	5
pH		-	-	-	-	-	-	-	-
% MOISTURE		13.0	24.6	17.5	19.9	18.1	19.2	20.8	29.1
GDOT CLASSIFICATION		IIB3	IIB4	IIB2	IIB3	IIB3	IIB4	IIIC3	IIB4

NOTES:

1. Per GDOT GDT 6 and 7, the reported values for Percent Volume Change, Maximum Dry Density, and Percent Optimum Moisture correspond to the Corrected Values for these tests (as applicable). Refer to individual laboratory sheets for uncorrected values.
2. Stations and offsets referenced correspond to either, SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
3. Due to project delays, laboratory testing for noted samples was generally performed in October 2024; laboratory testing for all other samples was generally performed in June 2024.
4. CBR specimens were compacted using 10-blows, 25-blows, and 56-blows per layer. The CBR value provided is based on the 0.1-inch penetration reading on a specimen compacted by 56-blows per layer. Refer to individual laboratory sheets in Appendix B-2 for additional information.

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I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

LABORATORY TEST RESULTS SUMMARY
GDOT 810.2

810.2 TEST NUMBER		9 [Note 3]	10 [Note 3]	11	12 [Note 3]	13 [Note 3]	14	15	16
BORING NUMBER		R-7	R-8	R-9	R-10	R-13	R-14	R-15	R-18
STATION (APPROXIMATE)		1045+17	1035+14	1082+54	1066+02	1017+69	1008+34	178+99	38+82
OFFSET (FT) (APPROXIMATE)		152.0' L	136.5' L	141.0' R	117.5' R	202.5' R	217.5' R	30.0' R	38.5' L
DEPTH (FT)		0.0-5.0	0.0-5.0	1.0-4.5	0.0-7.0	0.0-5.0	0.3-2.0	2.0-5.0	1.0-2.7
% PASSING	1 - 1/2" SIEVE	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	3/4" SIEVE	100.0	99.5	99.7	99.5	99.5	99.3	100.0	99.8
	#10 SIEVE	97.8	92.4	96.6	93.3	92.9	94.2	98.7	95.0
	#40 SIEVE	91.7	82.6	76.5	75.7	81.9	84.7	78.0	82.8
	#60 SIEVE	83.6	70.2	67.1	61.5	70.3	72.2	64.4	64.4
	#200 SIEVE	68.3	47.2	53.3	42.3	50.6	52.9	43.4	35.6
% CLAY		47.7	11.4	14.0	21.5	21.6	33.2	8.1	14.1
FOR MATERIAL PASSING #10 SIEVE	% VOL. CHANGE	17.6	33.4	22.5	7.0	10.9	10.4	8.1	4.0
	% SWELL	10.1	32.9	21.2	4.2	8.4	5.3	6.6	1.5
	% SHRINKAGE	7.8	2.7	1.7	3.2	3.2	5.6	1.6	2.7
	MAX DRY DENSITY (PCF)	98.8	108.5	102.4	112.9	109.1	109.8	112.1	121.2
	% OPT. MOISTURE	21.9	17.0	19.1	15.0	16.7	18.0	14.3	11.5
LIQUID LIMIT		-	-	59	-	-	-	-	-
PLASTIC LIMIT		-	-	41	-	-	-	-	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
SOIL SUPPORT VALUE		-	2.3	2.8	-	-	3.1	-	-
CBR [Note 4]		-	4	5	-	-	6	-	-
pH		-	-	-	-	-	-	-	-
% MOISTURE		25.3	23.0	34.9	18.8	20.8	17.5	13.8	10.9
GDOT CLASSIFICATION		IIB4	IIIC2	IIB4	IIB2	IIB3	IIB3	IIB2	IIB2

NOTES:

1. Per GDOT GDT 6 and 7, the reported values for Percent Volume Change, Maximum Dry Density, and Percent Optimum Moisture correspond to the Corrected Values for these tests (as applicable). Refer to individual laboratory sheets for uncorrected values.
2. Stations and offsets referenced correspond to either, SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
3. Due to project delays, laboratory testing for noted samples was generally performed in October 2024; laboratory testing for all other samples was generally performed in June 2024.
4. CBR specimens were compacted using 10-blows, 25-blows, and 56-blows per layer. The CBR value provided is based on the 0.1-inch penetration reading on a specimen compacted by 56-blows per layer. Refer to individual laboratory sheets in Appendix B-2 for additional information.

EGSci consulting inc

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

LABORATORY TEST RESULTS SUMMARY
GDOT 810.2

810.2 TEST NUMBER		17	18 [Note 3]	-	-	-	-	-	-
BORING NUMBER		R-19	R-20	-	-	-	-	-	-
STATION (APPROXIMATE)		28+60	18+67	-	-	-	-	-	-
OFFSET (FT) (APPROXIMATE)		38.5' L	42.0' L	-	-	-	-	-	-
DEPTH (FT)		0.0-4.5	0.0-5.0	-	-	-	-	-	-
% PASSING	1 - 1/2" SIEVE	100.0	100.0	-	-	-	-	-	-
	3/4" SIEVE	99.9	99.0	-	-	-	-	-	-
	#10 SIEVE	99.3	94.1	-	-	-	-	-	-
	#40 SIEVE	92.3	82.9	-	-	-	-	-	-
	#60 SIEVE	80.8	71.7	-	-	-	-	-	-
	#200 SIEVE	61.5	49.7	-	-	-	-	-	-
% CLAY		41.7	18.7	-	-	-	-	-	-
FOR MATERIAL PASSING #10 SIEVE	% VOL. CHANGE	12.6	15.8	-	-	-	-	-	-
	% SWELL	7.0	13.7	-	-	-	-	-	-
	% SHRINKAGE	5.7	2.9	-	-	-	-	-	-
	MAX DRY DENSITY (PCF)	98.4	106.9	-	-	-	-	-	-
	% OPT. MOISTURE	22.9	18.2	-	-	-	-	-	-
LIQUID LIMIT		67	-	-	-	-	-	-	-
PLASTIC LIMIT		41	-	-	-	-	-	-	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
SOIL SUPPORT VALUE		4.6	-	-	-	-	-	-	-
CBR [Note 4]		12	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% MOISTURE		17.6	21.4	-	-	-	-	-	-
GDOT CLASSIFICATION		IIB4	IIB3	-	-	-	-	-	-

NOTES:

1. Per GDOT GDT 6 and 7, the reported values for Percent Volume Change, Maximum Dry Density, and Percent Optimum Moisture correspond to the Corrected Values for these tests (as applicable). Refer to individual laboratory sheets for uncorrected values.
2. Stations and offsets referenced correspond to either, SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
3. Due to project delays, laboratory testing for noted samples was generally performed in October 2024; laboratory testing for all other samples was generally performed in June 2024.
4. CBR specimens were compacted using 10-blows, 25-blows, and 56-blows per layer. The CBR value provided is based on the 0.1-inch penetration reading on a specimen compacted by 56-blows per layer. Refer to individual laboratory sheets in Appendix B-2 for additional information.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER	B2-1	B2-1	B2-1	B2-1	B2-1	B2-1	B2-2	B2-2
STATION (APPROXIMATE)	154+23	154+23	154+23	154+23	154+23	154+23	155+15	155+15
OFFSET (FT) (APPROXIMATE)	41.5' R	41.5' R	41.5' R	41.5' R	41.5' R	41.5' R	31.0' L	31.0' L
SAMPLE NUMBER	S1	S3	S5	S9	S12	S15	S1	S3
DEPTH (FT)	1.0-2.5	6.0-7.5	13.5-15.0	33.5-35.0	48.5-50.0	63.5-65.0	1.0-2.5	6.0-7.5
% PASSING	1 - 1/2" SIEVE	-	100.0	100.0	-	100.0	-	100.0	
	3/4" SIEVE	-	100.0	100.0	-	100.0	-	100.0	
	#4 SIEVE	-	100.0	94.6	-	100.0	-	99.7	
	#10 SIEVE	-	99.3	92.5	-	98.6	-	98.1	
	#40 SIEVE	-	75.9	75.8	-	64.9	-	85.5	
	#60 SIEVE	-	59.7	58.6	-	47.2	-	75.3	
	#200 SIEVE	-	36.5	32.9	21.2	25.5	25.9	56.7	40.1
LIQUID LIMIT		-	-	-	-	-	-	-	-
PLASTIC LIMIT		-	-	-	-	-	-	-	-
USCS CLASSIFICATION		-	[SM]	[SM]	[SM]	[SM]	[SM]	[CL]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		23.6	26.7	27.6	23.2	23.0	25.0	20.8	26.2

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

EGSci consulting inc

LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B2-2	B2-2	B2-2	B2-3	B2-3	B2-3	B2-3	B2-3
STATION (APPROXIMATE)		155+15	155+15	155+15	156+50	156+50	156+50	156+50	156+50
OFFSET (FT) (APPROXIMATE)		31.0' L	31.0' L	31.0' L	38.5' R	38.5' R	38.5' R	38.5' R	38.5' R
SAMPLE NUMBER		S7b	S11	S15	S1	S2	S5	ST1	S8
DEPTH (FT)		24.5-25.0	43.5-45.0	63.5-65.0	1.0-2.5	3.5-5.0	13.5-15.0	15.0-17.0	28.5-30.0
% PASSING	1 - 1/2" SIEVE	-	100.0	100.0	-	100.0	100.0	-	100.0
	3/4" SIEVE	-	100.0	100.0	-	100.0	100.0	-	100.0
	#4 SIEVE	-	100.0	100.0	-	100.0	98.9	-	100.0
	#10 SIEVE	-	97.3	98.7	-	98.9	93.5	-	99.0
	#40 SIEVE	-	72.0	85.8	-	86.2	64.3	-	53.8
	#60 SIEVE	-	55.5	70.5	-	73.1	50.3	-	37.8
	#200 SIEVE	26.3	28.2	32.6	47.9	50.6	27.5	41.1	18.0
LIQUID LIMIT		-	-	-	-	-	-	NV	-
PLASTIC LIMIT		-	-	-	-	-	-	NP	-
USCS CLASSIFICATION		[SM]	[SM]	[SM]	[SM]	[MH]	[SM]	SM	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		19.7	27.8	20.8	16.3	20.2	27.1	18.5	17.3

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B2-3	B2-3	B2-3	B3-1	B3-1	B3-1	B3-1	B3-1
STATION (APPROXIMATE)		156+50	156+50	156+50	1035+89	1035+89	1035+89	1035+89	1035+89
OFFSET (FT) (APPROXIMATE)		38.5' R	38.5' R	38.5' R	232.5' R	232.5' R	232.5' R	232.5' R	232.5' R
SAMPLE NUMBER		S13	S16	S17	S1	S2	S3	S4	S6
DEPTH (FT)		53.5-55.0	68.5-69.4	73.5-74.8	1.0-2.5	3.5-5.0	6.0-7.5	8.5-10.0	18.5-20.0
% PASSING	1 - 1/2" SIEVE	100.0	-	100.0	-	-	100.0	-	100.0
	3/4" SIEVE	100.0	-	100.0	-	-	100.0	-	100.0
	#4 SIEVE	100.0	-	100.0	-	-	99.8	-	81.0
	#10 SIEVE	95.0	-	96.8	-	-	97.9	-	71.6
	#40 SIEVE	68.7	-	76.2	-	-	82.3	-	52.6
	#60 SIEVE	51.1	-	61.8	-	-	68.9	-	45.7
	#200 SIEVE	22.4	25.6	27.6	-	40.0	47.5	34.2	25.7
LIQUID LIMIT		-	-		-	36	-	-	-
PLASTIC LIMIT		-	-		-	21	-	-	-
USCS CLASSIFICATION		[SM]	[SM]	[SM]	-	SC	[SC]	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		24.1	18.0	16.6	12.7	16.5	19.2	17.9	13.2

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B3-1	B3-1A	B3-2	B3-2	B3-2	B3-3	B3-3	B3-3
STATION (APPROXIMATE)		1035+89	1035+88	1034+54	1034+54	1034+54	1033+11	1033+11	1033+11
OFFSET (FT) (APPROXIMATE)		232.5' R	234.0' R	206.0' R	206.0' R	206.0' R	185.5' R	185.5' R	185.5' R
SAMPLE NUMBER		S7	ST1	S1	S4	S6	S1	S2	S3
DEPTH (FT)		23.5-23.9	3.5-5.5	1.0-2.5	8.5-10.0	18.5-20.0	1.0-2.5	3.5-5.0	6.0-7.5
% PASSING	1 - 1/2" SIEVE	-	-	-	100.0	-	-	-	-
	3/4" SIEVE	-	-	-	100.0	-	-	-	-
	#4 SIEVE	-	-	-	100.0	-	-	-	-
	#10 SIEVE	-	-	-	99.1	-	-	-	-
	#40 SIEVE	-	-	-	79.9	-	-	-	-
	#60 SIEVE	-	-	-	62.0	-	-	-	-
	#200 SIEVE	61.4	24.2	61.4	34.8	25.2	-	73.3	51.6
LIQUID LIMIT		-	26	46	-	-	-	67	-
PLASTIC LIMIT		-	19	25	-	-	-	38	-
USCS CLASSIFICATION		[ML]	SC-SM	CL	[SC]	[SM]	-	MH	[MH]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		18.0	20.5	18.0	29.0	20.7	14.6	26.5	24.0

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B3-3	B3-3	B3-3	B3-3	B3-4	B3-4	B3-4	B3-4
STATION (APPROXIMATE)		1033+11	1033+11	1033+11	1033+11	1031+56	1031+56	1031+56	1031+56
OFFSET (FT) (APPROXIMATE)		185.5' R	185.5' R	185.5' R	185.5' R	173.5' R	173.5' R	173.5' R	173.5' R
SAMPLE NUMBER		S5	S10	S12	S14	S1	S2t	S8	S11
DEPTH (FT)		13.5-15.0	38.5-40.0	48.5-49.8	58.5-60.0	1.0-2.5	3.5-4.5	28.5-30.0	43.5-45.0
% PASSING	1 - 1/2" SIEVE	100.0	100.0	100.0	100.0	-	-	100.0	-
	3/4" SIEVE	100.0	100.0	100.0	100.0	-	-	100.0	-
	#4 SIEVE	100.0	98.2	99.7	100.0	-	-	96.0	-
	#10 SIEVE	96.5	93.7	98.2	99.0	-	-	91.3	-
	#40 SIEVE	62.8	65.7	81.7	81.5	-	-	77.1	-
	#60 SIEVE	47.1	55.3	70.2	67.4	-	-	66.8	-
	#200 SIEVE	25.1	26.3	40.0	40.5	69.3	36.9	35.4	23.3
LIQUID LIMIT		-	-	-	-	47	51	-	-
PLASTIC LIMIT		-	-	-	-	24	31	-	-
USCS CLASSIFICATION		[SM]	[SM]	[SM]	[SM]	CL	SM	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		31.7	11.3	15.9	20.3	23.4	17.4	23.3	18.6

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B3-4	B3-5	B3-5	B3-5	B3-5	B3-5	B3-5	B3-6
STATION (APPROXIMATE)		1031+56	1030+02	1030+02	1030+02	1030+02	1030+02	1030+02	1028+78
OFFSET (FT) (APPROXIMATE)		173.5' R	182.5' R	182.5' R	182.5' R	182.5' R	182.5' R	182.5' R	199.5' R
SAMPLE NUMBER		S16	S1	S4	S9	S12	S14	S15	S1
DEPTH (FT)		68.5-69.0	1.0-2.5	8.5-10.0	33.5-35.0	48.5-49.9	58.5-60.0	63.5-64.8	1.0-2.5
% PASSING	1 - 1/2" SIEVE	100.0	-	100.0	100.0	100.0	-	100.0	-
	3/4" SIEVE	100.0	-	100.0	100.0	100.0	-	100.0	-
	#4 SIEVE	90.6	-	100.0	100.0	100.0	-	100.0	-
	#10 SIEVE	83.6	-	99.1	99.6	97.7	-	100.0	-
	#40 SIEVE	71.1	-	78.9	74.8	62.2	-	80.7	-
	#60 SIEVE	62.1	-	57.3	54.4	45.2	-	57.5	-
	#200 SIEVE	30.7	70.6	27.5	25.8	22.8	24.0	27.1	-
LIQUID LIMIT		-	51	-	-	-	-	-	-
PLASTIC LIMIT		-	26	-	-	-	-	-	-
USCS CLASSIFICATION		[SM]	CH	[SM]	[SM]	[SM]	[SM]	[SM]	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		9.7	18.9	20.0	16.9	20.3	21.1	17.3	15.8

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

EGSci consulting inc

LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B3-6	B3-6	B3-6	B3-6A	B3-6A	B3-7	B3-7	B3-7
STATION (APPROXIMATE)		1028+78	1028+78	1028+78	1028+77	1028+77	1027+54	1027+54	1027+54
OFFSET (FT) (APPROXIMATE)		199.5' R	199.5' R	199.5' R	202.5' R	202.5' R	185.5' R	185.5' R	185.5' R
SAMPLE NUMBER		S3	S5	S6	S11	S15	S1	S2	S3
DEPTH (FT)		6.0-7.5	13.5-15.0	18.5-20.0	43.5-45.0	63.5-63.8	1.0-2.5	3.5-5.0	6.0-7.5
% PASSING	1 - 1/2" SIEVE	-	-	100.0	100.0	-	-	-	-
	3/4" SIEVE	-	-	100.0	100.0	-	-	-	-
	#4 SIEVE	-	-	100.0	100.0	-	-	-	-
	#10 SIEVE	-	-	100.0	99.2	-	-	-	-
	#40 SIEVE	-	-	84.1	87.4	-	-	-	-
	#60 SIEVE	-	-	63.1	77.2	-	-	-	-
	#200 SIEVE	37.4	36.9	39.9	42.3	20.1	53.7	47.0	34.7
LIQUID LIMIT		NV	NV	-	-	-	37	-	-
PLASTIC LIMIT		NP	NP	-	-	-	21	-	-
USCS CLASSIFICATION		SM	SM	[SM]	[SM]	[SM]	CL	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		22.0	22.9	15.1	14.5	16.2	15.2	24.7	27.7

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

EGSci consulting inc

LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		B3-7	B3-7	B3-7	C-1	C-1	C-1	C-2	C-2
STATION (APPROXIMATE)		1027+54	1027+54	1027+54	1070+87	1070+87	1070+87	1072+93	1072+93
OFFSET (FT) (APPROXIMATE)		185.5' R	185.5' R	185.5' R	92.0' L	92.0' L	92.0' L	166.0' R	166.0' R
SAMPLE NUMBER		S7	S14	S15	S6	S9	S11	S1	S3t
DEPTH (FT)		23.5-25.0	58.5-60.0	63.5-65.0	18.5-20.0	33.5-35.0	43.5-45.0	1.0-2.5	6.0-7.0
% PASSING	1 - 1/2" SIEVE	100.0	100.0	100.0	-	100.0	-	-	100.0
	3/4" SIEVE	100.0	100.0	100.0	-	100.0	-	-	86.6
	#4 SIEVE	100.0	99.8	99.6	-	100.0	-	-	81.1
	#10 SIEVE	98.7	98.9	98.8	-	98.3	-	-	80.5
	#40 SIEVE	82.3	88.8	82.2	-	82.2	-	-	65.0
	#60 SIEVE	68.4	71.5	62.8	-	67.7	-	-	52.5
	#200 SIEVE	36.5	34.5	29.9	25.0	34.3	18.6	50.1	30.7
LIQUID LIMIT		-	-	-	-	-	-	-	-
PLASTIC LIMIT		-	-	-	-	-	-	-	-
USCS CLASSIFICATION		[SM]	[SM]	[SM]	[SM]	[SM]	[SM]	[MH]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		34.0	24.3	16.8	10.2	25.1	17.0	26.0	23.5

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

EGSci consulting inc

LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		C-2	C-2	C-3	C-3	C-3	C-3	C-4	C-4
STATION (APPROXIMATE)		1072+93	1072+93	1031+46	1031+46	1031+46	1031+46	1038+23	1038+23
OFFSET (FT) (APPROXIMATE)		166.0' R	166.0' R	195.5' L	195.5' L	195.5' L	195.5' L	462.0' R	462.0' R
SAMPLE NUMBER		S4	S6	S1	S3t	S4	S6	S1	S2
DEPTH (FT)		8.5-10.0	18.5-20.0	1.0-2.5	6.0-7.1	8.5-10.0	18.5-20.0	1.0-2.5	3.5-5.0
% PASSING	1 - 1/2" SIEVE	-	-	-	100.0	-	-	100.0	-
	3/4" SIEVE	-	-	-	100.0	-	-	100.0	-
	#4 SIEVE	-	-	-	100.0	-	-	100.0	-
	#10 SIEVE	-	-	-	99.7	-	-	99.7	-
	#40 SIEVE	-	-	-	85.1	-	-	88.5	-
	#60 SIEVE	-	-	-	67.8	-	-	74.1	-
	#200 SIEVE	35.4	30.1	-	45.5	23.5	26.9	50.6	-
LIQUID LIMIT		-	-	-	-	-	-	-	-
PLASTIC LIMIT		-	-	-	-	-	-	-	-
USCS CLASSIFICATION		[SM]	[SM]	-	[SC]	[SM]	[SM]	[MH]	[MH]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		28.8	7.8	11.5	27.7	24.0	17.6	14.3	21.8

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		C-4	C-4	C-4	C-5	C-5	C-5	C-5	C-5
STATION (APPROXIMATE)		1038+23	1038+23	1038+23	1021+44	1021+44	1021+44	1021+44	1021+44
OFFSET (FT) (APPROXIMATE)		462.0' R	462.0' R	462.0' R	228.5' L	228.5' L	228.5' L	228.5' L	228.5' L
SAMPLE NUMBER		S3	S4	S5b	S1t	S2	S3	S5	S7
DEPTH (FT)		6.0-7.5	8.5-10.0	14.7-15.0	1.0-2.0	3.5-5.0	6.0-7.5	13.5-15.0	23.5-23.9
% PASSING	1 - 1/2" SIEVE	-	-	-	-	100.0	100.0	100.0	-
	3/4" SIEVE	-	-	-	-	100.0	100.0	100.0	-
	#4 SIEVE	-	-	-	-	93.4	71.9	95.1	-
	#10 SIEVE	-	-	-	-	91.7	54.6	92.3	-
	#40 SIEVE	-	-	-	-	79.5	21.1	67.9	-
	#60 SIEVE	-	-	-	-	61.9	12.2	52.8	-
	#200 SIEVE	27.2	28.1	9.0	56.8	23.7	4.1	24.6	19.1
LIQUID LIMIT		-	-	-	49	-	-	-	-
PLASTIC LIMIT		-	-	-	32	-	-	-	-
USCS CLASSIFICATION		[SM]	[SM]	[SP-SM]	ML	[SM]	SP	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		27.2	31.4	8.3	22.2	29.0	10.9	12.5	14.0

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		C-6	C-6	C-6	P-1	P-1	P-2	P-2	P-2
STATION (APPROXIMATE)		1022+08	1022+08	1022+08	120+34	120+34	129+00	129+00	129+00
OFFSET (FT) (APPROXIMATE)		274.5' R	274.5' R	274.5' R	254.0' R	254.0' R	242.0' R	242.0' R	242.0' R
SAMPLE NUMBER		S1	S3t	S5	S1	S4	S1	S2	S3
DEPTH (FT)		1.0-2.5	6.0-7.2	13.5-15.0	1.0-2.5	8.5-10.0	1.0-2.5	3.5-5.0	6.0-7.5
% PASSING	1 - 1/2" SIEVE	-	-	-	-	100.0	100.0	100.0	-
	3/4" SIEVE	-	-	-	-	100.0	100.0	100.0	-
	#4 SIEVE	-	-	-	-	99.7	100.0	98.6	-
	#10 SIEVE	-	-	-	-	99.5	99.7	98.5	-
	#40 SIEVE	-	-	-	-	88.4	95.9	84.5	-
	#60 SIEVE	-	-	-	-	74.2	88.8	73.5	-
	#200 SIEVE	-	12.5	31.3	65.4	35.9	69.8	43.1	33.6
LIQUID LIMIT		-	-	-	51	-	-	-	-
PLASTIC LIMIT		-	-	-	22	-	-	-	-
USCS CLASSIFICATION		-	[SC]	-	CH	[SM]	[CL]	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		21.7	24.4	29.9	23.1	15.2	25.9	20.1	18.7

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		P-4	P-4	P-5	P-5	P-5	P-5	P-5	P-6
STATION (APPROXIMATE)		166+39	166+39	38+50	38+50	38+50	38+50	38+50	171+13
OFFSET (FT) (APPROXIMATE)		63.5' L	63.5' L	649.0' L	649.0' L	649.0' L	649.0' L	649.0' L	93.0' R
SAMPLE NUMBER		S1	S5	S1	S2	S3	S4	S6	S2
DEPTH (FT)		1.0-2.5	13.5-15.0	1.0-2.5	3.5-5.0	6.0-7.5	8.5-10.0	18.5-20.0	3.5-5.0
% PASSING	1 - 1/2" SIEVE	-	100.0	-	-	-	100.0	-	100.0
	3/4" SIEVE	-	100.0	-	-	-	100.0	-	100.0
	#4 SIEVE	-	99.8	-	-	-	100.0	-	94.4
	#10 SIEVE	-	99.5	-	-	-	100.0	-	93.2
	#40 SIEVE	-	90.5	-	-	-	96.7	-	72.1
	#60 SIEVE	-	80.2	-	-	-	90.2	-	56.7
	#200 SIEVE	54.3	49.2	69.6	57.9	39.7	62.6	20.5	27.0
LIQUID LIMIT		64	-	83	94	73	-	-	-
PLASTIC LIMIT		35	-	54	46	59	-	-	-
USCS CLASSIFICATION		MH	[SM]	MH	MH	SM	[ML]	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		20.4	25.1	35.8	38.7	45.0	46.2	25.7	11.7

NOTES:

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2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		R-2	R-2	R-3	R-3	R-3	R-6	R-6	R-9
STATION (APPROXIMATE)		107+90	107+90	114+54	114+54	114+54	1059+25	1059+25	1082+54
OFFSET (FT) (APPROXIMATE)		10.5' L	10.5' L	0.5' R	0.5' R	0.5' R	215.0' L	215.0' L	141.0' R
SAMPLE NUMBER		S3	S4	S2	S6	S8	S1	S2	S1
DEPTH (FT)		2.0-4.5	4.5-5.0	3.5-5.0	18.5-20.0	28.5-30.0	0.2-1.0	1.0-1.5	0.2-1.0
% PASSING	1 - 1/2" SIEVE	-	100.0	-	100.0	-	-	-	-
	3/4" SIEVE	-	100.0	-	100.0	-	-	-	-
	#4 SIEVE	-	91.0	-	99.3	-	-	-	-
	#10 SIEVE	-	84.4	-	98.2	-	-	-	-
	#40 SIEVE	-	55.9	-	83.6	-	-	-	-
	#60 SIEVE	-	41.7	-	71.6	-	-	-	-
	#200 SIEVE	35.0	22.1	75.8	36.7	21.6	-	-	-
LIQUID LIMIT		51	-	66	-	-	-	-	-
PLASTIC LIMIT		38	-	38	-	-	-	-	-
USCS CLASSIFICATION		SM	[SM]	MH	[SM]	[SM]	-	-	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		20.0	5.4	26.2	17.9	13.5	14.7	6.6	15.2

NOTES:

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3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		R-9	R-11	R-11	R-11	R-12	R-12	R-12	R-12
STATION (APPROXIMATE)		1082+54	1056+17	1056+17	1056+17	1048+71	1048+71	1048+71	1048+71
OFFSET (FT) (APPROXIMATE)		141.0' R	334.0' R	334.0' R	334.0' R	420.5' R	420.5' R	420.5' R	420.5' R
SAMPLE NUMBER		S3	S1	S2	S5	S1	S2	S8	S12
DEPTH (FT)		4.5-7.0	1.0-2.5	3.5-5.0	13.5-15.0	1.0-2.5	3.5-5.0	28.5-30.0	48.5-50.0
% PASSING	1 - 1/2" SIEVE	-	-	100.0	-	-	-	100.0	100.0
	3/4" SIEVE	-	-	100.0	-	-	-	100.0	100.0
	#4 SIEVE	-	-	94.3	-	-	-	95.8	95.4
	#10 SIEVE	-	-	93.7	-	-	-	91.6	92.3
	#40 SIEVE	-	-	79.3	-	-	-	63.7	66.8
	#60 SIEVE	-	-	66.0	-	-	-	49.4	52.7
	#200 SIEVE	53.1	-	47.3	69.6	-	55.8	26.9	23.2
LIQUID LIMIT		56	-	-	67	-	68	-	-
PLASTIC LIMIT		38	-	-	42	-	47	-	-
USCS CLASSIFICATION		MH	-	[SC]	MH	-	MH	[SM]	[SM]
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		28.3	16.8	12.4	26.0	16.2	34.8	17.9	20.1

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		R-12	R-15	R-15	R-16	R-17	R-17	R-18	-
STATION (APPROXIMATE)		1048+71	178+99	178+99	181+69	189+58	189+58	38+82	-
OFFSET (FT) (APPROXIMATE)		420.5' R	30.0' R	30.0' R	280.5' L	20.5' R	20.5' R	38.5' L	-
SAMPLE NUMBER		S14	S1	S2	AS-1	S1	S3	S1	-
DEPTH (FT)		58.5-60.0	0-1.0	1.0-2.0	0-1.8	1.0-2.5	6.0-7.5	0-1.0	-
% PASSING	1 - 1/2" SIEVE	100.0	-	-	-	-	100.0	-	-
	3/4" SIEVE	90.8	-	-	-	-	100.0	-	-
	#4 SIEVE	85.4	-	-	-	-	100.0	-	-
	#10 SIEVE	83.9	-	-	-	-	99.9	-	-
	#40 SIEVE	67.4	-	-	-	-	91.3	-	-
	#60 SIEVE	51.2	-	-	-	-	74.7	-	-
	#200 SIEVE	21.7	-	-	-	53.2	48.7	-	-
LIQUID LIMIT		-	-	-	-	41	-	-	-
PLASTIC LIMIT		-	-	-	-	31	-	-	-
USCS CLASSIFICATION		[SM]	-	-	-	ML	[SM]	-	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		15.7	18.1	24.6	4.5	21.3	25.8	5.1	-

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.
4. Due to project delays, laboratory testing for samples above was generally performed in October 2024.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER	STATION (APPROX.)	OFFSET (APPROX.)	DEPTH (FT)	UNCONFINED COMPRESSIVE STRENGTH OF ROCK CORE (PSI)
B3-1	1035+89	232.5' R	44.8-45.3	6,173 Note 1
B3-1	1035+89	232.5' R	49.0-49.6	13,365
B3-1	1035+89	232.5' R	51.0-51.6	7,048
B3-1	1035+89	232.5' R	58.2-58.7	810
B3-1	1035+89	232.5' R	70.0-70.7	9,318 Note 1
B3-2	1034+54	206.0' R	34.7-35.1	3,205 Note 1
B3-2	1034+54	206.0' R	45.2-45.5	2,389 Note 1
B3-2	1034+54	206.0' R	48.0-48.5	3,737
B3-2	1034+54	206.0' R	53.7-54.2	3,602

NOTES:

1. Sample did not meet a 2:1 Length:Diameter ratio due to limited length of core; the compressive strength of a rock core specimen of similar material meeting the 2:1 ratio may vary.
2. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.

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LABORATORY TEST RESULTS SUMMARY

I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

WATER SAMPLE ID	STATION (APPROX.)	OFFSET (APPROX.)	pH	RESISTIVITY (OHM-CM)
WS-1	1086+94	109.0' L	7.16	14,900
WS-2	1069+89	147.0' L	7.05	20,800
WS-3	1036+02	173.0' R	7.21	26,000
WS-4	1021+98	199.5' R	7.03	21,000
WS-5	1020+14	211.5' R	7.33	22,300
WS-6	1072+54	125.0' R	7.15	23,100
WS-7	1068+15	131.0' R	6.71	23,700

NOTES:

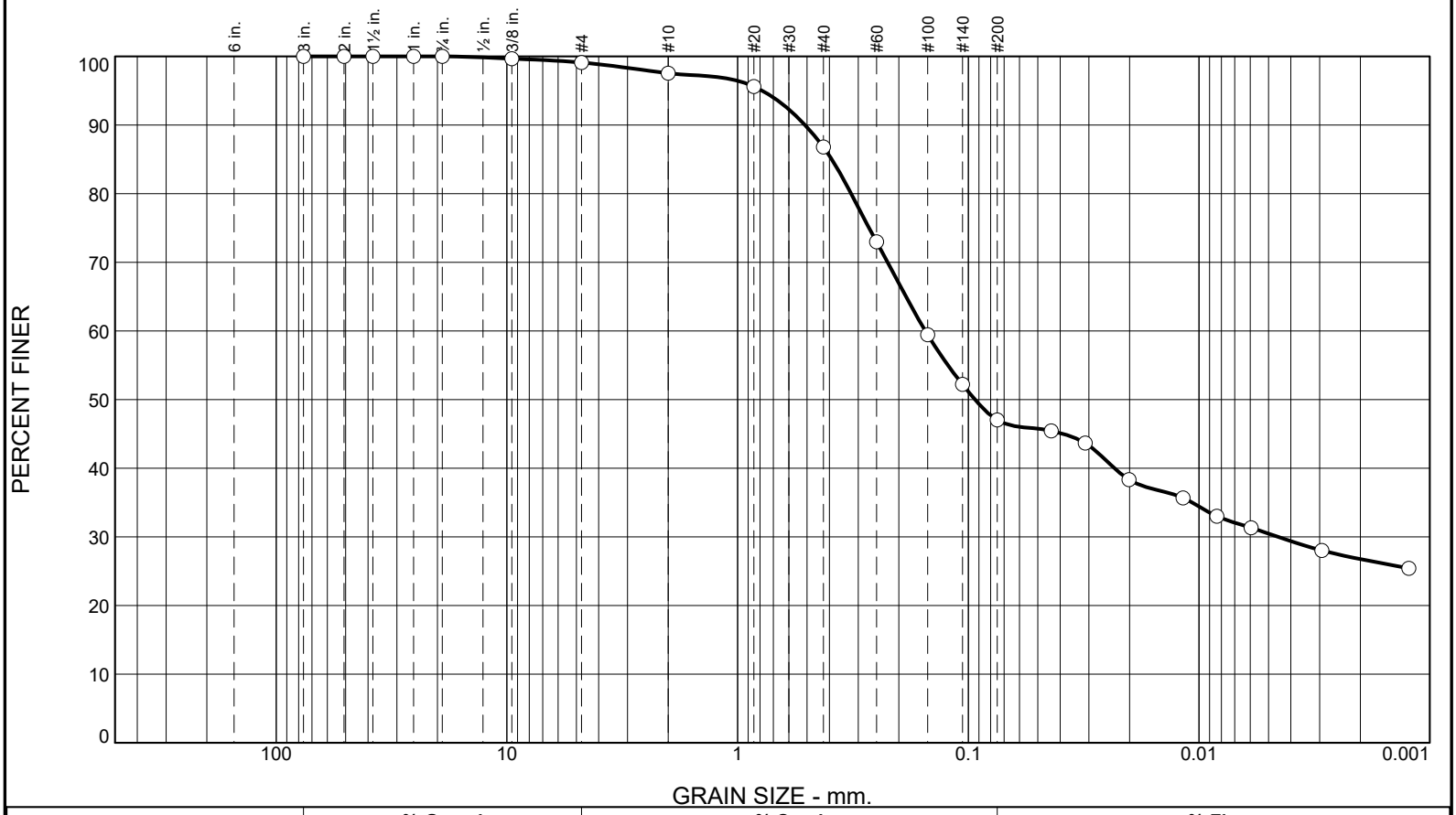
1. Water sample IDs were assigned in the field for sample tracking purposes but do not represent a formal name of the sampled location. Refer to the approximate station and offset for each sampled location.
2. Stations and offsets referenced correspond to either SR 42 (STA xx+xx), New Bethlehem Road (STA xxx+xx), or I-75 Centerline (STA xxxx+xx) alignments.

EGSci consulting inc

APPENDIX B-2

LABORATORY TEST DATA SHEETS

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	1.5	10.8	39.8	20.2	26.8

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.7		
#4	99.1		
#10	97.6		
#20	95.6		
#40	86.8		
#60	73.0		
#100	59.5		
#140	52.2		
#200	47.0		
0.0437 mm.	45.5		
0.0311 mm.	43.7		
0.0201 mm.	38.4		
0.0117 mm.	35.7		
0.0084 mm.	33.0		
0.0059 mm.	31.3		
0.0029 mm.	28.0		
0.0012 mm.	25.4		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5104 D_{85}= 0.3907 D_{60}= 0.1535
D_{50}= 0.0936 D_{30}= 0.0045 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #25957
As received moisture content = 13.0%

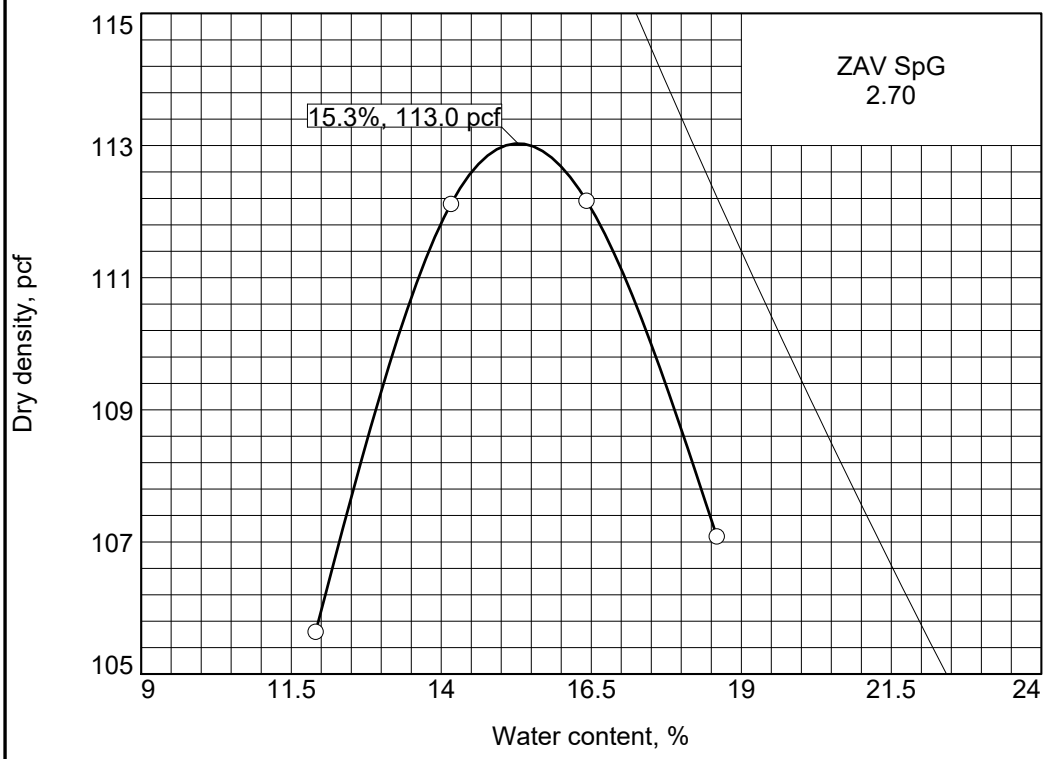
Source of Sample: B2-3 **Depth:** 0-5 ft
Sample Number: AS-1 **Date:** N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification: GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	13.0	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	2.4	**%<#200**	47.0
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	6062.0	6209.2	6248.2	6194.1		
WM	4281.7	4281.7	4281.7	4281.7		
WW + T #1	831.2	569.4	682.7	767.8		
WD + T #1	763.6	509.2	615.8	679.6		
TARE #1	195.9	84.1	208.4	205.2		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	11.9	14.2	16.4	18.6		
DRY DENSITY	105.6	112.1	112.2	107.1		

GDT 7 CORRECTED TEST RESULTS	**UNCORRECTED**
Maximum dry density = 114.3 pcf	113.0 pcf
Optimum moisture =14.3 %	15.3 %

Material Description
Brown Silty SAND

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** B2-3 **Depth:** 0-5 ft **Sample Number:** AS-1

Remarks:
Lab #25957

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/13/2024
Boring No.	B2-3	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	6/14/2024
Sample Depth	0-5 ft	**Lab No.**	25957
Sample Description	Brown Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	450.0	
Mold number / Cal. Due	4147	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9935	(Shrink)	3.9935
Mold Height (in):	(Swell)	1.0040	(Shrink)	1.0040

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	888.4	438.4	132.4	KAT	194.7	634.9	581.2	386.5	53.7	13.9	116.2
Shrink	891.5	891.5	269.2								236.4

Swell

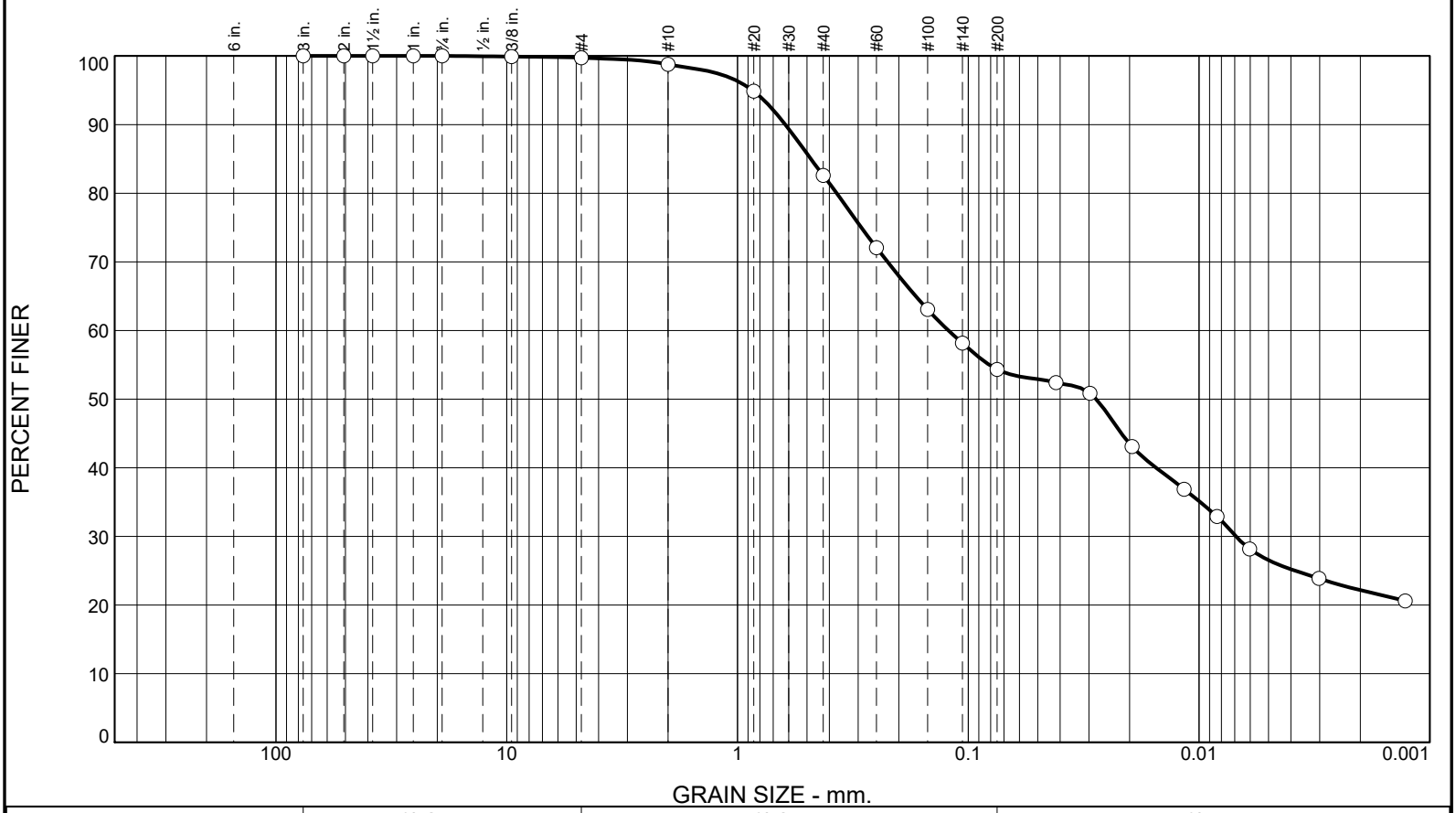
Initial Dial Reading:	0.388	A
After Soak Dial Reading:	0.437	B
Swell (%):	**4.9**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0130	Tare ID: KAT
After Drying Dial Reading (ht):	1.0062	
After Drying Dia. Reading (d):	3.9600	
	3.9635	
	3.9605	
	3.9590	
Average:	3.9608	
Original Volume (in^3):	12.688	
Final Volume (in^3):	12.397	
Shrinkage (%):	**2.3**	

Total Volume Change (%):	7.2
Plus #10 Sieve Correction Factor:	0.984
Corrected Total Volume Change (%):	**7.1**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.9	16.2	28.3	32.1	22.2

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.9		
#4	99.7		
#10	98.8		
#20	94.9		
#40	82.6		
#60	72.1		
#100	63.1		
#140	58.2		
#200	54.3		
0.0417 mm.	52.4		
0.0297 mm.	50.9		
0.0195 mm.	43.1		
0.0116 mm.	36.9		
0.0084 mm.	32.9		
0.0060 mm.	28.2		
0.0030 mm.	23.9		
0.0013 mm.	20.6		

* (no specification provided)

Soil Description

Reddish Brown Sandy Elastic SILT

Atterberg Limits

PL= 49 LL= 60 PI= 11

Coefficients

D_{90}= 0.6207 D_{85}= 0.4810 D_{60}= 0.1219
D_{50}= 0.0279 D_{30}= 0.0069 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= A-7-5(6)

Remarks

Lab #26699
As received moisture content = 24.6%

Source of Sample: P-5 **Depth:** 1-5 ft
Sample Number: AS-1

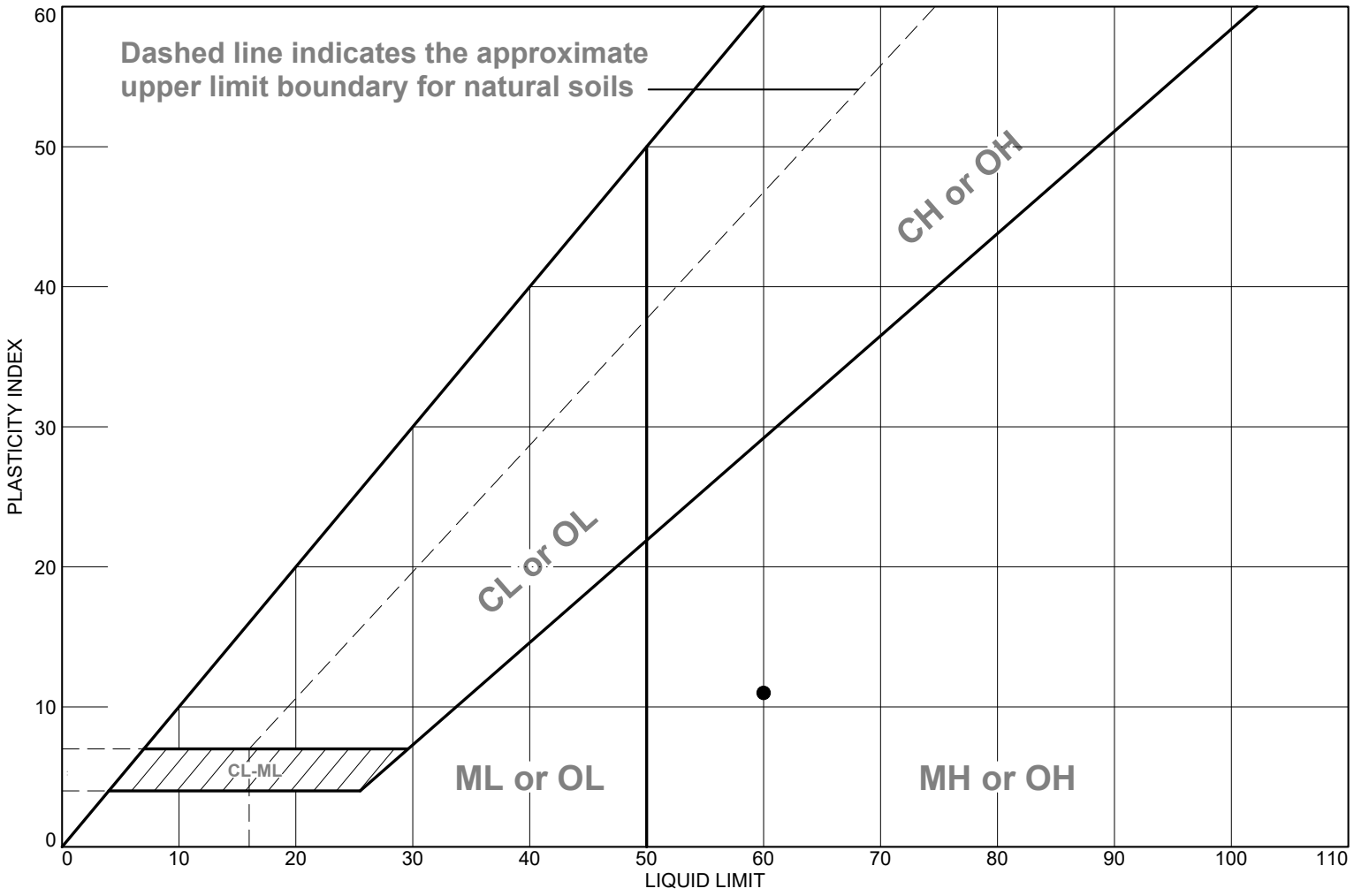
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Reddish Brown Sandy Elastic SILT	60	49	11	82.6	54.3	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** P-5 **Depth:** 1-5 ft **Sample Number:** AS-1

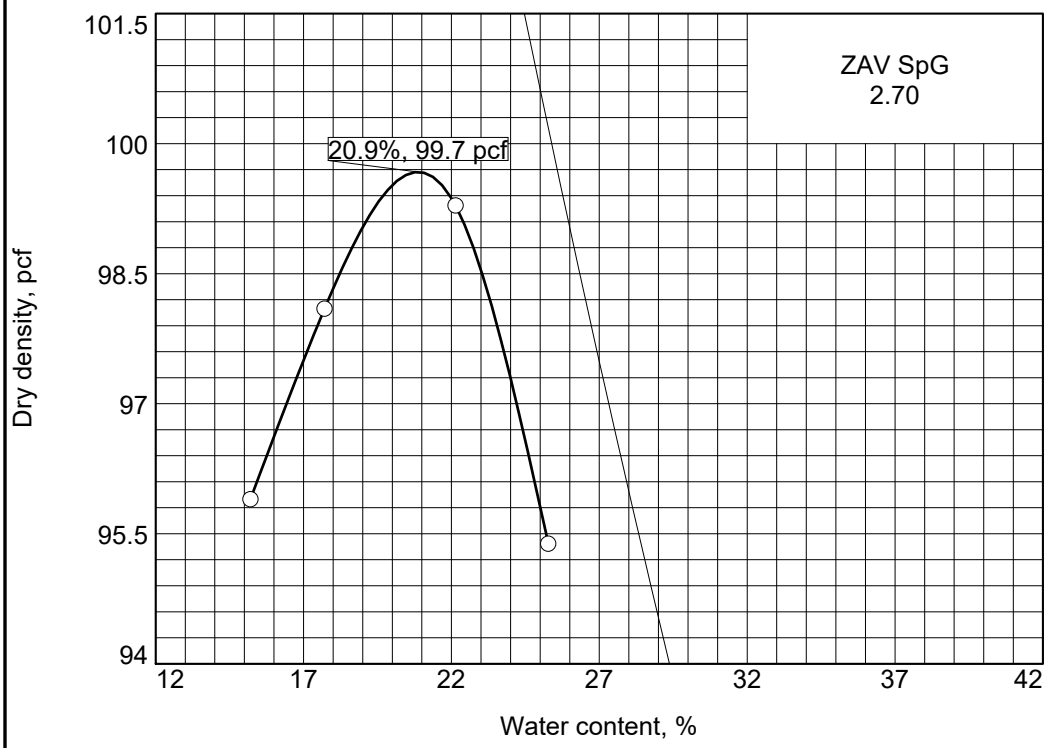
Remarks:

● Lab #26699
As received moisture content = 24.6%

Figure

Tested By: KP **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification: GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	24.6	**Sp.G.**	2.7
LL	60	**PI**	11
%>#10	1.2	**%<#200**	54.3
USCS	MH	**AASHTO**	A-7-5(6)

TESTING DATA

	1	2	3	4	5	6
WM + WS	3718.0	3793.2	3853.8	3880.5		
WM	2054.3	2054.3	2054.3	2054.3		
WW + T #1	761.4	627.2	786.1	840.5		
WD + T #1	686.8	546.1	666.5	723.7		
TARE #1	196.1	88.2	193.3	196.1		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	15.2	17.7	25.3	22.1		
DRY DENSITY	95.9	98.1	95.4	99.3		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 100.4 pcf	99.7 pcf	Reddish Brown Sandy Elastic SILT
Optimum moisture =20.1 %	20.9 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** P-5 **Depth:** 1-5 ft **Sample Number:** AS-1

Remarks:
Lab #26699

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/9/2024
Boring No.	P-5	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	1-5 ft	**Lab No.**	26699
Sample Description	Reddish Brown Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	445.2	448.4
Mold number / Cal. Due	4150	4142

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9960	(Shrink)	3.9965
Mold Height (in):	(Swell)	1.0008	(Shrink)	1.0023

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	852.1	406.9	122.9	TAT	651.2	1058.0	984.8	333.6	73.2	21.9	100.8
Shrink	856.1	407.7	123.1								101.0

Swell

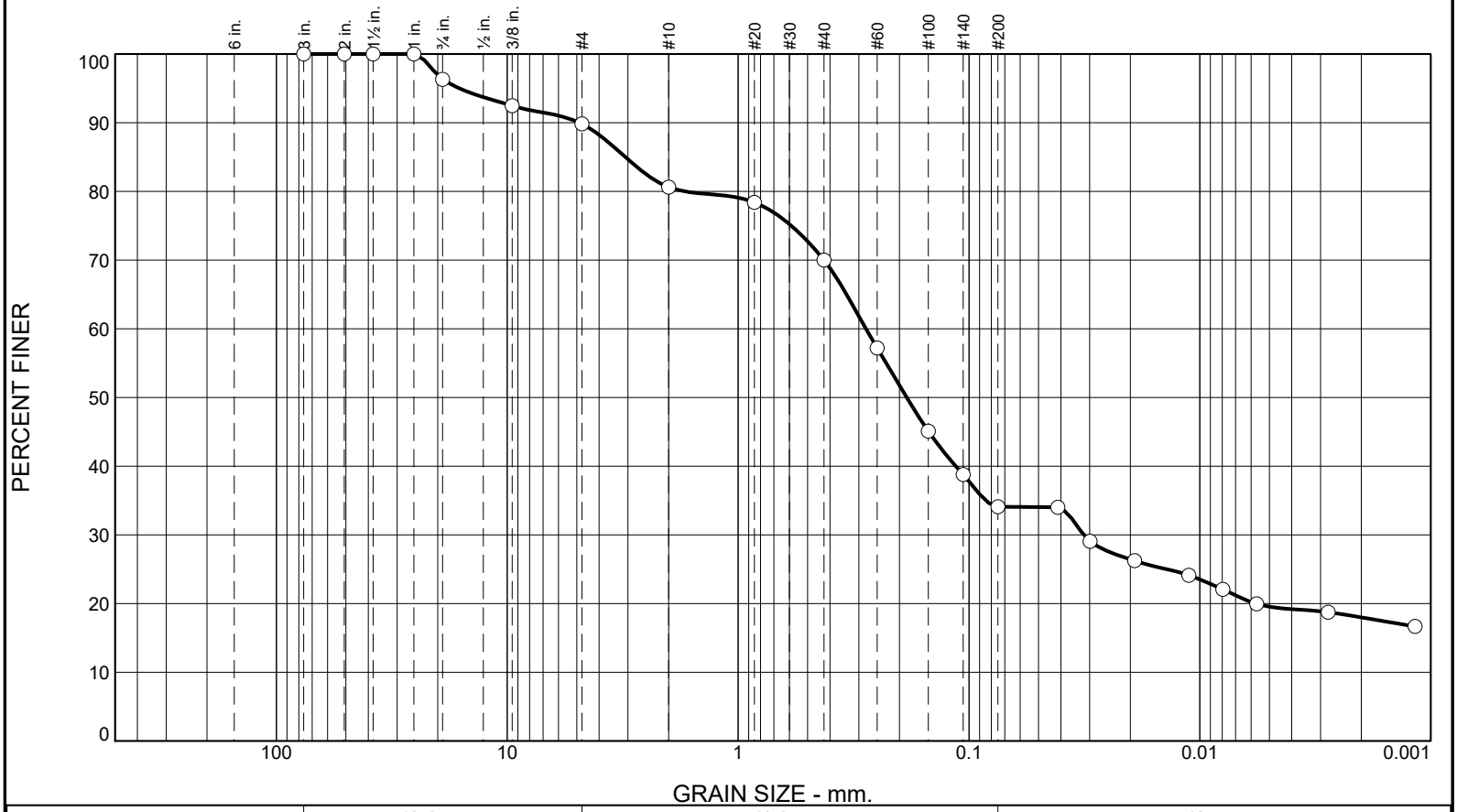
Initial Dial Reading:	0.445	A
After Soak Dial Reading:	0.631	B
Swell (%):	**18.6**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0240	Tare ID: TAT
After Drying Dial Reading (ht):	1.0015	
After Drying Dia. Reading (d):	4.0150	
	3.9650	
	3.9540	
	3.9520	
Average:	3.9715	
Original Volume (in^3):	12.845	
Final Volume (in^3):	12.407	
Shrinkage (%):	**3.4**	

Total Volume Change (%):	22.0
Plus #10 Sieve Correction Factor:	0.993
Corrected Total Volume Change (%):	**21.8**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.7	6.5	9.2	10.6	35.9	16.1	18.0

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	96.3		
.375	92.5		
#4	89.8		
#10	80.6		
#20	78.4		
#40	70.0		
#60	57.2		
#100	45.1		
#140	38.8		
#200	34.1		
0.0413 mm.	34.0		
0.0299 mm.	29.1		
0.0192 mm.	26.2		
0.0112 mm.	24.1		
0.0080 mm.	22.1		
0.0057 mm.	20.0		
0.0028 mm.	18.7		
0.0012 mm.	16.7		

* (no specification provided)

Soil Description

Brown Clayey SAND

Atterberg Limits

PL= 24 LL= 41 PI= 17

Coefficients

D_{90}= 4.8651 D_{85}= 3.0783 D_{60}= 0.2796
D_{50}= 0.1861 D_{30}= 0.0318 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-7(1)

Remarks

Lab #25958
As received moisture content = 17.5%

Source of Sample: P-6 **Depth:** 0-3 ft
Sample Number: AS-1

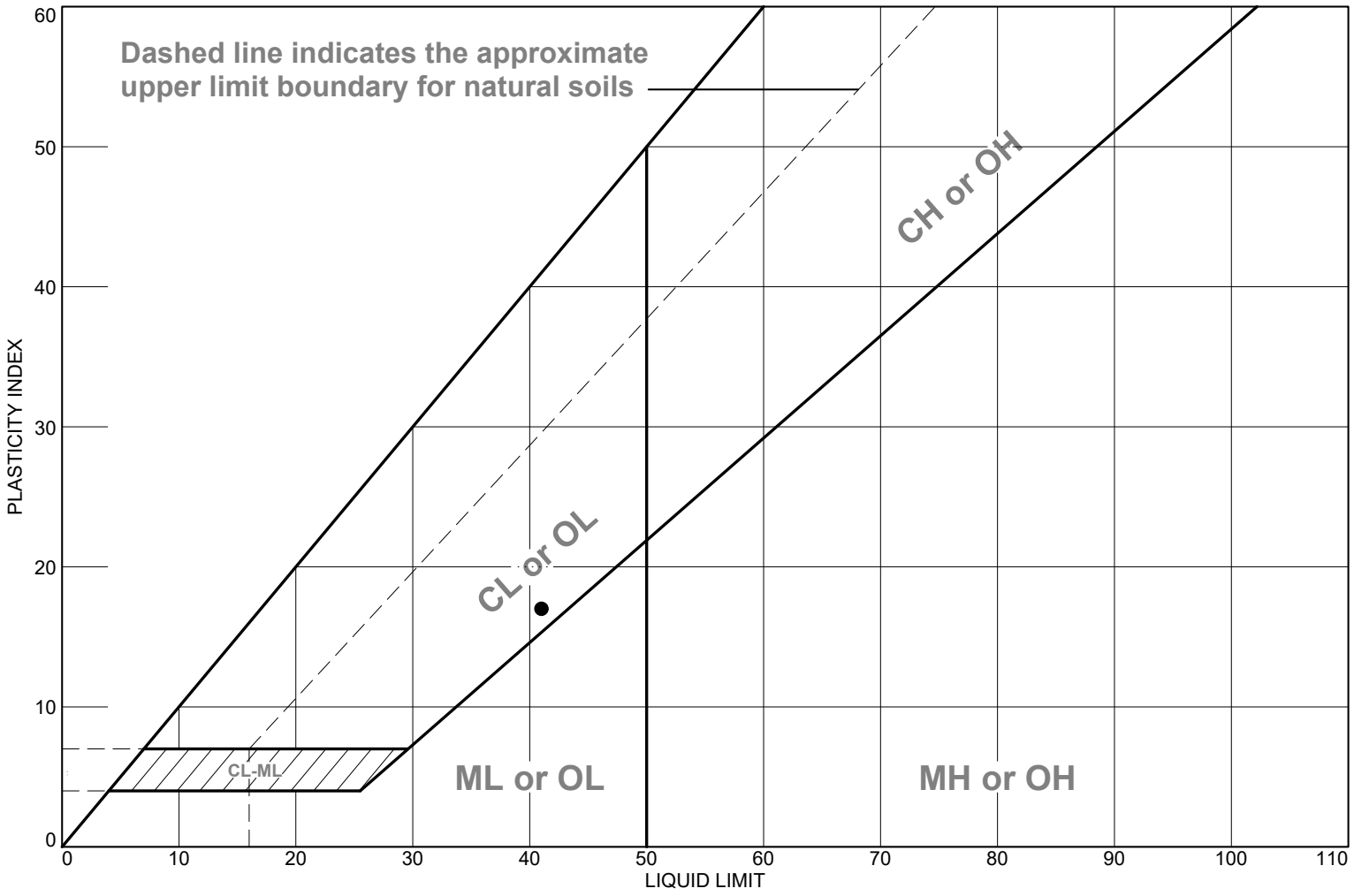
Date: N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Clayey SAND	41	24	17	70.0	34.1	SC

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

● **Source of Sample:** P-6 **Depth:** 0-3 ft **Sample Number:** AS-1

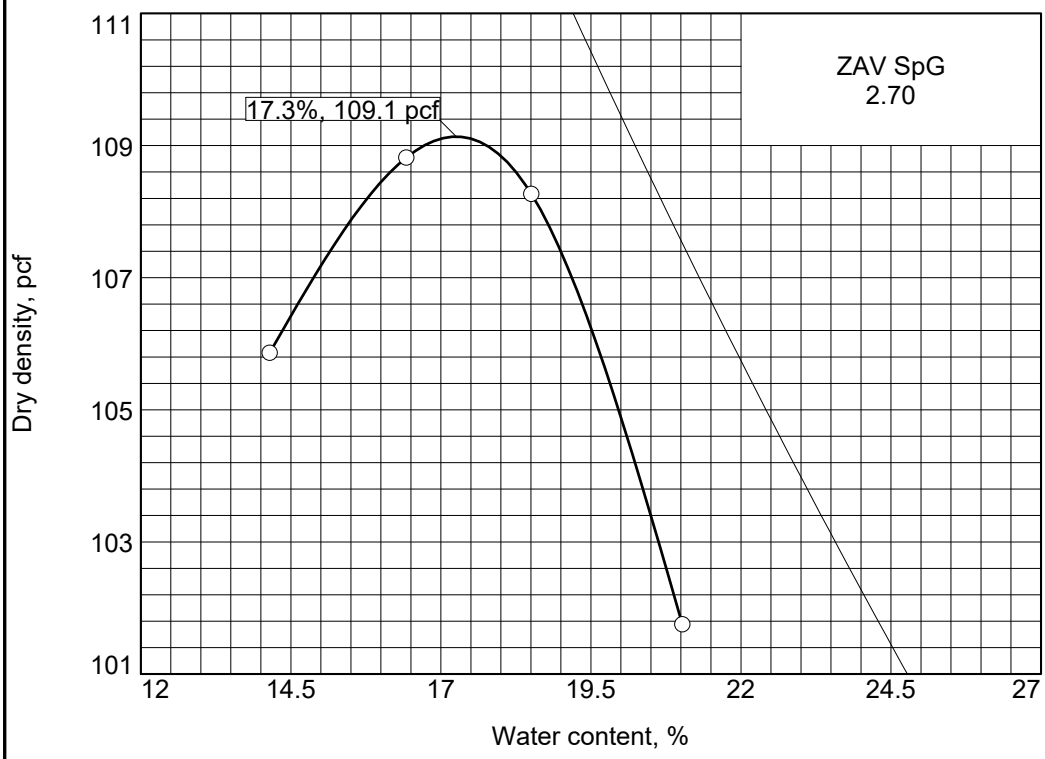
Remarks:

● Lab #25958
As received moisture content = 17.5%

Figure

Tested By: EG **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	17.5	**Sp.G.**	2.7
LL	41	**PI**	17
%>#10	19.4	**%<#200**	34.1
USCS	SC	**AASHTO**	A-2-7(1)

TESTING DATA

	1	2	3	4	5	6
WM + WS	6101.5	6189.6	6213.9	6136.2		
WM	4281.7	4281.7	4281.7	4281.7		
WW + T #1	784.1	712.3	589.7	501.3		
WD + T #1	712.2	624.2	510.4	428.6		
TARE #1	204.0	87.8	81.9	82.8		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	14.1	16.4	18.5	21.0		
DRY DENSITY	105.9	108.8	108.3	101.8		

GDT 7 CORRECTED TEST RESULTS	**UNCORRECTED**	**Material Description**
Maximum dry density = 114.4 pcf	109.1 pcf	Brown Clayey SAND
Optimum moisture =14.0 %	17.3 %	

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** P-6 **Depth:** 0-3 ft **Sample Number:** AS-1

Remarks:
Lab #25958

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/13/2024
Boring No.	P-6	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	6/14/2024
Sample Depth	0-3 ft	**Lab No.**	25958
Sample Description	Brown Clayey SAND		

	Swell	Shrink
(1) Weight of Mold (g)	445.4	
Mold number / Cal. Due	4150	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9945	(Shrink)	3.9945
Mold Height (in):	(Swell)	1.0045	(Shrink)	

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	856.5	411.1	124.2	UNS	197.6	604.2	551.3	353.7	52.9	15.0	108.0
Shrink	851.9	851.9	257.3								223.8

Swell

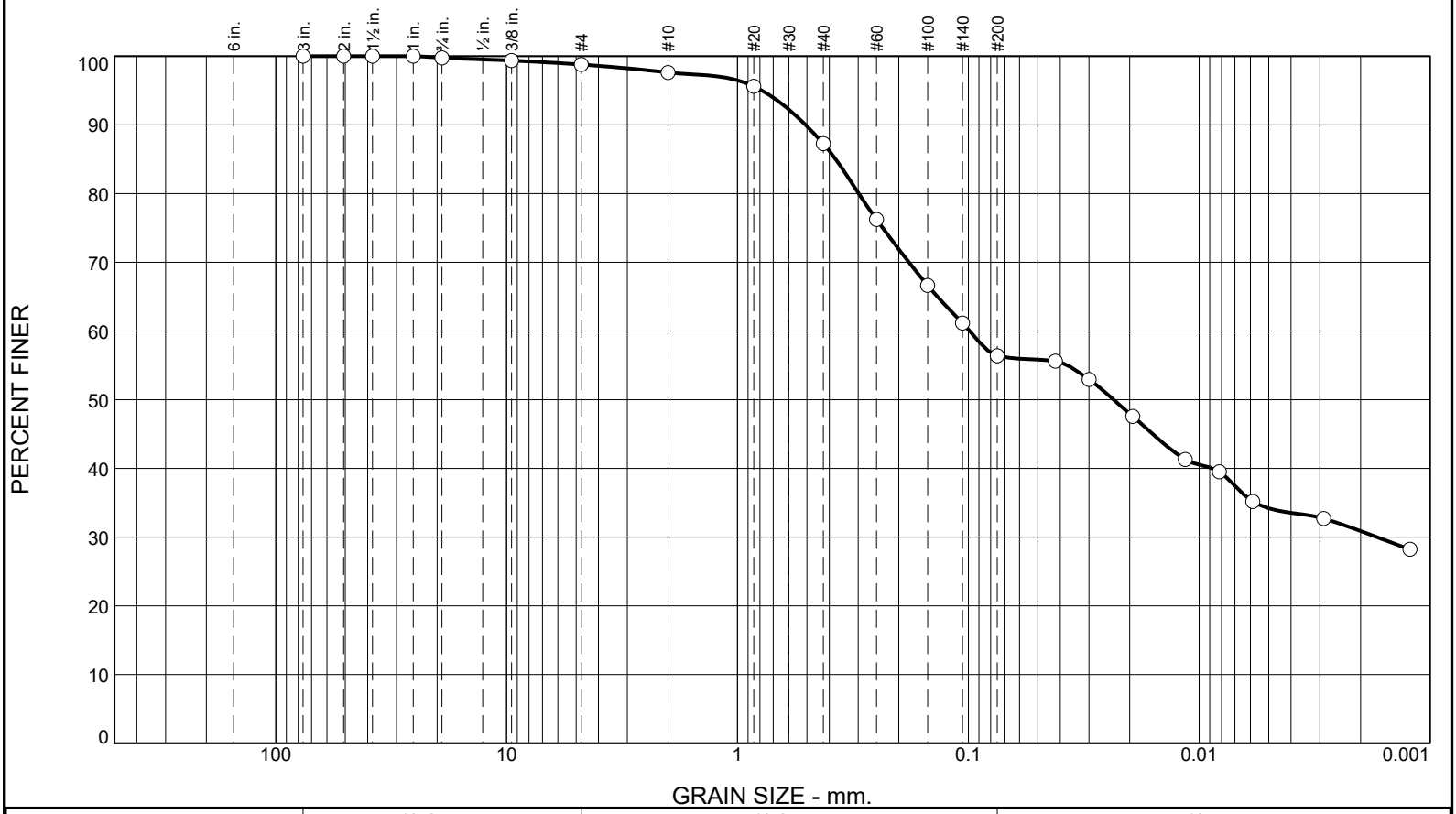
Initial Dial Reading:	0.386	A
After Soak Dial Reading:	0.473	B
Swell (%):	**8.7**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9931	Tare ID: UNS
After Drying Dial Reading (ht):	0.9890	
After Drying Dia. Reading (d):	3.9730	
	3.9770	
	3.9745	
	3.9725	
Average:	3.9743	
Original Volume (in^3):	12.445	
Final Volume (in^3):	12.269	
Shrinkage (%):	**1.4**	

Total Volume Change (%):	10.1
Plus #10 Sieve Correction Factor:	0.840
Corrected Total Volume Change (%):	**8.5**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.2	1.0	1.2	10.3	30.9	25.5	30.9

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.8		
.375	99.4		
#4	98.8		
#10	97.6		
#20	95.6		
#40	87.3		
#60	76.2		
#100	66.6		
#140	61.2		
#200	56.4		
0.0419 mm.	55.6		
0.0300 mm.	52.9		
0.0194 mm.	47.6		
0.0115 mm.	41.3		
0.0082 mm.	39.5		
0.0059 mm.	35.2		
0.0029 mm.	32.7		
0.0012 mm.	28.2		

* (no specification provided)

Soil Description

Reddish Brown Sandy Elastic SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5071 D_{85}= 0.3757 D_{60}= 0.0986
D_{50}= 0.0235 D_{30}= 0.0017 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #25959
As received moisture content = 19.9%

Source of Sample: R-1 **Depth:** 0-1.3 ft
Sample Number: AS-1

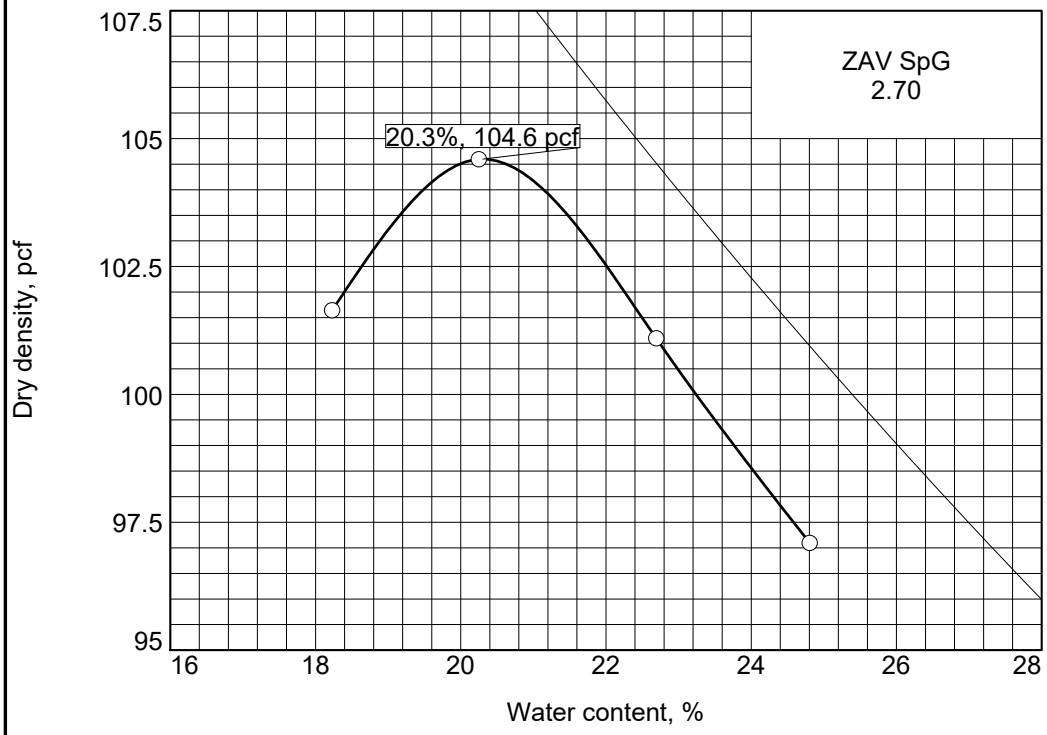
Date: N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	19.9	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	2.4	**%<#200**	56.4
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	6091.4	6175.8	6149.6	6106.6		
WM	4281.7	4281.7	4281.7	4281.7		
WW + T #1	847.0	779.7	635.1	716.7		
WD + T #1	748.0	665.5	534.1	614.2		
TARE #1	204.9	101.5	89.0	201.0		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	18.2	20.2	22.7	24.8		
DRY DENSITY	101.6	104.6	101.1	97.1		

GDT 7 CORRECTED TEST RESULTS	**UNCORRECTED**
Maximum dry density = 106.3 pcf	104.6 pcf
Optimum moisture =19.1 %	20.3 %

Material Description
Reddish Brown Sandy Elastic SILT

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-1 **Depth:** 0-1.3 ft **Sample Number:** AS-1

Remarks:
Lab #25959

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/13/2024
Boring No.	R-1	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	6/14/2024
Sample Depth	0-1.3 ft	**Lab No.**	25959
Sample Description	Reddish Brown Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	452.2	
Mold number / Cal. Due	4144	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9955	(Shrink)	3.9955
Mold Height (in):	(Swell)	1.0025	(Shrink)	1.0025

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	862.7	410.5	124.0	FAT	194.1	605.8	542.4	348.3	63.4	18.2	104.9
Shrink	865.7	865.7	261.4								221.2

Swell

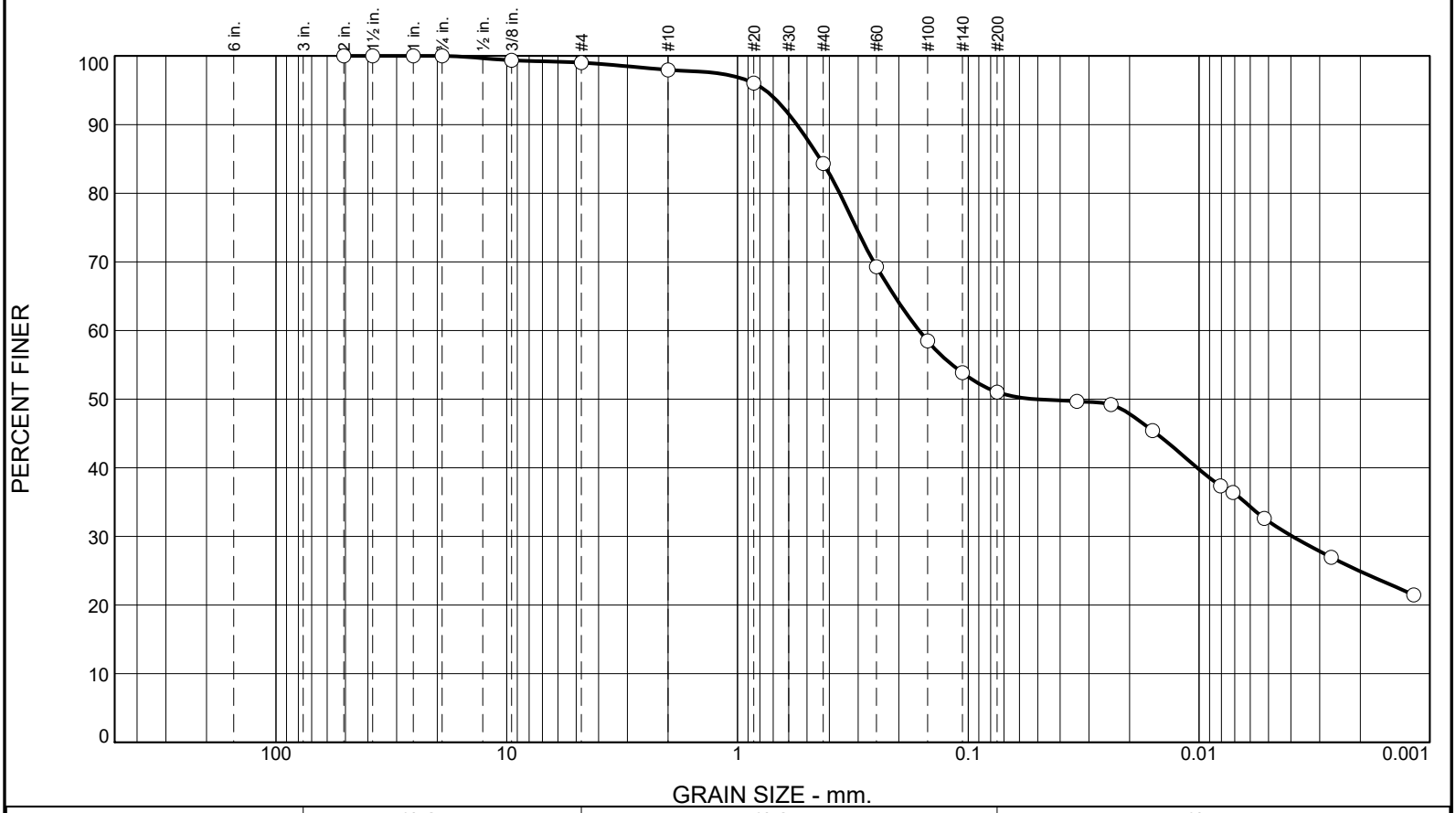
Initial Dial Reading:	0.402	A
After Soak Dial Reading:	0.535	B
Swell (%):	**13.3**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0086	Tare ID: FAT
After Drying Dial Reading (ht):	0.9955	
After Drying Dia. Reading (d):	3.9625	
	3.9595	
	3.9620	
	3.9615	
Average:	3.9614	
Original Volume (in^3):	12.646	
Final Volume (in^3):	12.269	
Shrinkage (%):	**3.0**	

Total Volume Change (%):	16.2
Plus #10 Sieve Correction Factor:	0.985
Corrected Total Volume Change (%):	**16.0**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.0	1.0	13.7	33.3	26.1	24.9

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.4		
#4	99.0		
#10	98.0		
#20	96.1		
#40	84.3		
#60	69.3		
#100	58.5		
#140	53.8		
#200	51.0		
0.0338 mm.	49.7		
0.0241 mm.	49.2		
0.0159 mm.	45.4		
0.0081 mm.	37.4		
0.0071 mm.	36.4		
0.0052 mm.	32.6		
0.0027 mm.	27.0		
0.0012 mm.	21.5		

* (no specification provided)

Soil Description

Reddish Brown Sandy Lean CLAY

Atterberg Limits

PL= 23 LL= 35 PI= 12

Coefficients

D_{90}= 0.5533 D_{85}= 0.4381 D_{60}= 0.1634
D_{50}= 0.0517 D_{30}= 0.0039 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(4)

Remarks

Lab #25960
As received moisture content = 18.1%

Source of Sample: R-2 **Depth:** 0.2-1.5 ft
Sample Number: AS-1

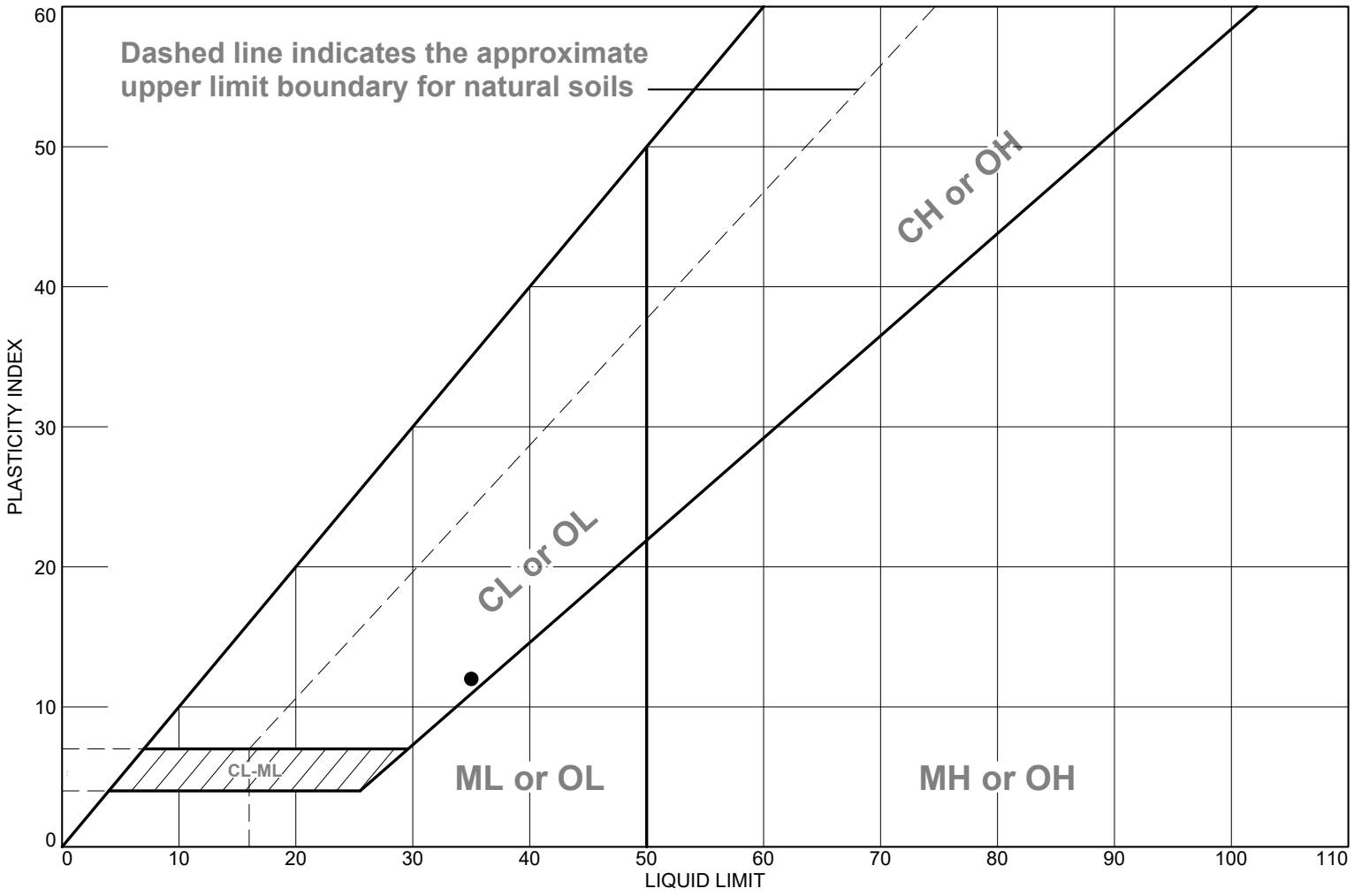
Date: N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB, SG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Reddish Brown Sandy Lean CLAY	35	23	12	84.3	51.0	CL

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

● **Source of Sample:** R-2 **Depth:** 0.2-1.5 ft **Sample Number:** AS-1

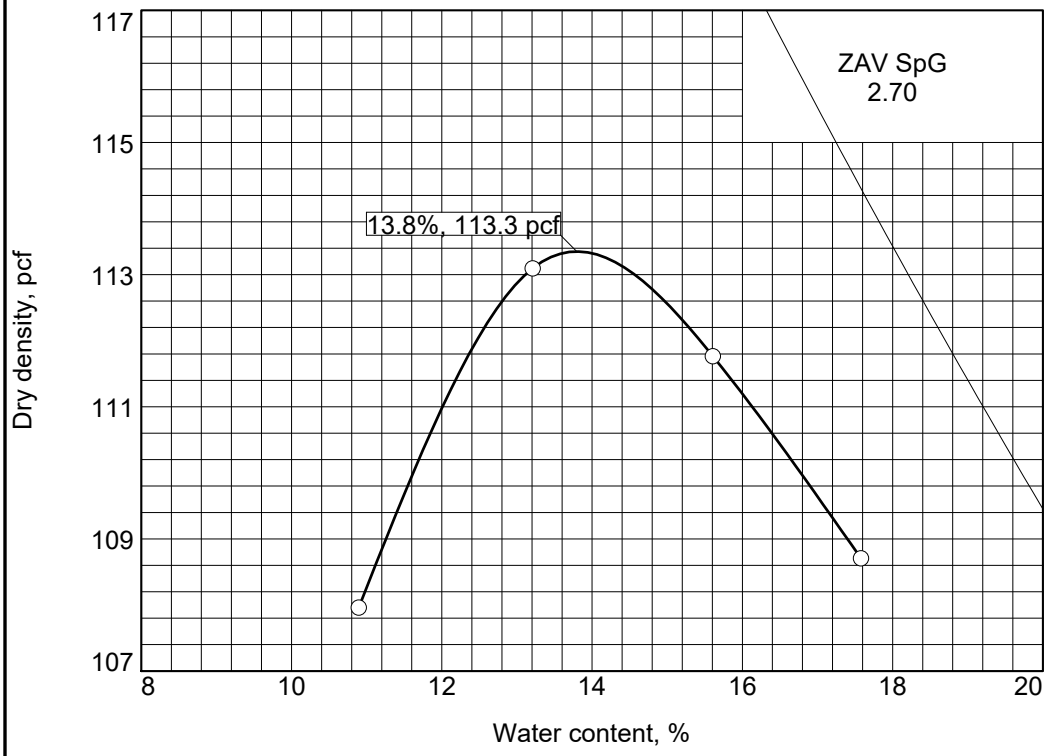
Remarks:

● Lab #25960
As received moisture content = 18.1%

Figure

Tested By: EG **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	18.1	**Sp.G.**	2.7
LL	35	**PI**	12
%>#10	2.0	**%<#200**	51.0
USCS	CL	**AASHTO**	A-6(4)

TESTING DATA

	1	2	3	4	5	6
WM + WS	3815.1	3940.3	3958.0	3937.0		
WM	2012.2	2012.2	2012.2	2012.2		
WW + T #1	654.0	774.1	809.7	767.2		
WD + T #1	598.4	706.3	726.4	683.0		
TARE #1	88.0	193.0	192.7	204.0		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	10.9	13.2	15.6	17.6		
DRY DENSITY	108.0	113.1	111.8	108.7		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED
Maximum dry density = 113.5 pcf	113.3 pcf
Optimum moisture =13.4 %	13.8 %

Material Description
Reddish Brown Sandy Lean CLAY

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-2 **Depth:** 0.2-1.5 ft **Sample Number:** AS-1

Remarks:
Lab #25960

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	KP
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/18/2024
Boring No.	R-2	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	6/27/2024
Sample Depth	0.2-1.5 ft	**Lab No.**	25960
Sample Description	Reddish Brown Sandy Lean CLAY		

	Swell	Shrink
(1) Weight of Mold (g)	446.0	
Mold number / Cal. Due	4151	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9950	(Shrink)	3.9950
Mold Height (in):	(Swell)	1.0000	(Shrink)	1.0000

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	873.9	427.9	129.2	USA	198.5	617.5	566.8	368.3	50.7	13.8	113.6
Shrink	866.2	420.2	126.9								111.5

Swell

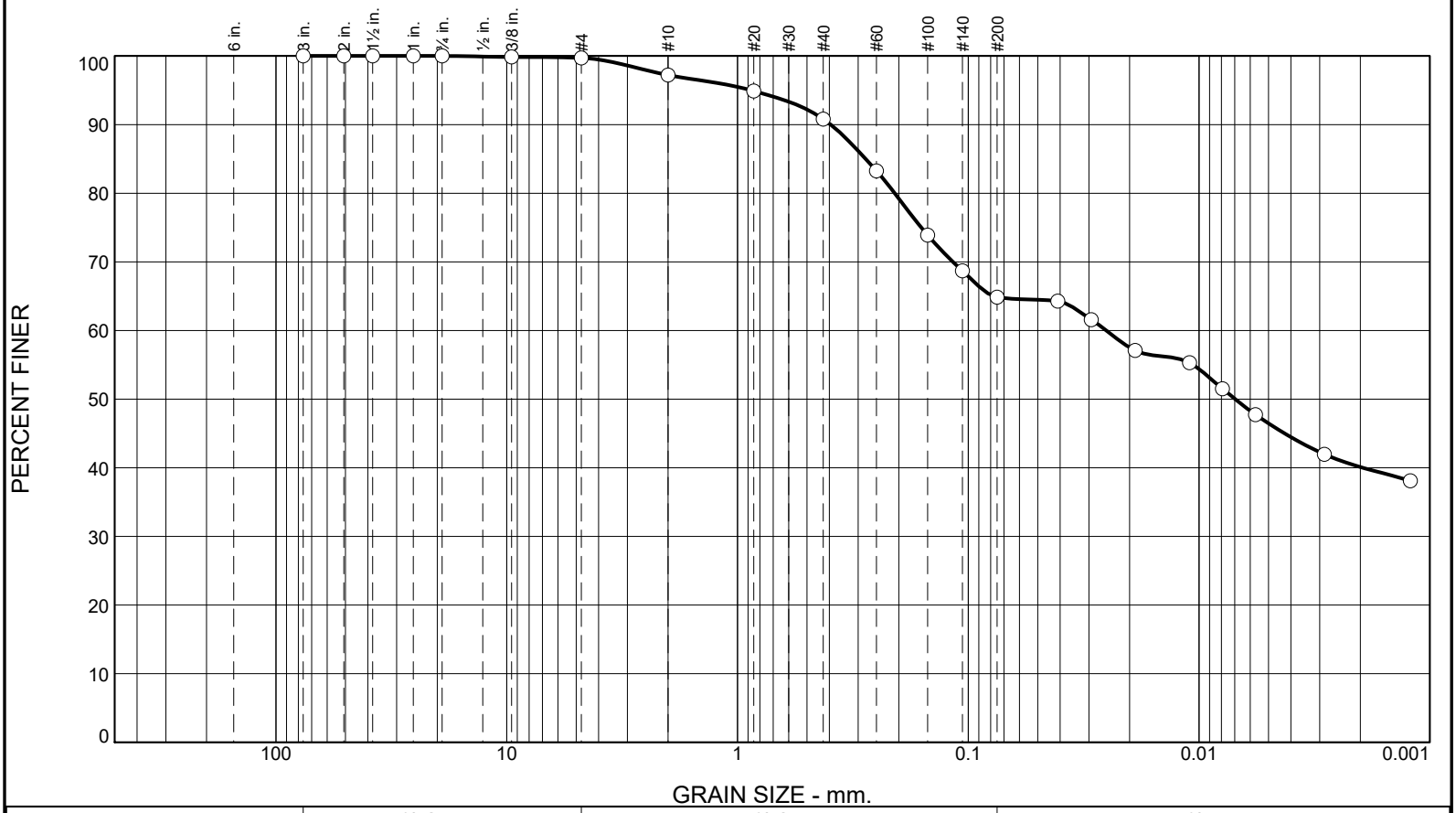
Initial Dial Reading:	0.421	A
After Soak Dial Reading:	0.471	B
Swell (%):	**5.0**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9945	Tare ID: USA
After Drying Dial Reading (ht):	0.9870	
After Drying Dia. Reading (d):	3.9710	
	3.9670	
	3.9585	
	3.9595	
Average:	3.9640	
Original Volume (in^3):	12.466	
Final Volume (in^3):	12.181	
Shrinkage (%):	**2.3**	

Total Volume Change (%):	7.3
Plus #10 Sieve Correction Factor:	0.984
Corrected Total Volume Change (%):	**7.2**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	2.5	6.4	25.9	24.8	40.1

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.9		
#4	99.7		
#10	97.2		
#20	94.9		
#40	90.8		
#60	83.3		
#100	73.9		
#140	68.7		
#200	64.9		
0.0409 mm.	64.3		
0.0293 mm.	61.6		
0.0189 mm.	57.1		
0.0110 mm.	55.3		
0.0079 mm.	51.5		
0.0057 mm.	47.7		
0.0029 mm.	42.0		
0.0012 mm.	38.1		

* (no specification provided)

Soil Description

Reddish Brown Sandy Elastic SILT

Atterberg Limits

PL= 31 LL= 55 PI= 24

Coefficients

D_{90}= 0.3948 D_{85}= 0.2785 D_{60}= 0.0252
D_{50}= 0.0070 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= A-7-5(15)

Remarks

Lab #26706
As received moisture content = 19.2%

Source of Sample: R-3 **Depth:** 1-5 ft
Sample Number: AS-1

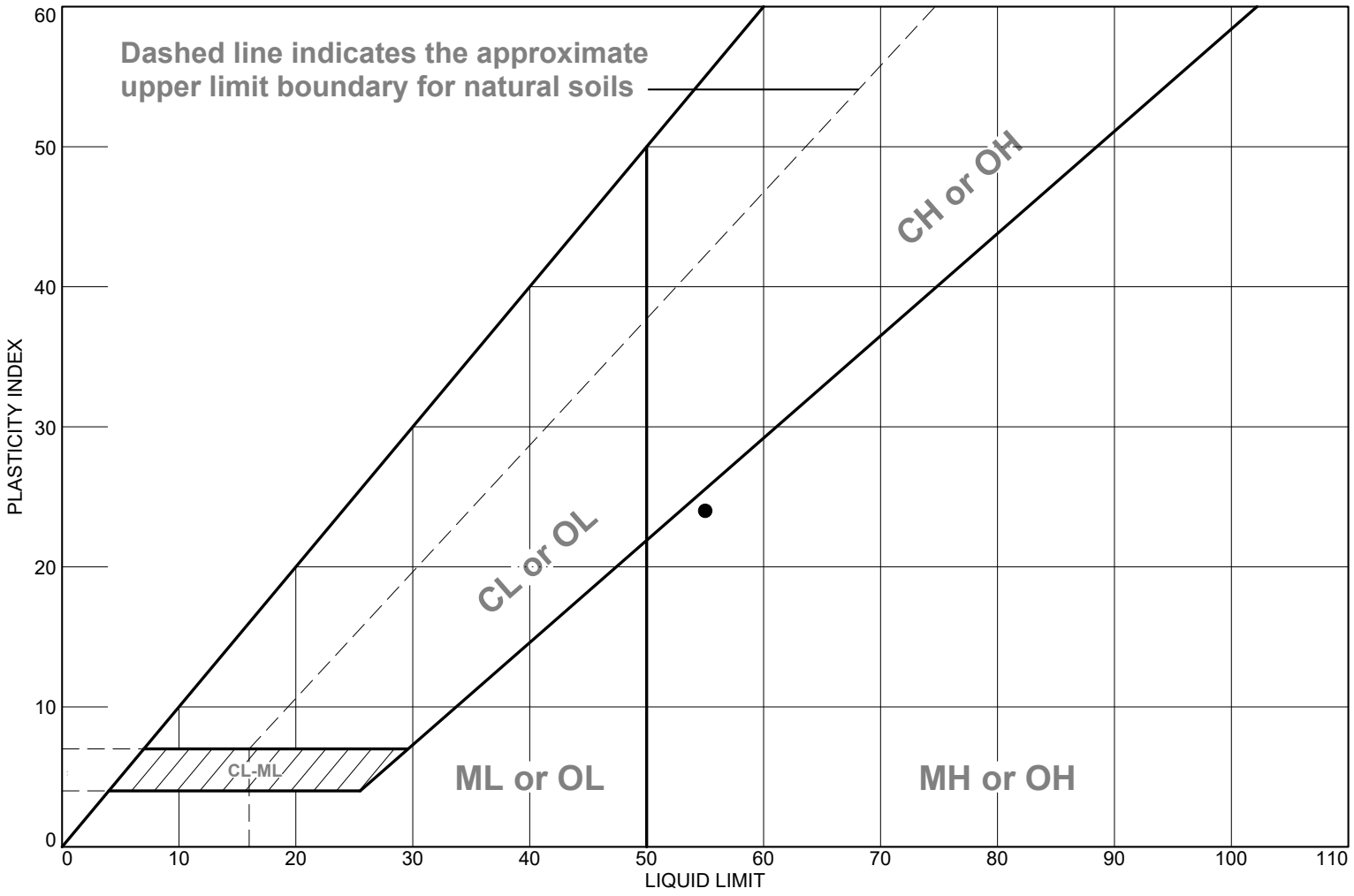
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Reddish Brown Sandy Elastic SILT	55	31	24	90.8	64.9	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-3 **Depth:** 1-5 ft **Sample Number:** AS-1

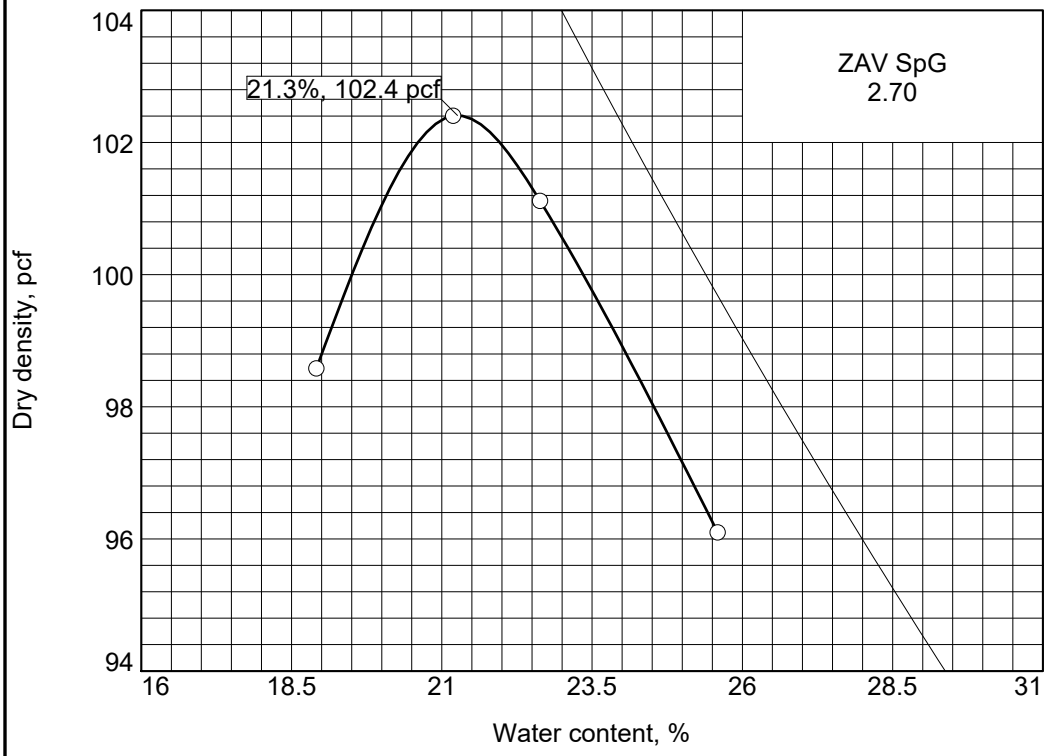
Remarks:

● Lab #26706
As received moisture content = 19.2%

Figure

Tested By: KP **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.: 5.5 lb
Hammer Drop: 12 in
Number of Layers: three
Blows per Layer: 25
Mold Size: 0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	19.2	**Sp.G.**	2.7
LL	55	**PI**	24
%>#10	2.8	**%<#200**	64.9
USCS	MH	**AASHTO**	A-7-5(15)

TESTING DATA

	1	2	3	4	5	6
WM + WS	3819.8	3923.4	3921.9	3872.0		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	803.0	814.2	828.7	771.4		
WD + T #1	706.0	707.7	709.8	632.2		
TARE #1	193.1	205.1	184.5	88.2		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	18.9	21.2	22.6	25.6		
DRY DENSITY	98.6	102.4	101.1	96.1		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 103.0 pcf	102.4 pcf	Reddish Brown Sandy Elastic SILT
Optimum moisture =20.0 %	21.3 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-3 **Depth:** 1-5 ft **Sample Number:** AS-1

Remarks:
Lab #26706

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/15/2024
Boring No.	R-3	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	1-5 ft	**Lab No.**	26706
Sample Description	Reddish Brown Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	445.4	448.6
Mold number / Cal. Due	4150	4142

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9968	(Shrink)	3.9963
Mold Height (in):	(Swell)	1.0008	(Shrink)	1.0017

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	858.7	413.3	124.8	POS	645.5	1057.3	984.7	339.2	72.6	21.4	102.8
Shrink	860.4	411.8	124.4								102.4

Swell

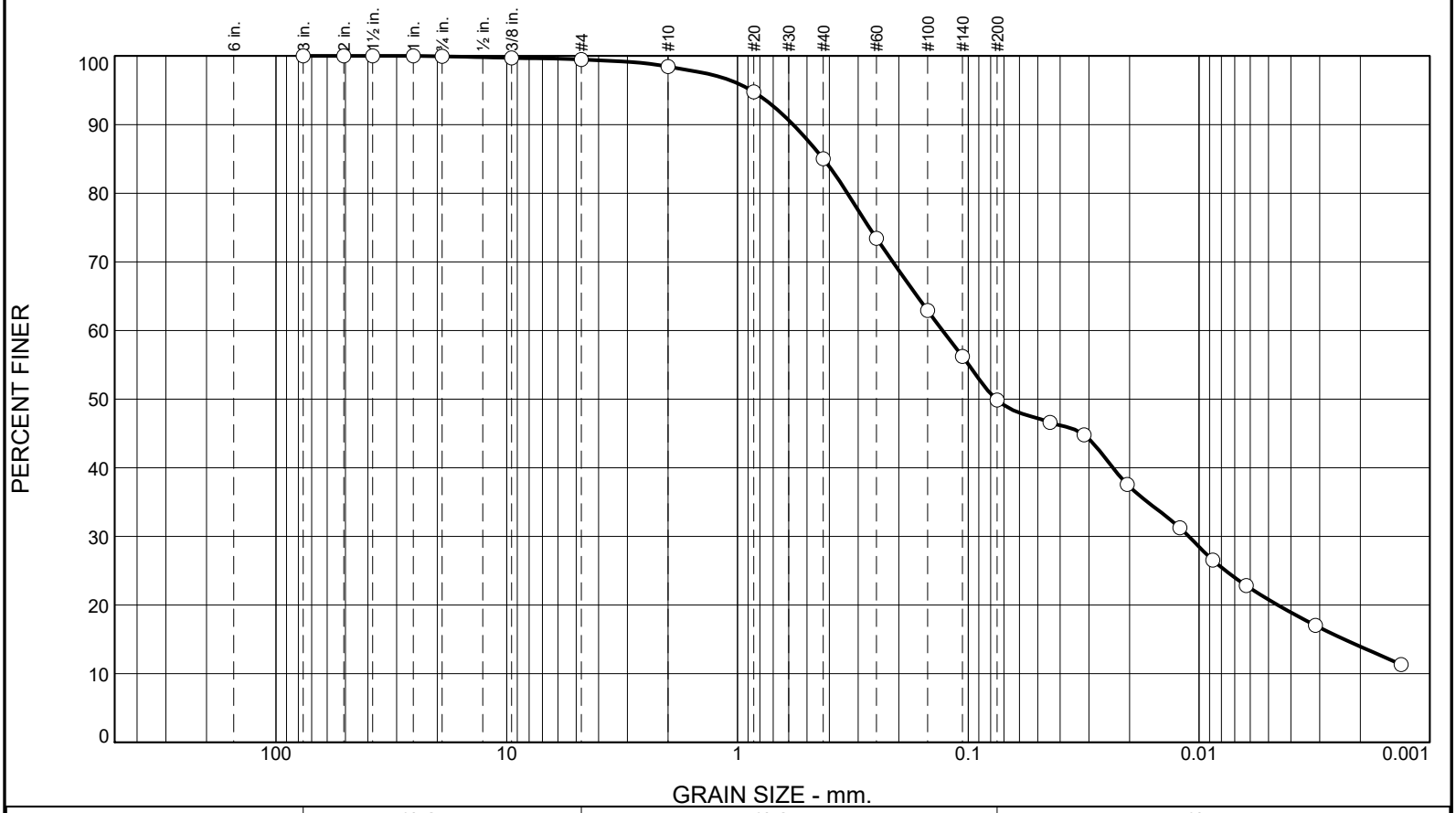
Initial Dial Reading:	0.412	A
After Soak Dial Reading:	0.500	B
Swell (%):	**8.8**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0015	Tare ID: POS
After Drying Dial Reading (ht):	0.9802	
After Drying Dia. Reading (d):	3.9040	
	3.9170	
	3.9060	
	3.9140	
Average:	3.9103	
Original Volume (in^3):	12.562	
Final Volume (in^3):	11.771	
Shrinkage (%):	**6.3**	

Total Volume Change (%):	15.1
Plus #10 Sieve Correction Factor:	0.978
Corrected Total Volume Change (%):	**14.8**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.1	0.4	1.1	13.4	35.1	36.0	13.9

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.9		
.375	99.7		
#4	99.5		
#10	98.4		
#20	94.8		
#40	85.0		
#60	73.4		
#100	62.9		
#140	56.2		
#200	49.9		
0.0442 mm.	46.6		
0.0315 mm.	44.8		
0.0205 mm.	37.6		
0.0121 mm.	31.2		
0.0087 mm.	26.5		
0.0062 mm.	22.8		
0.0031 mm.	17.0		
0.0013 mm.	11.3		

* (no specification provided)

Soil Description

Tan Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5746 D_{85}= 0.4244 D_{60}= 0.1292
D_{50}= 0.0758 D_{30}= 0.0111 D_{15}= 0.0023
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26722
As received moisture content = 20.8%

Source of Sample: R-5 **Depth:** 1-1.5 ft
Sample Number: AS-1

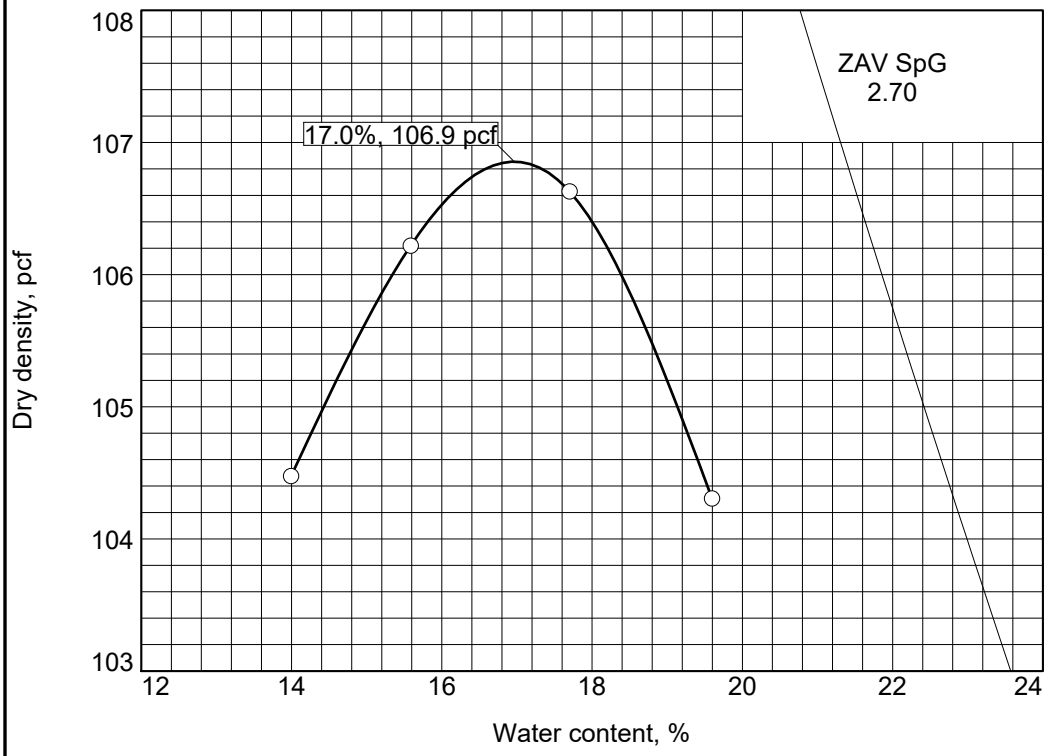
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	20.8	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	1.6	**%<#200**	49.9
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	3944.5	3933.1	3903.4	3848.0		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	794.1	797.0	856.0	820.3		
WD + T #1	703.7	697.2	766.6	744.8		
TARE #1	193.0	188.0	193.0	205.3		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	17.7	19.6	15.6	14.0		
DRY DENSITY	106.6	104.3	106.2	104.5		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 107.6 pcf	106.9 pcf	Tan Silty SAND
Optimum moisture =16.2 %	17.0 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-5 **Depth:** 1-1.5 ft **Sample Number:** AS-1

Remarks:
Lab #26722

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/9/2024
Boring No.	R-5	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	1-1.5 ft	**Lab No.**	26722
Sample Description	Tan Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	445.8	448.7
Mold number / Cal. Due	4151	4148

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9968	(Shrink)	3.9963
Mold Height (in):	(Swell)	1.0005	(Shrink)	1.0002

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	862.0	416.2	125.7	KAT	643.3	1059.5	995.6	352.3	63.9	18.1	106.4
Shrink	865.4	416.7	125.8								106.5

Swell

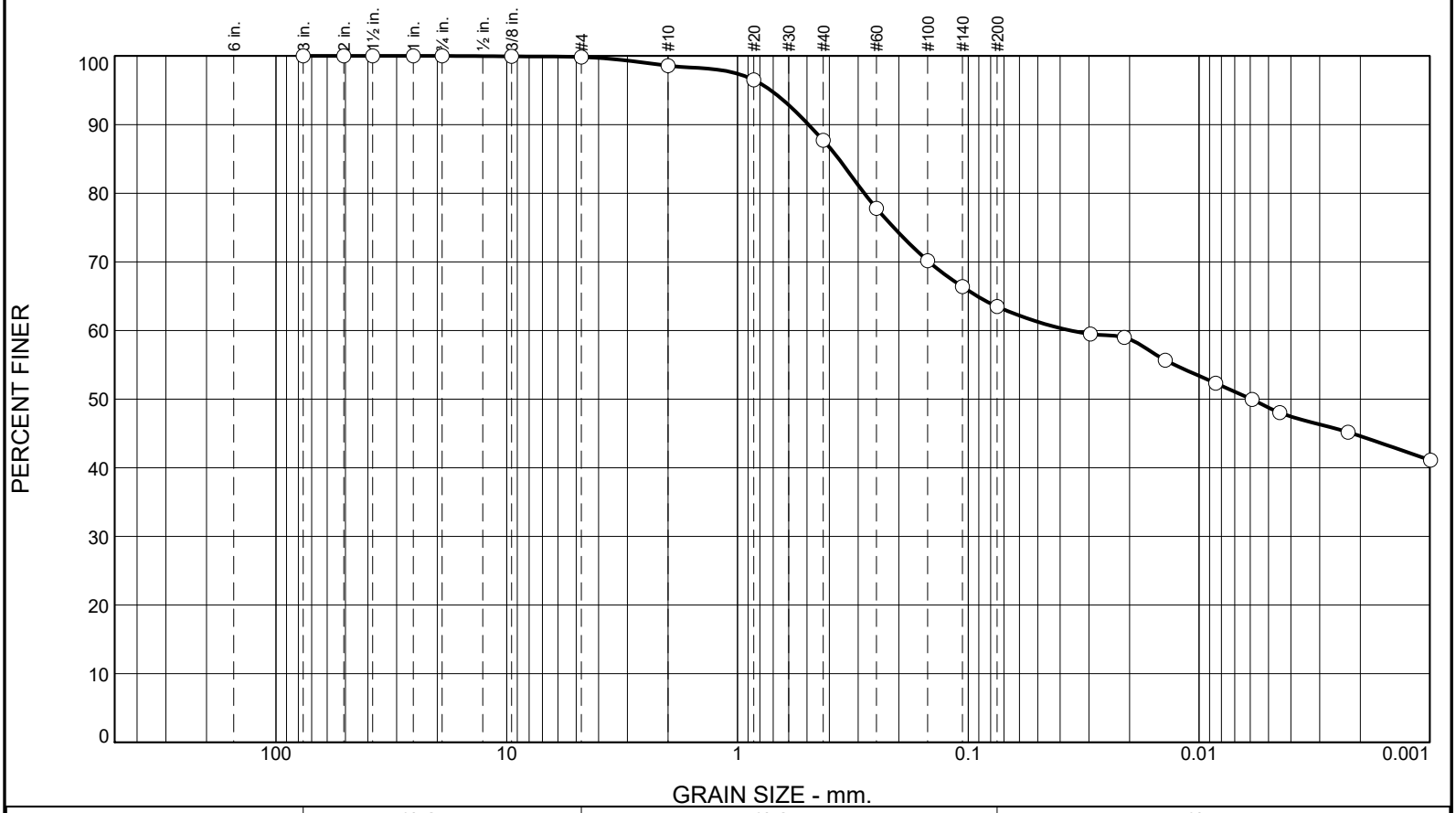
Initial Dial Reading:	0.420	A
After Soak Dial Reading:	0.750	B
Swell (%):	**33.0**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0090	Tare ID: KAT
After Drying Dial Reading (ht):	0.9873	
After Drying Dia. Reading (d):	3.9770	
	3.9778	
	3.9765	
	3.9735	
Average:	3.9762	
Original Volume (in^3):	12.656	
Final Volume (in^3):	12.260	
Shrinkage (%):	**3.1**	

Total Volume Change (%):	36.1
Plus #10 Sieve Correction Factor:	0.985
Corrected Total Volume Change (%):	**35.6**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	1.2	10.9	24.2	18.9	44.6

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.9		
#4	99.8		
#10	98.6		
#20	96.5		
#40	87.7		
#60	77.8		
#100	70.2		
#140	66.4		
#200	63.5		
0.0296 mm.	59.5		
0.0211 mm.	59.0		
0.0140 mm.	55.7		
0.0085 mm.	52.3		
0.0059 mm.	49.9		
0.0045 mm.	48.0		
0.0023 mm.	45.2		
0.0010 mm.	41.1		

* (no specification provided)

Soil Description

Light Reddish Brown Sandy Elastic SILT

Atterberg Limits

PL= 36 LL= 57 PI= 21

Coefficients

D_{90}= 0.4925 D_{85}= 0.3642 D_{60}= 0.0361
D_{50}= 0.0059 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= A-7-5(14)

Remarks

Lab #25961
As received moisture content = 29.1%

Source of Sample: R-6 **Depth:** 1.5-5 ft
Sample Number: AS-3

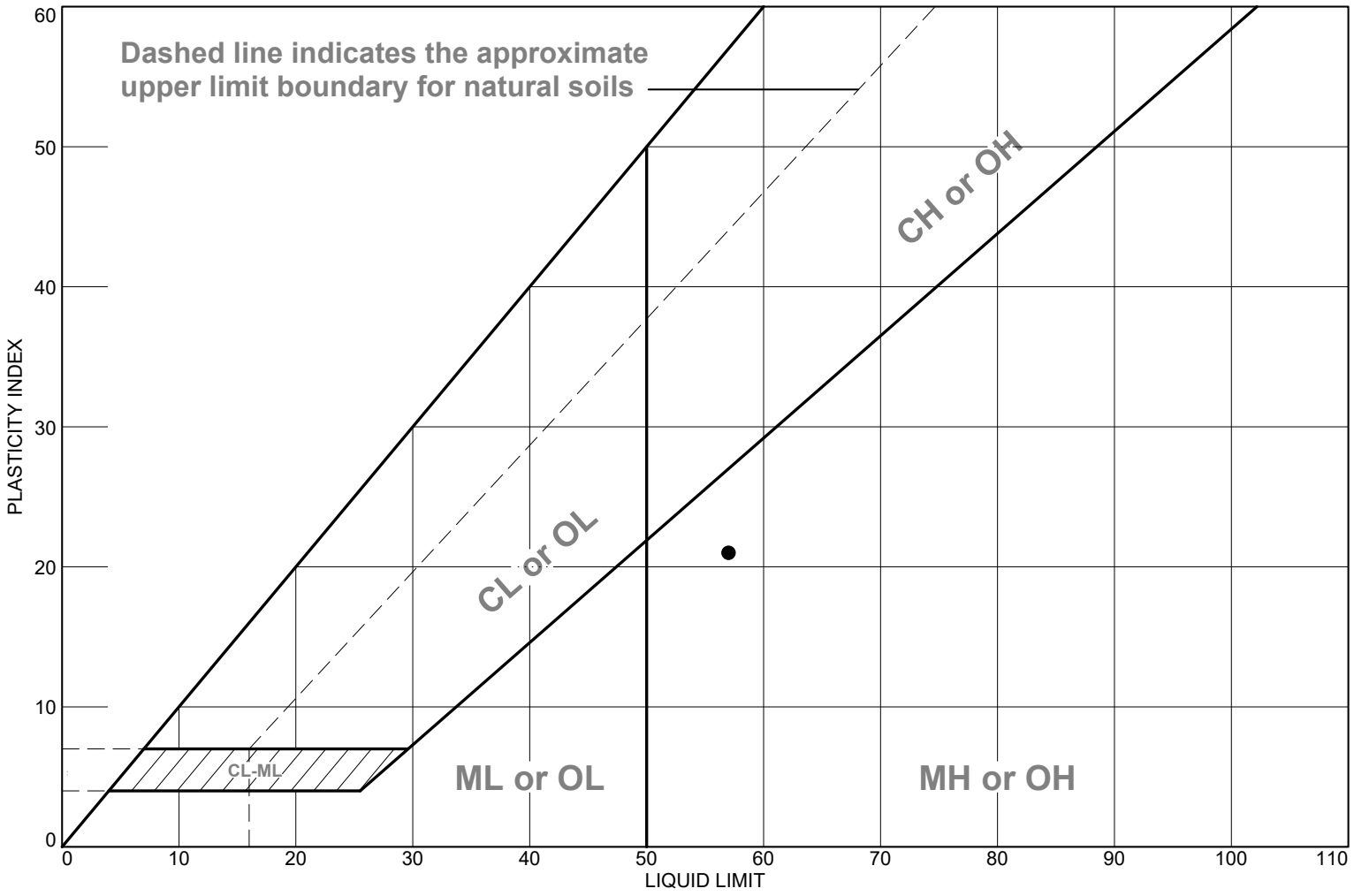
Date: N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB, SG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Light Reddish Brown Sandy Elastic SILT	57	36	21	87.7	63.5	MH

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

● **Source of Sample:** R-6 **Depth:** 1.5-5 ft **Sample Number:** AS-3

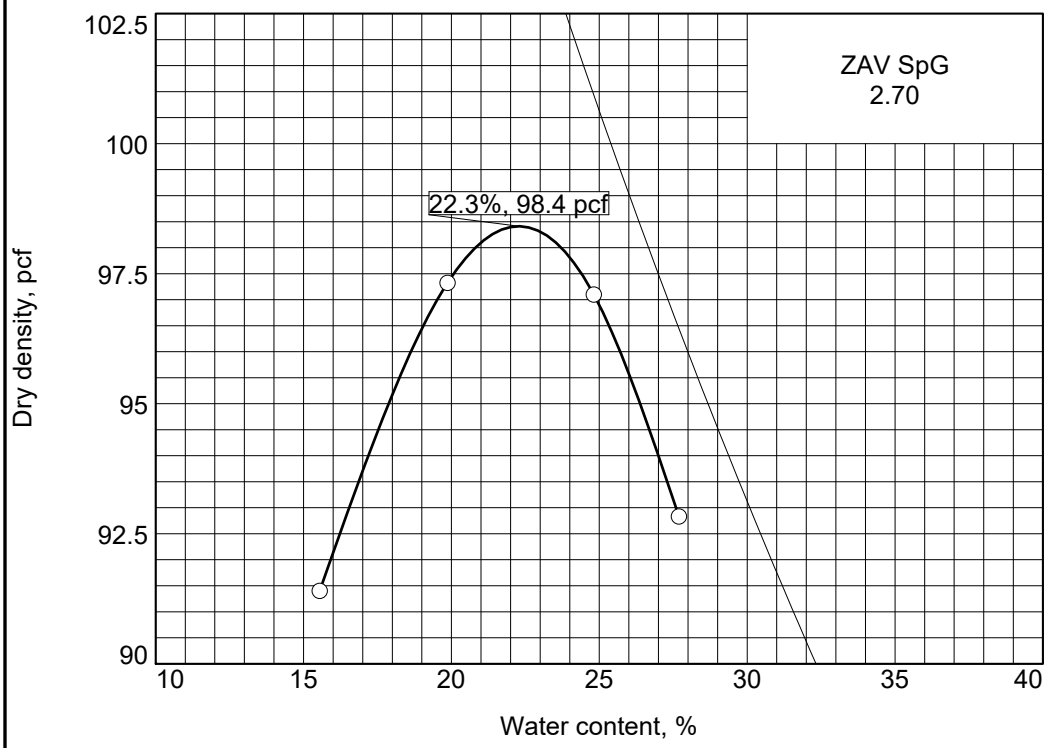
Remarks:

● Lab #25961
As received moisture content = 29.1%

Figure

Tested By: EG **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb.
Hammer Drop:	12 in.
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.03333 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	29.1	**Sp.G.**	2.7
LL	57	**PI**	21
%>#10	1.4	**%<#200**	63.5
USCS	MH	**AASHTO**	A-7-5(14)

TESTING DATA

	1	2	3	4	5	6
WM + WS	3797.3	3769.0	3837.3	3602.6		
WM	2012.2	2012.2	2012.2	2012.2		
WW + T #1	685.2	696.5	730.7	594.2		
WD + T #1	561.2	613.0	626.8	526.1		
TARE #1	113.4	192.7	208.1	88.0		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	27.7	19.9	24.8	15.5		
DRY DENSITY	92.8	97.3	97.1	91.4		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 98.6 pcf	98.4 pcf	Light Reddish Brown Sandy Elastic SILT
Optimum moisture =21.0 %	22.3 %	

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-6 **Depth:** 1.5-5 ft **Sample Number:** AS-3

Remarks:
Lab #25961

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	KP
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/18/2024
Boring No.	R-6	**Reviewed By**	TZ
Sample No.	AS-3	**Review Date**	6/27/2024
Sample Depth	1.5-5 ft	**Lab No.**	25961
Sample Description	Light Reddish Brown Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	448.8	
Mold number / Cal. Due	4148	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.988	(Shrink)	3.9880
Mold Height (in):	(Swell)	1.0050	(Shrink)	1.0050

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	850.9	402.1	121.4	PLS	191.3	595.4	521.0	329.7	74.4	22.6	99.0
Shrink	853.9	405.1	122.3								99.8

Swell

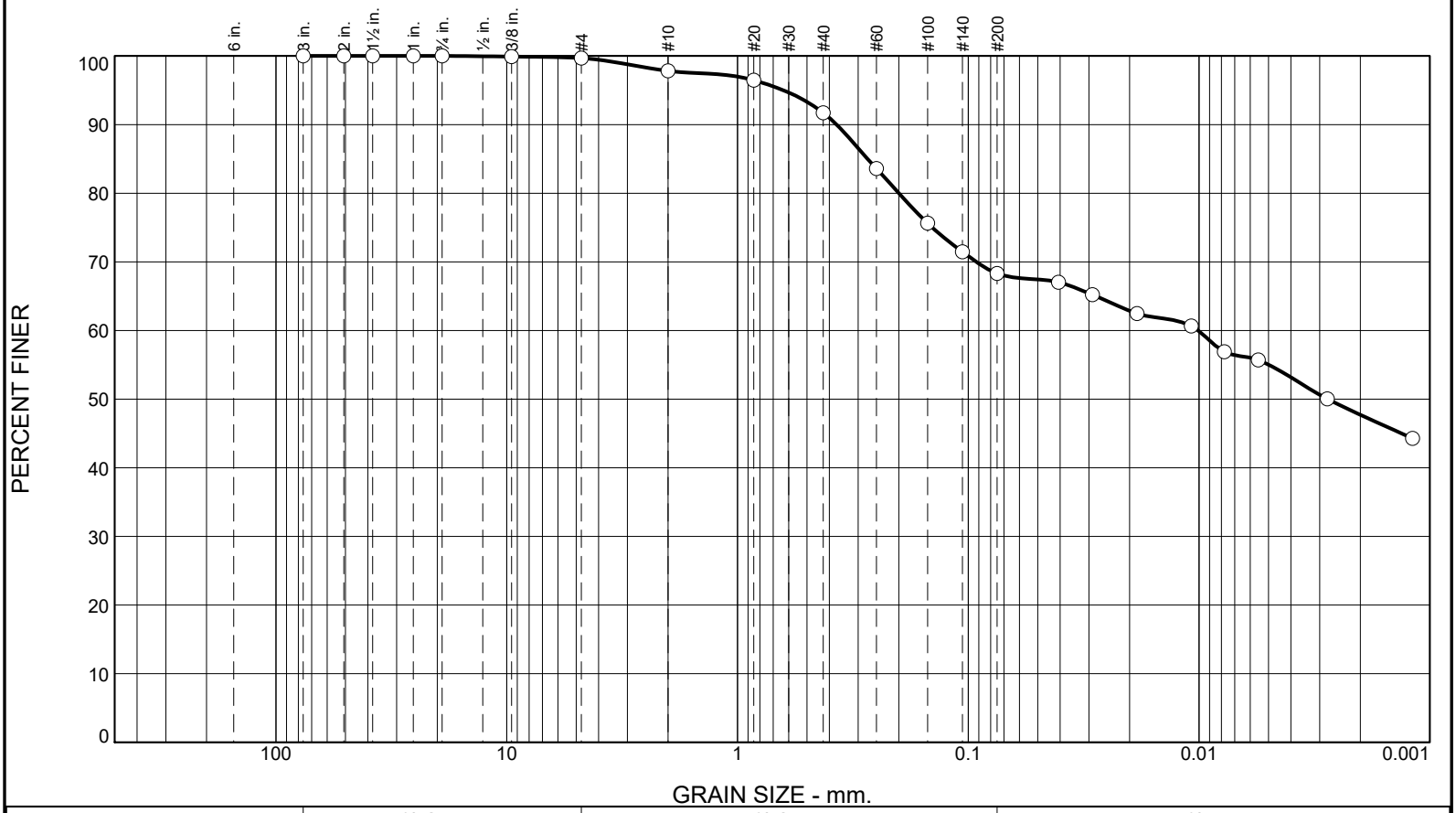
Initial Dial Reading:	0.427	A
After Soak Dial Reading:	0.512	B
Swell (%):	**8.5**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9940	Tare ID: PLS
After Drying Dial Reading (ht):	0.9770	
After Drying Dia. Reading (d):	3.9300	
	3.9295	
	3.9315	
	3.9290	
Average:	3.9300	
Original Volume (in^3):	12.416	
Final Volume (in^3):	11.851	
Shrinkage (%):	**4.5**	

Total Volume Change (%):	13.0
Plus #10 Sieve Correction Factor:	0.993
Corrected Total Volume Change (%):	**12.9**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	1.9	6.1	23.4	20.6	47.7

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	99.9		
#4	99.7		
#10	97.8		
#20	96.5		
#40	91.7		
#60	83.6		
#100	75.6		
#140	71.5		
#200	68.3		
0.0406 mm.	67.0		
0.0290 mm.	65.2		
0.0186 mm.	62.5		
0.0108 mm.	60.6		
0.0078 mm.	56.9		
0.0055 mm.	55.7		
0.0028 mm.	50.0		
0.0012 mm.	44.3		

* (no specification provided)

Soil Description

Red Sandy CLAY

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.3720 D_{85}= 0.2731 D_{60}= 0.0101
D_{50}= 0.0028 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26725
As received moisture content = 25.3%

Source of Sample: R-7 **Depth:** 0-5 ft
Sample Number: AS-1

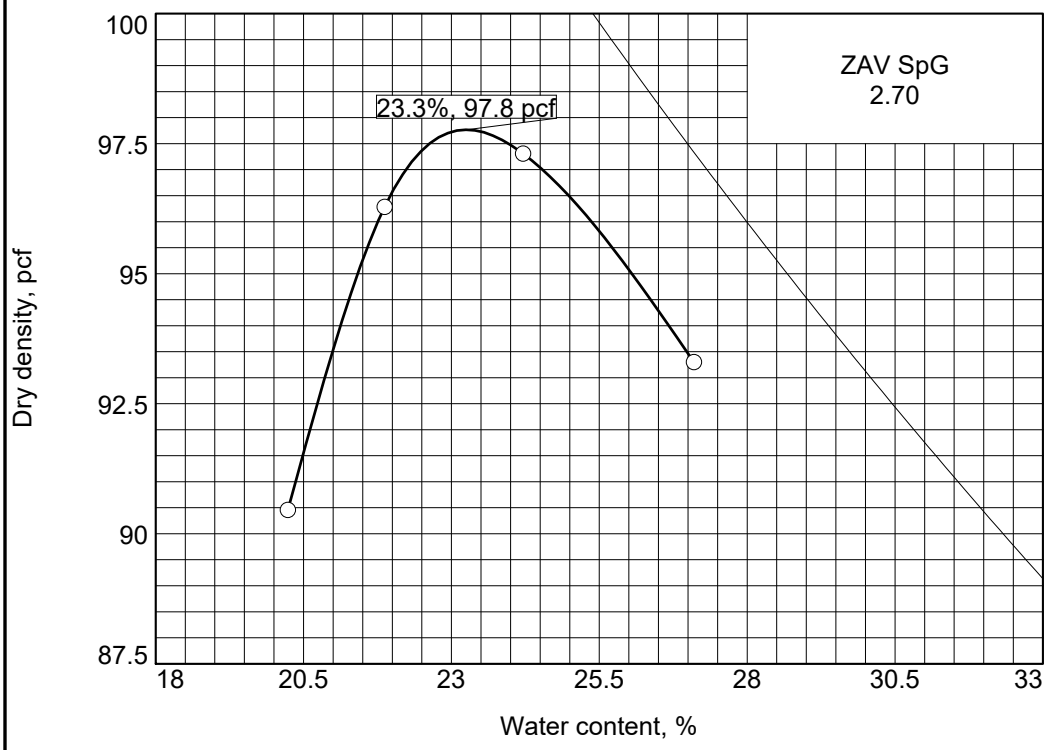
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	25.3	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	2.2	**%<#200**	68.3
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	3692.4	3821.6	3874.7	3840.3		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	808.0	770.7	695.7	824.8		
WD + T #1	703.1	669.2	596.1	667.7		
TARE #1	184.7	205.1	184.7	88.0		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	20.2	21.9	24.2	27.1		
DRY DENSITY	90.5	96.3	97.3	93.3		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 98.8 pcf	97.8 pcf	Red Sandy CLAY
Optimum moisture =21.9 %	23.3 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-7 **Depth:** 0-5 ft **Sample Number:** AS-1

Remarks:
Lab #26725

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/9/2024
Boring No.	R-7	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	0-5 ft	**Lab No.**	26725
Sample Description	Red Sandy CLAY		

	Swell	Shrink
(1) Weight of Mold (g)	452.6	448.6
Mold number / Cal. Due	4141	4145

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9946	(Shrink)	3.9970
Mold Height (in):	(Swell)	1.0023	(Shrink)	0.9995

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	852.2	400.6	121.0	USA	647.0	1047.7	968.2	321.2	79.5	24.8	97.0
Shrink	849.0	400.4	120.9								96.9

Swell

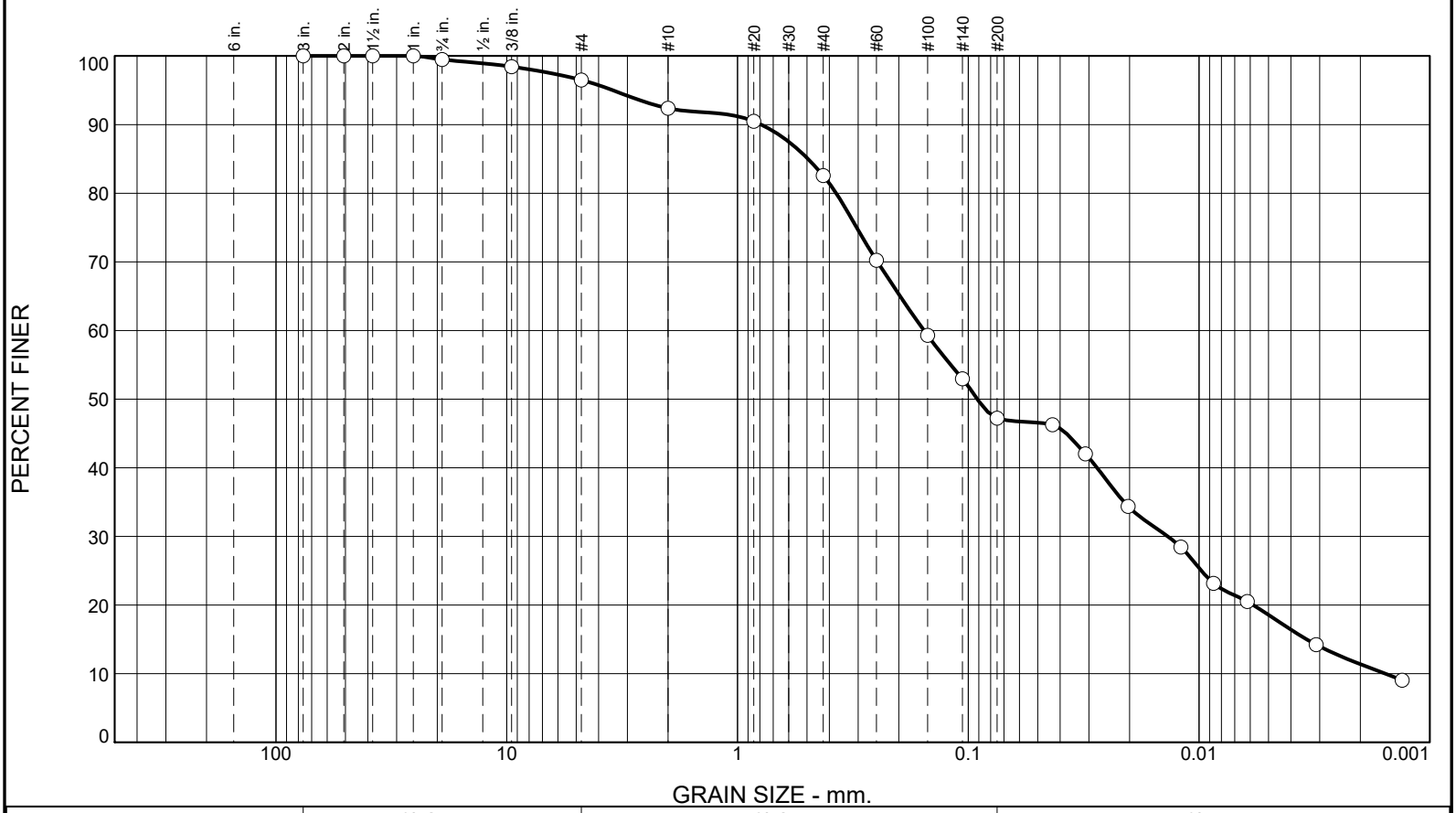
Initial Dial Reading:	0.456	A
After Soak Dial Reading:	0.557	B
Swell (%):	**10.1**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0060	Tare ID: USA
After Drying Dial Reading (ht):	0.9748	
After Drying Dia. Reading (d):	3.9020	
	3.9010	
	3.8965	
	3.9000	
Average:	3.8999	
Original Volume (in^3):	12.623	
Final Volume (in^3):	11.644	
Shrinkage (%):	**7.8**	

Total Volume Change (%):	17.8
Plus #10 Sieve Correction Factor:	0.986
Corrected Total Volume Change (%):	**17.6**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.5	3.0	4.1	9.8	35.4	35.8	11.4

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.5		
.375	98.4		
#4	96.5		
#10	92.4		
#20	90.5		
#40	82.6		
#60	70.2		
#100	59.3		
#140	53.0		
#200	47.2		
0.0432 mm.	46.3		
0.0311 mm.	42.0		
0.0203 mm.	34.4		
0.0120 mm.	28.4		
0.0087 mm.	23.2		
0.0062 mm.	20.5		
0.0031 mm.	14.2		
0.0013 mm.	9.0		

* (no specification provided)

Soil Description

Tannish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.7894 D_{85}= 0.4948 D_{60}= 0.1555
D_{50}= 0.0914 D_{30}= 0.0136 D_{15}= 0.0034
D_{10}= 0.0016 C_u= 99.77 C_c= 0.77

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26726
As received moisture content = 23.0%

Source of Sample: R-8 **Depth:** 0-5 ft
Sample Number: AS-1

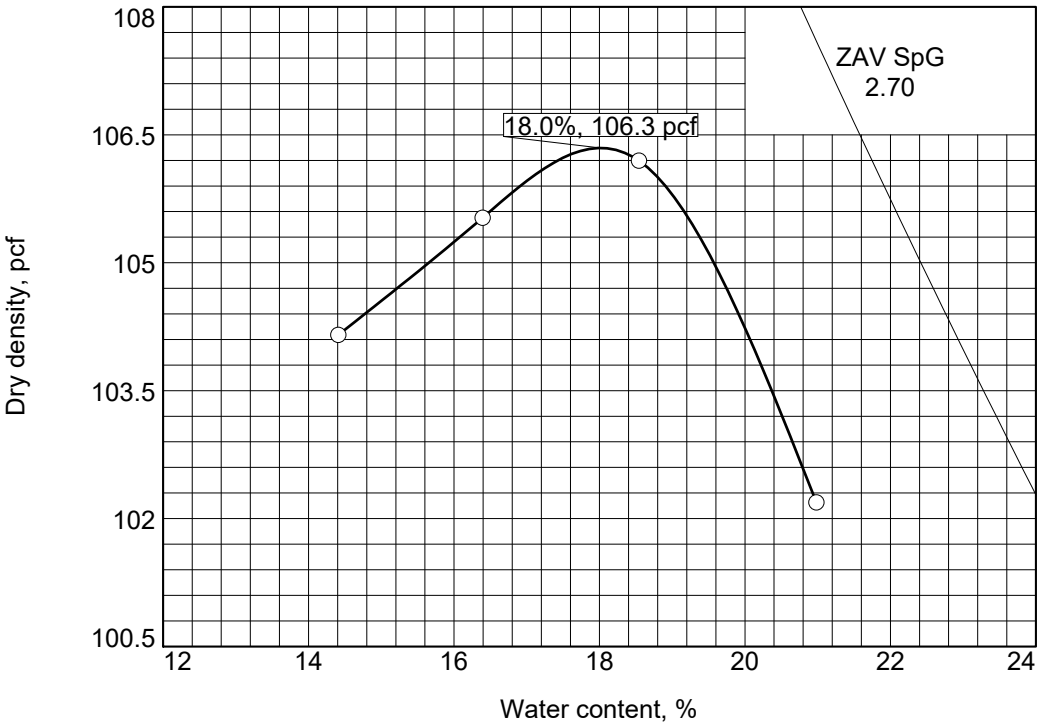
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	23.0	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	7.6	**%<#200**	47.2
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	3849.0	3904.2	3950.3	3916.3		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	850.7	824.2	787.0	814.0		
WD + T #1	767.9	734.1	694.1	708.4		
TARE #1	193.3	184.5	193.1	205.1		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	14.4	16.4	18.5	21.0		
DRY DENSITY	104.2	105.5	106.2	102.2		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 108.5 pcf	106.3 pcf	Tannish Brown Silty SAND
Optimum moisture =17.0 %	18.0 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-8 **Depth:** 0-5 ft **Sample Number:** AS-1

Remarks:
Lab #26726

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/9/2024
Boring No.	R-8	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	0-5 ft	**Lab No.**	26726
Sample Description	Tannish Brown Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	451.7	451.3
Mold number / Cal. Due	4144	4143

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9958	(Shrink)	3.9938
Mold Height (in):	(Swell)	1.0037	(Shrink)	1.0033

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	870.1	418.4	126.4	POS	648.3	1058.6	997.9	349.6	60.7	17.4	107.7
Shrink	861.7	410.4	123.9								105.6

Swell

Initial Dial Reading: 0.461 A

After Soak Dial Reading: 0.791 B

Swell (%): 32.9

((A-B)/Mold HT)

Shrink

Initial Dial Reading (ht): 1.0170 Tare ID: POS

After Drying Dial Reading (ht): 0.9982

After Drying Dia. Reading (d): 3.9755

3.9750

3.9785

3.9750

Average: 3.9760

Original Volume (in^3): 12.740

Final Volume (in^3): 12.394

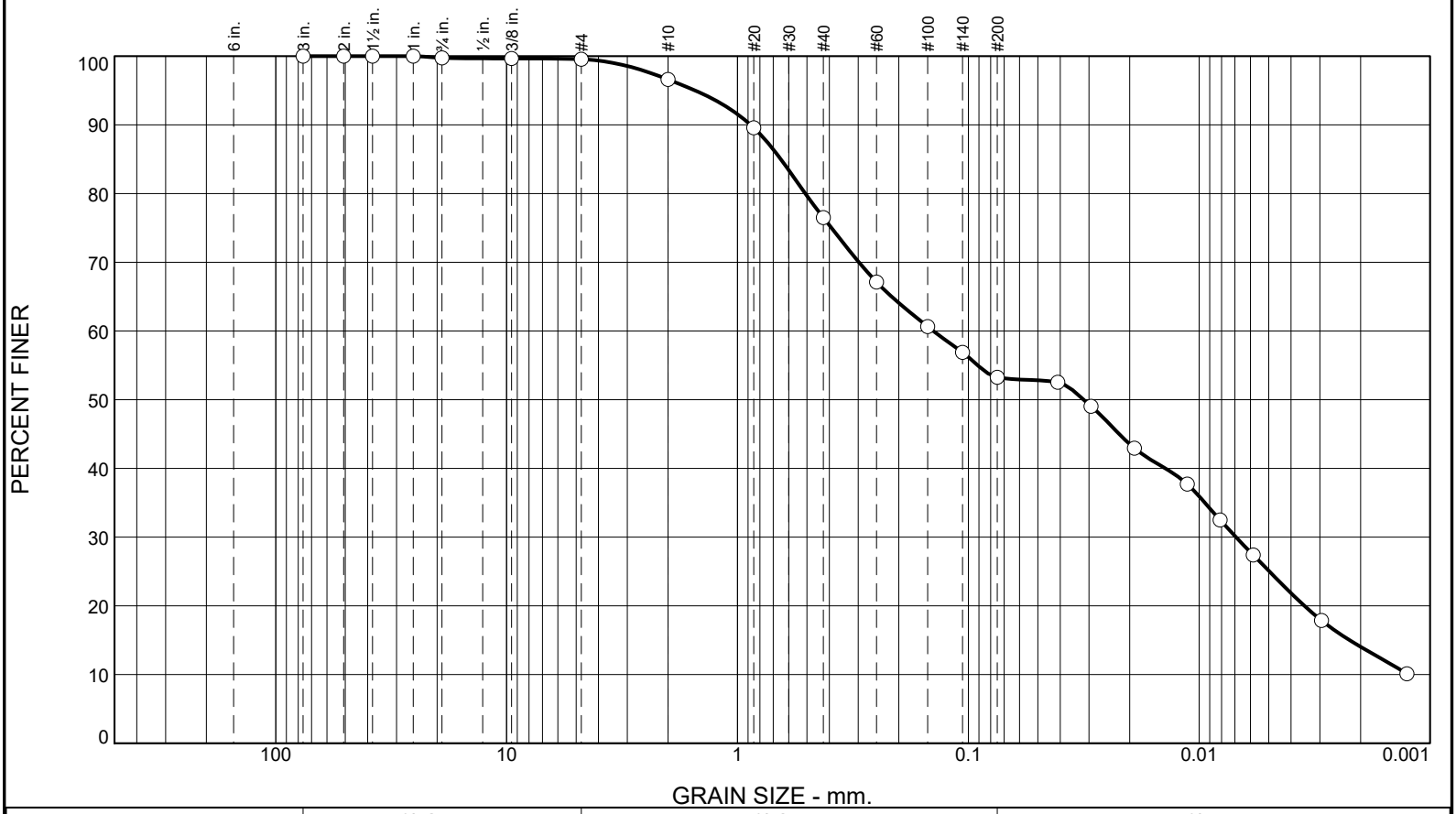
Shrinkage (%): 2.7

Total Volume Change (%): 35.6

Plus #10 Sieve Correction Factor: 0.937

Corrected Total Volume Change (%): 33.4

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.3	0.1	3.0	20.1	23.2	39.3	14.0

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.7		
.375	99.7		
#4	99.6		
#10	96.6		
#20	89.6		
#40	76.5		
#60	67.1		
#100	60.7		
#140	56.9		
#200	53.3		
0.0410 mm.	52.5		
0.0294 mm.	49.0		
0.0191 mm.	42.9		
0.0113 mm.	37.7		
0.0081 mm.	32.5		
0.0058 mm.	27.4		
0.0030 mm.	17.9		
0.0013 mm.	10.1		

* (no specification provided)

Soil Description

Pinkish White Sandy Elastic SILT

Atterberg Limits

PL= 41 LL= 59 PI= 18

Coefficients

D_{90}= 0.8773 D_{85}= 0.6494 D_{60}= 0.1418
D_{50}= 0.0317 D_{30}= 0.0069 D_{15}= 0.0022
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= A-7-5(8)

Remarks

Lab #25962
As received moisture content = 34.9%

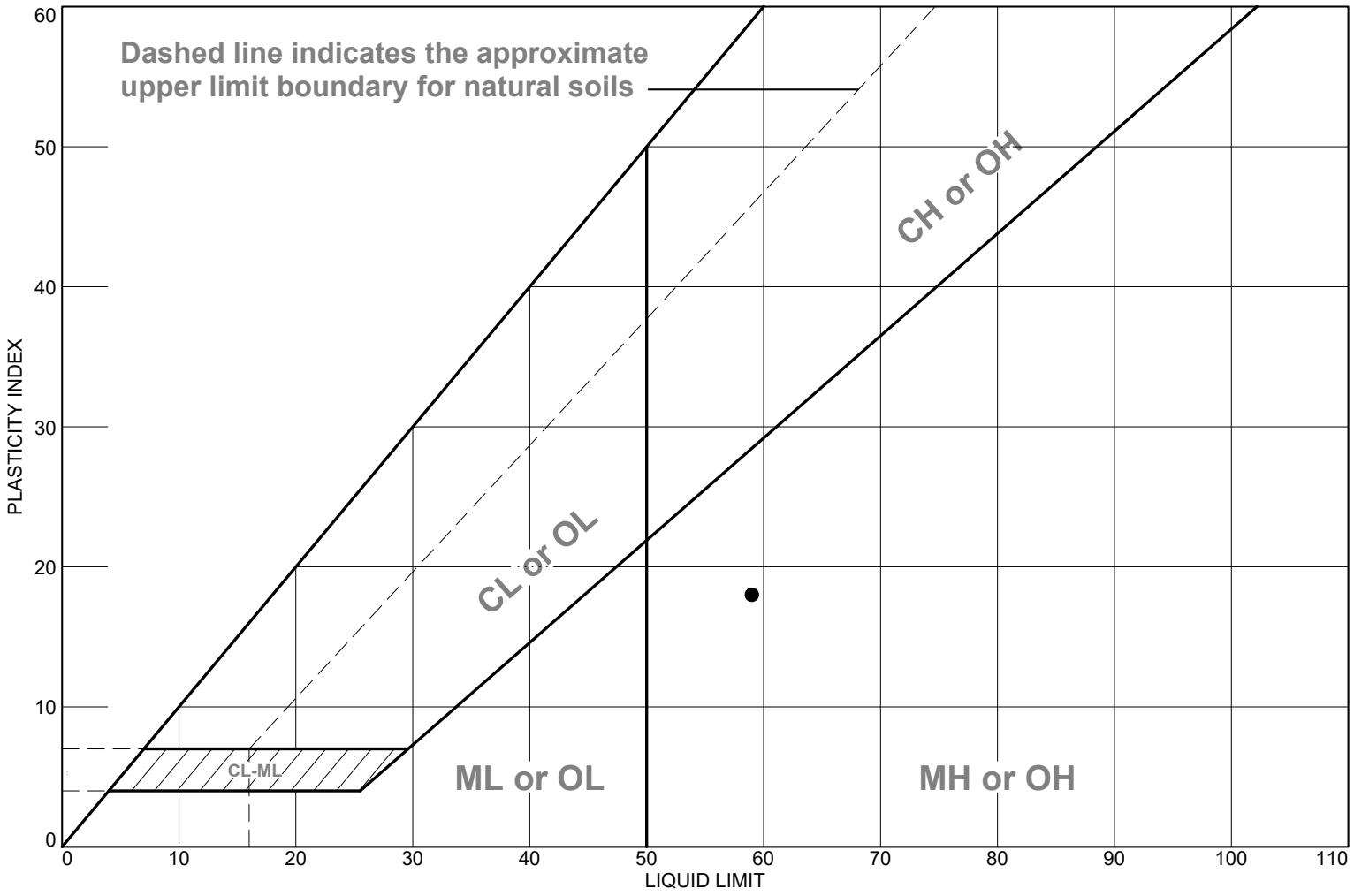
Source of Sample: R-9 **Depth:** 1-4.5 ft
Sample Number: AS-2 **Date:** N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Pinkish White Sandy Elastic SILT	59	41	18	76.5	53.3	MH

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

● **Source of Sample:** R-9 **Depth:** 1-4.5 ft **Sample Number:** AS-2

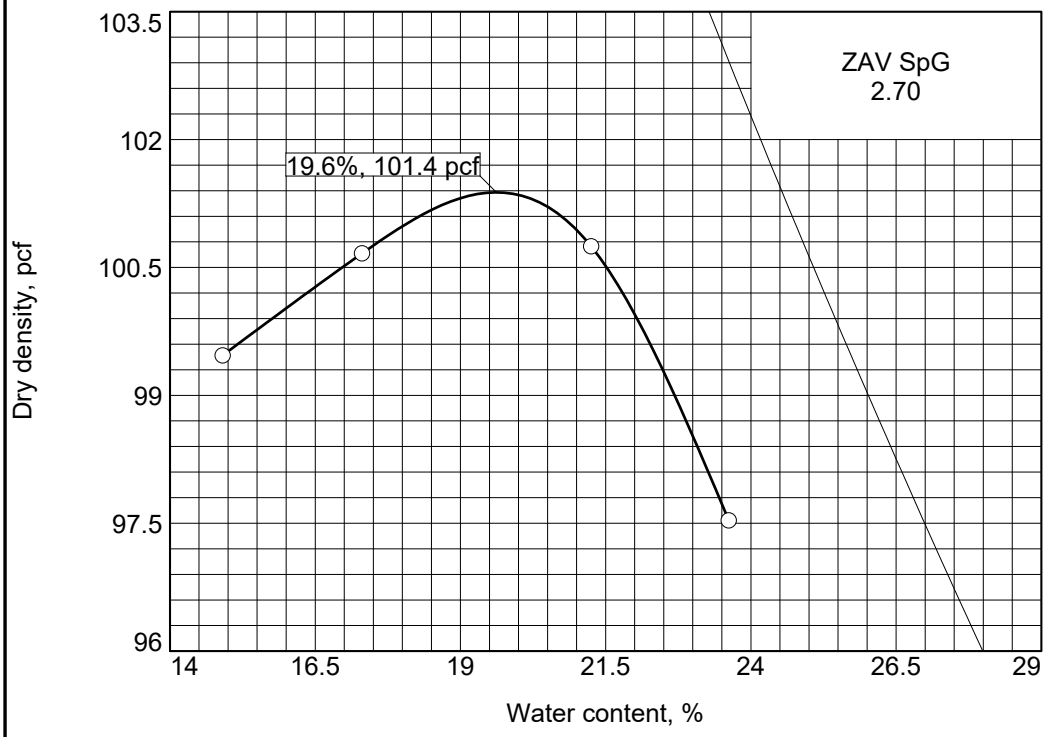
Remarks:

● Lab #25962
As received moisture content = 34.9%

Figure

Tested By: PD **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification: GDOT GDT7

Hammer Wt.:	5.5 lb.
Hammer Drop:	12 in.
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.03333 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	34.9	**Sp.G.**	2.7
LL	59	**PI**	18
%>#10	3.4	**%<#200**	53.3
USCS	MH	**AASHTO**	A-7-5(8)

TESTING DATA

	1	2	3	4	5	6
WM + WS	6002.5	6059.6	6097.0	6120.9		
WM	4281.3	4281.3	4281.3	4281.3		
WW + T #1	809.2	797.8	698.5	829.8		
WD + T #1	732.3	708.6	601.9	717.2		
TARE #1	216.4	193.2	192.9	187.3		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	14.9	17.3	23.6	21.2		
DRY DENSITY	99.5	100.7	97.5	100.7		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED
Maximum dry density = 102.4 pcf	101.4 pcf
Optimum moisture =19.1 %	19.6 %

Material Description

Pinkish White Sandy Elastic SILT

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-9 **Depth:** 1-4.5 ft **Sample Number:** AS-2

Remarks:

Lab #25962

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	KP
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/18/2024
Boring No.	R-9	**Reviewed By**	TZ
Sample No.	AS-2	**Review Date**	6/27/2024
Sample Depth	1-4.5 ft	**Lab No.**	25962
Sample Description	Pinkish White Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	448.5	
Mold number / Cal. Due	4142	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9975	(Shrink)	3.9975
Mold Height (in):	(Swell)	1.0045	(Shrink)	1.0045

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	848.9	400.4	120.9	KAT	194.6	589.0	524.5	329.9	64.5	19.6	101.1
Shrink	845.7	397.2	120.0								100.3

Swell

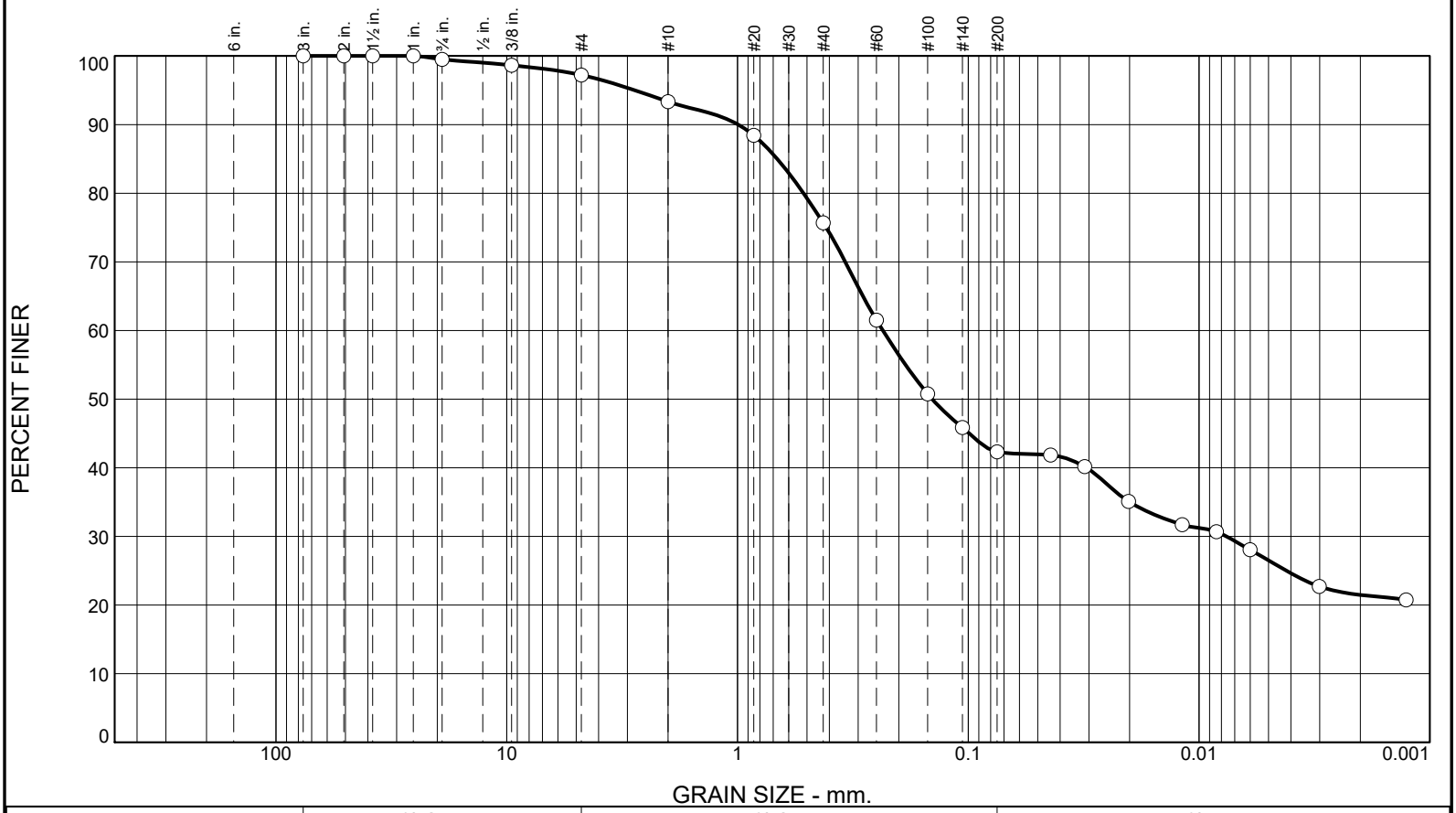
Initial Dial Reading:	0.429	A
After Soak Dial Reading:	0.642	B
Swell (%):	**21.2**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9925	Tare ID: KAT
After Drying Dial Reading (ht):	0.9854	
After Drying Dia. Reading (d):	3.9715	
	3.9735	
	3.9790	
	3.9830	
Average:	3.9768	
Original Volume (in^3):	12.457	
Final Volume (in^3):	12.239	
Shrinkage (%):	**1.7**	

Total Volume Change (%):	22.9
Plus #10 Sieve Correction Factor:	0.979
Corrected Total Volume Change (%):	**22.5**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.5	2.3	3.9	17.6	33.4	20.8	21.5

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.5		
.375	98.6		
#4	97.2		
#10	93.3		
#20	88.4		
#40	75.7		
#60	61.5		
#100	50.8		
#140	45.9		
#200	42.3		
0.0440 mm.	41.8		
0.0313 mm.	40.1		
0.0202 mm.	35.1		
0.0118 mm.	31.7		
0.0084 mm.	30.7		
0.0060 mm.	28.0		
0.0030 mm.	22.7		
0.0013 mm.	20.7		

* (no specification provided)

Soil Description

Reddish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.9933 D_{85}= 0.6728 D_{60}= 0.2345
D_{50}= 0.1433 D_{30}= 0.0076 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26729
As received moisture content = 18.8%

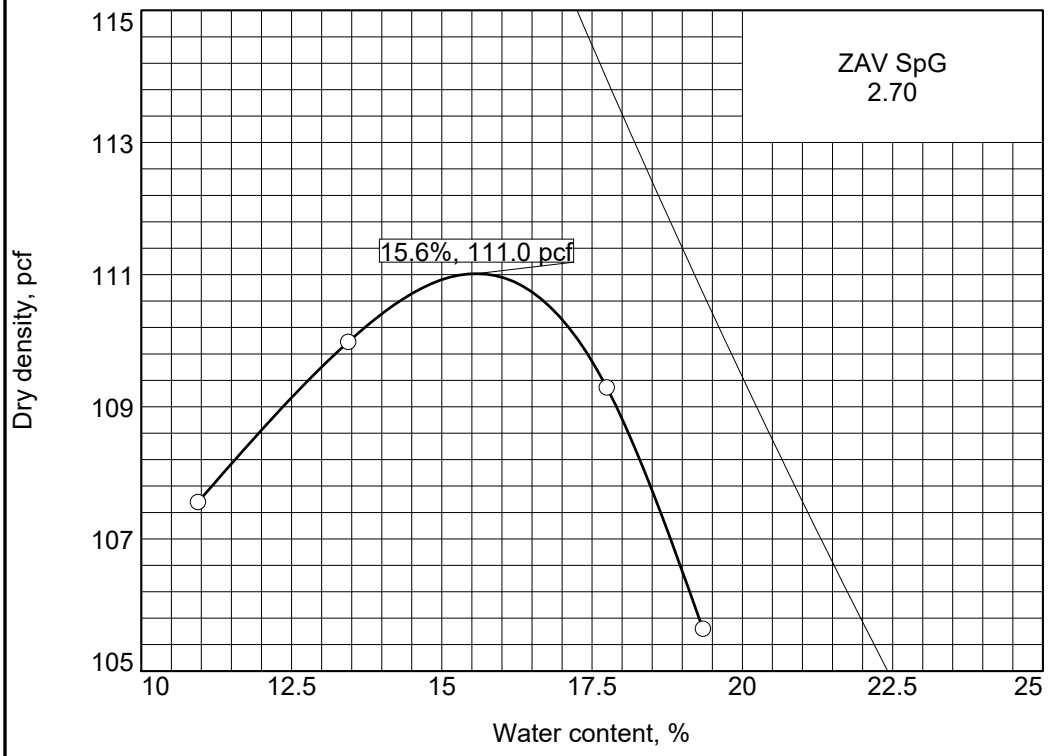
Source of Sample: R-10 **Depth:** 0-7 ft
Sample Number: AS-1 **Date:** N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	18.8	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	6.7	**%<#200**	42.3
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	3851.5	3992.4	3953.1	3933.4		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	794.0	865.7	788.2	667.2		
WD + T #1	724.4	763.6	692.3	598.8		
TARE #1	88.4	188.2	196.5	90.0		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	10.9	17.7	19.3	13.4		
DRY DENSITY	107.6	109.3	105.6	110.0		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 112.9 pcf	111.0 pcf	Reddish Brown Silty SAND
Optimum moisture =15.0 %	15.6 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-10 **Depth:** 0-7 ft **Sample Number:** AS-1

Remarks:
Lab #26729

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/15/2024
Boring No.	R-10	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	0-7 ft	**Lab No.**	26729
Sample Description	Reddish Brown Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	451.6	448.9
Mold number / Cal. Due	4141	4145

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9968	(Shrink)	3.9963
Mold Height (in):	(Swell)	1.0008	(Shrink)	1.0017

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	870.5	418.9	126.5	TAT	651.3	1076.9	1013.5	362.2	63.4	17.5	107.7
Shrink	874.6	425.7	128.6								109.4

Swell

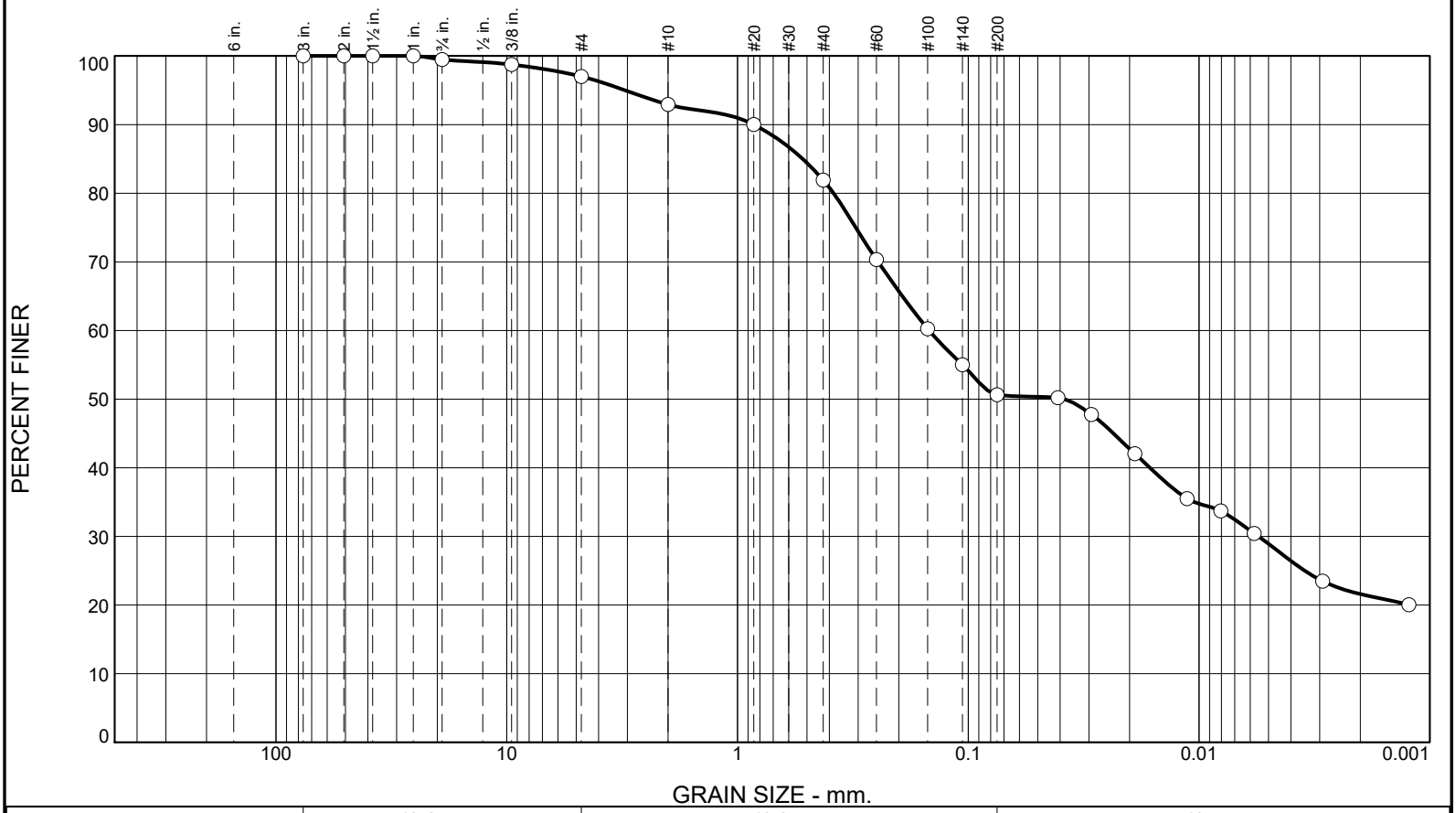
Initial Dial Reading:	0.428	A
After Soak Dial Reading:	0.470	B
Swell (%):	**4.2**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0020	Tare ID: TAT
After Drying Dial Reading (ht):	0.9968	
After Drying Dia. Reading (d):	3.9370	
	3.9465	
	3.9365	
	3.9490	
Average:	3.9423	
Original Volume (in^3):	12.568	
Final Volume (in^3):	12.167	
Shrinkage (%):	**3.2**	

Total Volume Change (%):	7.4
Plus #10 Sieve Correction Factor:	0.943
Corrected Total Volume Change (%):	**7.0**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.5	2.5	4.1	11.0	31.3	29.0	21.6

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.5		
.375	98.7		
#4	97.0		
#10	92.9		
#20	90.0		
#40	81.9		
#60	70.3		
#100	60.3		
#140	55.0		
#200	50.6		
0.0409 mm.	50.2		
0.0293 mm.	47.7		
0.0190 mm.	42.0		
0.0113 mm.	35.5		
0.0080 mm.	33.7		
0.0058 mm.	30.4		
0.0029 mm.	23.5		
0.0012 mm.	20.0		

* (no specification provided)

Soil Description

Reddish Brown Sandy SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.8499 D_{85}= 0.5218 D_{60}= 0.1478
D_{50}= 0.0381 D_{30}= 0.0055 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26730
As received moisture content = 20.8%

Source of Sample: R-13 **Depth:** 0-5 ft
Sample Number: AS-1

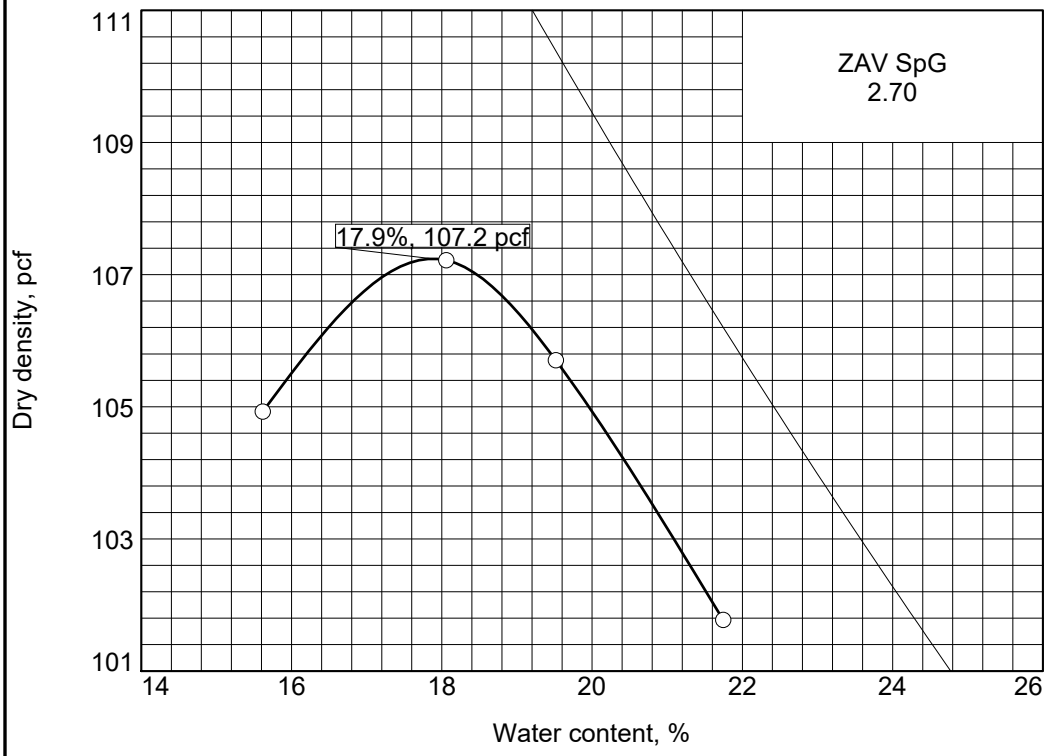
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	20.8	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	7.1	**%<#200**	50.6
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	3957.0	3920.4	3960.7	3881.4		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	792.5	800.0	800.4	825.3		
WD + T #1	694.7	693.3	708.1	740.0		
TARE #1	193.6	202.6	197.0	193.8		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	19.5	21.7	18.1	15.6		
DRY DENSITY	105.7	101.8	107.2	104.9		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 109.1 pcf	107.2 pcf	Reddish Brown Sandy SILT
Optimum moisture = 16.7 %	17.9 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-13 **Depth:** 0-5 ft **Sample Number:** AS-1

Remarks:
Lab #26730

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/15/2024
Boring No.	R-13	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	0-5 ft	**Lab No.**	26730
Sample Description	Reddish Brown Sandy SILT		

	Swell	Shrink
(1) Weight of Mold (g)	452.0	451.4
Mold number / Cal. Due	4144	4143

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9968	(Shrink)	3.9963
Mold Height (in):	(Swell)	1.0008	(Shrink)	1.0017

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	880.2	428.2	129.3	MAC	645.3	1059.8	997.3	352.0	62.5	17.8	109.8
Shrink	866.0	414.6	125.2								106.3

Swell

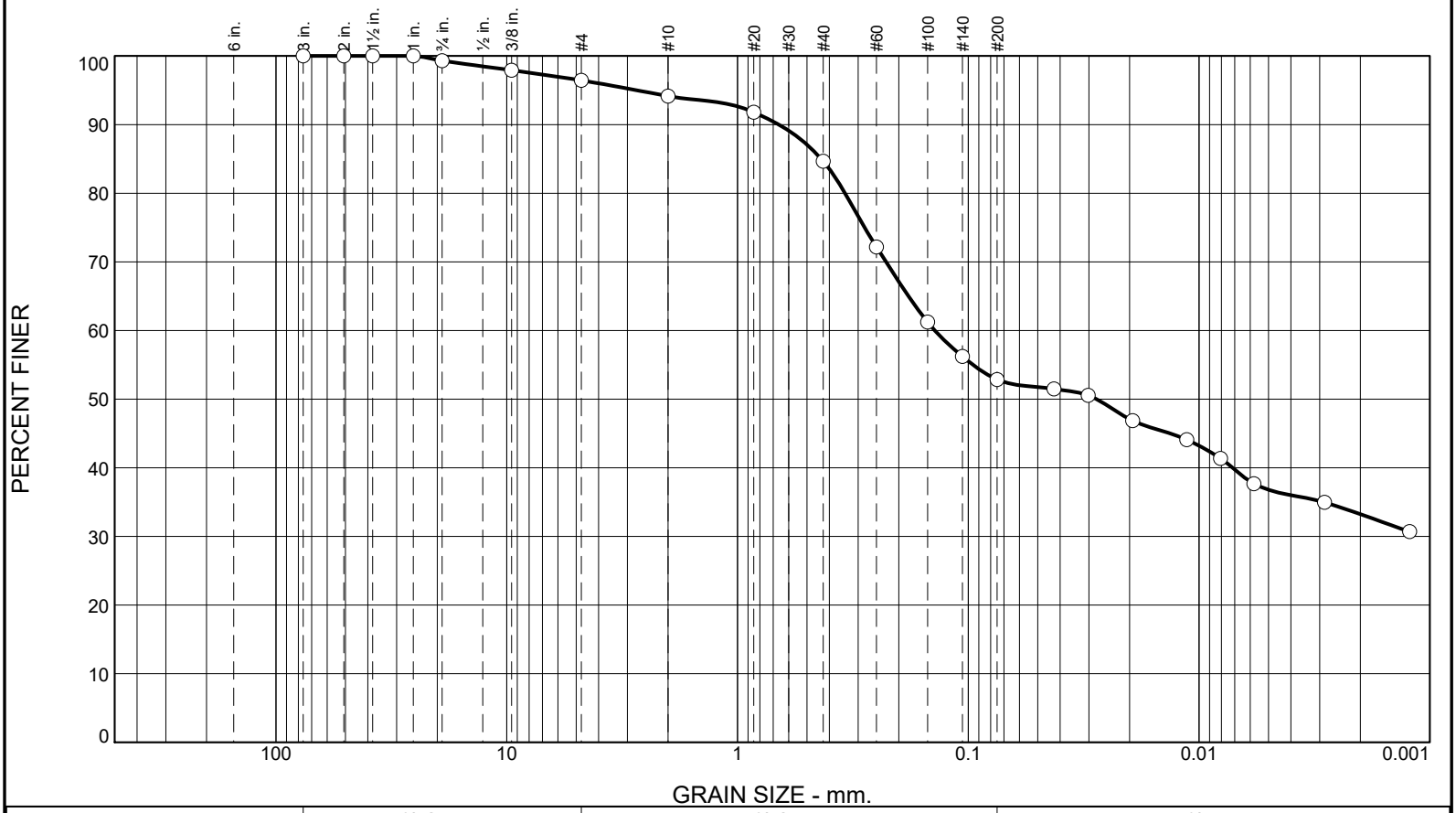
Initial Dial Reading:	0.462	A
After Soak Dial Reading:	0.546	B
Swell (%):	**8.4**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0085	Tare ID: MAC
After Drying Dial Reading (ht):	1.0003	
After Drying Dia. Reading (d):	3.9475	
	3.9475	
	3.9460	
	3.9520	
Average:	3.9483	
Original Volume (in^3):	12.650	
Final Volume (in^3):	12.247	
Shrinkage (%):	**3.2**	

Total Volume Change (%):	11.6
Plus #10 Sieve Correction Factor:	0.945
Corrected Total Volume Change (%):	**10.9**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.7	2.9	2.2	9.5	31.8	19.7	33.2

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.3		
.375	97.9		
#4	96.4		
#10	94.2		
#20	91.8		
#40	84.7		
#60	72.2		
#100	61.2		
#140	56.2		
#200	52.9		
0.0426 mm.	51.5		
0.0302 mm.	50.6		
0.0194 mm.	46.9		
0.0113 mm.	44.1		
0.0081 mm.	41.4		
0.0058 mm.	37.7		
0.0029 mm.	35.0		
0.0012 mm.	30.7		

* (no specification provided)

Soil Description

Reddish Brown Sandy Elastic SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6626 D_{85}= 0.4337 D_{60}= 0.1396
D_{50}= 0.0278 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #25963
As received moisture content = 17.5%

Source of Sample: R-14 **Depth:** 0.3-2 ft
Sample Number: AS-1

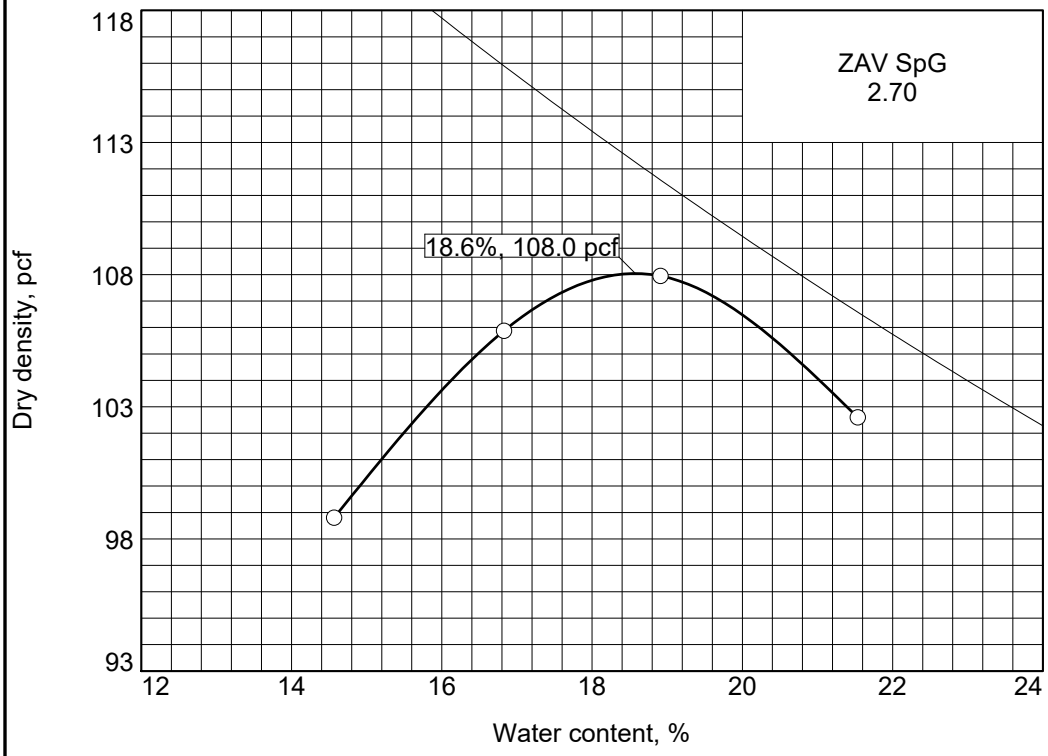
Date: N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB, SG **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	17.5	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	5.8	**%<#200**	52.9
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	5986.0	6144.0	6214.4	6159.1		
WM	4281.3	4281.3	4281.3	4281.3		
WW + T #1	867.3	897.1	673.9	748.4		
WD + T #1	783.1	797.9	580.1	650.5		
TARE #1	205.1	208.4	84.1	195.9		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	14.6	16.8	18.9	21.5		
DRY DENSITY	98.8	105.9	108.0	102.6		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 109.8 pcf	108.0 pcf	Reddish Brown Sandy Elastic SILT
Optimum moisture =18.0 %	18.6 %	

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-14 **Depth:** 0.3-2 ft **Sample Number:** AS-1

Remarks:
Lab #25963

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	KP
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/18/2024
Boring No.	R-14	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	6/27/2024
Sample Depth	0.3-2 ft	**Lab No.**	25963
Sample Description	Reddish Brown Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	448.8	
Mold number / Cal. Due	4145	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.997	(Shrink)	3.9970
Mold Height (in):	(Swell)	1.0020	(Shrink)	1.0020

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	868.6	419.8	126.8	SAT	197.0	614.0	547.2	350.2	66.8	19.1	106.5
Shrink	867.4	418.6	126.4								106.2

Swell

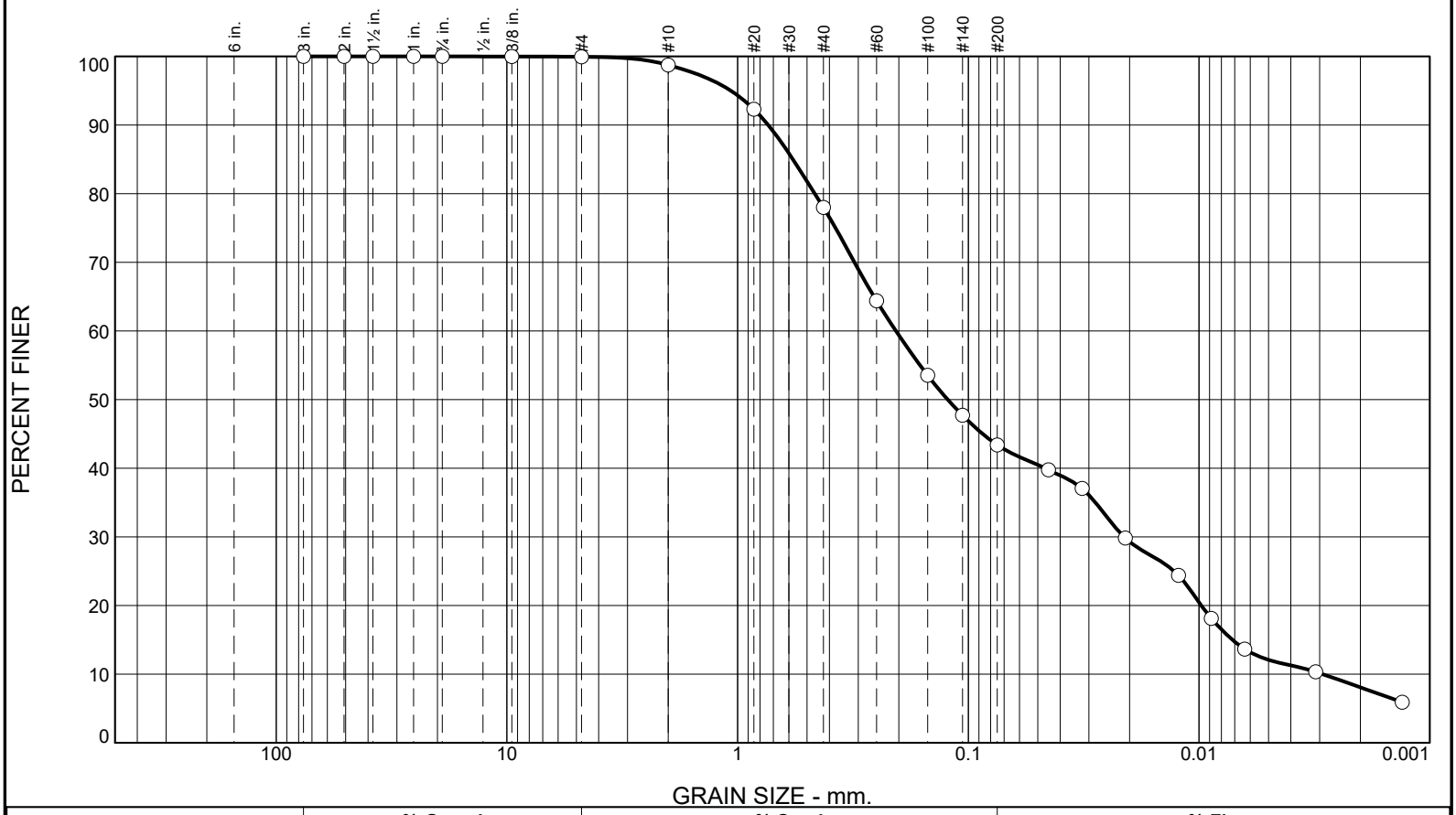
Initial Dial Reading:	0.436	A
After Soak Dial Reading:	0.489	B
Swell (%):	**5.3**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9890	Tare ID: KAT
After Drying Dial Reading (ht):	0.9760	
After Drying Dia. Reading (d):	3.9060	
	3.9100	
	3.9130	
	3.9040	
Average:	3.9083	
Original Volume (in^3):	12.409	
Final Volume (in^3):	11.709	
Shrinkage (%):	**5.6**	

Total Volume Change (%):	10.9
Plus #10 Sieve Correction Factor:	0.953
Corrected Total Volume Change (%):	**10.4**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	1.2	20.7	34.6	35.3	8.1

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.375	100.0		
#4	99.9		
#10	98.7		
#20	92.3		
#40	78.0		
#60	64.4		
#100	53.5		
#140	47.7		
#200	43.4		
0.0450 mm.	39.7		
0.0321 mm.	37.0		
0.0209 mm.	29.8		
0.0123 mm.	24.4		
0.0089 mm.	18.1		
0.0063 mm.	13.6		
0.0031 mm.	10.3		
0.0013 mm.	5.9		

* (no specification provided)

Soil Description

Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.7365 D_{85}= 0.5760 D_{60}= 0.2060
D_{50}= 0.1228 D_{30}= 0.0211 D_{15}= 0.0072
D_{10}= 0.0029 C_u= 70.57 C_c= 0.74

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #25964
As received moisture content = 13.8%

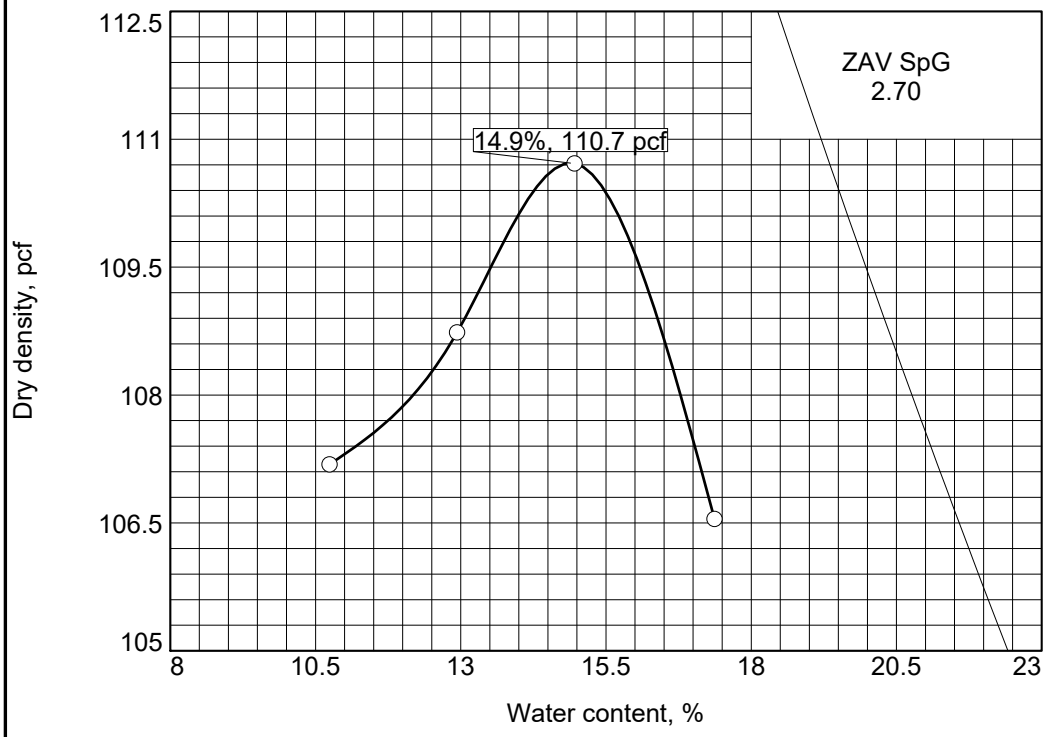
Source of Sample: R-15 **Depth:** 2-5 ft
Sample Number: AS-3 **Date:** N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	13.8	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	1.3	**%<#200**	43.4
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	6069.2	6131.0	6198.4	6164.9		
WM	4281.7	4281.7	4281.7	4281.7		
WW + T #1	614.7	739.9	814.6	759.2		
WD + T #1	560.1	664.8	735.2	677.1		
TARE #1	51.7	84.3	204.4	204.4		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	10.7	12.9	15.0	17.4		
DRY DENSITY	107.2	108.7	110.7	106.5		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED
Maximum dry density = 112.1 pcf	110.7 pcf
Optimum moisture =14.3 %	14.9 %

Material Description
Gray Silty SAND

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-15 **Depth:** 2-5 ft **Sample Number:** AS-3

Remarks:
Lab #25964

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/13/2024
Boring No.	R-15	**Reviewed By**	TZ
Sample No.	AS-3	**Review Date**	6/14/2024
Sample Depth	2-5 ft	**Lab No.**	25964
Sample Description	Gray Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	448.2	
Mold number / Cal. Due	4152	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9945	(Shrink)	3.9945
Mold Height (in):	(Swell)	1.0045	(Shrink)	1.0045

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	866.1	417.9	126.2	PLS	191.3	610.4	560.2	368.9	50.2	13.6	111.1
Shrink	868.7	868.7	262.3								230.9

Swell

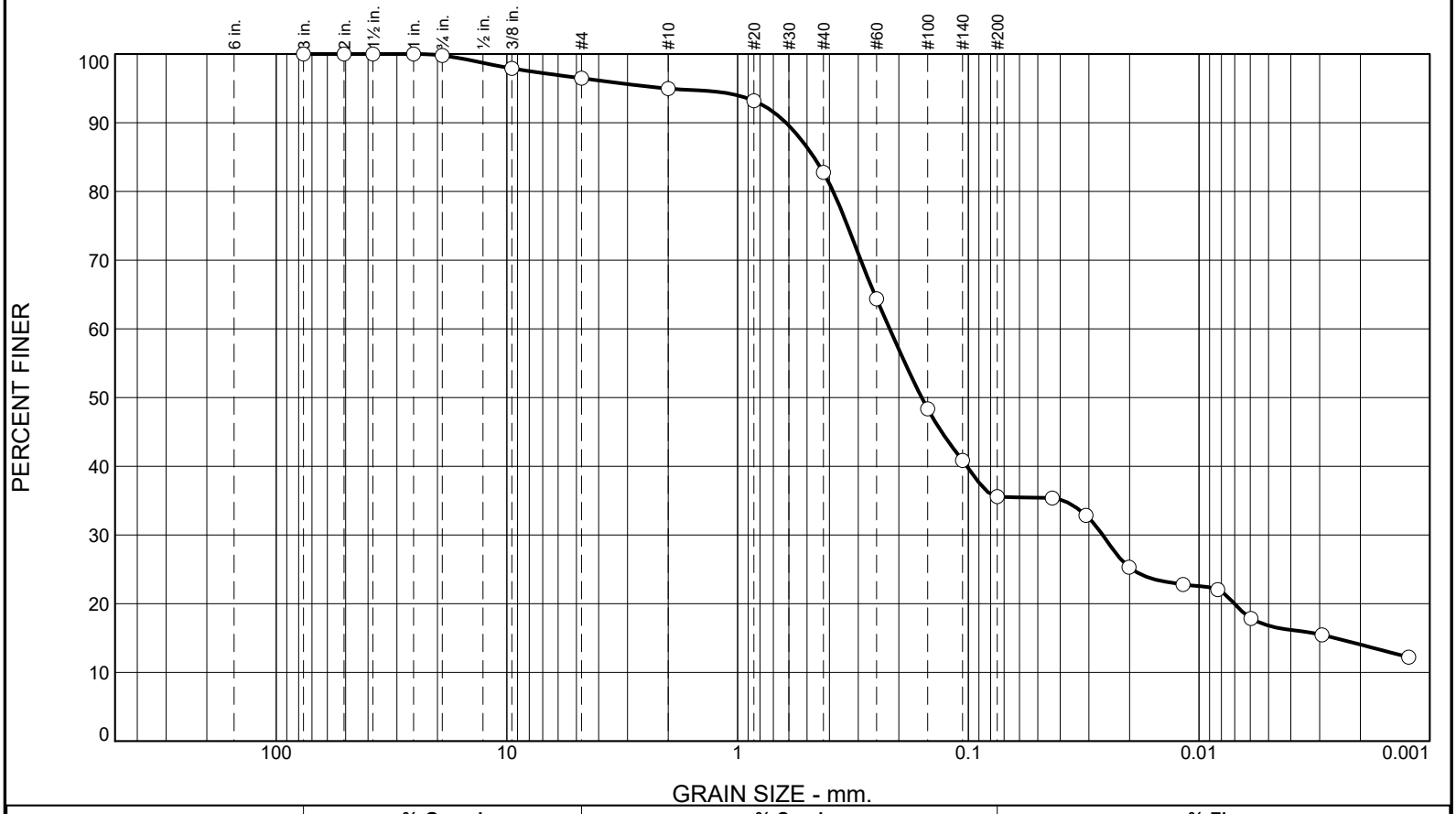
Initial Dial Reading:	0.412	A
After Soak Dial Reading:	0.478	B
Swell (%):	**6.6**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9958	Tare ID: PLS
After Drying Dial Reading (ht):	0.9903	
After Drying Dia. Reading (d):	3.9730	
	3.9740	
	3.9750	
	3.9730	
Average:	3.9738	
Original Volume (in^3):	12.479	
Final Volume (in^3):	12.282	
Shrinkage (%):	**1.6**	

Total Volume Change (%):	8.2
Plus #10 Sieve Correction Factor:	0.992
Corrected Total Volume Change (%):	**8.1**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.2	3.3	1.5	12.2	47.2	21.5	14.1

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.8		
.375	97.9		
#4	96.5		
#10	95.0		
#20	93.2		
#40	82.8		
#60	64.4		
#100	48.4		
#140	40.9		
#200	35.6		
0.0432 mm.	35.4		
0.0309 mm.	32.9		
0.0201 mm.	25.3		
0.0117 mm.	22.8		
0.0083 mm.	22.0		
0.0060 mm.	17.9		
0.0029 mm.	15.5		
0.0012 mm.	12.2		

* (no specification provided)

Soil Description

Light Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6171 D_{85}= 0.4676 D_{60}= 0.2191
D_{50}= 0.1592 D_{30}= 0.0262 D_{15}= 0.0026
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #25965
As received moisture content = 10.9%

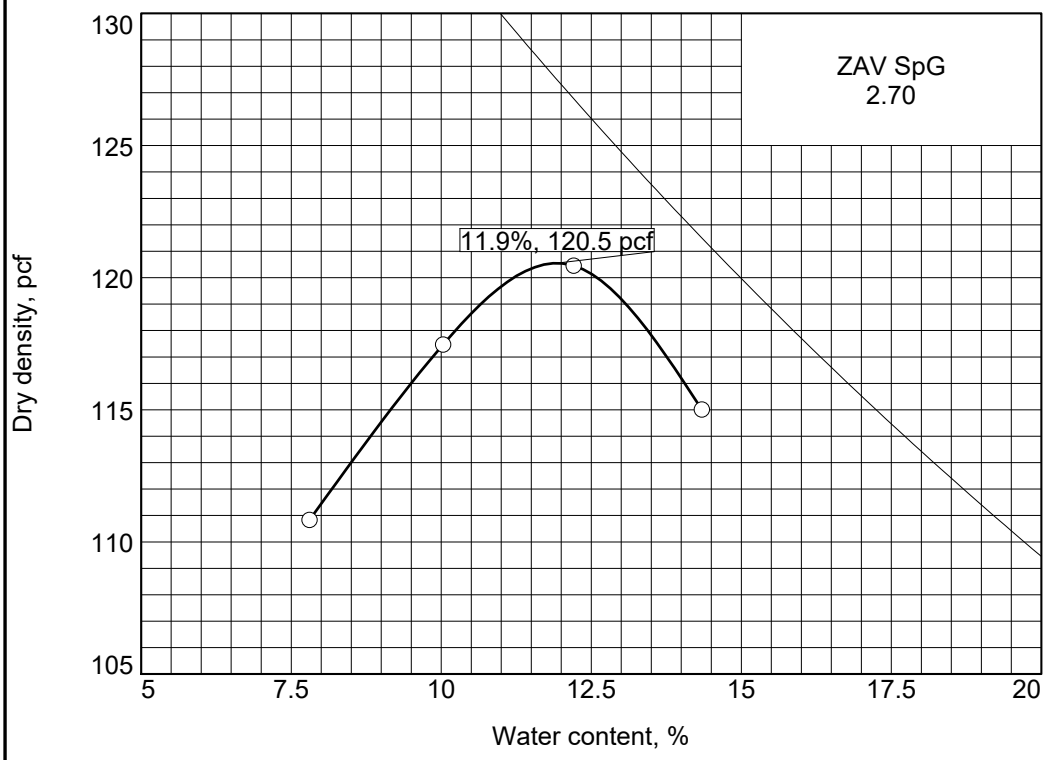
Source of Sample: R-18 **Depth:** 1-2.7 ft
Sample Number: AS-2 **Date:** N/A

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification: GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	10.9%	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	5.0	**%<#200**	35.6
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	6081.0	6228.1	6317.1	6262.1		
WM	4281.7	4281.7	4281.7	4281.7		
WW + T #1	764.1	846.6	794.5	630.8		
WD + T #1	723.4	787.5	729.3	562.2		
TARE #1	201.9	198.3	195.2	83.9		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	7.8	10.0	12.2	14.3		
DRY DENSITY	110.8	117.5	120.5	115.0		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 121.2 pcf	120.5 pcf	Light Brown Silty SAND
Optimum moisture =11.5 %	11.9 %	

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

○ **Source of Sample:** R-18 **Depth:** 1-2.7 ft **Sample Number:** AS-2

Remarks:
Lab #25965

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/13/2024
Boring No.	R-18	**Reviewed By**	TZ
Sample No.	AS-2	**Review Date**	6/14/2024
Sample Depth	1-2.7 ft	**Lab No.**	25965
Sample Description	Light Brown Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	451.3	
Mold number / Cal. Due	4149	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9955	(Shrink)	3.9955
Mold Height (in):	(Swell)	1.0045	(Shrink)	1.0045

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	890.9	439.6	132.8	P-20	198.6	638.6	596.4	397.8	42.2	10.6	120.0
Shrink	892.0	892.0	269.4								243.5

Swell

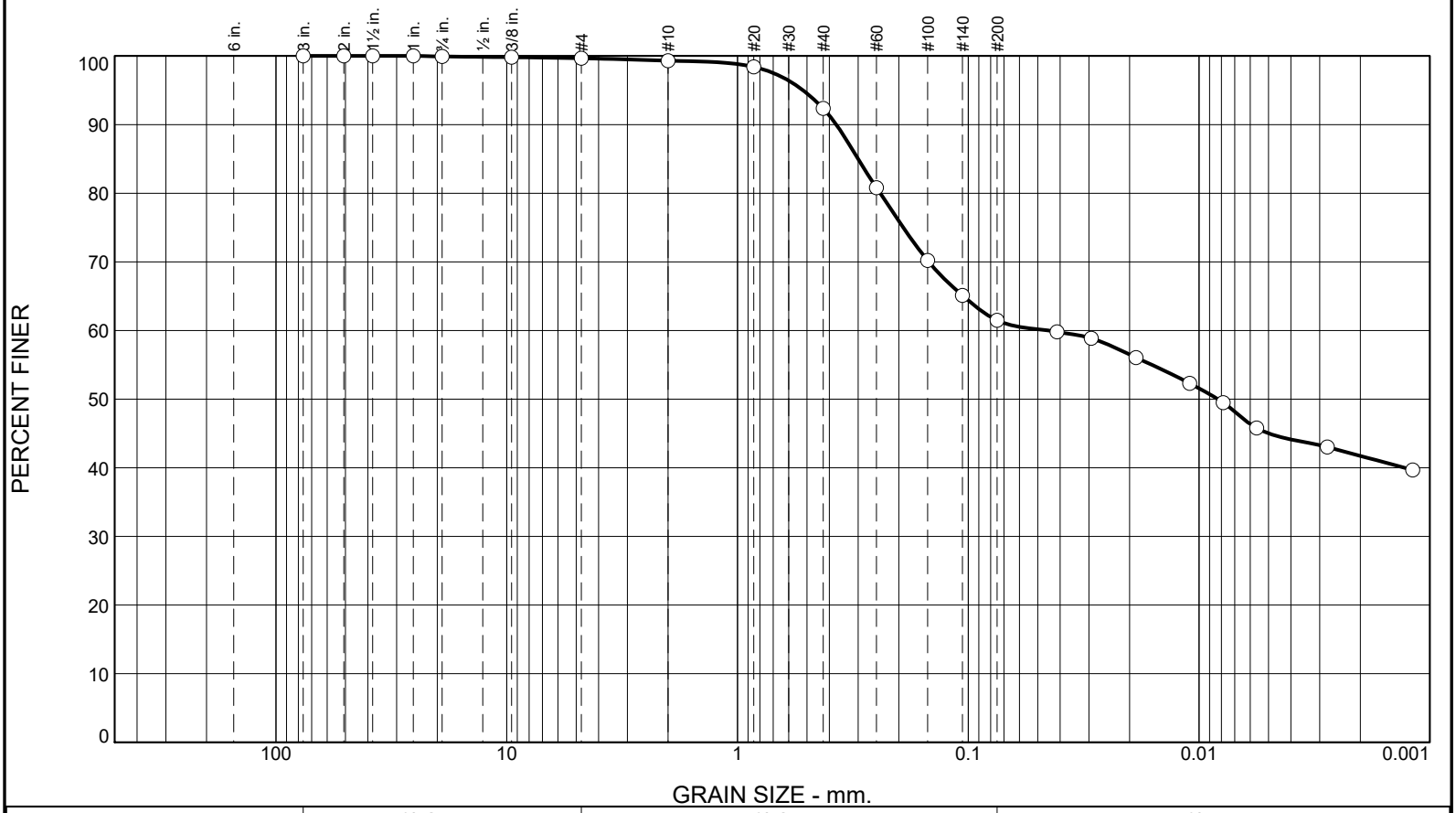
Initial Dial Reading:	0.426	A
After Soak Dial Reading:	0.441	B
Swell (%):	**1.5**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9937	Tare ID: USA
After Drying Dial Reading (ht):	0.9915	
After Drying Dia. Reading (d):	3.9820	
	3.9795	
	3.9865	
	3.8350	
Average:	3.9458	
Original Volume (in^3):	12.459	
Final Volume (in^3):	12.124	
Shrinkage (%):	**2.7**	

Total Volume Change (%):	4.2
Plus #10 Sieve Correction Factor:	0.957
Corrected Total Volume Change (%):	**4.0**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.1	0.2	0.4	7.0	30.8	19.8	41.7

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.9		
.375	99.8		
#4	99.7		
#10	99.3		
#20	98.4		
#40	92.3		
#60	80.8		
#100	70.2		
#140	65.1		
#200	61.5		
0.0413 mm.	59.8		
0.0293 mm.	58.9		
0.0187 mm.	56.0		
0.0110 mm.	52.3		
0.0079 mm.	49.5		
0.0056 mm.	45.8		
0.0028 mm.	43.0		
0.0012 mm.	39.7		

* (no specification provided)

Soil Description

Reddish Brown Sandy Elastic SILT

Atterberg Limits

PL= 41 LL= 67 PI= 26

Coefficients

D_{90}= 0.3734 D_{85}= 0.3000 D_{60}= 0.0449
D_{50}= 0.0083 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= A-7-5(17)

Remarks

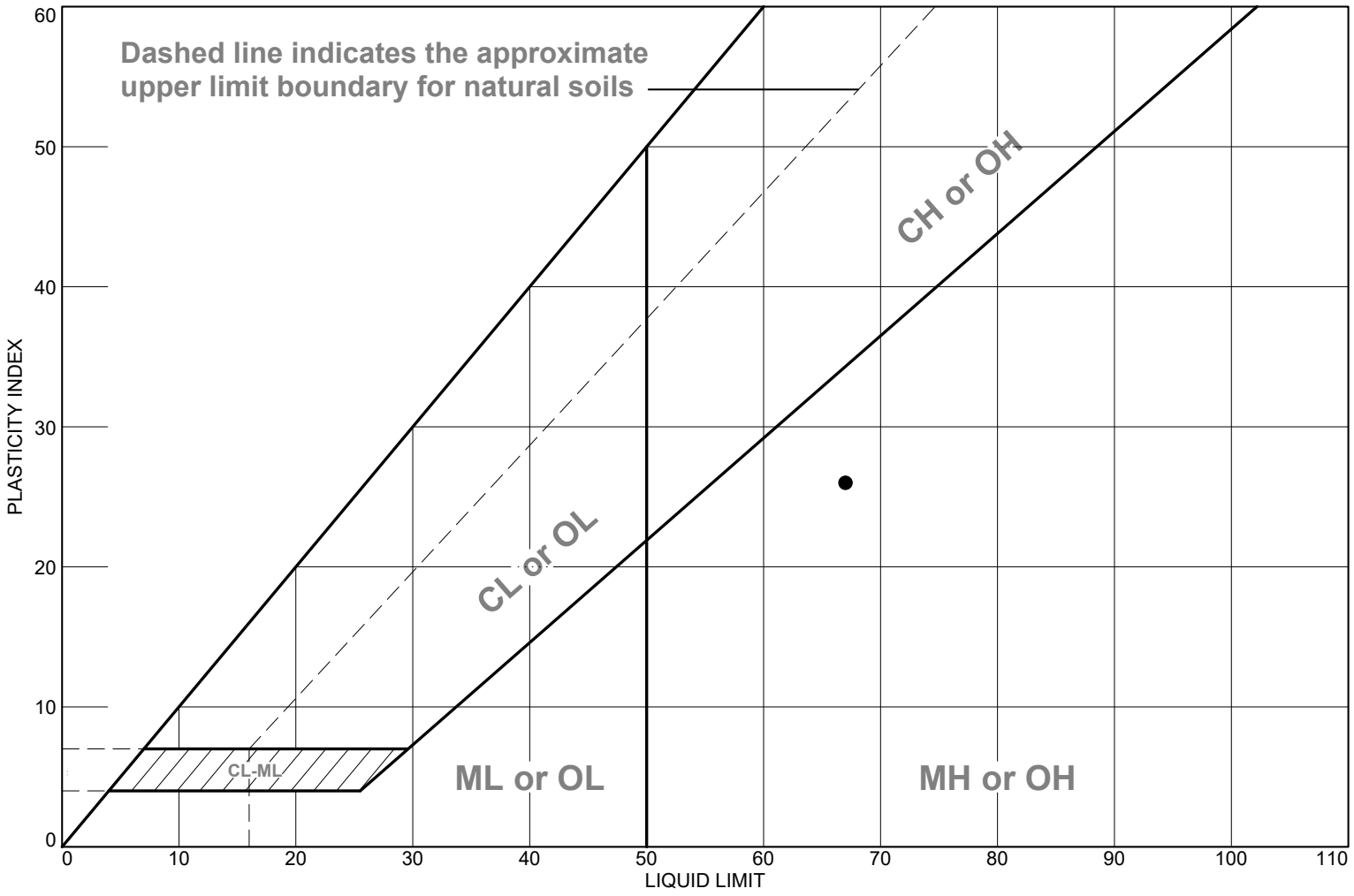
Lab #25966
As received moisture content = 17.6%

Source of Sample: R-19 **Depth:** 0-4.5 ft **Date:** N/A
Sample Number: AS-1

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road PI 0017182
Project No: US-EI-6162232368 **Figure**

Tested By: EB / EB, SG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Reddish Brown Sandy Elastic SILT	67	41	26	92.3	61.5	MH

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road PI 0017182

● **Source of Sample:** R-19 **Sample Number:** AS-1 **Depth:** 0-4.5 ft

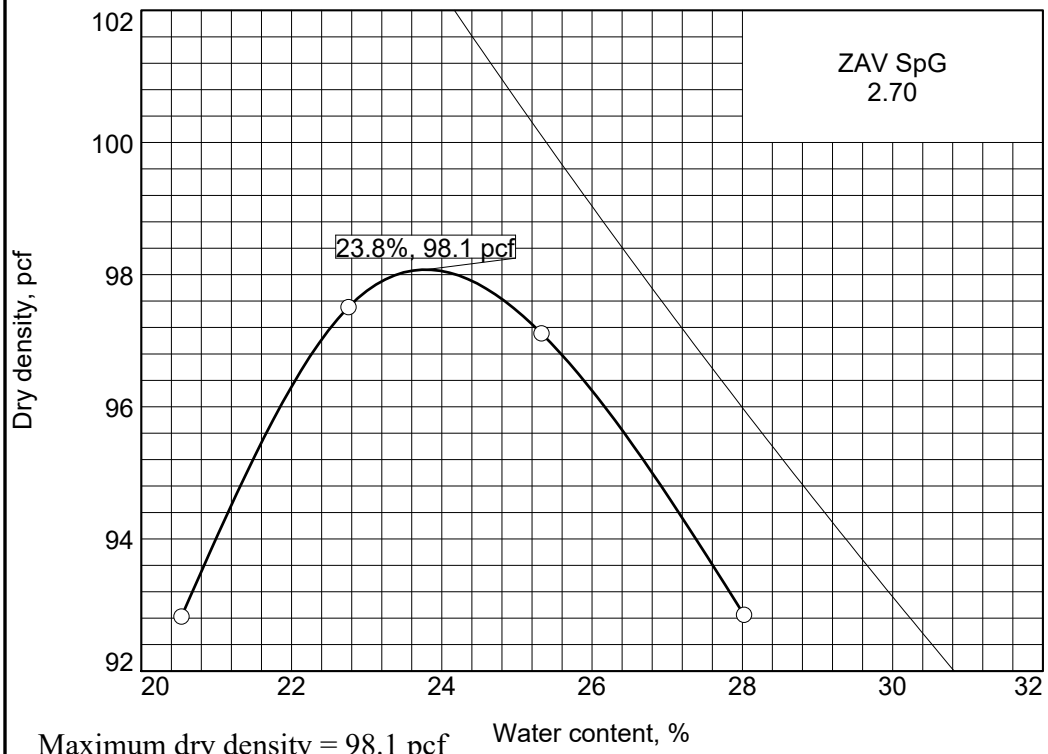
Remarks:

● Lab #25966
As received moisture content = 17.6%

Figure

Tested By: SG **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb.
Hammer Drop:	12 in.
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.03333 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	17.6	**Sp.G.**	2.7
LL	67	**PI**	26
%>#10	0.7	**%<#200**	61.5
USCS	MH	**AASHTO**	A-7-5(17)

Maximum dry density = 98.1 pcf

Optimum moisture = 23.8 %

TESTING DATA

	1	2	3	4	5	6
WM + WS	6071.4	5966.2	6083.9	6114.1		
WM	4281.3	4281.3	4281.3	4281.3		
WW + T #1	608.0	808.5	700.6	662.2		
WD + T #1	494.4	705.5	585.9	546.1		
TARE #1	89.0	203.9	81.9	87.7		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	28.0	20.5	22.8	25.3		
DRY DENSITY	92.9	92.8	97.5	97.1		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 98.4 pcf	98.1 pcf	Reddish Brown Sandy Elastic SILT
Optimum moisture =22.9 %	23.8 %	

Project No. US-EI-6162232368 **Client:** EGSci

Project: I-75 at CR 312/Bethlehem Road

○ **Source of Sample:** R-19 **Sample Number:** AS-1 **Depth:** 0-4.5 ft

Remarks:
Lab #25966

Figure

Tested By: KP **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	KP
Project Name	I-75 at CR 312/Bethlehem Rd PI 0017182	**Test Date**	6/18/2024
Boring No.	R-19	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	6/27/2024
Sample Depth	0-4.5 ft	**Lab No.**	25966
Sample Description	Reddish Brown Sandy Elastic SILT		

	Swell	Shrink
(1) Weight of Mold (g)	447.2	
Mold number / Cal. Due	4146	

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9965	(Shrink)	3.9965
Mold Height (in):	(Swell)	1.0000	(Shrink)	1.0000

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	846.1	398.9	120.5	ACT	201.9	598.7	520.9	319.0	77.8	24.4	96.9
Shrink	844.8	397.0	120.1								96.6

Swell

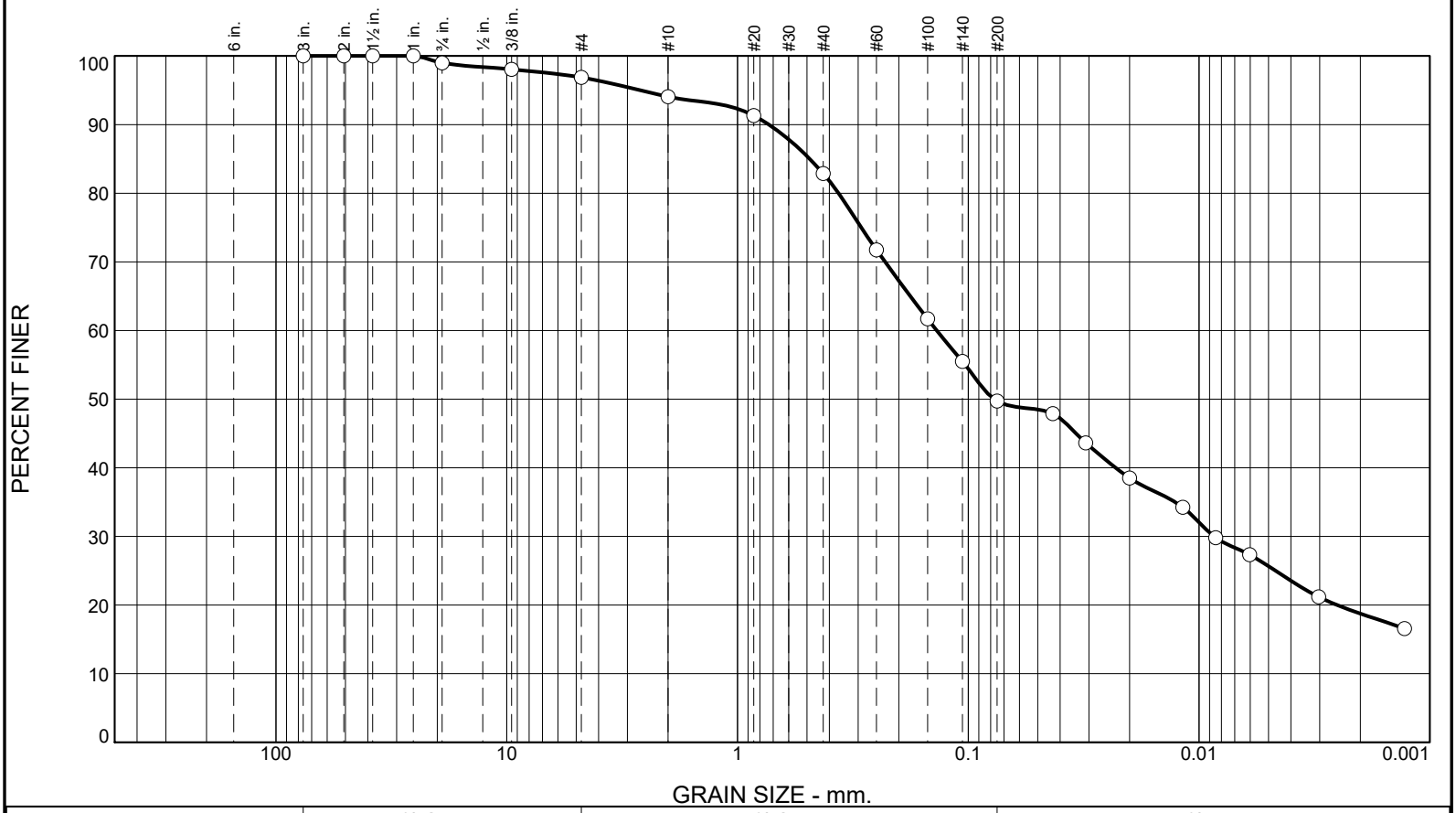
Initial Dial Reading:	0.433	A
After Soak Dial Reading:	0.503	B
Swell (%):	**7.0**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	0.9943	Tare ID: USA
After Drying Dial Reading (ht):	0.9736	
After Drying Dia. Reading (d):	3.9190	
	3.9180	
	3.9260	
	3.9265	
Average:	3.9224	
Original Volume (in^3):	12.473	
Final Volume (in^3):	11.764	
Shrinkage (%):	**5.7**	

Total Volume Change (%):	12.7
Plus #10 Sieve Correction Factor:	0.993
Corrected Total Volume Change (%):	**12.6**

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.0	2.1	2.8	11.2	33.2	31.0	18.7

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	99.0		
.375	98.1		
#4	96.9		
#10	94.1		
#20	91.3		
#40	82.9		
#60	71.7		
#100	61.7		
#140	55.5		
#200	49.7		
0.0430 mm.	47.9		
0.0310 mm.	43.6		
0.0200 mm.	38.5		
0.0118 mm.	34.3		
0.0085 mm.	29.8		
0.0060 mm.	27.3		
0.0030 mm.	21.2		
0.0013 mm.	16.6		

* (no specification provided)

Soil Description

Reddish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.7312 D_{85}= 0.4867 D_{60}= 0.1369
D_{50}= 0.0774 D_{30}= 0.0086 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26735
As received moisture content = 21.4%

Source of Sample: R-20 **Depth:** 0-5 ft
Sample Number: AS-1

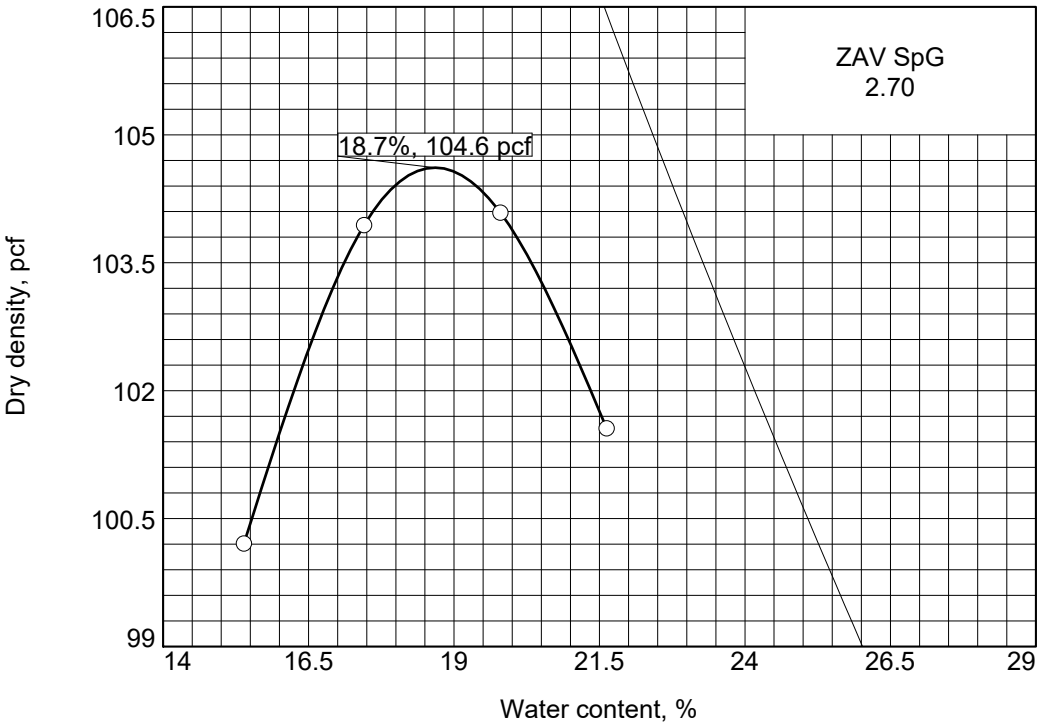
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

COMPACTION TEST REPORT



Curve No.

Test Specification:
GDOT GDT 7

Hammer Wt.:	5.5 lb
Hammer Drop:	12 in
Number of Layers:	three
Blows per Layer:	25
Mold Size:	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

Soil Data

NM	21.4	**Sp.G.**	2.7
LL	N/A	**PI**	N/A
%>#10	5.9	**%<#200**	49.7
USCS	N/A	**AASHTO**	N/A

TESTING DATA

	1	2	3	4	5	6
WM + WS	3893.0	3932.3	3914.6	3795.8		
WM	2054.5	2054.5	2054.5	2054.5		
WW + T #1	722.3	759.7	750.1	888.2		
WD + T #1	643.7	668.1	649.6	794.4		
TARE #1	193.4	205.4	184.8	184.9		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	17.5	19.8	21.6	15.4		
DRY DENSITY	103.9	104.1	101.6	100.2		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 106.9 pcf	104.6 pcf	Reddish Brown Silty SAND
Optimum moisture =18.2 %	18.7 %	

Project No. US-EI-6162232368 **Client:** EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

○ **Source of Sample:** R-20 **Depth:** 0-5 ft **Sample Number:** AS-1

Remarks:
Lab #26735

Figure

Tested By: DC **Checked By:** TZ

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	DC
Project Name	I-75 at CR313/Bethlehem Rd PI 0017182	**Test Date**	10/15/2024
Boring No.	R-20	**Reviewed By**	TZ
Sample No.	AS-1	**Review Date**	10/18/2024
Sample Depth	0-5 ft	**Lab No.**	26735
Sample Description	Reddish Brown Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	445.8	448.7
Mold number / Cal. Due	4151	4148

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9968	(Shrink)	3.9963
Mold Height (in):	(Swell)	1.0008	(Shrink)	1.0017

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	861.0	415.2	125.4	FAT	642.6	1054.2	987.3	344.7	66.9	19.4	105.0
Shrink	860.6	411.9	124.4								104.2

Swell

Initial Dial Reading:	0.452	A
After Soak Dial Reading:	0.589	B
Swell (%):	**13.7**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0000	Tare ID: FAT
After Drying Dial Reading (ht):	0.9935	
After Drying Dia. Reading (d):	3.9490	
	3.9530	
	3.9475	
	3.9520	
Average:	3.9504	
Original Volume (in^3):	12.543	
Final Volume (in^3):	12.177	
Shrinkage (%):	**2.9**	

Total Volume Change (%):	16.6
Plus #10 Sieve Correction Factor:	0.954
Corrected Total Volume Change (%):	**15.8**

MOISTURE CONTENT

ASTM D2216-19

Project Name I-75 @ CR312/Bethlehem Rd PI0017182 **Project No.** US-EI-6162232368

Tested By AG **Reviewed By** TZ

Test Date 10/2/2024 **Review Date** 10/9/2024

Boring No.	Sample No.	Depth (Ft)	Lab No.	Tare No.	Tare Wt. (grams)	Wet Soil + Tare (grams)	Dry Soil + Tare (grams)	Dry Soil Wt (grams)	Moisture Content (%)
B2-1	S1	1-2.5	26609	B-22	22.25	67.62	58.95	36.7	23.6
B3-1	S1	1-2.5	26628	R-52	15.83	70.83	64.62	48.79	12.7
B3-3	S1	1-2.5	26638	R-8	16.41	52.86	48.23	31.82	14.6
B3-6	S1	1-2.5	26656	A-78	15.78	50.26	45.55	29.77	15.8

MOISTURE CONTENT

ASTM D2216-19

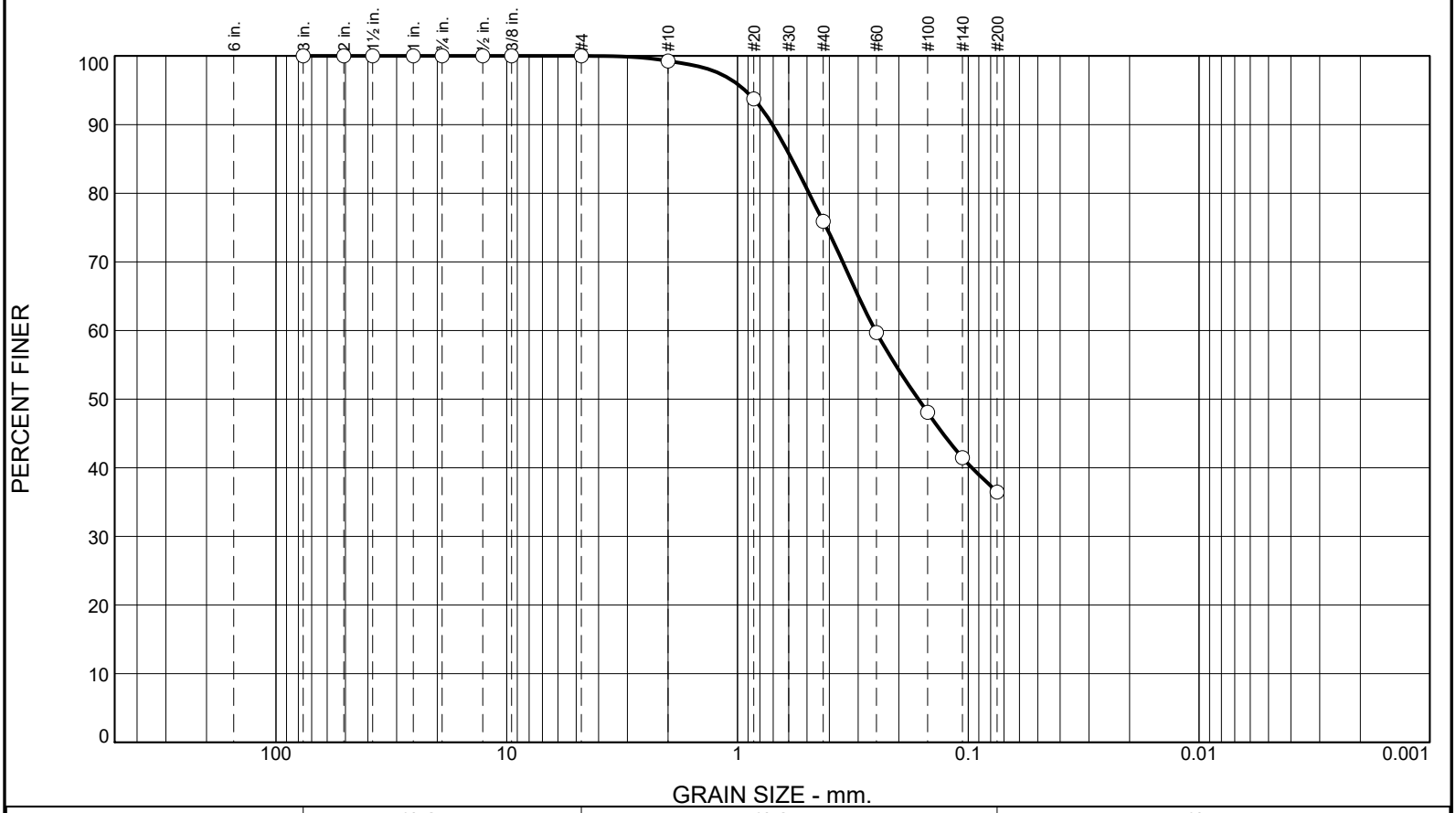
Project Name I-75 @ CR312/Bethlehem Rd PI0017182 **Project No.** US-EI-6162232368

Tested By KP **Reviewed By** TZ

Test Date 10/16/2024 **Review Date** 10/18/2024

Boring No.	Sample No.	Depth (Ft)	Lab No.	Tare No.	Tare Wt. (grams)	Wet Soil + Tare (grams)	Dry Soil + Tare (grams)	Dry Soil Wt (grams)	Moisture Content (%)
C-3	S1	1-2.5	26675	SS-51	144.66	215.02	207.76	63.1	11.5
C-4	S2	3.5-5	26680	SS-12	89.02	181.17	164.65	75.63	21.8
C-6	S1	1-2.5	26689	SS-56	142.50	248.91	229.96	87.46	21.7
R-11	S1	1-2.5	26710	SS-31	97.30	195.18	181.10	83.80	16.8
R-12	S1	1-2.5	26713	SS-55	142.65	229.64	217.54	74.89	16.2
R-6	S1	0.2-1	26723	SS-20	89.11	281.18	256.57	167.46	14.7
R-6	S2	1-1.5	26724	LS-64	88.86	192.80	186.32	97.46	6.6
R-9	S1	0.2-1	26727	LS-59	87.91	236.01	216.48	128.57	15.2
R-15	S1	0-1	26731	LS-56	89.03	189.96	174.48	85.45	18.1
R-15	S2	1-2	26732	LS-39	92.95	242.93	213.32	120.37	24.6
R-16	AS-1	0-1.8	26733	BC-3	88.21	157.30	154.31	66.1	4.5
R-18	S1	0-1	26734	LS-40	94.45	306.18	295.91	201.46	5.1

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.7	23.4	39.4	36.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.3		
#20	93.7		
#40	75.9		
#60	59.7		
#100	48.1		
#140	41.5		
#200	36.5		

* (no specification provided)

Soil Description

Reddish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.7059 D_{85}= 0.5827 D_{60}= 0.2528
D_{50}= 0.1645 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26610
As received moisture content = 26.7%

Source of Sample: B2-1 **Depth:** 6-7.5 ft
Sample Number: S3

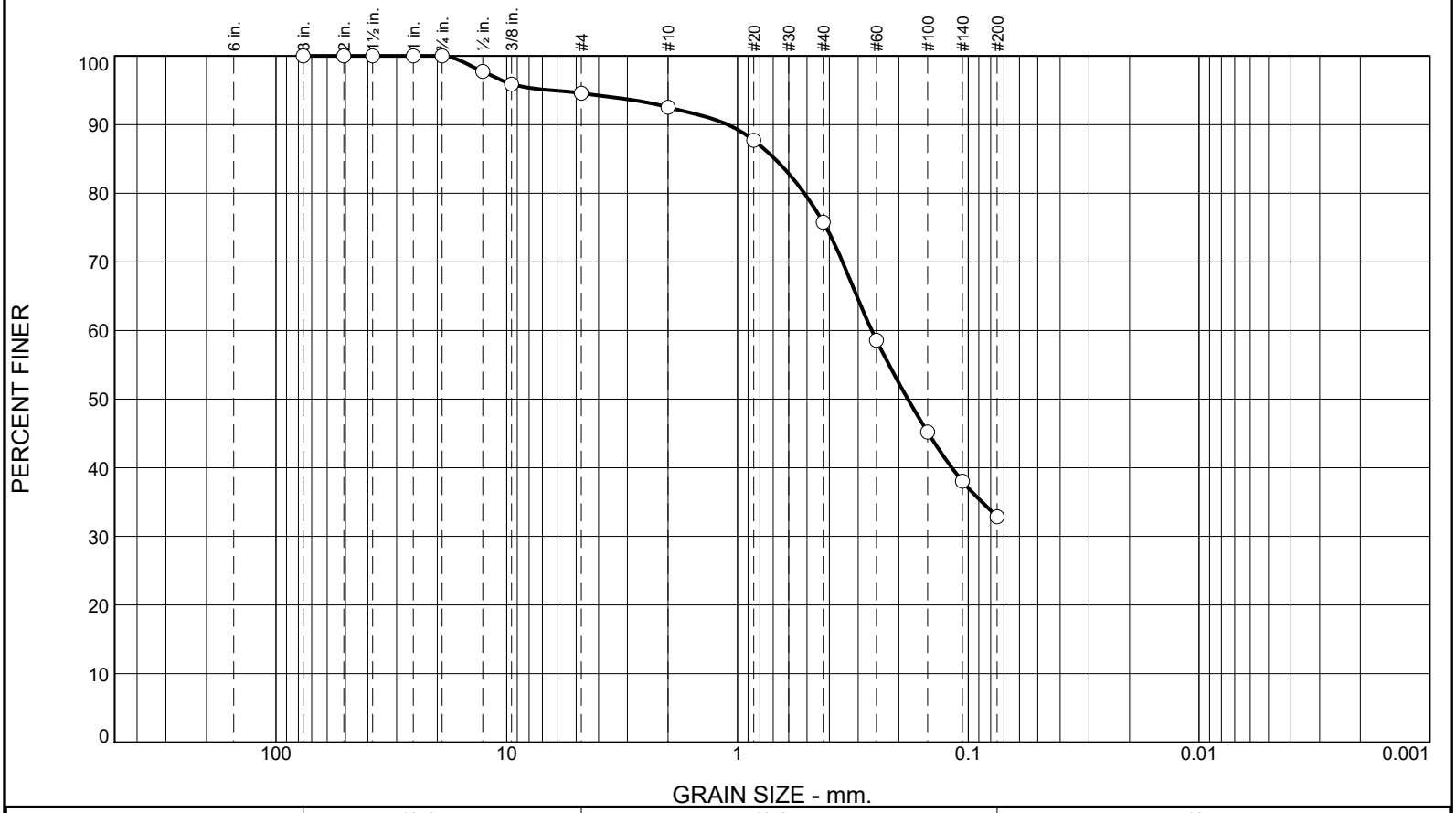
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6713



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	5.4	2.1	16.7	42.9	32.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	97.7		
.375	95.9		
#4	94.6		
#10	92.5		
#20	87.7		
#40	75.8		
#60	58.6		
#100	45.2		
#140	38.0		
#200	32.9		

* (no specification provided)

Soil Description

Reddish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.1044 D_{85}= 0.6881 D_{60}= 0.2620
D_{50}= 0.1826 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26611
As received moisture content = 27.6%

Source of Sample: B2-1 **Depth:** 13.5-15 ft
Sample Number: S5

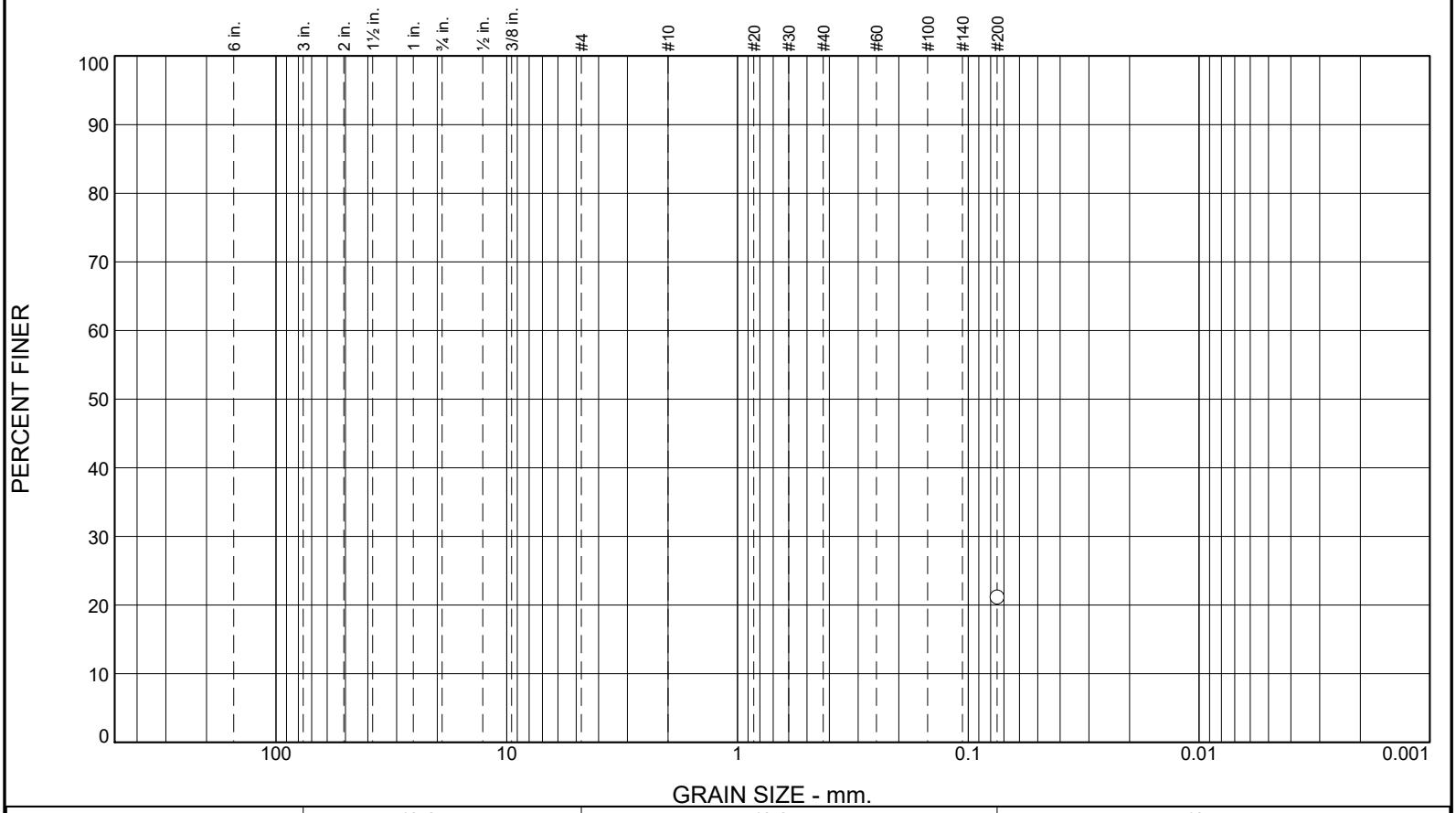
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						21.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	21.2		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26612
As received moisture content = 23.2%

Source of Sample: B2-1 **Depth:** 33.5-35 ft
Sample Number: S9

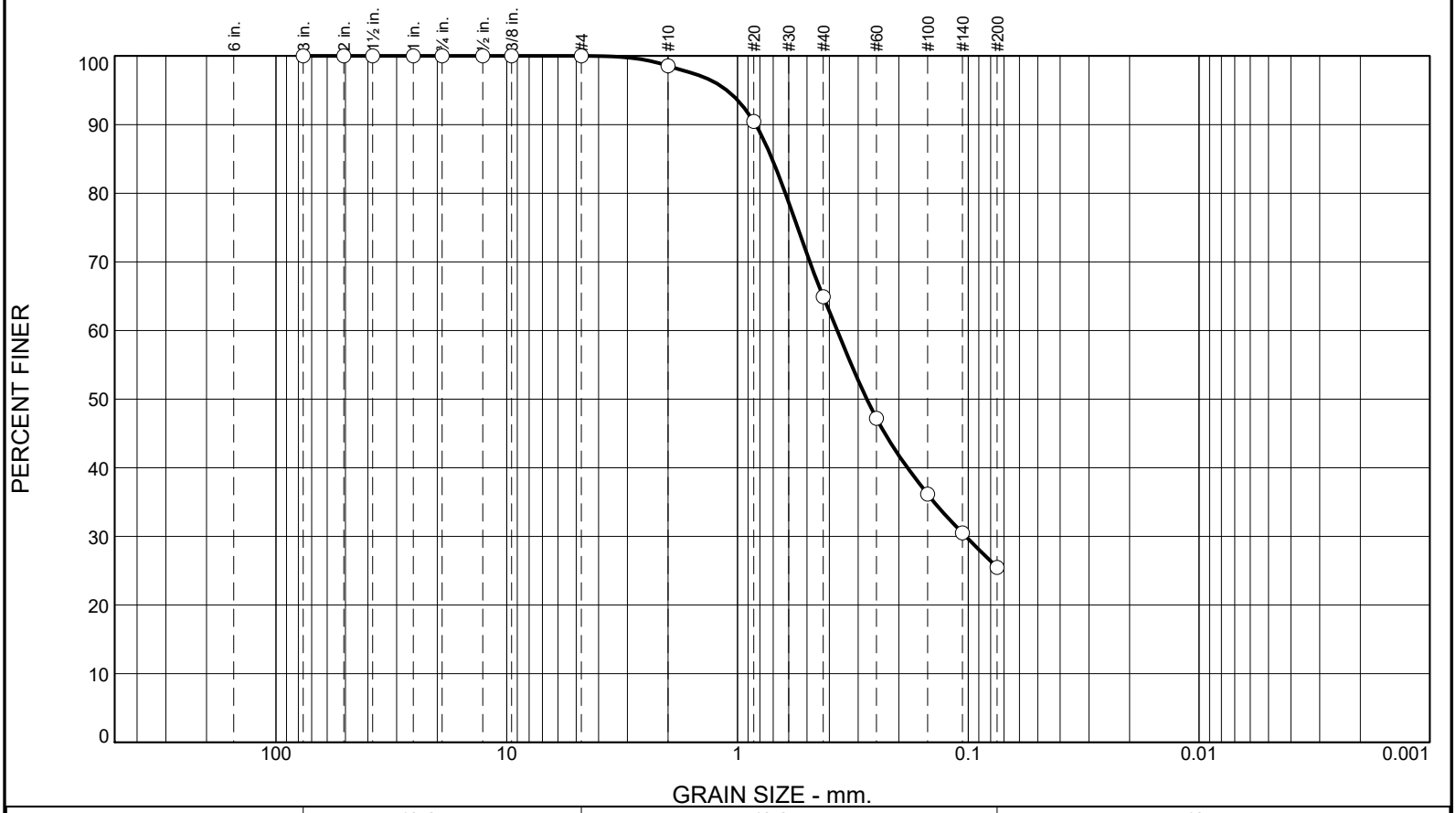
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.4	33.7	39.4	25.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	98.6		
#20	90.5		
#40	64.9		
#60	47.2		
#100	36.2		
#140	30.5		
#200	25.5		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.8339 D_{85}= 0.7076 D_{60}= 0.3699
D_{50}= 0.2752 D_{30}= 0.1026 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26613
As received moisture content = 23.0%

Source of Sample: B2-1 **Depth:** 48.5-50 ft
Sample Number: S12

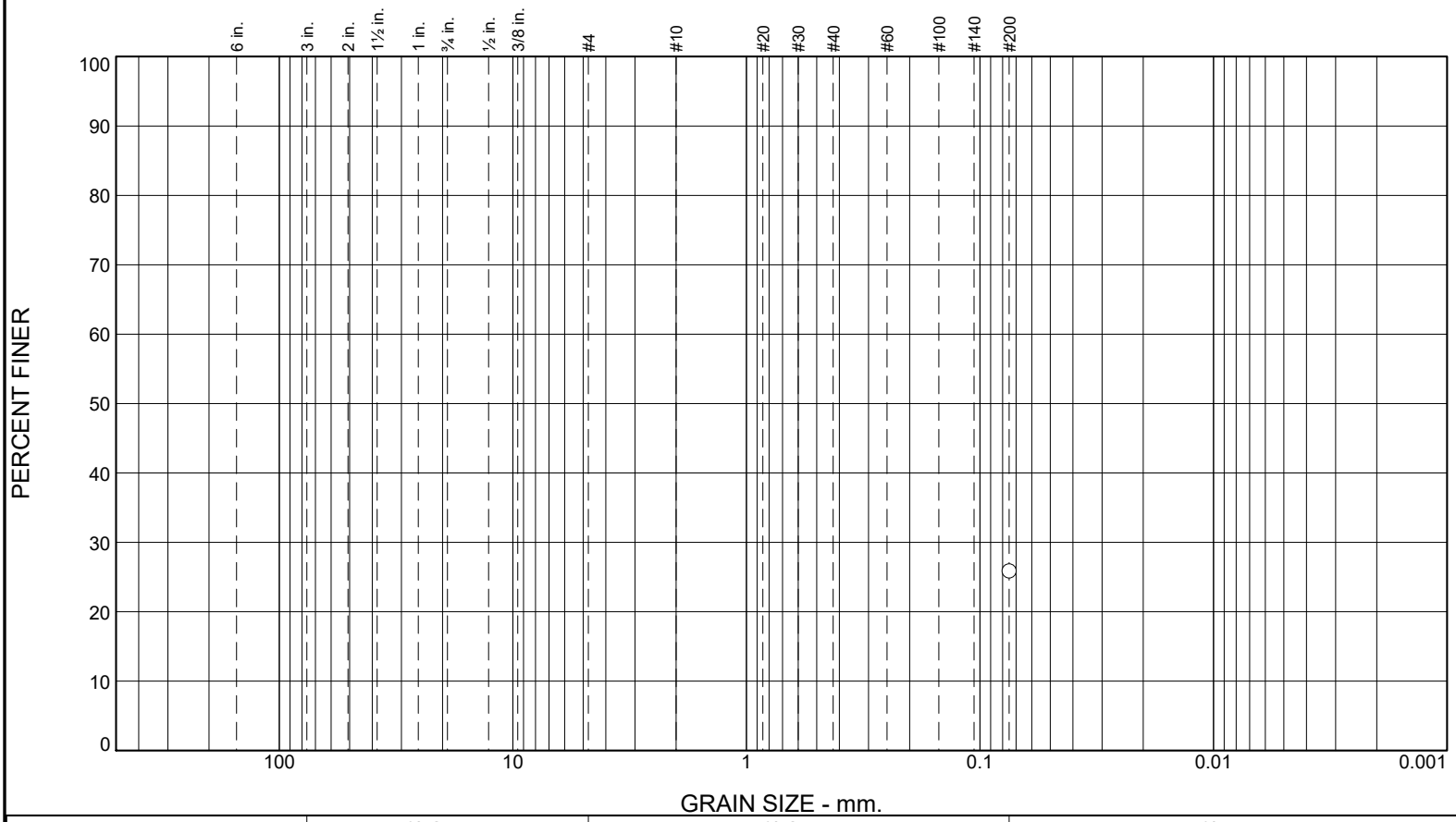
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						25.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	25.9		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26614
As received moisture content = 25.0%

Source of Sample: B2-1 **Depth:** 63.5-65 ft
Sample Number: S15

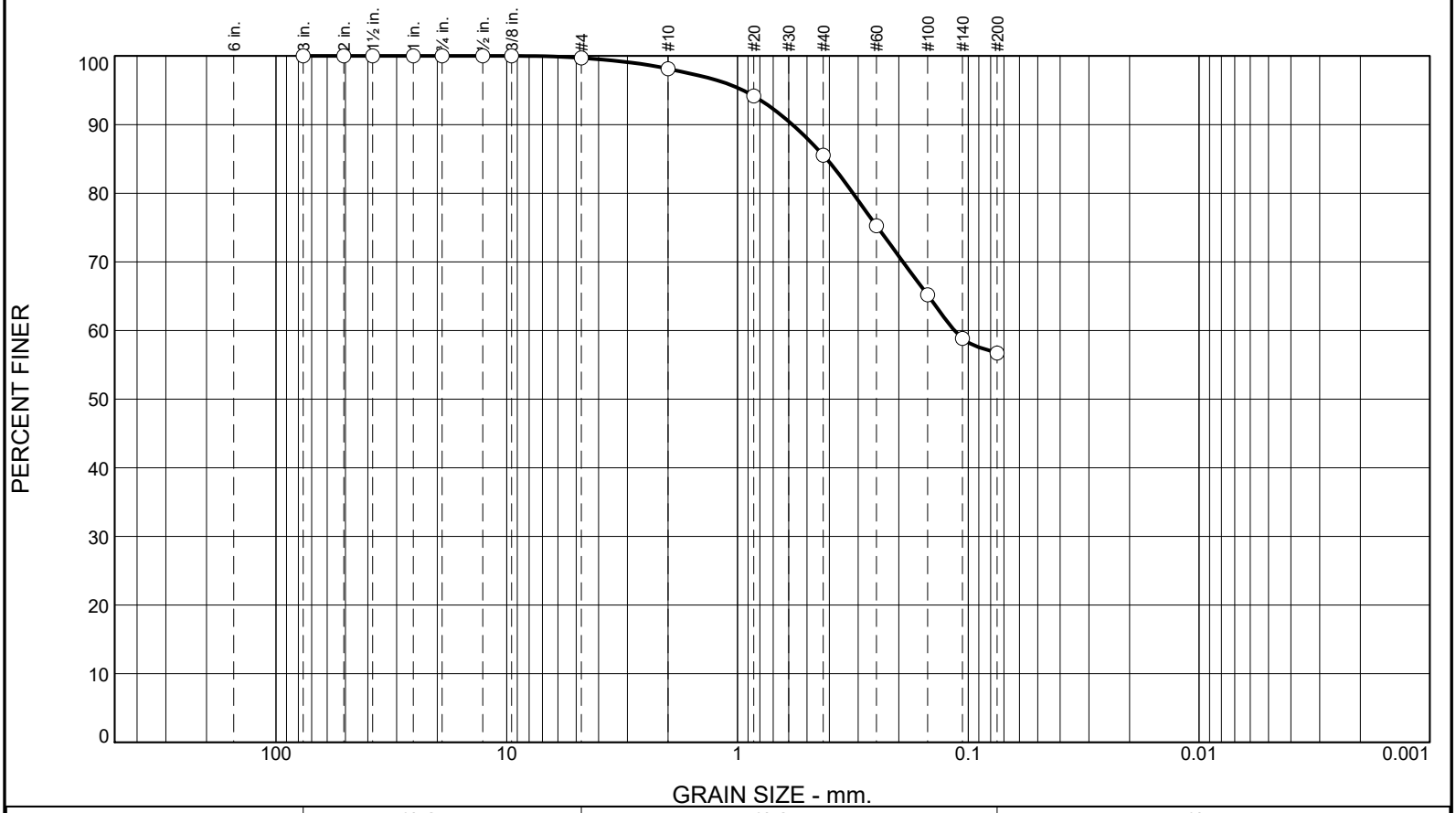
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	1.6	12.6	28.8	56.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.7		
#10	98.1		
#20	94.2		
#40	85.5		
#60	75.3		
#100	65.2		
#140	58.8		
#200	56.7		

* (no specification provided)

Soil Description

Reddish Brown Sandy CLAY

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5785 D_{85}= 0.4112 D_{60}= 0.1148
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26615
As received moisture content = 20.8%

Source of Sample: B2-2 **Depth:** 1-2.5 ft
Sample Number: S1

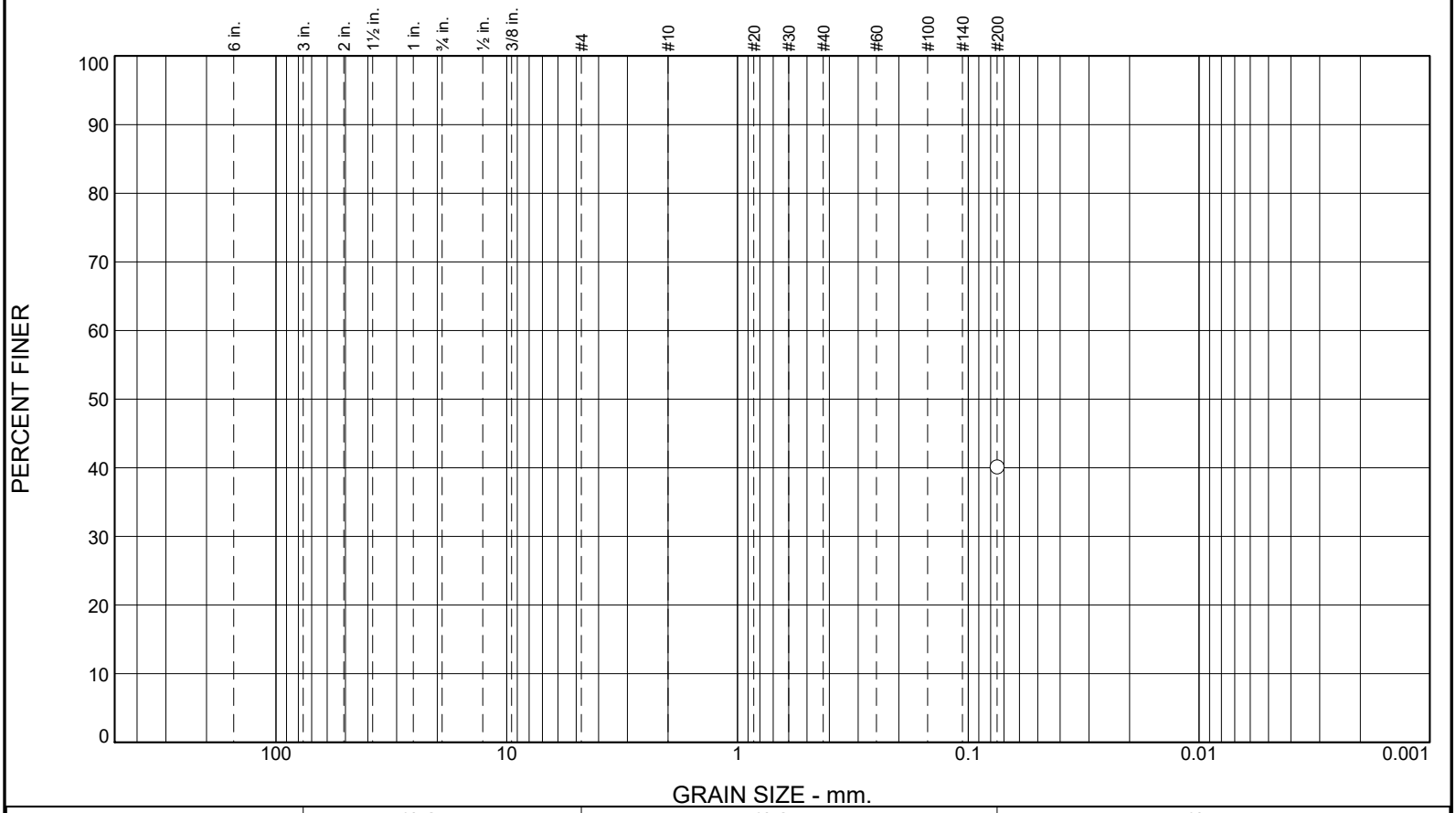
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						40.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	40.1		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26616
As received moisture content = 26.2%

Source of Sample: B2-2 **Depth:** 6-7.5
Sample Number: S3

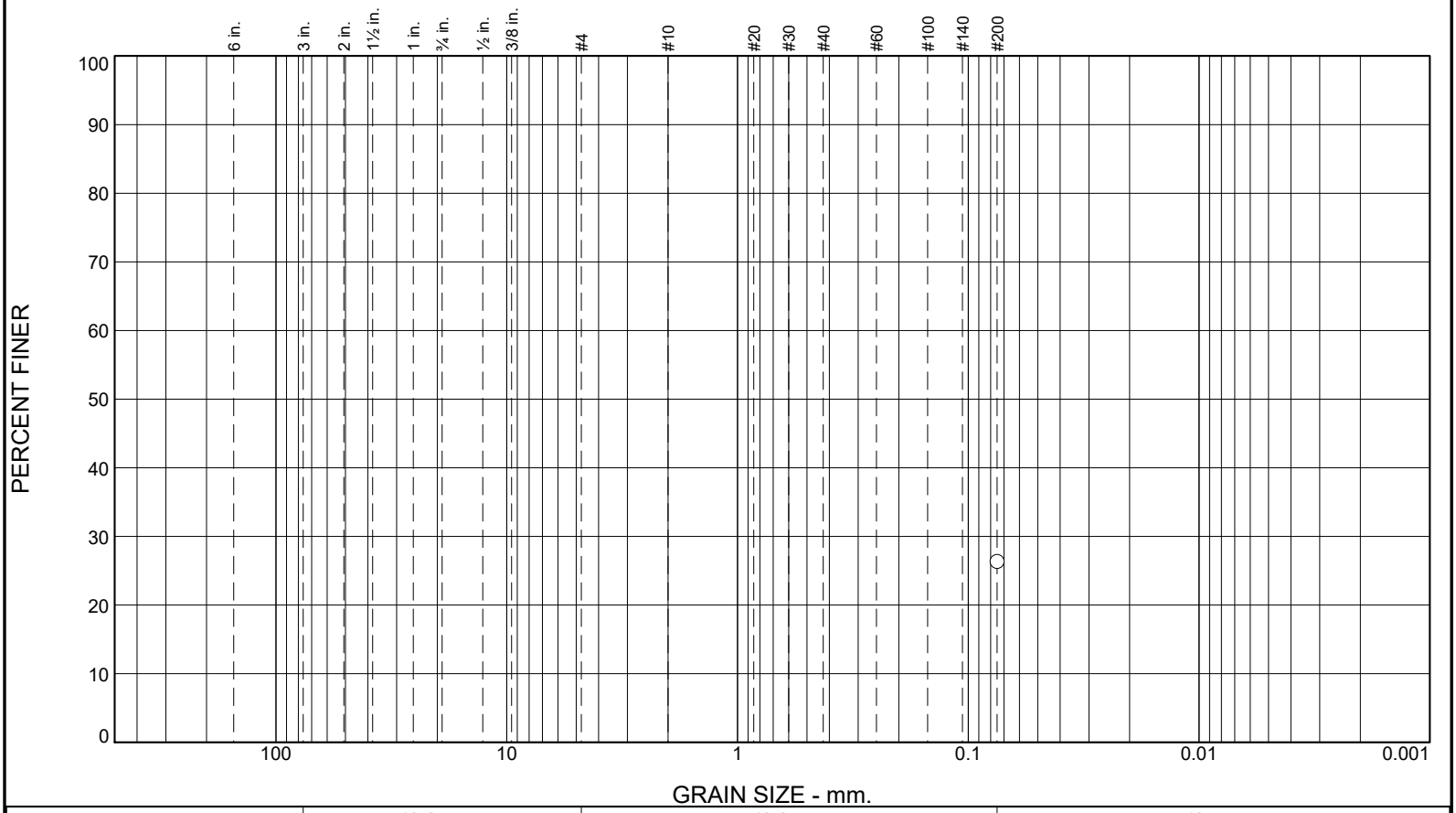
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						26.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	26.3		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26617
As received moisture content = 19.7%

Source of Sample: B2-2 **Depth:** 24.5-25 ft
Sample Number: S7b

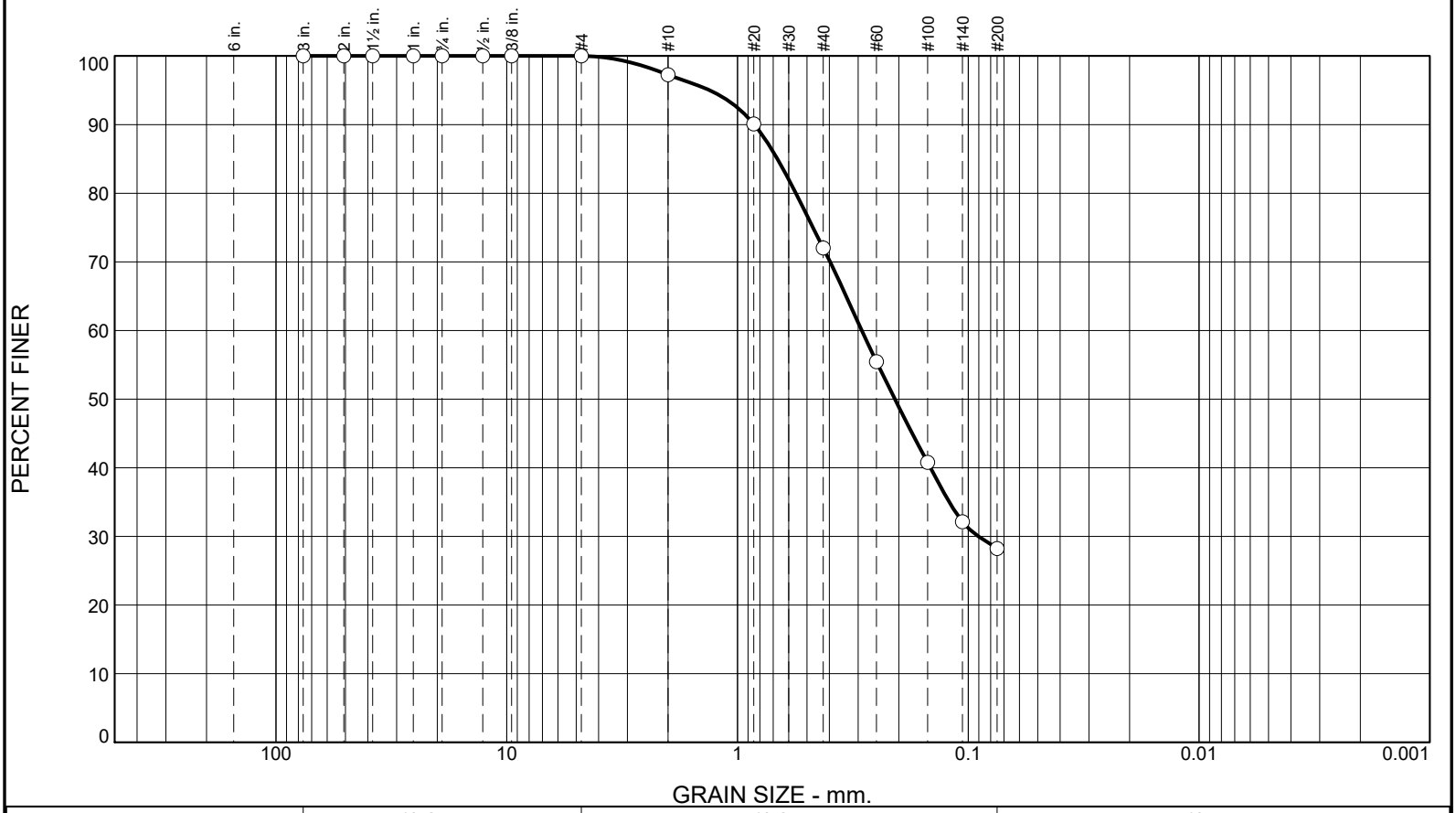
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	2.7	25.3	43.8	28.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	97.3		
#20	90.1		
#40	72.0		
#60	55.5		
#100	40.8		
#140	32.1		
#200	28.2		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.8449 D_{85}= 0.6716 D_{60}= 0.2893
D_{50}= 0.2080 D_{30}= 0.0903 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26618
As received moisture content = 27.8%

Source of Sample: B2-2 **Depth:** 43.5-45 ft
Sample Number: S11

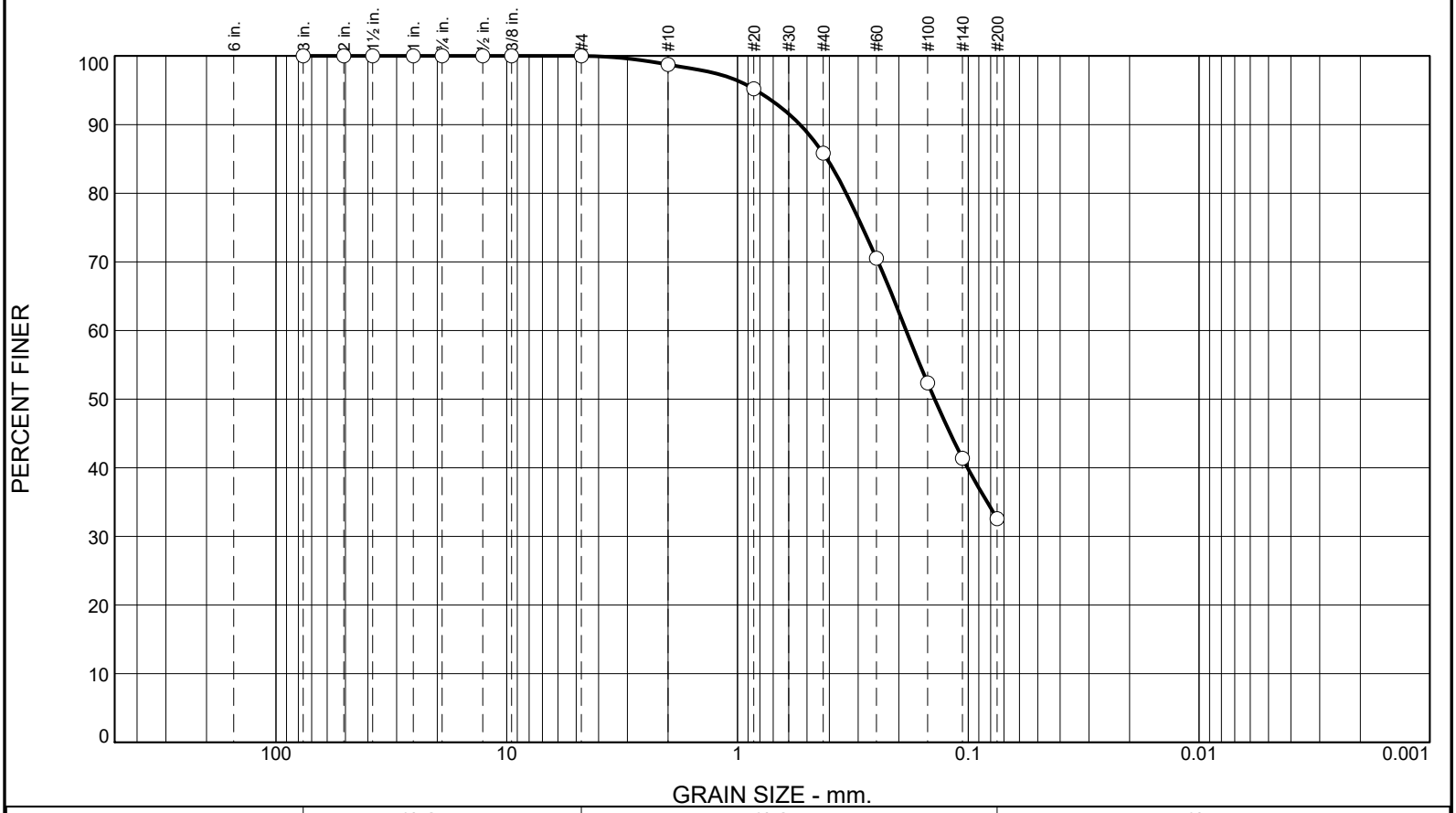
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.3	12.9	53.2	32.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	98.7		
#20	95.2		
#40	85.8		
#60	70.5		
#100	52.4		
#140	41.4		
#200	32.6		

* (no specification provided)

Soil Description

Dark Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5360 D_{85}= 0.4092 D_{60}= 0.1858
D_{50}= 0.1398 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26619
As received moisture content = 20.8%

Source of Sample: B2-2 **Depth:** 63.5-65 ft
Sample Number: S15

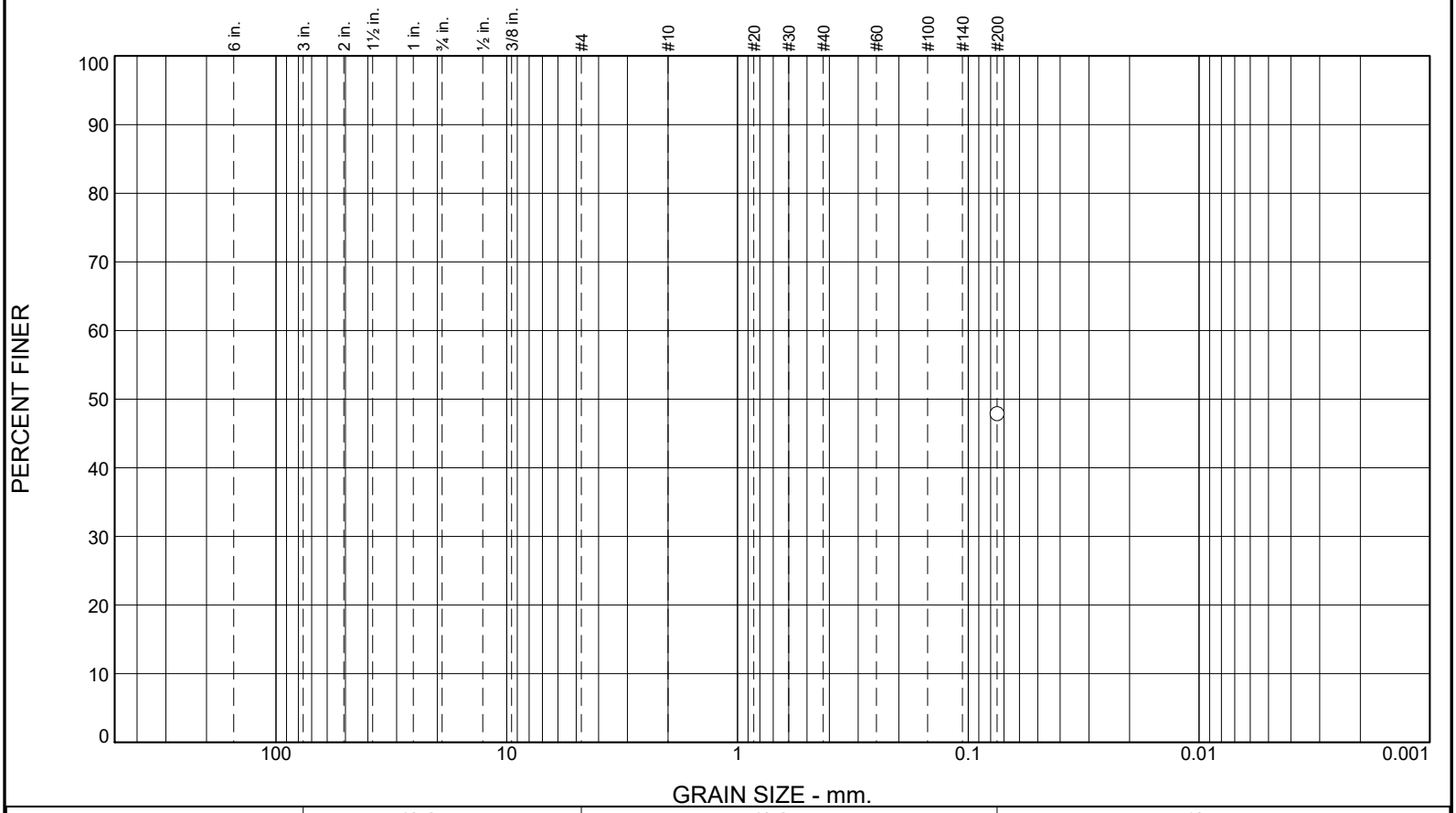
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						47.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	47.9		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26620
As received moisture content = 16.3%

Source of Sample: B2-3 **Depth:** 1-2.5 ft
Sample Number: S1

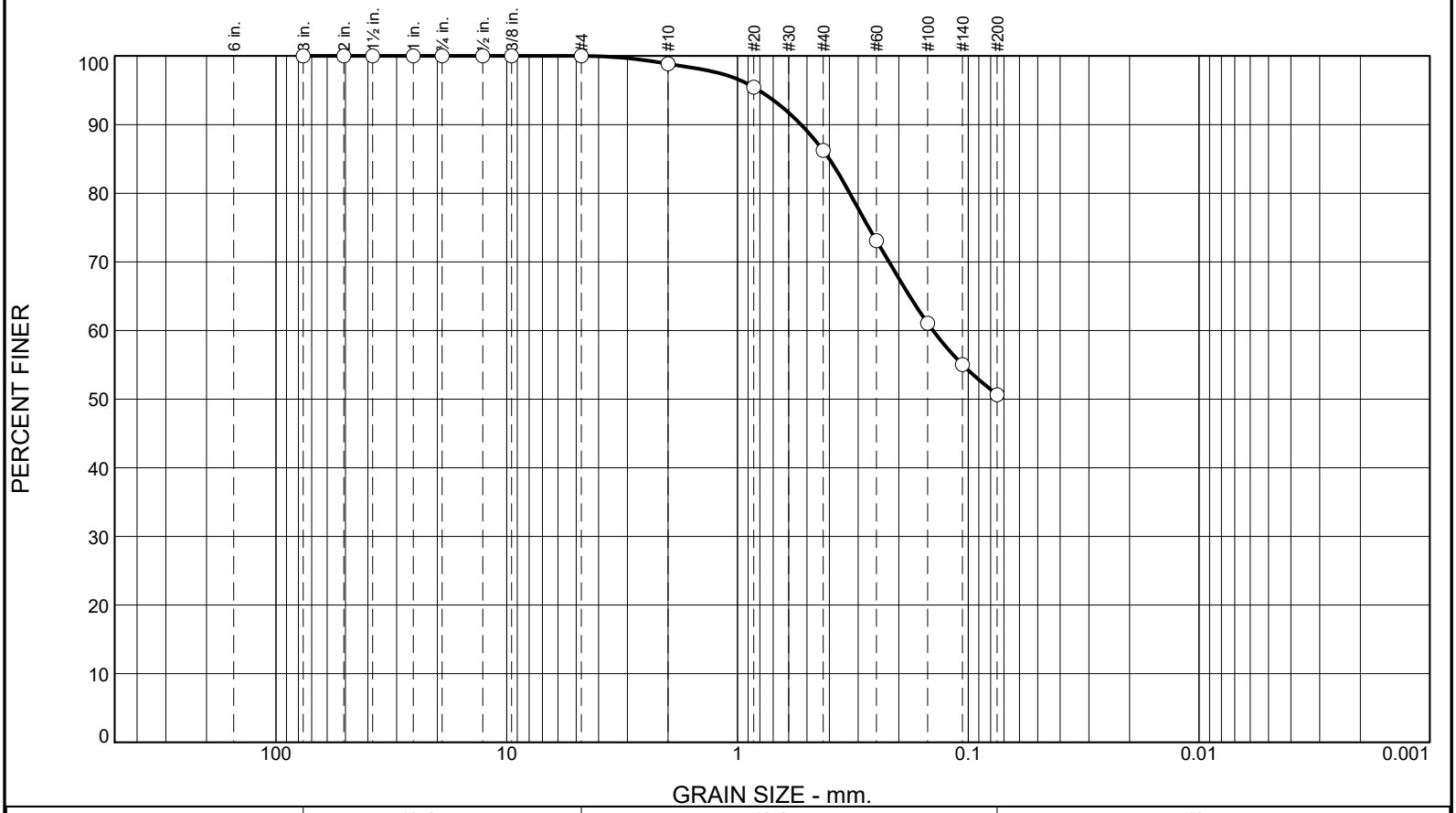
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.1	12.7	35.6	50.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	98.9		
#20	95.5		
#40	86.2		
#60	73.1		
#100	61.1		
#140	55.0		
#200	50.6		

* (no specification provided)

Soil Description

Red Sandy Elastic SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5307 D_{85}= 0.4001 D_{60}= 0.1422
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26621
As received moisture content = 20.2%

Source of Sample: B2-3 **Depth:** 3.5-5 ft
Sample Number: S2

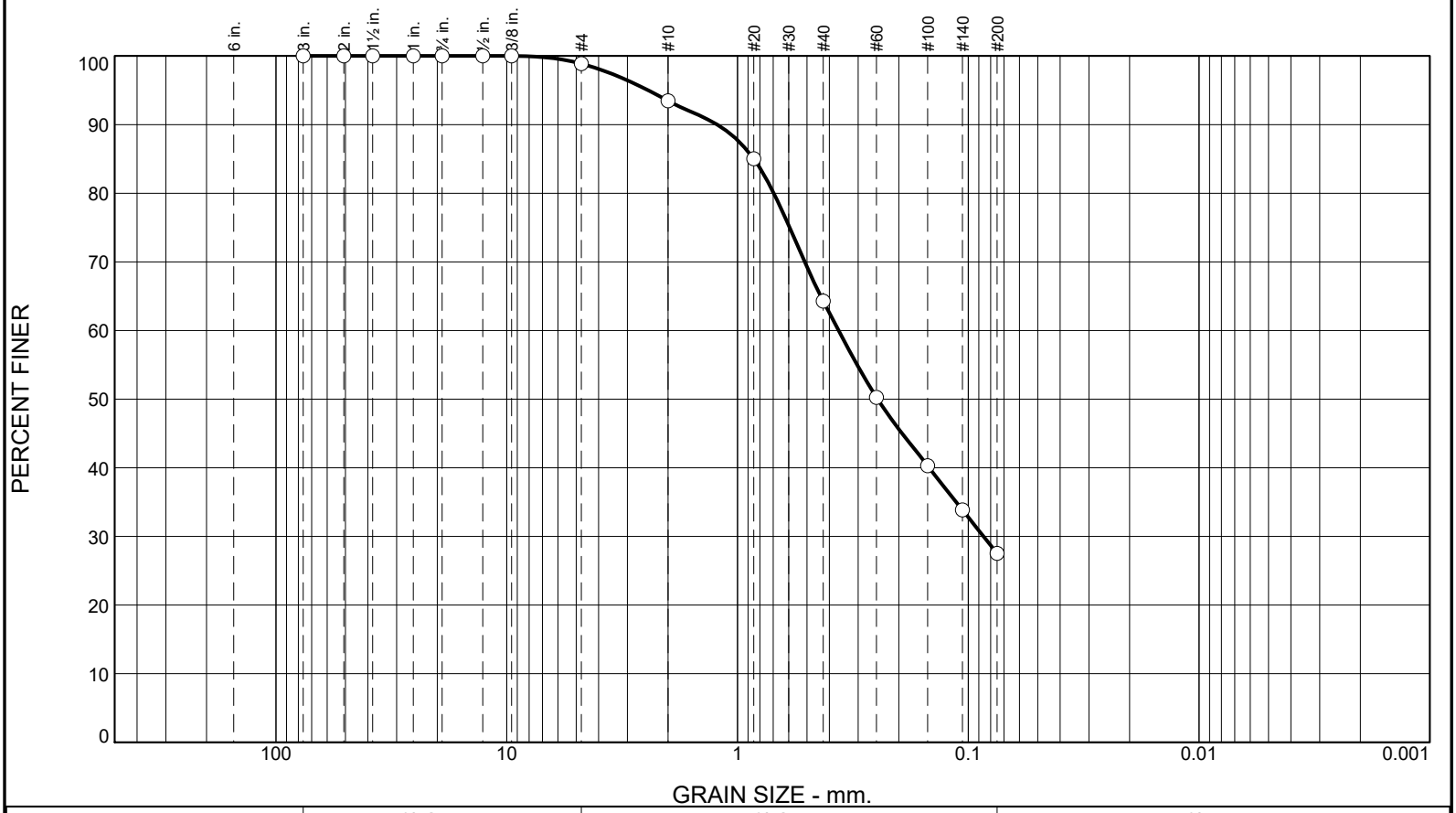
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.1	5.4	29.2	36.8	27.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	98.9		
#10	93.5		
#20	85.0		
#40	64.3		
#60	50.3		
#100	40.3		
#140	33.8		
#200	27.5		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.2259 D_{85}= 0.8492 D_{60}= 0.3647
D_{50}= 0.2472 D_{30}= 0.0859 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26622
As received moisture content = 27.1%

Source of Sample: B2-3 **Depth:** 13.5-15 ft
Sample Number: S5

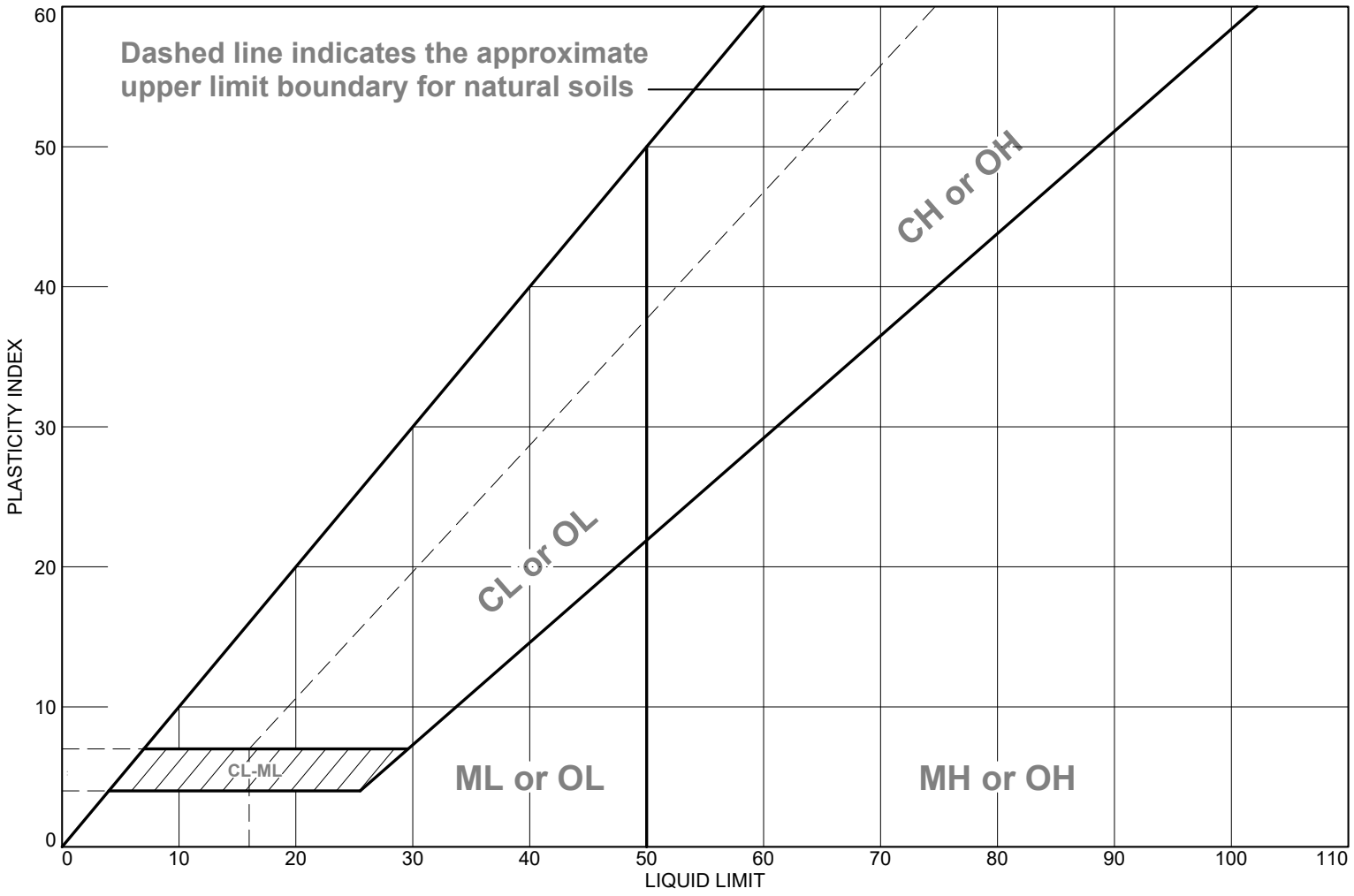
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Silty SAND	NV	NP	NP	N/A	41.1	SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B2-3 **Depth:** 15-17 ft **Sample Number:** ST1

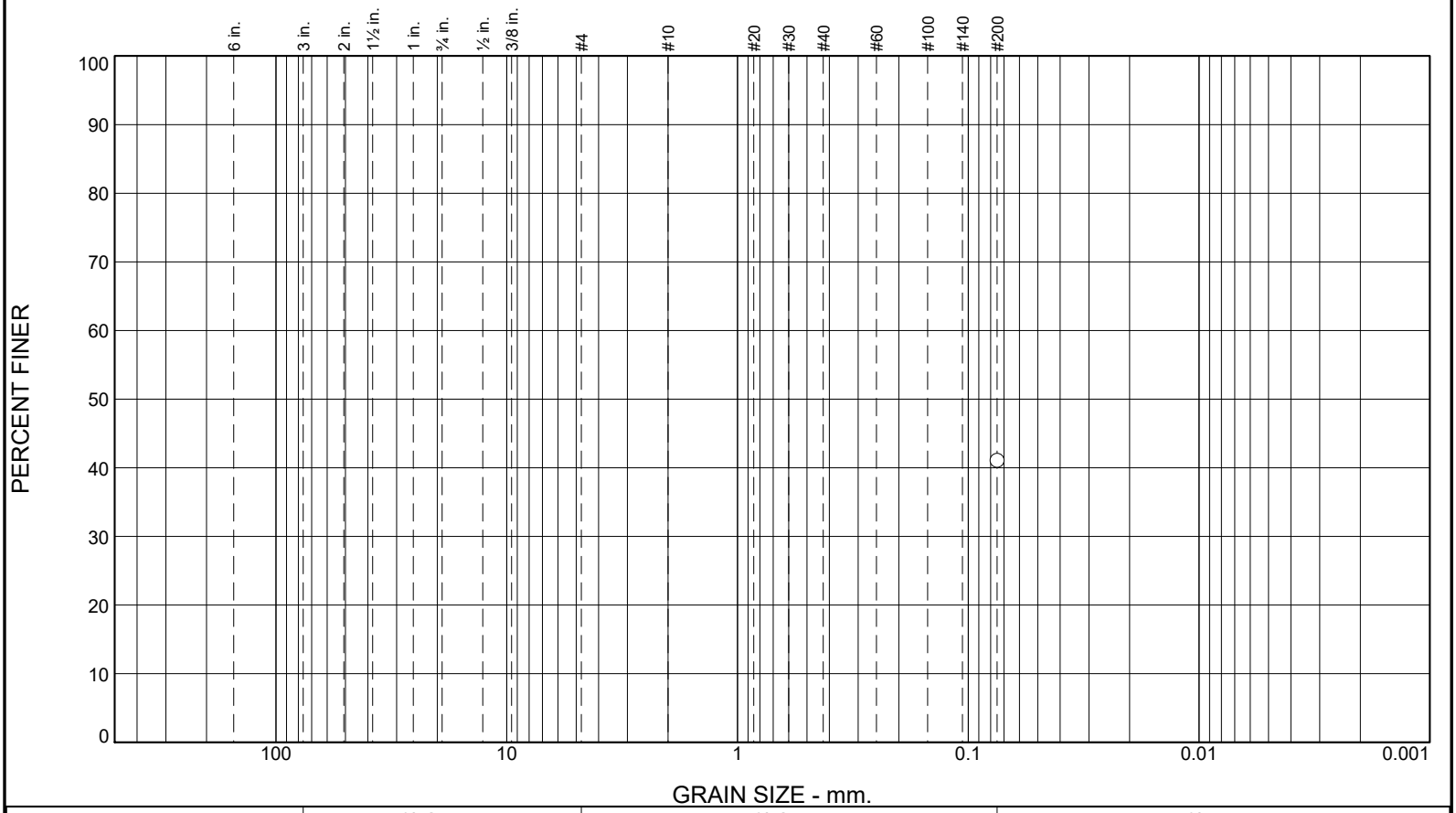
Remarks:

● Lab #26623
As received moisture content = 18.5%

Figure

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						41.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	41.1		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= N/A

Remarks

Lab #26623
As received moisture content = 18.5%

Source of Sample: B2-3 **Depth:** 15-17 ft
Sample Number: ST1

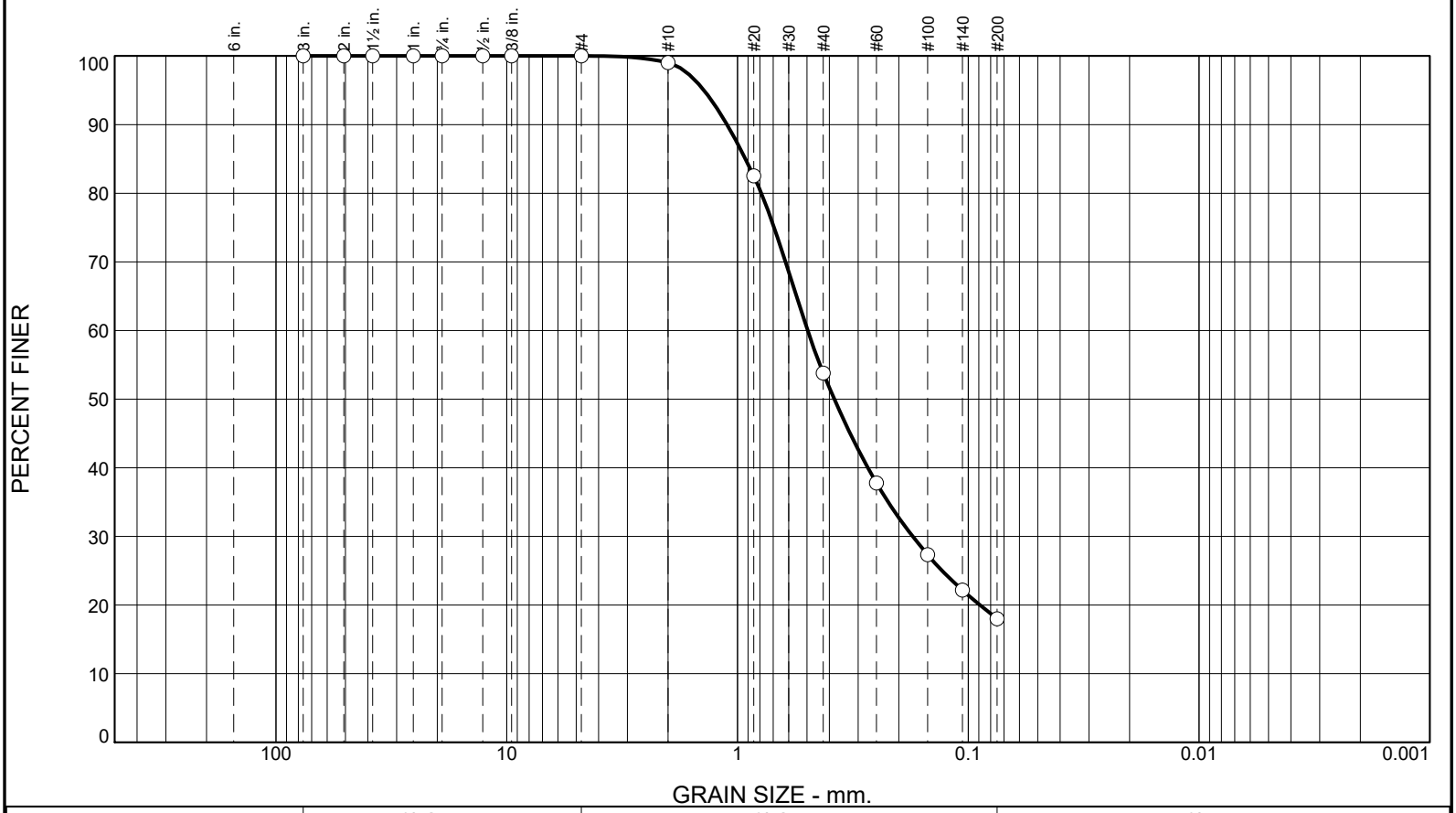
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.0	45.2	35.8	18.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.0		
#20	82.5		
#40	53.8		
#60	37.8		
#100	27.3		
#140	22.2		
#200	18.0		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.1108 D_{85}= 0.9238 D_{60}= 0.4964
D_{50}= 0.3808 D_{30}= 0.1740 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26624
As received moisture content = 17.3%

Source of Sample: B2-3 **Depth:** 28.5-30 ft
Sample Number: S8

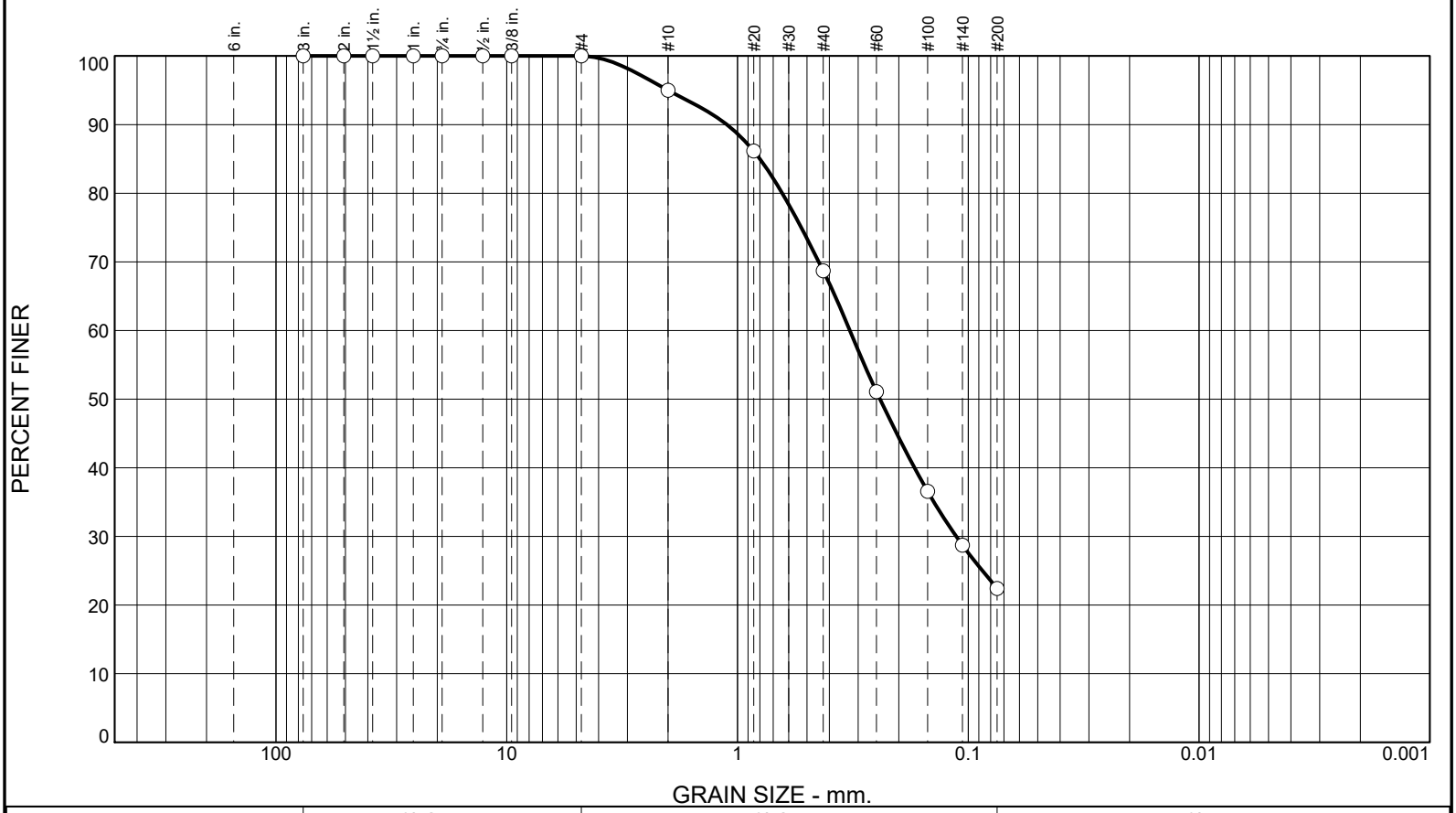
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	5.0	26.3	46.3	22.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	95.0		
#20	86.1		
#40	68.7		
#60	51.1		
#100	36.6		
#140	28.7		
#200	22.4		

* (no specification provided)

Soil Description

Brown Clayey SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.1128 D_{85}= 0.7996 D_{60}= 0.3259
D_{50}= 0.2413 D_{30}= 0.1128 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26625
As received moisture content = 24.1%

Source of Sample: B2-3 **Depth:** 53.5-55 ft
Sample Number: S13

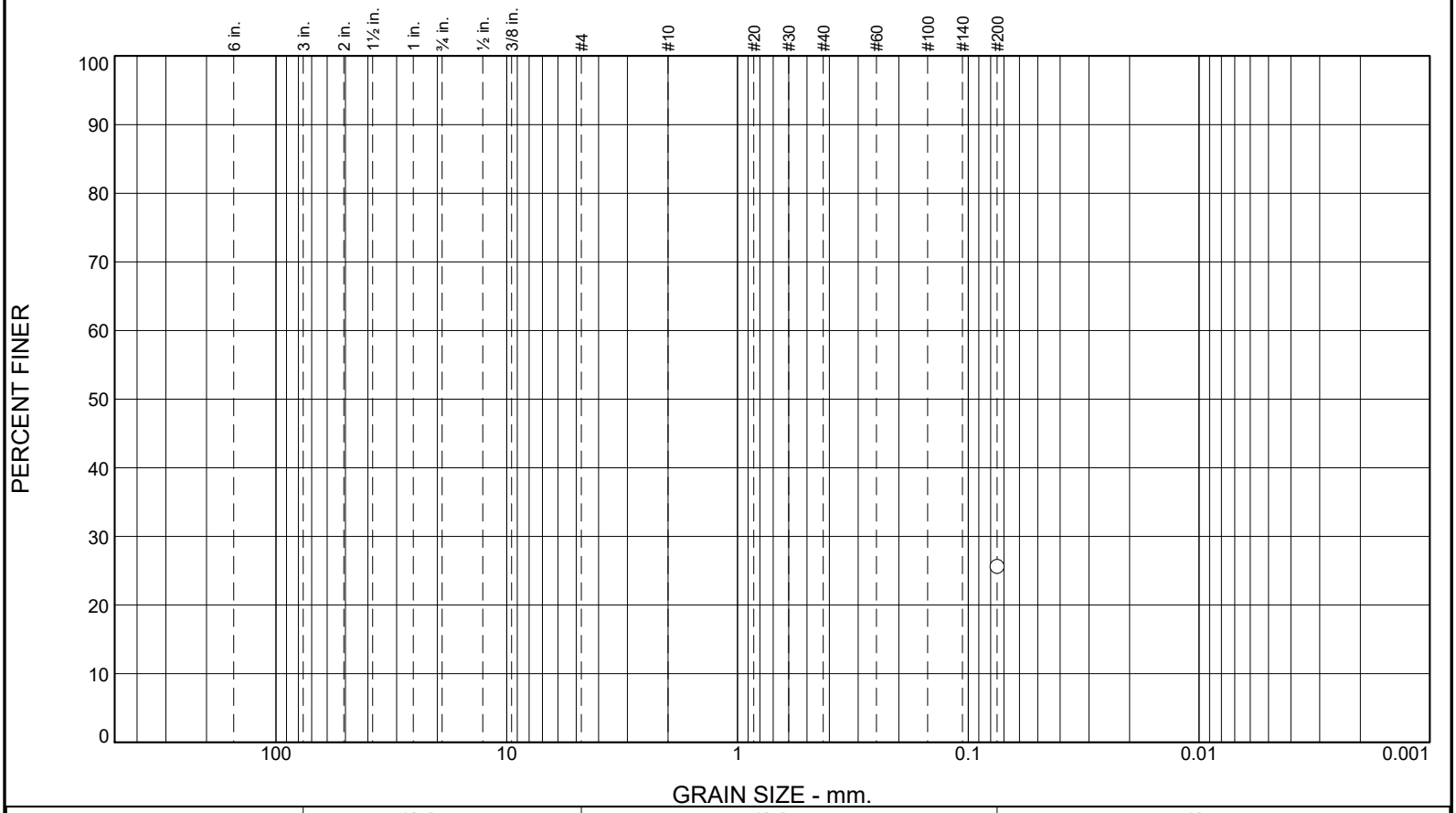
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						25.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	25.6		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26626
As received moisture content = 18.0%

Source of Sample: B2-3 **Depth:** 68.5-69.4 ft
Sample Number: S16

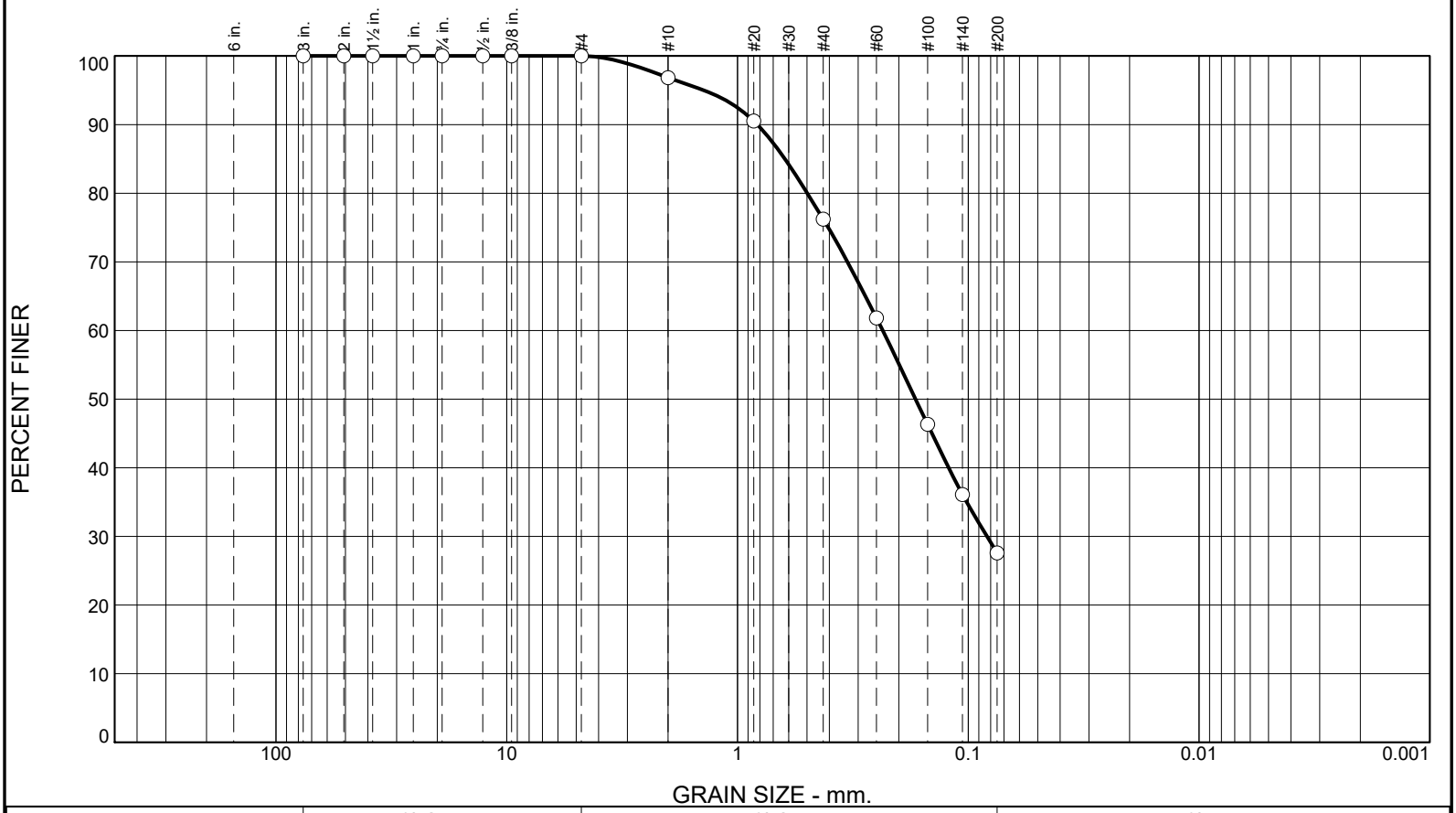
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	3.2	20.6	48.6	27.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	96.8		
#20	90.5		
#40	76.2		
#60	61.8		
#100	46.3		
#140	36.1		
#200	27.6		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.8201 D_{85}= 0.6236 D_{60}= 0.2348
D_{50}= 0.1693 D_{30}= 0.0829 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26627
As received moisture content = 16.6%

Source of Sample: B2-3 **Depth:** 73.5-74.8 ft
Sample Number: S17

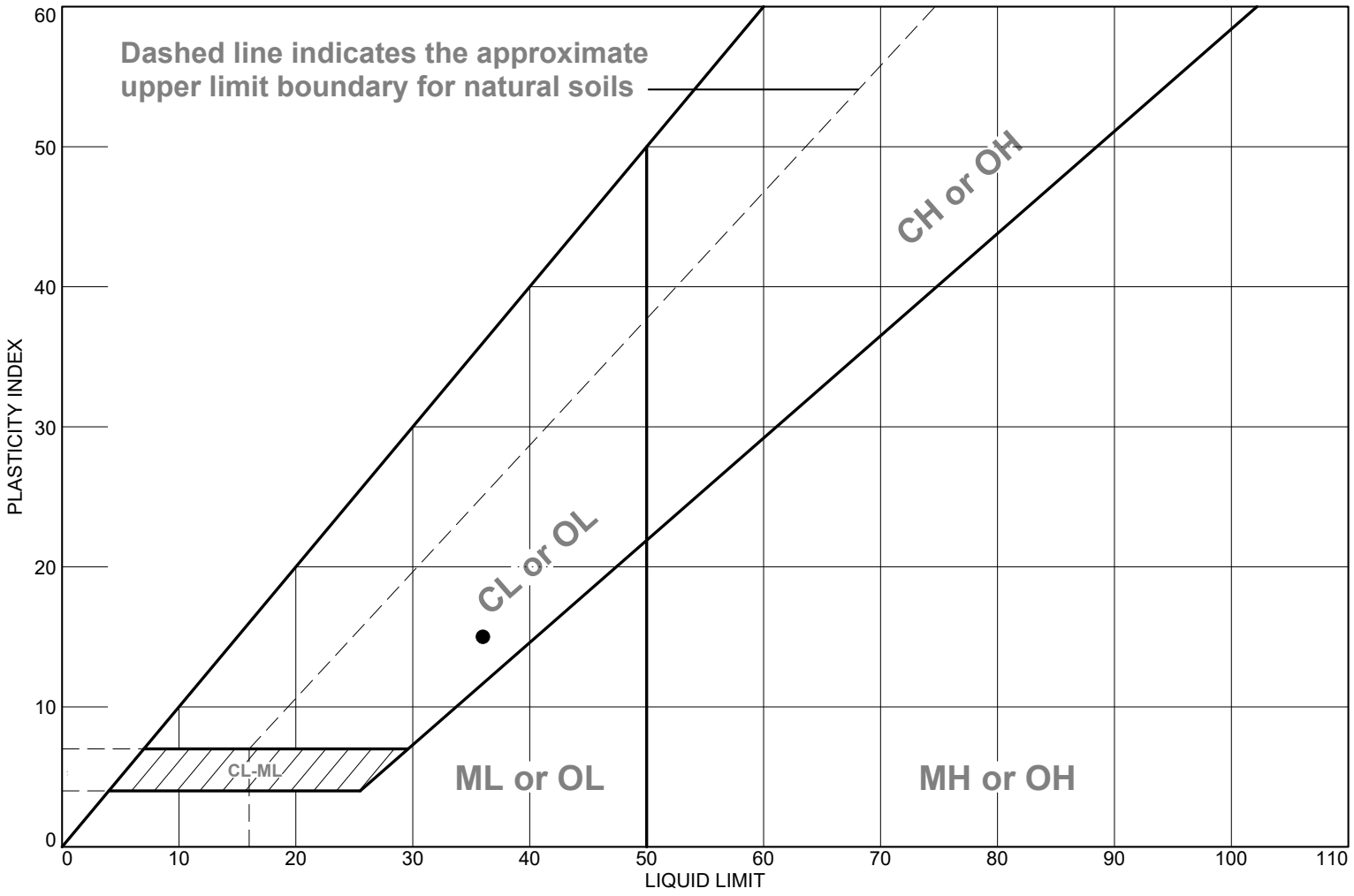
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Clayey SAND	36	21	15	N/A	40.0	SC

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-1 **Depth:** 3.5-5 ft **Sample Number:** S2

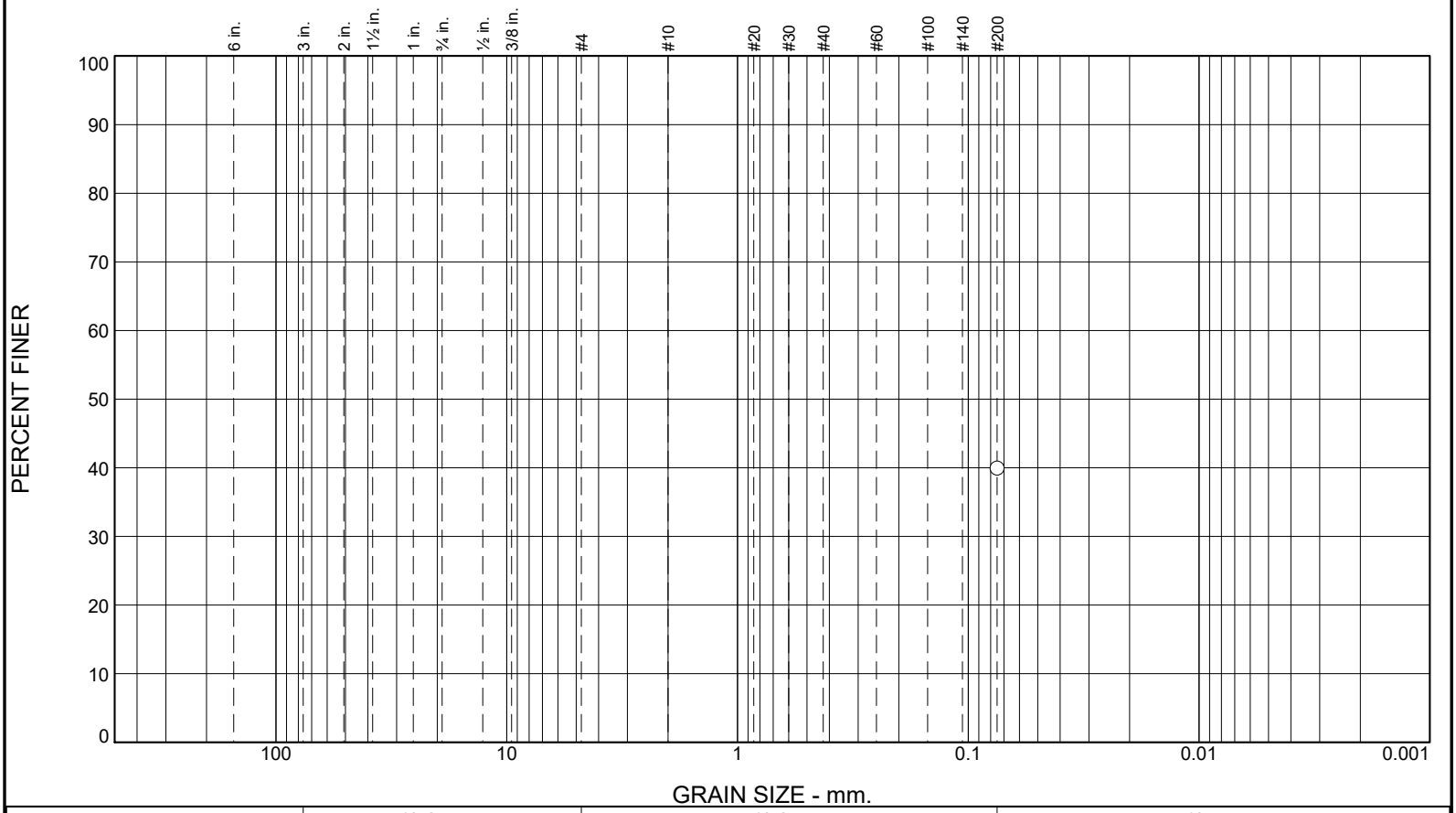
Remarks:

● Lab #26629
As received moisture content = 16.5%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						40.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	40.0		

* (no specification provided)

Soil Description

Brown Clayey SAND

Atterberg Limits

PL= 21 LL= 36 PI= 15

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= N/A

Remarks

Lab #26629
As received moisture content = 16.5%

Source of Sample: B3-1 **Depth:** 3.5-5 ft
Sample Number: S2

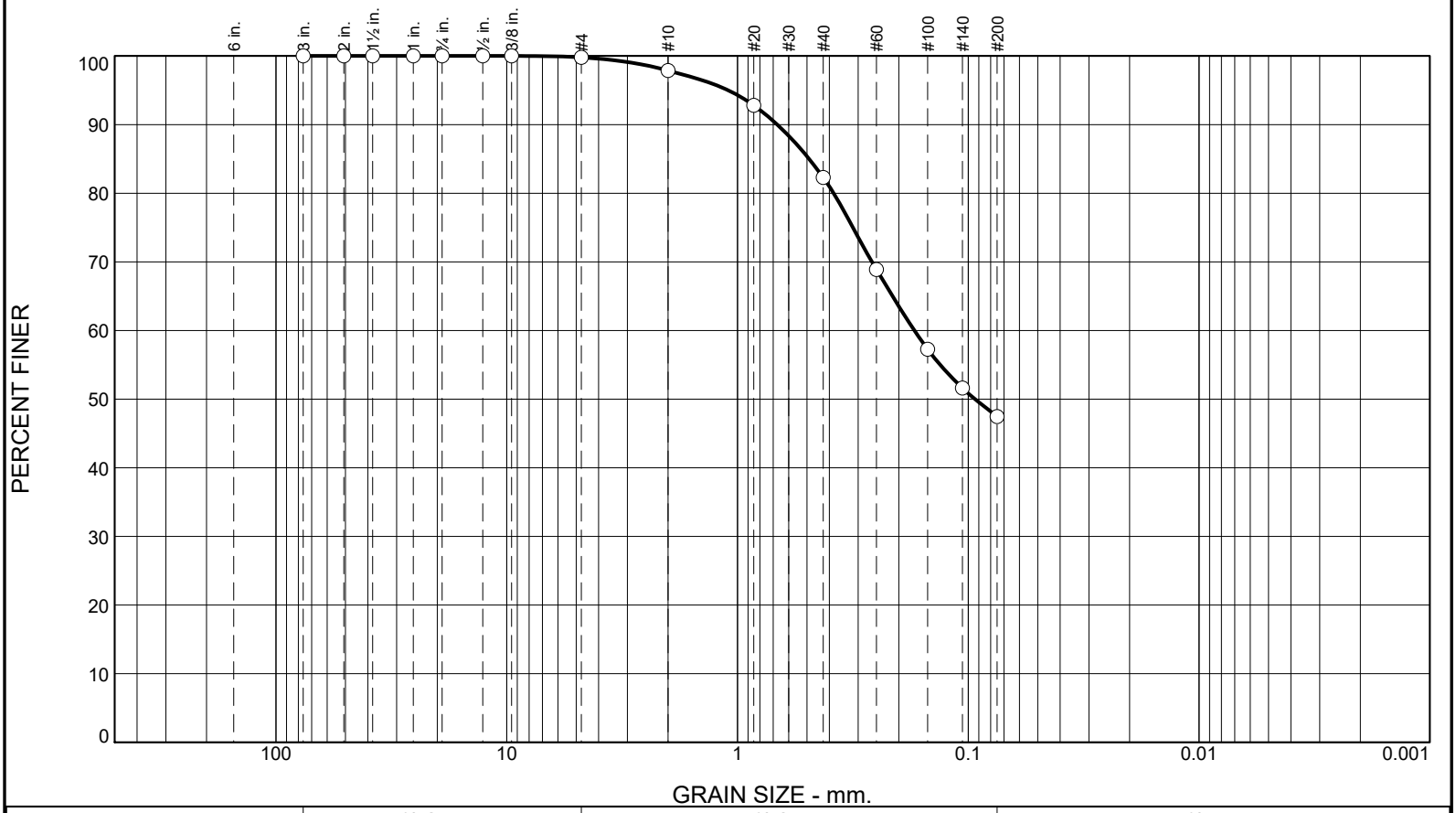
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	1.9	15.6	34.8	47.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.8		
#10	97.9		
#20	92.8		
#40	82.3		
#60	68.9		
#100	57.3		
#140	51.6		
#200	47.5		

* (no specification provided)

Soil Description

Brown Clayey SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6728 D_{85}= 0.4896 D_{60}= 0.1712
D_{50}= 0.0935 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26630
As received moisture content = 19.2%

Source of Sample: B3-1 **Depth:** 6-7.5 ft
Sample Number: S3

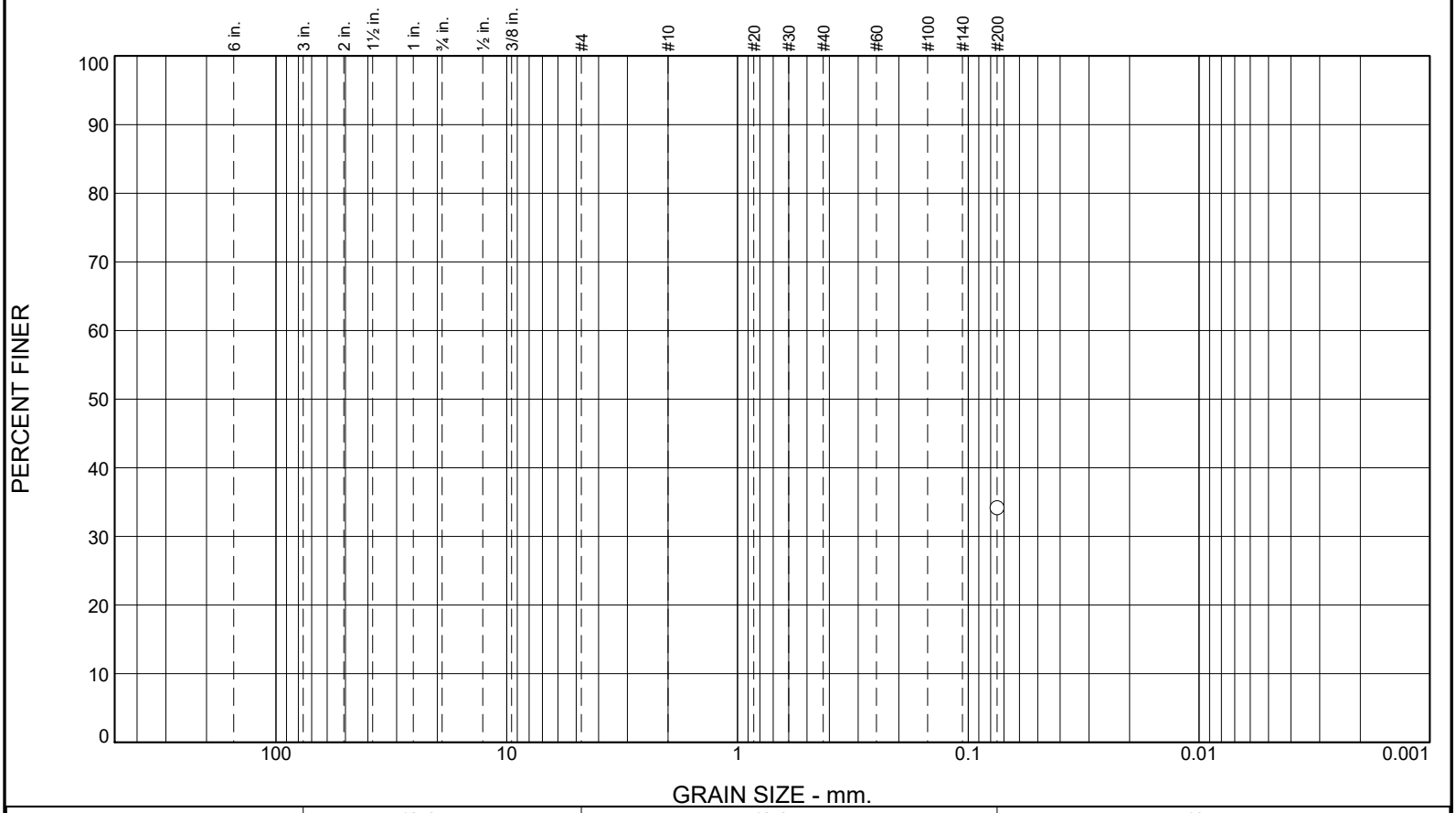
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						34.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	34.2		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26631
As received moisture content = 17.9%

Source of Sample: B3-1 **Depth:** 8.5-10 ft
Sample Number: S4

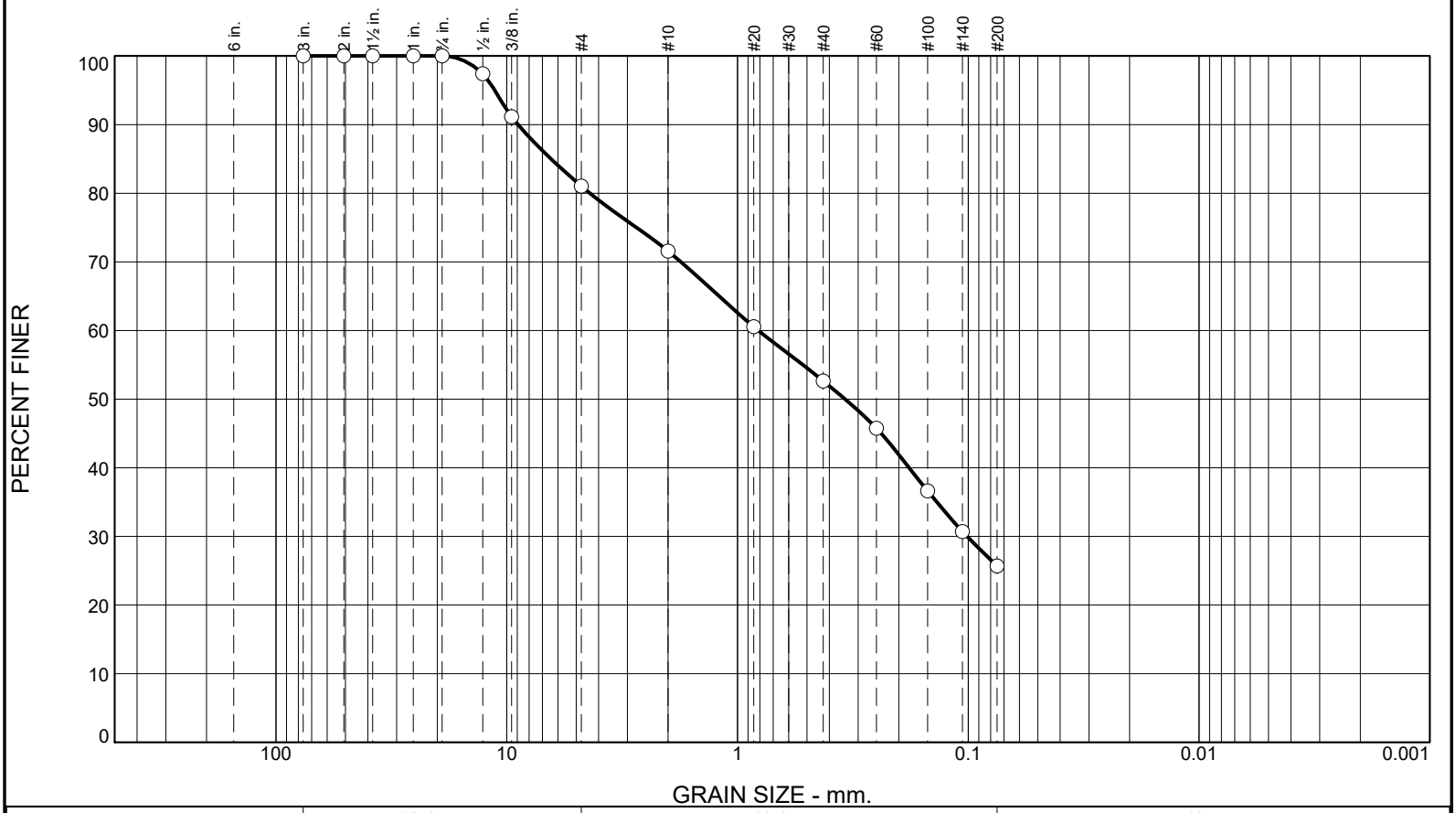
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	19.0	9.4	19.0	26.9	25.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	97.4		
.375	91.1		
#4	81.0		
#10	71.6		
#20	60.5		
#40	52.6		
#60	45.7		
#100	36.6		
#140	30.7		
#200	25.7		

* (no specification provided)

Soil Description

Gray Silty SAND with Gravel

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 8.9293 D_{85}= 6.4317 D_{60}= 0.8122
D_{50}= 0.3421 D_{30}= 0.1012 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26632
As received moisture content = 13.2%

Source of Sample: B3-1 **Depth:** 18.5-20 ft
Sample Number: S6

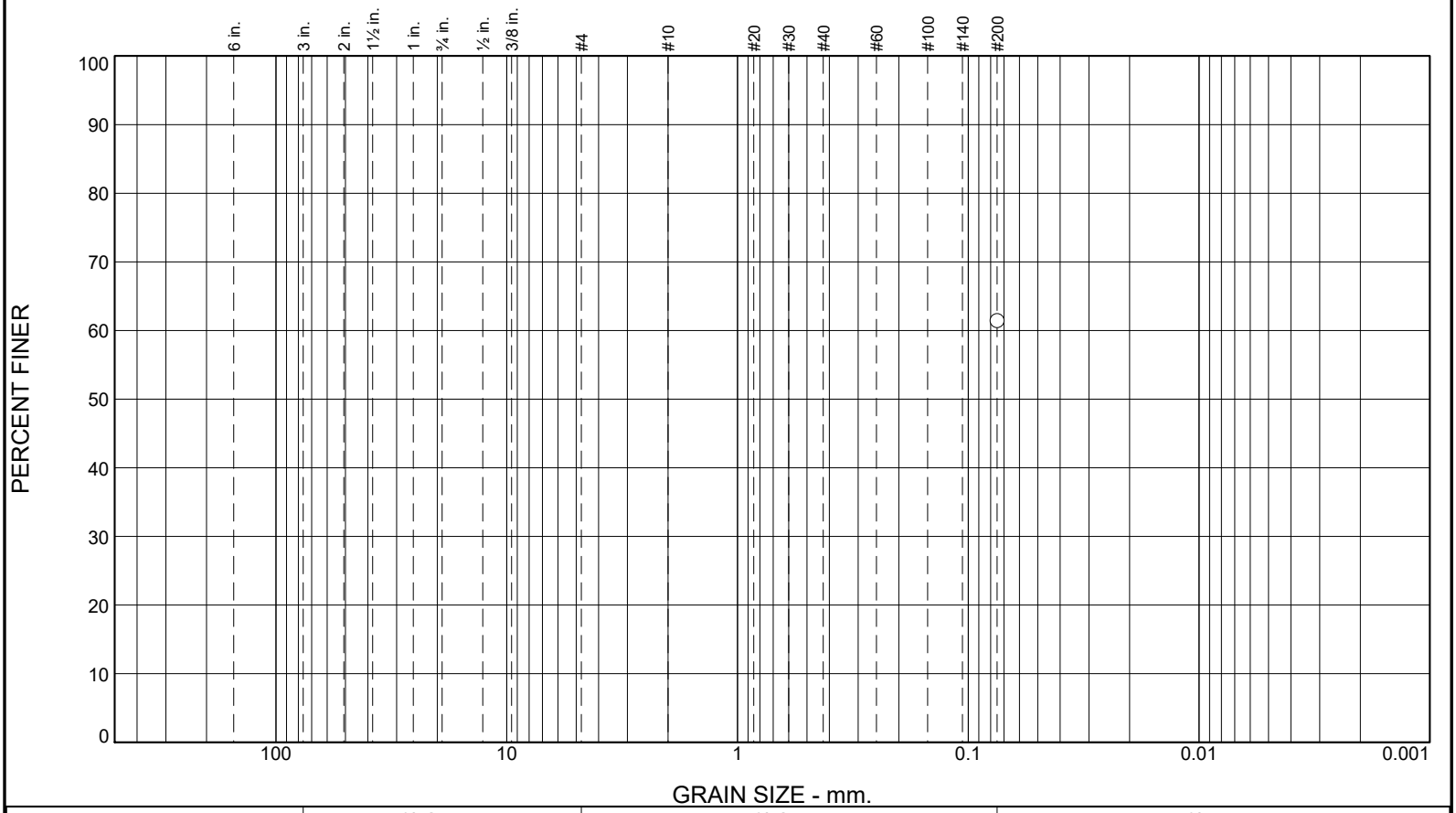
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						61.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	61.4		

* (no specification provided)

Soil Description

Brown Sandy SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26633
As received moisture content = 18.0%

Source of Sample: B3-1 **Depth:** 23.5-23.9 ft
Sample Number: S7

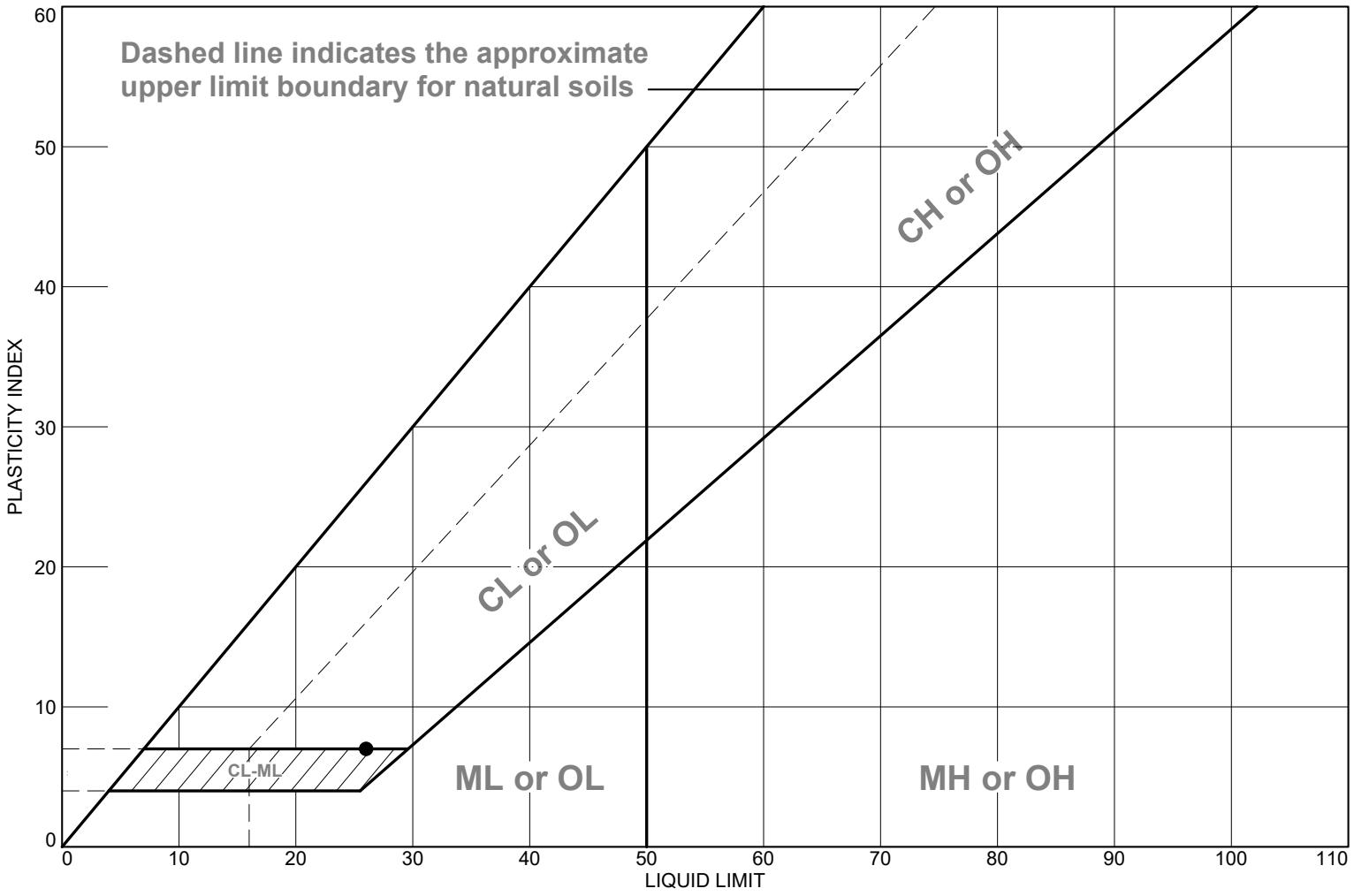
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Silty Clayey SAND	26	19	7	N/A	24.2	SC-SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-1A **Depth:** 3.5-5.5 ft **Sample Number:** ST1

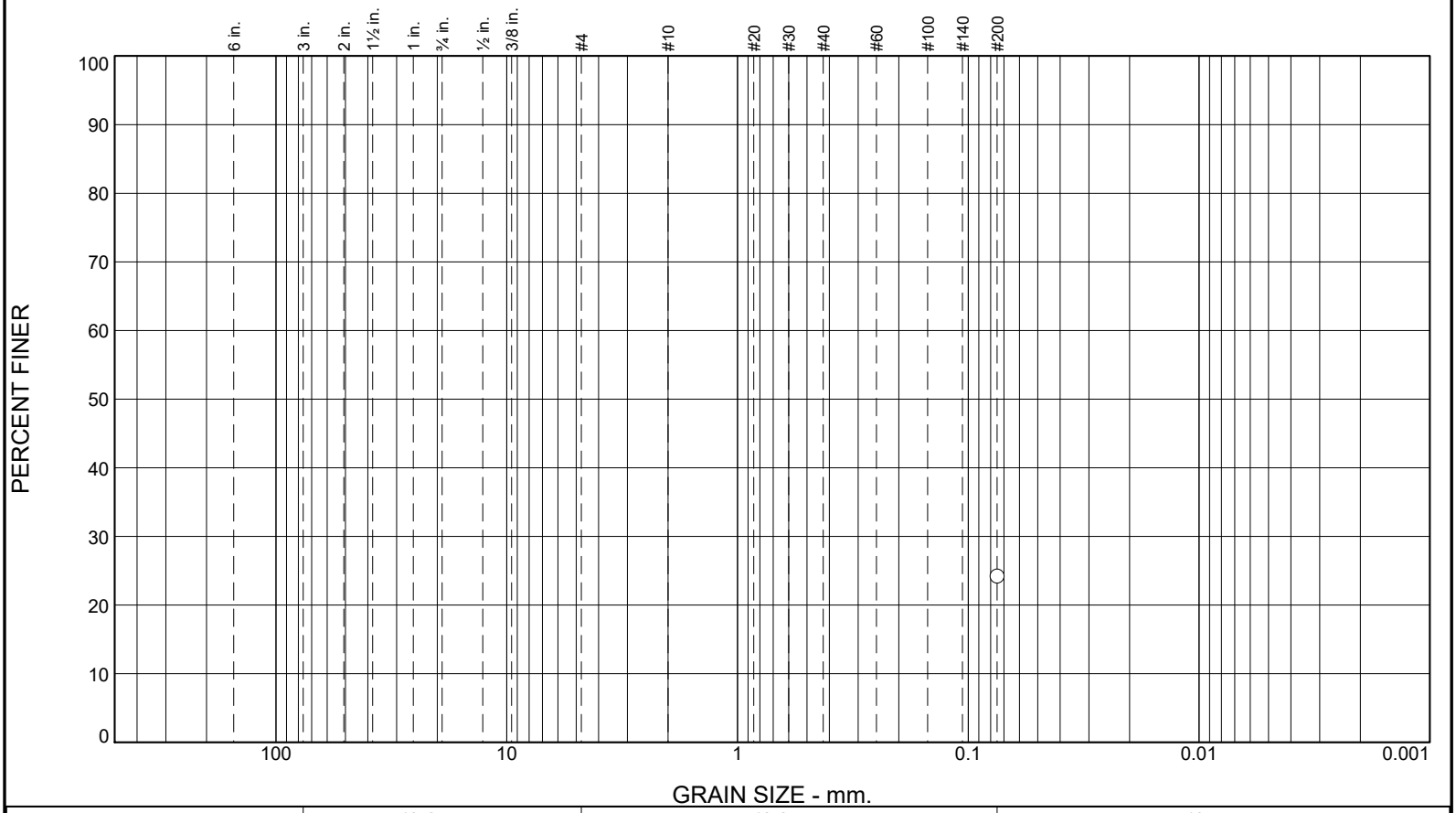
Remarks:

● Lab #26634
As received moisture content = 20.5%

Figure

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						24.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	24.2		

* (no specification provided)

Soil Description

Brown Silty Clayey SAND

Atterberg Limits

PL= 19 LL= 26 PI= 7

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SC-SM AASHTO= N/A

Remarks

Lab #26634
As received moisture content = 20.5%

Source of Sample: B3-1A **Depth:** 3.5-5.5 ft
Sample Number: ST1

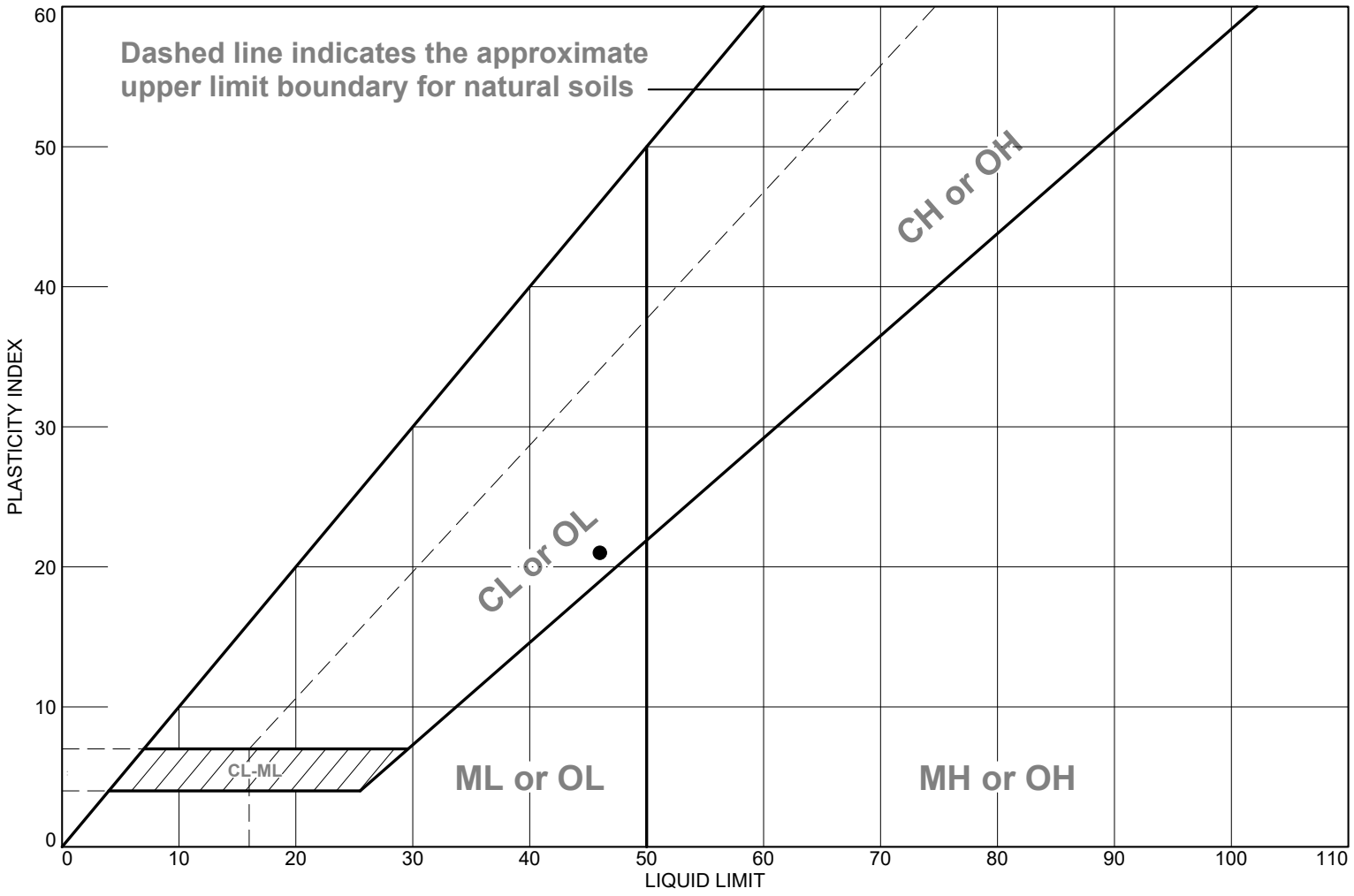
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Reddish Brown Sandy Lean CLAY	46	25	21	N/A	61.4	CL

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-2 **Depth:** 1-2.5 ft **Sample Number:** S1

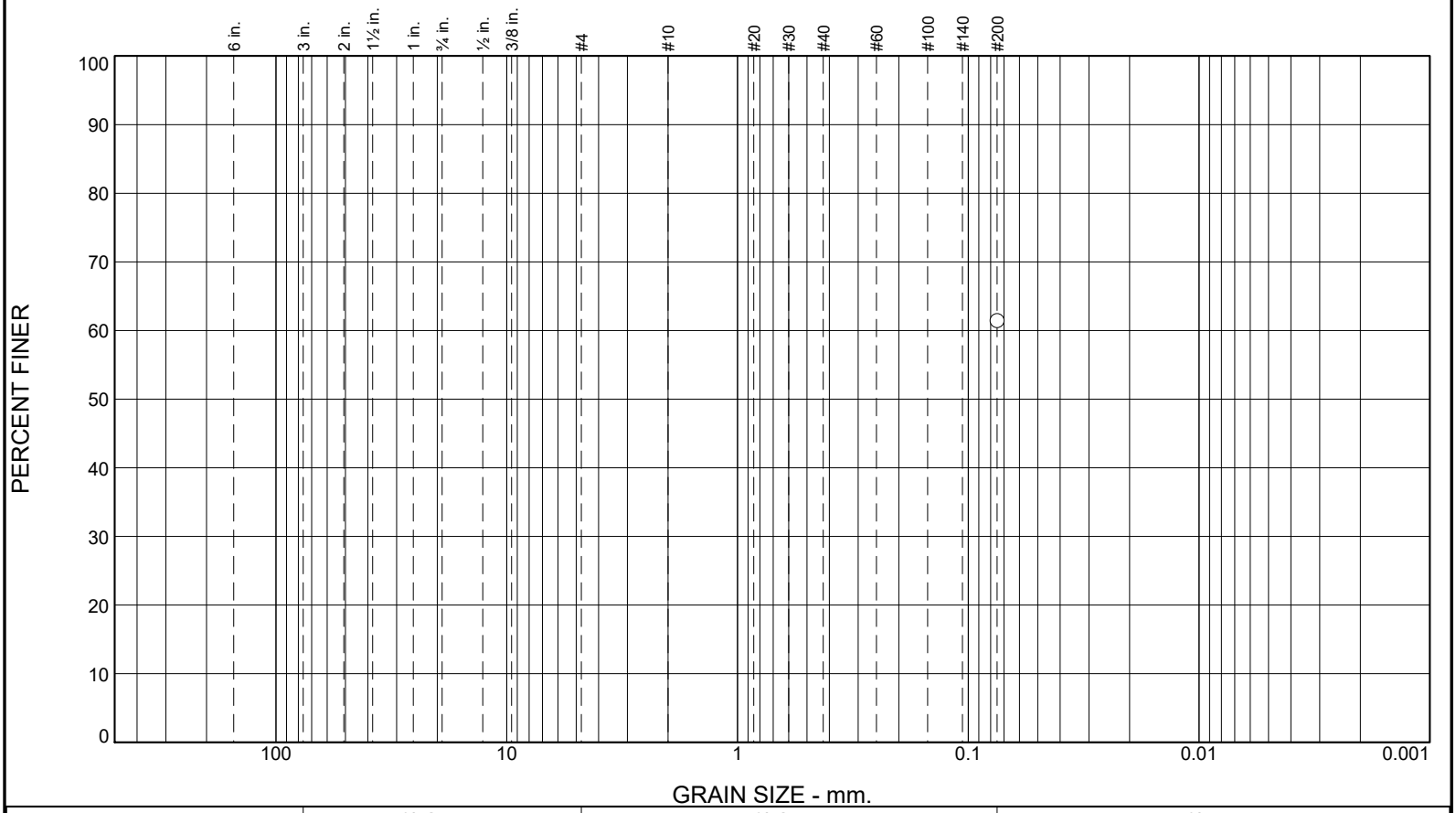
Remarks:

● Lab #26635
As received moisture content = 18.0%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						61.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	61.4		

* (no specification provided)

Soil Description

Reddish Brown Sandy Lean CLAY

Atterberg Limits

PL= 25 LL= 46 PI= 21

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= N/A

Remarks

Lab #26635
As received moisture content = 18.0%

Source of Sample: B3-2 **Depth:** 1-2.5 ft
Sample Number: S1

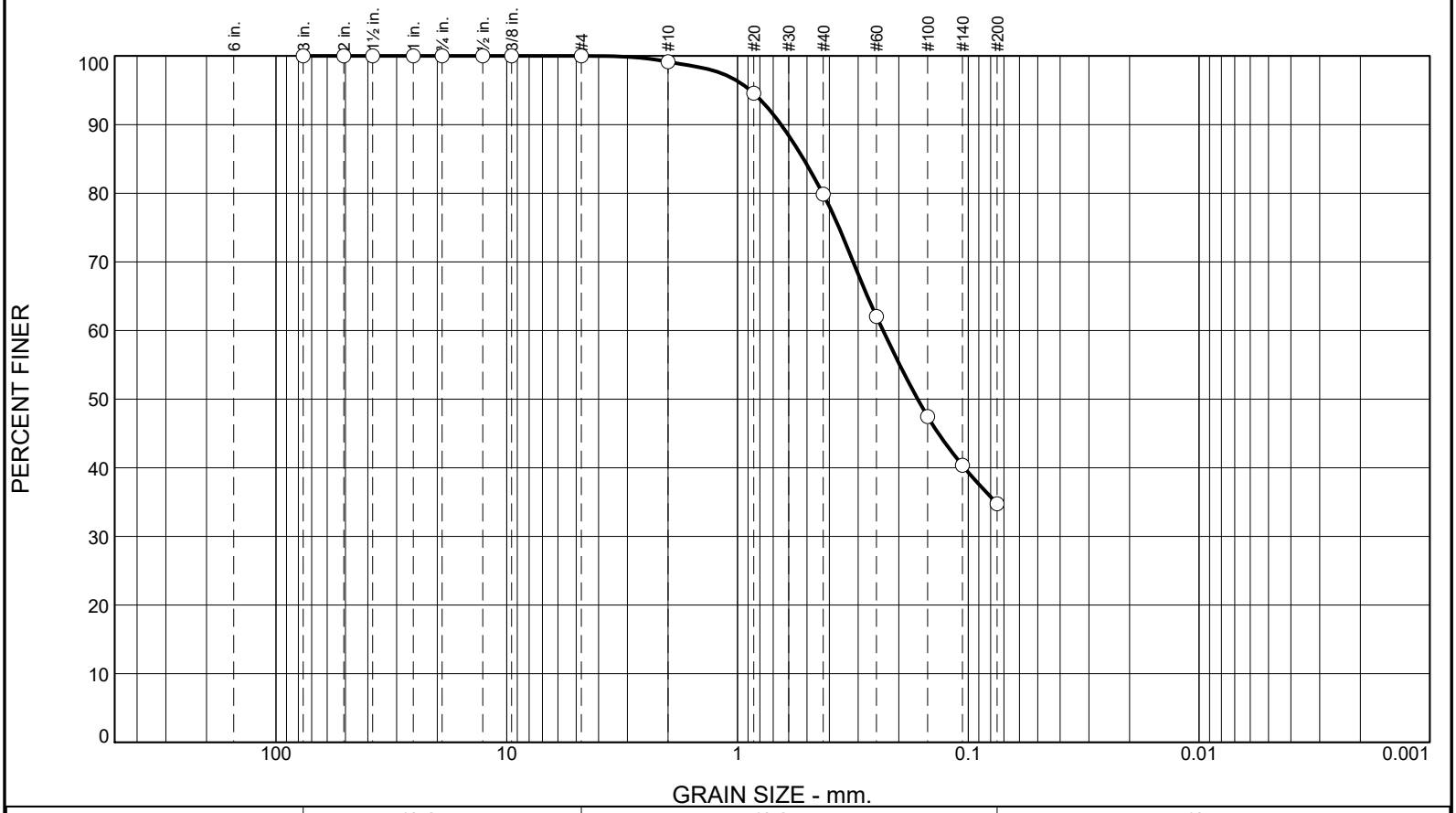
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.9	19.2	45.1	34.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.1		
#20	94.6		
#40	79.9		
#60	62.0		
#100	47.5		
#140	40.4		
#200	34.8		

* (no specification provided)

Soil Description

Brown Clayey SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6478 D_{85}= 0.5179 D_{60}= 0.2340
D_{50}= 0.1657 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26636
As received moisture content = 29.0%

Source of Sample: B3-2 **Depth:** 8.5-10 ft
Sample Number: S4

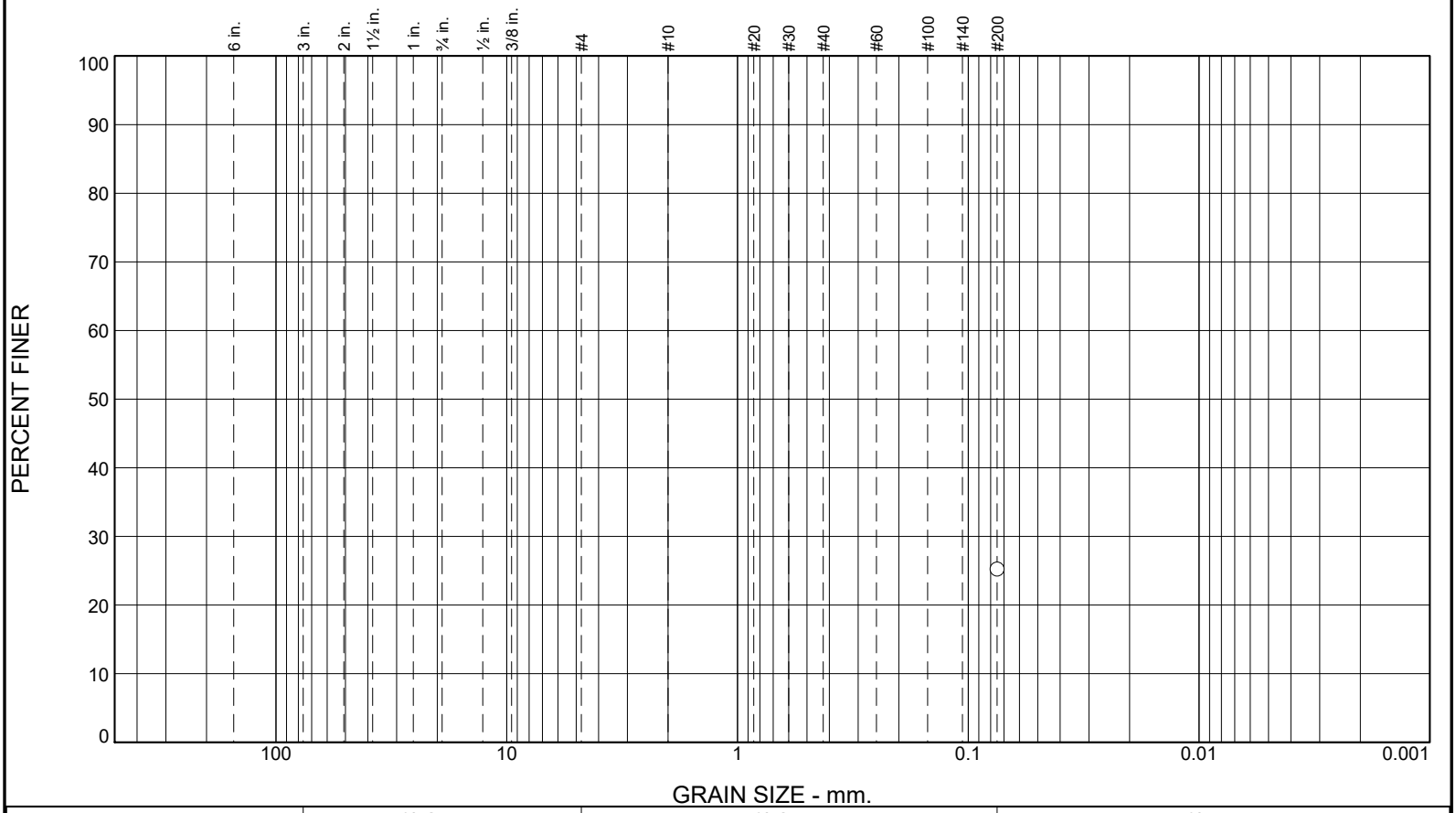
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						25.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	25.2		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26637
As received moisture content = 20.7%

Source of Sample: B3-2 **Depth:** 18.5-20 ft
Sample Number: S6

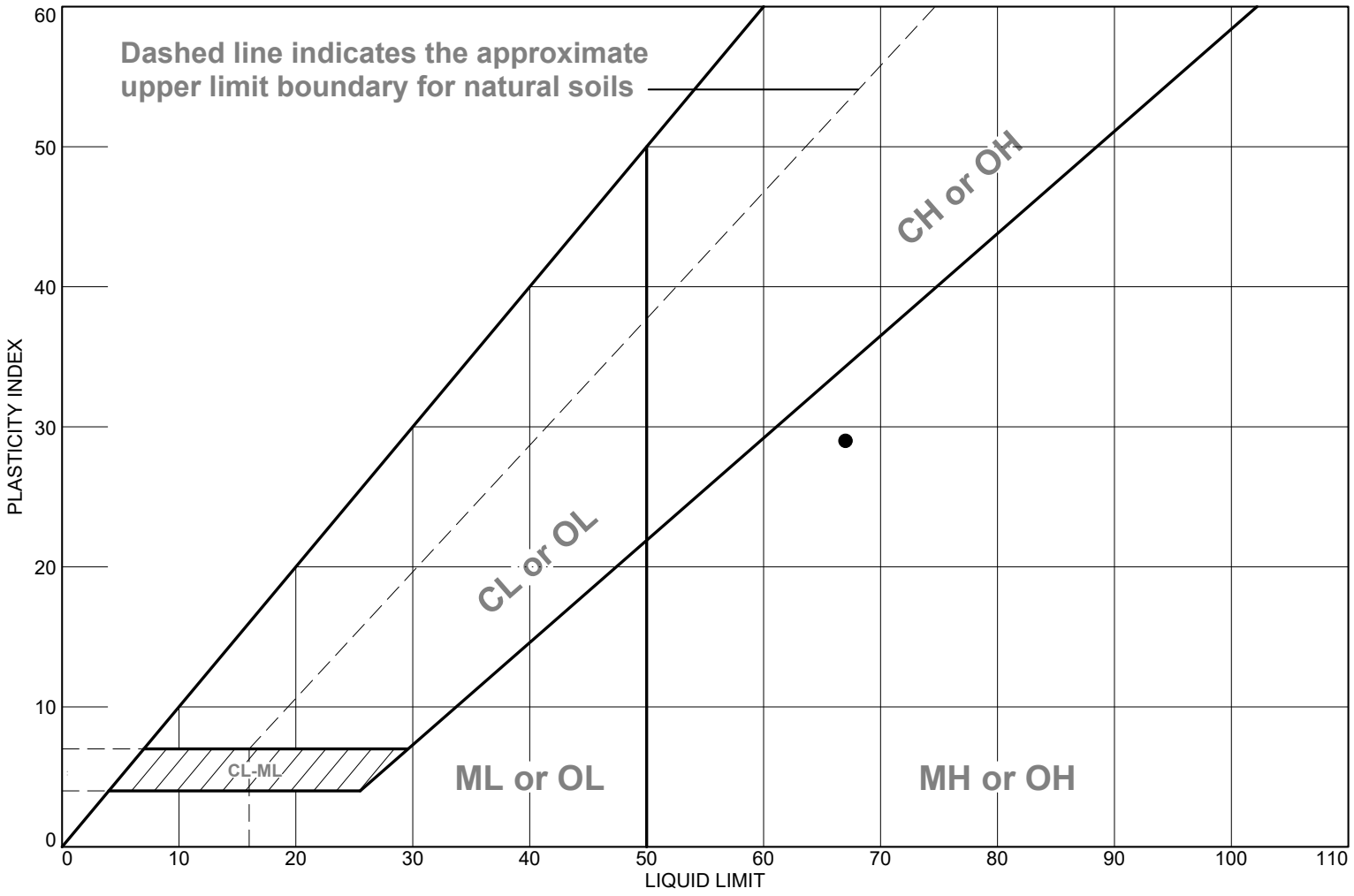
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Sandy Elastic SILT	67	38	29	N/A	73.3	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-3 **Depth:** 3.5-5 ft **Sample Number:** S2

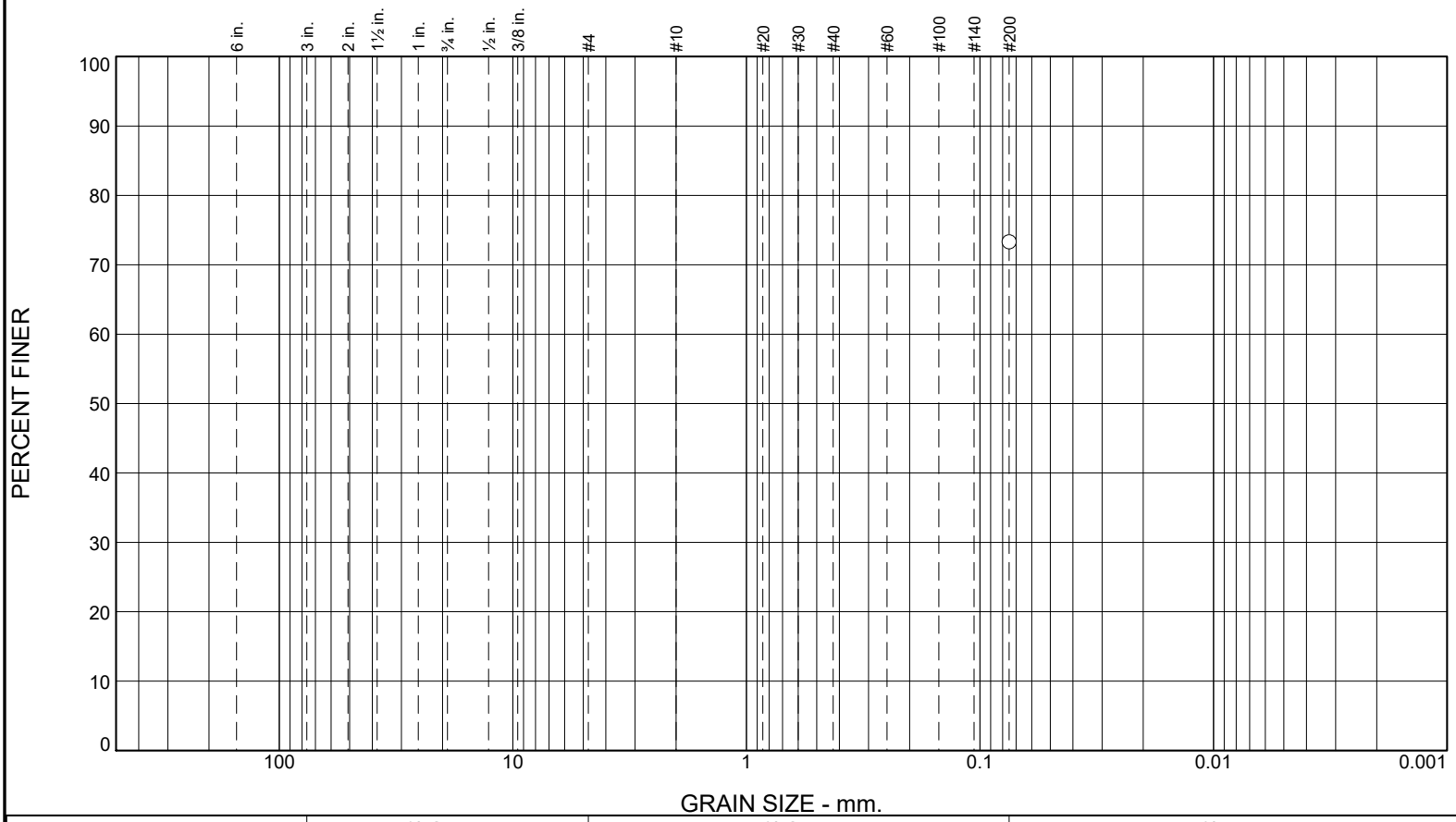
Remarks:

● Lab #26639
As received moisture content = 26.5%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						73.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	73.3		

* (no specification provided)

Soil Description

Brown Sandy Elastic SILT

Atterberg Limits

PL= 38 LL= 67 PI= 29

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26639
As received moisture content = 26.5%

Source of Sample: B3-3 **Depth:** 3.5-5 ft
Sample Number: S2

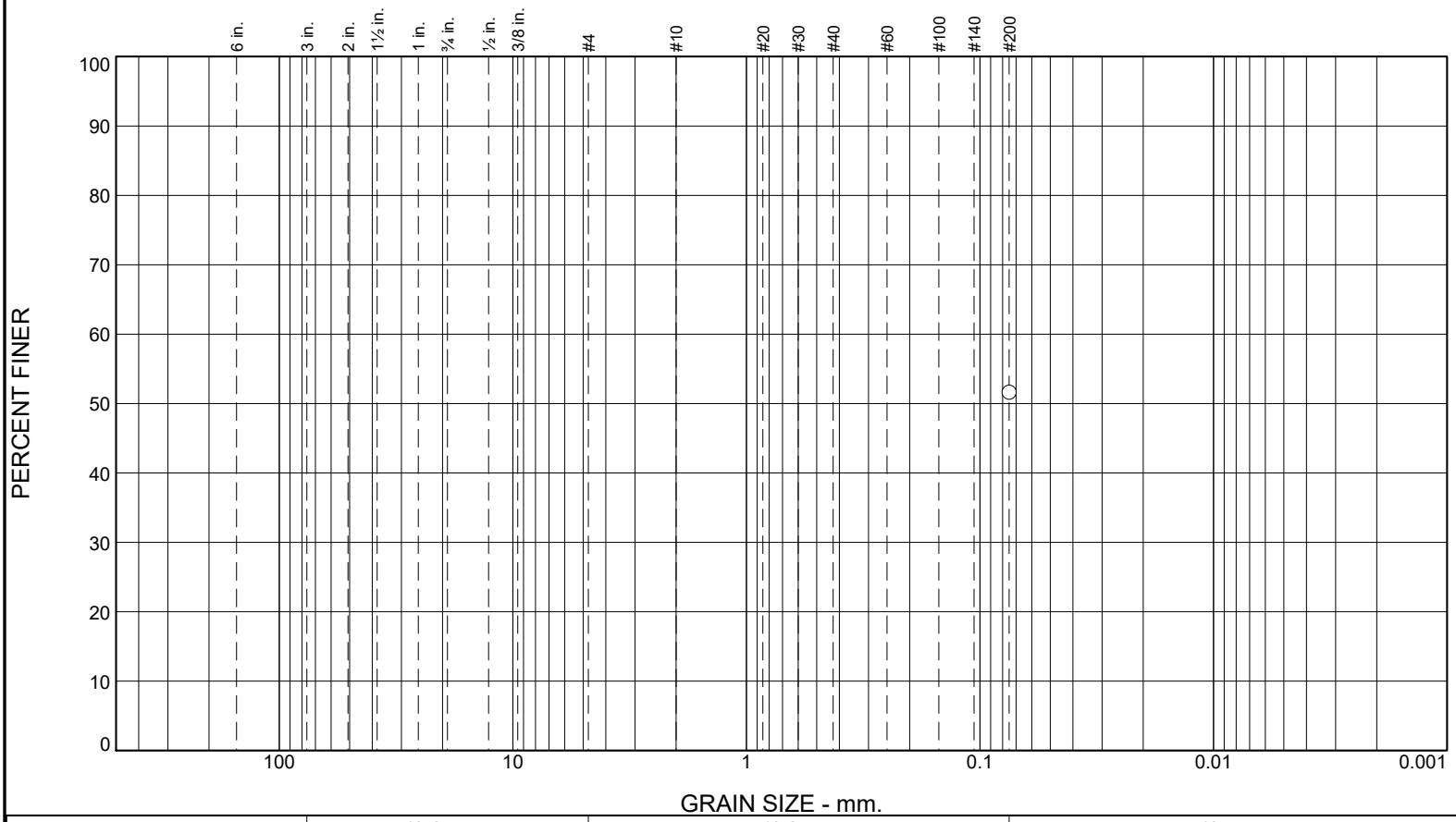
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						51.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	51.6		

* (no specification provided)

Soil Description

Brown Sandy Elastic SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26640
As received moisture content = 24.0%

Source of Sample: B3-3 **Depth:** 6-7.5 ft
Sample Number: S3

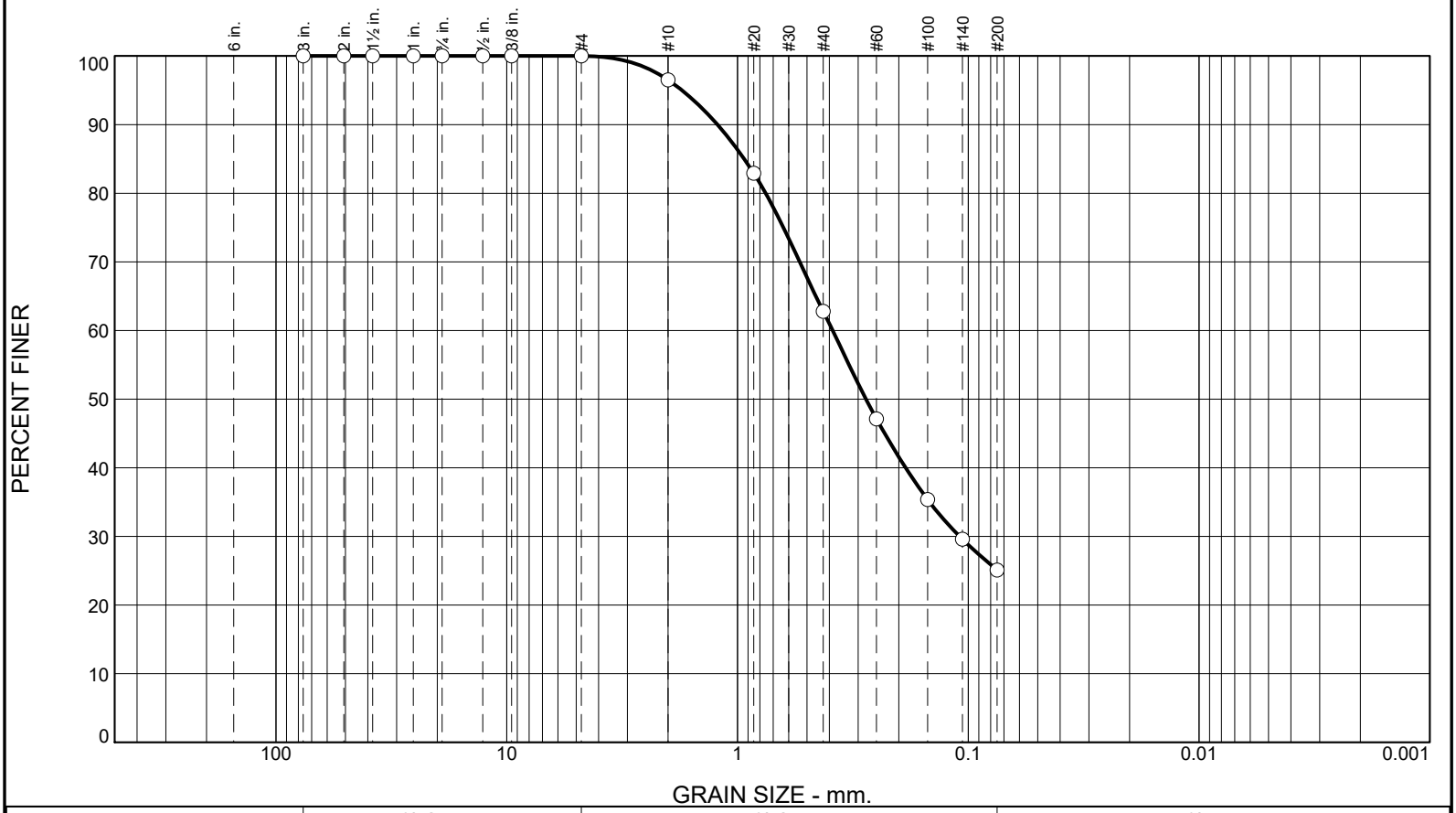
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	3.5	33.7	37.7	25.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	96.5		
#20	82.9		
#40	62.8		
#60	47.1		
#100	35.4		
#140	29.6		
#200	25.1		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.2219 D_{85}= 0.9358 D_{60}= 0.3870
D_{50}= 0.2777 D_{30}= 0.1090 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26641
As received moisture content = 31.7%

Source of Sample: B3-3 **Depth:** 13.5-15 ft
Sample Number: S5

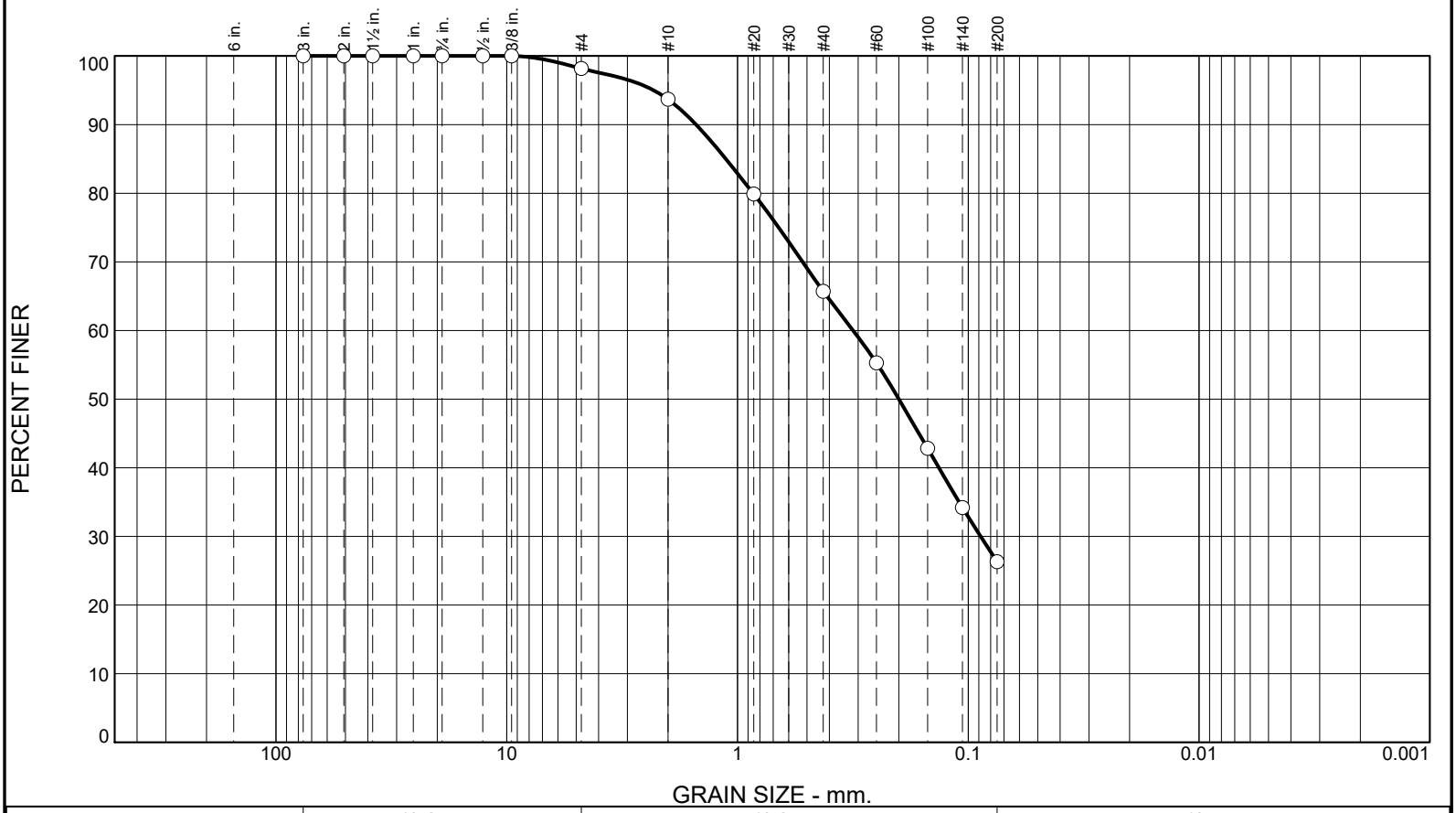
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.8	4.5	28.0	39.4	26.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	98.2		
#10	93.7		
#20	79.9		
#40	65.7		
#60	55.3		
#100	42.8		
#140	34.2		
#200	26.3		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.5115 D_{85}= 1.1241 D_{60}= 0.3154
D_{50}= 0.1998 D_{30}= 0.0883 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26642
As received moisture content = 11.3%

Source of Sample: B3-3 **Depth:** 38.5-40 ft
Sample Number: S10

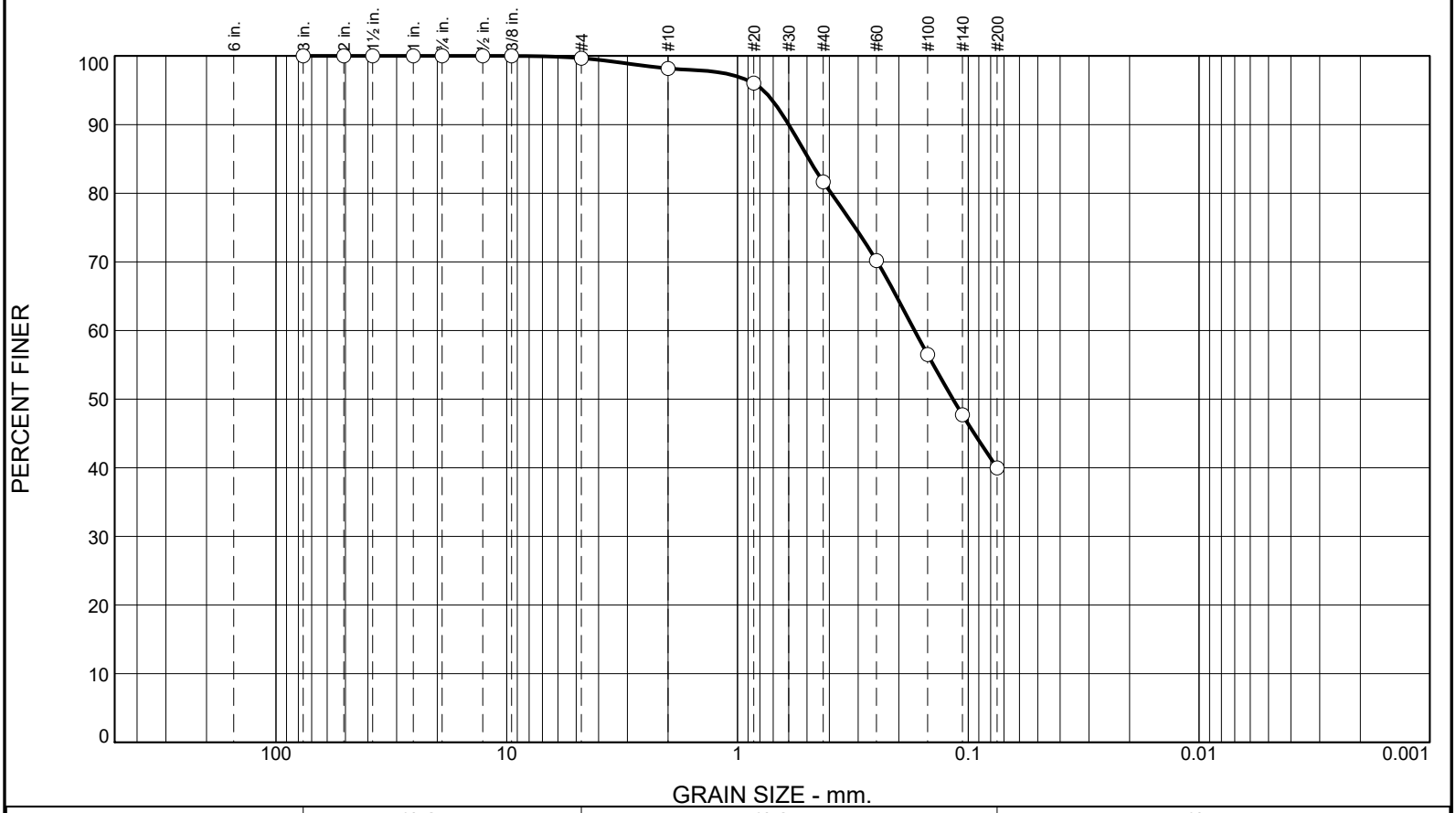
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	1.5	16.5	41.7	40.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.7		
#10	98.2		
#20	96.0		
#40	81.7		
#60	70.2		
#100	56.5		
#140	47.7		
#200	40.0		

* (no specification provided)

Soil Description

Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5999 D_{85}= 0.4909 D_{60}= 0.1709
D_{50}= 0.1165 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26643
As received moisture content = 15.9%

Source of Sample: B3-3 **Depth:** 48.5-49.8 ft
Sample Number: S12

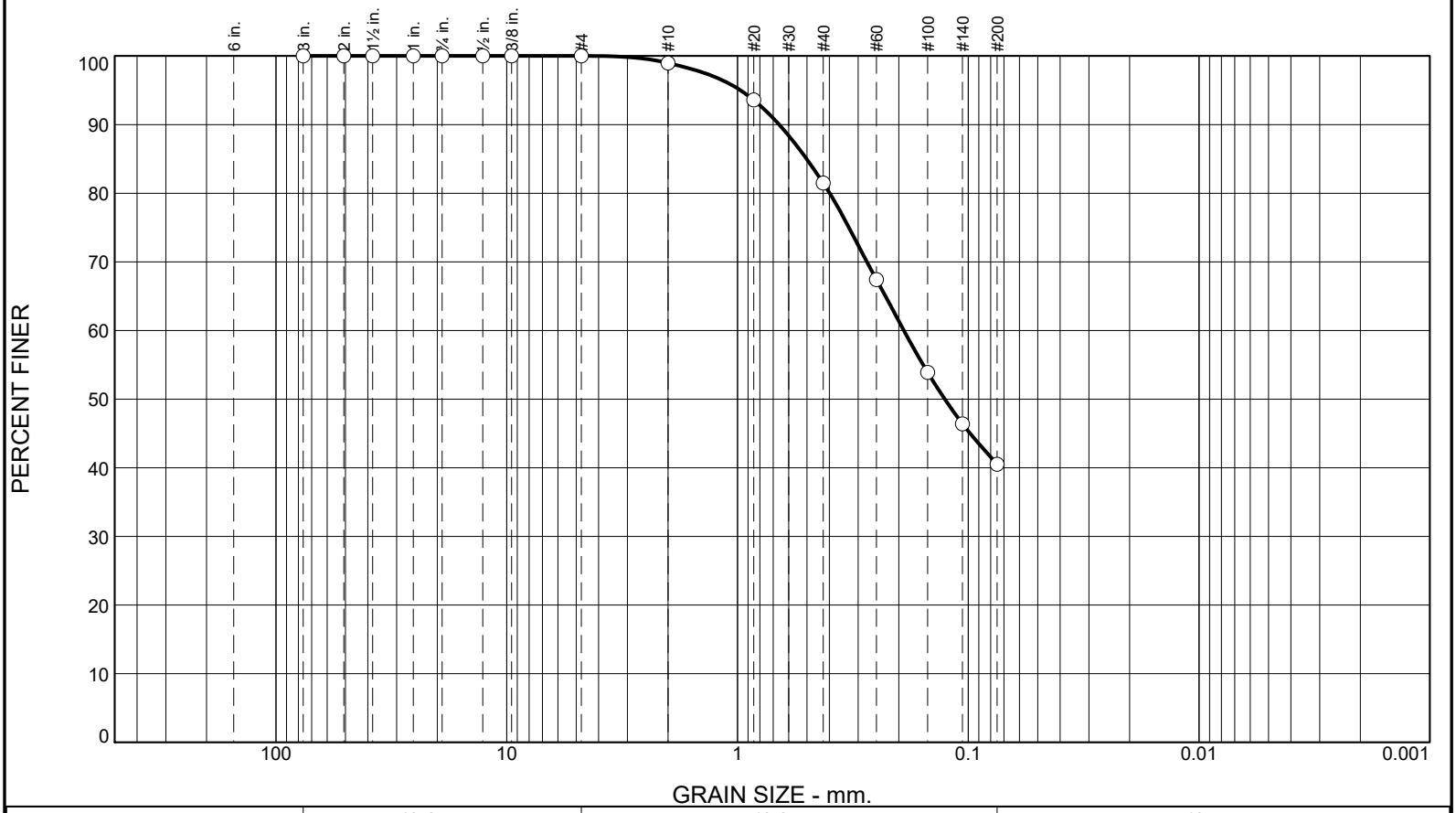
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.0	17.5	41.0	40.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.0		
#20	93.6		
#40	81.5		
#60	67.4		
#100	53.9		
#140	46.4		
#200	40.5		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6597 D_{85}= 0.5021 D_{60}= 0.1901
D_{50}= 0.1264 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26644
As received moisture content = 20.3%

Source of Sample: B3-3 **Depth:** 58.5-60 ft
Sample Number: S14

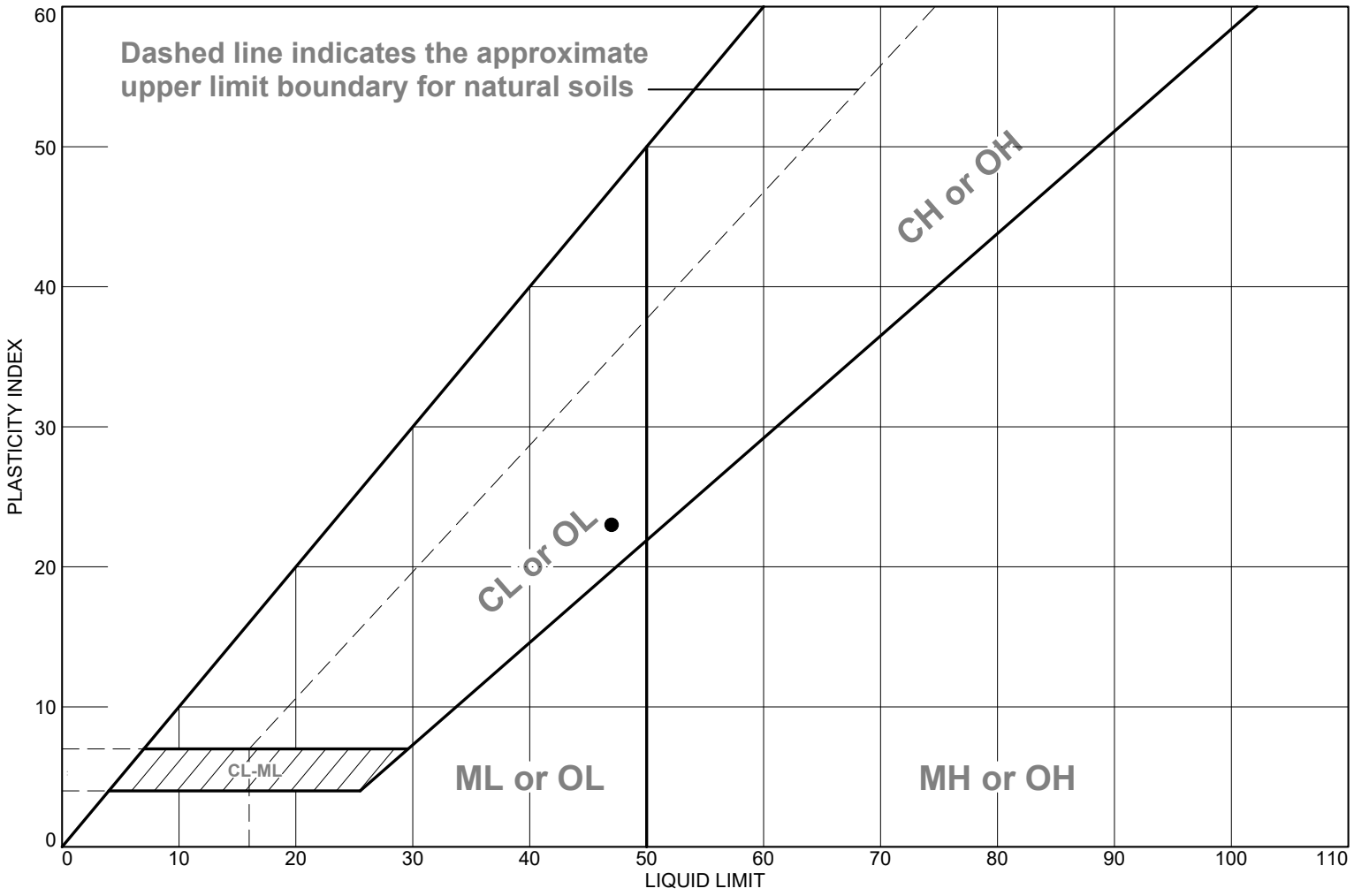
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Sandy Lean CLAY	47	24	23	N/A	69.3	CL

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-4 **Depth:** 1-2.5 ft **Sample Number:** S1

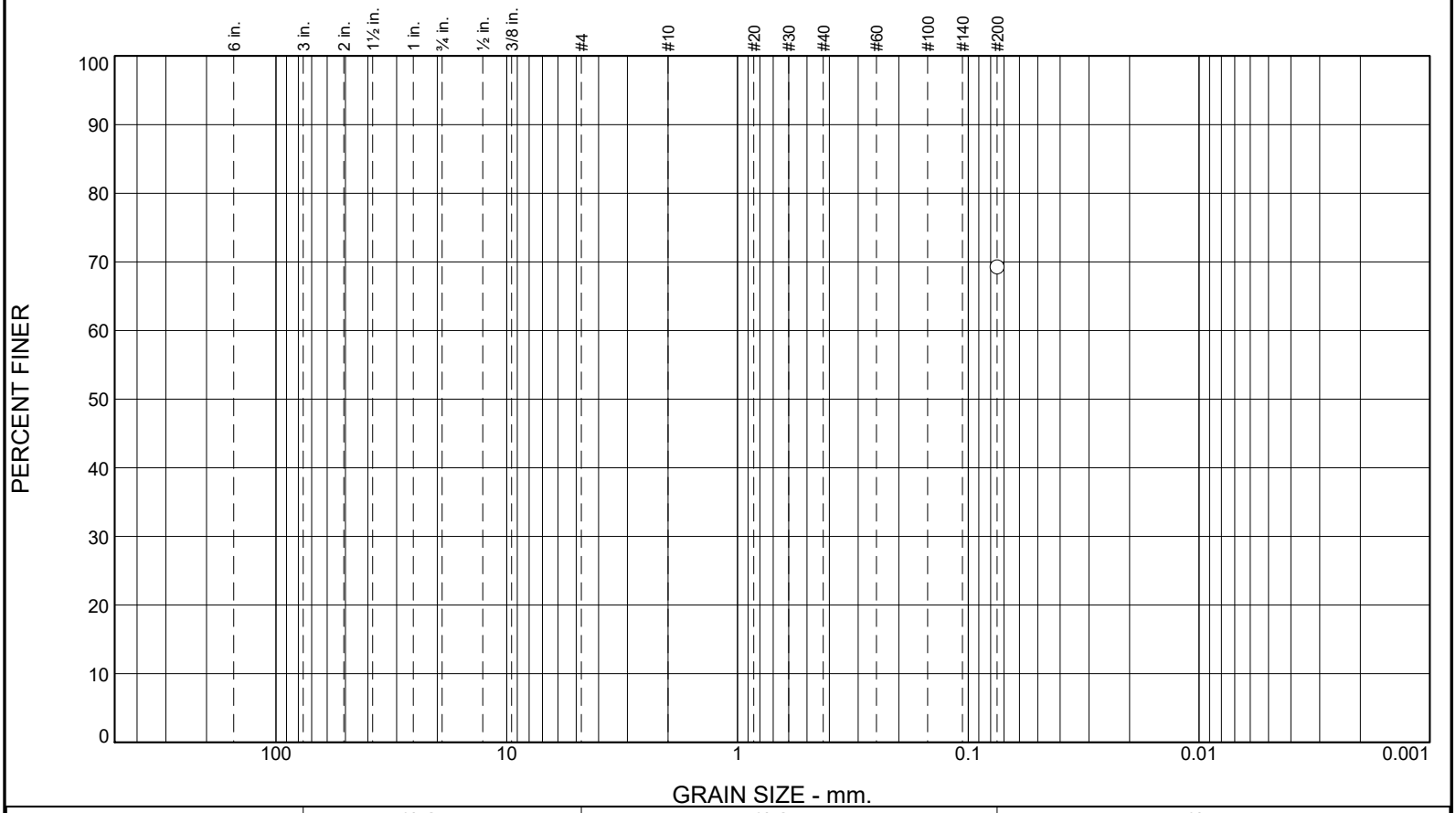
Remarks:

● Lab #26645
As received moisture content = 23.4%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						69.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	69.3		

* (no specification provided)

Soil Description

Brown Sandy Lean CLAY

Atterberg Limits

PL= 24 LL= 47 PI= 23

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= N/A

Remarks

Lab #26645
As received moisture content = 23.4%

Source of Sample: B3-4 **Depth:** 1-2.5 ft
Sample Number: S1

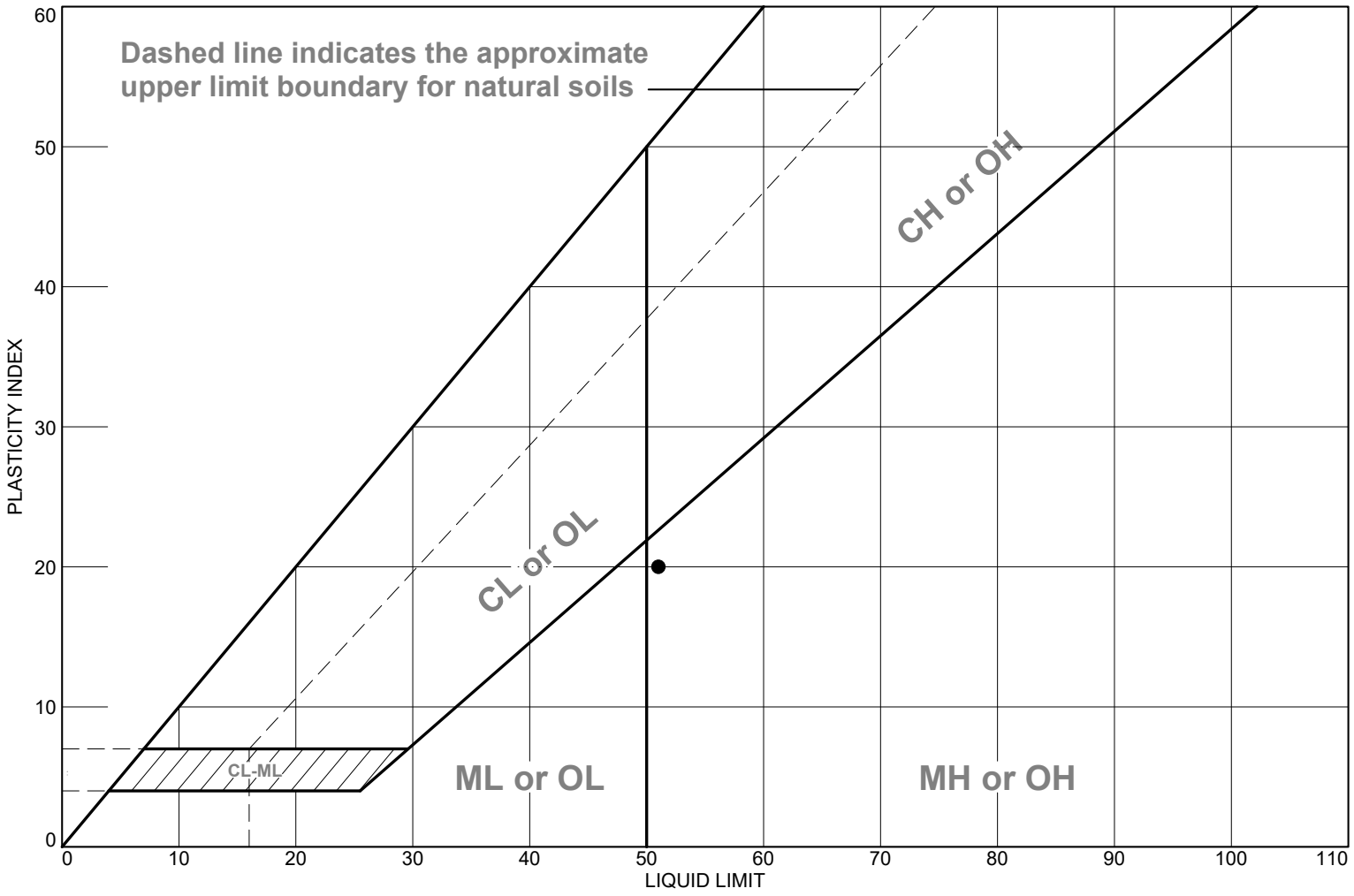
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Silty SAND	51	31	20	N/A	36.9	SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-4 **Depth:** 3.5-4.5 ft **Sample Number:** S2

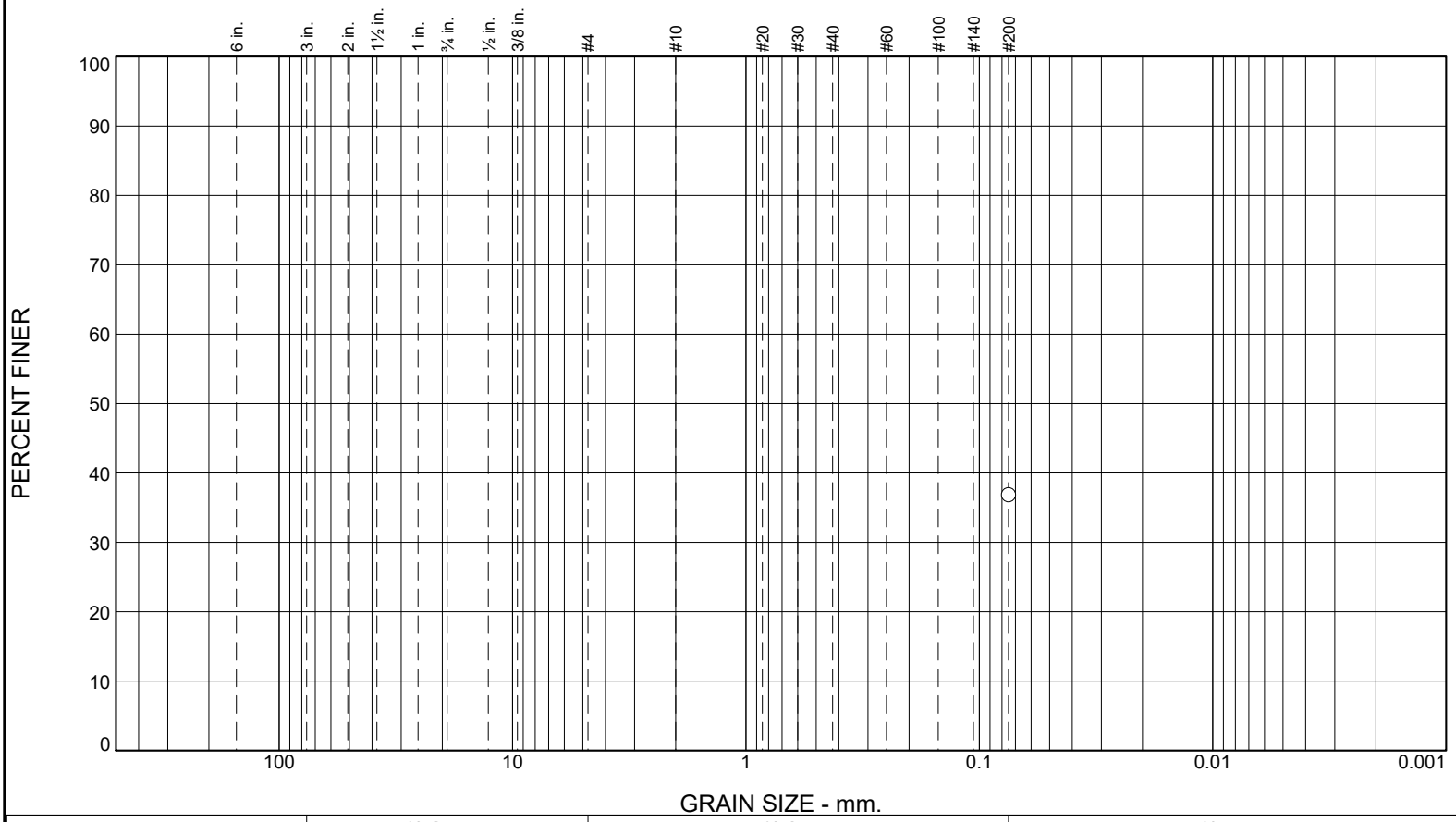
Remarks:

● Lab #26646
As received moisture content = 17.4%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						36.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	36.9		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= 31 LL= 51 PI= 20

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= N/A

Remarks

Lab #26646
As received moisture content = 17.4%

Source of Sample: B3-4 **Depth:** 3.5-4.5 ft
Sample Number: S2

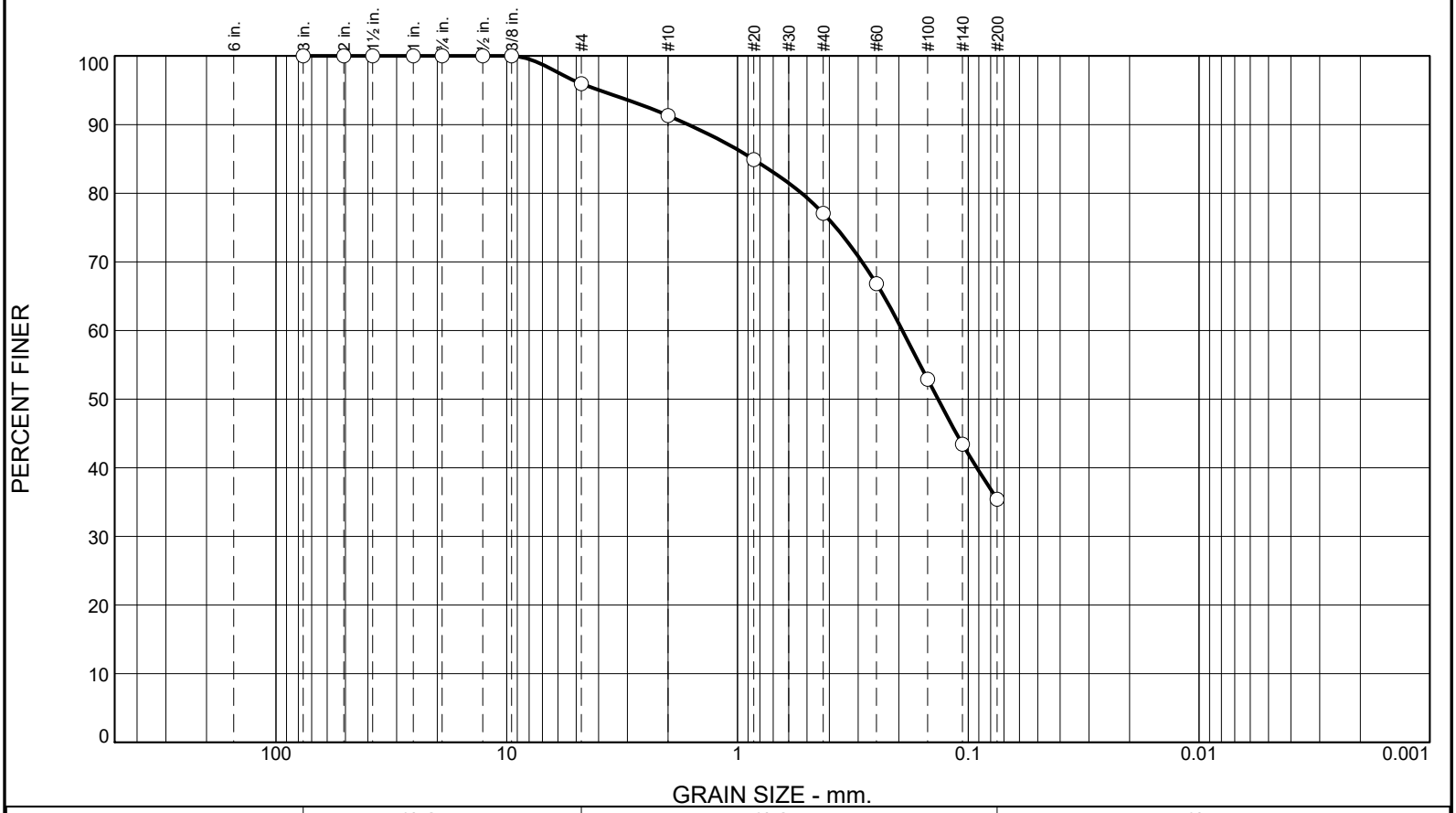
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.0	4.7	14.2	41.7	35.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	96.0		
#10	91.3		
#20	84.9		
#40	77.1		
#60	66.8		
#100	52.9		
#140	43.4		
#200	35.4		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.6350 D_{85}= 0.8588 D_{60}= 0.1929
D_{50}= 0.1351 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26647
As received moisture content = 23.3%

Source of Sample: B3-4 **Depth:** 28.5-30 ft
Sample Number: S8

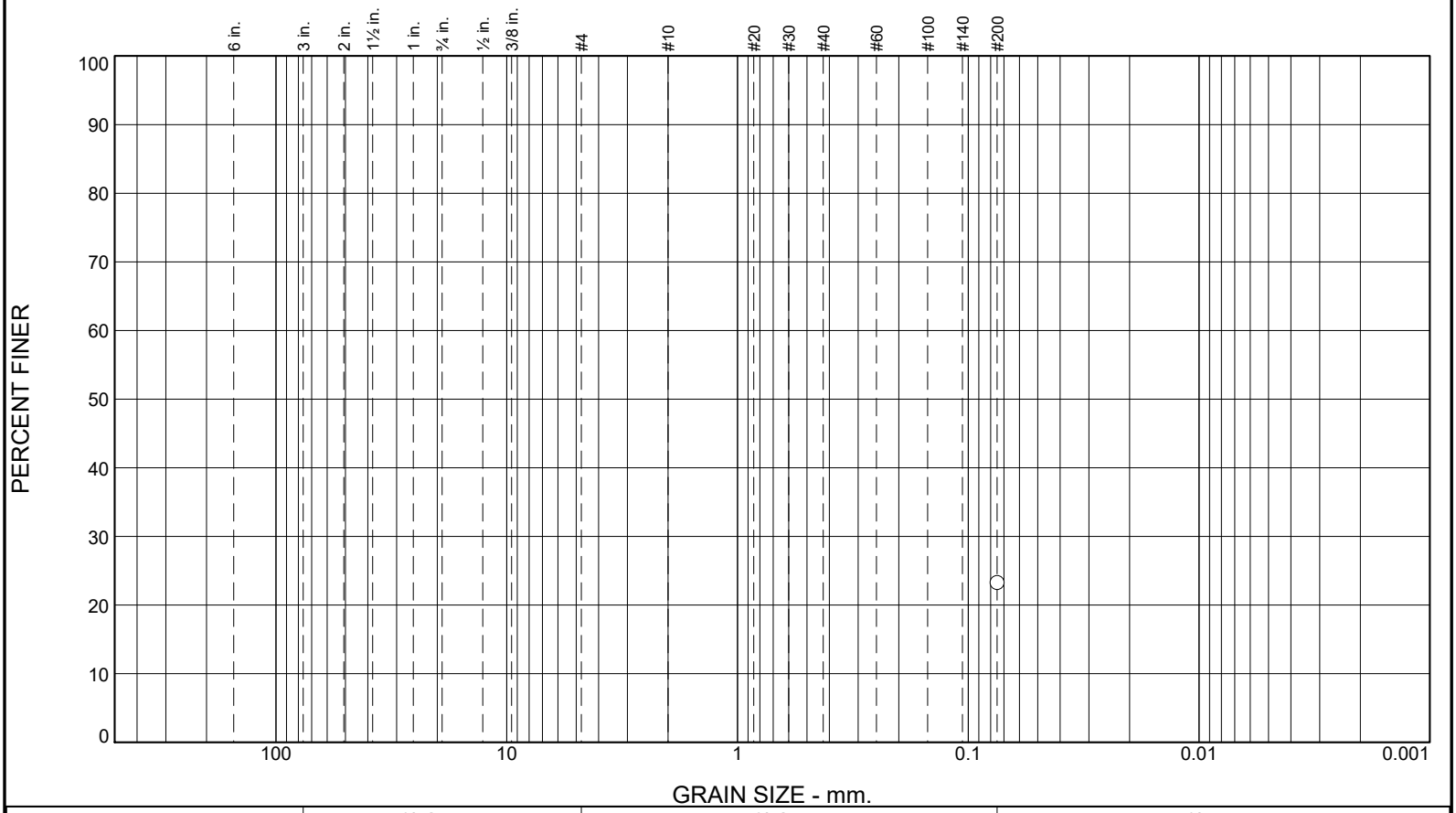
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						23.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	23.3		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26648
As received moisture content = 18.6%

Source of Sample: B3-4 **Depth:** 43.5-45 ft
Sample Number: S11

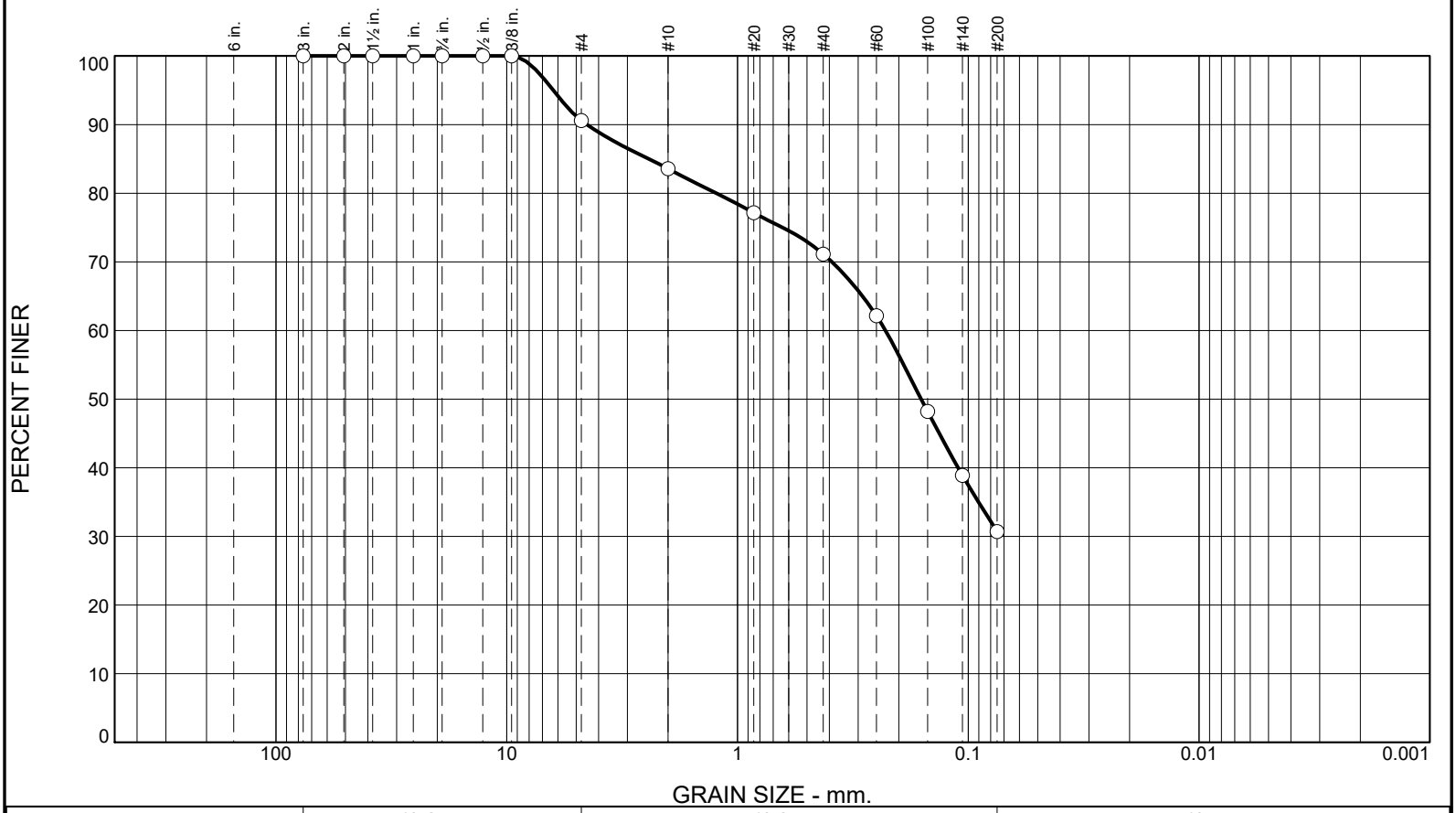
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	9.4	7.0	12.5	40.4	30.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	90.6		
#10	83.6		
#20	77.1		
#40	71.1		
#60	62.1		
#100	48.2		
#140	38.9		
#200	30.7		

* (no specification provided)

Soil Description

Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 4.4931 D_{85}= 2.4230 D_{60}= 0.2284
D_{50}= 0.1601 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26649
As received moisture content = 9.7%

Source of Sample: B3-4 **Depth:** 68.5-69 ft
Sample Number: S16

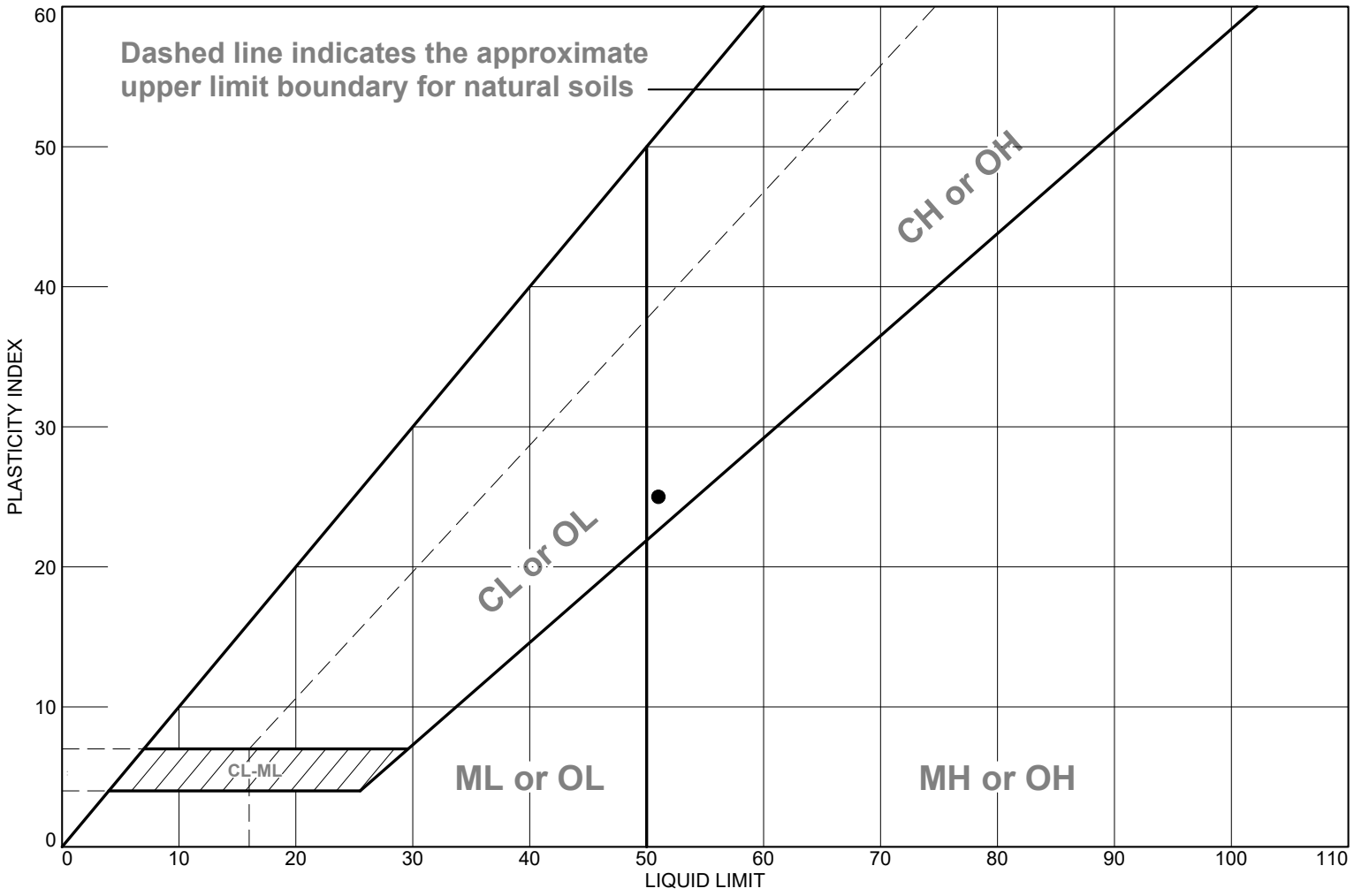
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Fat CLAY with Sand	51	26	25	N/A	70.6	CH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-5 **Depth:** 1-2.5 ft **Sample Number:** S1

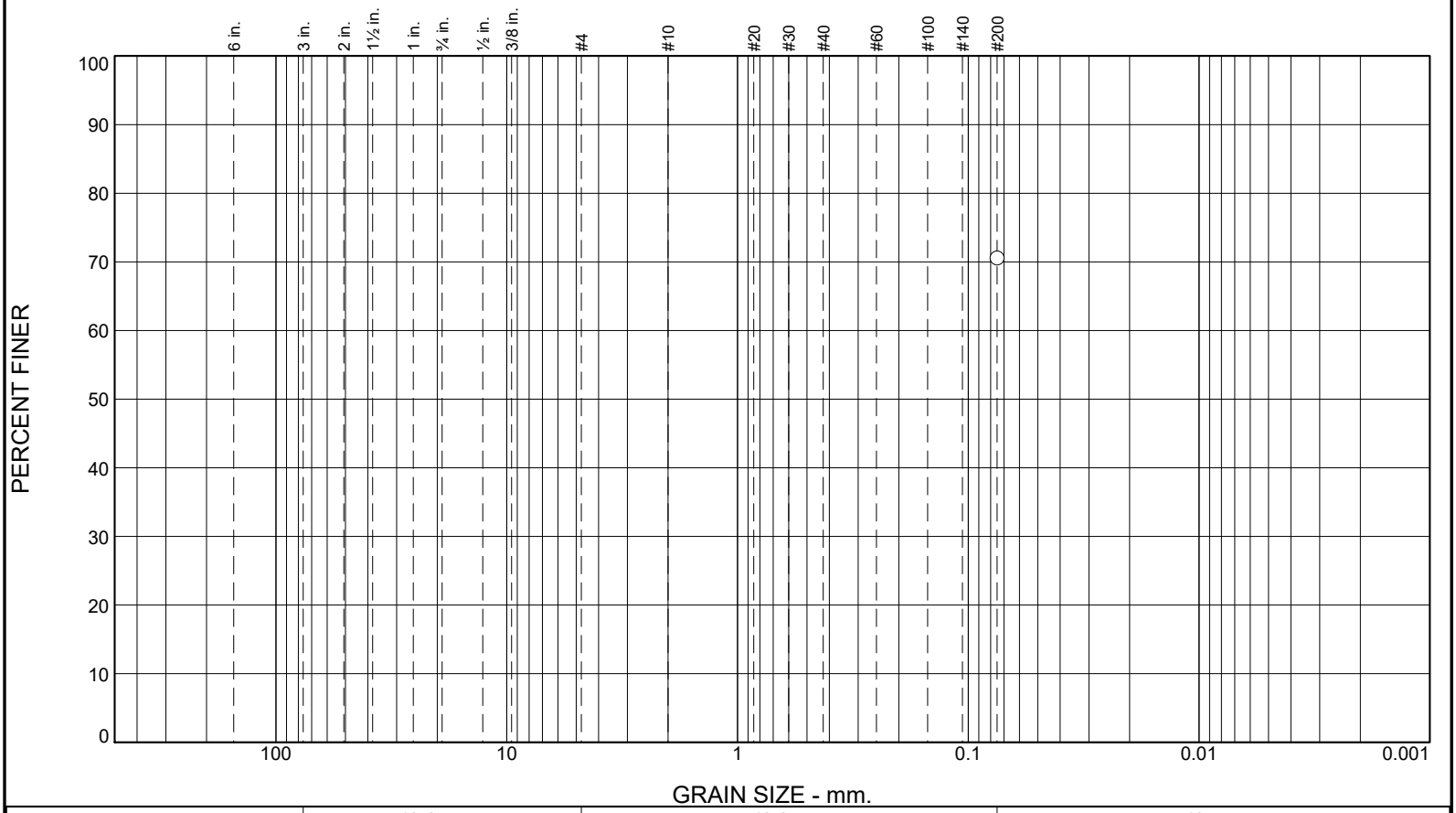
Remarks:

● Lab #26650
As received moisture content = 18.9%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						70.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	70.6		

* (no specification provided)

Soil Description

Brown Fat CLAY with Sand

Atterberg Limits

PL= 26 LL= 51 PI= 25

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CH AASHTO= N/A

Remarks

Lab #26650
As received moisture content = 18.9%

Source of Sample: B3-5 **Depth:** 1-2.5 ft
Sample Number: S1

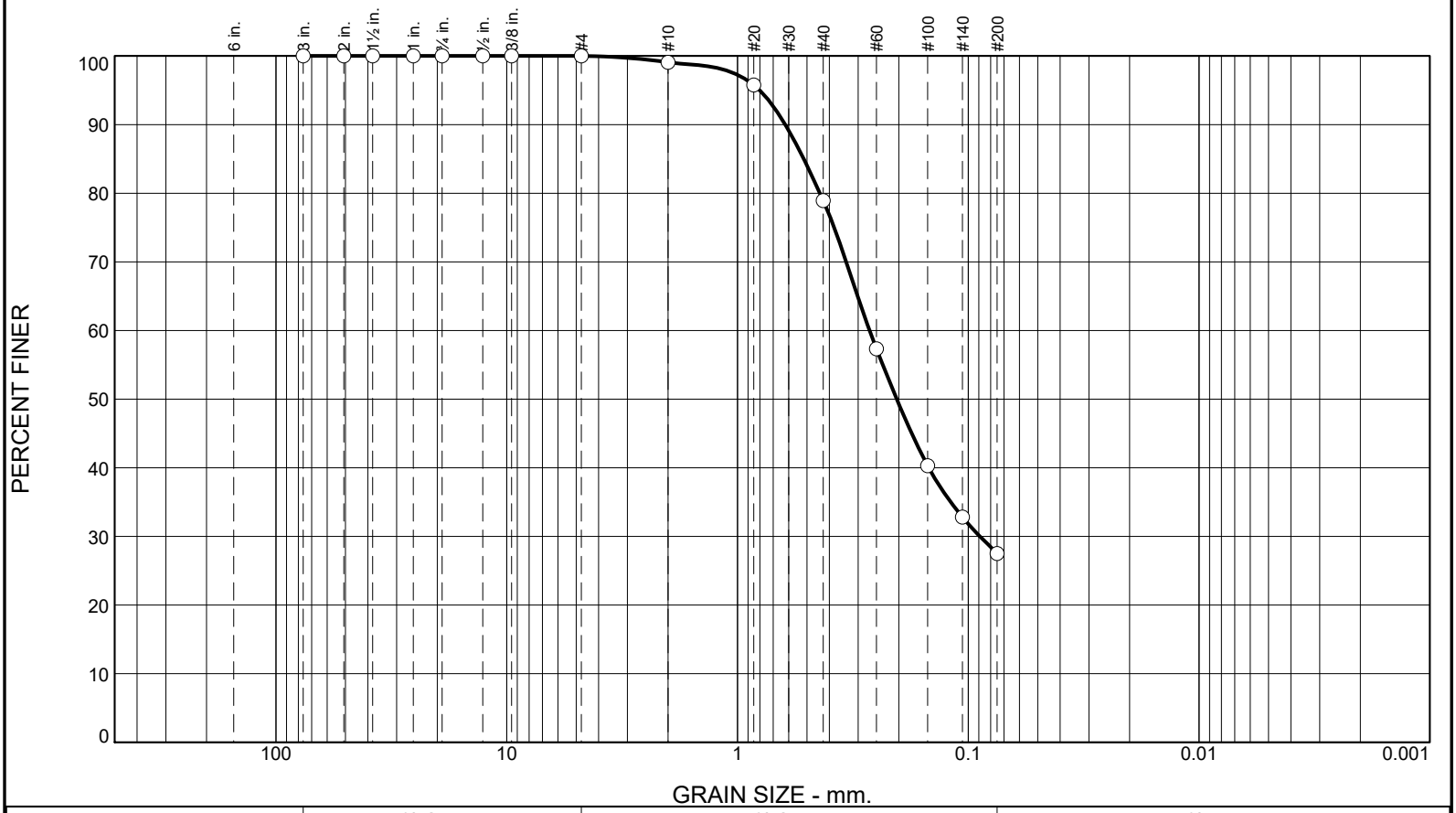
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.9	20.2	51.4	27.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.1		
#20	95.8		
#40	78.9		
#60	57.3		
#100	40.3		
#140	32.8		
#200	27.5		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6212 D_{85}= 0.5166 D_{60}= 0.2678
D_{50}= 0.2041 D_{30}= 0.0890 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26651
As received moisture content = 20.0%

Source of Sample: B3-5 **Depth:** 8.5-10 ft
Sample Number: S4

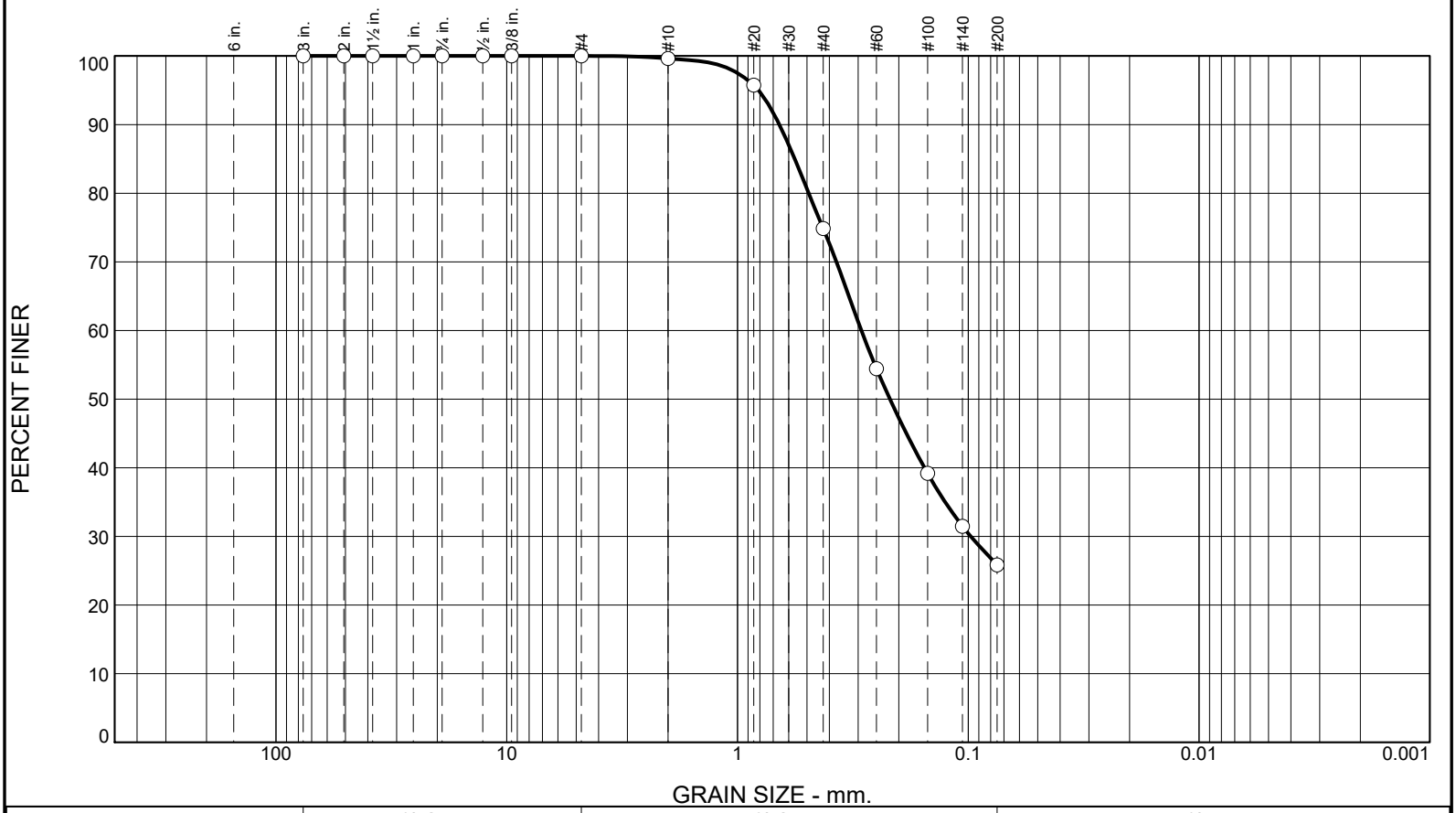
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.4	24.8	49.0	25.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.6		
#20	95.7		
#40	74.8		
#60	54.4		
#100	39.2		
#140	31.5		
#200	25.8		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6587 D_{85}= 0.5652 D_{60}= 0.2905
D_{50}= 0.2185 D_{30}= 0.0977 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26652
As received moisture content = 16.9%

Source of Sample: B3-5 **Depth:** 33.5-35 ft
Sample Number: S9

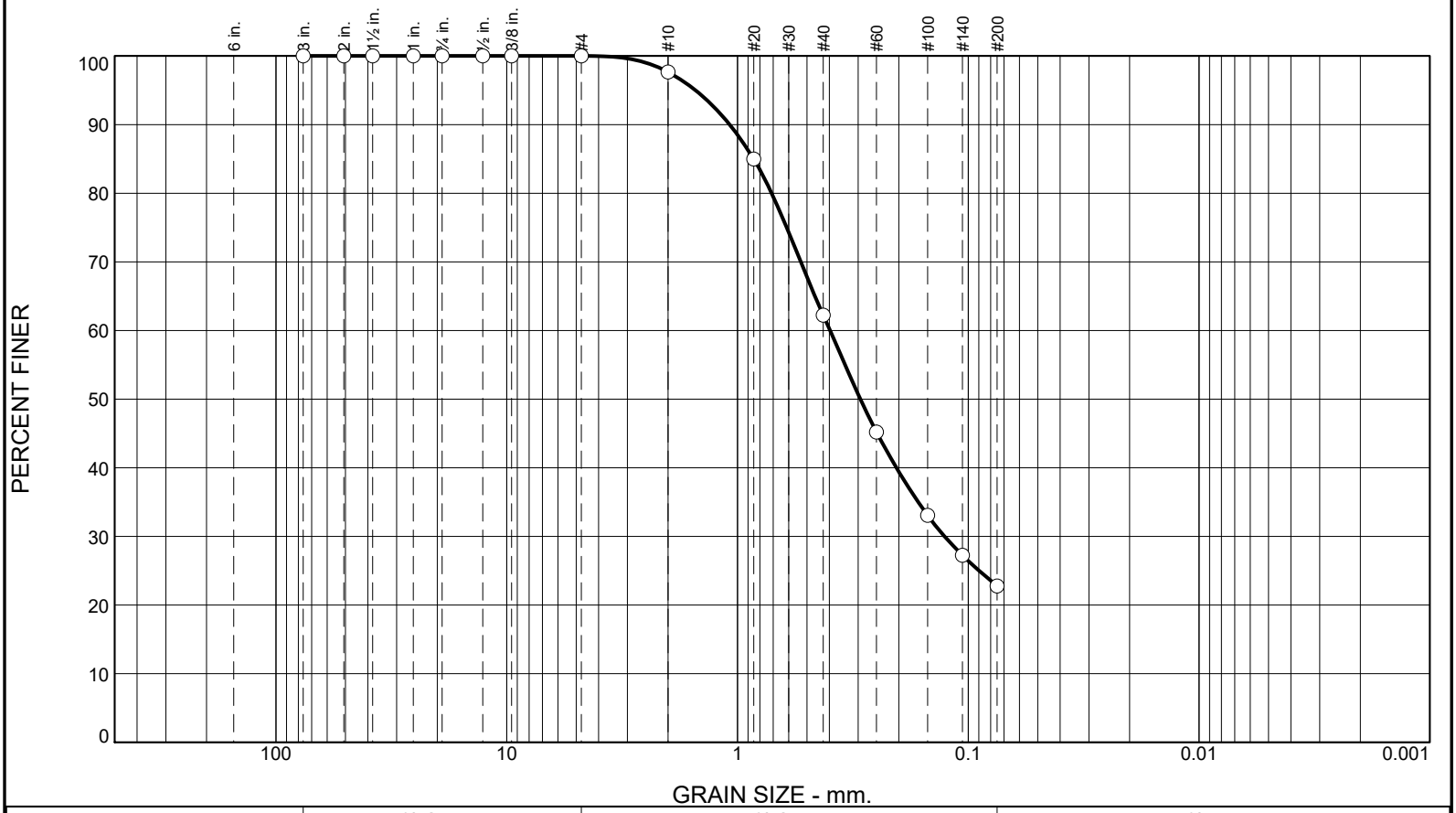
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	2.3	35.5	39.4	22.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	97.7		
#20	85.0		
#40	62.2		
#60	45.2		
#100	33.1		
#140	27.3		
#200	22.8		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.0814 D_{85}= 0.8507 D_{60}= 0.3971
D_{50}= 0.2934 D_{30}= 0.1267 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26653
As received moisture content = 20.3%

Source of Sample: B3-5 **Depth:** 48.5-49.9 ft
Sample Number: S12

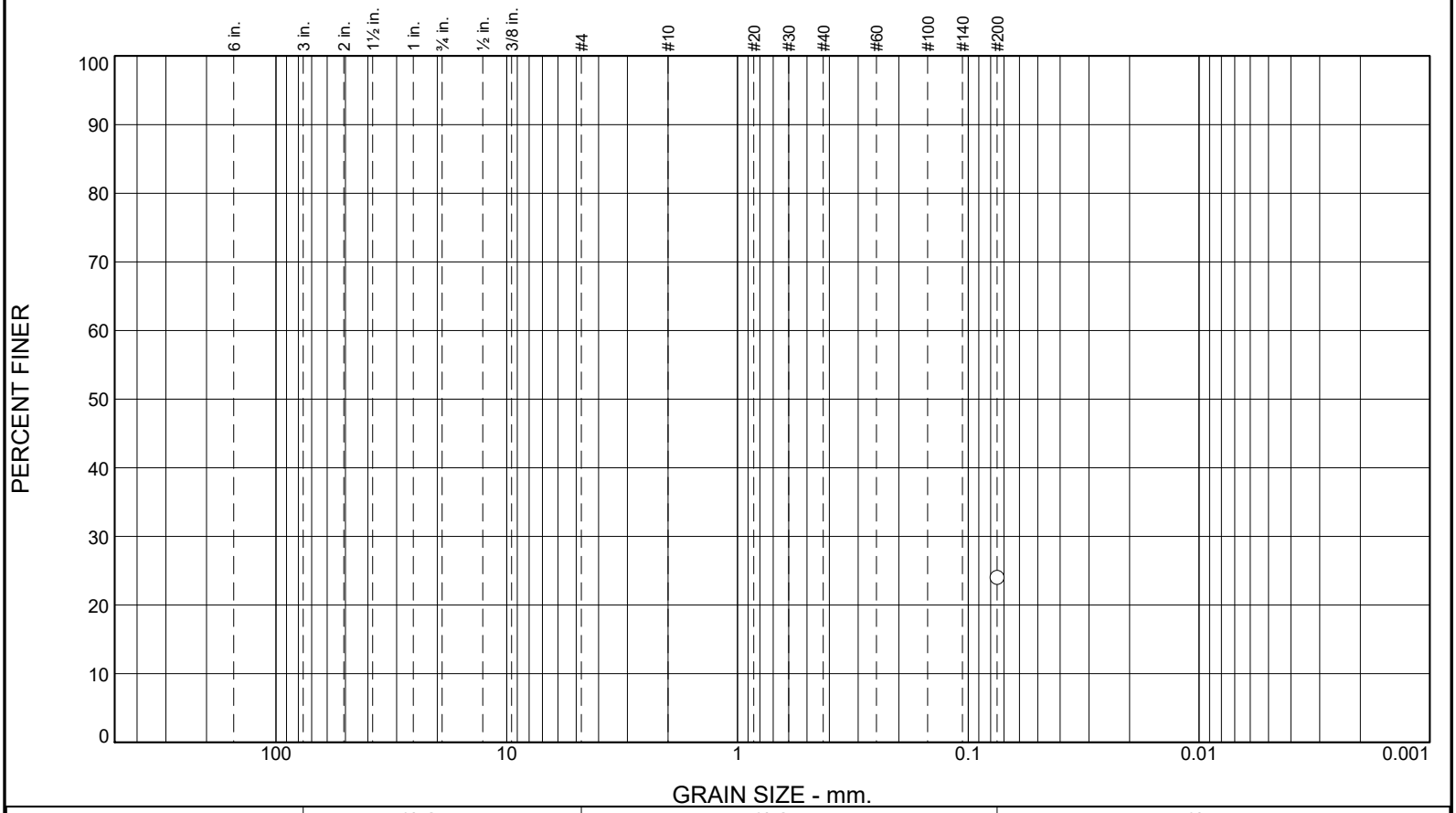
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						24.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	24.0		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26654
As received moisture content = 21.1%

Source of Sample: B3-5 **Depth:** 58.5-60 ft
Sample Number: S14

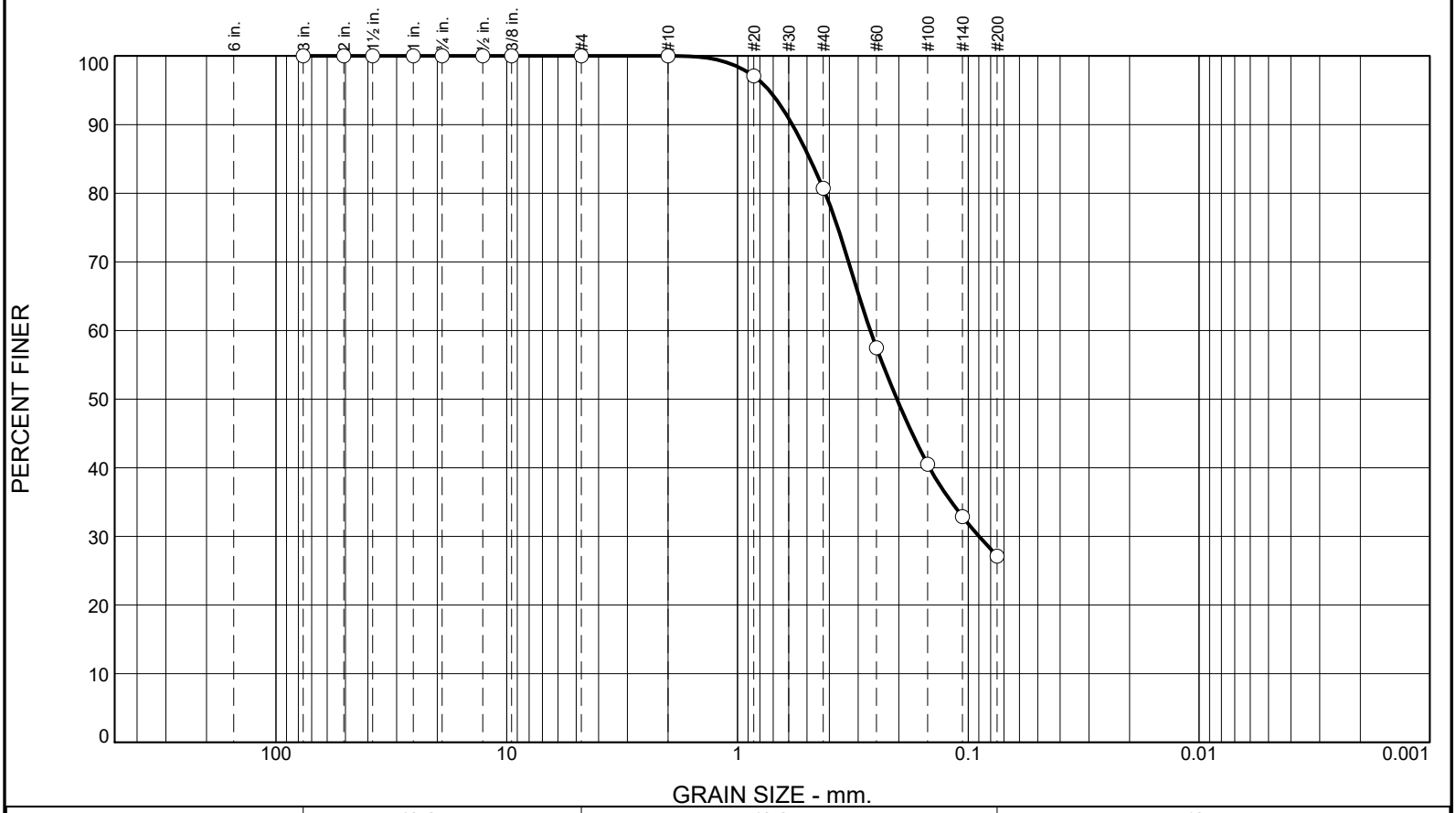
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	19.3	53.6	27.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	100.0		
#20	97.1		
#40	80.7		
#60	57.5		
#100	40.5		
#140	32.9		
#200	27.1		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5789 D_{85}= 0.4854 D_{60}= 0.2661
D_{50}= 0.2037 D_{30}= 0.0898 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26655
As received moisture content = 17.3%

Source of Sample: B3-5 **Depth:** 63.5-64.8 ft
Sample Number: S15

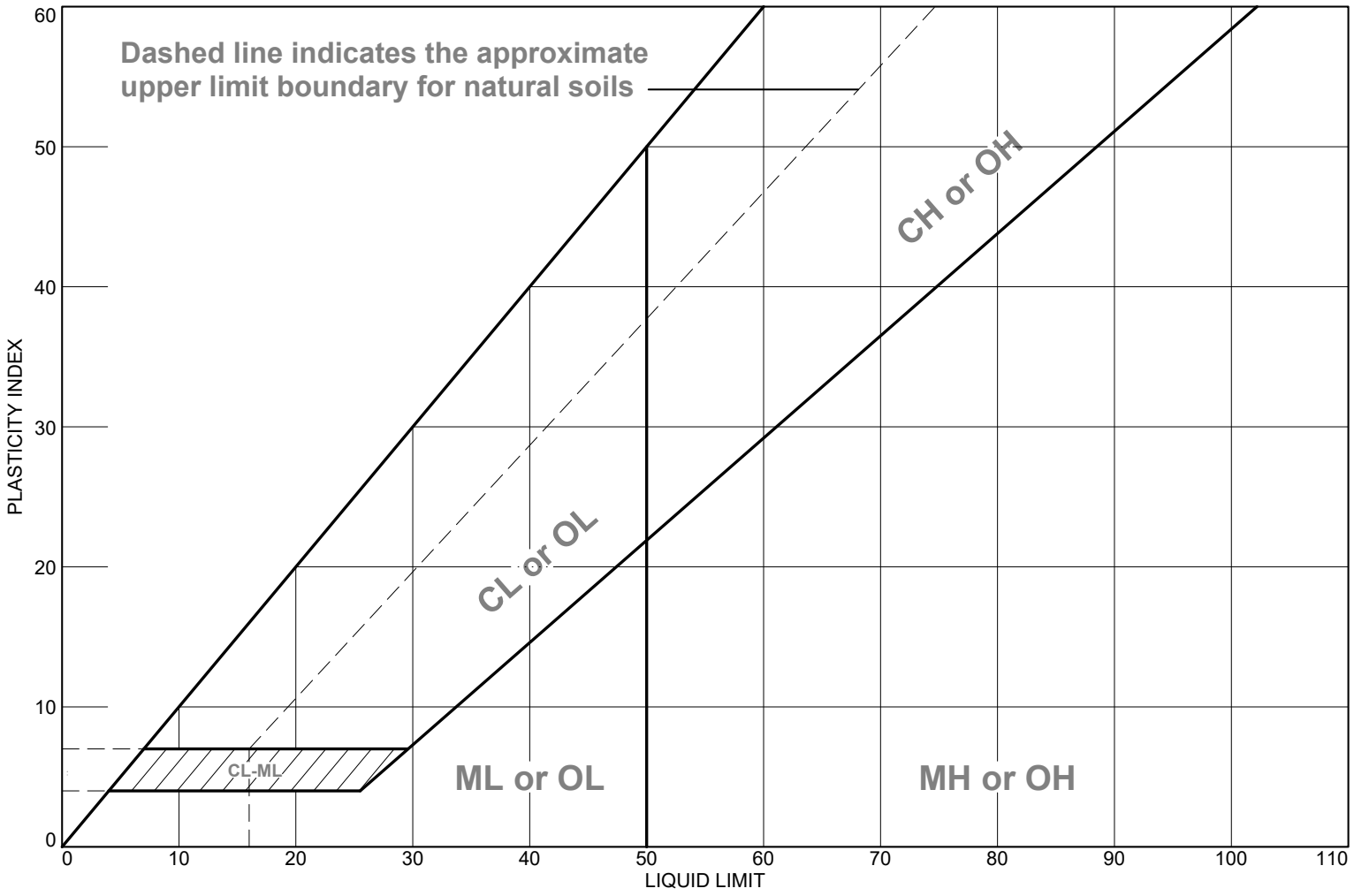
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Silty SAND	NV	NP	NP	N/A	37.4	SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-6 **Depth:** 6-7.5 ft **Sample Number:** S3

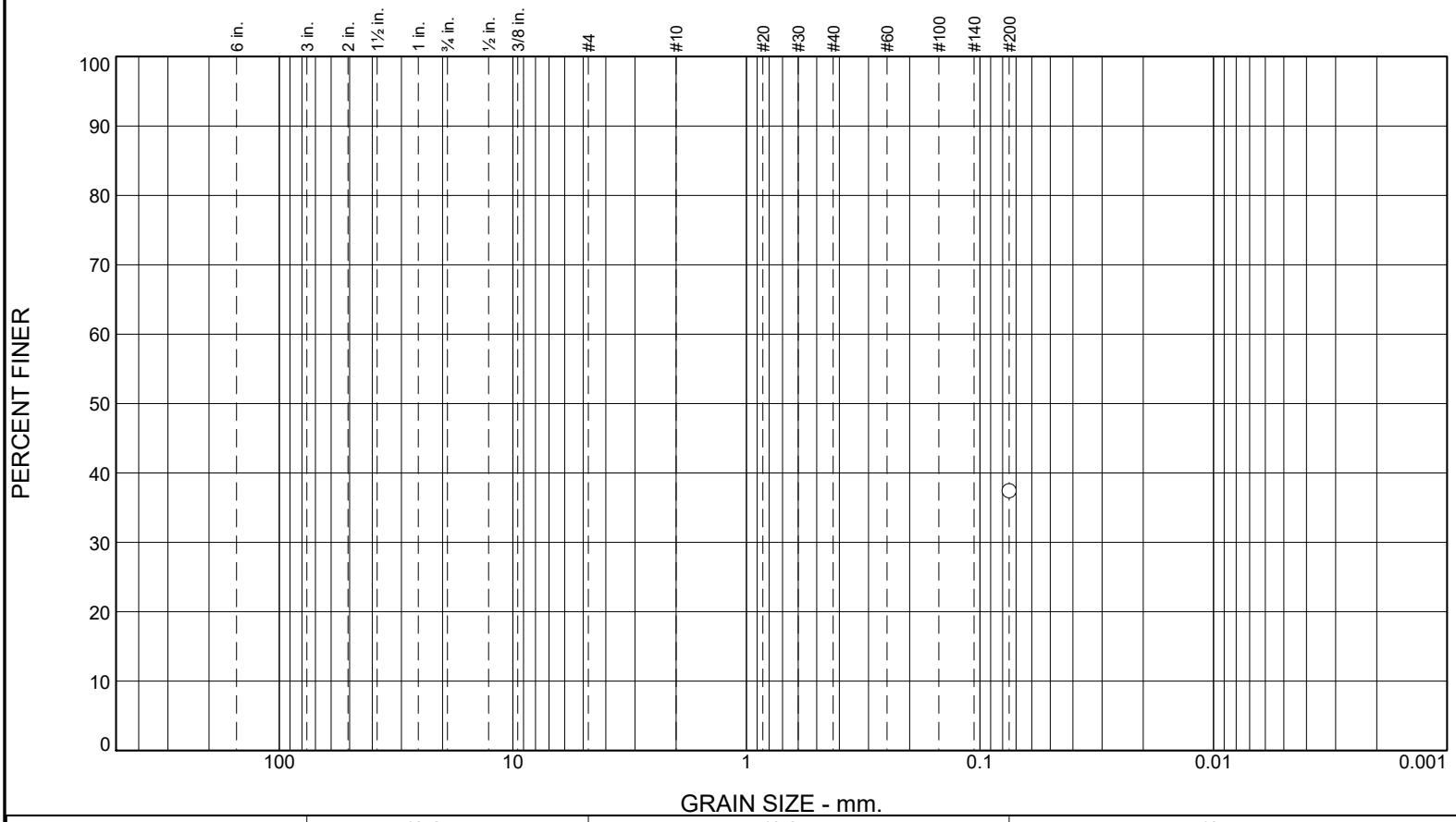
Remarks:

● Lab #26657
As received moisture content = 22.0%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						37.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	37.4		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= N/A

Remarks

Lab #26657
As received moisture content = 22.0%

Source of Sample: B3-6 **Depth:** 6-7.5 ft
Sample Number: S3

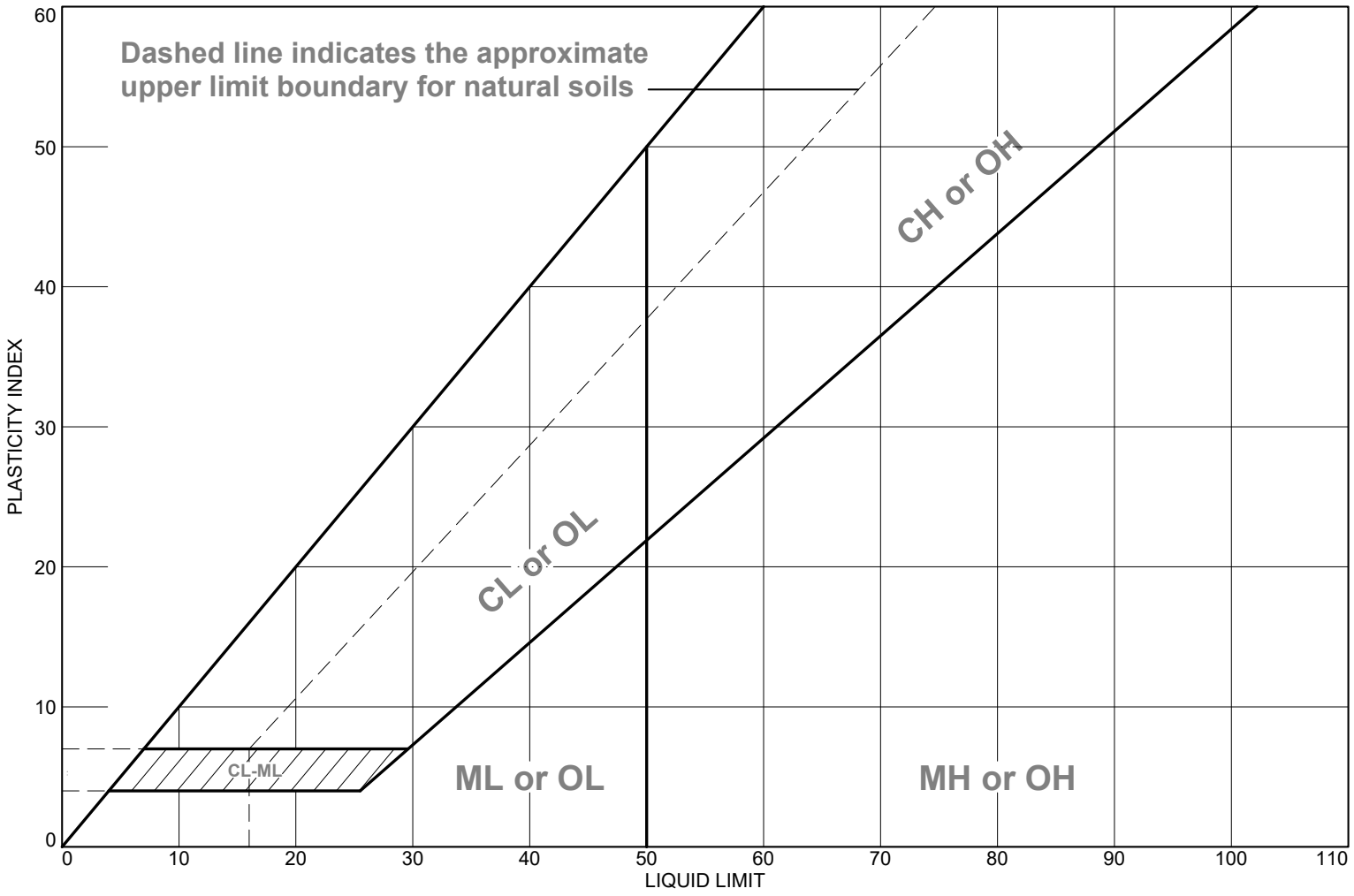
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Silty SAND	NV	NP	NP	N/A	36.9	SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-6 **Depth:** 13.5-15 ft **Sample Number:** S5

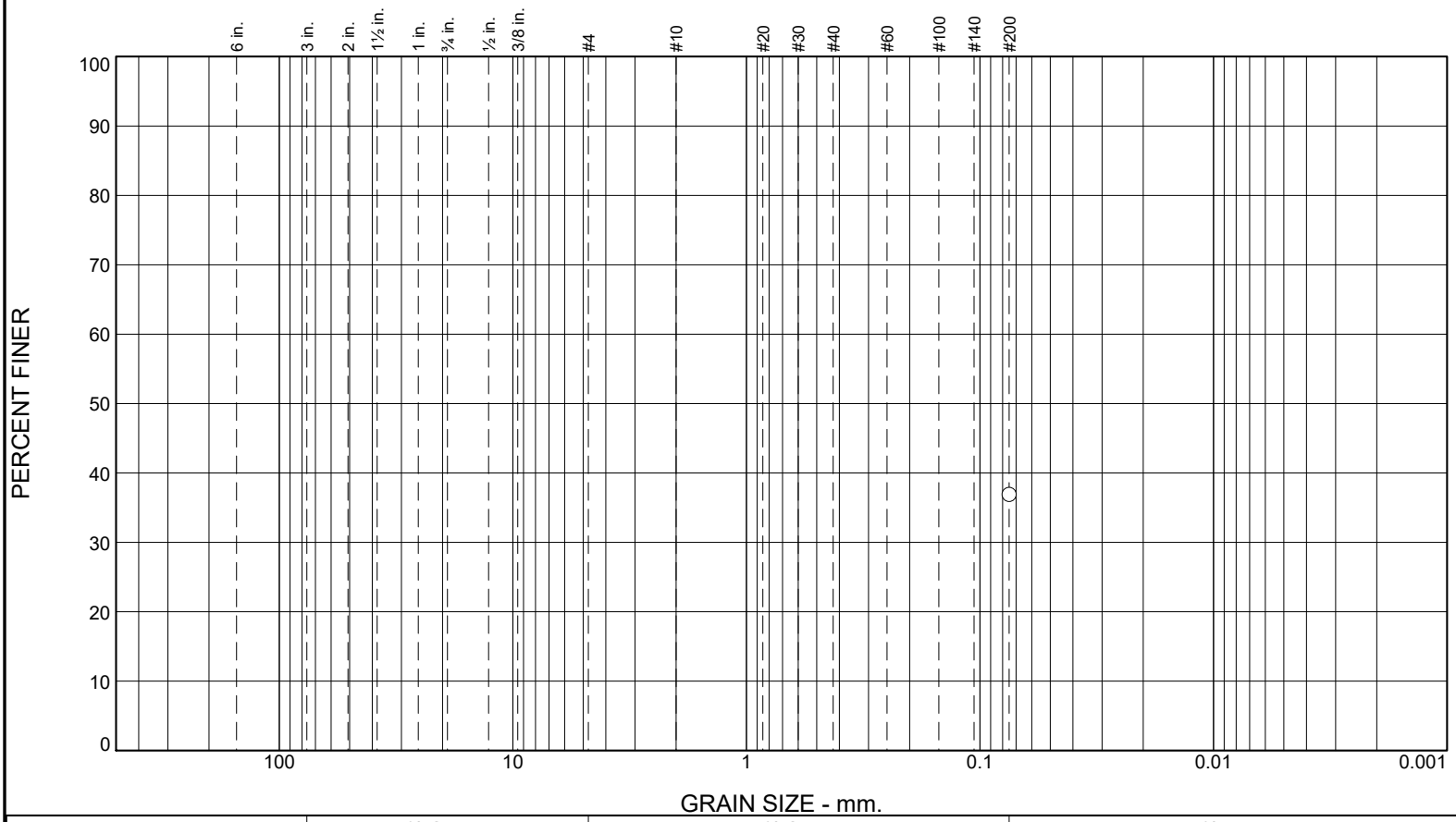
Remarks:

● Lab #26658
As received moisture content = 22.9%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						36.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	36.9		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= N/A

Remarks

Lab #26658
As received moisture content = 22.9%

Source of Sample: B3-6 **Depth:** 13.5-15 ft
Sample Number: S5

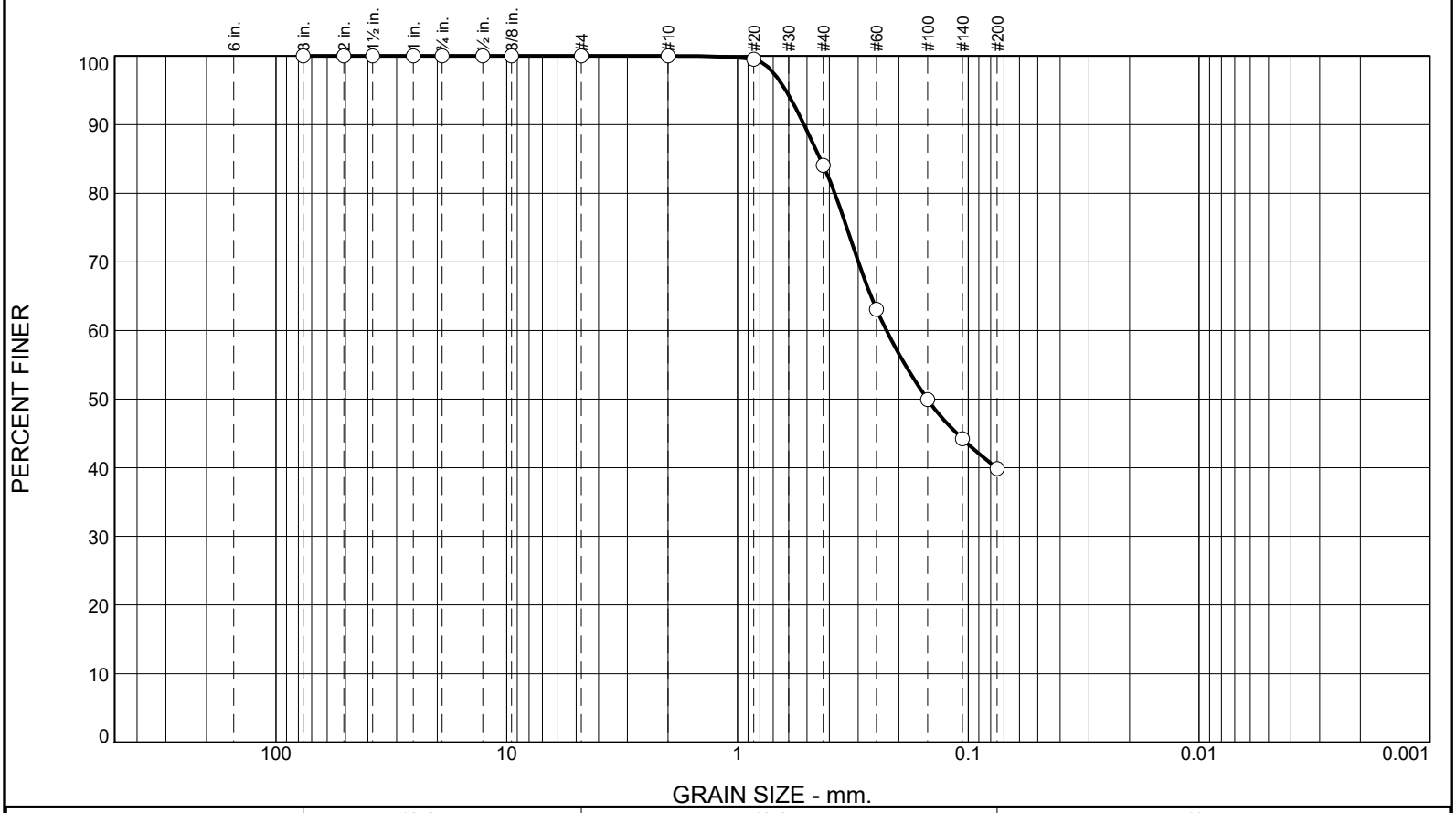
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	15.9	44.2	39.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	100.0		
#20	99.5		
#40	84.1		
#60	63.1		
#100	49.9		
#140	44.2		
#200	39.9		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5150 D_{85}= 0.4381 D_{60}= 0.2263
D_{50}= 0.1504 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26659
As received moisture content = 15.1%

Source of Sample: B3-6 **Depth:** 18.5-20 ft
Sample Number: S6

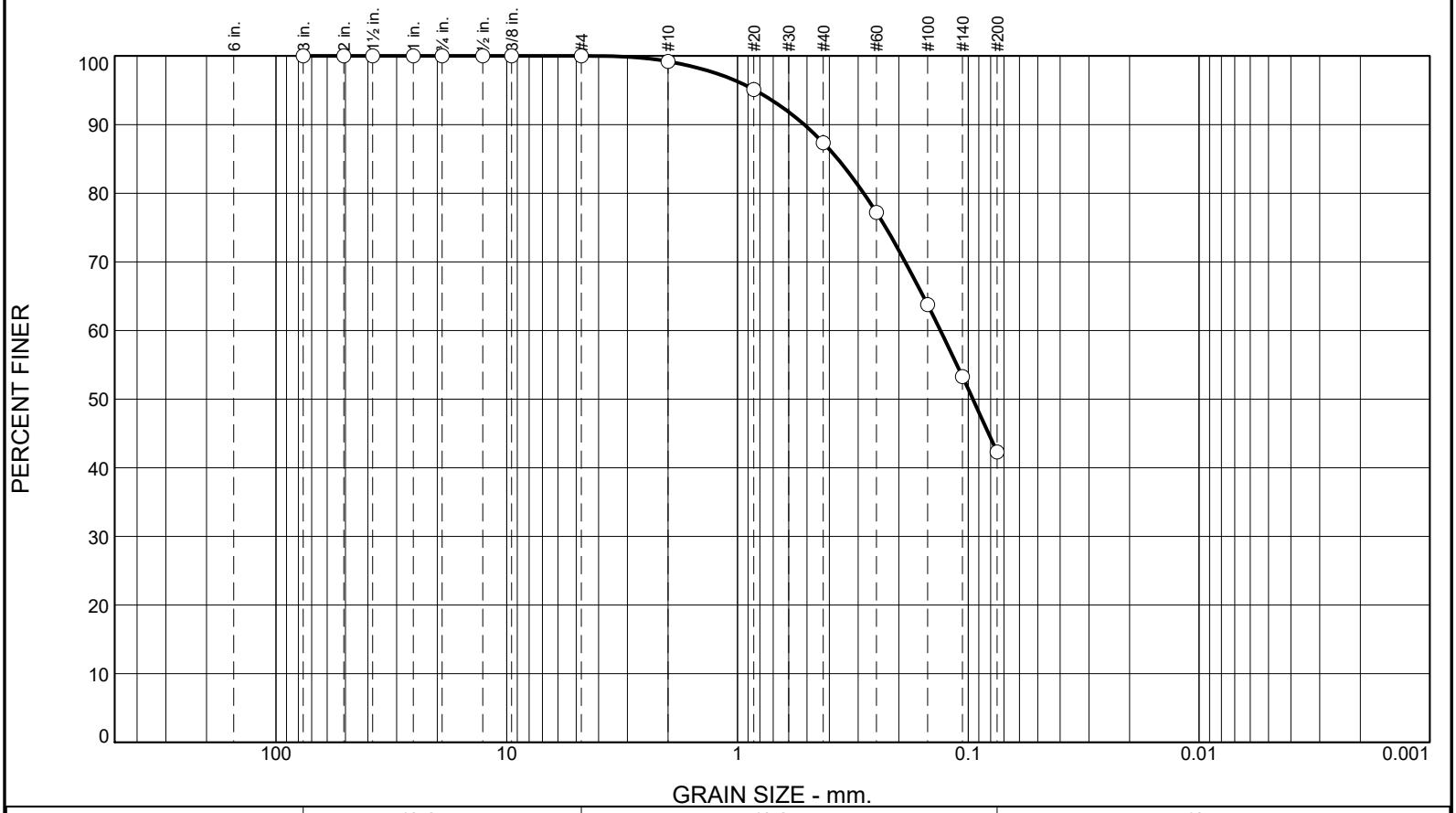
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.8	11.8	45.1	42.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.2		
#20	95.1		
#40	87.4		
#60	77.2		
#100	63.8		
#140	53.3		
#200	42.3		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5139 D_{85}= 0.3678 D_{60}= 0.1319
D_{50}= 0.0955 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26660
As received moisture content = 14.5%

Source of Sample: B3-6A **Depth:** 43.5-45 ft
Sample Number: S11

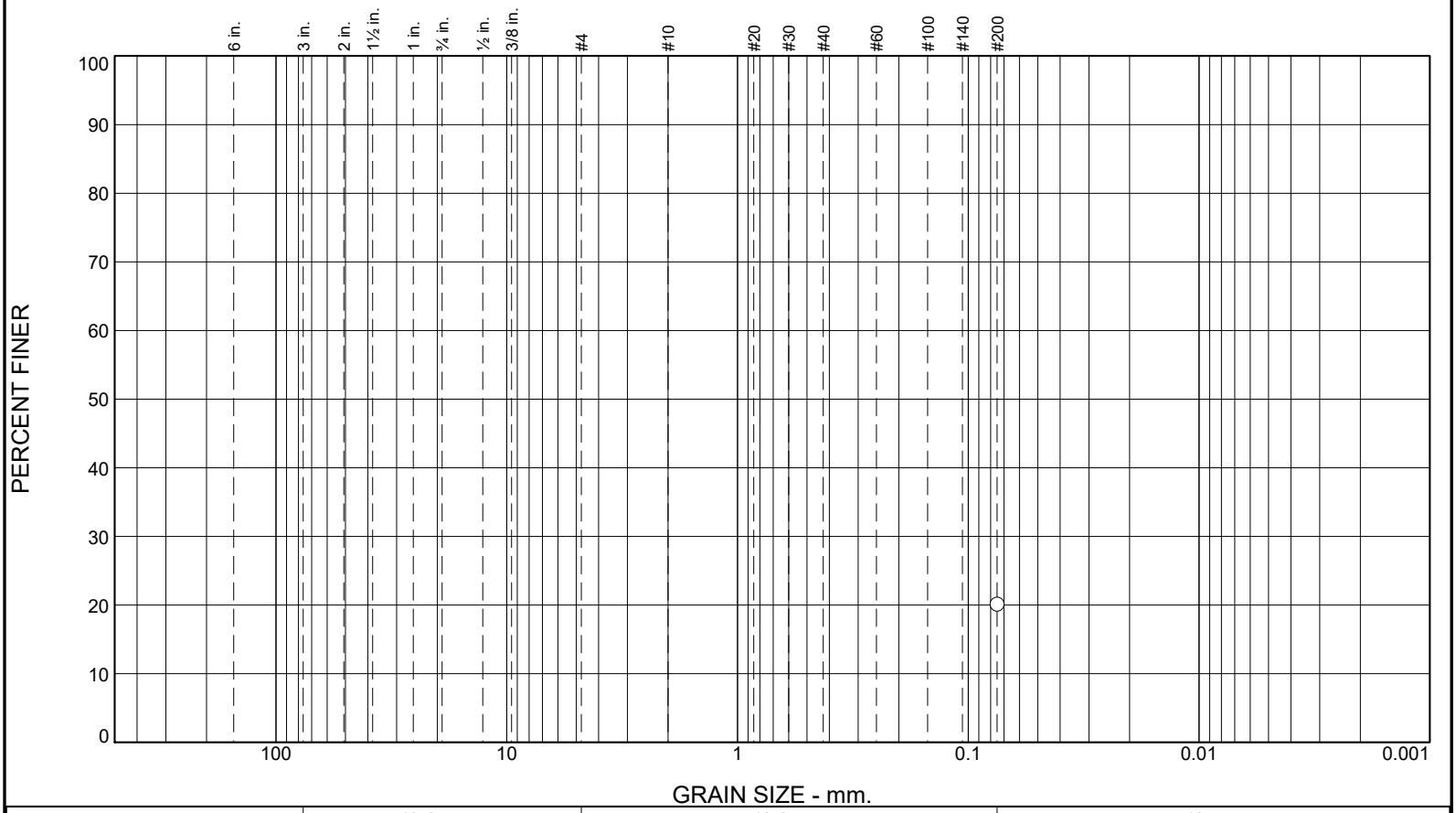
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						20.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	20.1		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26661
As received moisture content = 16.2%

Source of Sample: B3-6A **Depth:** 63.5-63.8 ft
Sample Number: S15

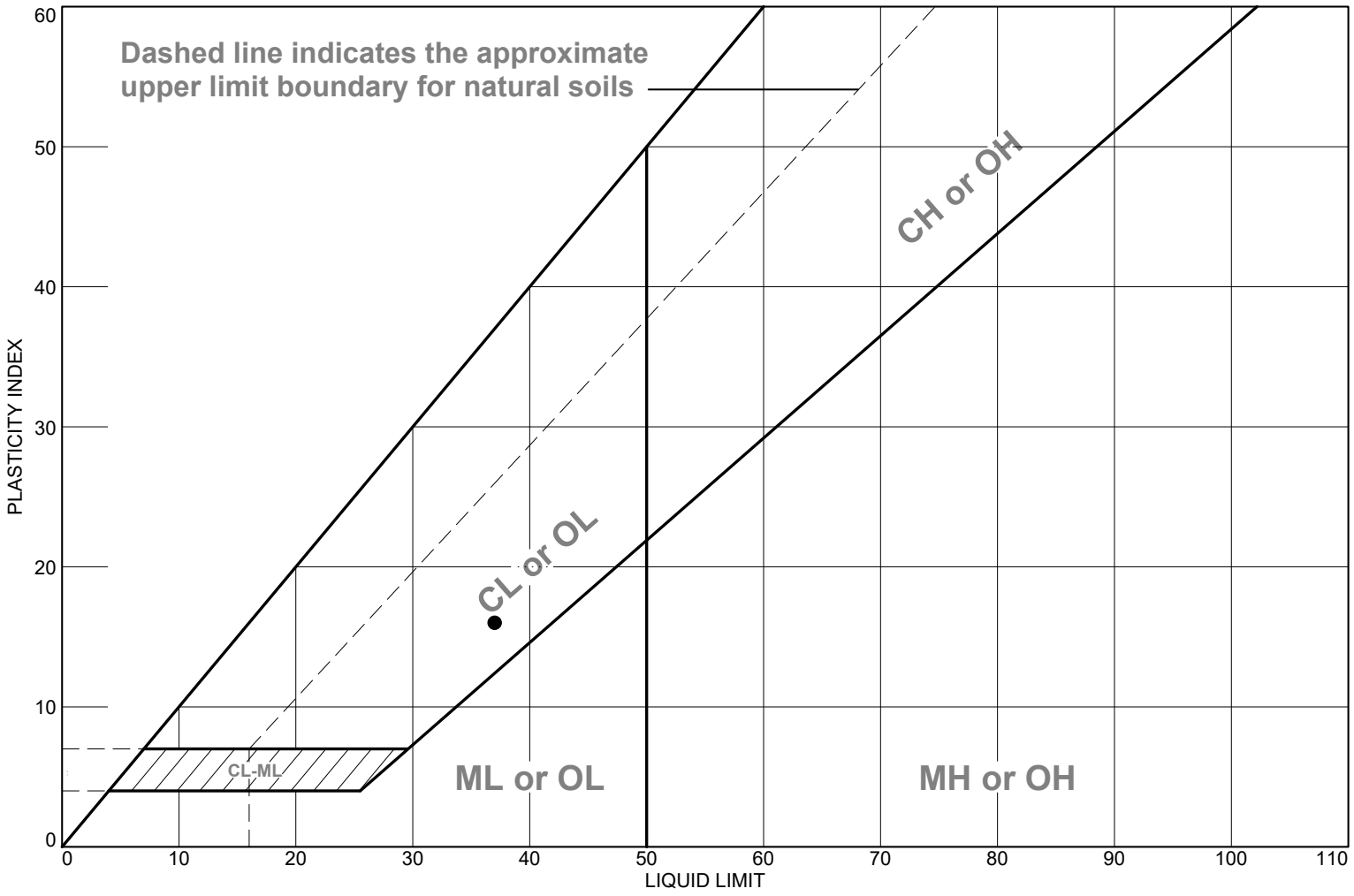
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown Sandy Lean CLAY	37	21	16	N/A	53.7	CL

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** B3-7 **Depth:** 1-2.5 ft **Sample Number:** S1

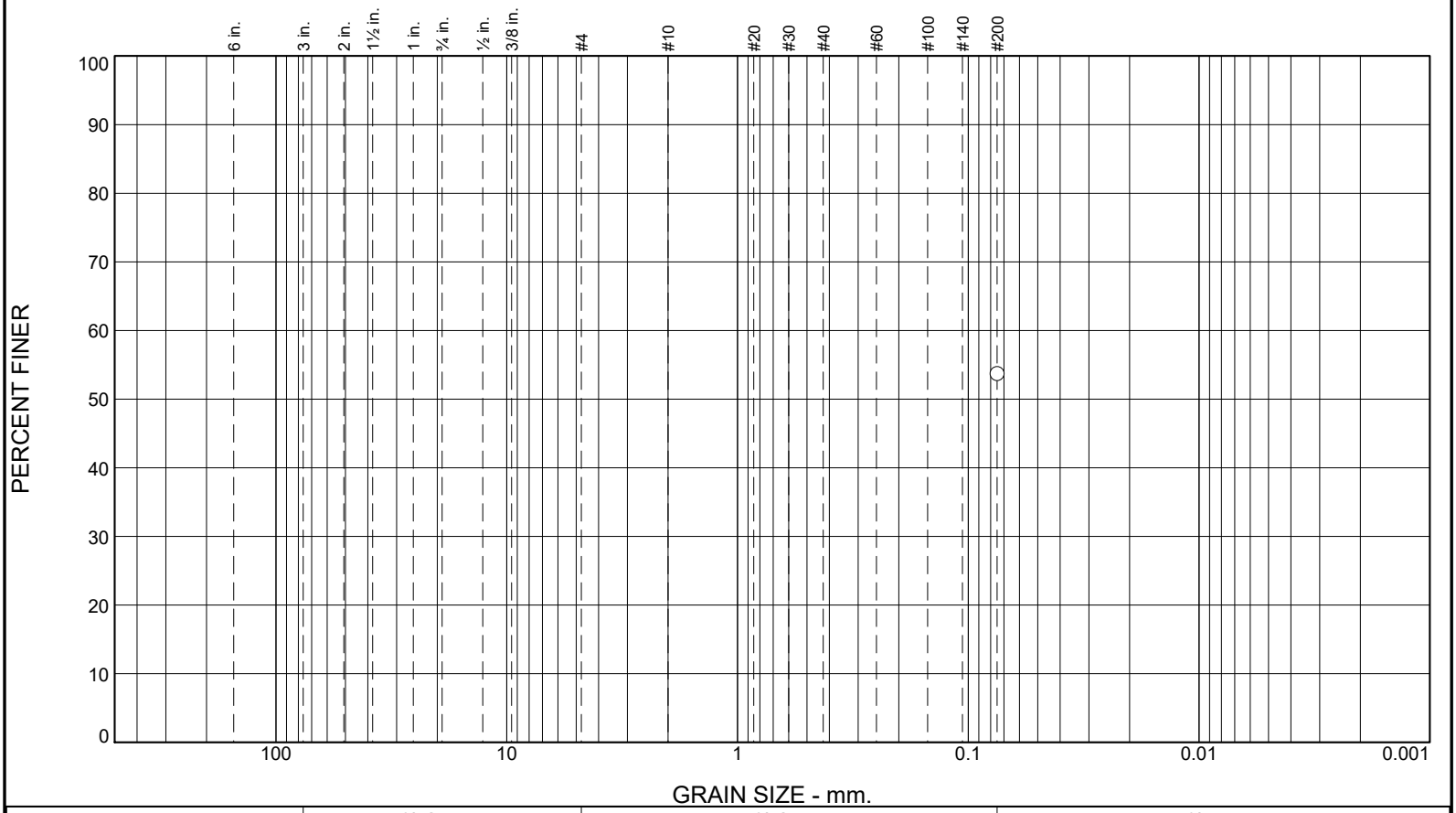
Remarks:

● Lab #26662
As received moisture content = 15.2%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						53.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	53.7		

* (no specification provided)

Soil Description

Brown Sandy Lean CLAY

Atterberg Limits

PL= 21 LL= 37 PI= 16

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= N/A

Remarks

Lab #26662
As received moisture content = 15.2%

Source of Sample: B3-7 **Depth:** 1-2.5 ft
Sample Number: S1

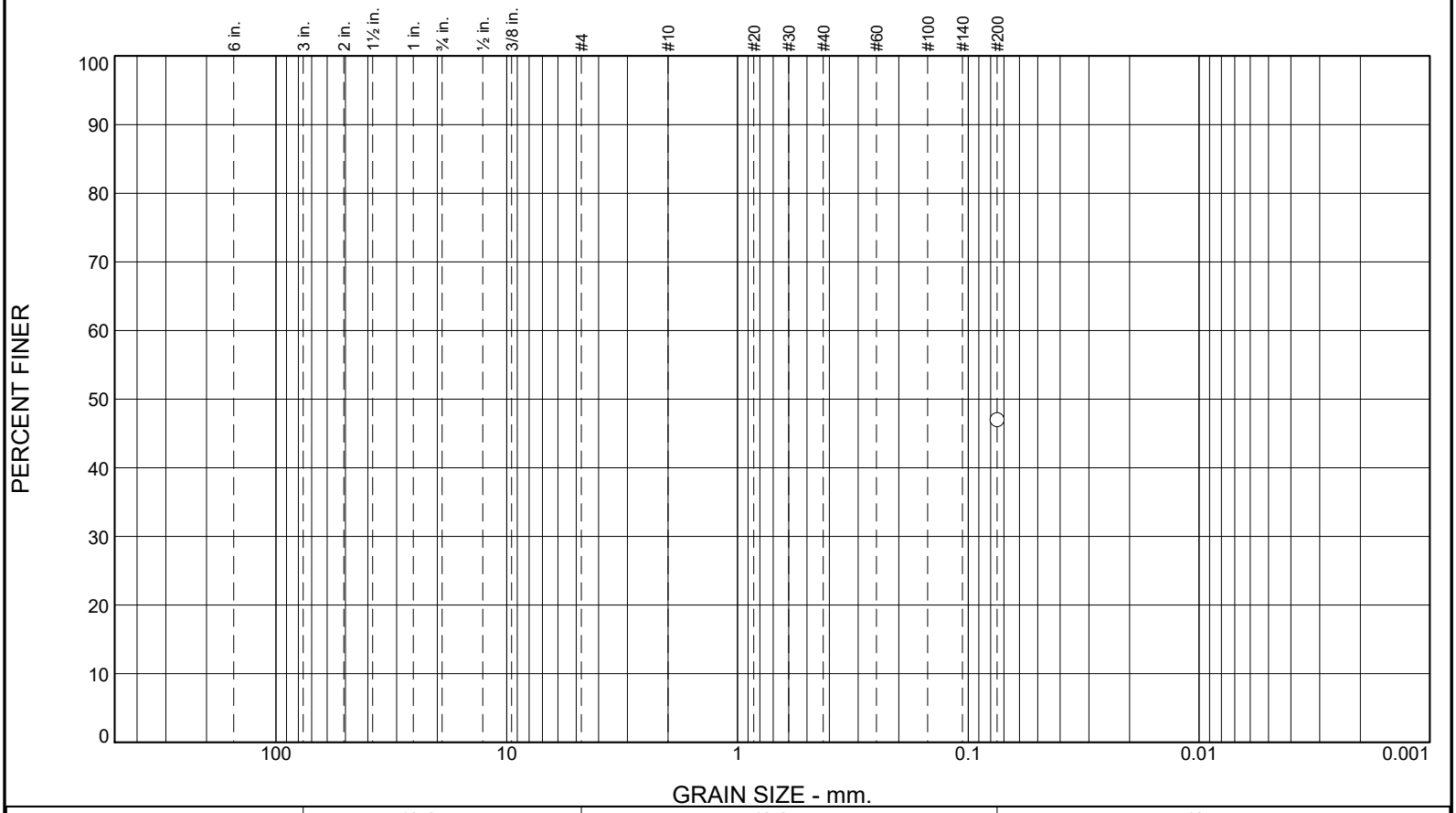
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: AG **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						47.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	47.0		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26663
As received moisture content = 24.7%

Source of Sample: B3-7 **Depth:** 3.5-5 ft
Sample Number: S2

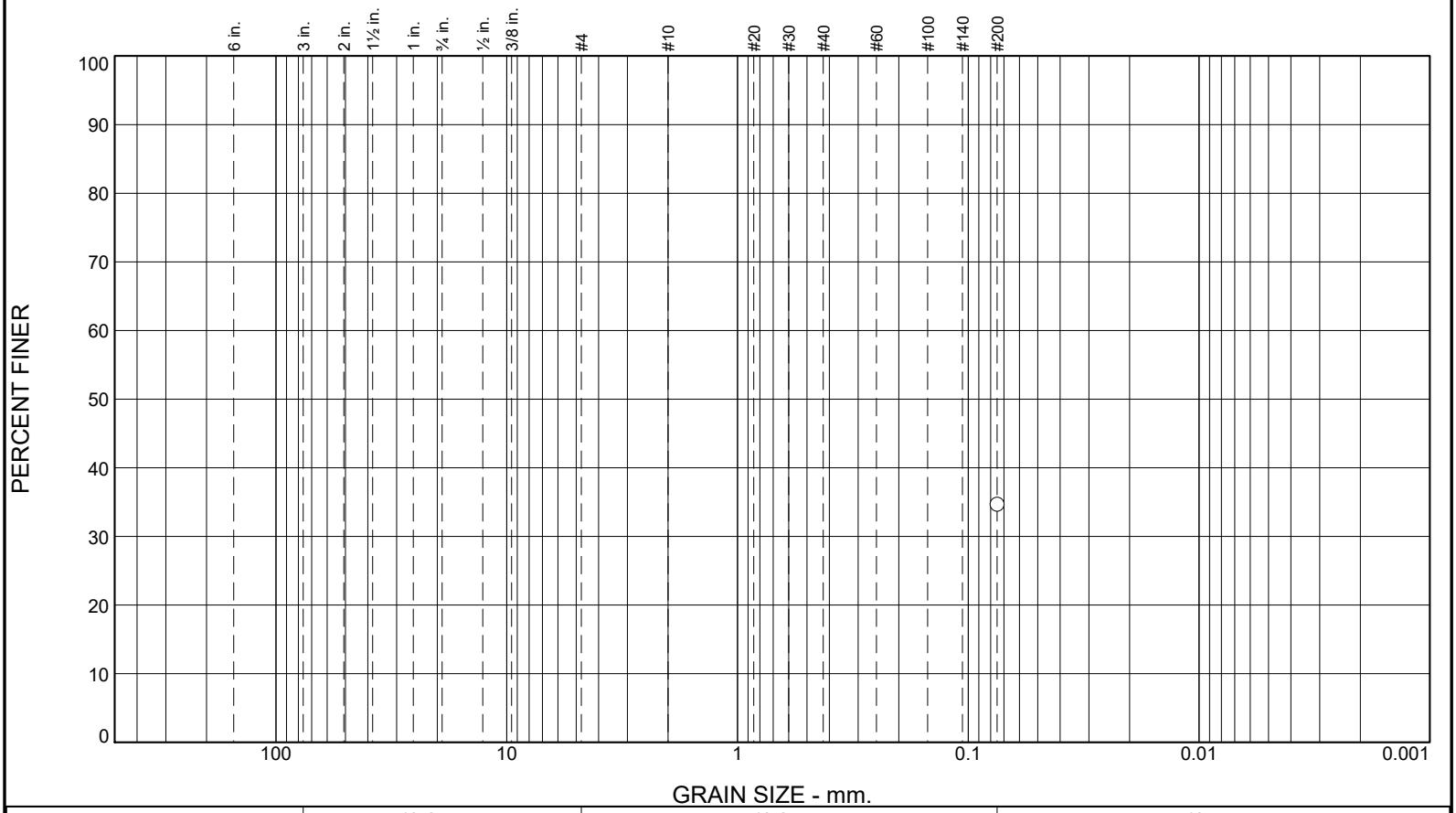
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						34.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	34.7		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26664
As received moisture content = 27.7%

Source of Sample: B3-7 **Depth:** 6-7.5 ft
Sample Number: S3

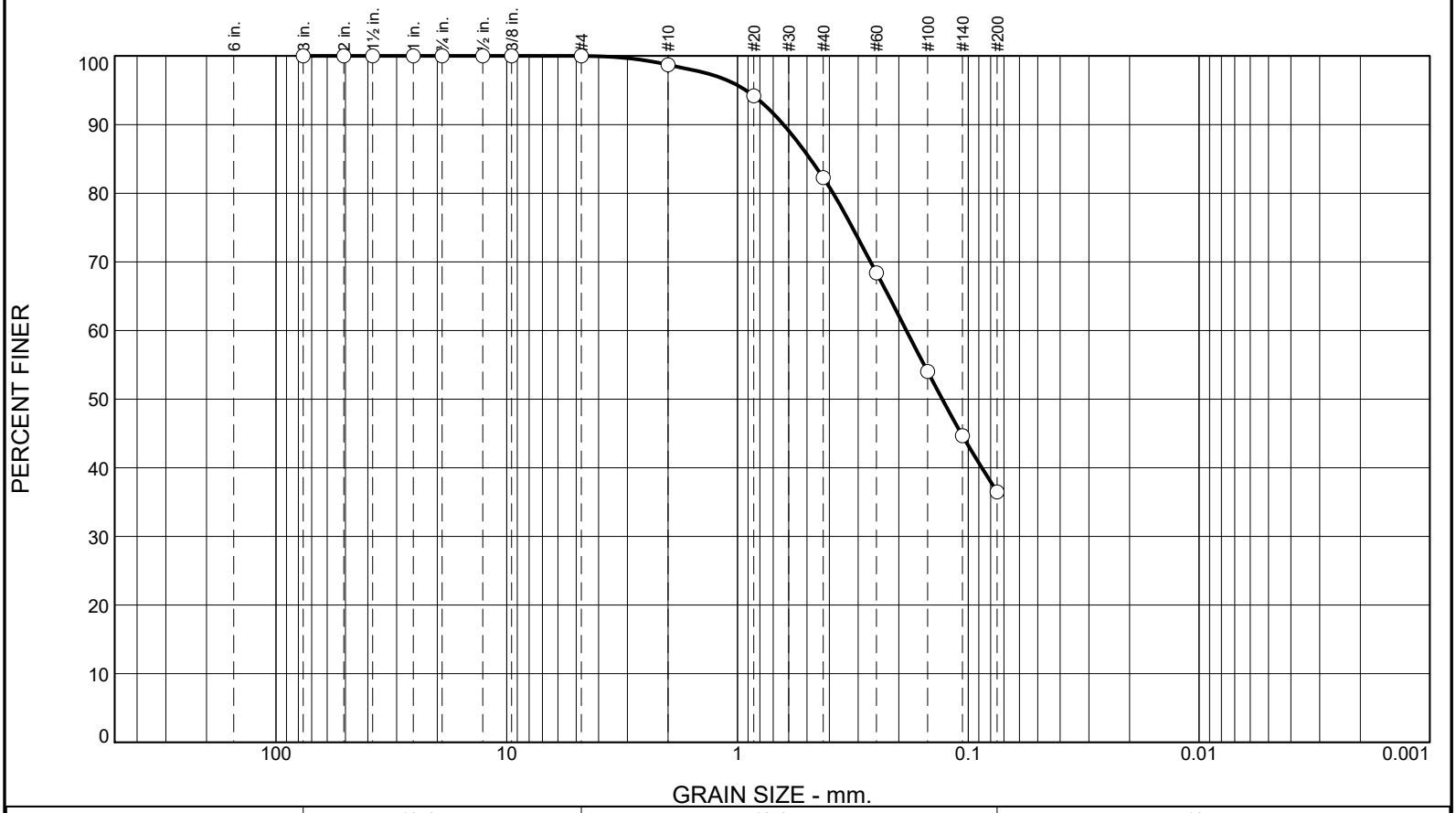
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.3	16.4	45.8	36.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	98.7		
#20	94.2		
#40	82.3		
#60	68.4		
#100	54.0		
#140	44.7		
#200	36.5		

* (no specification provided)

Soil Description

Tannish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6321 D_{85}= 0.4840 D_{60}= 0.1854
D_{50}= 0.1296 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26665
As received moisture content = 34.0%

Source of Sample: B3-7 **Depth:** 23.5-25 ft
Sample Number: S7

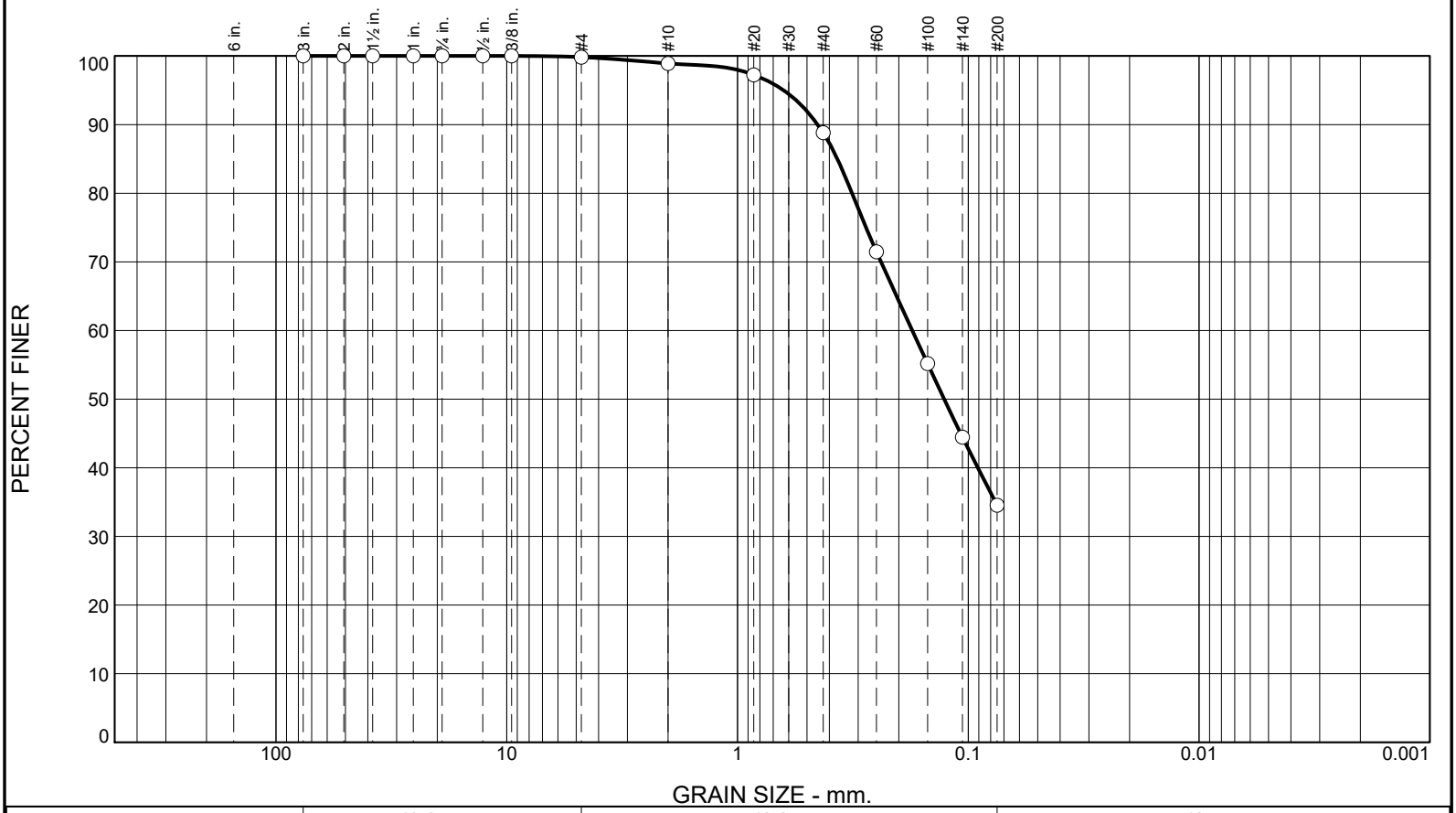
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.9	10.1	54.3	34.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.8		
#10	98.9		
#20	97.2		
#40	88.8		
#60	71.5		
#100	55.2		
#140	44.5		
#200	34.5		

* (no specification provided)

Soil Description

Yellowish Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.4494 D_{85}= 0.3695 D_{60}= 0.1748
D_{50}= 0.1271 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26666
As received moisture content = 24.3%

Source of Sample: B3-7 **Depth:** 58.5-60 ft
Sample Number: S14

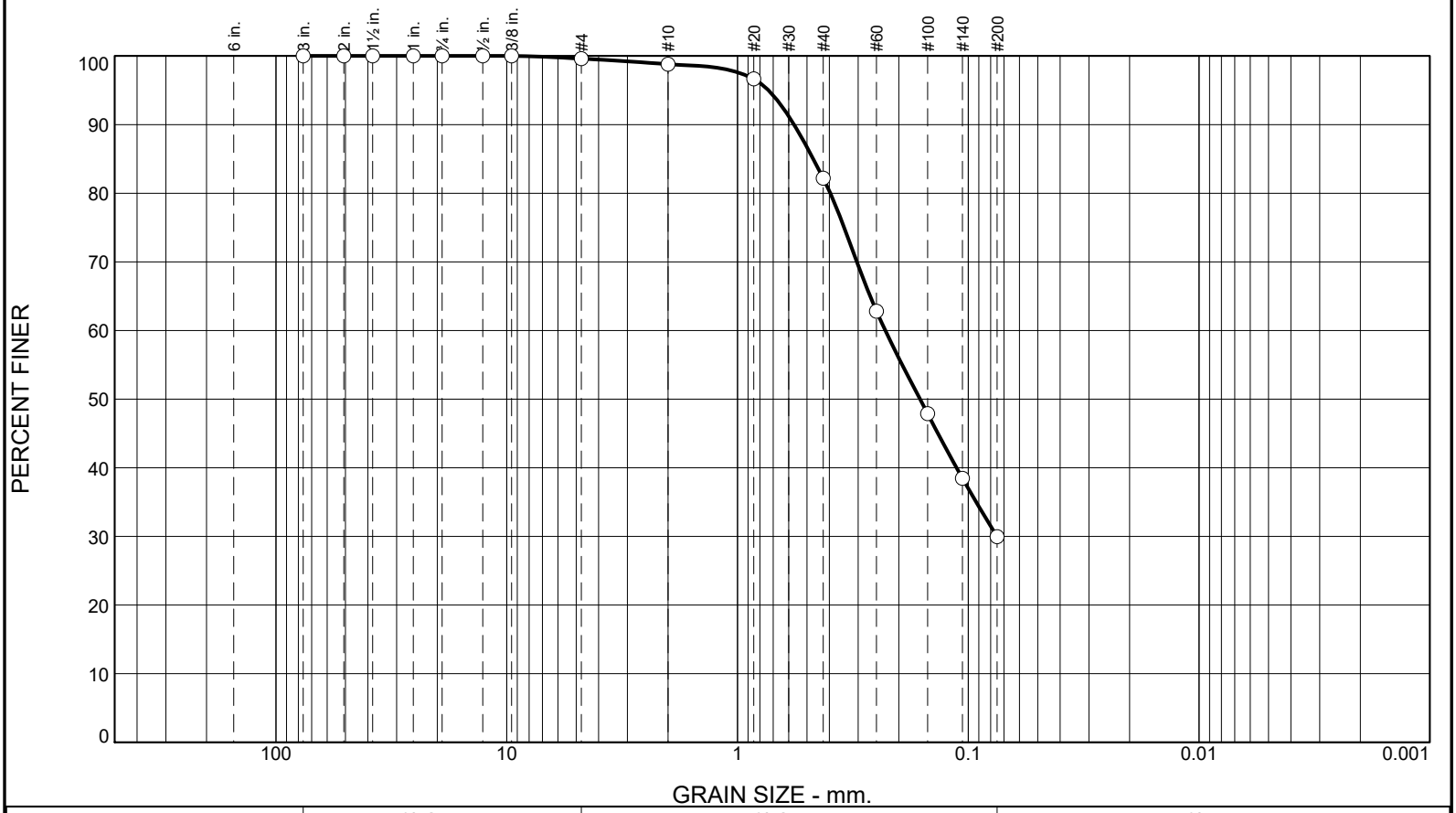
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	0.8	16.6	52.3	29.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.6		
#10	98.8		
#20	96.7		
#40	82.2		
#60	62.8		
#100	47.9		
#140	38.5		
#200	29.9		

* (no specification provided)

Soil Description

Gray to Yellow Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5691 D_{85}= 0.4696 D_{60}= 0.2289
D_{50}= 0.1618 D_{30}= 0.0752 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26667
As received moisture content = 16.8%

Source of Sample: B3-7 **Depth:** 63.5-65 ft
Sample Number: S15

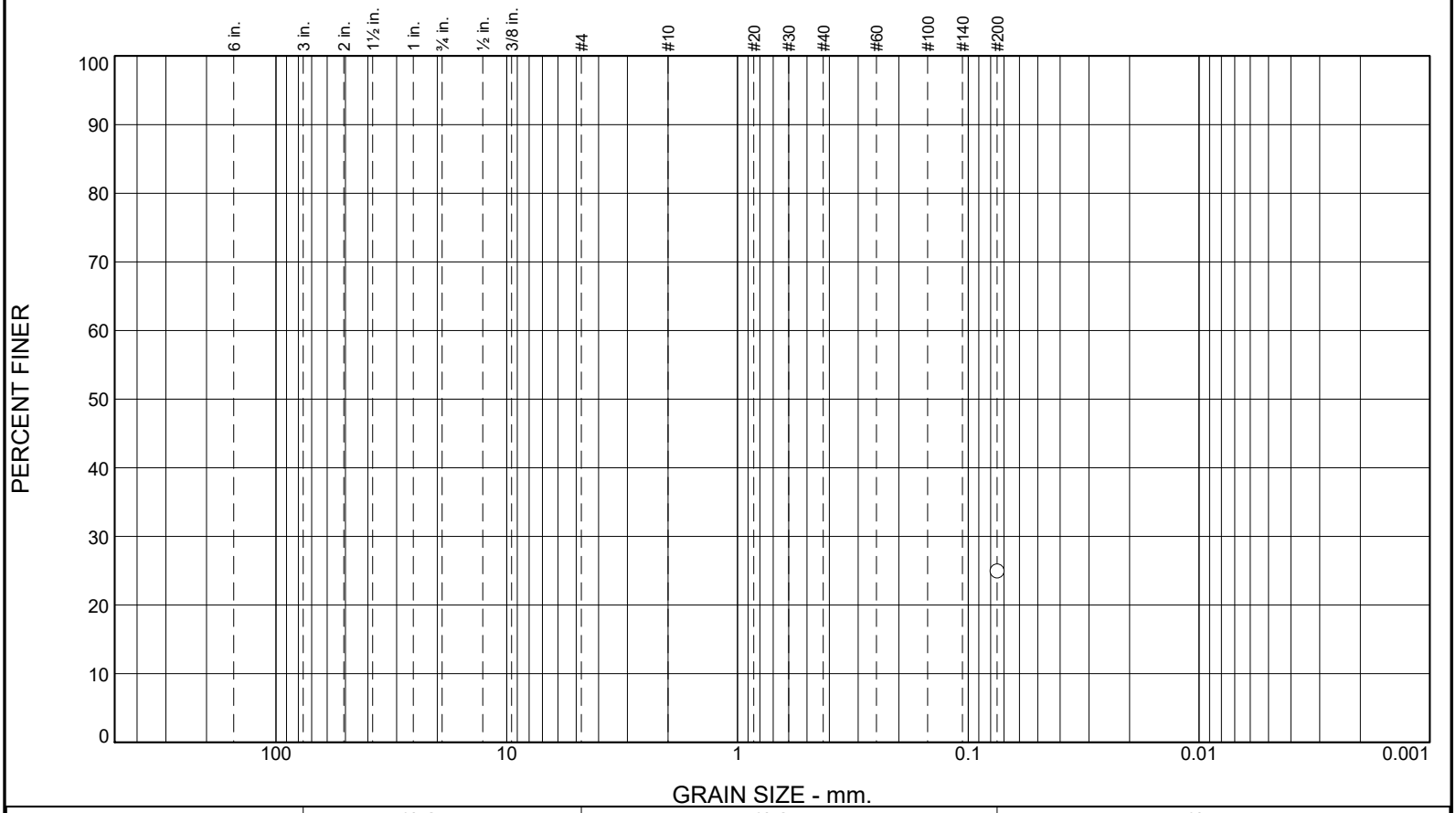
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						25.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	25.0		

* (no specification provided)

Soil Description

Tannish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26668
As received moisture content = 10.2%

Source of Sample: C-1 **Depth:** 18.5-20 ft
Sample Number: S6

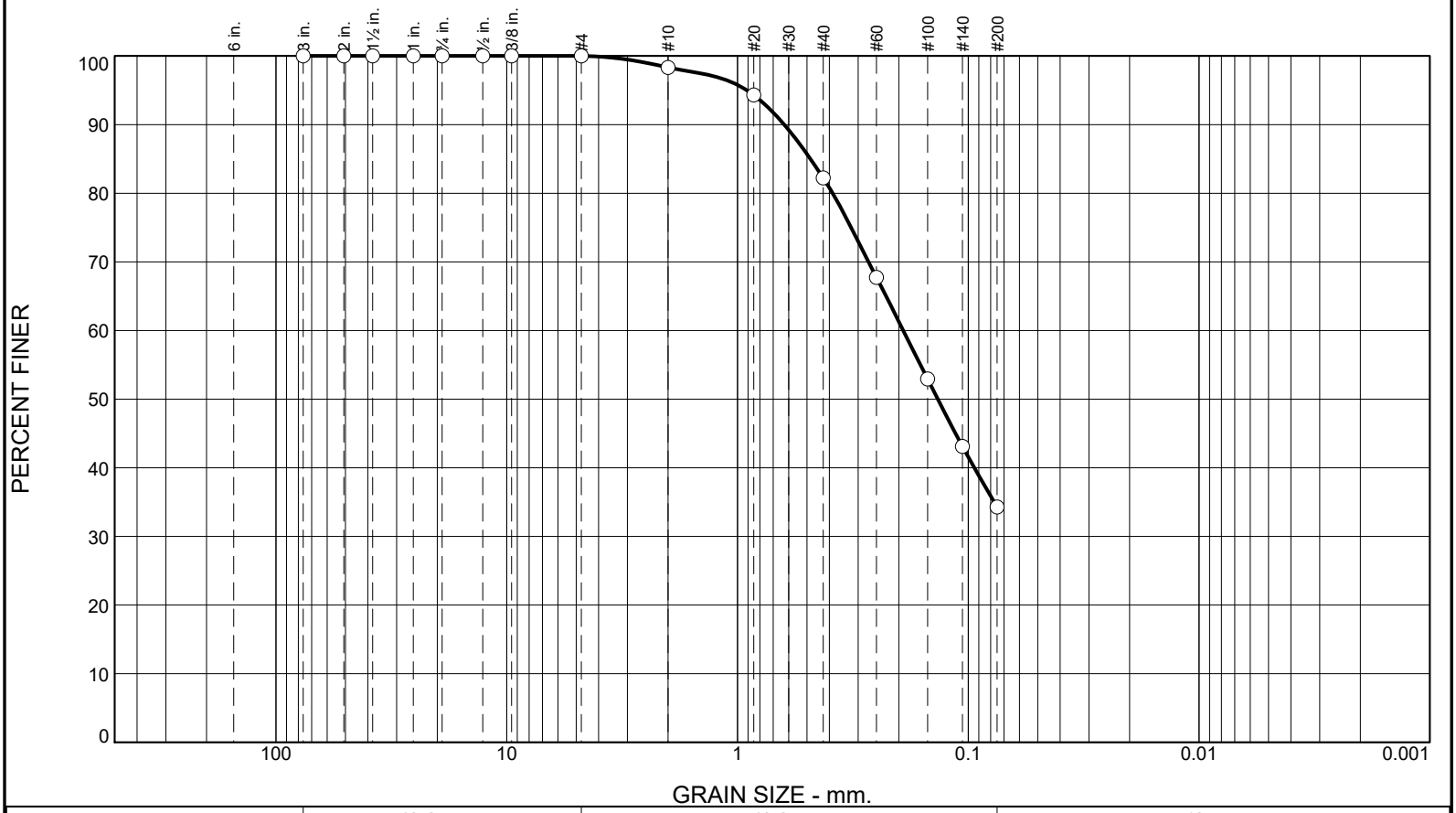
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.7	16.1	47.9	34.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	98.3		
#20	94.3		
#40	82.2		
#60	67.7		
#100	52.9		
#140	43.1		
#200	34.3		

* (no specification provided)

Soil Description

Gray to Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6275 D_{85}= 0.4830 D_{60}= 0.1913
D_{50}= 0.1355 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26669
As received moisture content = 25.1%

Source of Sample: C-1 **Depth:** 33.5-35 ft
Sample Number: S9

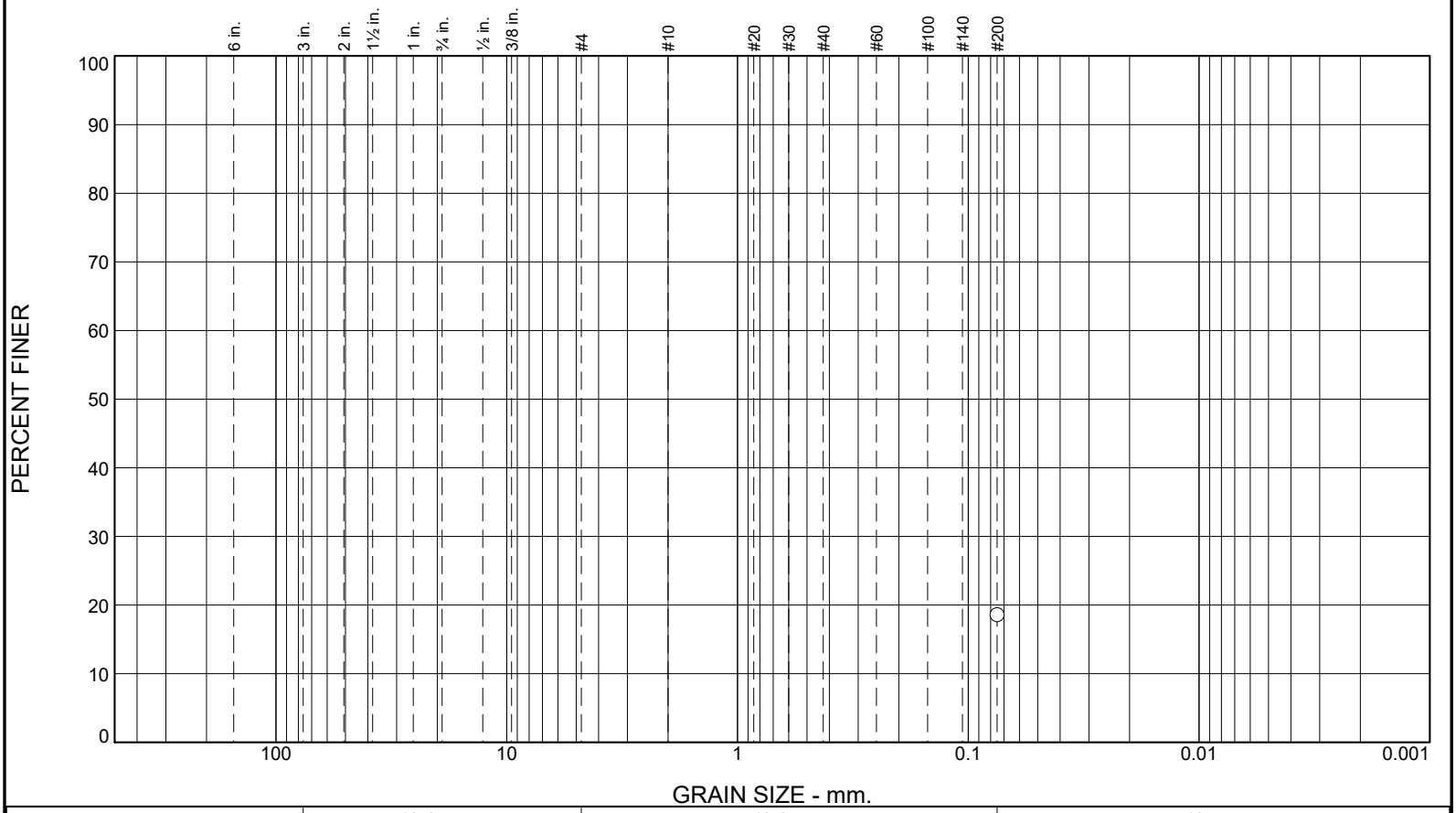
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						18.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	18.6		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26670
As received moisture content = 17.0%

Source of Sample: C-1 **Depth:** 43.5-45 ft
Sample Number: S11

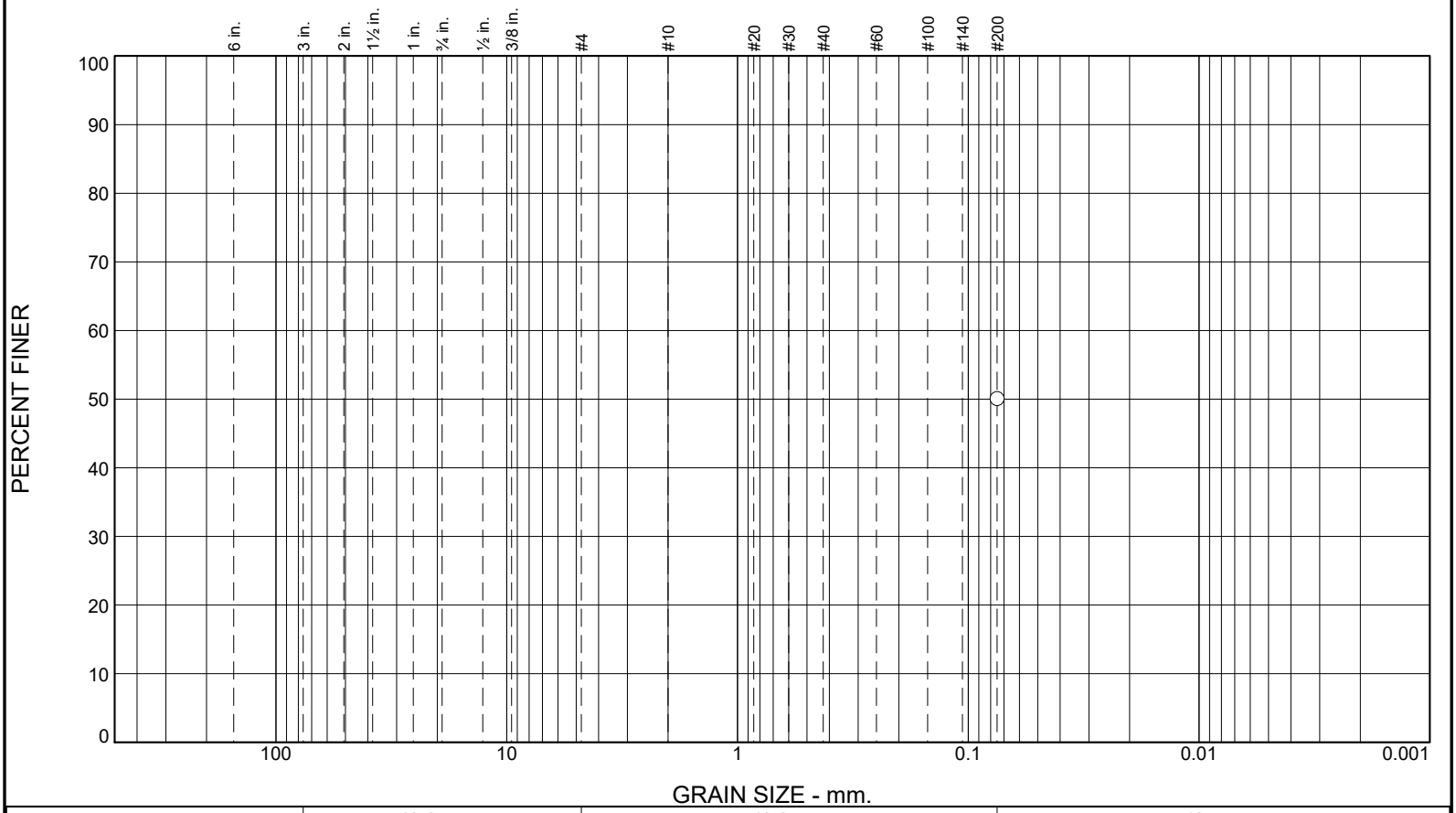
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						50.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	50.1		

* (no specification provided)

Soil Description

Yellowish Brown Sandy Elastic SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26671
As received moisture content = 26.0%

Source of Sample: C-2 **Depth:** 1-2.5 ft
Sample Number: S1

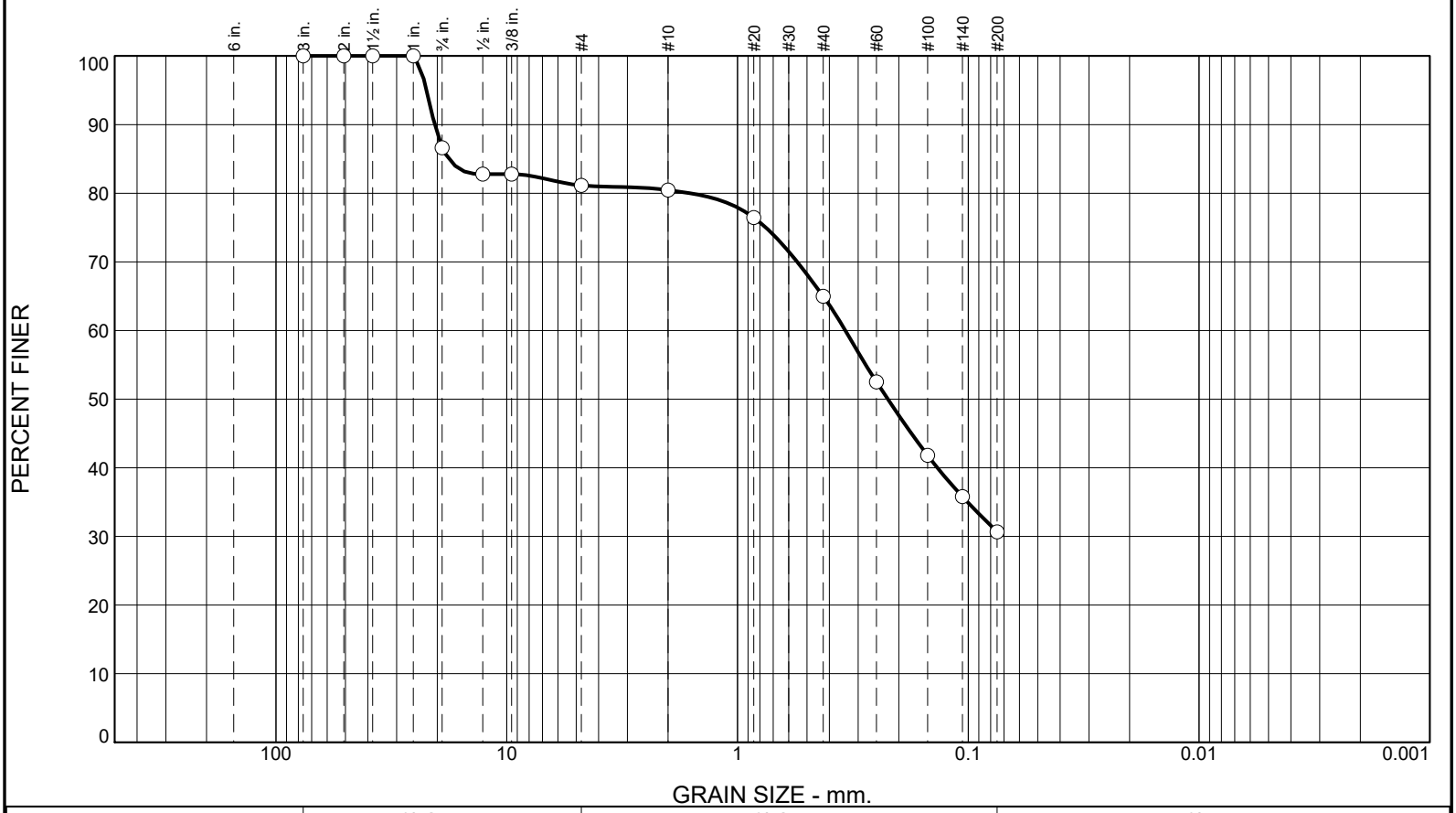
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.4	5.5	0.6	15.5	34.3	30.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	86.6		
.50	82.8		
.375	82.8		
#4	81.1		
#10	80.5		
#20	76.5		
#40	65.0		
#60	52.5		
#100	41.8		
#140	35.8		
#200	30.7		

* (no specification provided)

Soil Description

Gray to White Silty SAND with Gravel

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 20.5267 D_{85}= 17.7846 D_{60}= 0.3411
D_{50}= 0.2231 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26672
As received moisture content = 23.5%

Source of Sample: C-2 **Depth:** 6-7 ft
Sample Number: S3t

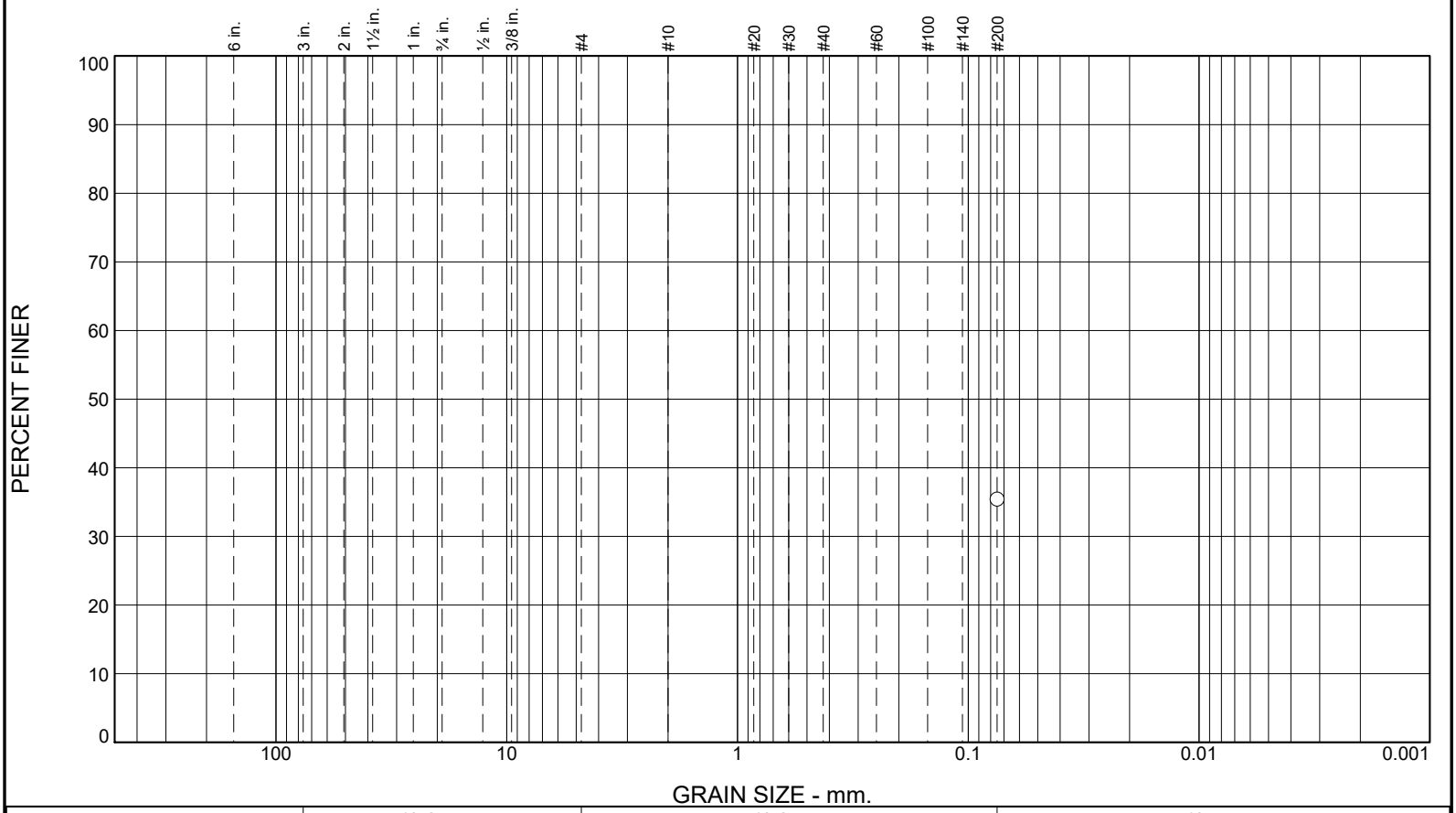
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						35.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	35.4		

* (no specification provided)

Soil Description

Brown to Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26673
As received moisture content = 28.8%

Source of Sample: C-2 **Depth:** 8.5-10 ft
Sample Number: S4

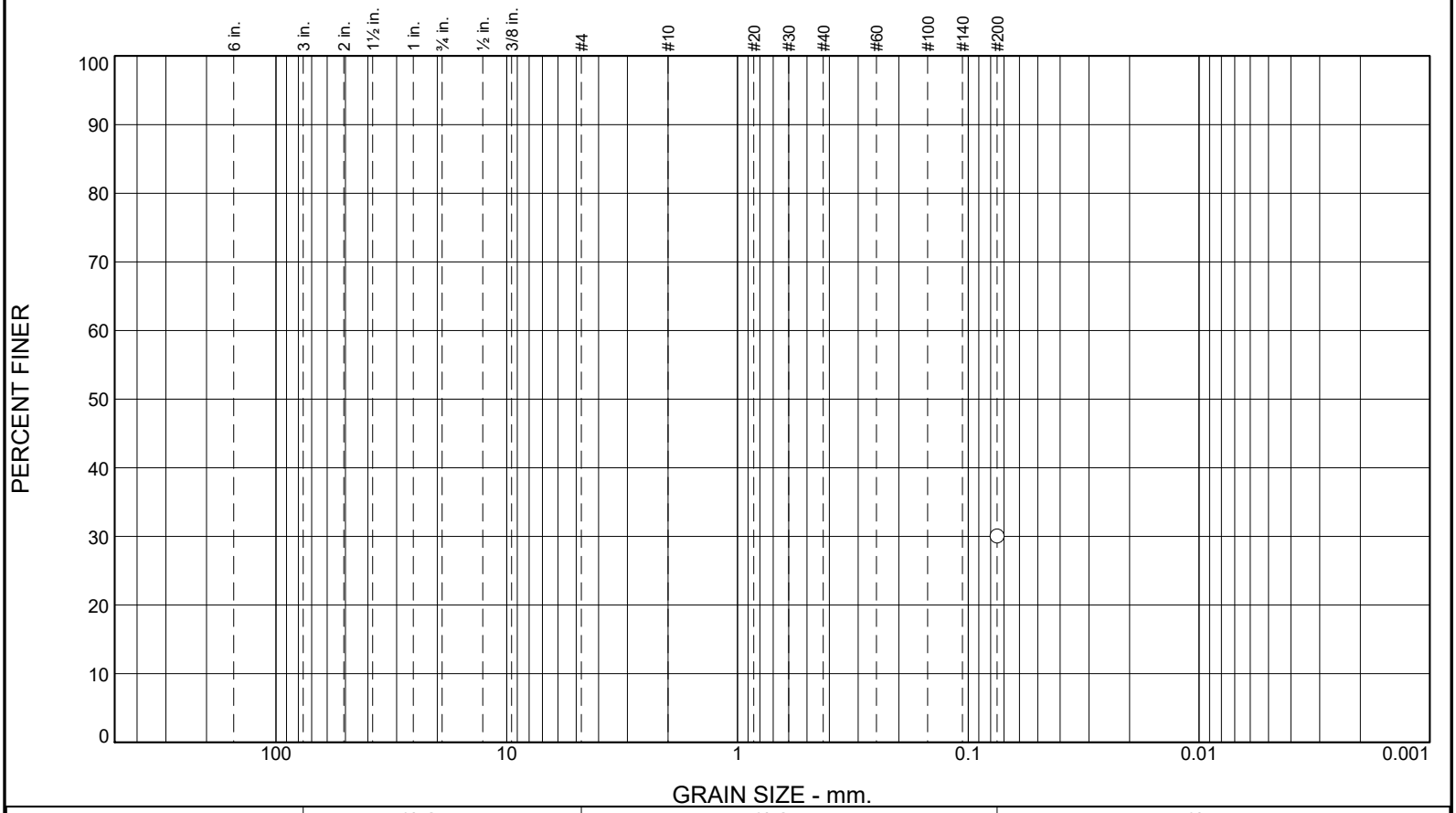
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						30.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	30.1		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26674
As received moisture content = 7.8%

Source of Sample: C-2 **Depth:** 18.5-20 ft
Sample Number: S6

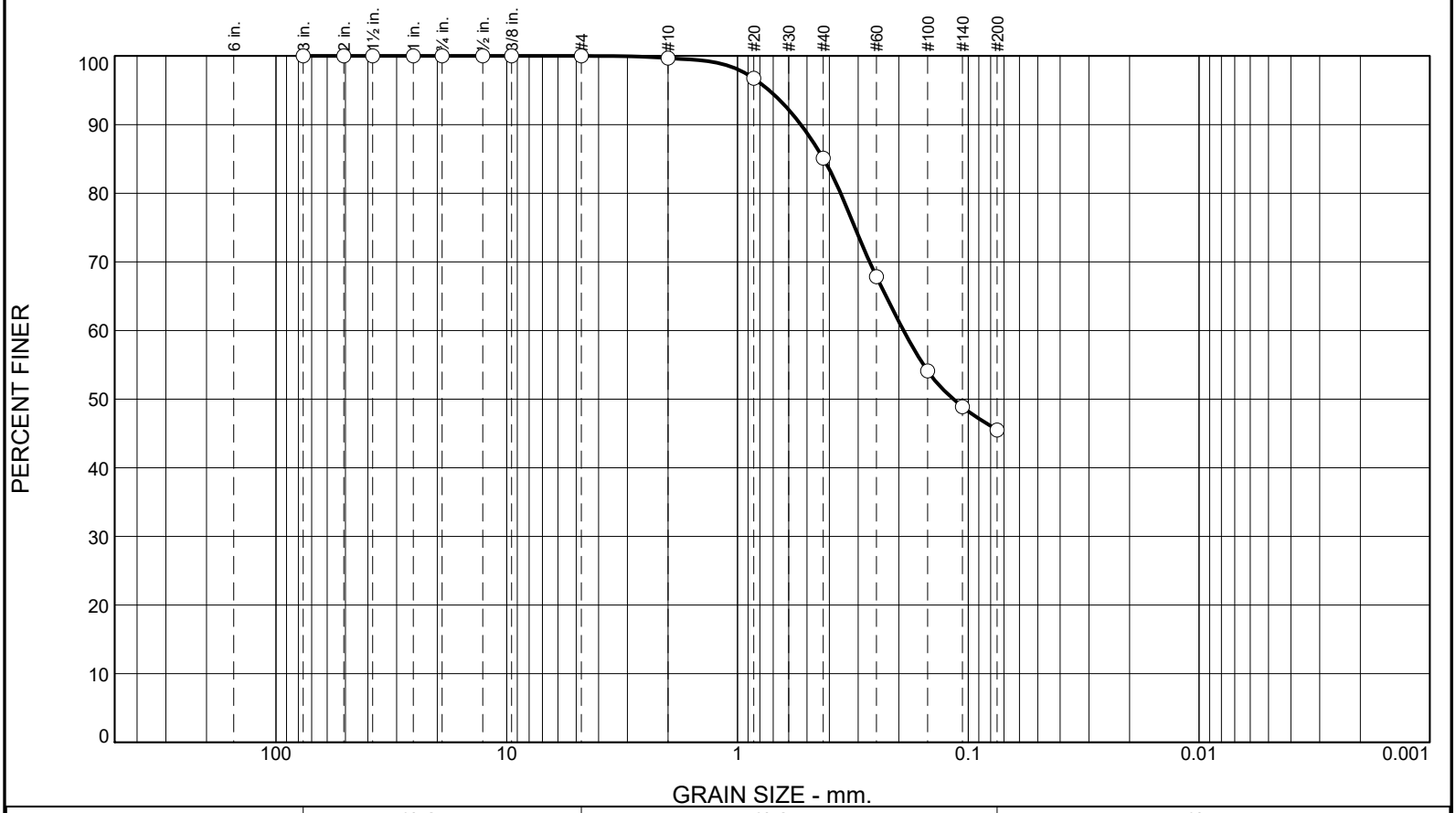
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.3	14.6	39.6	45.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.7		
#20	96.7		
#40	85.1		
#60	67.8		
#100	54.1		
#140	48.9		
#200	45.5		

* (no specification provided)

Soil Description

Reddish Brown Clayey SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.5316 D_{85}= 0.4231 D_{60}= 0.1907
D_{50}= 0.1159 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26676
As received moisture content = 27.7%

Source of Sample: C-3 **Depth:** 6-7.1 ft
Sample Number: S3t

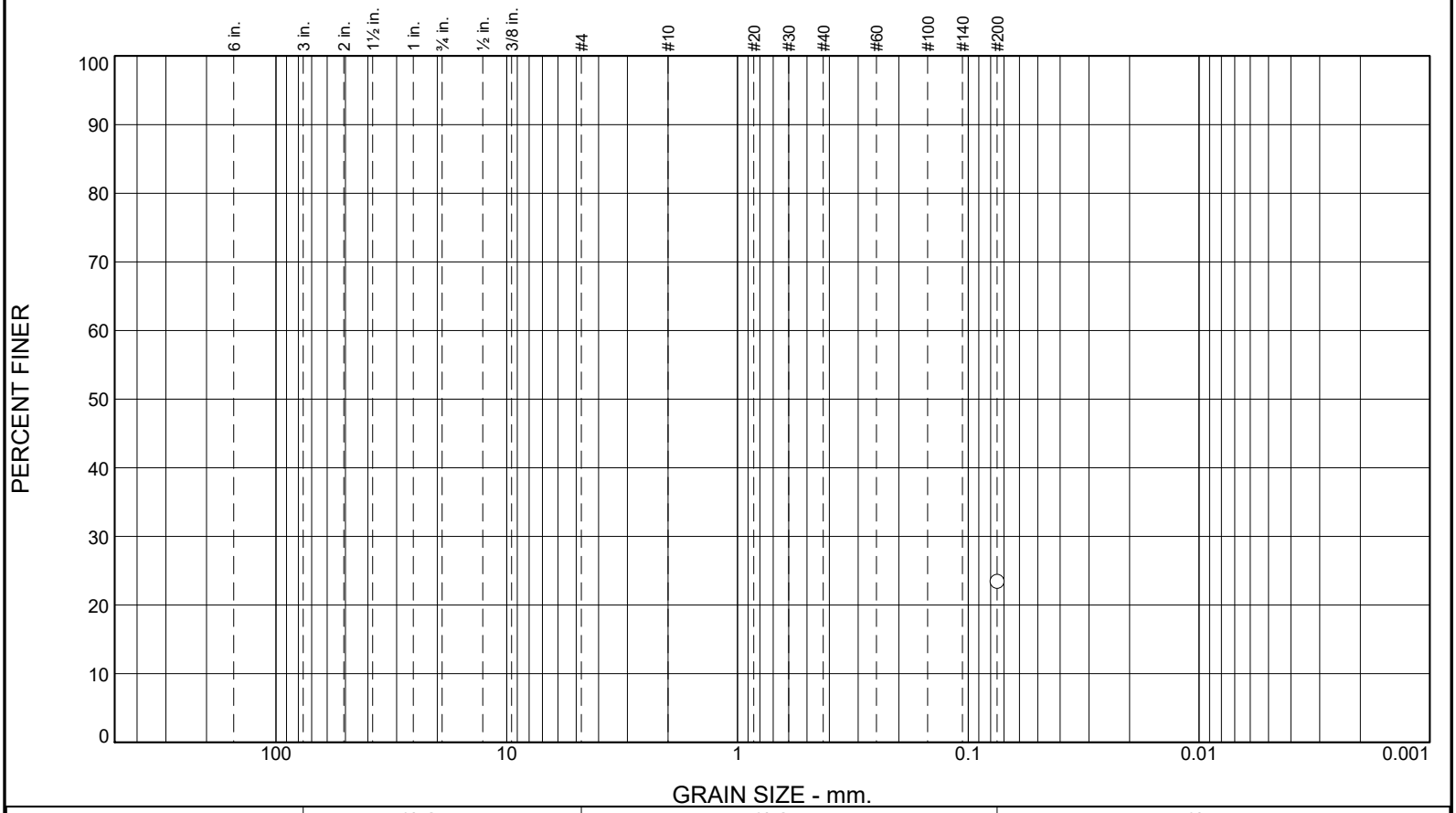
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						23.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	23.5		

* (no specification provided)

Soil Description

Olive Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26677
As received moisture content = 24.0%

Source of Sample: C-3 **Depth:** 8.5-10 ft
Sample Number: S4

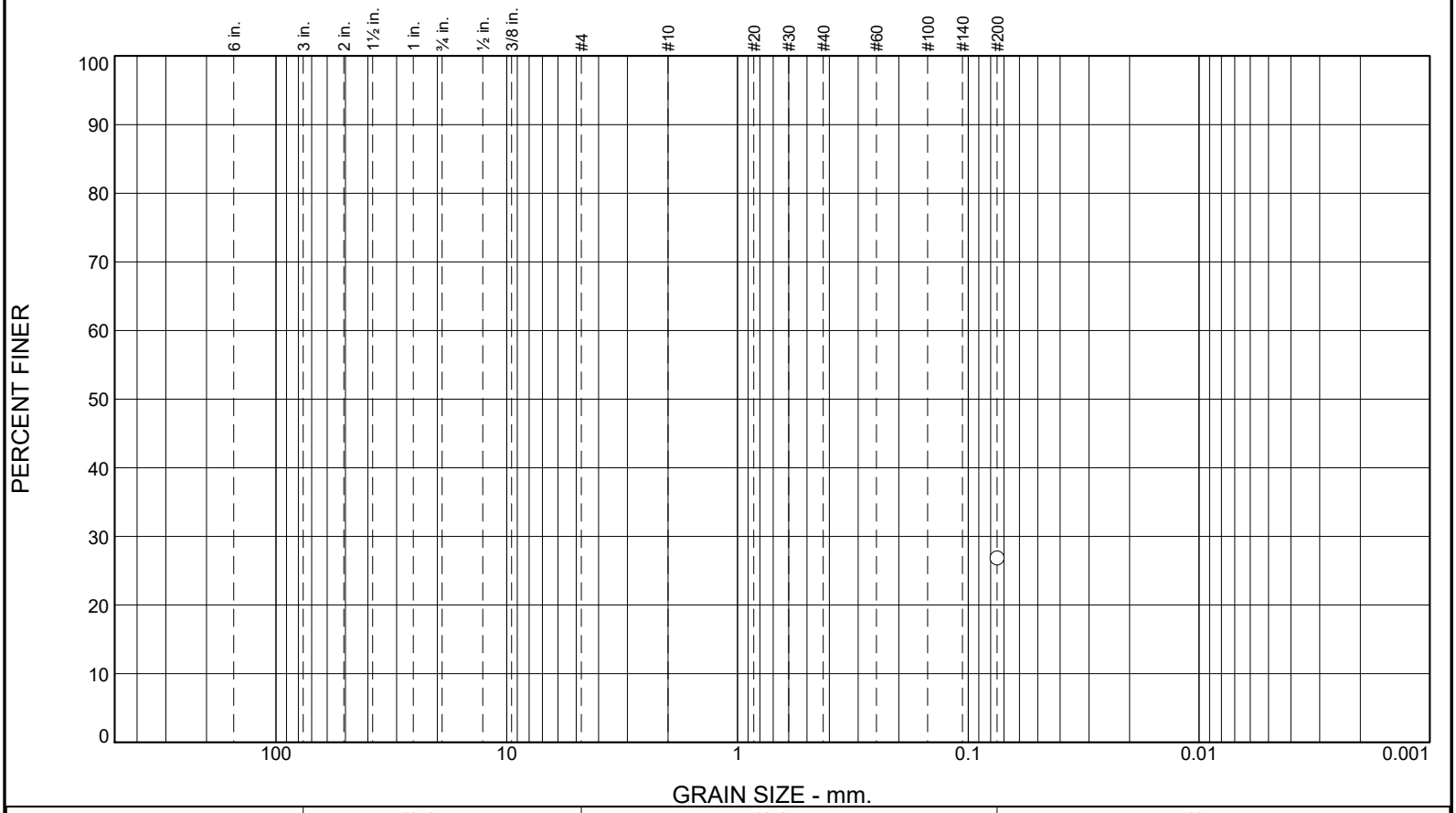
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						26.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	26.9		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26678
As received moisture content = 17.6%

Source of Sample: C-3 **Depth:** 18.5-20 ft
Sample Number: S6

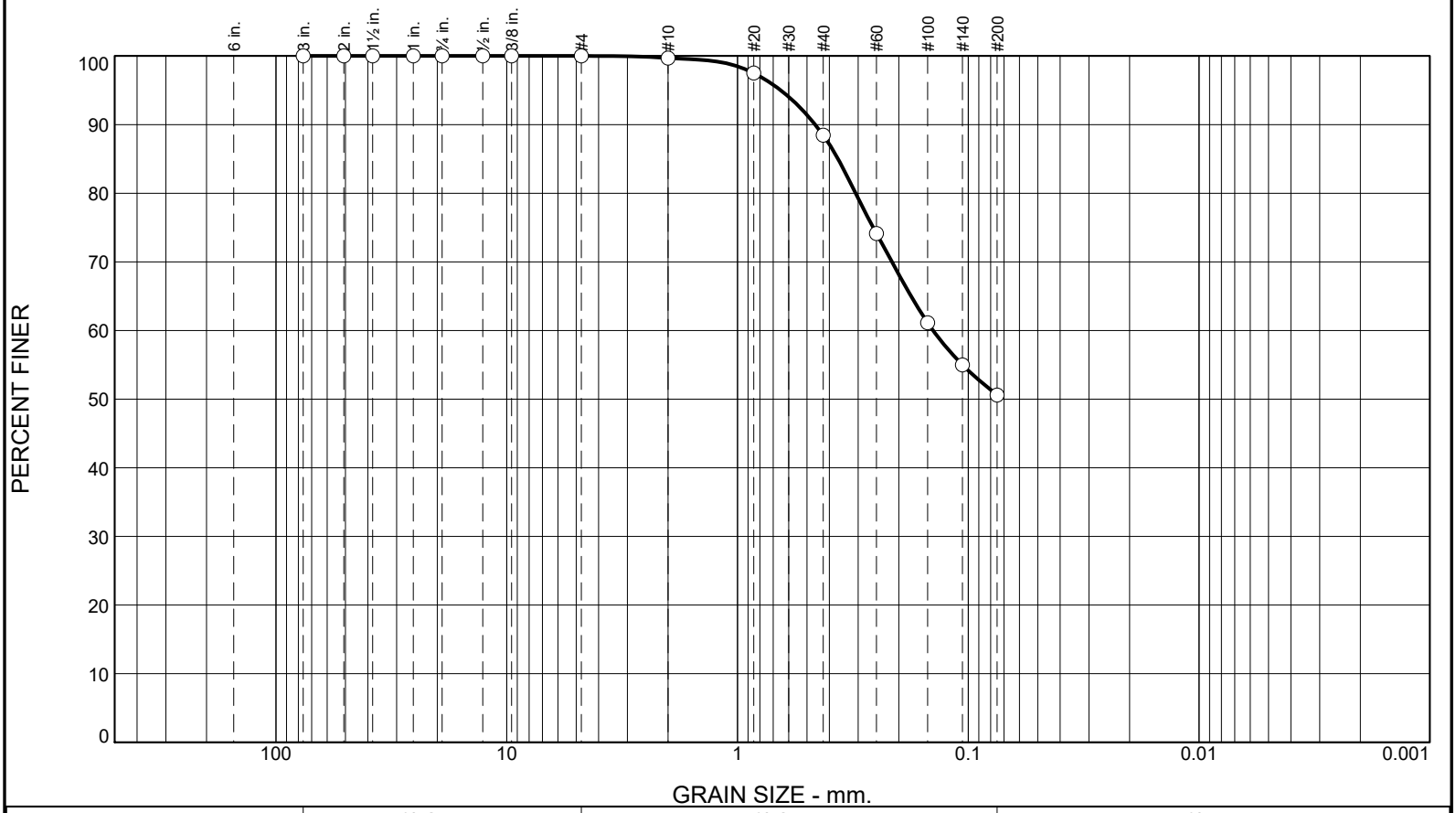
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.3	11.2	37.9	50.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.7		
#20	97.5		
#40	88.5		
#60	74.1		
#100	61.1		
#140	55.0		
#200	50.6		

* (no specification provided)

Soil Description

Yellowish Brown Sandy Elastic SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.4608 D_{85}= 0.3669 D_{60}= 0.1421
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26679
As received moisture content = 14.3%

Source of Sample: C-4 **Depth:** 1-2.5 ft
Sample Number: S1

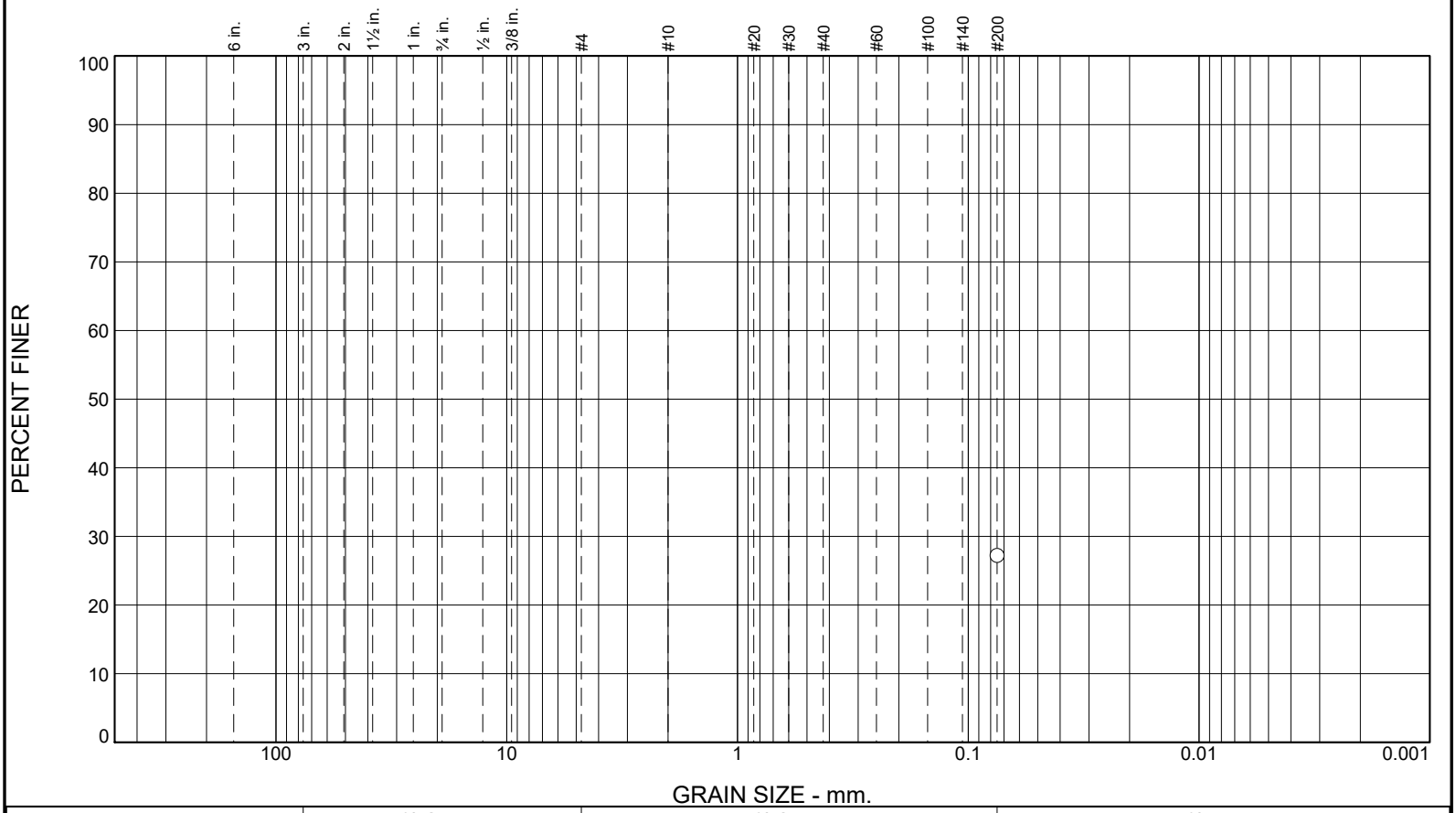
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						27.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	27.2		

* (no specification provided)

Soil Description

Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26681
As received moisture content = 27.2%

Source of Sample: C-4 **Depth:** 6-7.5 ft
Sample Number: S3

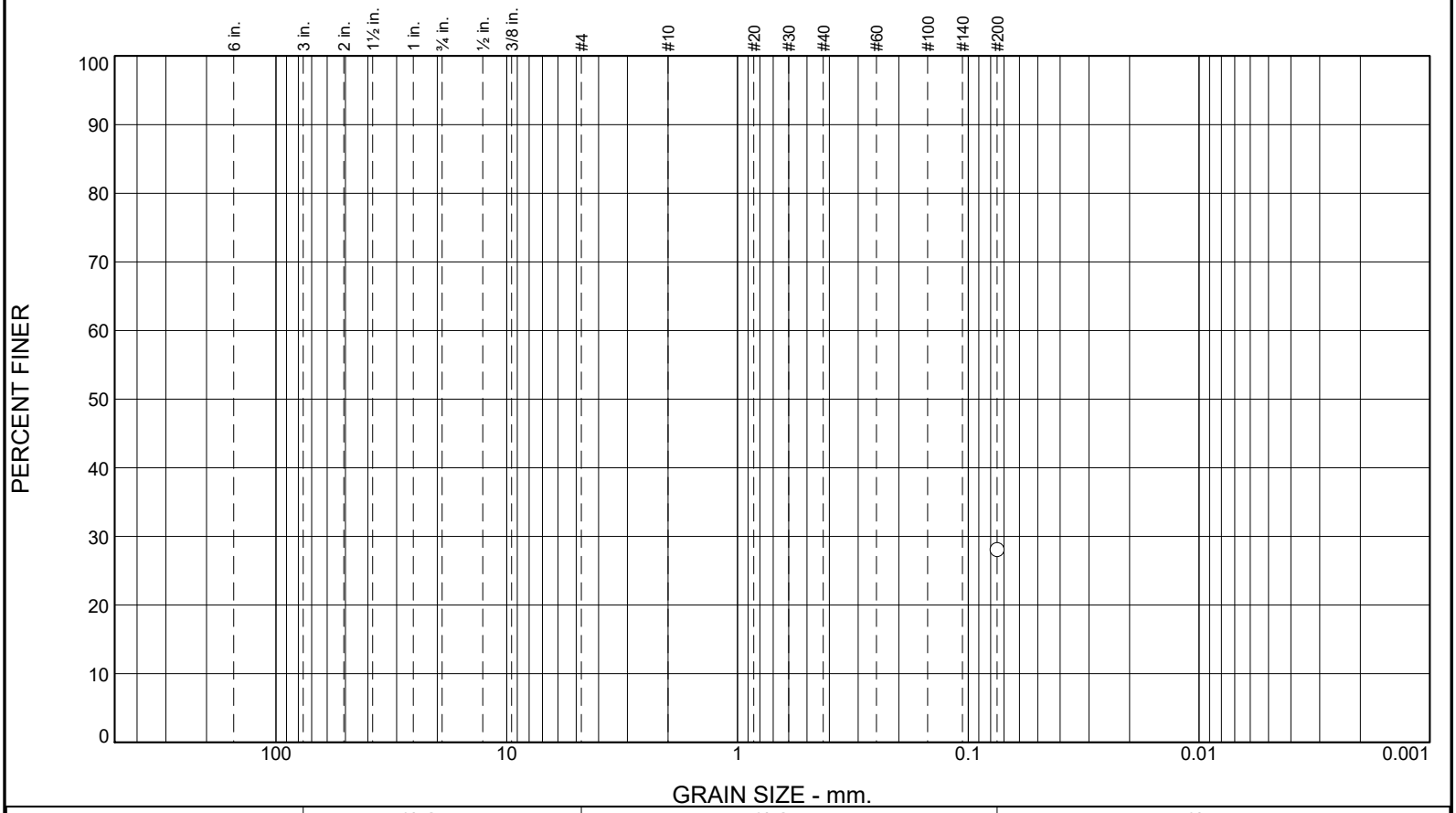
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						28.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	28.1		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26682
As received moisture content = 31.4%

Source of Sample: C-4 **Depth:** 8.5-10 ft
Sample Number: S4

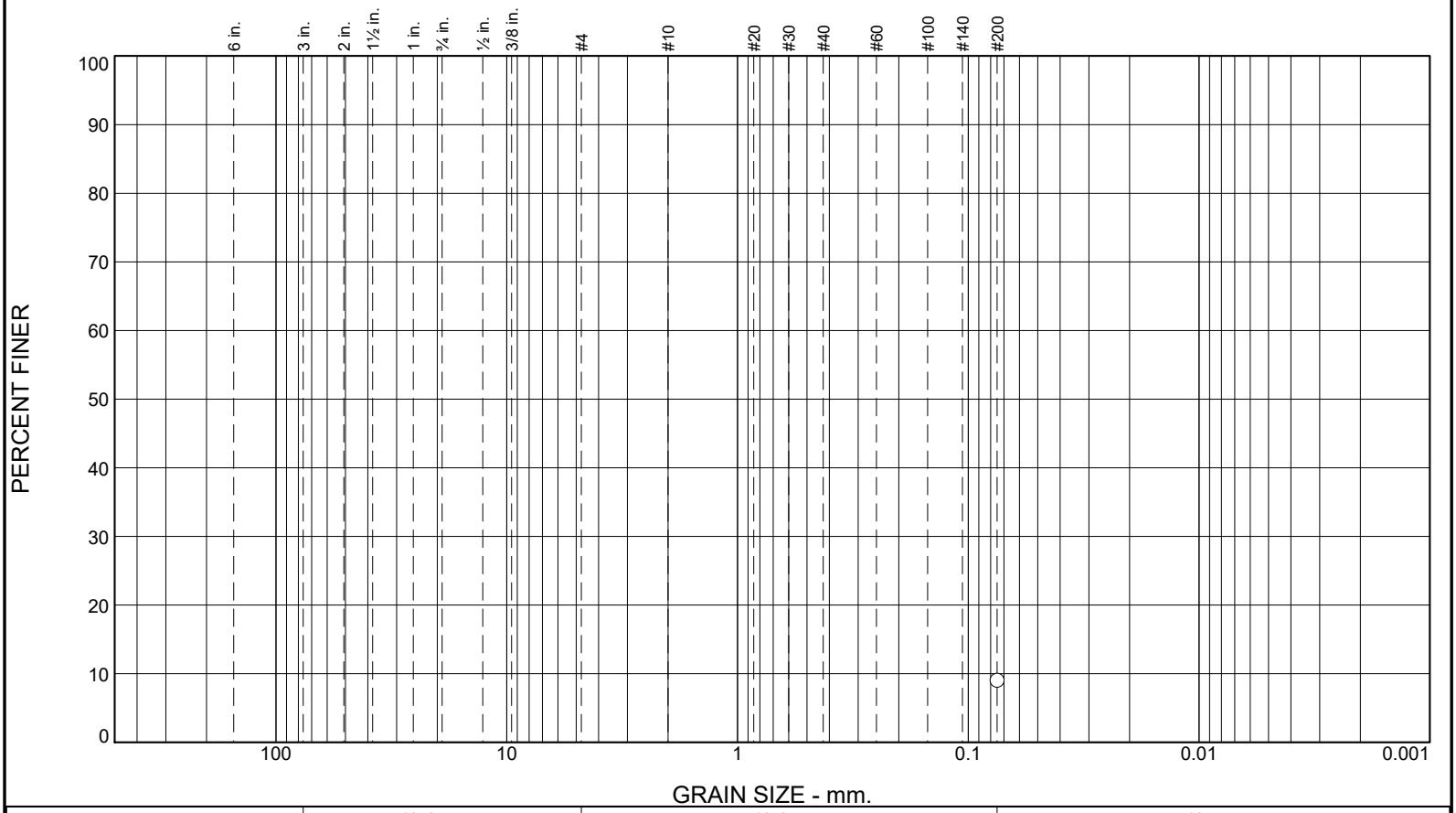
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						9.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	9.0		

* (no specification provided)

Soil Description

Brown SAND with Silt and Gravel

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26683
As received moisture content = 8.3%

Source of Sample: C-4 **Depth:** 14.7-15 ft
Sample Number: S5b

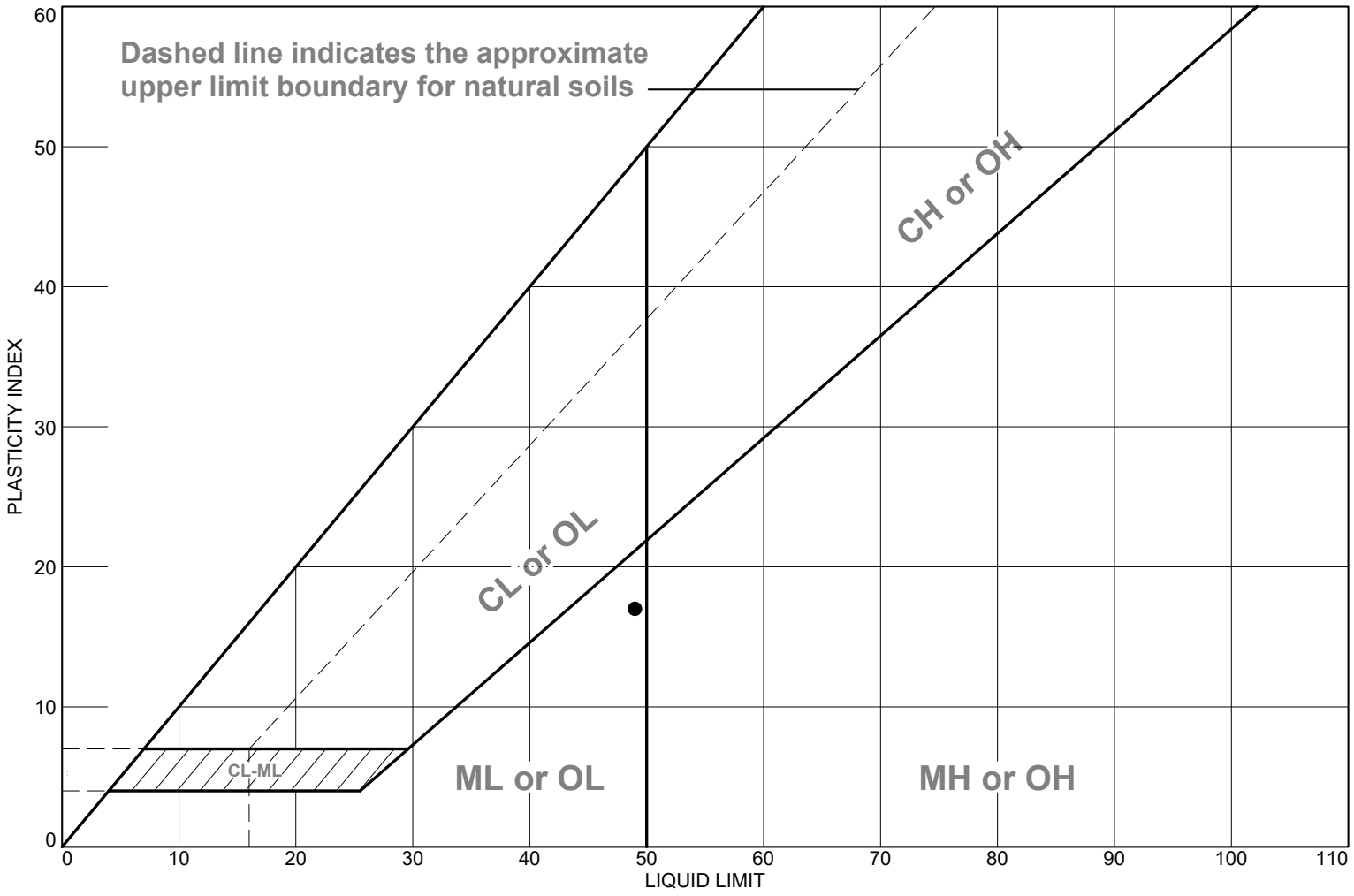
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Reddish Brown Sandy SILT	49	32	17	N/A	56.8	ML

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** C-5 **Depth:** 1-2 ft **Sample Number:** S1t

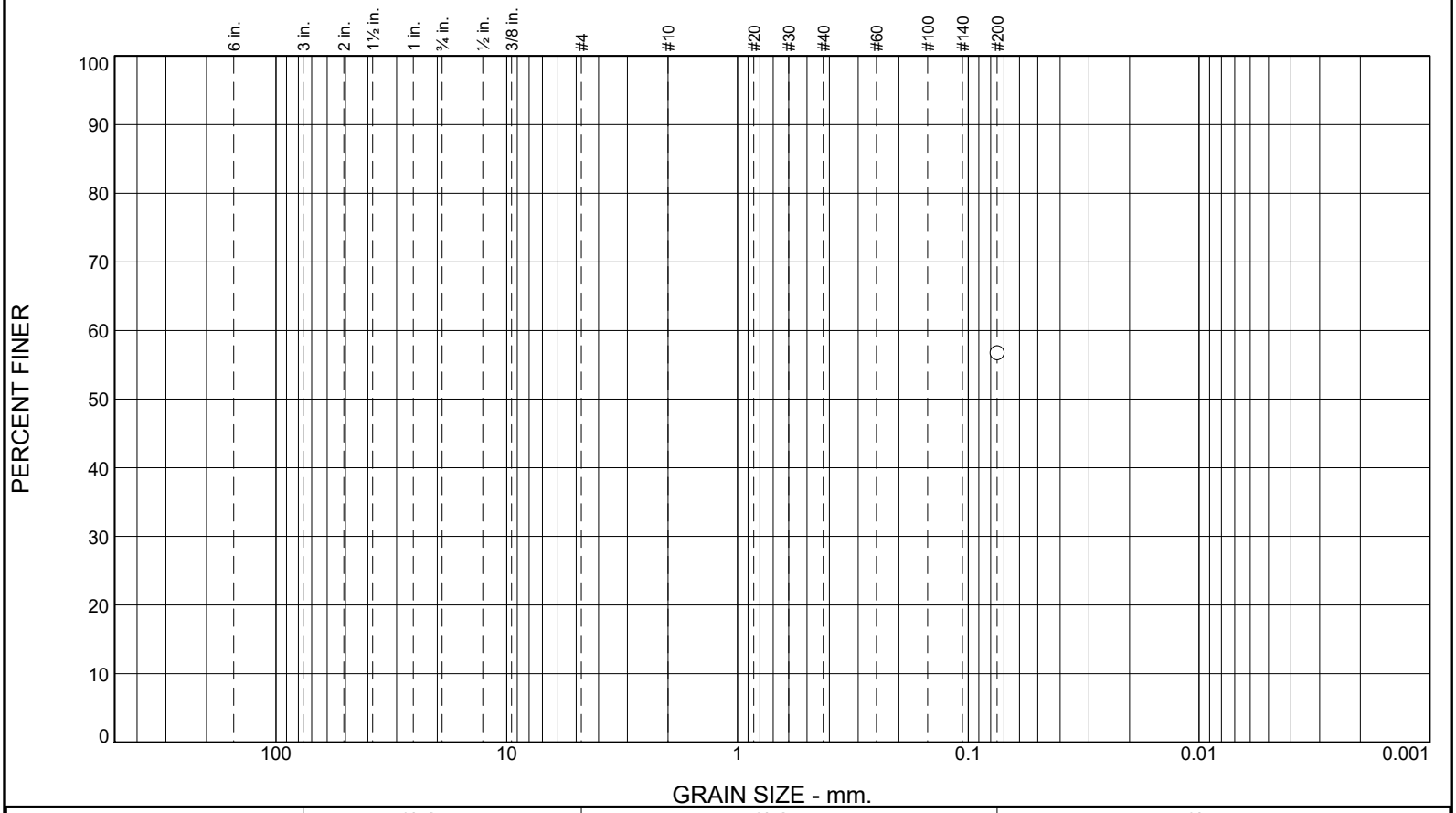
Remarks:

● Lab #26924
As received moisture content = 22.2%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						56.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	56.8		

* (no specification provided)

Soil Description

Reddish Brown Sandy SILT

Atterberg Limits

PL= 32 LL= 49 PI= 17

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO= N/A

Remarks

Lab #26924
As received moisture content = 22.2%

Source of Sample: C-5 **Depth:** 1-2 ft
Sample Number: S1t

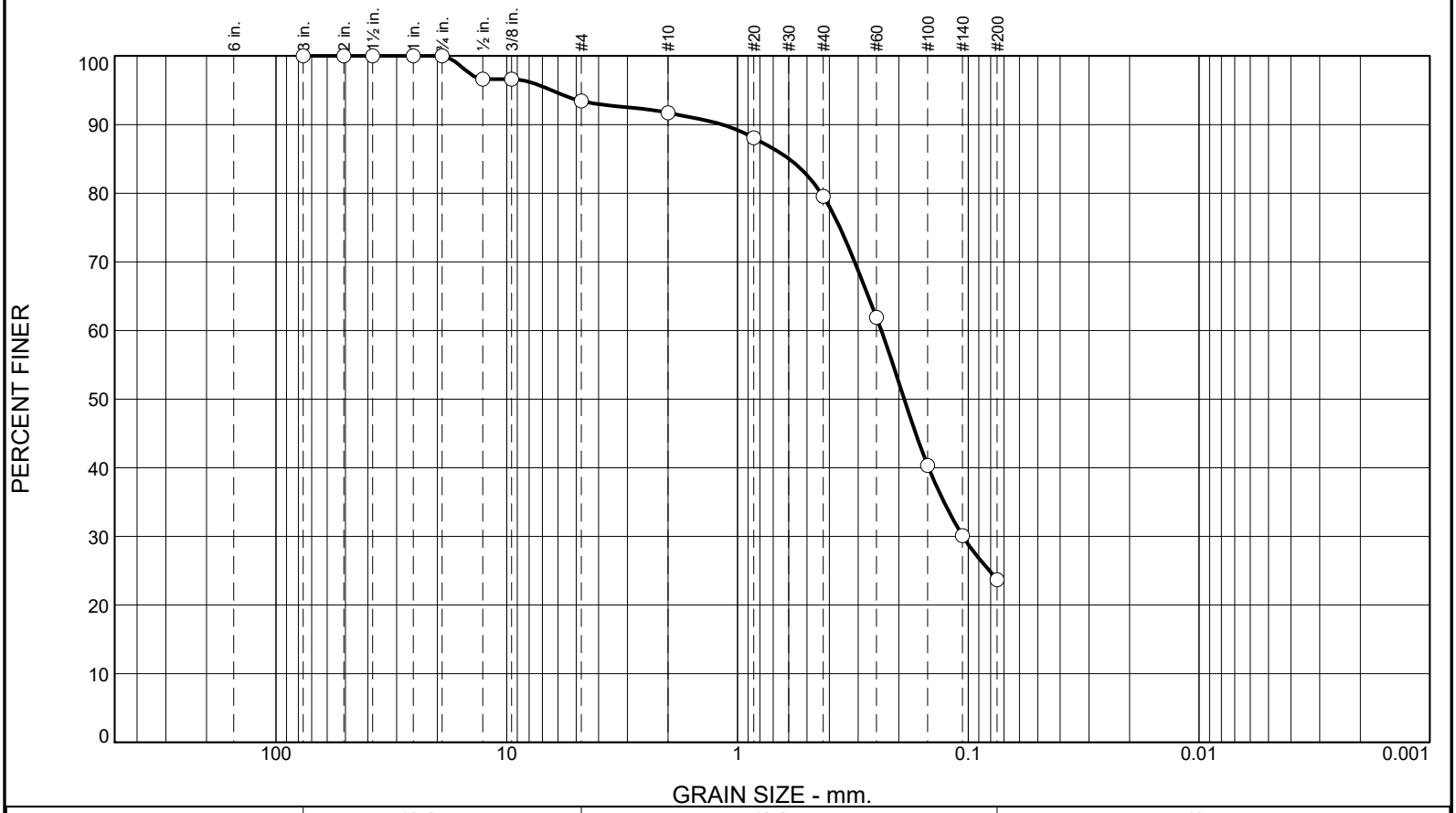
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	6.6	1.7	12.2	55.8	23.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	96.6		
.375	96.6		
#4	93.4		
#10	91.7		
#20	88.1		
#40	79.5		
#60	61.9		
#100	40.3		
#140	30.1		
#200	23.7		

* (no specification provided)

Soil Description

Dark Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.1650 D_{85}= 0.5979 D_{60}= 0.2381
D_{50}= 0.1894 D_{30}= 0.1055 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26685
As received moisture content = 29.0%

Source of Sample: C-5 **Depth:** 3.5-5 ft
Sample Number: S2

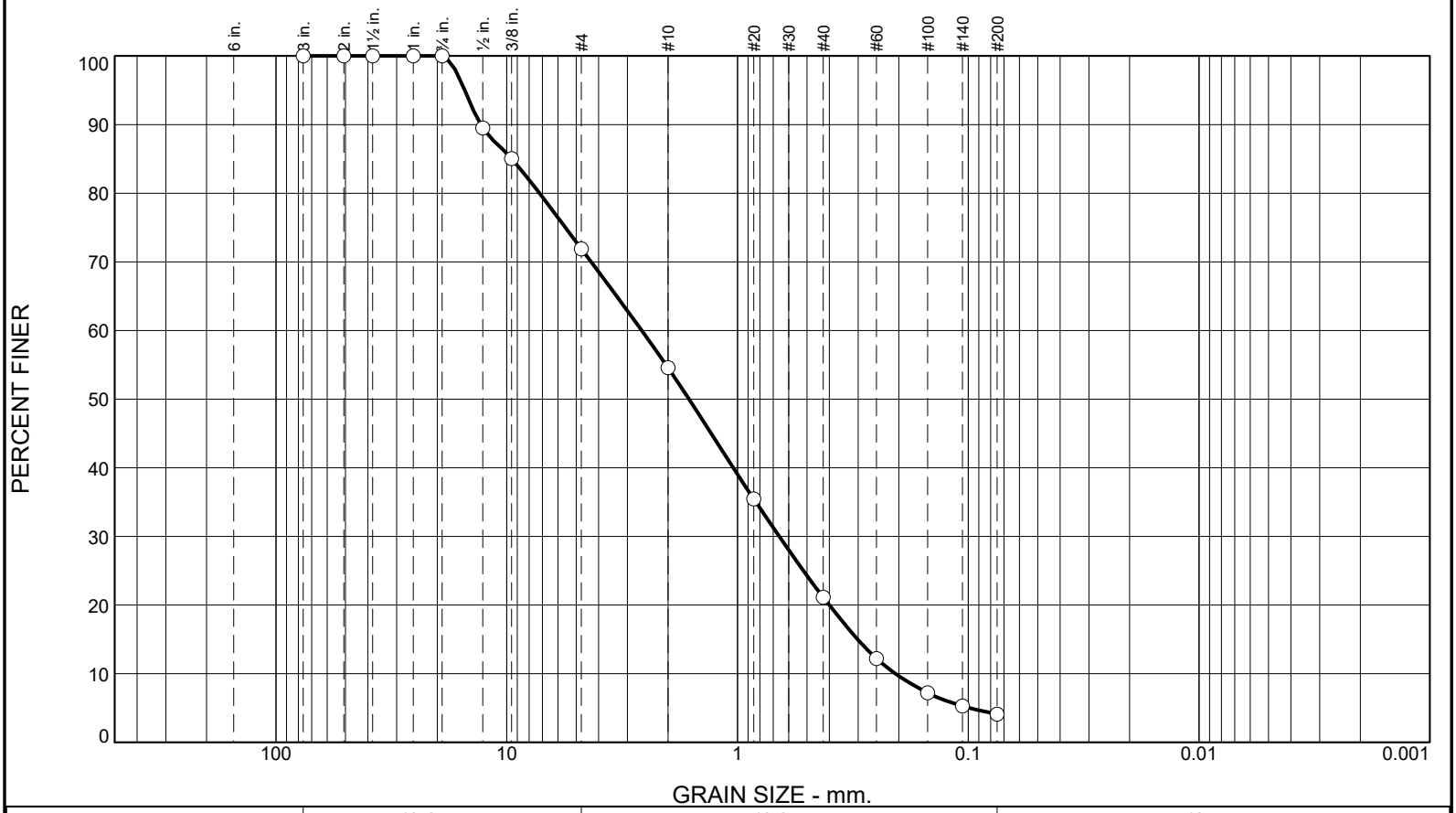
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	28.1	17.3	33.5	17.0	4.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	89.5		
.375	85.1		
#4	71.9		
#10	54.6		
#20	35.5		
#40	21.1		
#60	12.2		
#100	7.2		
#140	5.3		
#200	4.1		

* (no specification provided)

Soil Description

Grayish White to Yellow Poorly Graded SAND with Gravel

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 12.9800 D_{85}= 9.4967 D_{60}= 2.5994
D_{50}= 1.6221 D_{30}= 0.6590 D_{15}= 0.3016
D_{10}= 0.2070 C_u= 12.56 C_c= 0.81

Classification

USCS= SP AASHTO= N/A

Remarks

Lab #26686
As received moisture content = 10.9%

Source of Sample: C-5 **Depth:** 6-7.5 ft
Sample Number: S3

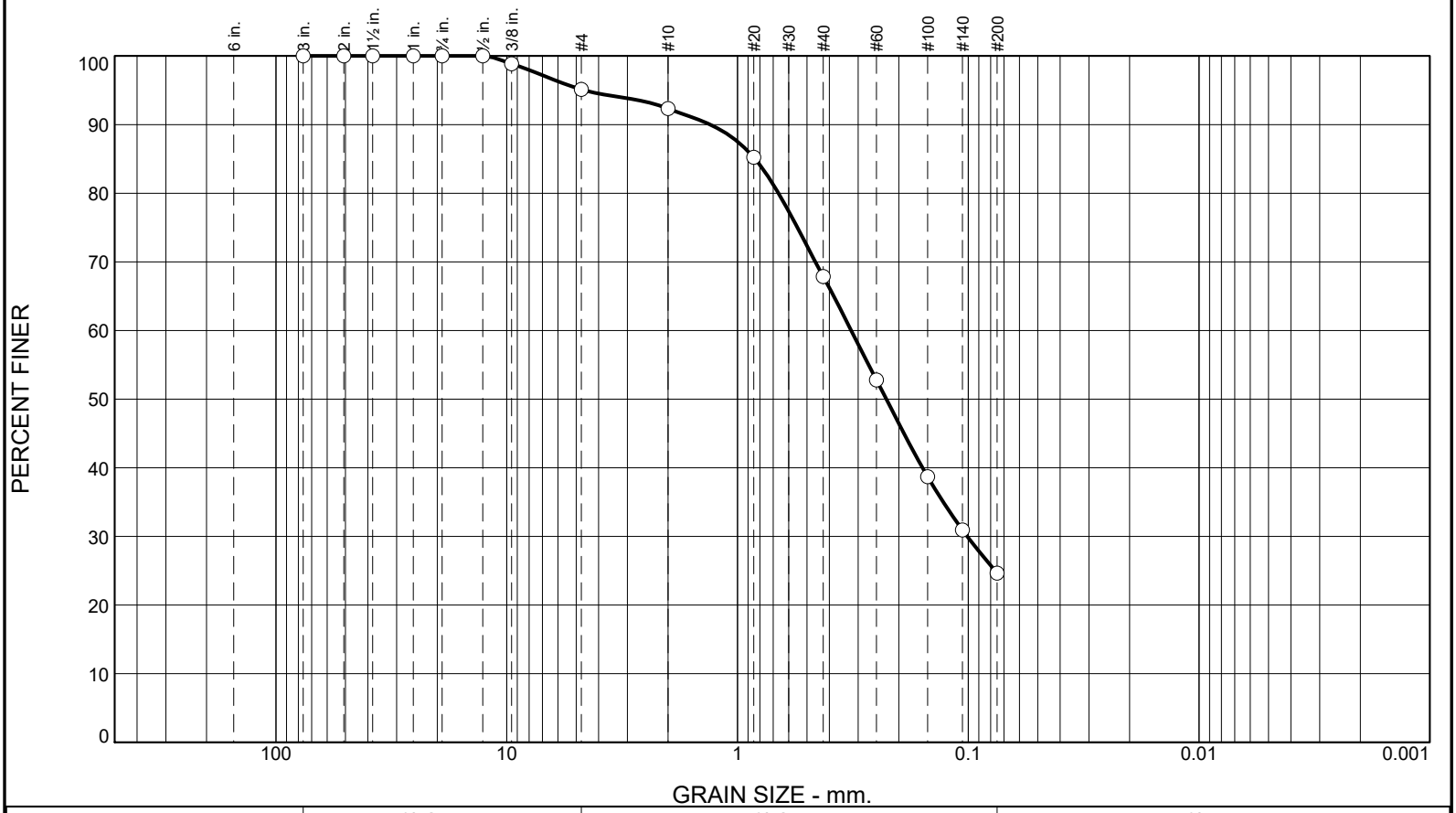
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.9	2.8	24.4	43.3	24.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	98.9		
#4	95.1		
#10	92.3		
#20	85.2		
#40	67.9		
#60	52.8		
#100	38.7		
#140	30.9		
#200	24.6		

* (no specification provided)

Soil Description

Brownish Yellow to White Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.3135 D_{85}= 0.8386 D_{60}= 0.3215
D_{50}= 0.2266 D_{30}= 0.1011 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26687
As received moisture content = 12.5%

Source of Sample: C-5 **Depth:** 13.5-15 ft
Sample Number: S5

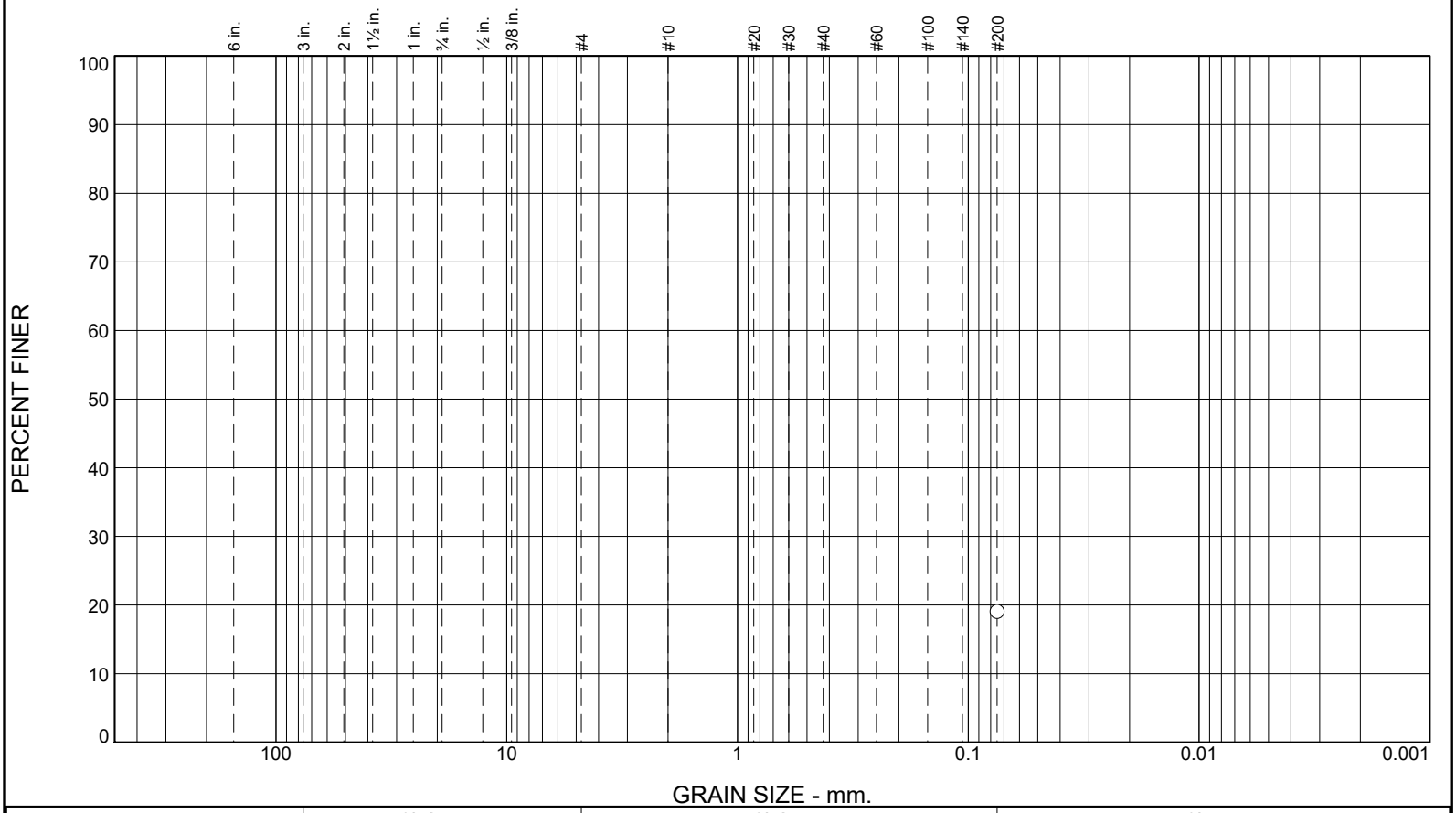
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						19.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	19.1		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26688
As received moisture content = 14.0%

Source of Sample: C-5 **Depth:** 23.5-23.9 ft
Sample Number: S7

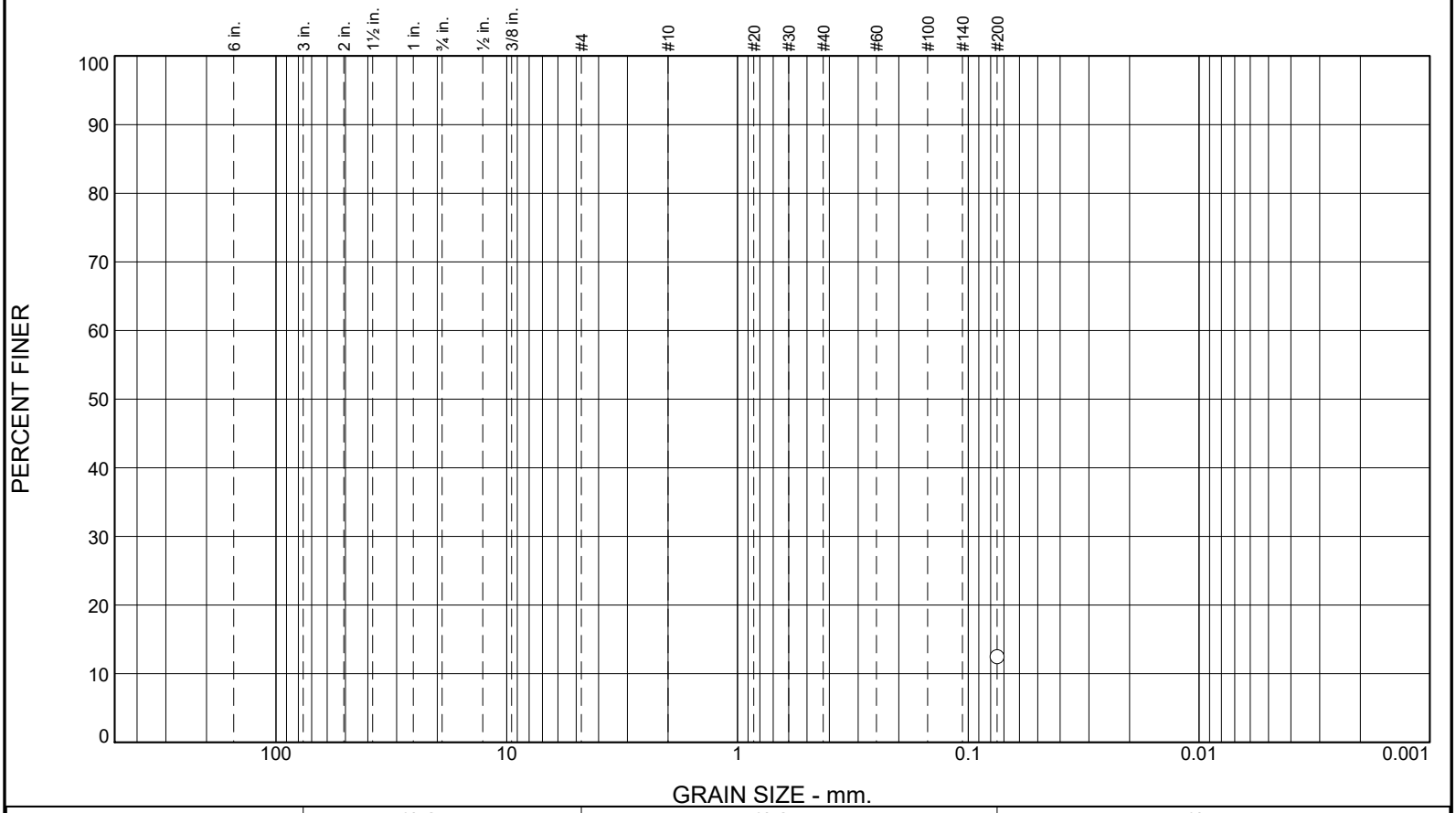
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						12.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	12.5		

* (no specification provided)

Soil Description

Gray Clayey SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26690
As received moisture content = 24.4%

Source of Sample: C-6 **Depth:** 6-7.2 ft
Sample Number: S3

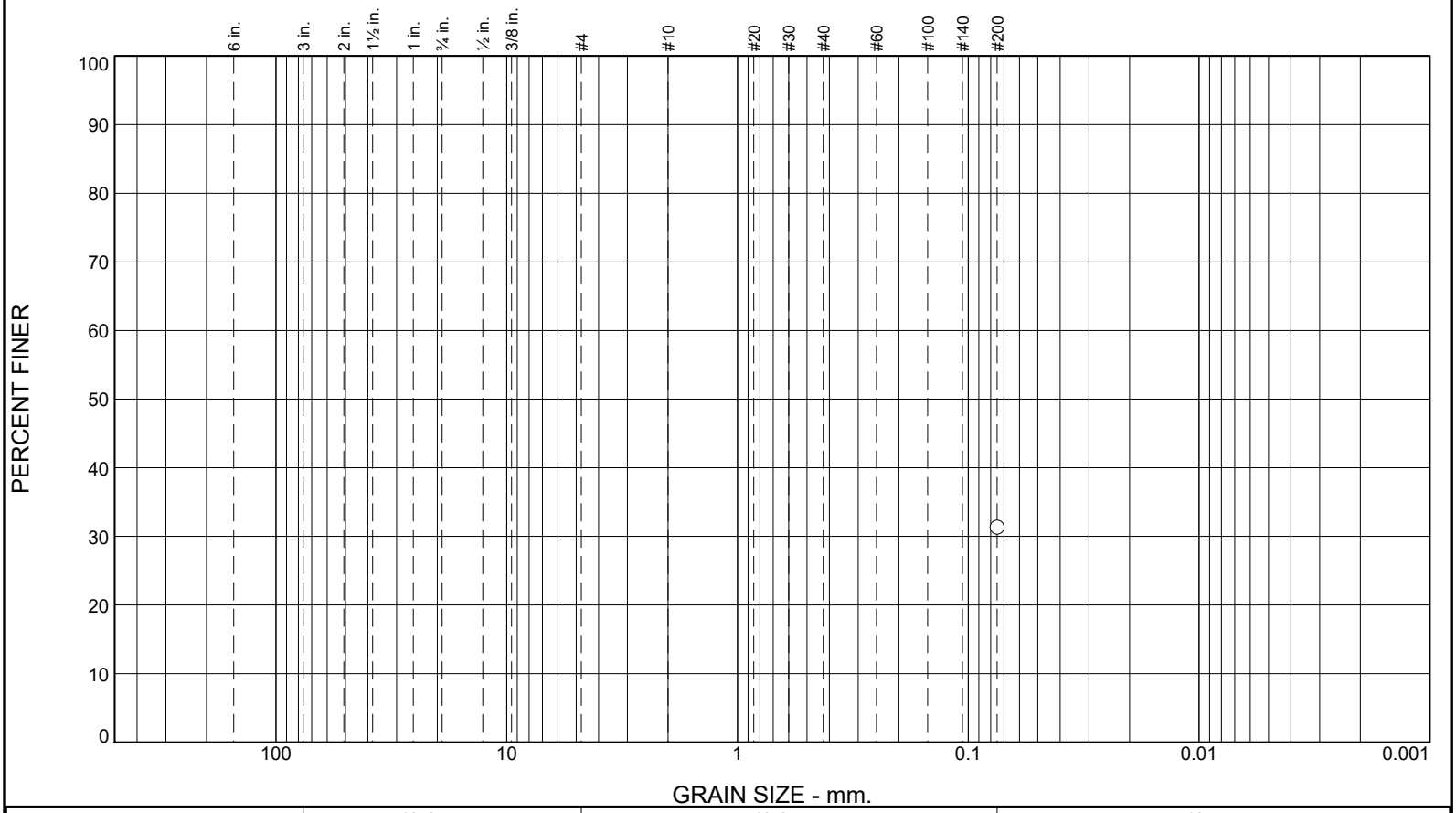
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						31.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	31.3		

* (no specification provided)

Soil Description

Reddish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26691
As received moisture content = 29.9%

Source of Sample: C-6 **Depth:** 13.5-15 ft
Sample Number: S5

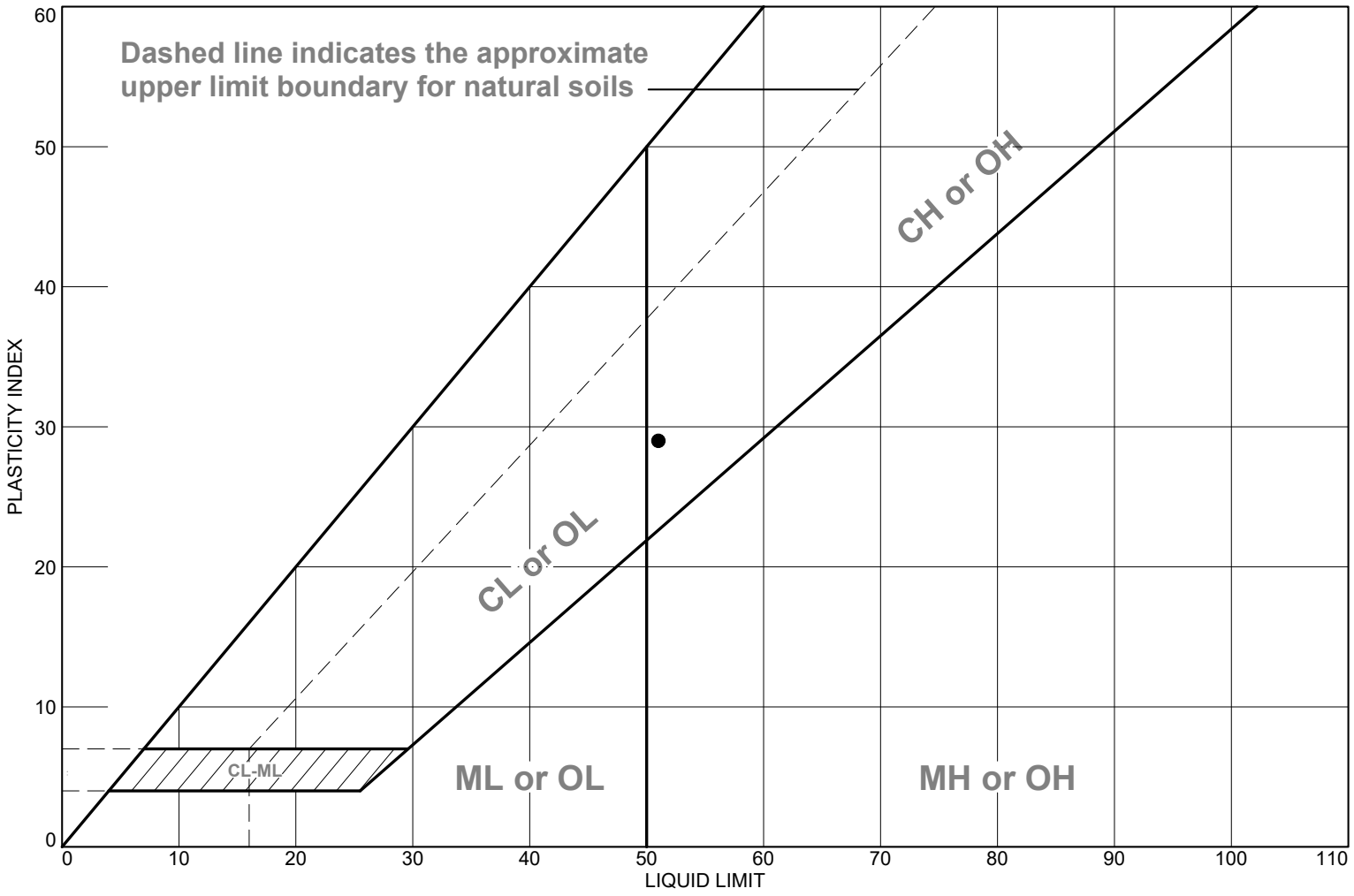
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Sandy Fat CLAY	51	22	29	N/A	65.4	CH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** P-1 **Depth:** 1-2.5 ft **Sample Number:** S1

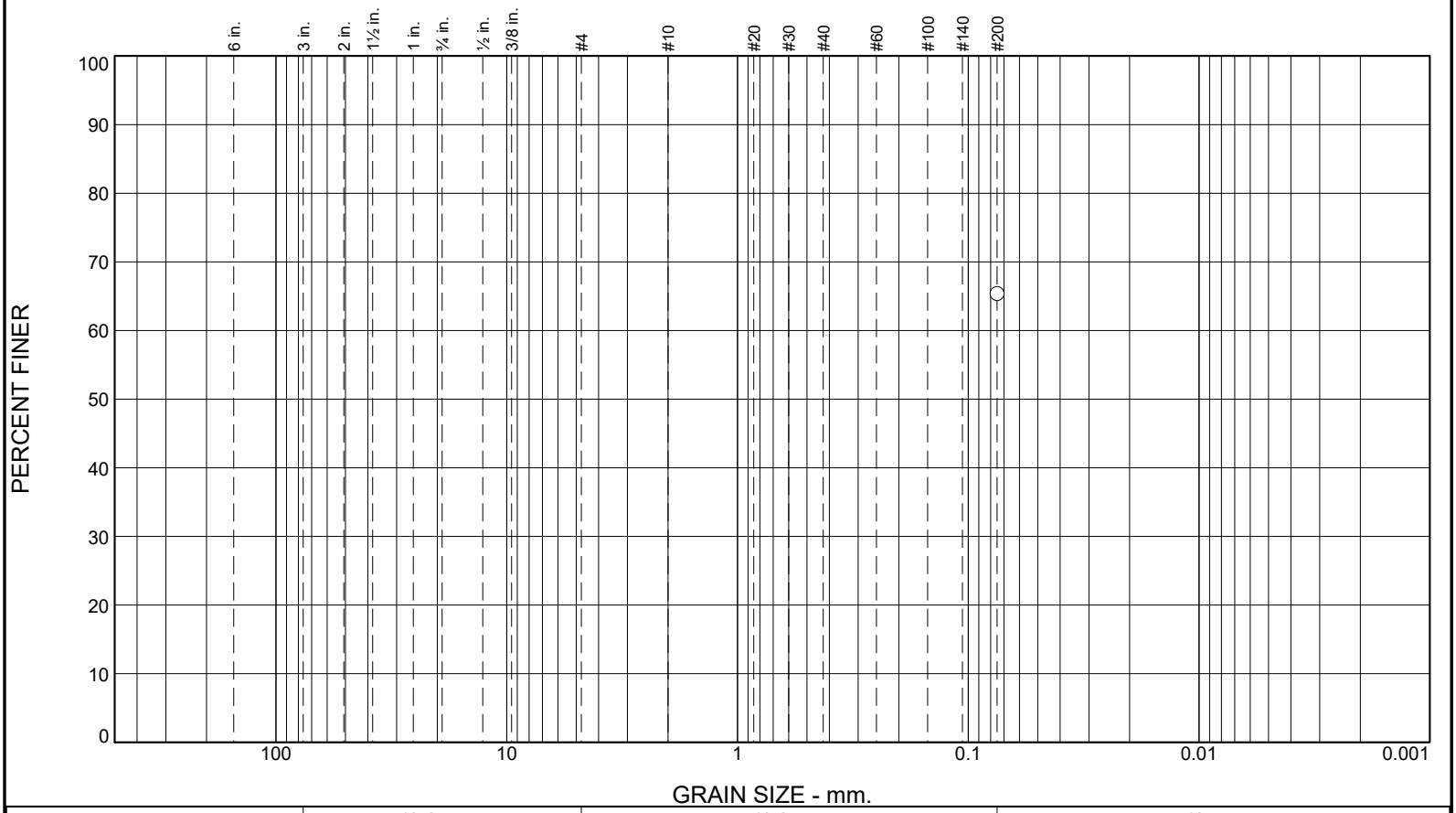
Remarks:

● Lab #26692
As received moisture content = 23.1%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						65.4	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	65.4		

* (no specification provided)

Soil Description

Red Sandy Fat CLAY

Atterberg Limits

PL= 22 LL= 51 PI= 29

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CH AASHTO= N/A

Remarks

Lab #26692
As received moisture content = 23.1%

Source of Sample: P-1 **Depth:** 1-2.5 ft
Sample Number: S1

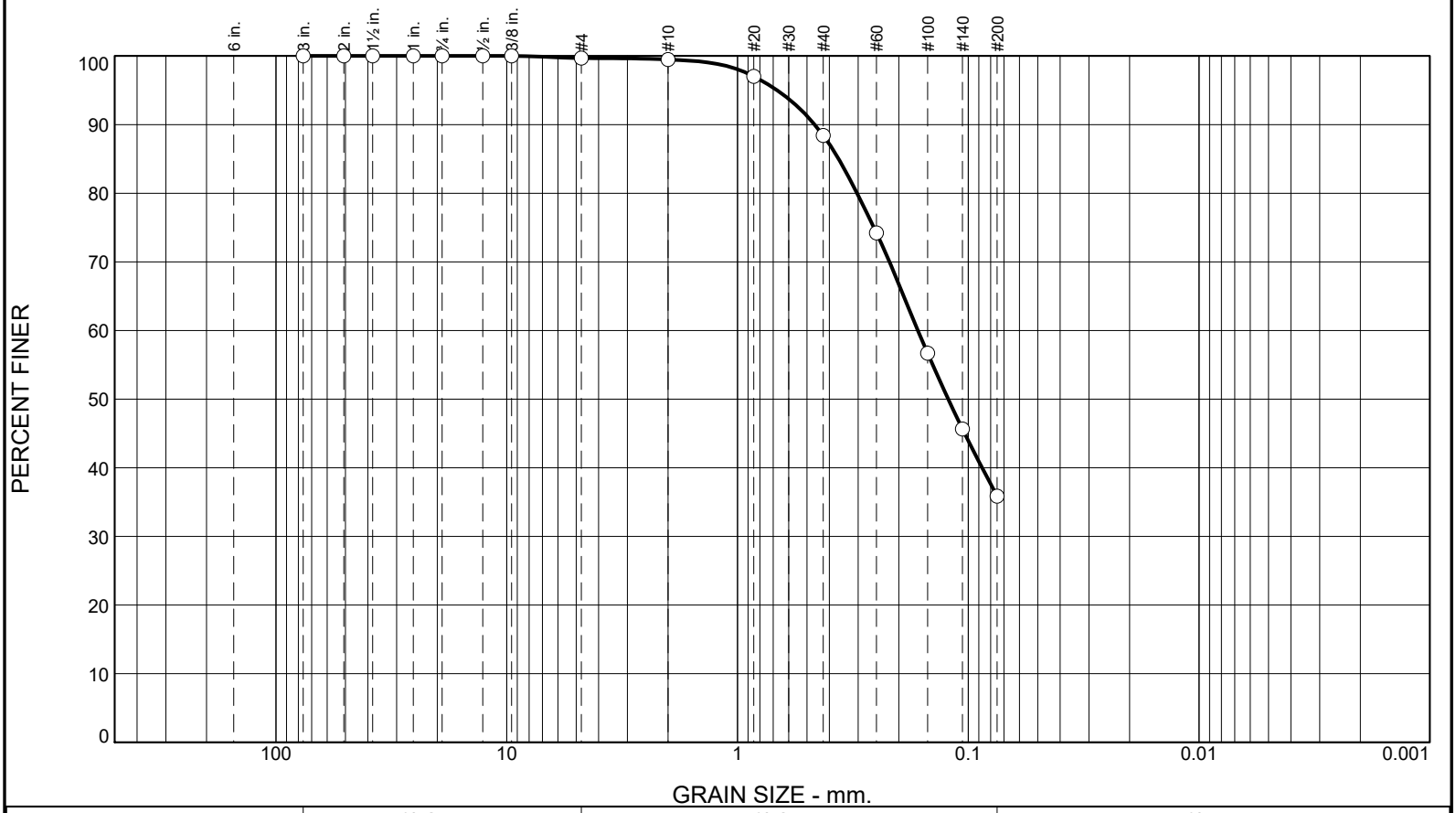
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.2	11.1	52.5	35.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.7		
#10	99.5		
#20	97.0		
#40	88.4		
#60	74.2		
#100	56.7		
#140	45.6		
#200	35.9		

* (no specification provided)

Soil Description

Yellowish Brown to Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.4630 D_{85}= 0.3647 D_{60}= 0.1653
D_{50}= 0.1221 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26693
As received moisture content = 15.2%

Source of Sample: P-1 **Depth:** 8.5-10 ft
Sample Number: S4

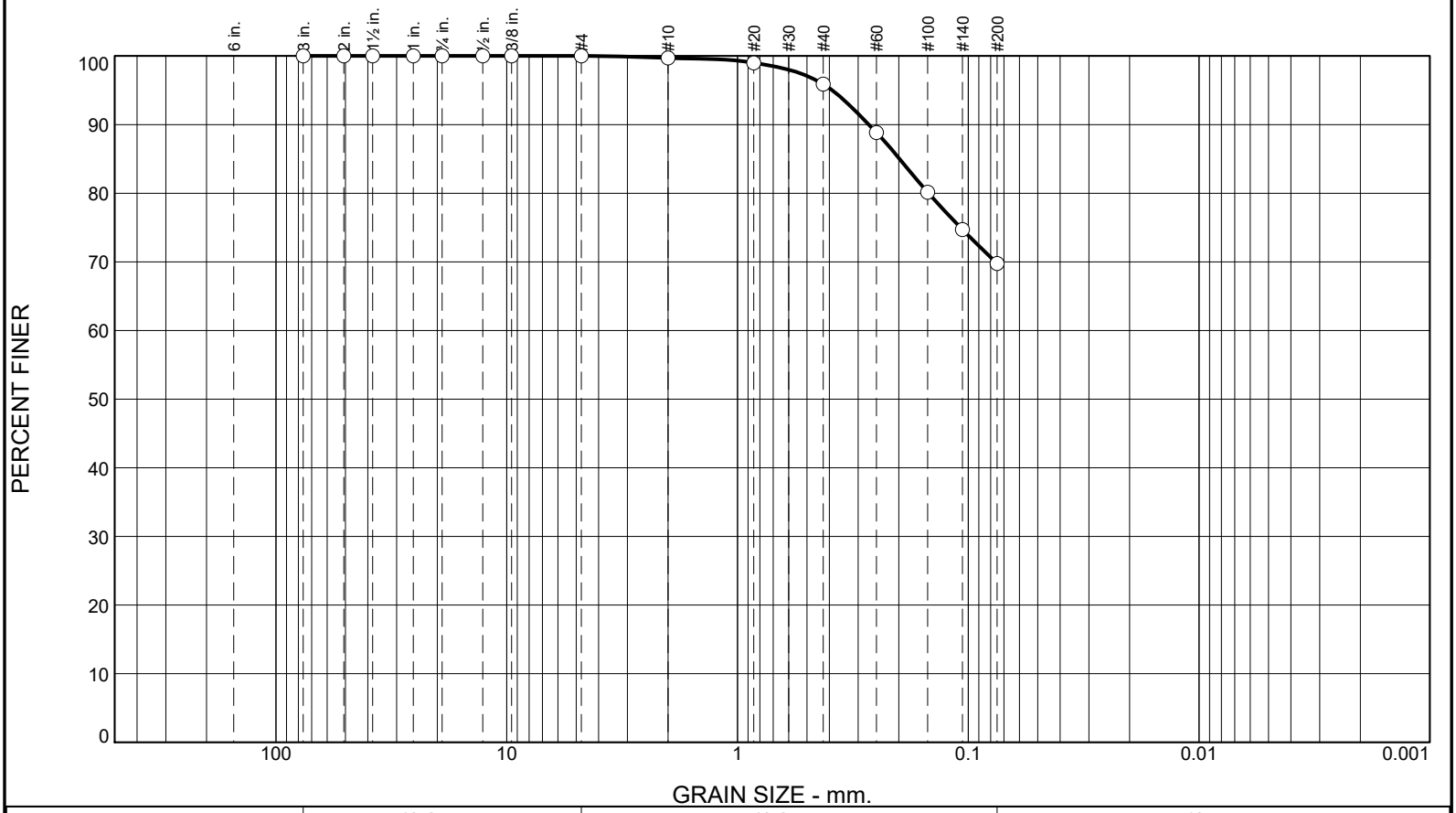
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.3	3.8	26.1	69.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.7		
#20	99.0		
#40	95.9		
#60	88.8		
#100	80.1		
#140	74.7		
#200	69.8		

* (no specification provided)

Soil Description

Red Sandy CLAY

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.2699 D_{85}= 0.1984 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26694
As received moisture content = 25.9%

Source of Sample: P-2 **Depth:** 1-2.5 ft
Sample Number: S1

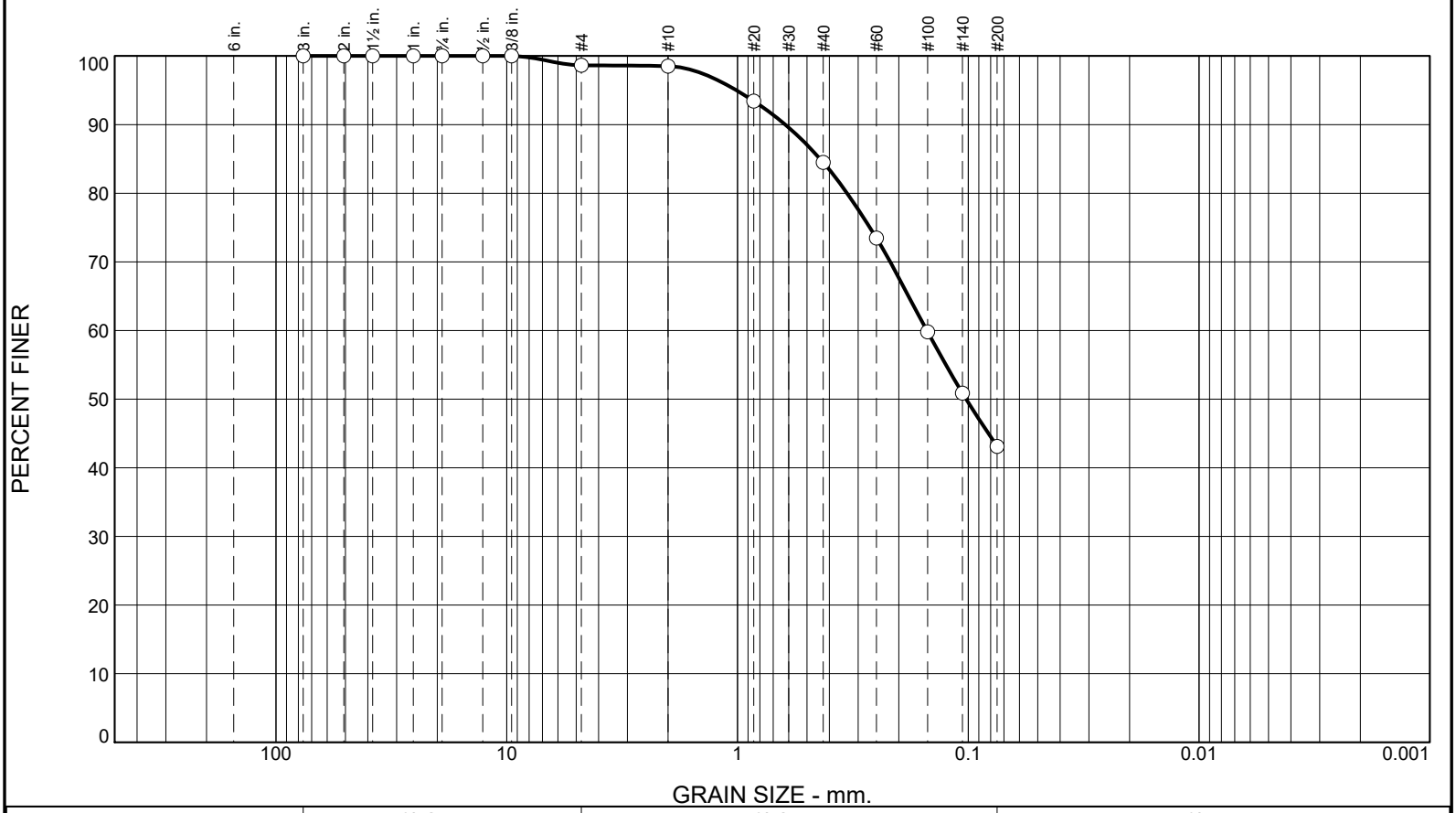
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.4	0.1	14.0	41.4	43.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	98.6		
#10	98.5		
#20	93.4		
#40	84.5		
#60	73.5		
#100	59.8		
#140	50.9		
#200	43.1		

* (no specification provided)

Soil Description

Red to Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6209 D_{85}= 0.4385 D_{60}= 0.1511
D_{50}= 0.1022 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26695
As received moisture content = 20.1%

Source of Sample: P-2 **Depth:** 3.5-5 ft
Sample Number: S2

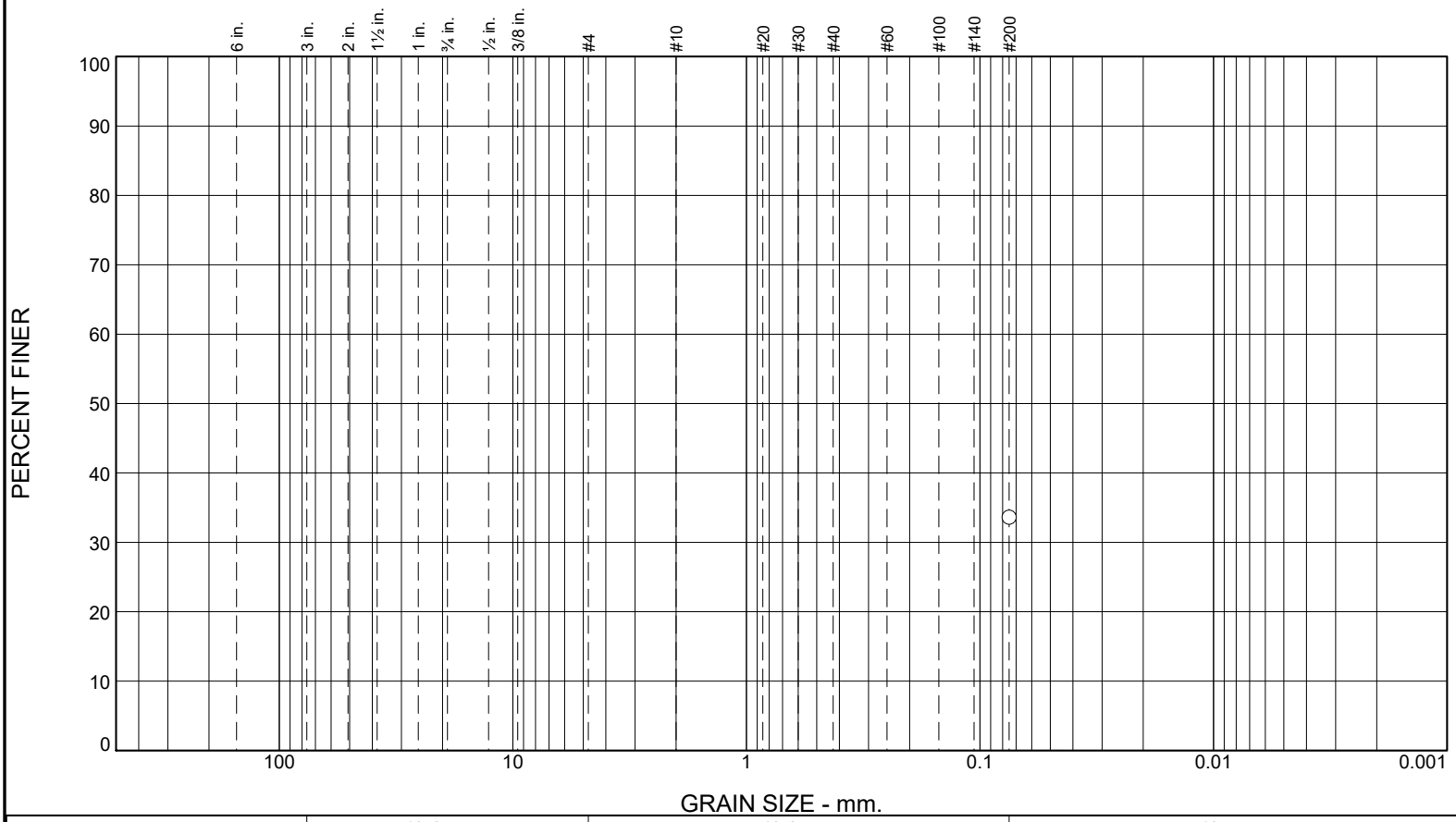
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						33.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	33.6		

* (no specification provided)

Soil Description

Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26696
As received moisture content = 18.7%

Source of Sample: P-2 **Depth:** 6-7.5 ft
Sample Number: S3

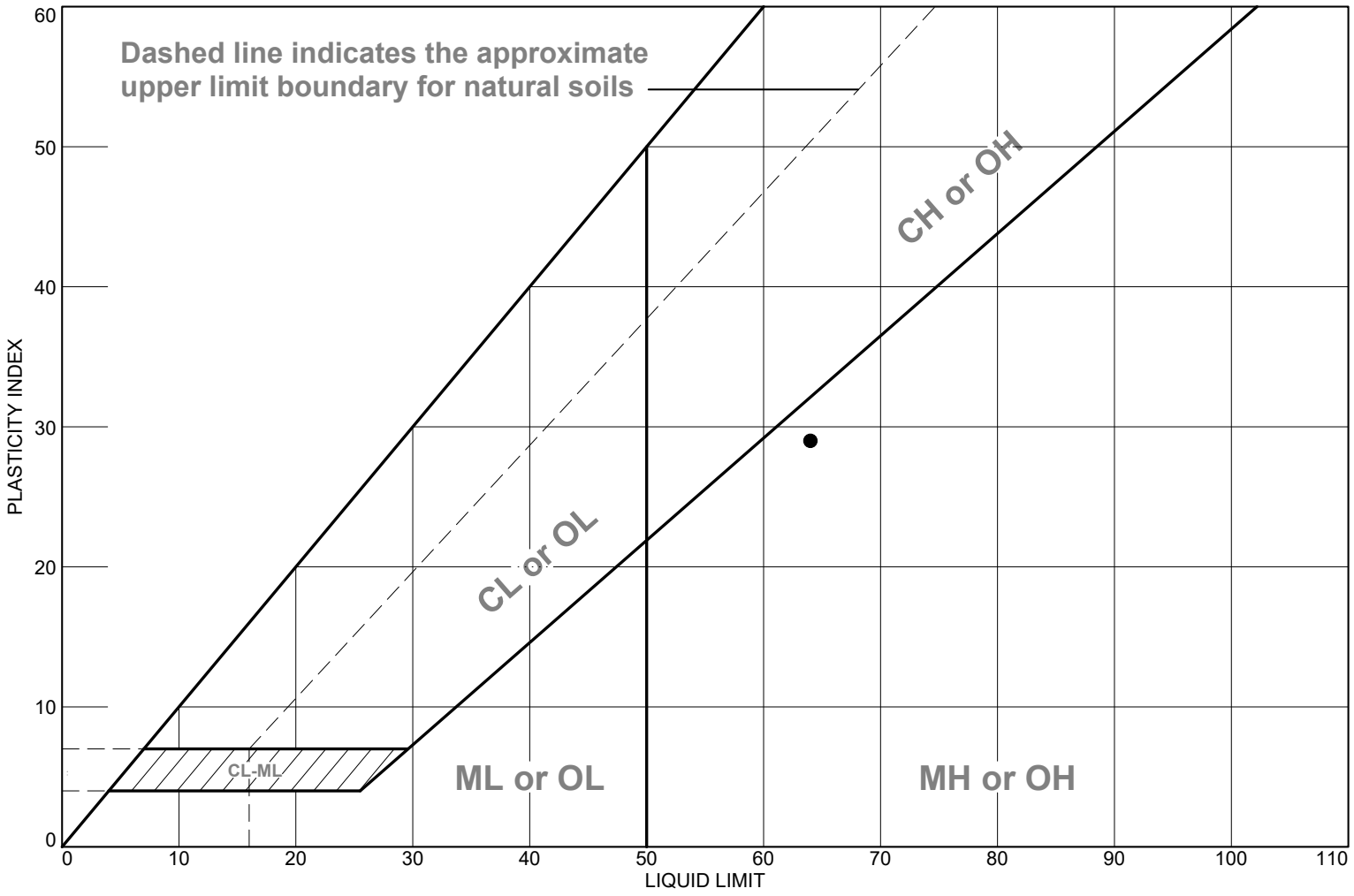
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Sandy Elastic SILT	64	35	29	N/A	54.3	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** P-4 **Depth:** 1-2.5 ft **Sample Number:** S1

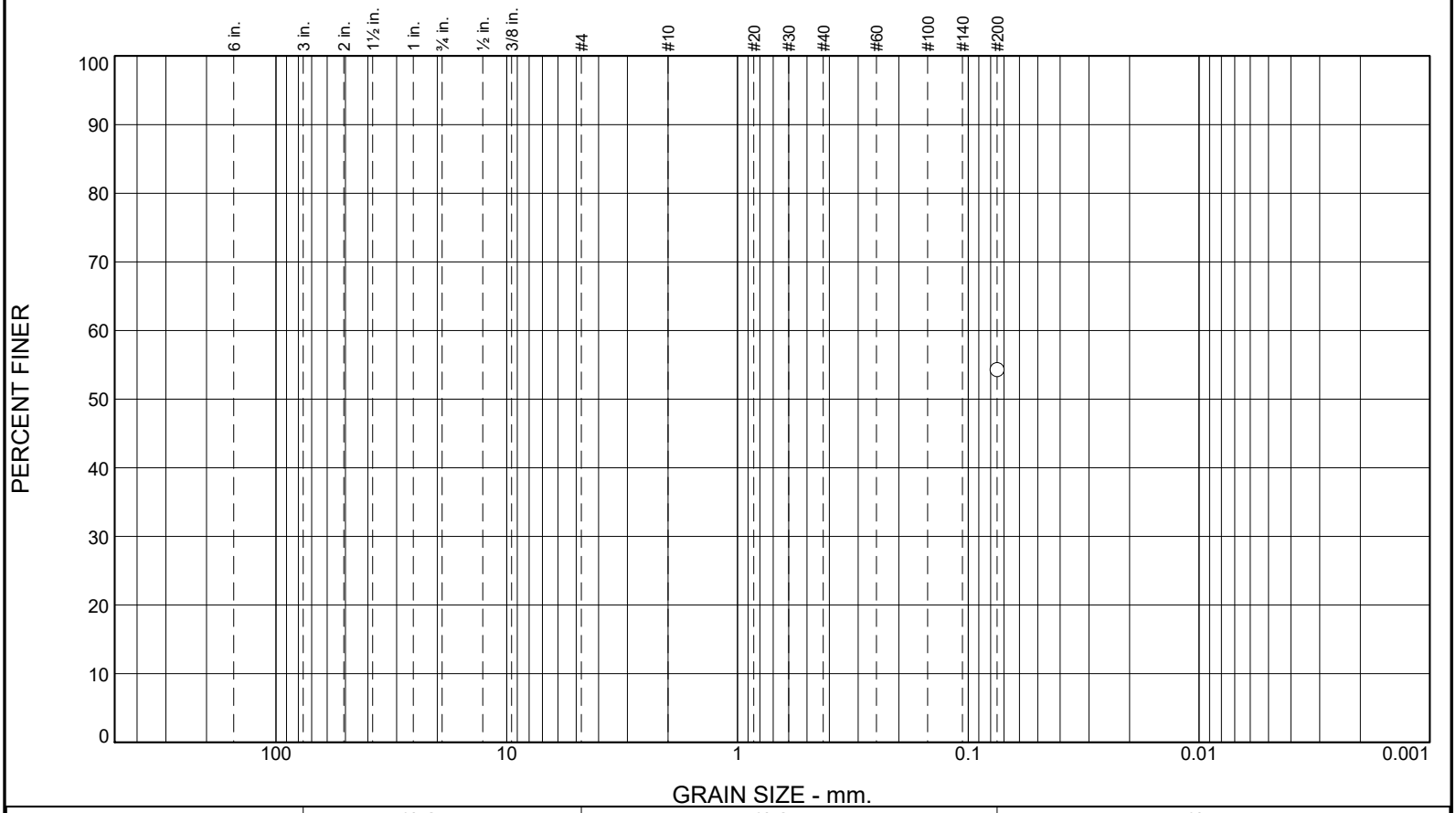
Remarks:

● Lab #26697
As received moisture content = 20.4%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						54.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	54.3		

* (no specification provided)

Soil Description

Red Sandy Elastic SILT

Atterberg Limits

PL= 35 LL= 64 PI= 29

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26697
As received moisture content = 20.4%

Source of Sample: P-4 **Depth:** 1-2.5 ft
Sample Number: S1

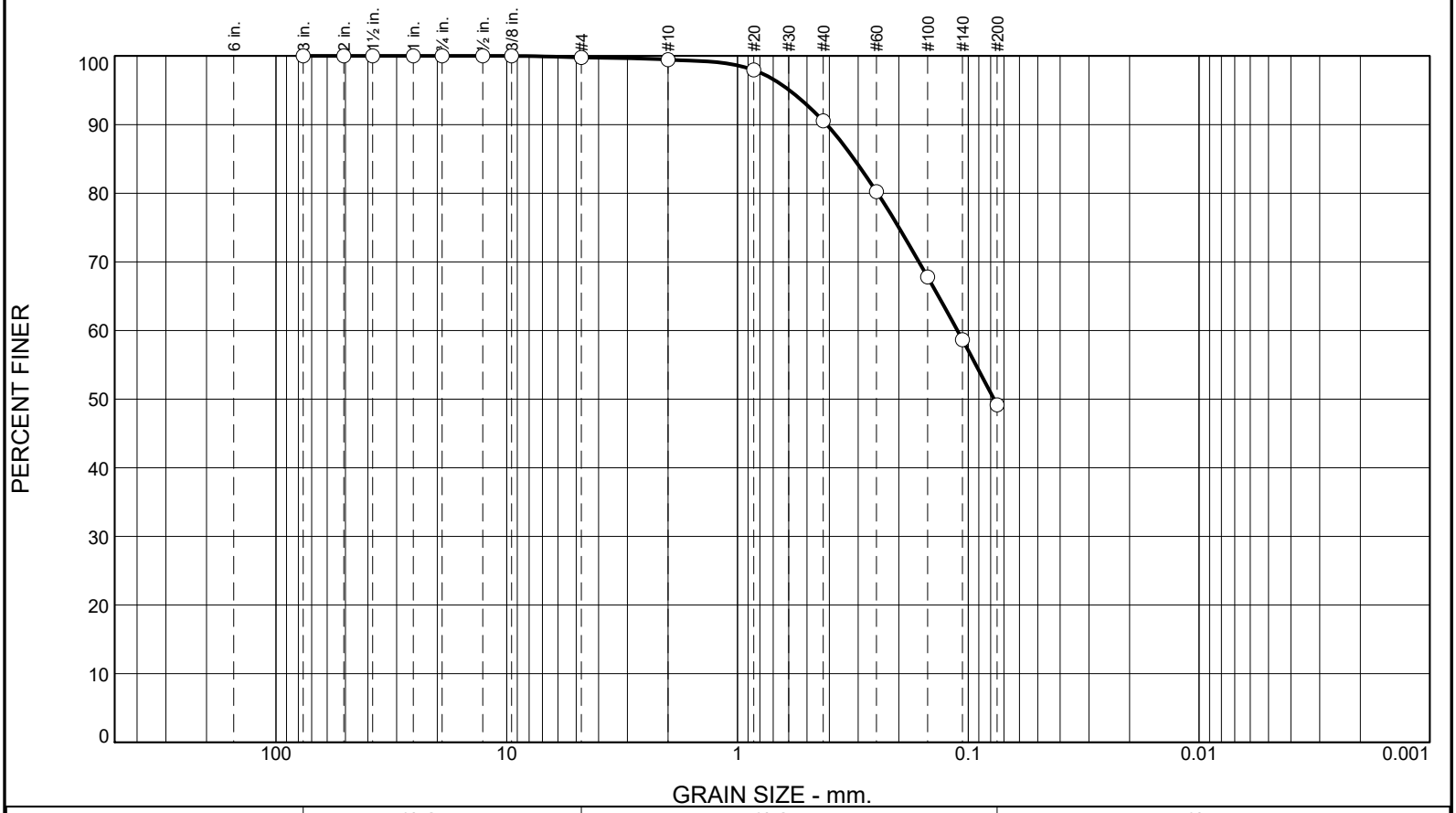
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.3	9.0	41.3	49.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.8		
#10	99.5		
#20	98.0		
#40	90.5		
#60	80.2		
#100	67.8		
#140	58.7		
#200	49.2		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.4105 D_{85}= 0.3127 D_{60}= 0.1115
D_{50}= 0.0773 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26698
As received moisture content = 25.1%

Source of Sample: P-4 **Depth:** 13.5-15 ft
Sample Number: S5

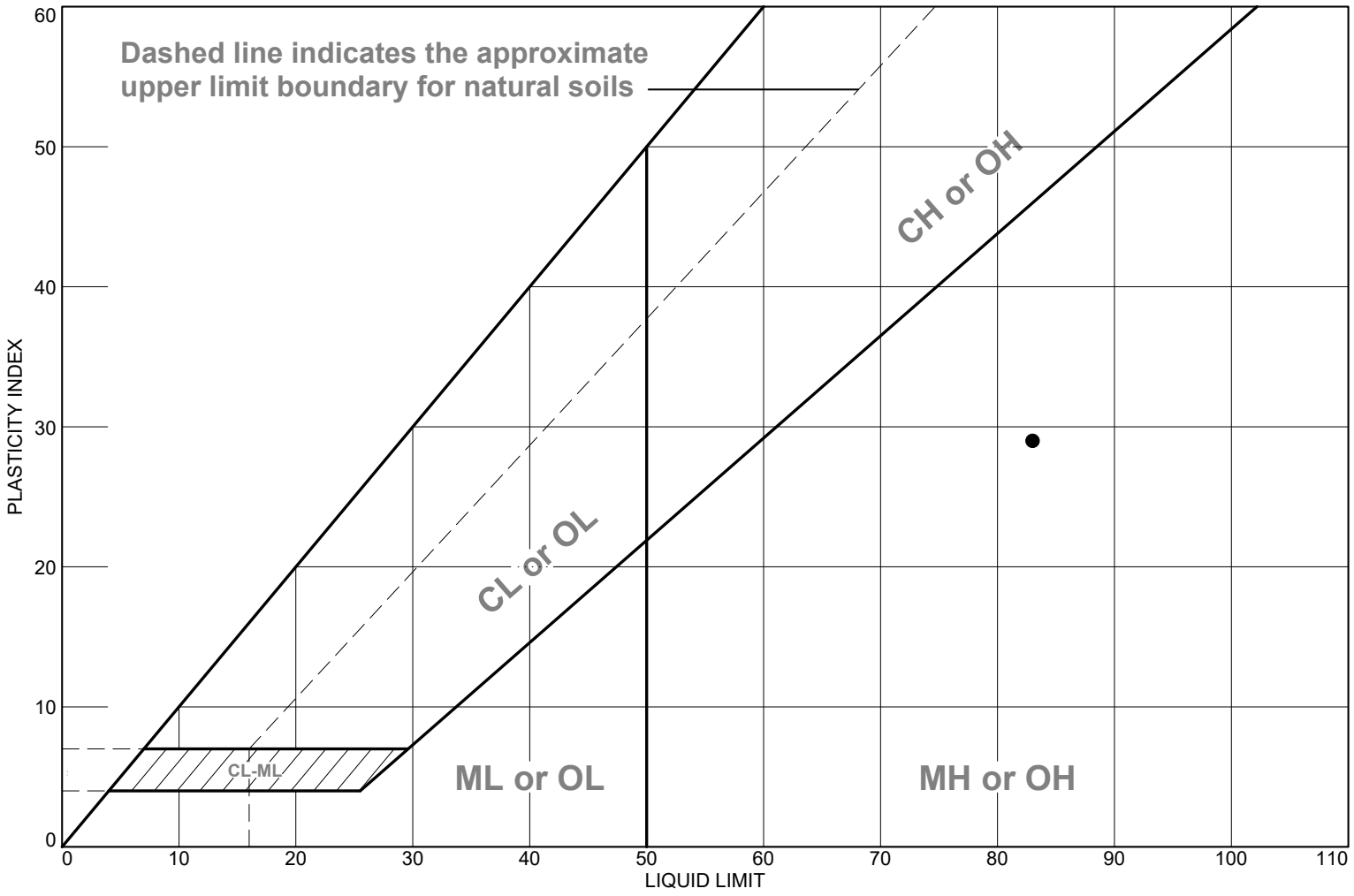
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Sandy Elastic SILT	83	54	29	N/A	69.6	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** P-5 **Depth:** 1-2.5 ft **Sample Number:** S1

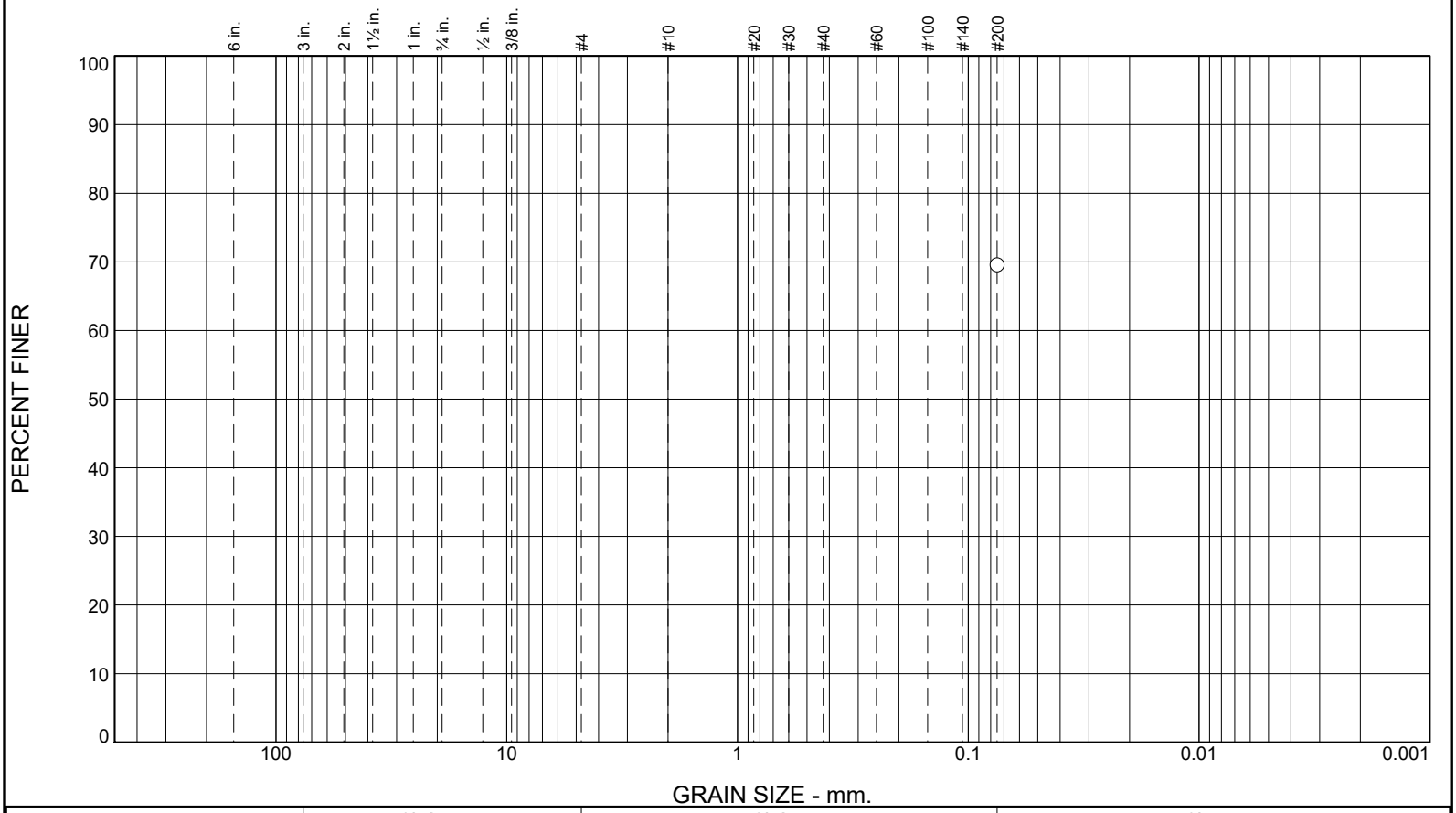
Remarks:

● Lab #26700
As received moisture content = 35.8%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						69.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	69.6		

* (no specification provided)

Soil Description

Red Sandy Elastic SILT

Atterberg Limits

PL= 54 LL= 83 PI= 29

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26700
As received moisture content = 35.8%

Source of Sample: P-5 **Depth:** 1-2.5 ft
Sample Number: S1

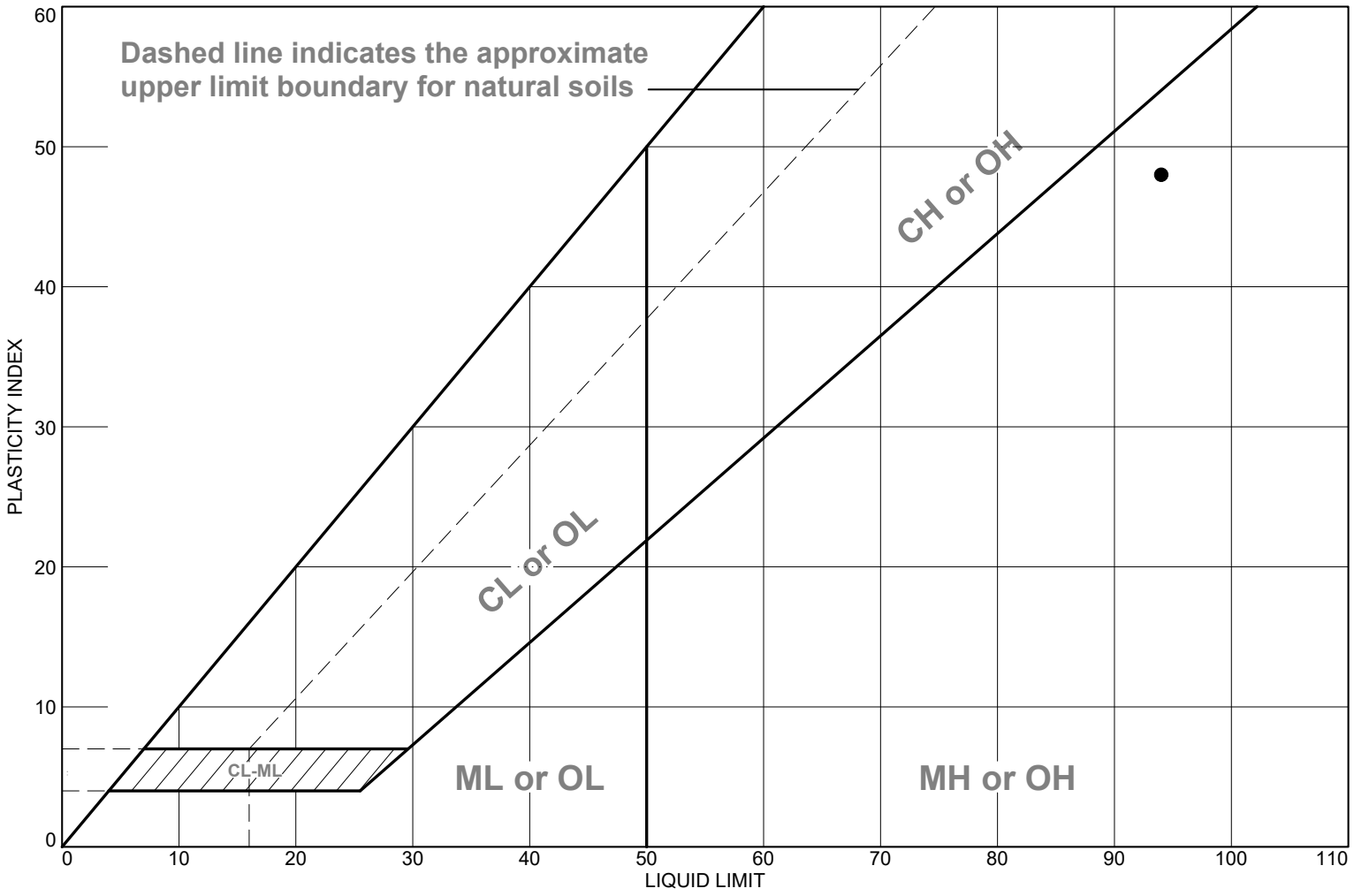
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Sandy Elastic SILT	94	46	48	N/A	57.9	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** P-5 **Depth:** 3.5-5 ft **Sample Number:** S2

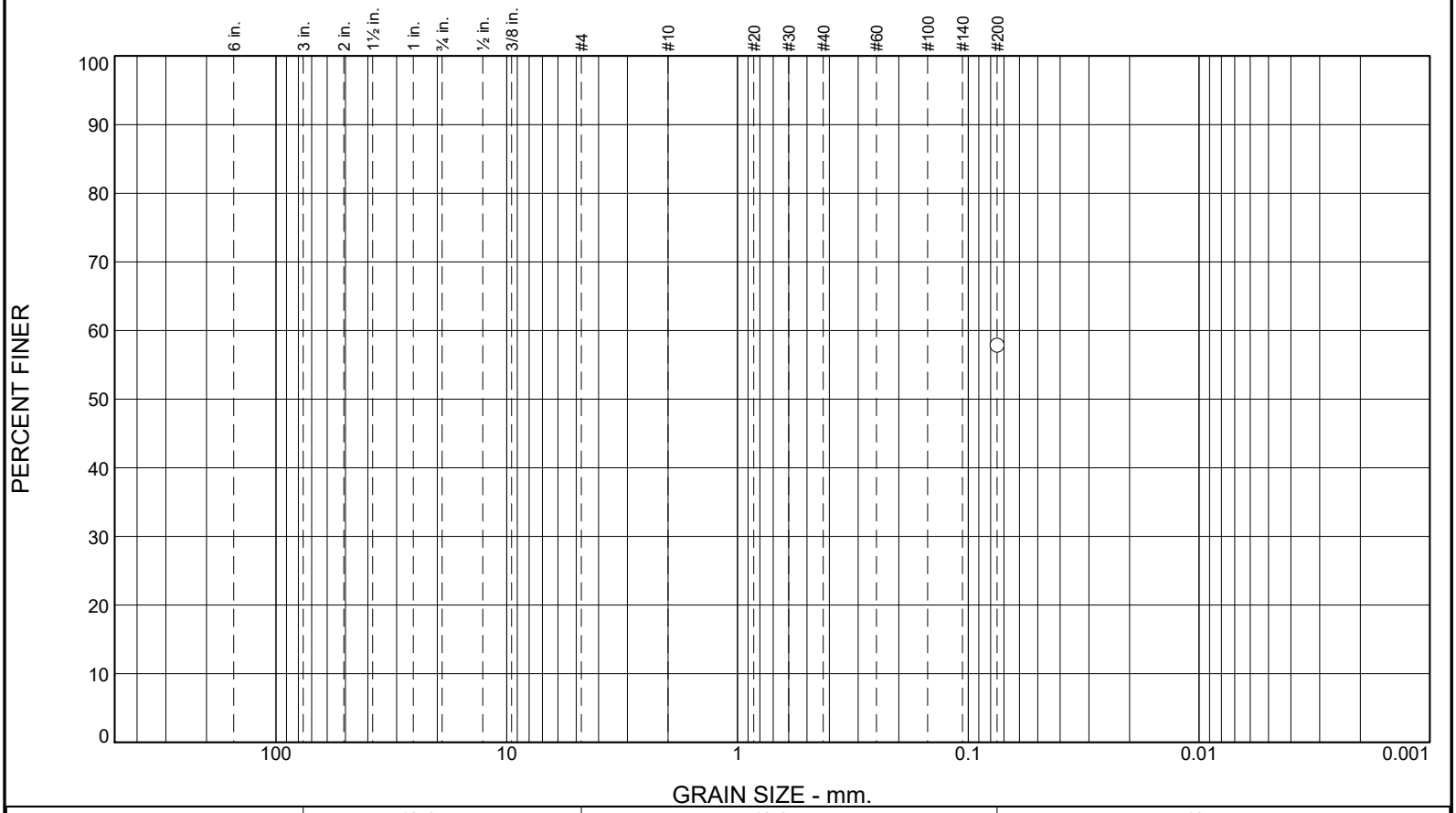
Remarks:

● Lab #26701
As received moisture content = 38.7%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						57.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	57.9		

* (no specification provided)

Soil Description

Red Sandy Elastic SILT

Atterberg Limits

PL= 46 LL= 94 PI= 48

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26701
As received moisture content = 38.7%

Source of Sample: P-5 **Depth:** 3.5-5 ft
Sample Number: S2

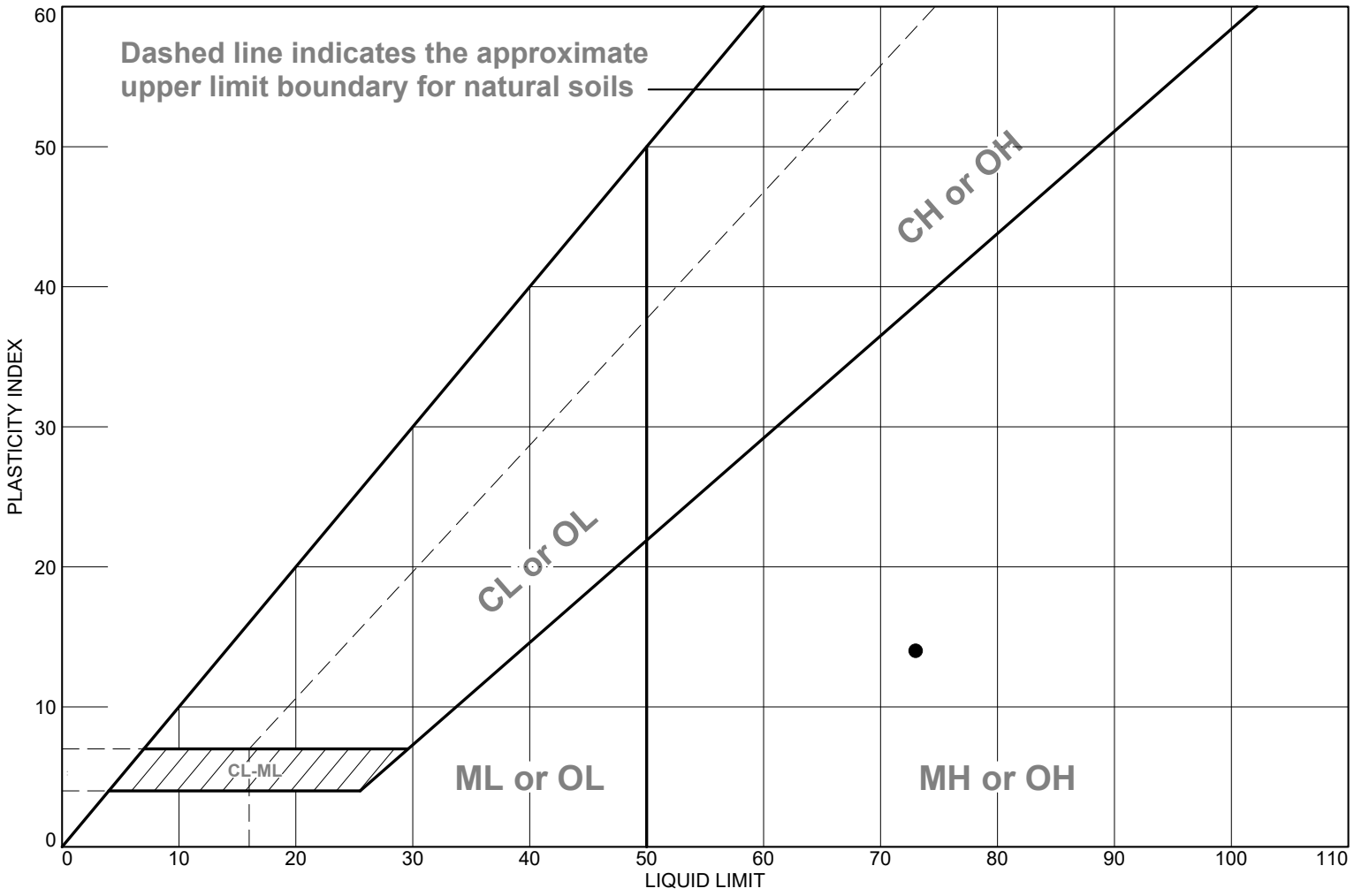
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Silty SAND	73	59	14	N/A	39.7	SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** P-5 **Depth:** 6-7.5 ft **Sample Number:** S3

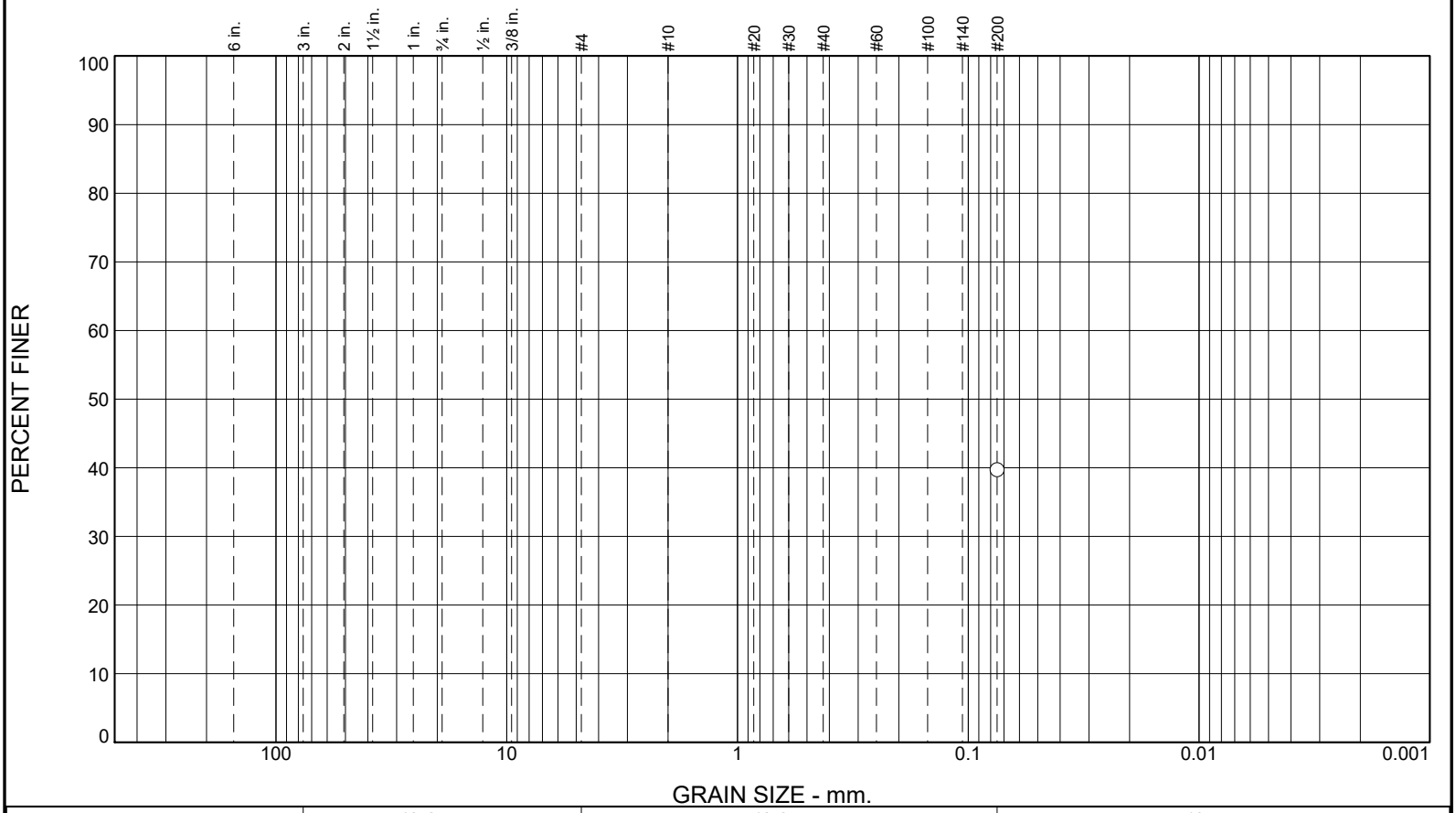
Remarks:

● Lab #26702
As received moisture content = 45.0%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						39.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	39.7		

* (no specification provided)

Soil Description

Red Silty SAND

Atterberg Limits

PL= 59 LL= 73 PI= 14

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= N/A

Remarks

Lab #26702
As received moisture content = 45.0%

Source of Sample: P-5 **Depth:** 6-7.5 ft
Sample Number: S3

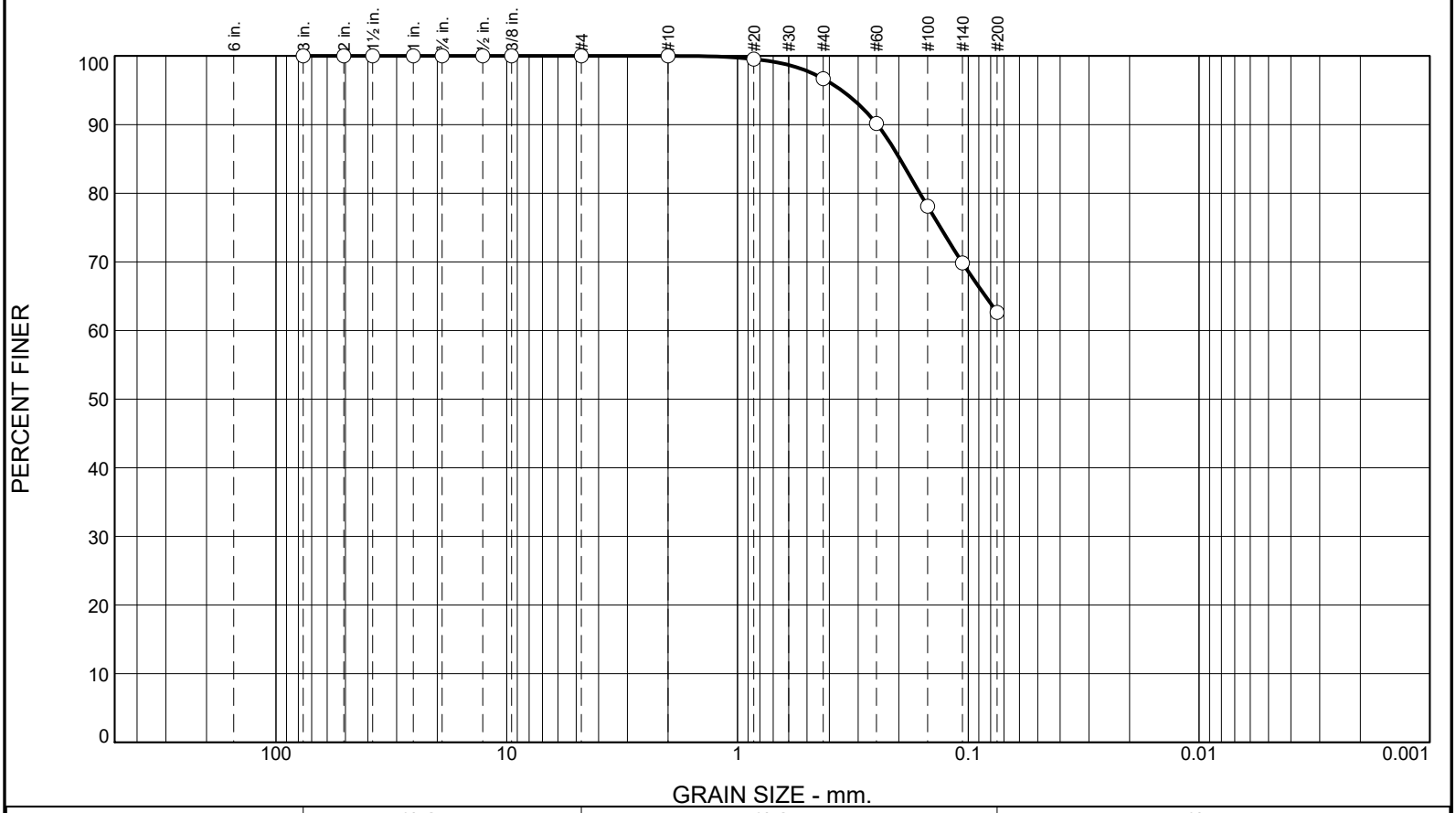
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	3.3	34.1	62.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	100.0		
#20	99.5		
#40	96.7		
#60	90.2		
#100	78.1		
#140	69.8		
#200	62.6		

* (no specification provided)

Soil Description

Pink Sandy SILT

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.2478 D_{85}= 0.1976 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26703
As received moisture content = 46.2%

Source of Sample: P-5 **Depth:** 8.5-10 ft
Sample Number: S4

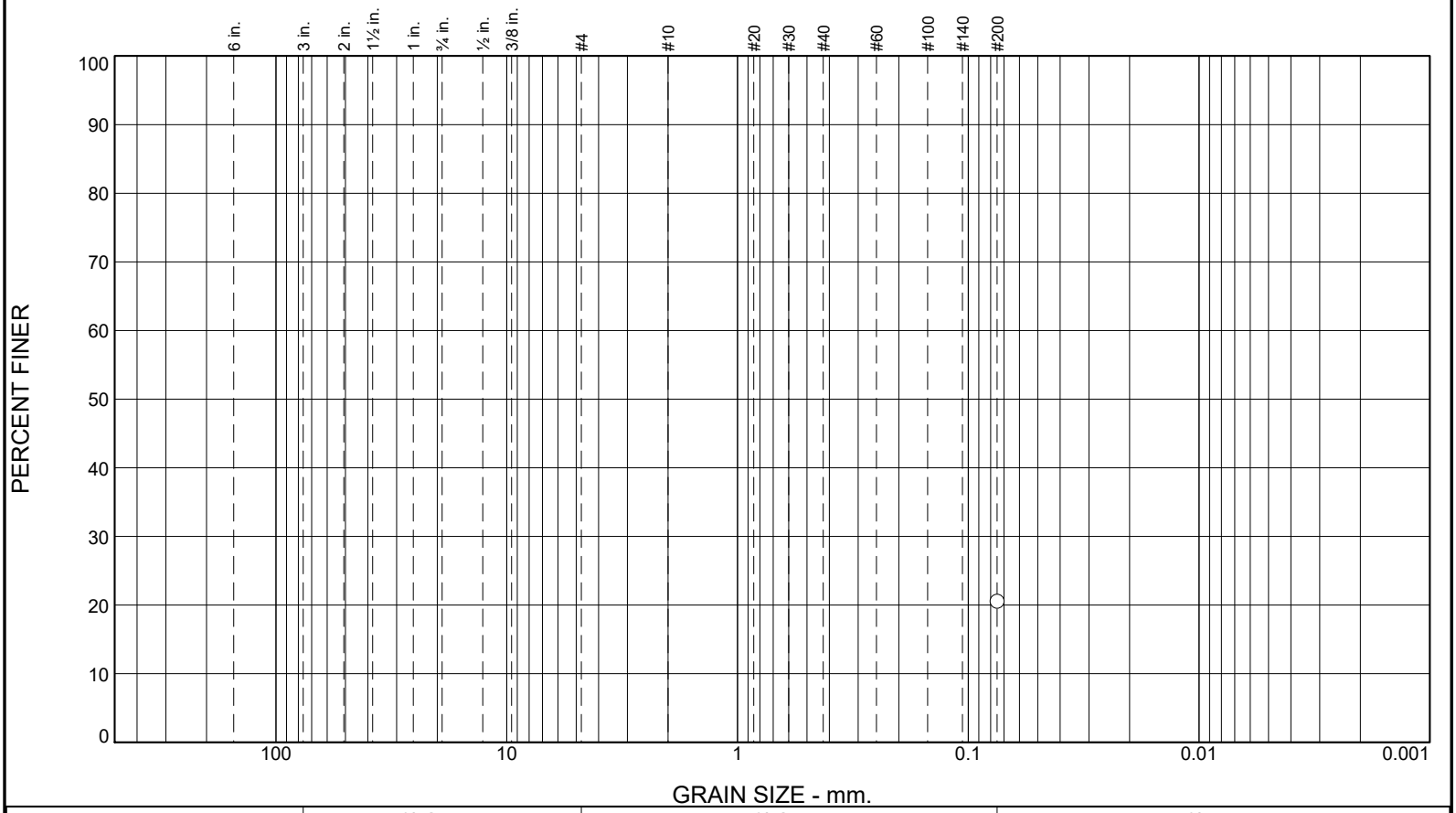
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						20.5	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	20.5		

* (no specification provided)

Soil Description

Dark Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26704
As received moisture content = 25.7%

Source of Sample: P-5 **Depth:** 18.5-20 ft
Sample Number: S6

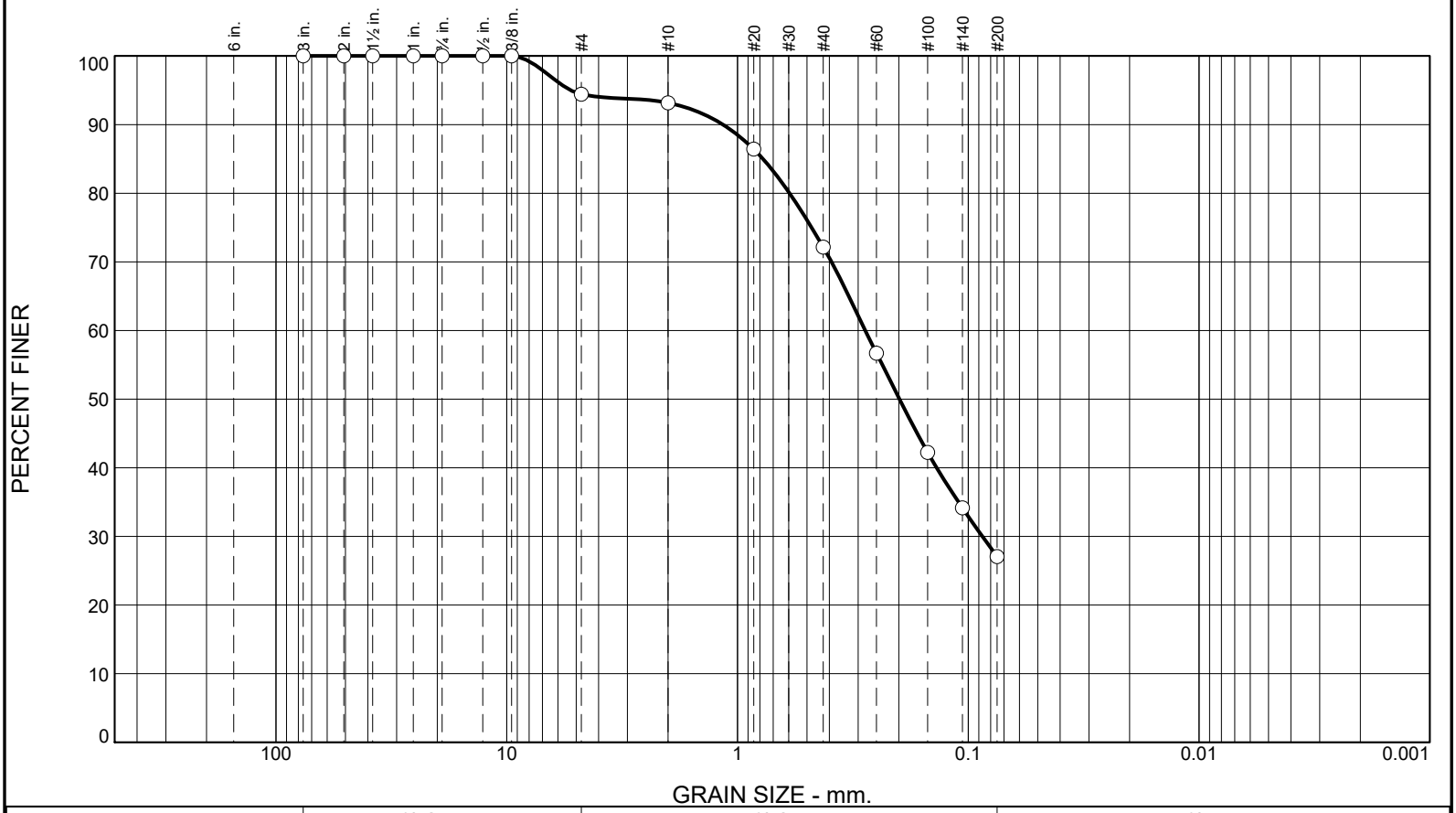
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	5.6	1.2	21.1	45.1	27.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	94.4		
#10	93.2		
#20	86.4		
#40	72.1		
#60	56.7		
#100	42.2		
#140	34.1		
#200	27.0		

* (no specification provided)

Soil Description

Reddish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.1568 D_{85}= 0.7748 D_{60}= 0.2796
D_{50}= 0.1985 D_{30}= 0.0868 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26705
As received moisture content = 11.7%

Source of Sample: P-6 **Depth:** 3.5-5 ft
Sample Number: S2

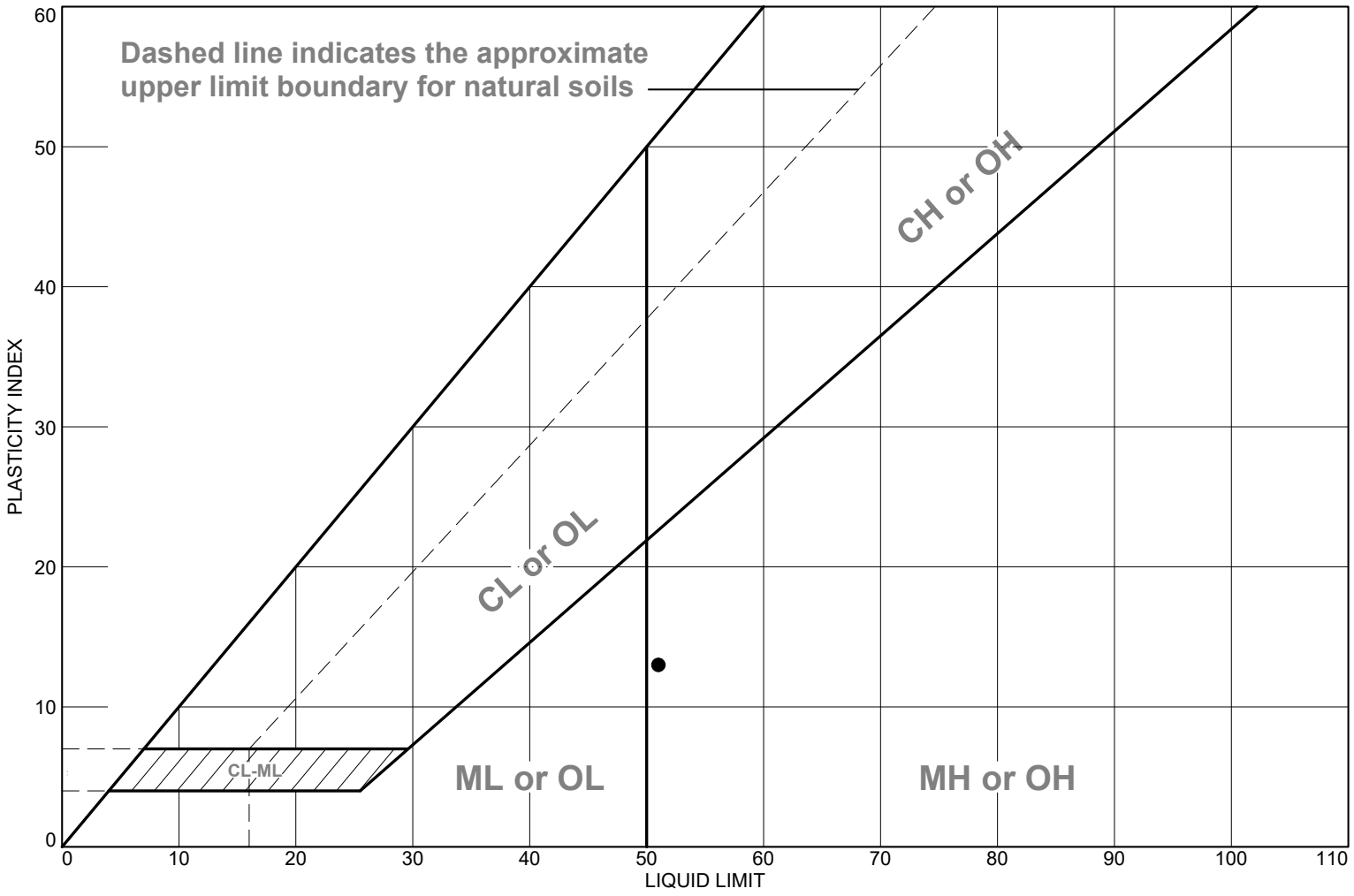
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Silty SAND	51	38	13	N/A	35.0	SM

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-2 **Depth:** 2-4.5 ft **Sample Number:** S3

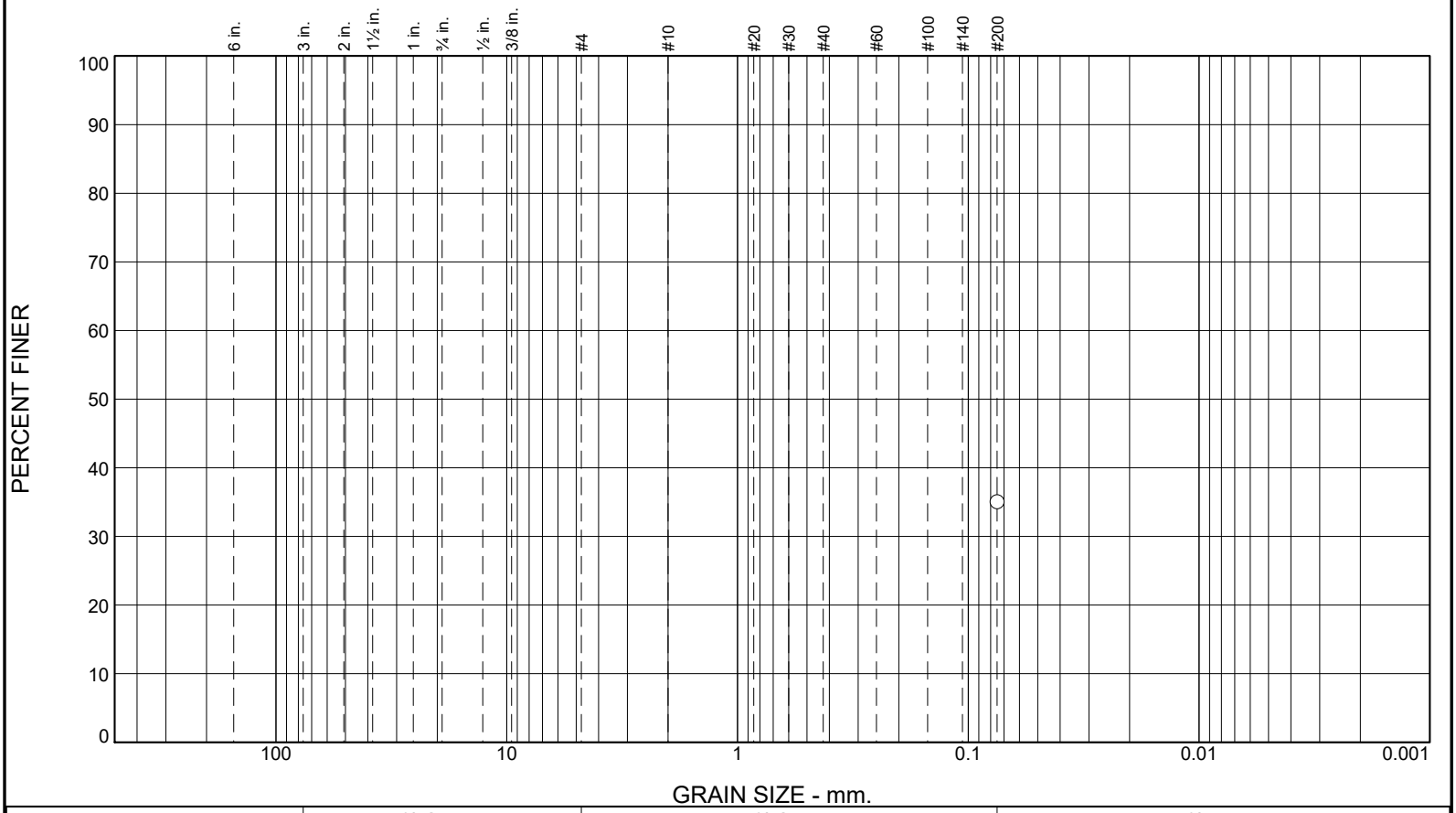
Remarks:

● Lab #26720
As received moisture content = 20.0%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						35.0	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	35.0		

* (no specification provided)

Soil Description

Red Silty SAND

Atterberg Limits

PL= 38 LL= 51 PI= 13

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= N/A

Remarks

Lab #26720
As received moisture content = 20.0%

Source of Sample: R-2 **Depth:** 2-4.5 ft
Sample Number: S3

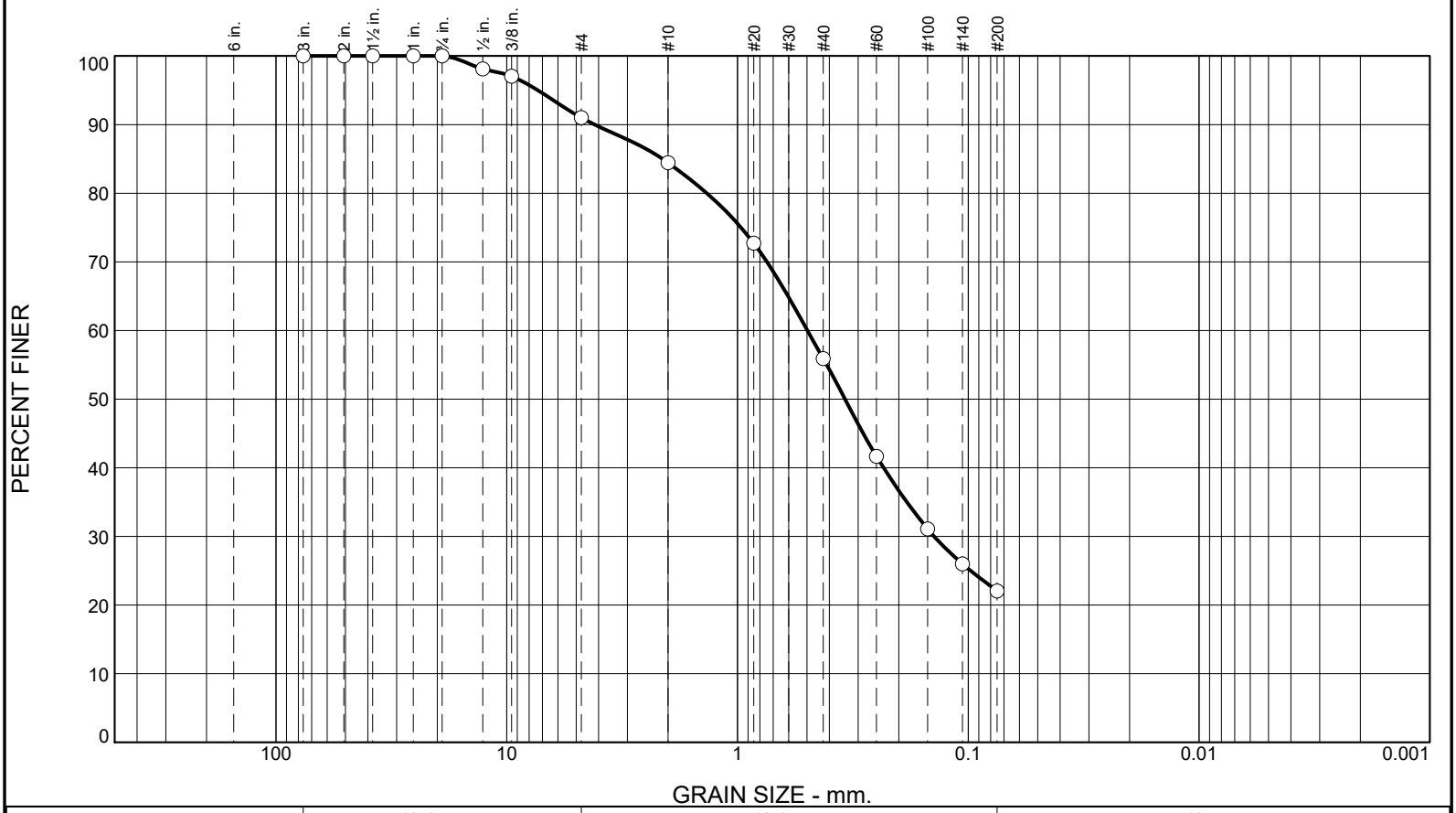
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	9.0	6.6	28.5	33.8	22.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	98.1		
.375	97.0		
#4	91.0		
#10	84.4		
#20	72.7		
#40	55.9		
#60	41.7		
#100	31.1		
#140	26.0		
#200	22.1		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 4.1598 D_{85}= 2.1121 D_{60}= 0.4979
D_{50}= 0.3420 D_{30}= 0.1406 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26721
As received moisture content = 5.4%

Source of Sample: R-2 **Depth:** 4.5-5 ft
Sample Number: S4

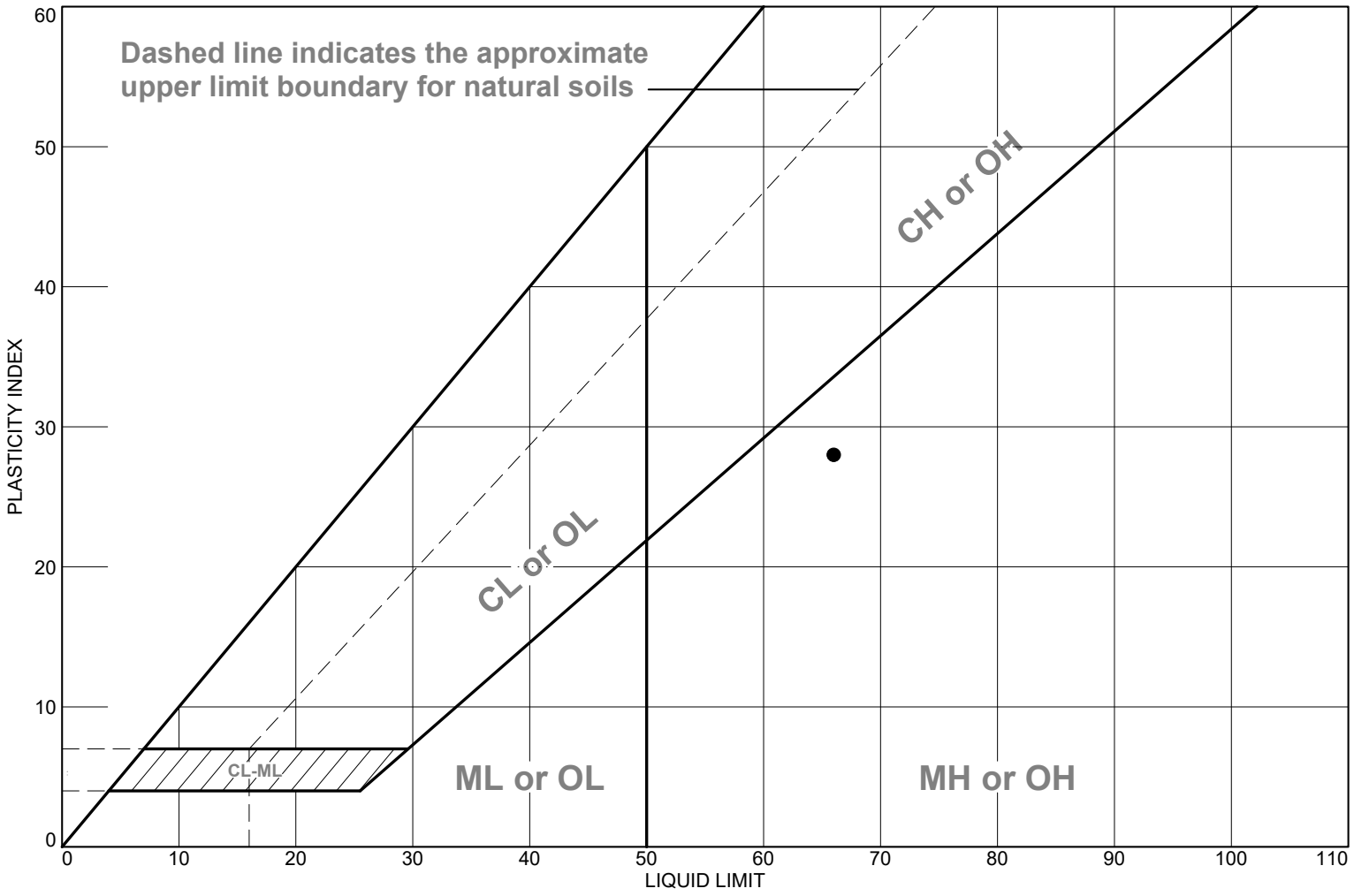
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Red Elastic SILT with Sand	66	38	28	N/A	75.8	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-3 **Depth:** 3.5-5 ft **Sample Number:** S2

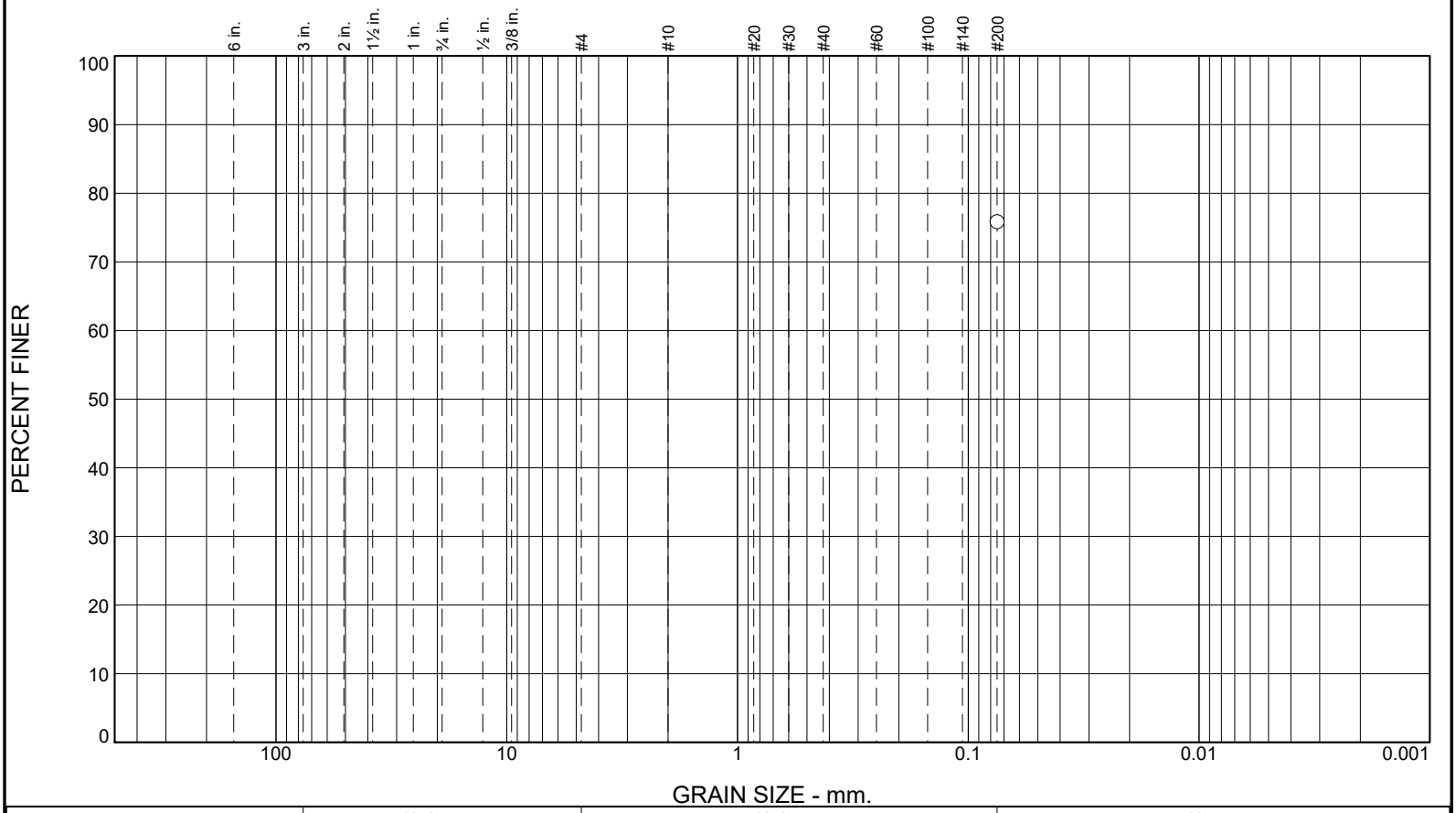
Remarks:

● Lab #26707
As received moisture content = 26.2%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						75.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	75.8		

* (no specification provided)

Soil Description

Red Elastic SILT with Sand

Atterberg Limits

PL= 38 LL= 66 PI= 28

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26707
As received moisture content = 26.2%

Source of Sample: R-3 **Depth:** 3.5-5 ft
Sample Number: S2

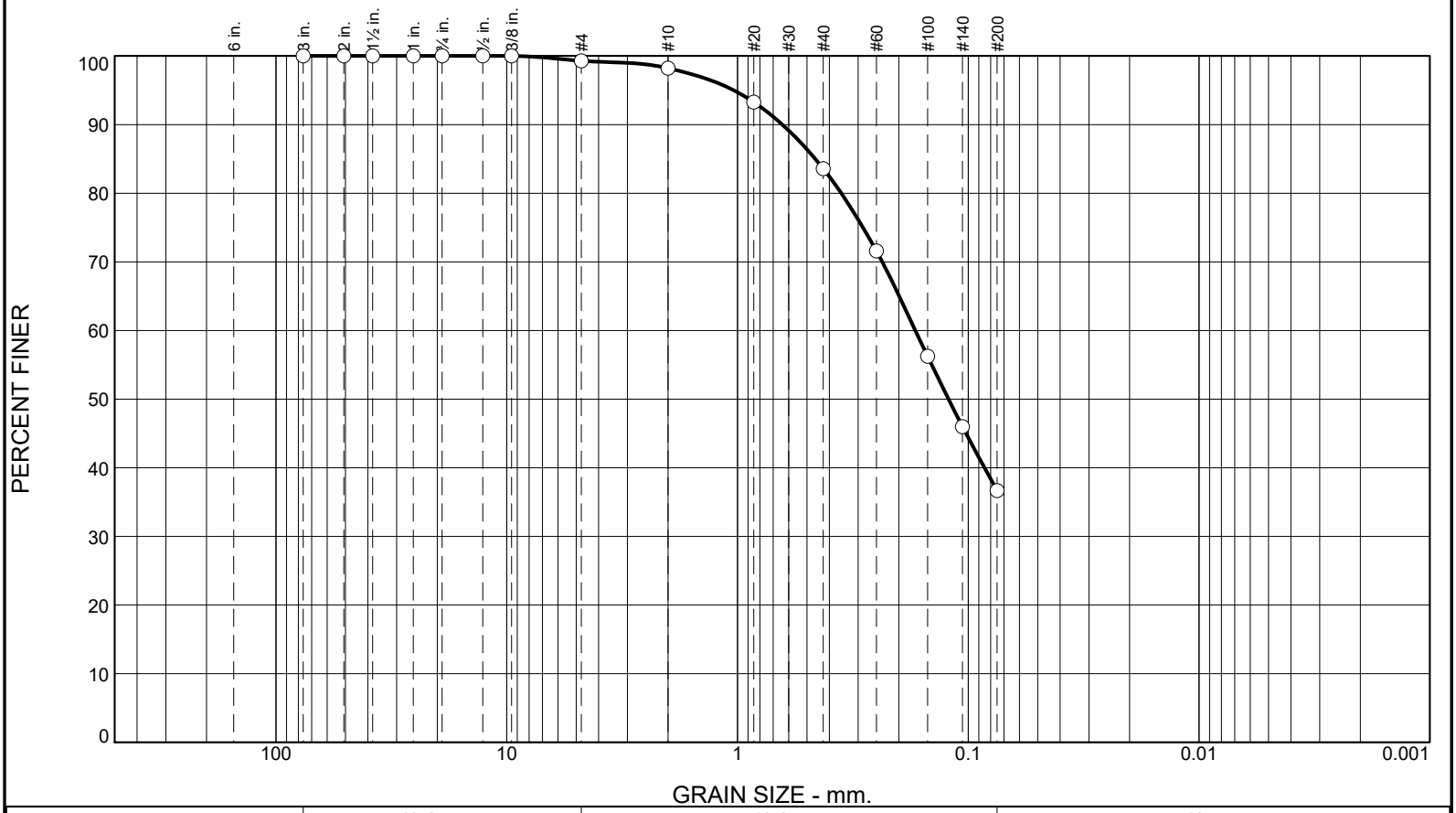
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	1.1	14.6	46.9	36.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	99.3		
#10	98.2		
#20	93.3		
#40	83.6		
#60	71.6		
#100	56.2		
#140	46.0		
#200	36.7		

* (no specification provided)

Soil Description

Yellowish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.6394 D_{85}= 0.4603 D_{60}= 0.1696
D_{50}= 0.1217 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26708
As received moisture content = 17.9%

Source of Sample: R-3 **Depth:** 18.5-20 ft
Sample Number: S6

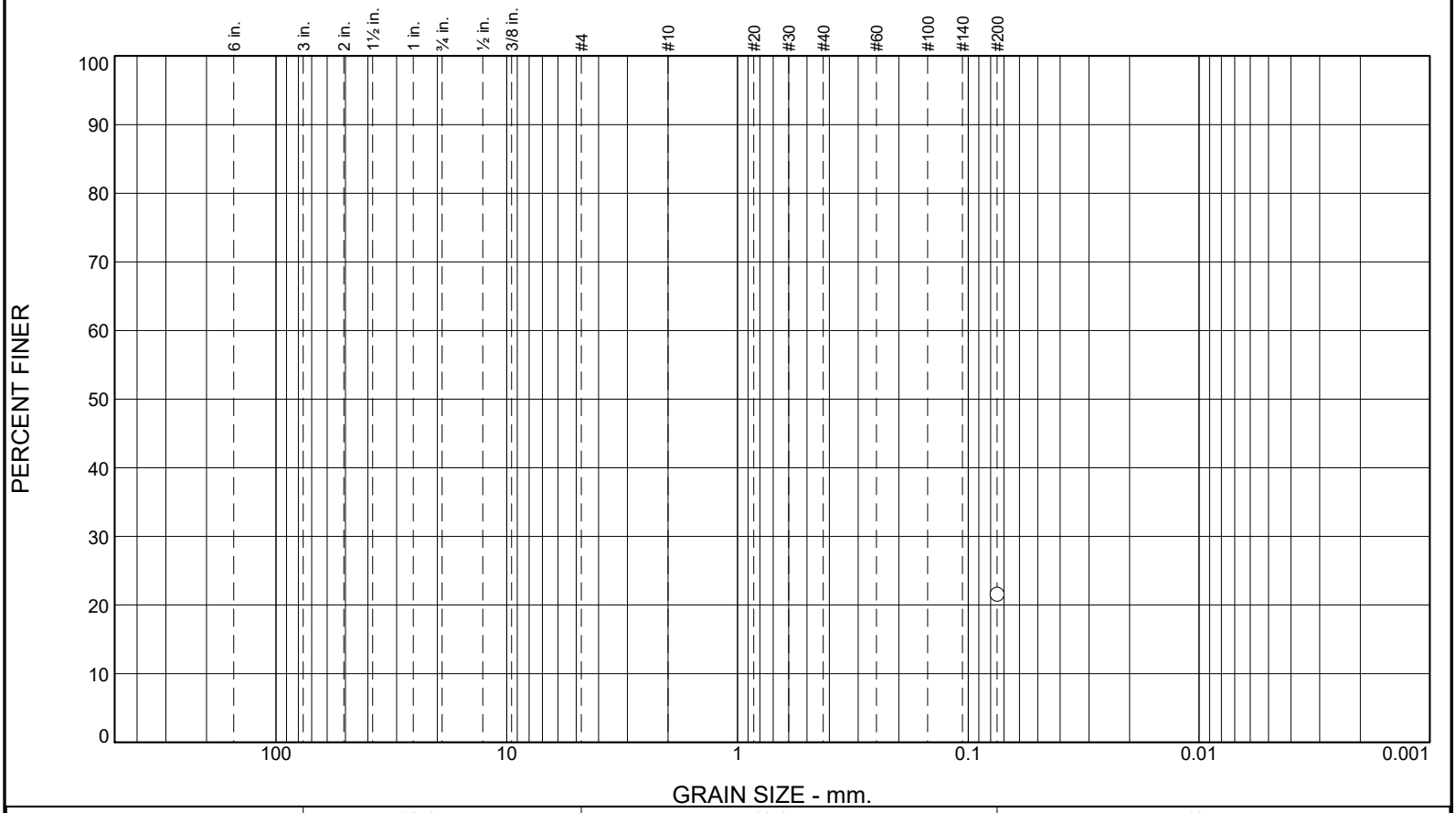
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						21.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	21.6		

* (no specification provided)

Soil Description

Brown Silty SAND with Gravel

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26709
As received moisture content = 13.5%

Source of Sample: R-3 **Depth:** 28.5-30 ft
Sample Number: S8

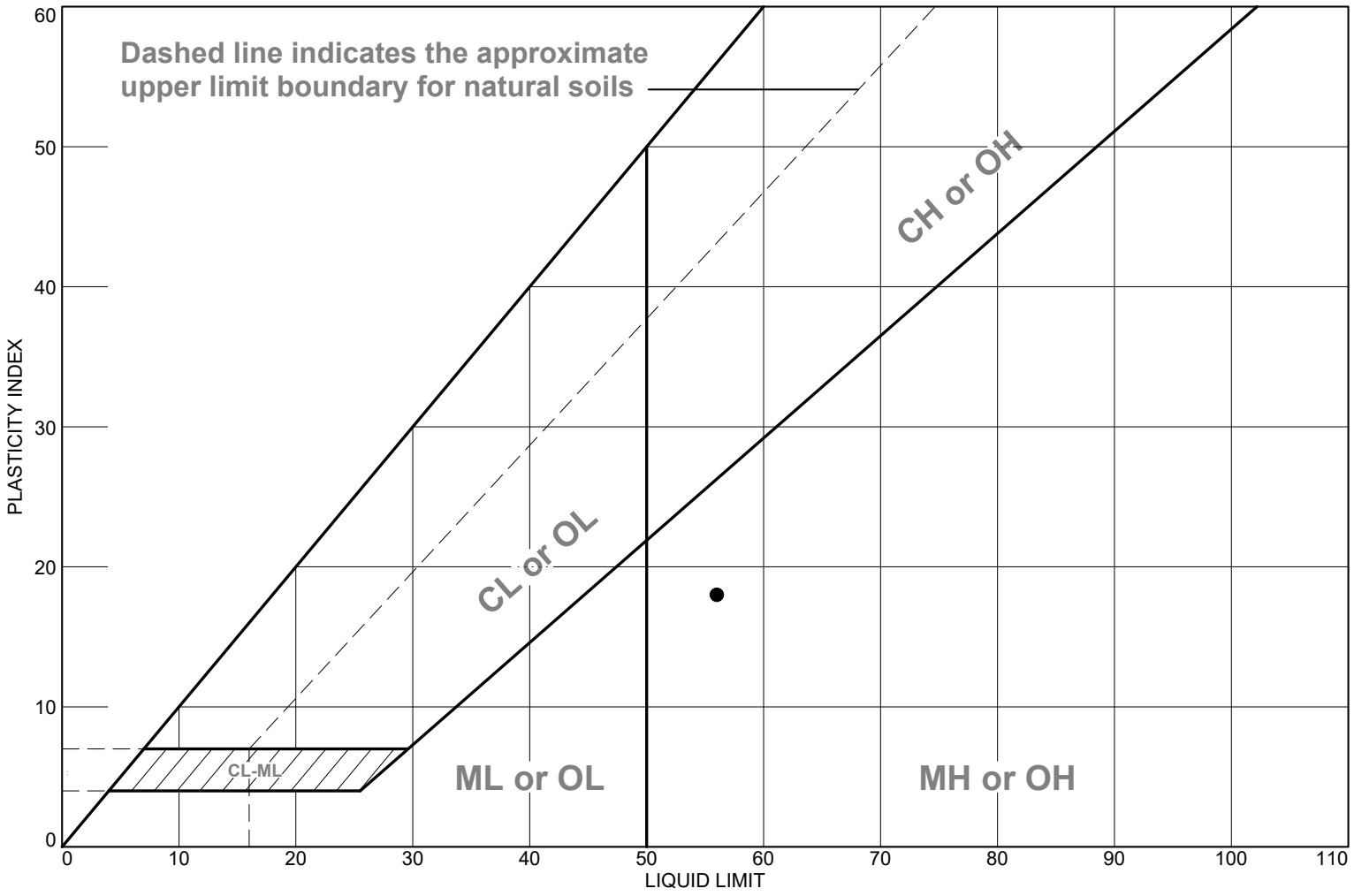
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Pinkish White Sandy Elastic SILT	56	38	18	N/A	53.1	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-9 **Depth:** 4.5-7 ft **Sample Number:** S3

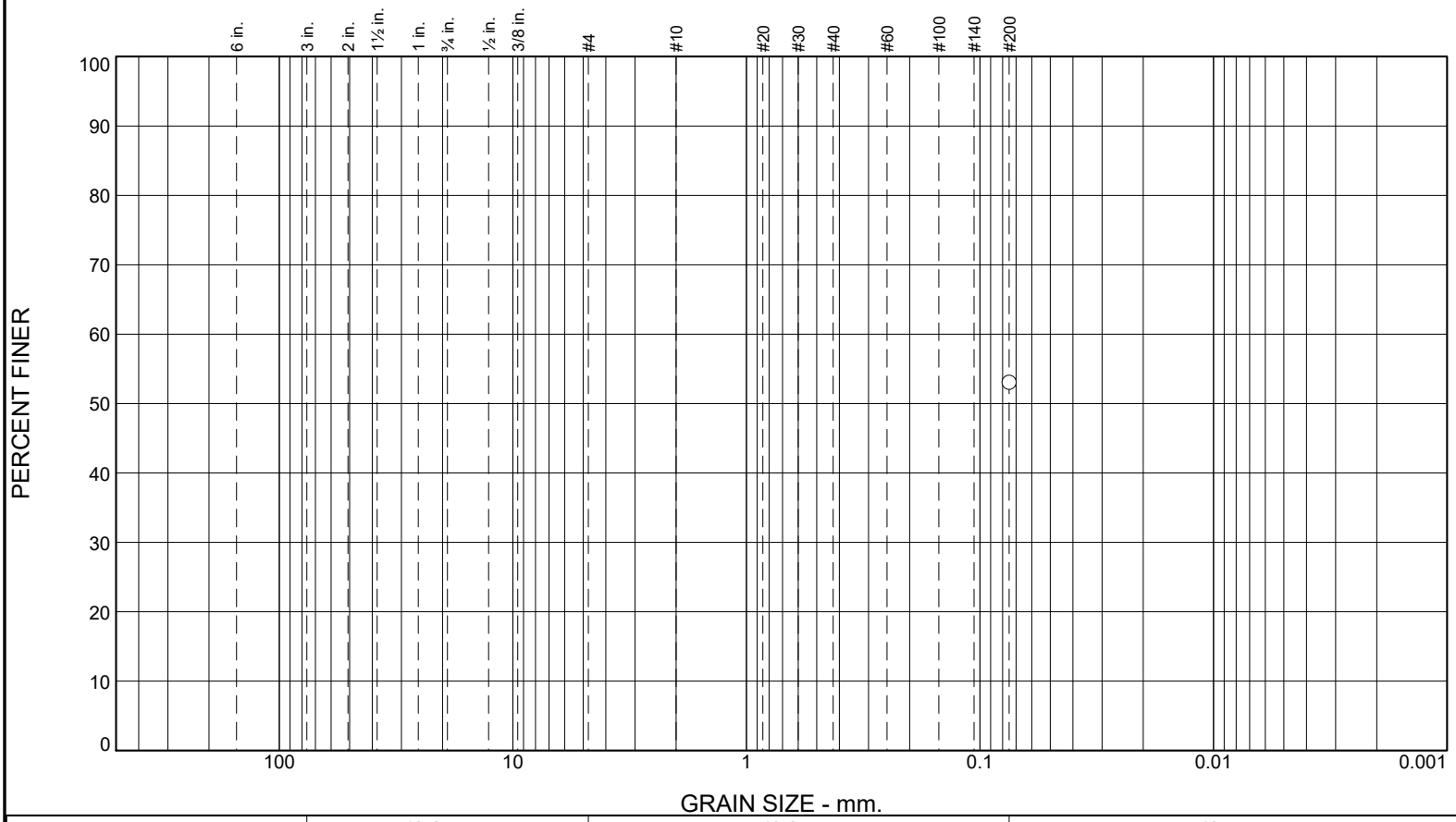
Remarks:

● Lab #26728
As received moisture content = 28.3%

Figure

Tested By: EB **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						53.1	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	53.1		

* (no specification provided)

Soil Description

Pinkish White Sandy Elastic SILT

Atterberg Limits

PL= 38 LL= 56 PI= 18

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26728
As received moisture content = 28.3%

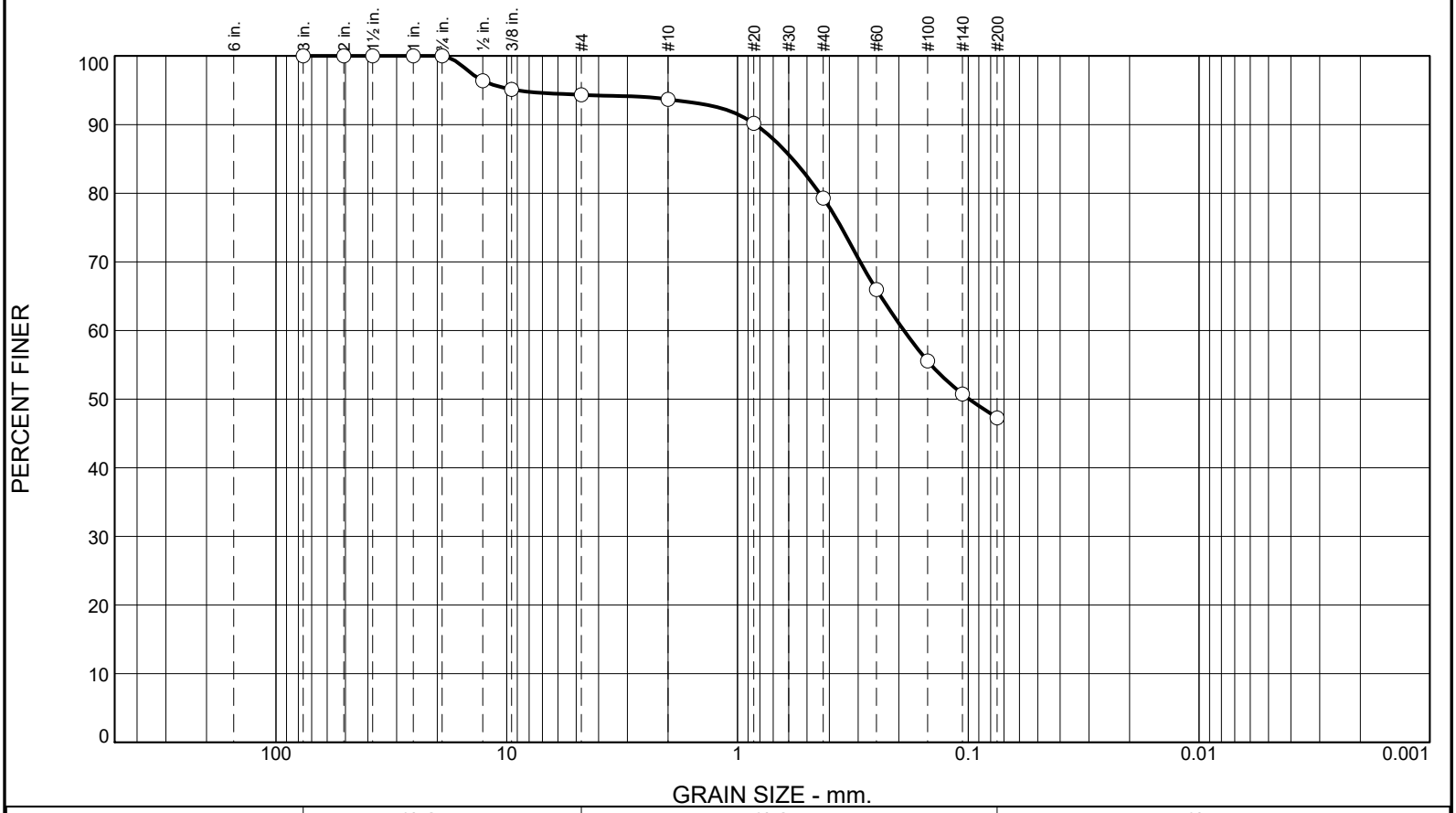
Source of Sample: R-9 **Depth:** 4.5-7 ft
Sample Number: S3 **Date:**

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	5.7	0.6	14.4	32.0	47.3	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	96.4		
.375	95.1		
#4	94.3		
#10	93.7		
#20	90.2		
#40	79.3		
#60	66.0		
#100	55.5		
#140	50.7		
#200	47.3		

* (no specification provided)

Soil Description

Brown Clayey SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.8348 D_{85}= 0.5779 D_{60}= 0.1900
D_{50}= 0.0992 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26711
As received moisture content = 12.4%

Source of Sample: R-11 **Depth:** 3.5-5 ft
Sample Number: S2

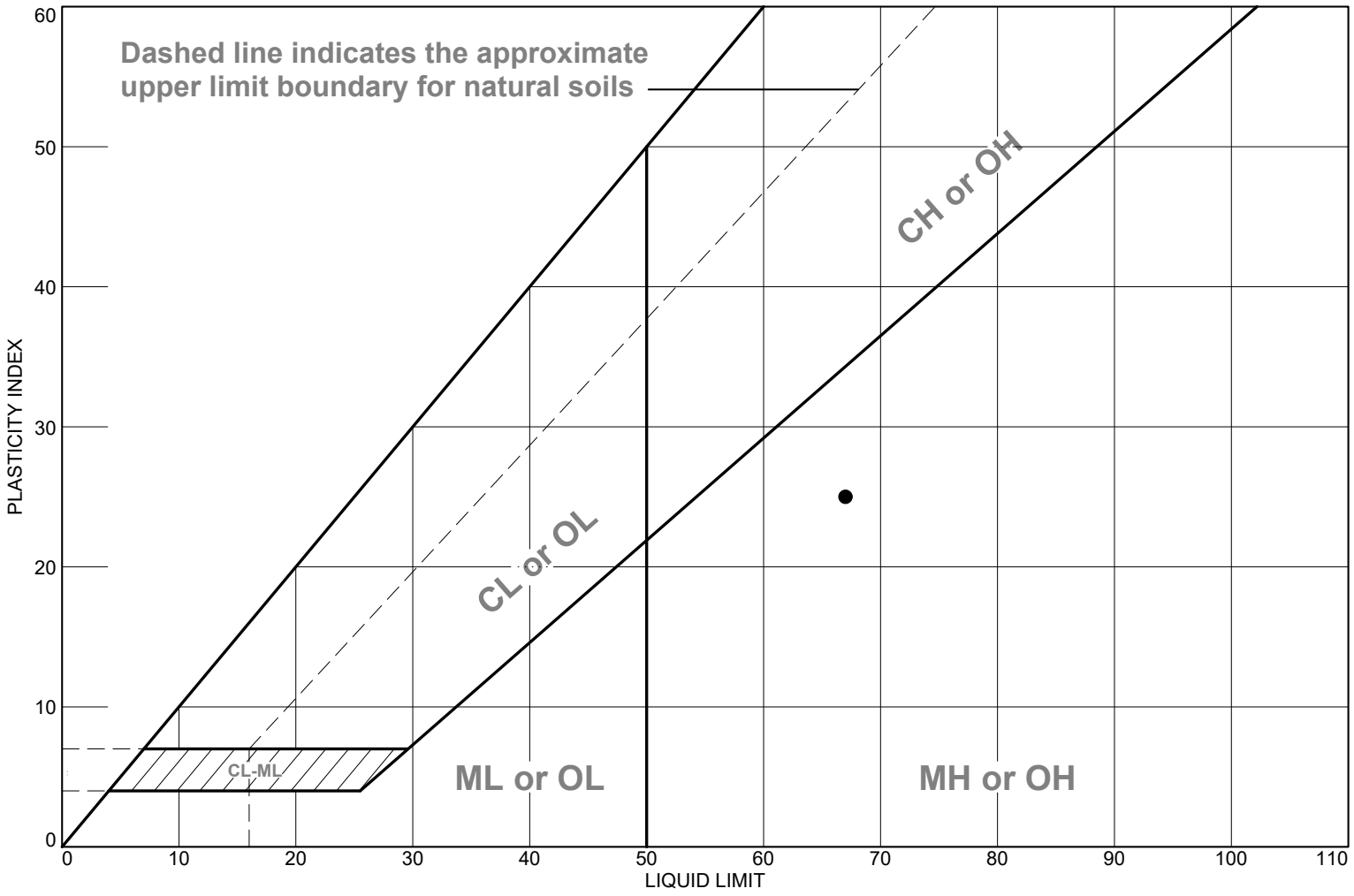
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Pink Sandy Elastic SILT	67	42	25	N/A	69.6	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-11 **Depth:** 13.5-15 ft **Sample Number:** S5

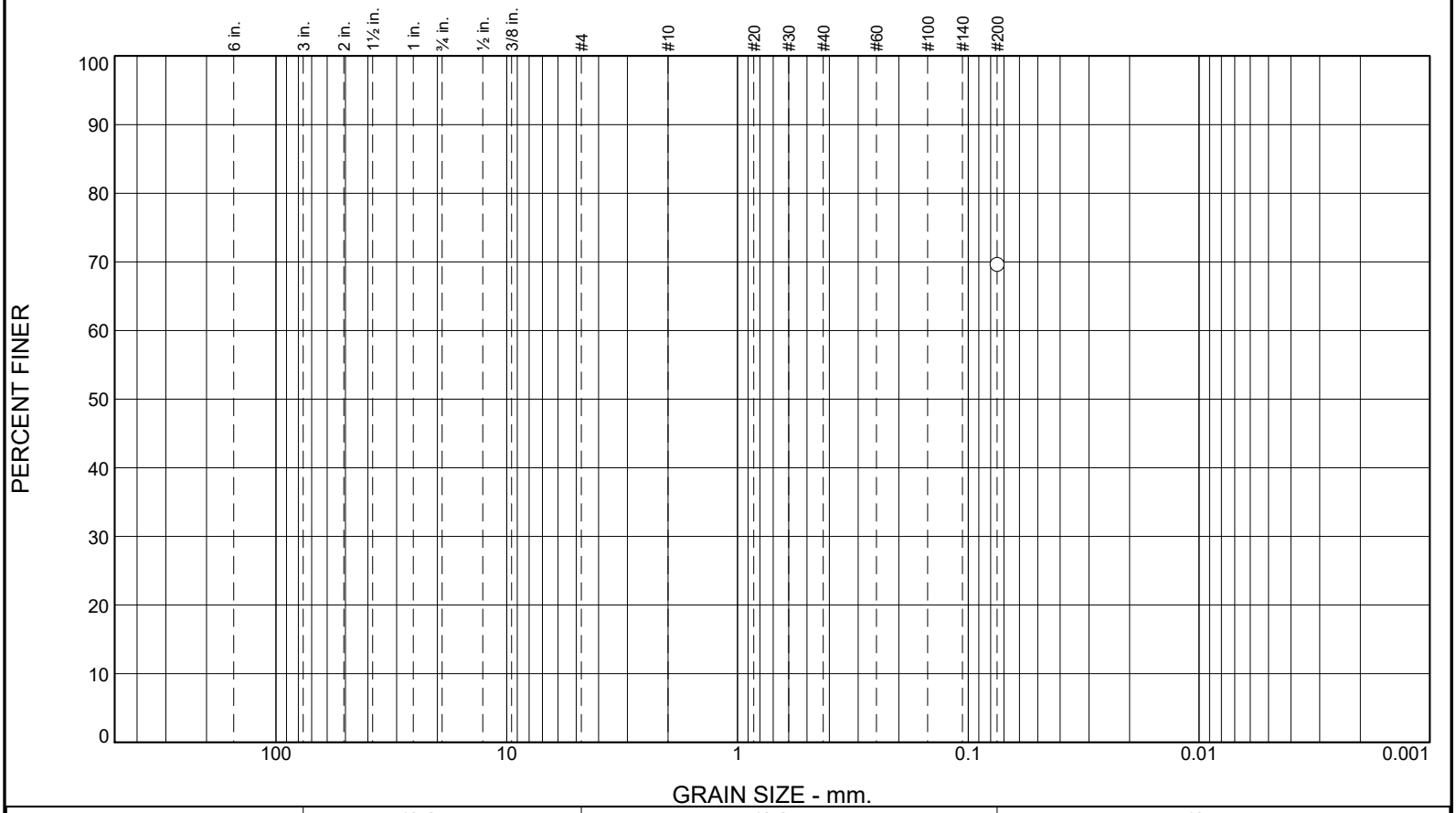
Remarks:

● Lab #26712
As received moisture content = 26.0%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						69.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	69.6		

* (no specification provided)

Soil Description

Pink Sandy Elastic SILT

Atterberg Limits

PL= 42 LL= 67 PI= 25

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26712
As received moisture content = 26.0%

Source of Sample: R-11 **Depth:** 13.5-15 ft
Sample Number: S5

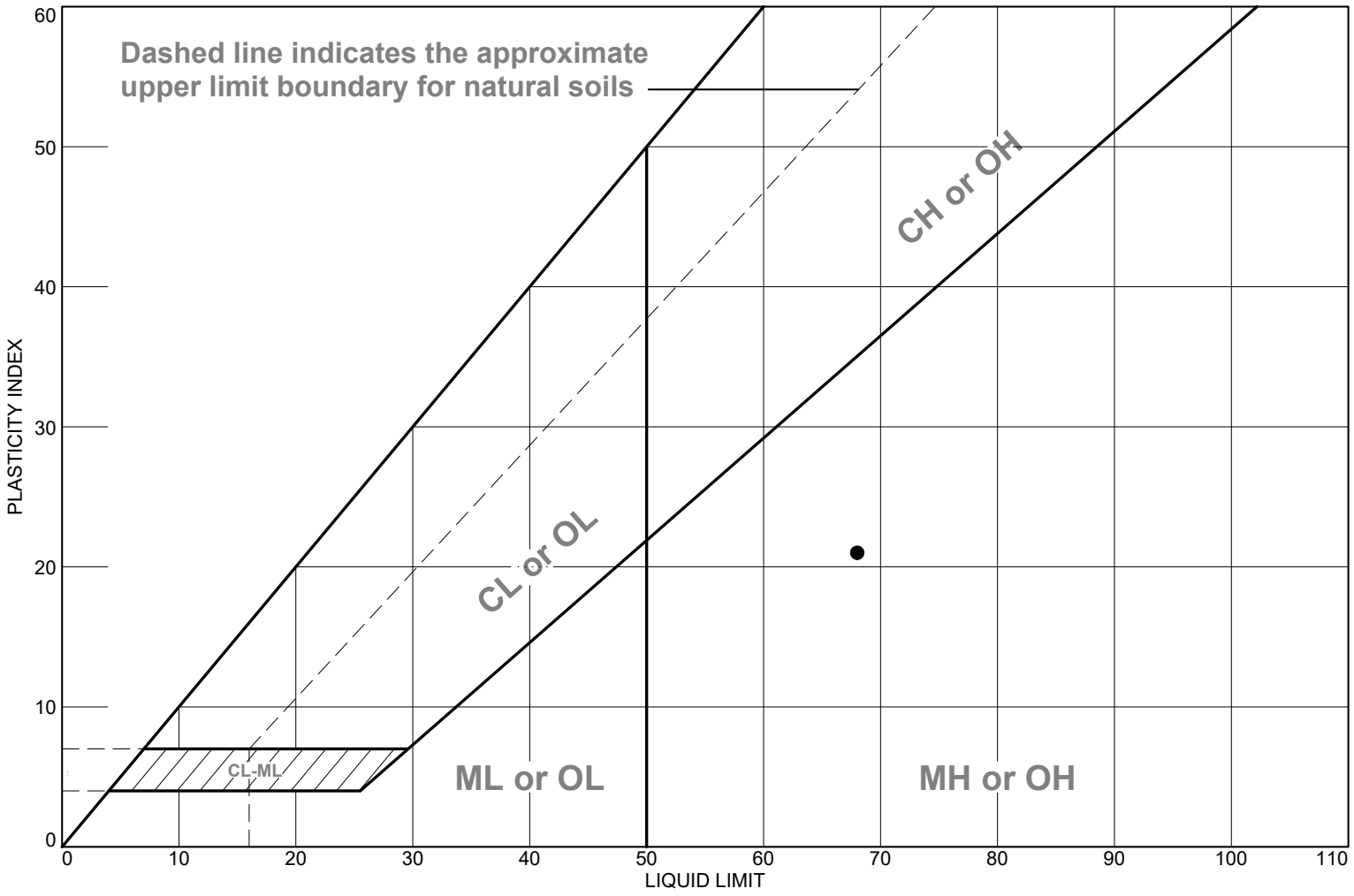
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Pink Sandy Elastic SILT	68	47	21	N/A	55.8	MH

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-12 **Depth:** 3.5-5 ft **Sample Number:** S2

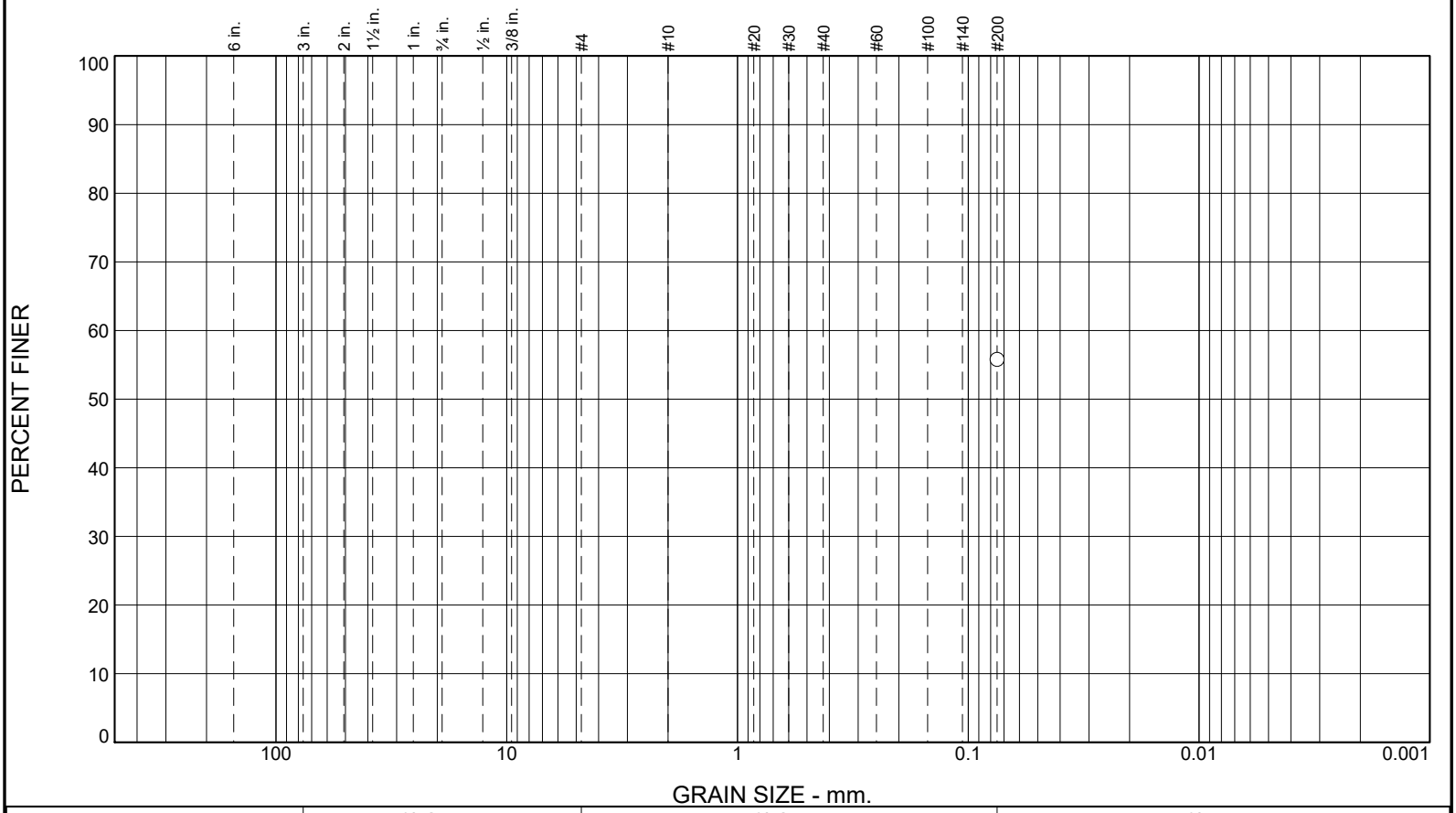
Remarks:

● Lab #26714
As received moisture content = 34.8%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						55.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	55.8		

* (no specification provided)

Soil Description

Pink Sandy Elastic SILT

Atterberg Limits

PL= 47 LL= 68 PI= 21

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= N/A

Remarks

Lab #26714
As received moisture content = 34.8%

Source of Sample: R-12 **Depth:** 3.5-5 ft
Sample Number: S2

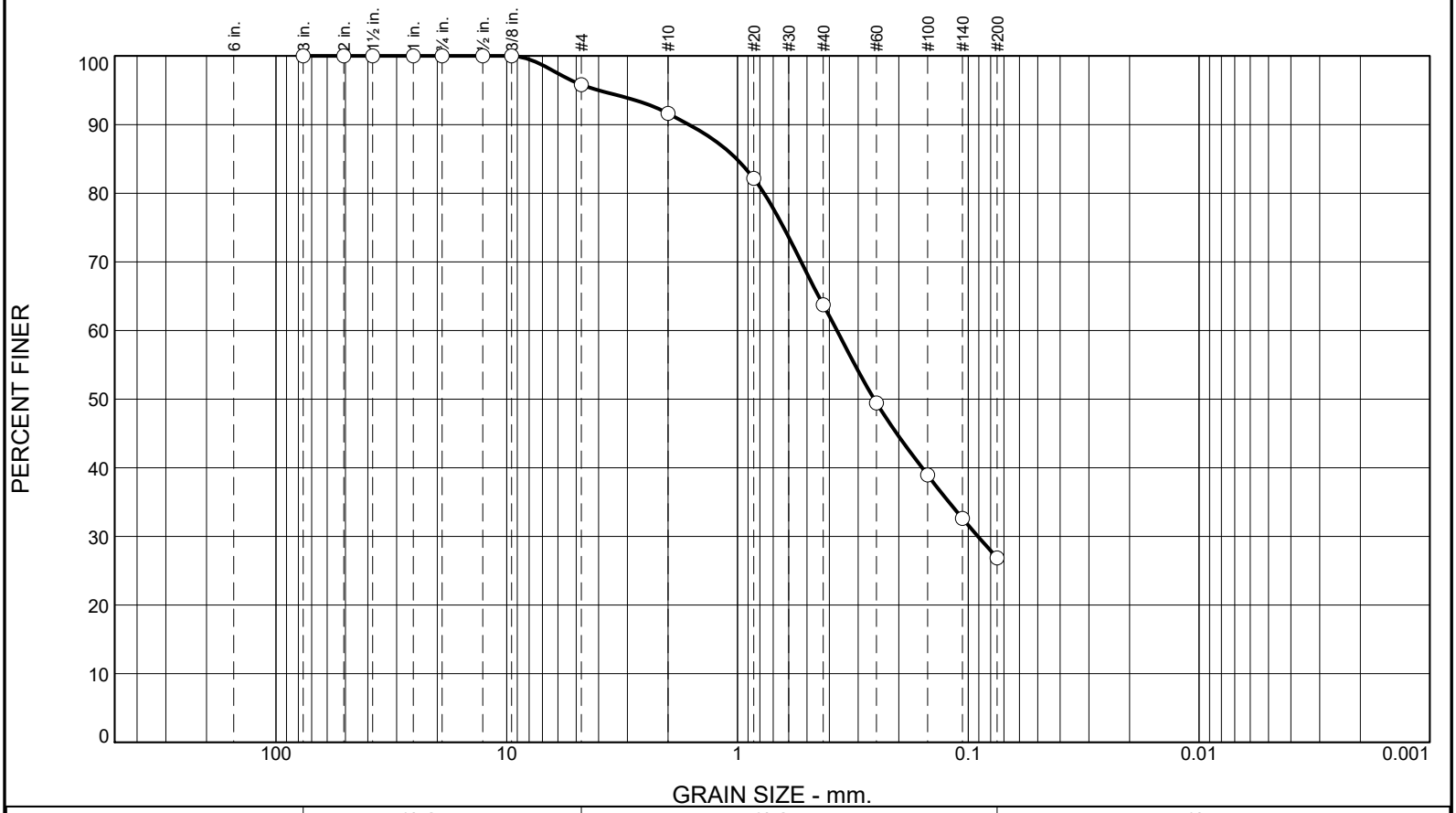
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.2	4.2	27.9	36.8	26.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	95.8		
#10	91.6		
#20	82.2		
#40	63.7		
#60	49.4		
#100	38.9		
#140	32.6		
#200	26.9		

* (no specification provided)

Soil Description

Tannish Brown Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.6242 D_{85}= 1.0092 D_{60}= 0.3709
D_{50}= 0.2558 D_{30}= 0.0908 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26715
As received moisture content = 17.9%

Source of Sample: R-12 **Depth:** 28.5-30 ft
Sample Number: S8

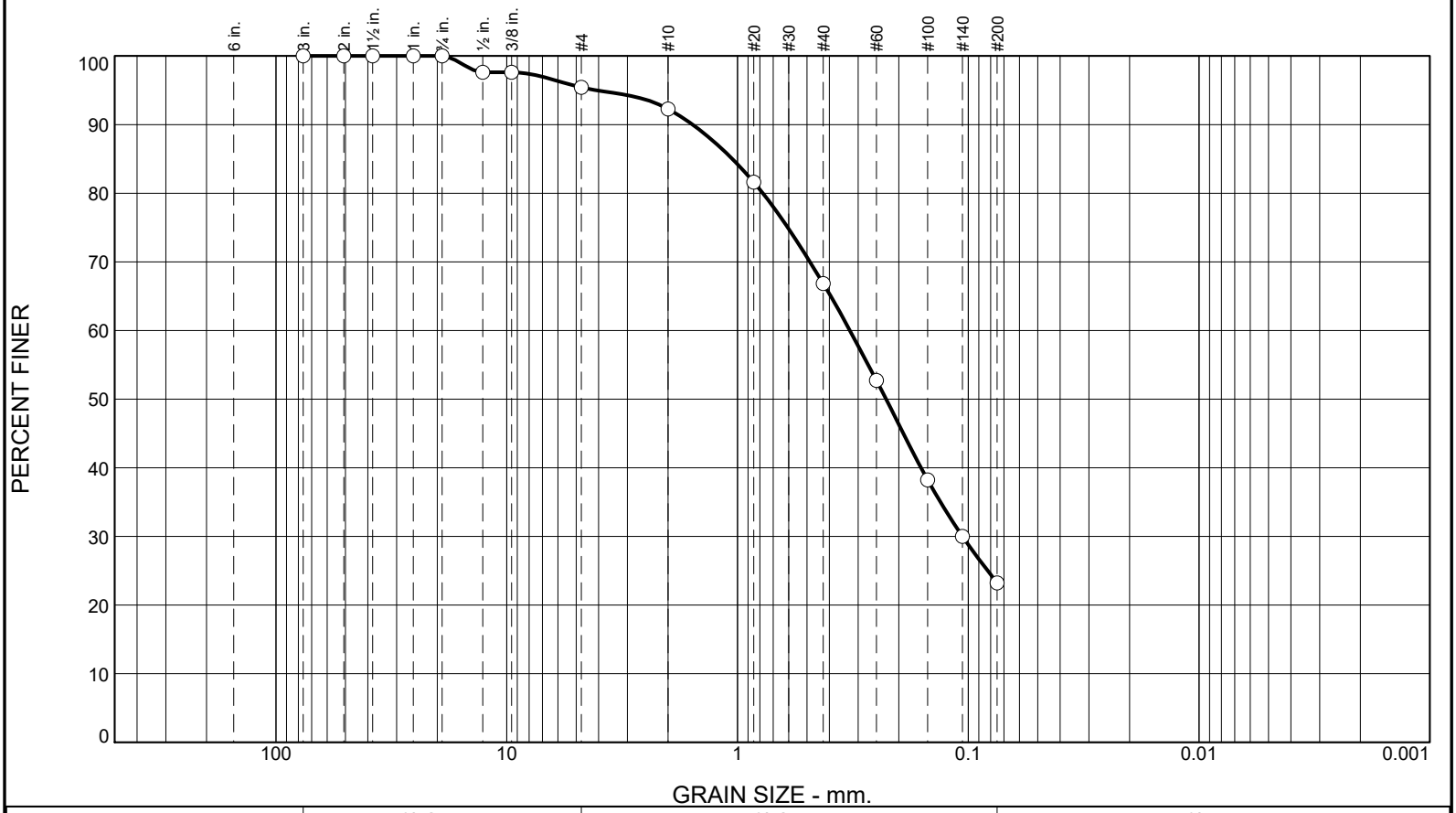
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.6	3.1	25.5	43.6	23.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	97.6		
.375	97.6		
#4	95.4		
#10	92.3		
#20	81.6		
#40	66.8		
#60	52.7		
#100	38.2		
#140	30.0		
#200	23.2		

* (no specification provided)

Soil Description

Yellowish Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 1.5658 D_{85}= 1.0538 D_{60}= 0.3259
D_{50}= 0.2270 D_{30}= 0.1060 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26716
As received moisture content = 20.1%

Source of Sample: R-12 **Depth:** 48.5-50 ft
Sample Number: S12

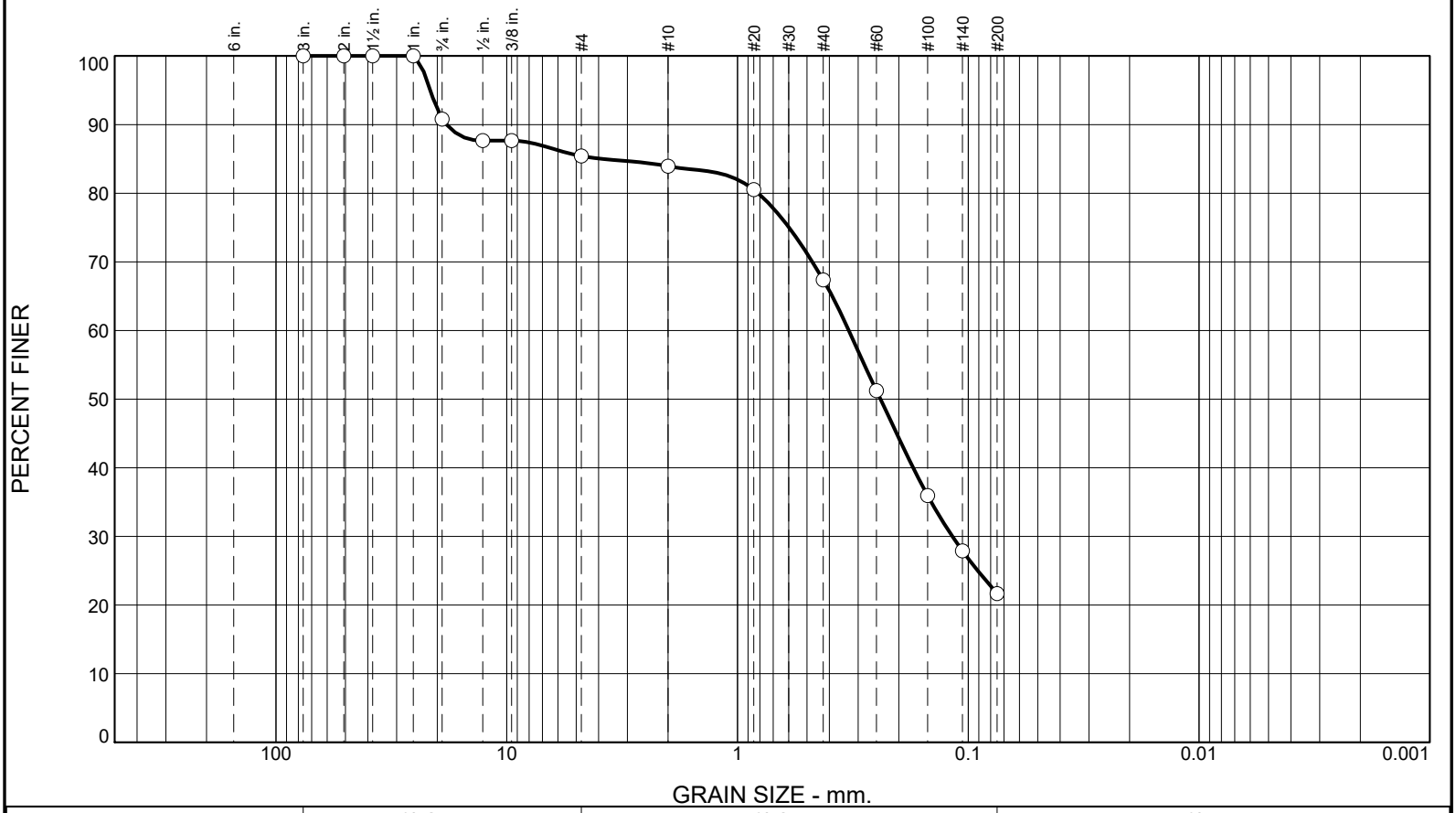
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.2	5.4	1.5	16.5	45.7	21.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	90.8		
.50	87.7		
.375	87.7		
#4	85.4		
#10	83.9		
#20	80.5		
#40	67.4		
#60	51.2		
#100	35.9		
#140	27.9		
#200	21.7		

* (no specification provided)

Soil Description

Gray Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 18.2167 D_{85}= 3.8294 D_{60}= 0.3294
D_{50}= 0.2401 D_{30}= 0.1171 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26717
As received moisture content = 15.7%

Source of Sample: R-12 **Depth:** 58.5-60 ft
Sample Number: S14

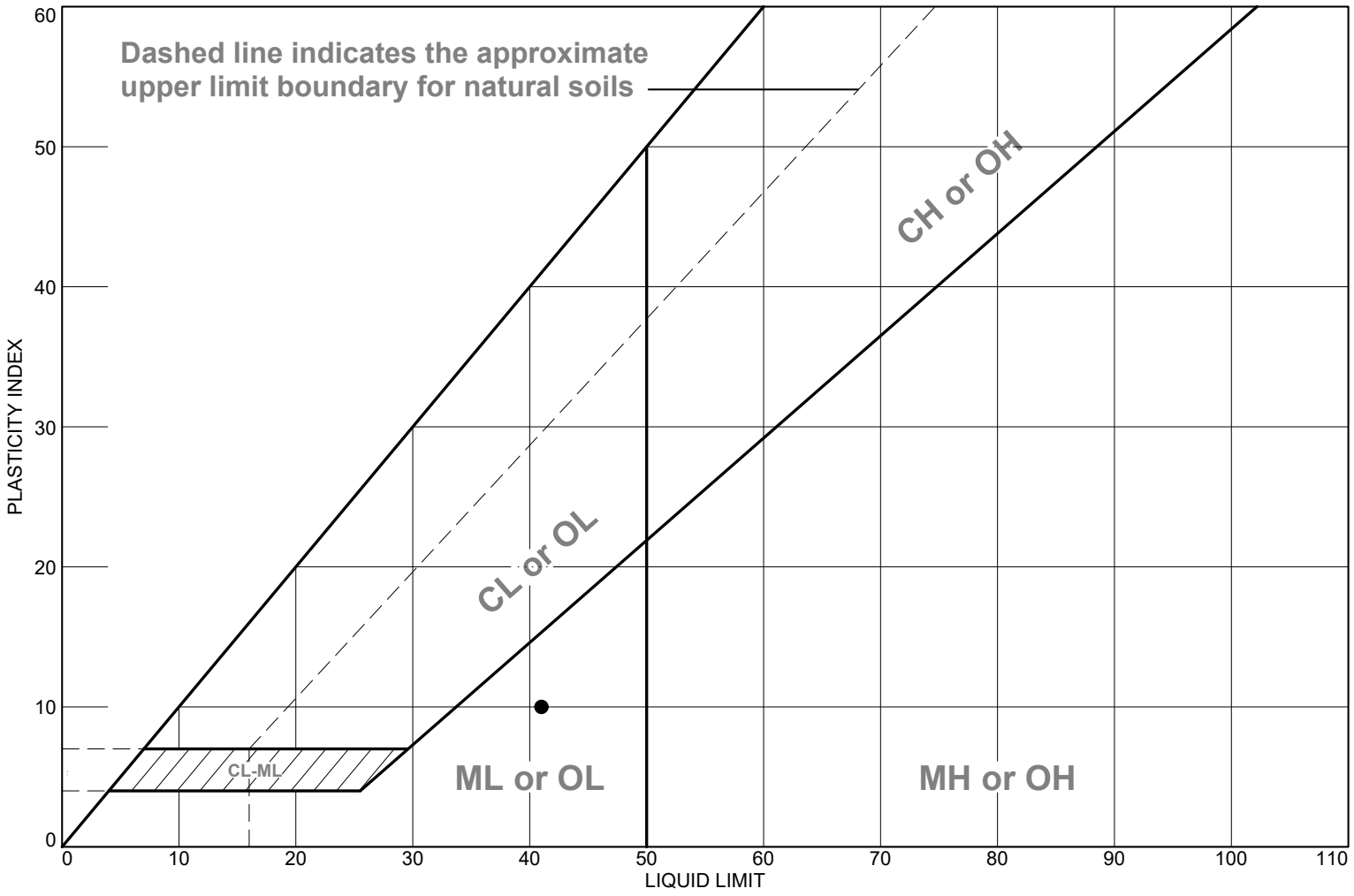
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Pink Sandy SILT	41	31	10	N/A	53.2	ML

Project No. US-EI-6162232368 **Client:** EGSci Consulting

Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

● **Source of Sample:** R-17 **Depth:** 1-2.5 ft **Sample Number:** S1

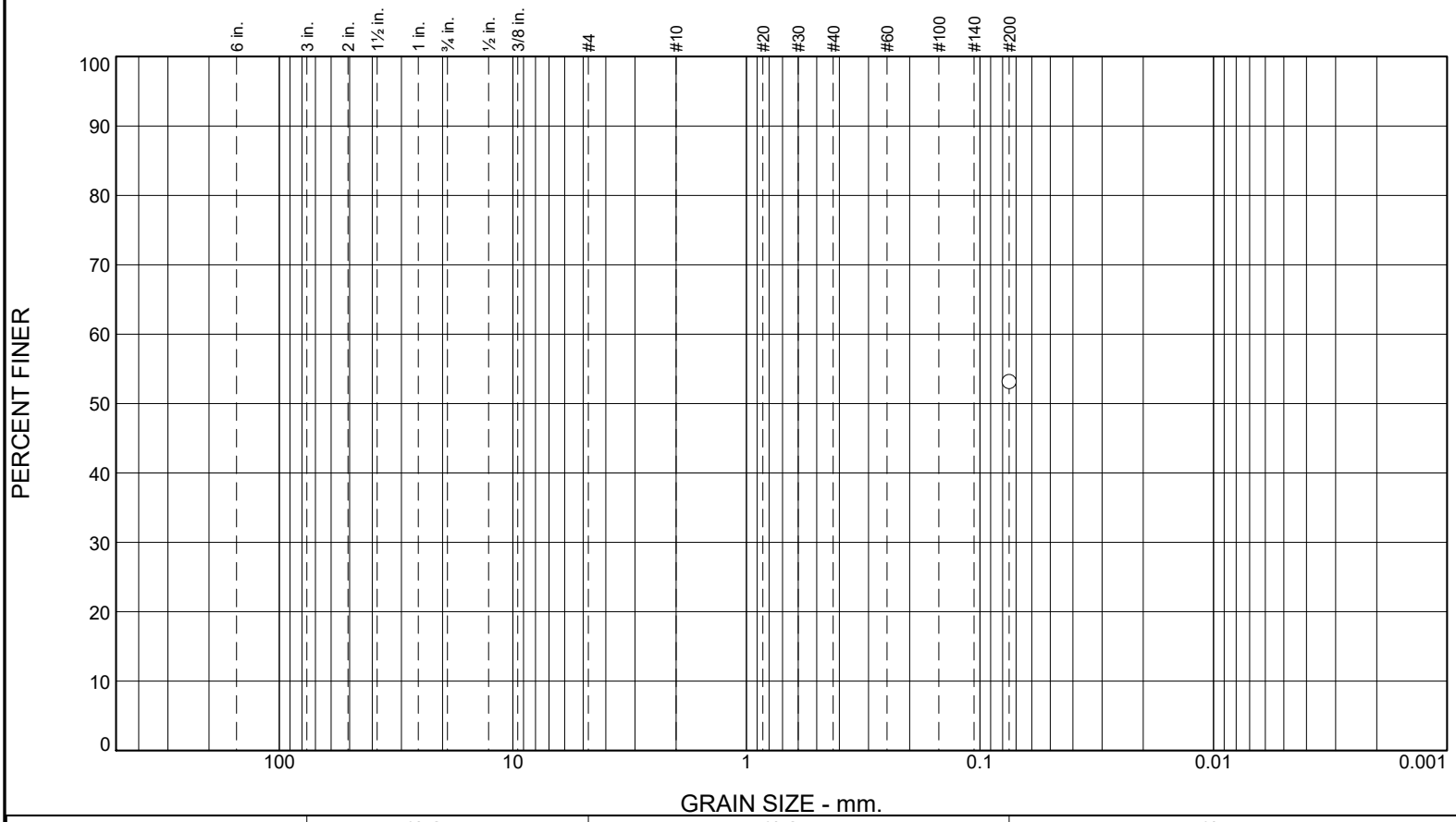
Remarks:

● Lab #26718
As received moisture content = 21.3%

Figure

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D1140



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						53.2	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	53.2		

* (no specification provided)

Soil Description

Pink Sandy SILT

Atterberg Limits

PL= 31 LL= 41 PI= 10

Coefficients

D_{90}= D_{85}= D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO= N/A

Remarks

Lab #26718
As received moisture content = 21.3%

Source of Sample: R-17 **Depth:** 1-2.5 ft
Sample Number: S1

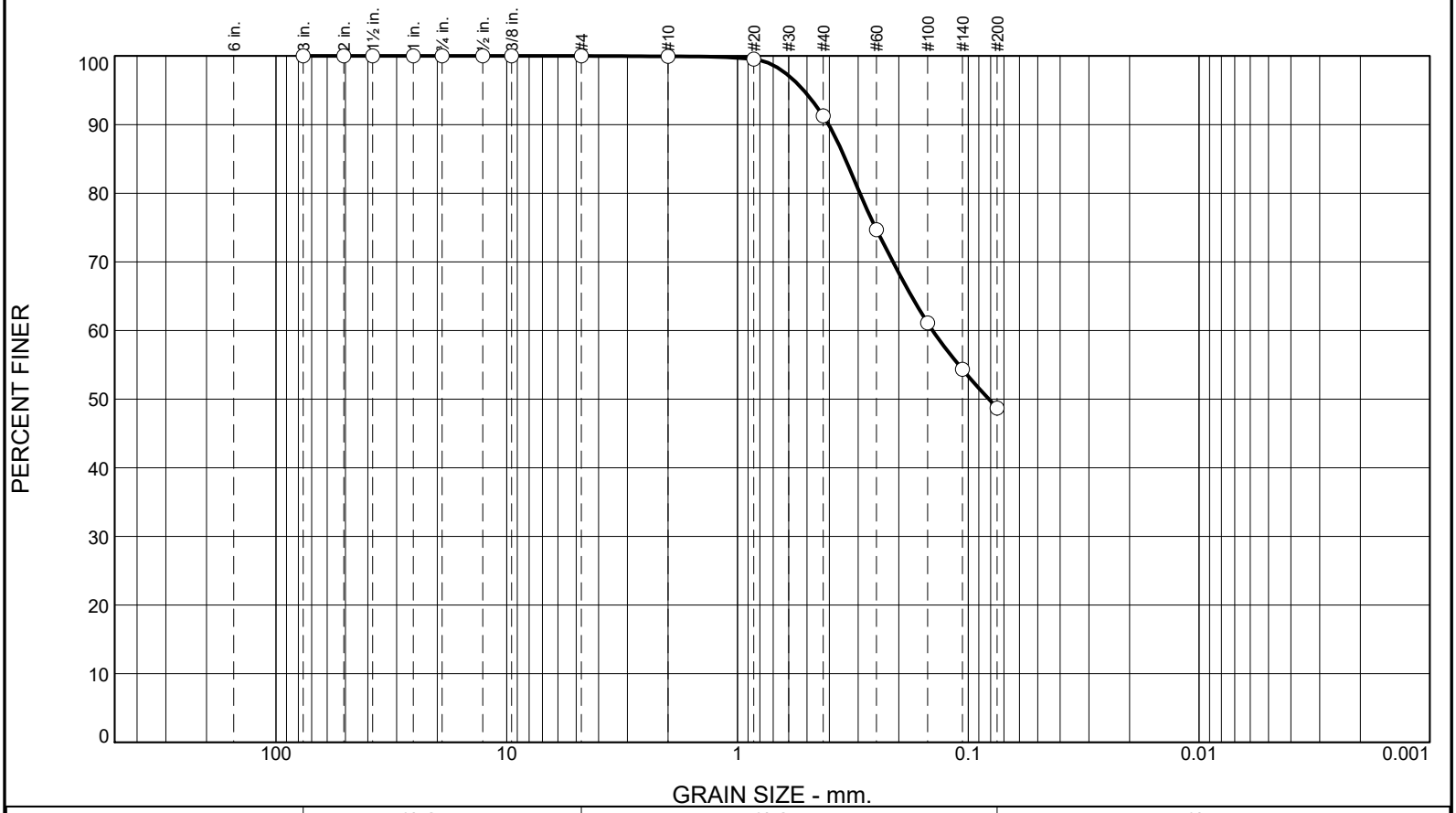
Date: N/A

Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	8.6	42.6	48.7	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.50	100.0		
.375	100.0		
#4	100.0		
#10	99.9		
#20	99.5		
#40	91.3		
#60	74.7		
#100	61.1		
#140	54.3		
#200	48.7		

* (no specification provided)

Soil Description

Red Silty SAND

Atterberg Limits

PL= N/A LL= N/A PI= N/A

Coefficients

D_{90}= 0.4028 D_{85}= 0.3411 D_{60}= 0.1428
D_{50}= 0.0814 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= N/A AASHTO= N/A

Remarks

Lab #26719
As received moisture content = 25.8%

Source of Sample: R-17 **Depth:** 6-7.5 ft
Sample Number: S3

Date: N/A

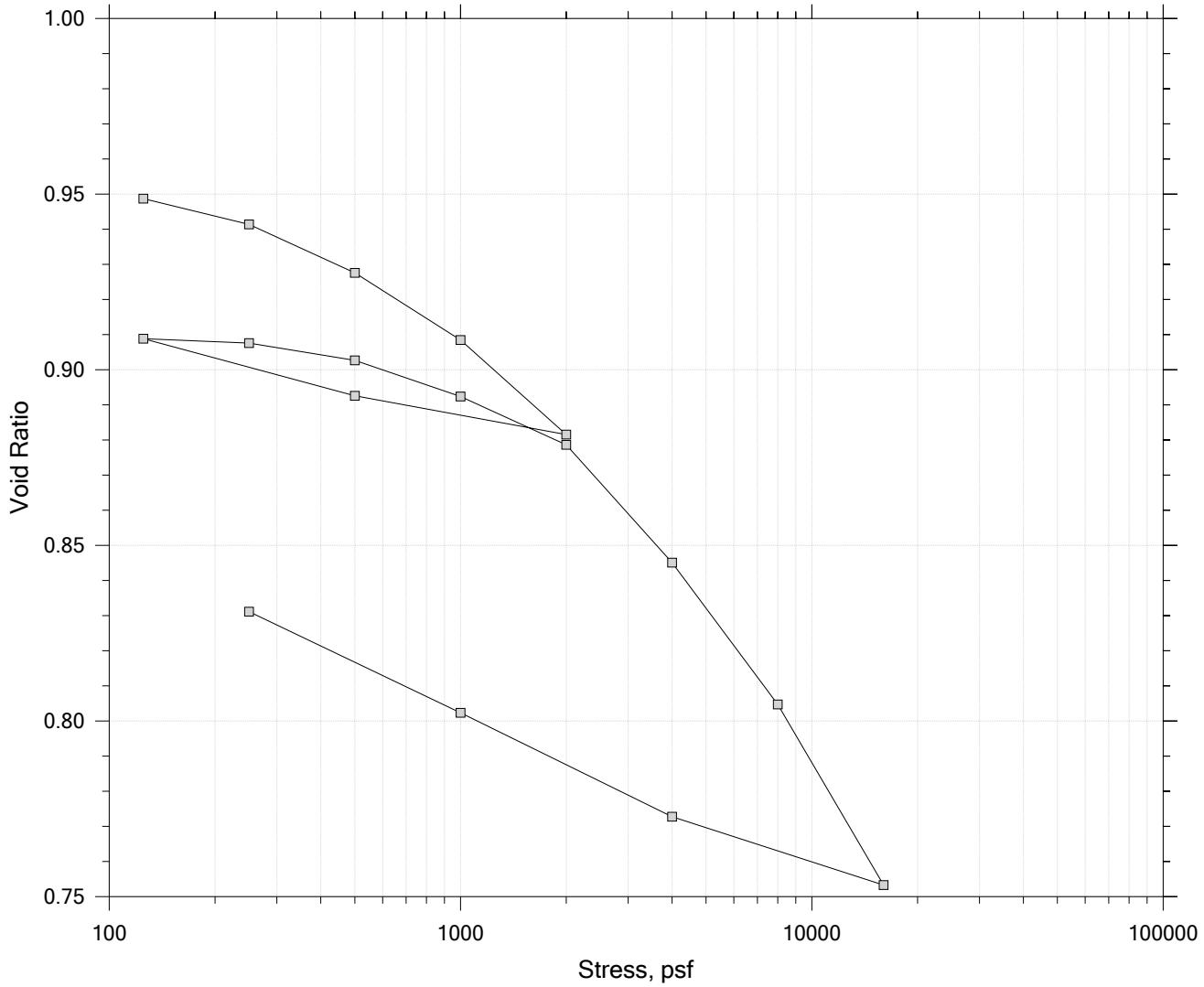
Client: EGSci Consulting
Project: I-75 at CR 312/Bethlehem Road GDOT PI 0017182

Project No: US-EI-6162232368 **Figure**

Tested By: KP **Checked By:** TZ

One-Dimensional Consolidation by ASTM D2435 - Method B

Summary Report

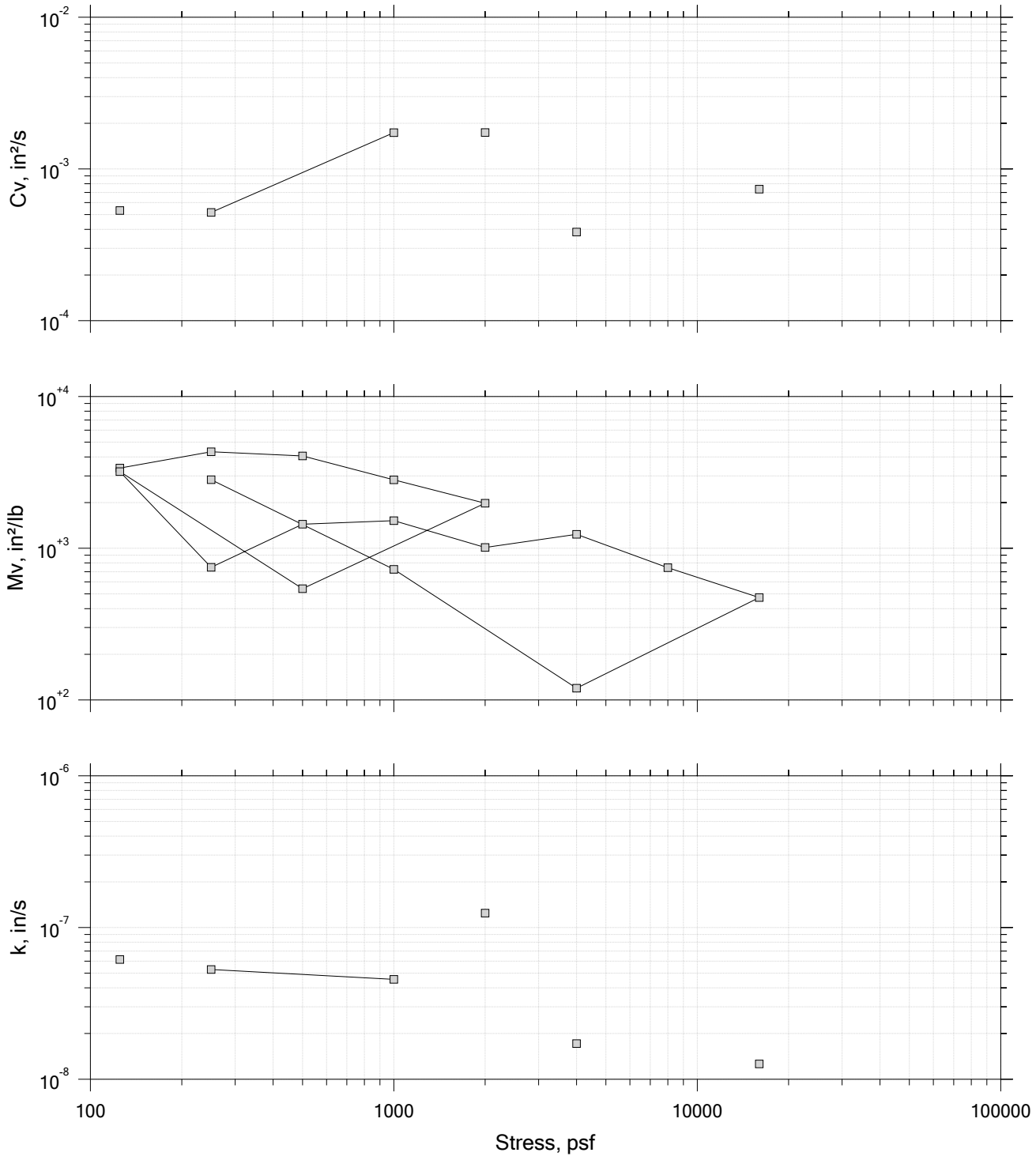


				Before Test	After Test
			Water Content, %	25.00	28.78
			Dry Unit Weight, pcf	91.034	97.164
			Saturation, %	74.65	98.68
Specimen Diameter, in: 2.5		Specimen Height, in: 1	Void Ratio	0.95	0.83
LL: Non-Plastic	PL: Non-Plastic	PI: Non-Plastic	GS: 2.85		

	Project Name: See Remarks	Location: B2-3	Project Number: US-EI-6162232368
	Boring Number: B2-3	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
	Test Number: 26623	Preparation: Intact	Elevation: N/A
	Description: Brown Silty SAND		
	Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		
	Displacement at End of Increment		

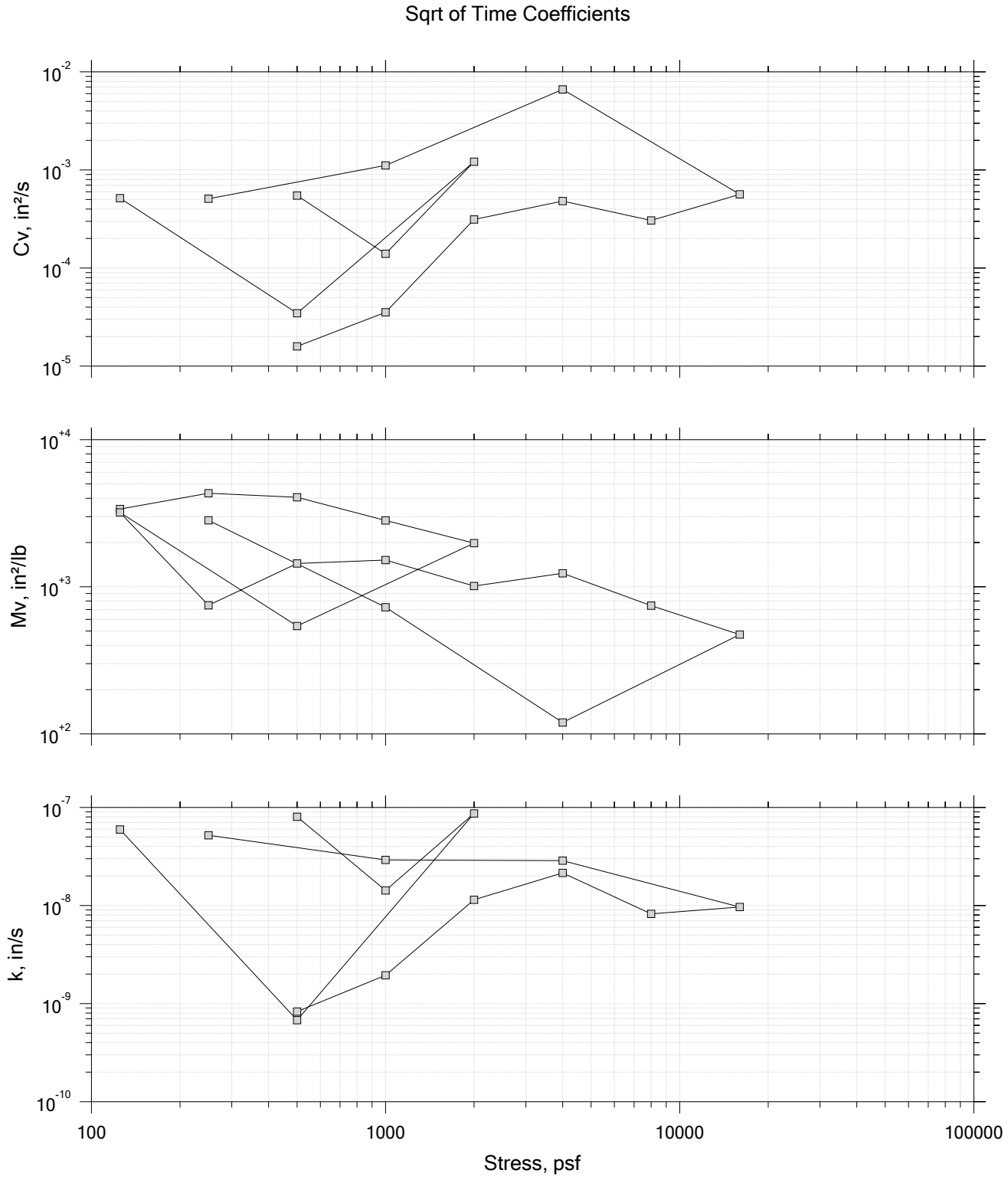
One-Dimensional Consolidation by ASTM D2435 - Method B

Log of Time Coefficients



Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

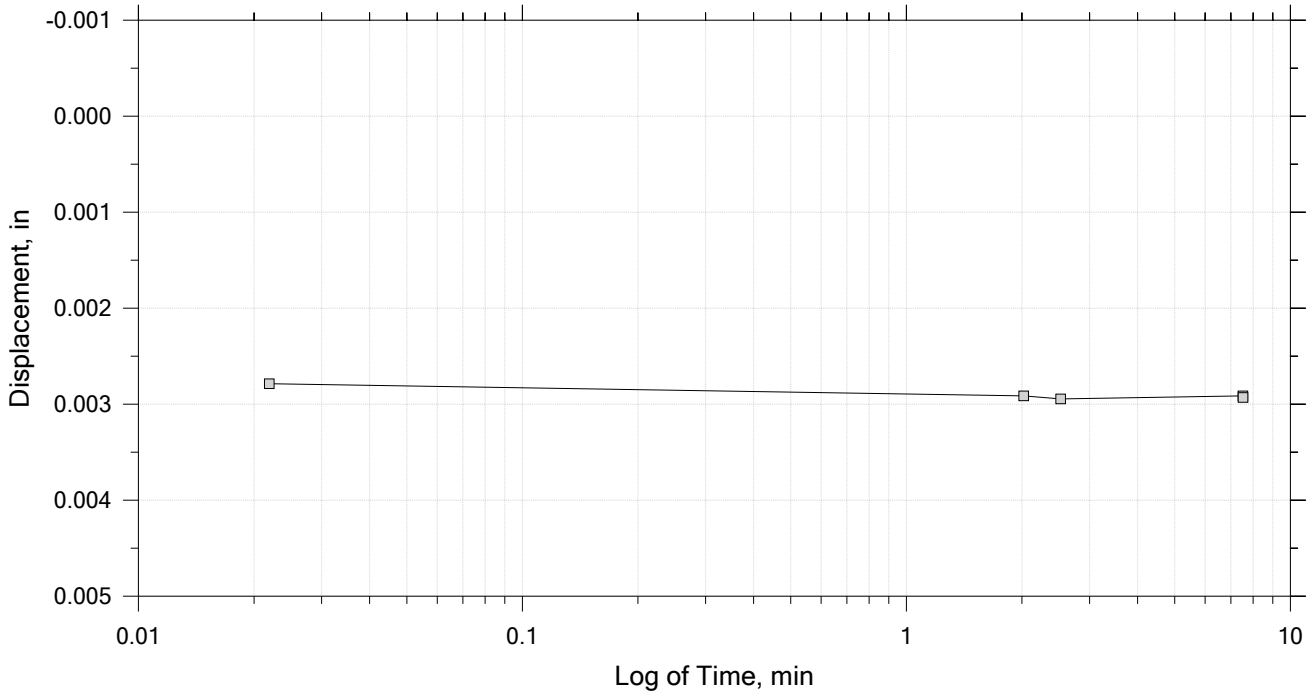
One-Dimensional Consolidation by ASTM D2435 - Method B

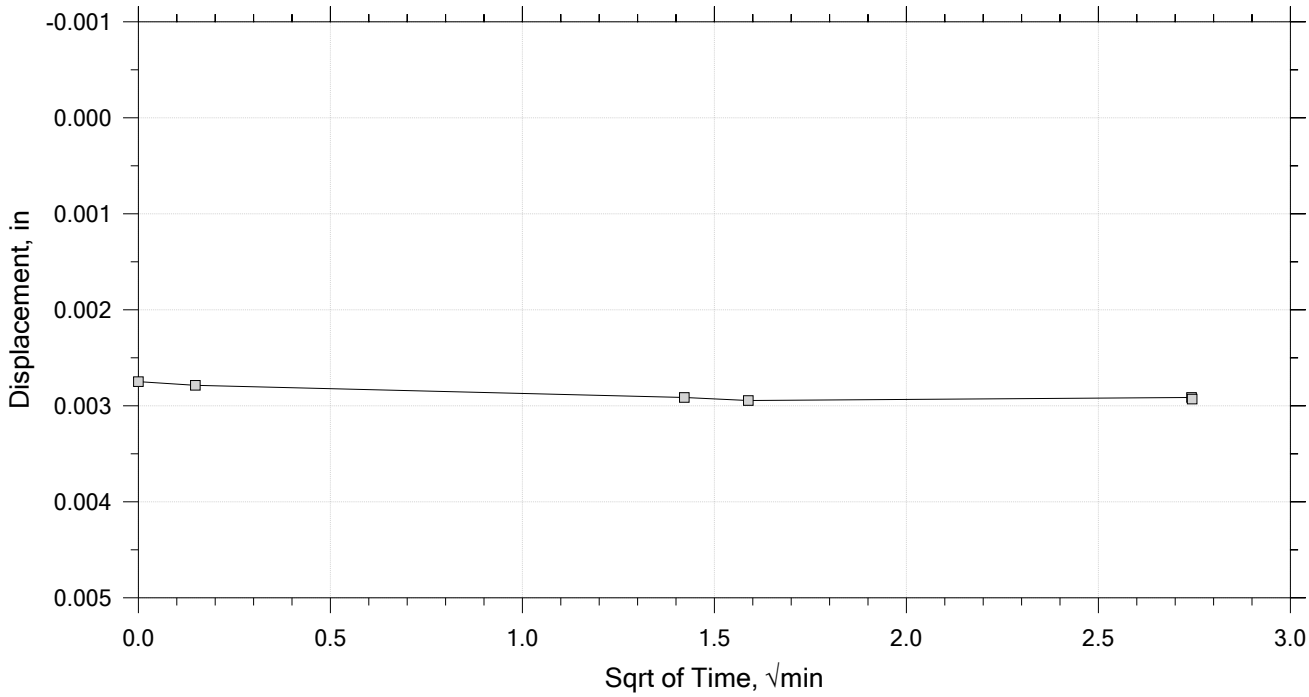


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 17
Constant Load Step
Stress: 125 psf

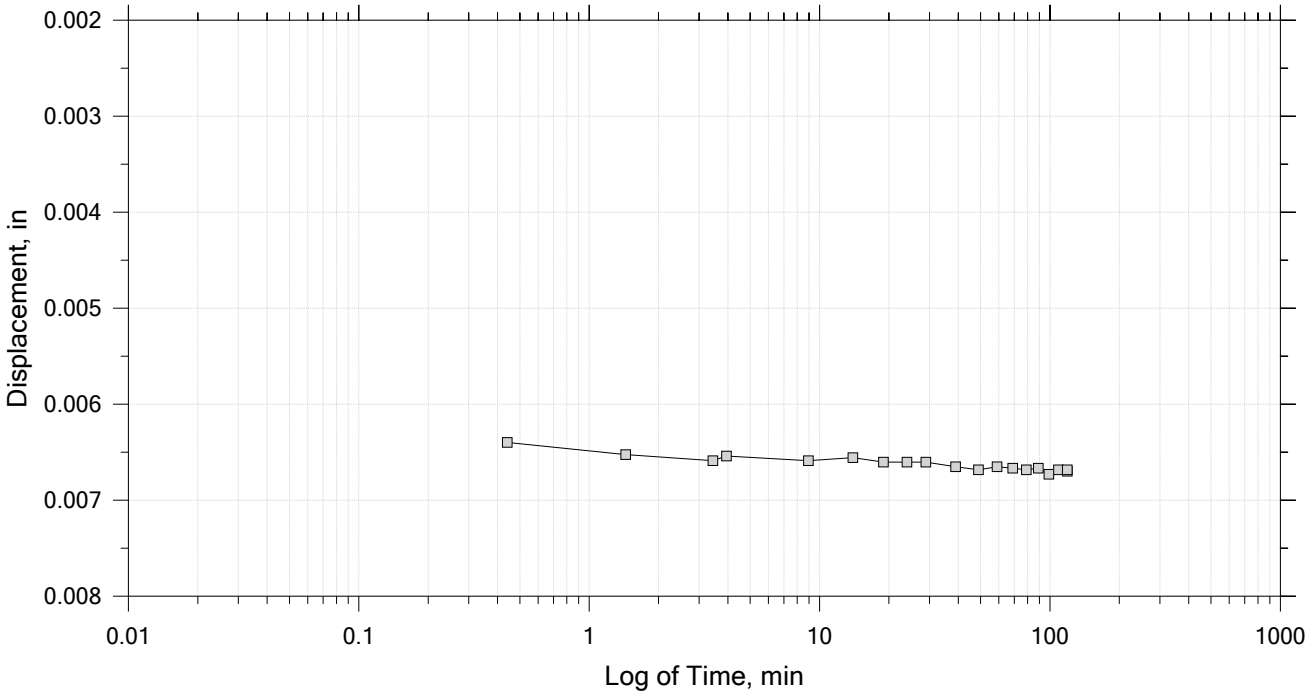


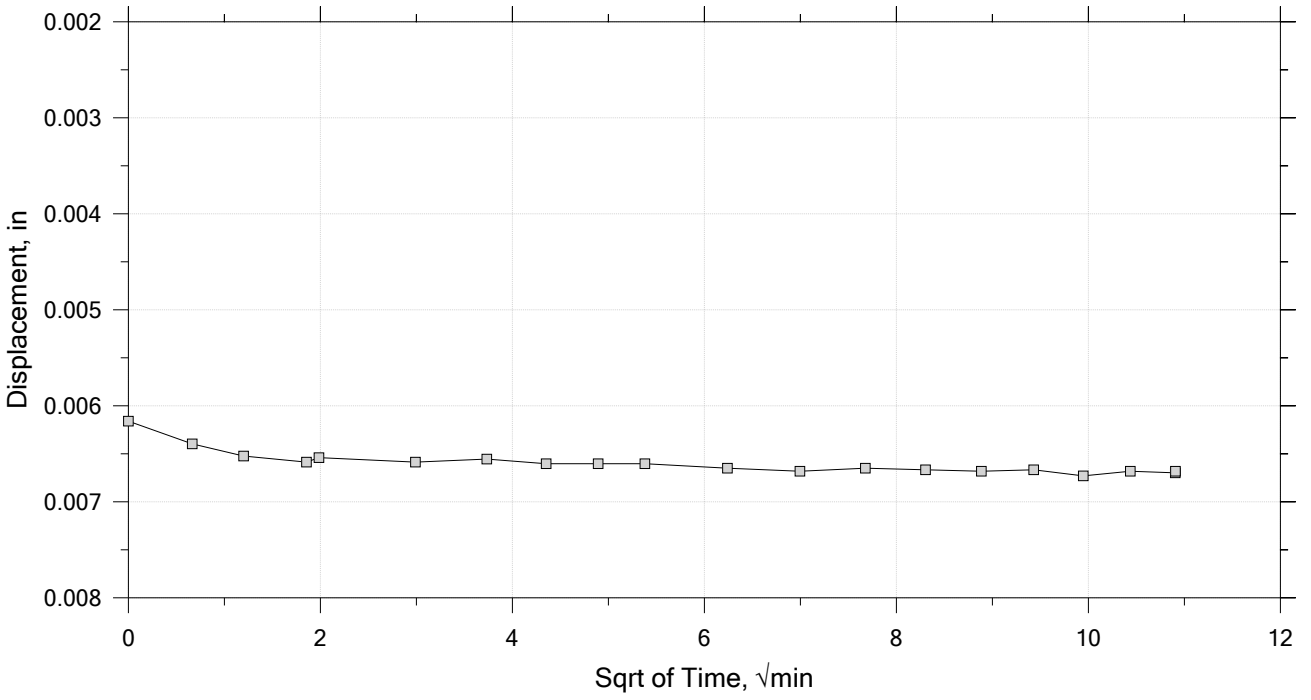


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 17
Constant Load Step
Stress: 250 psf

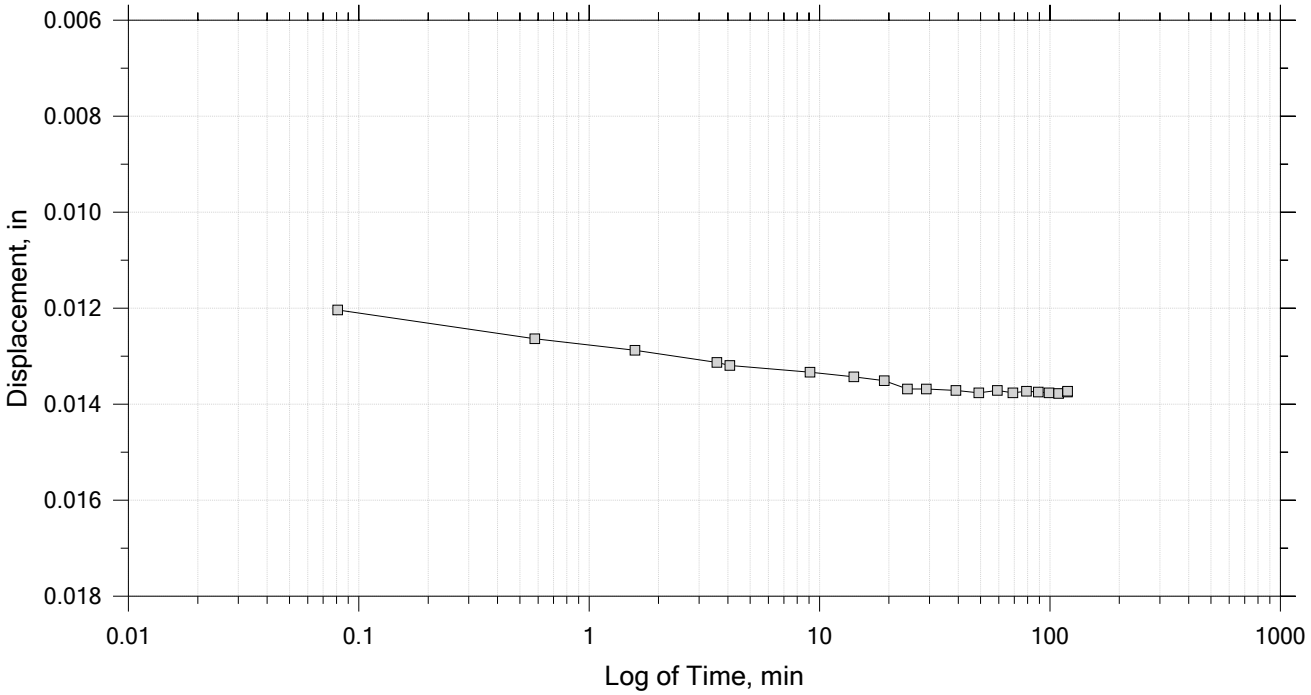


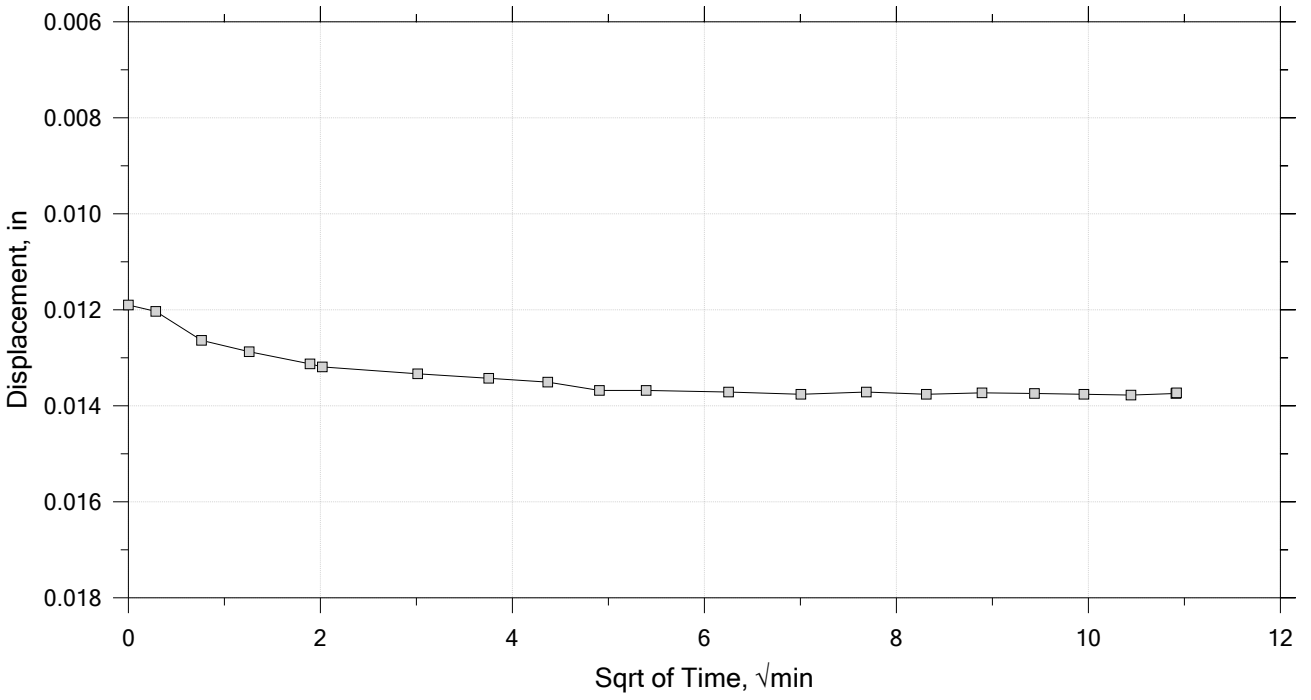


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 17
Constant Load Step
Stress: 500 psf

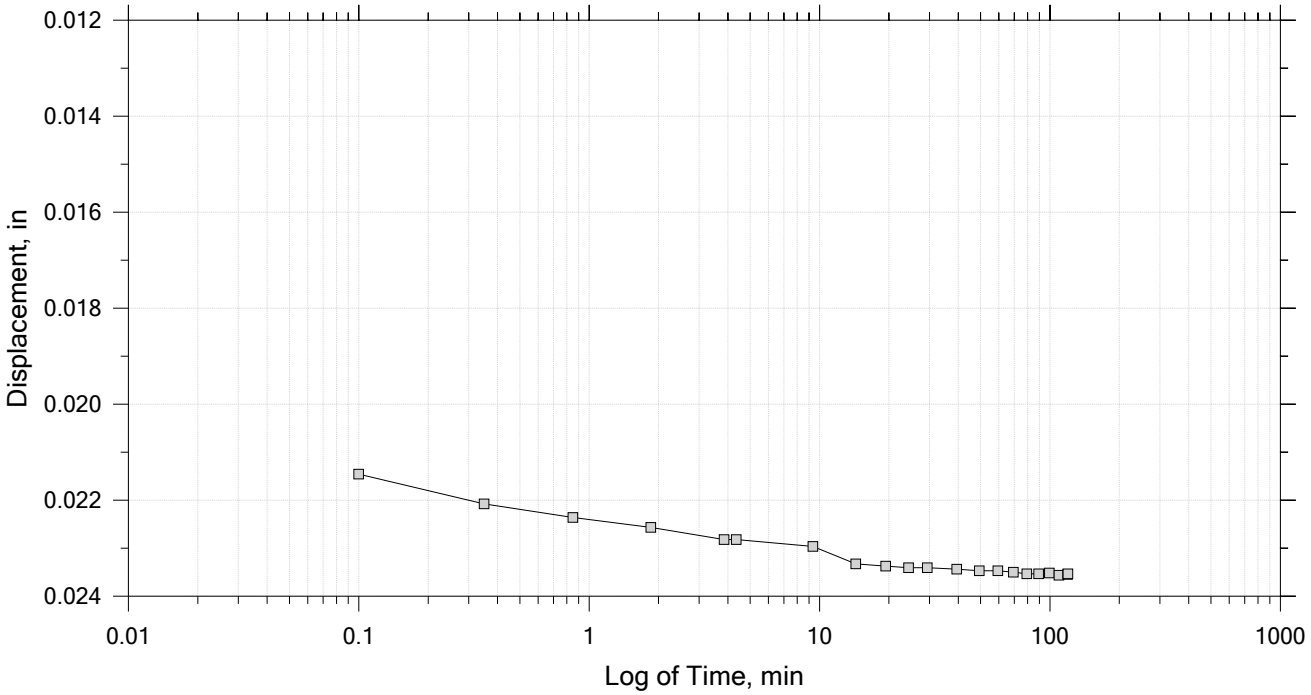


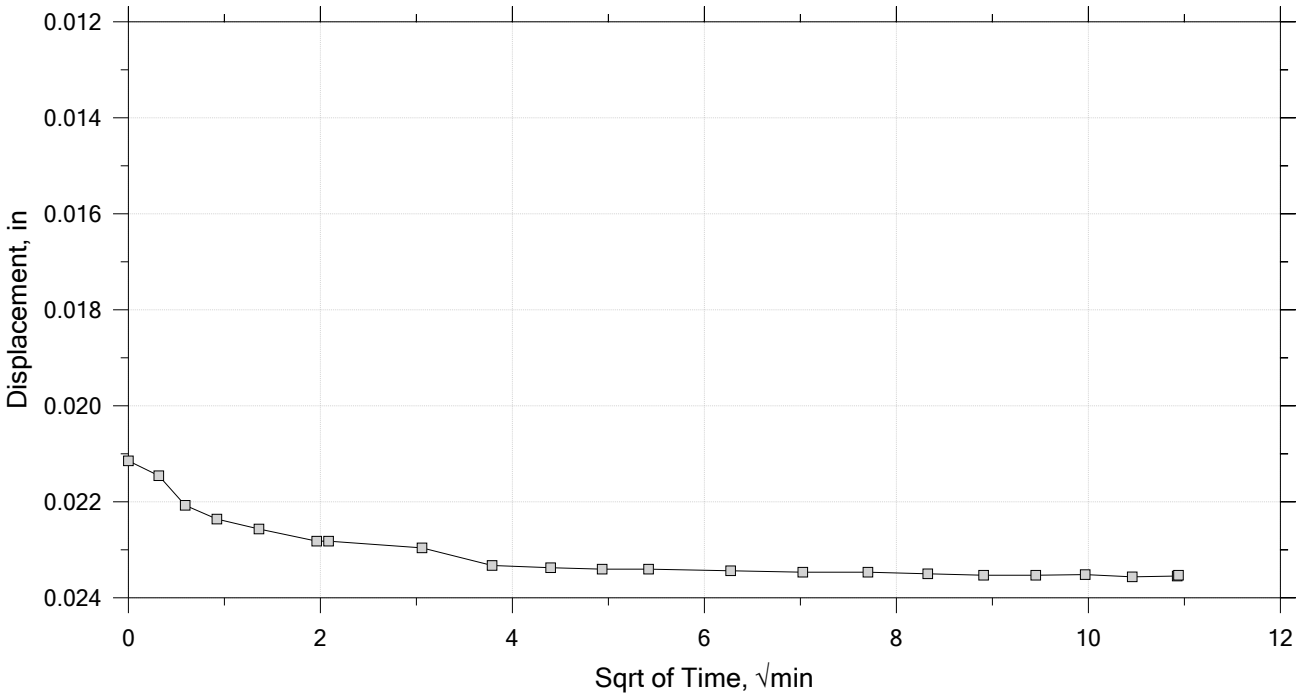


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 17
Constant Load Step
Stress: 1e+03 psf

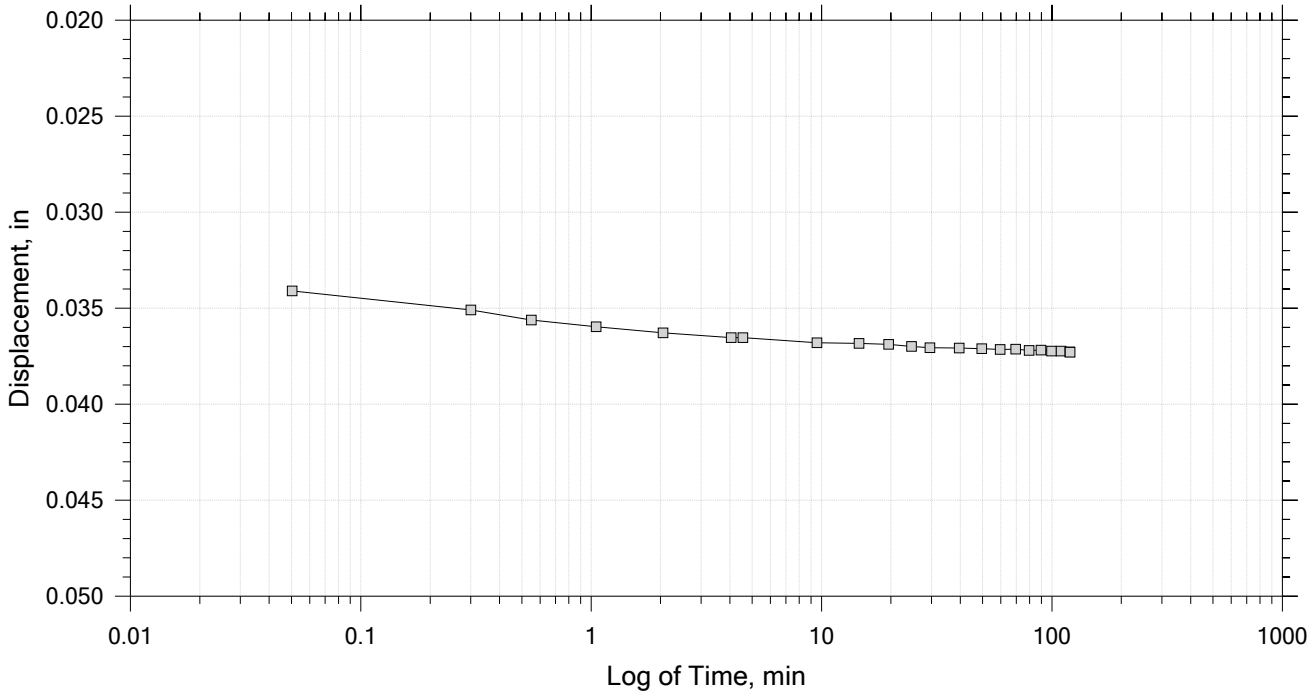


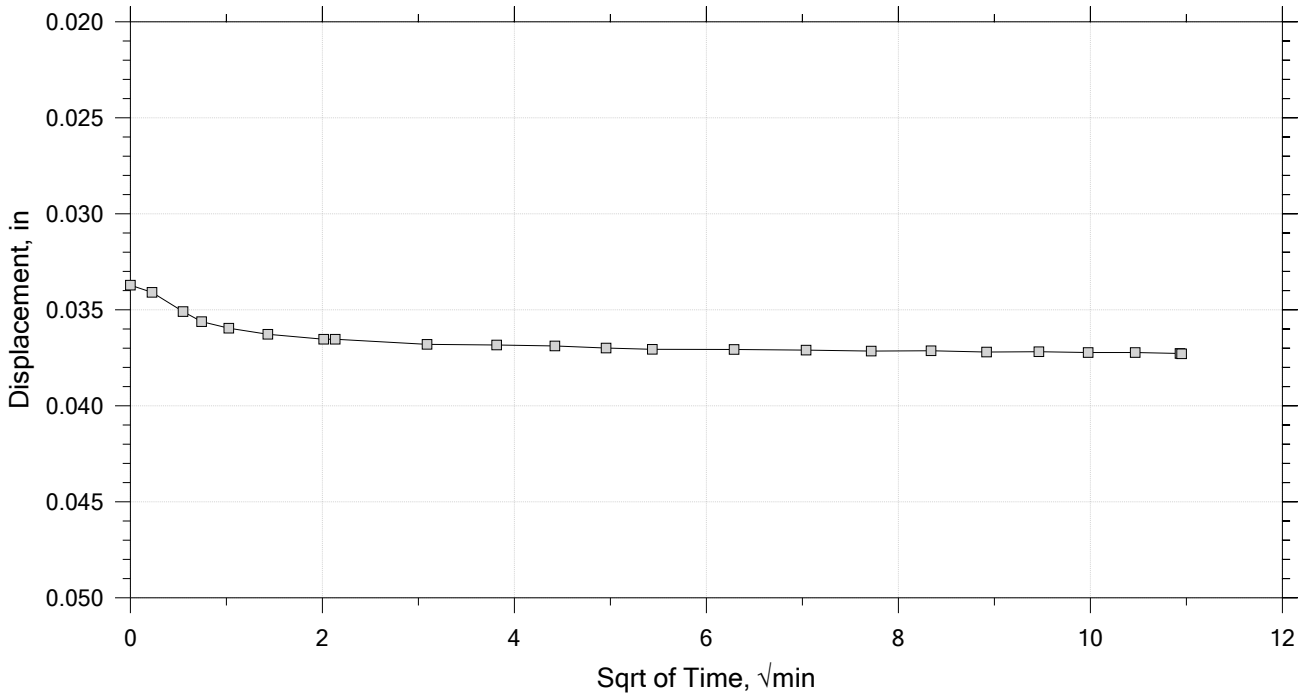


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 17
Constant Load Step
Stress: 2e+03 psf

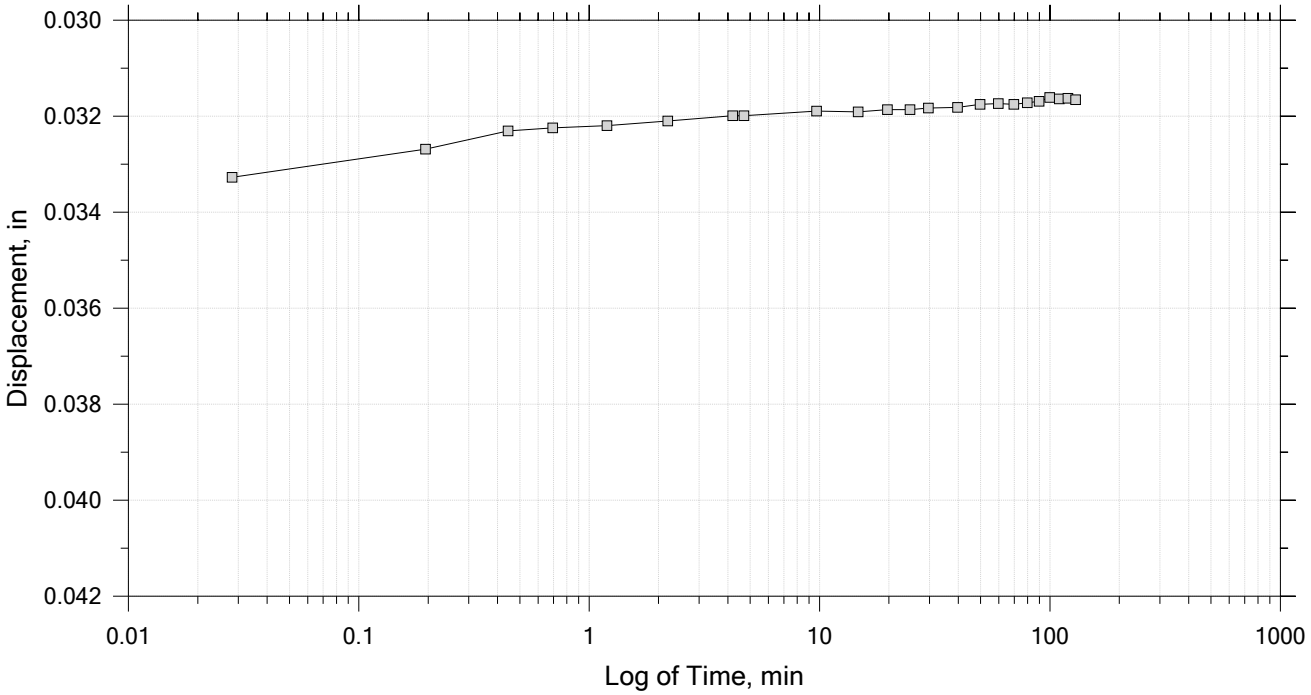


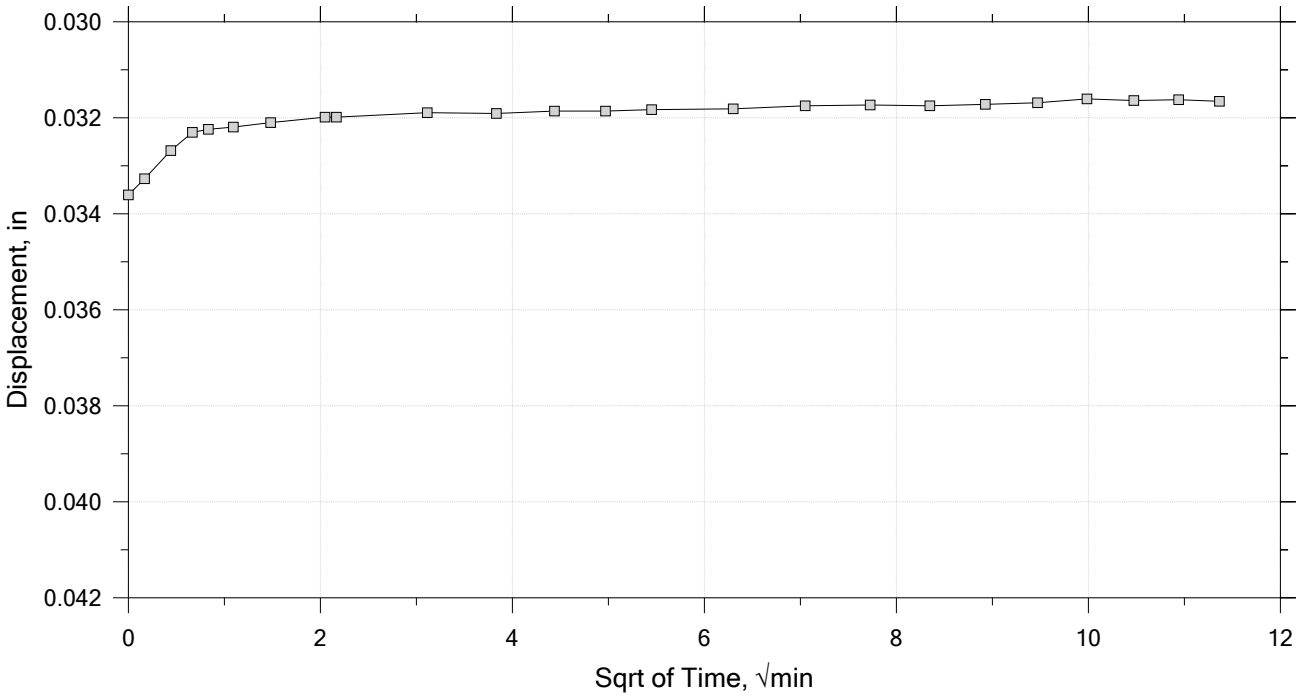


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 17
Constant Load Step
Stress: 500 psf

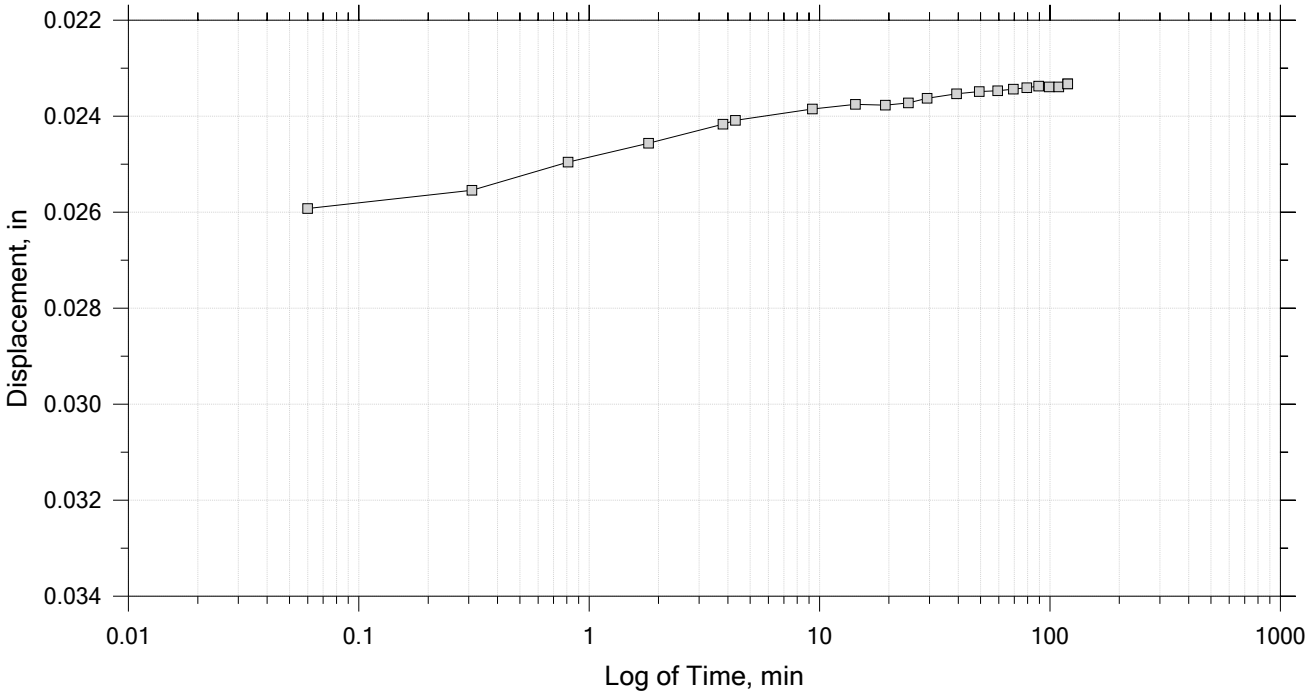


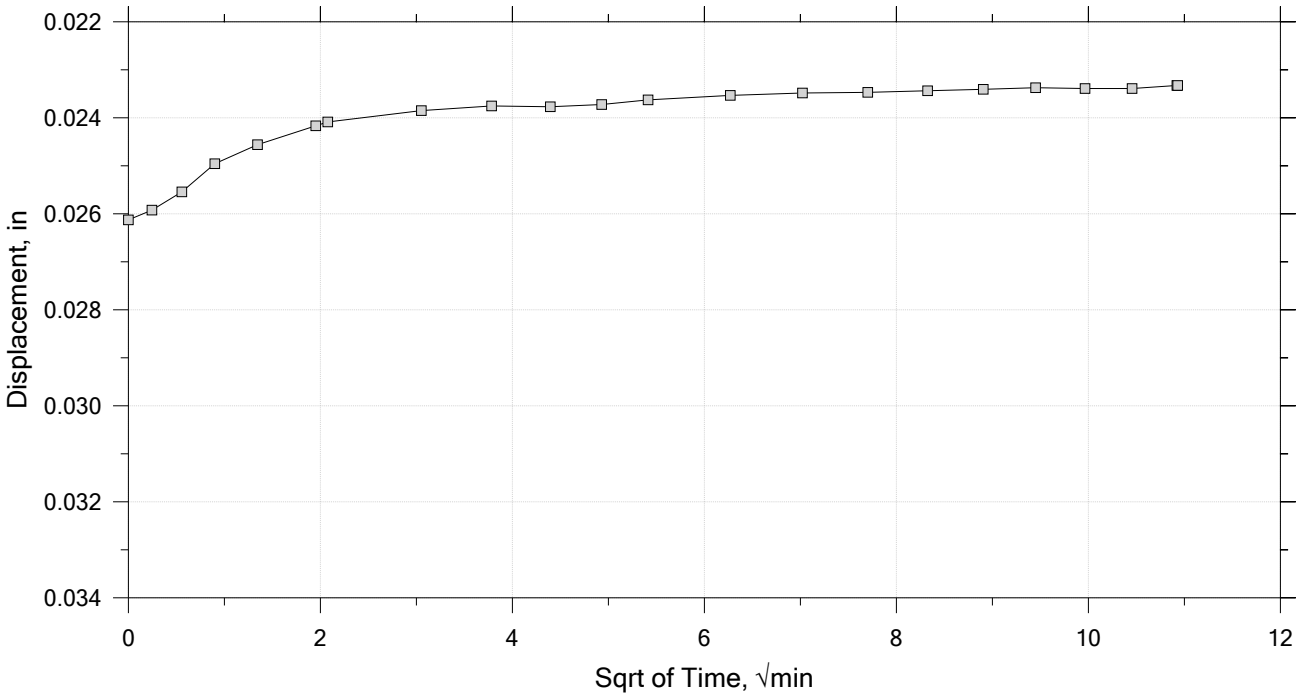


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 17
Constant Load Step
Stress: 125 psf

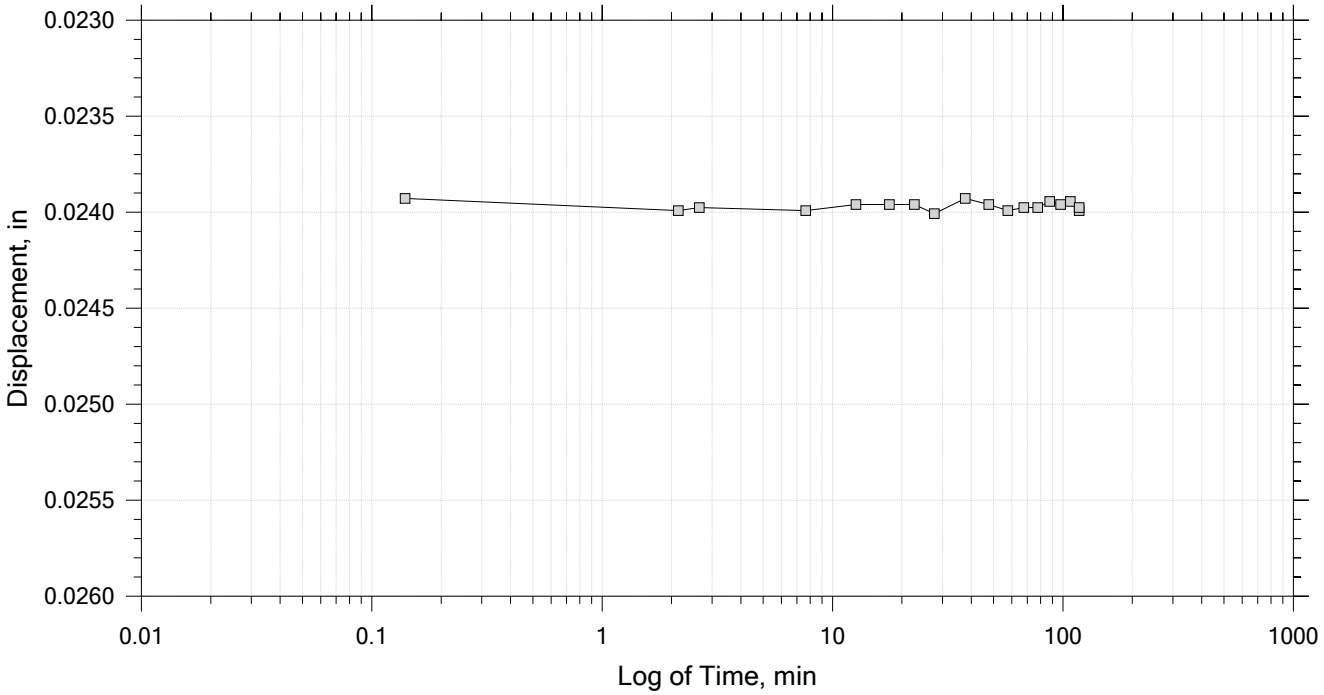


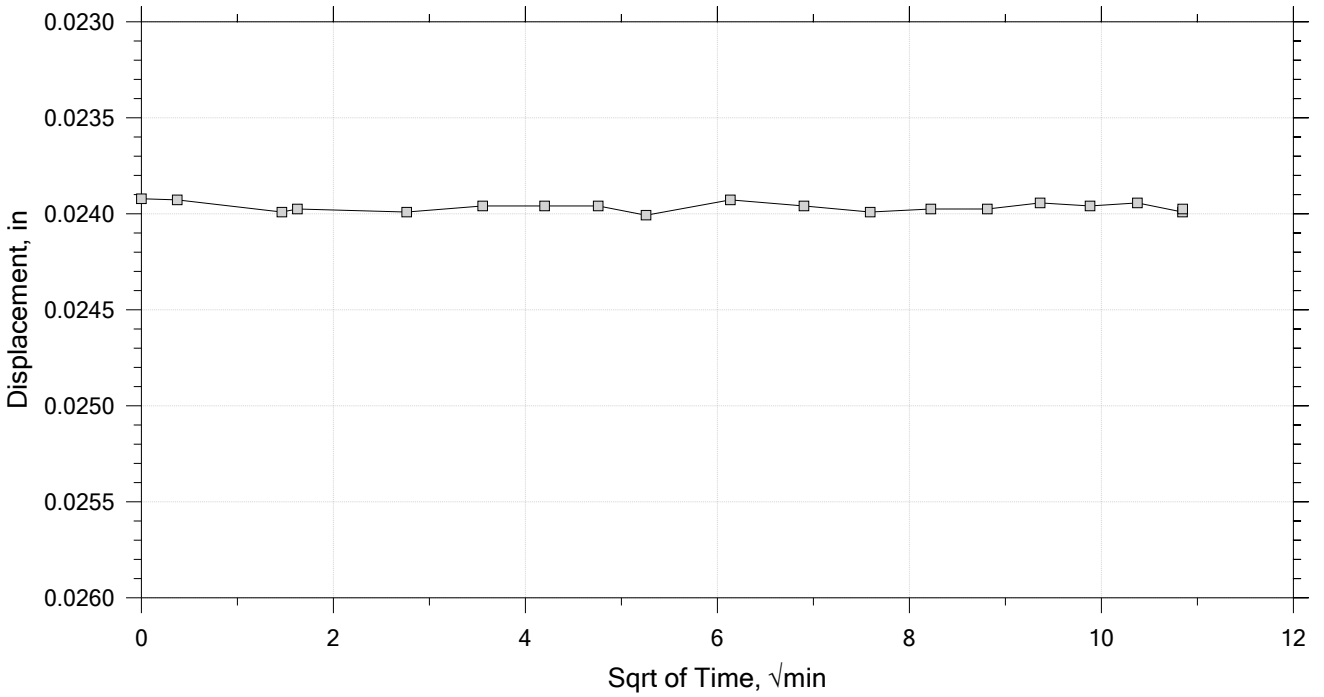


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 17
Constant Load Step
Stress: 250 psf

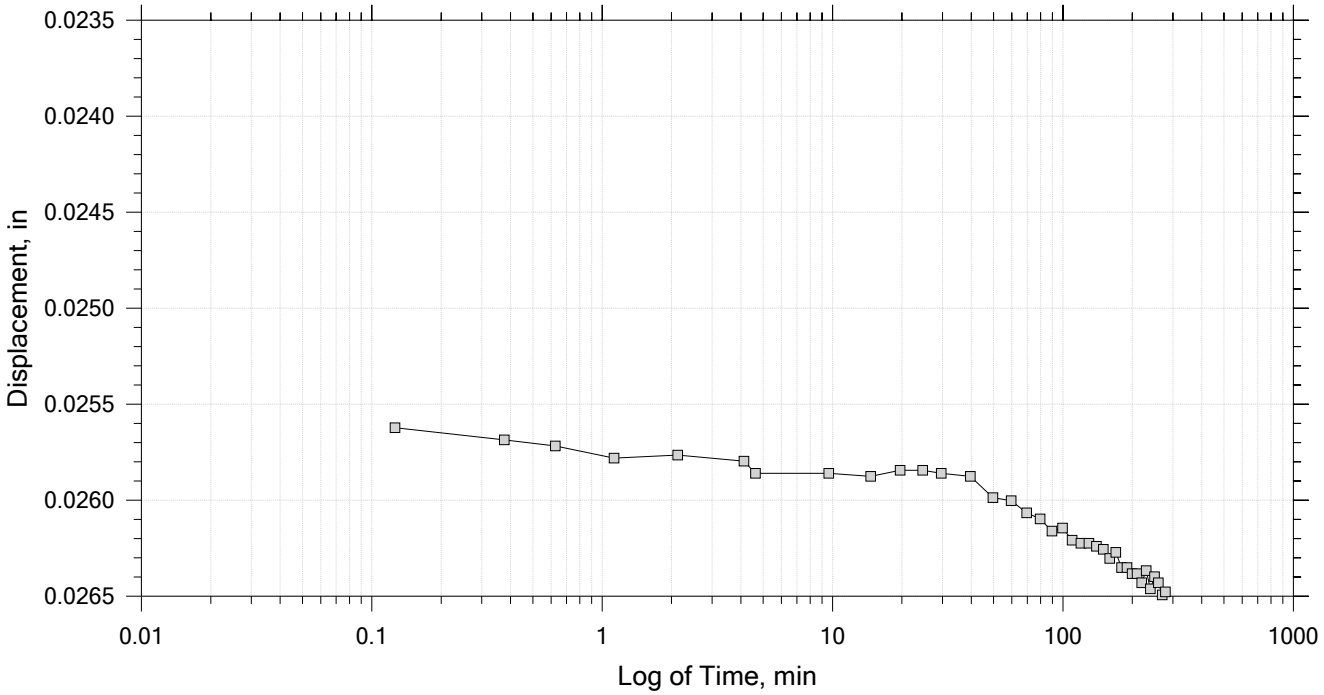


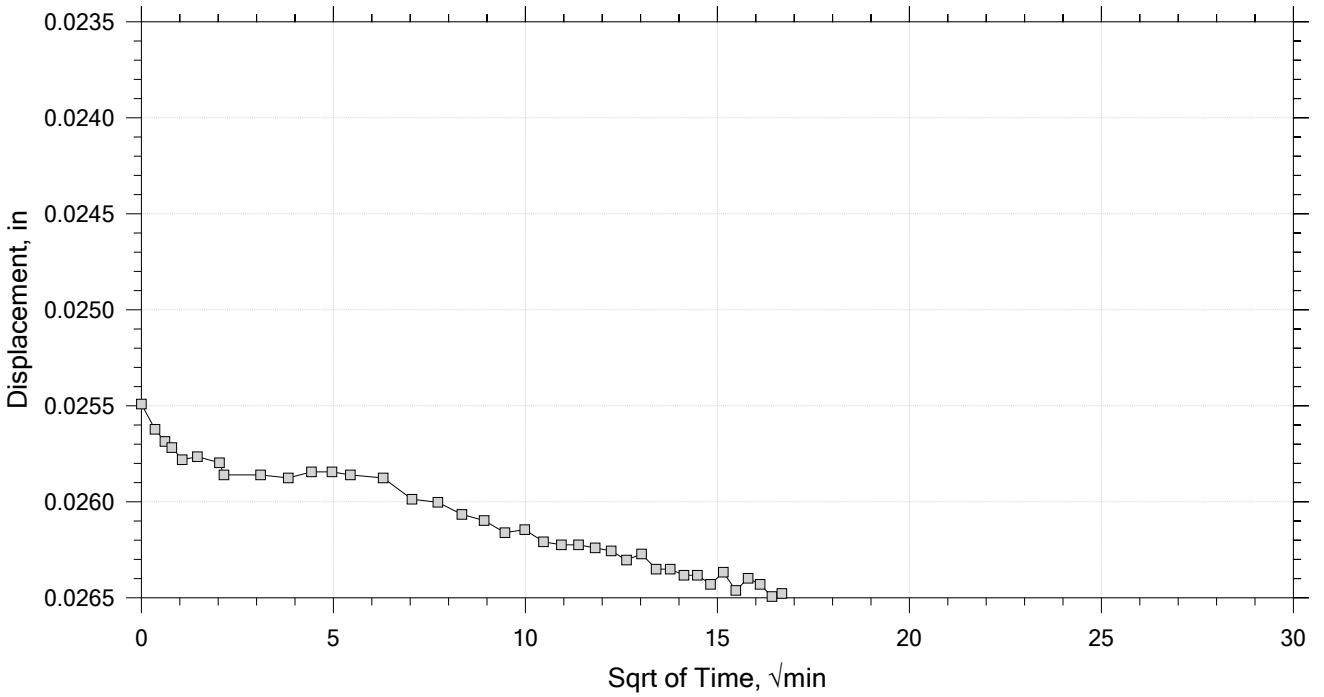


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 17
Constant Load Step
Stress: 500 psf

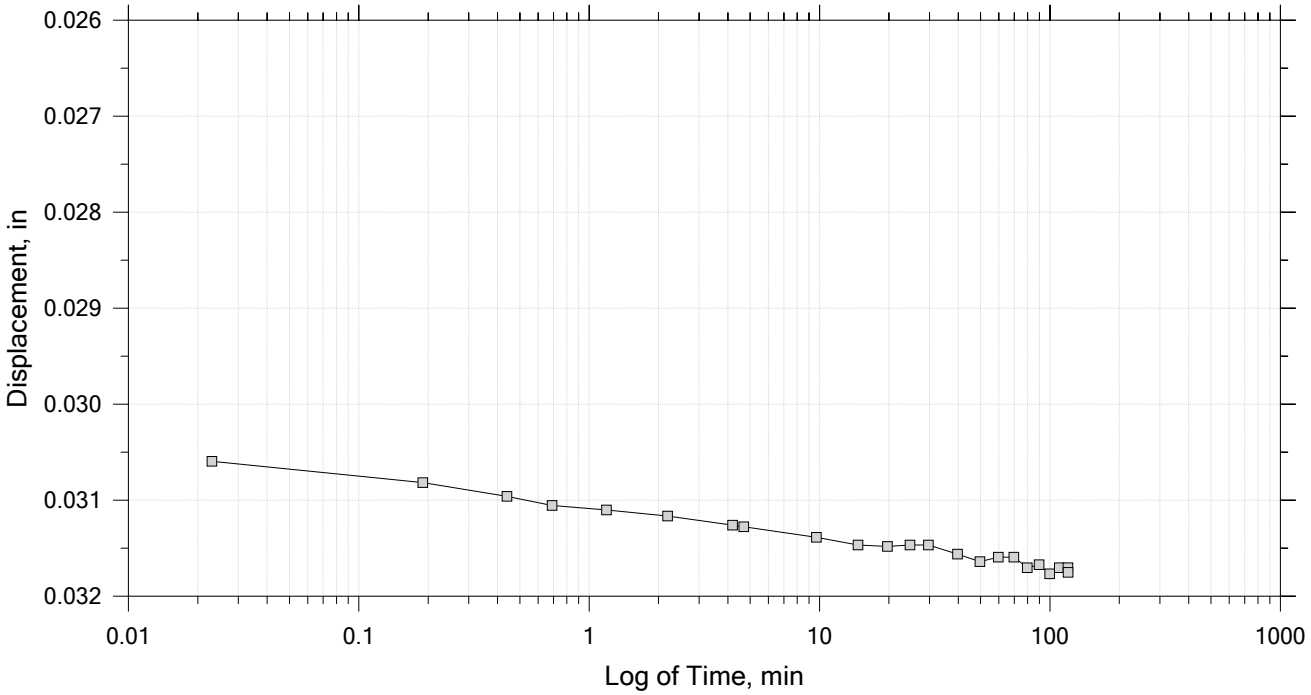


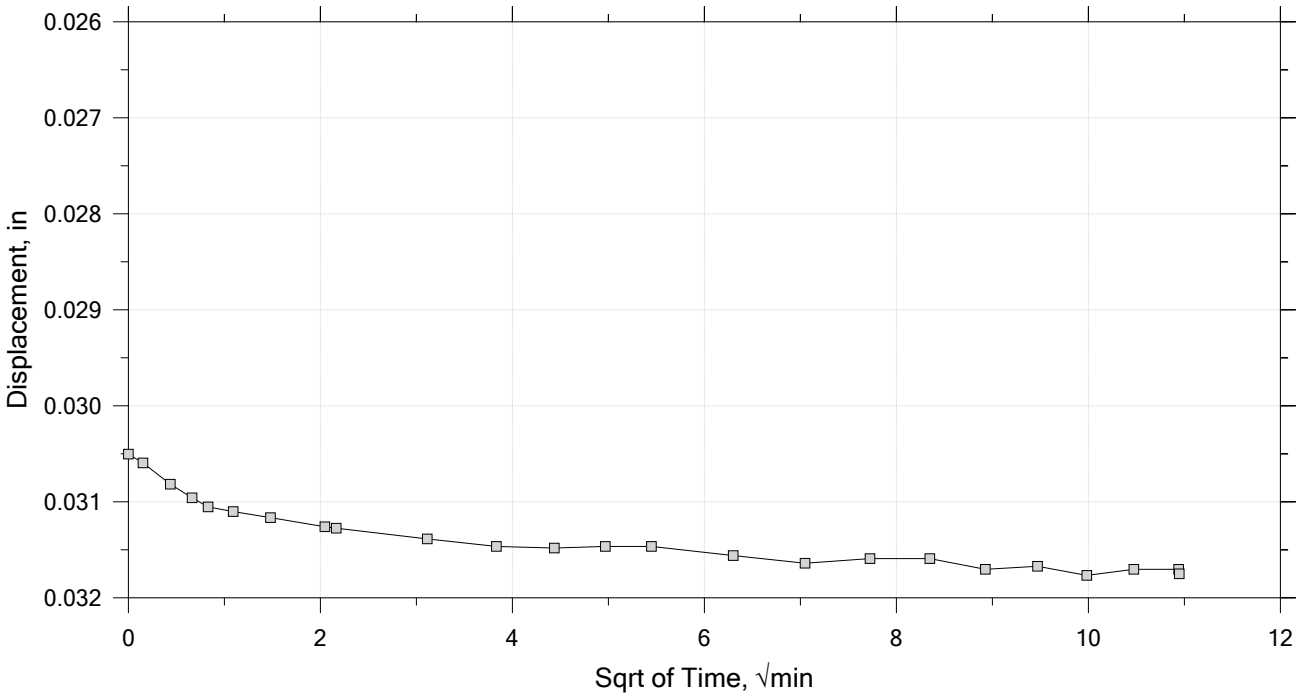


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 17
Constant Load Step
Stress: 1e+03 psf

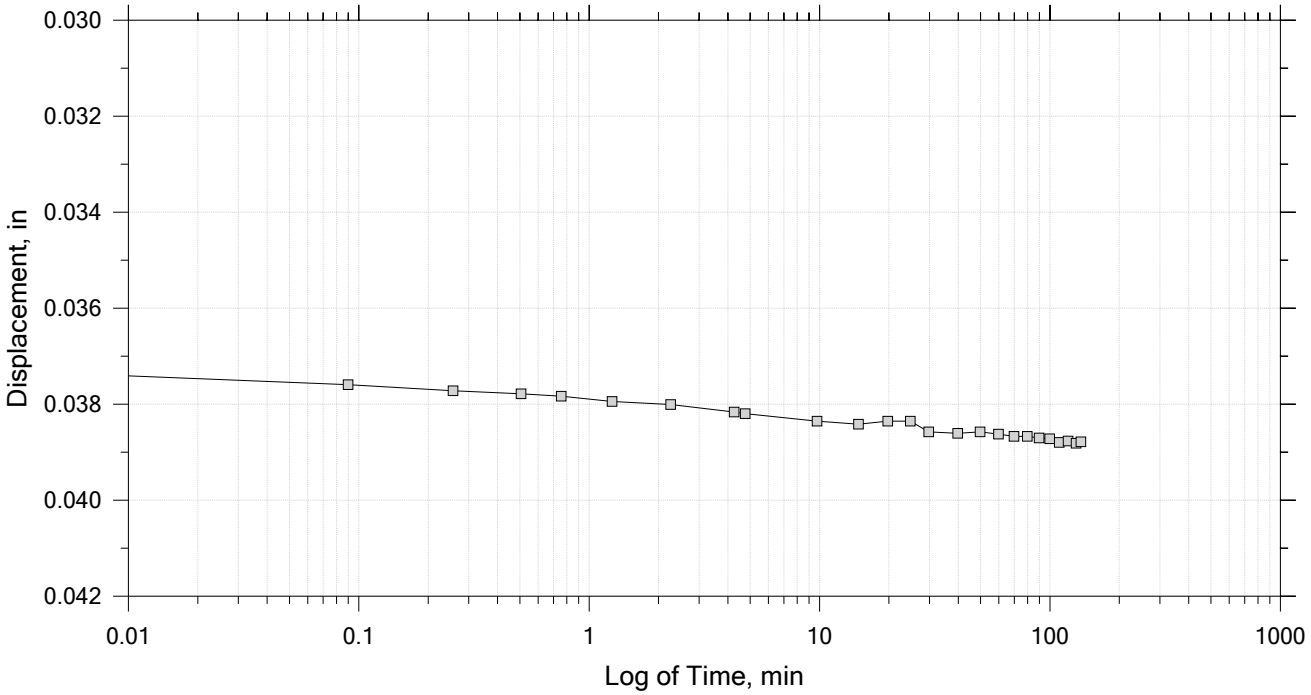


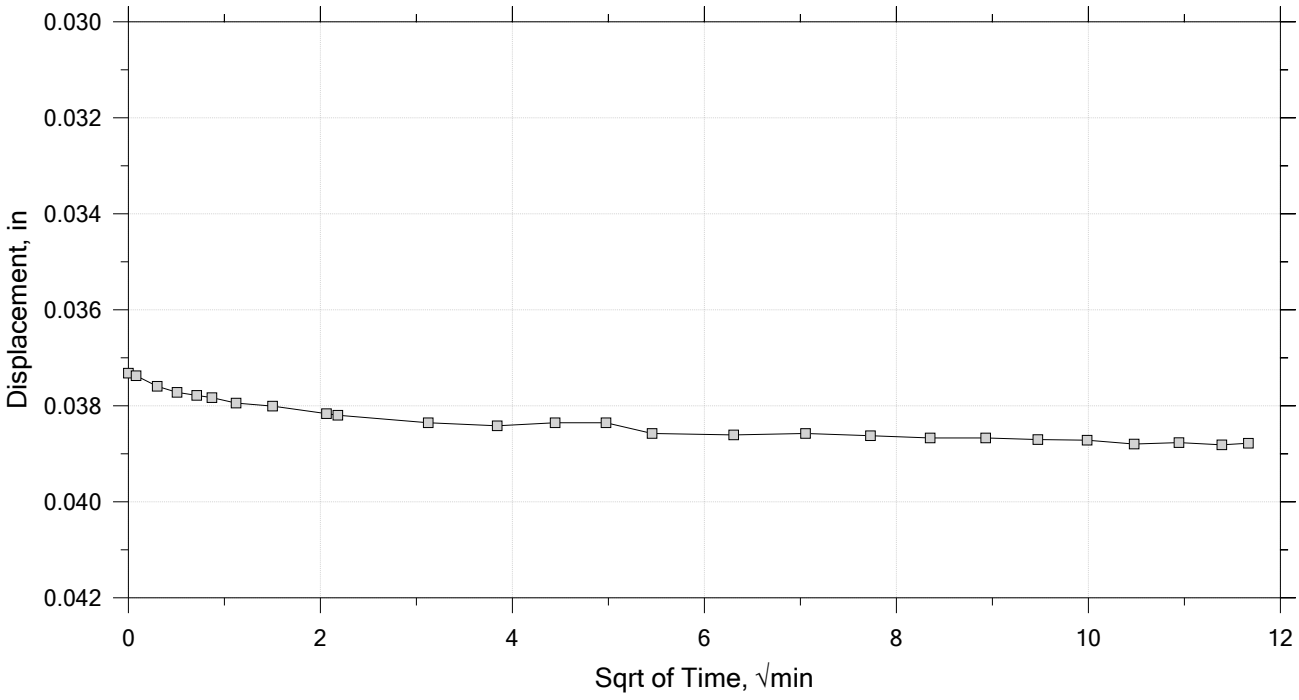


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 17
Constant Load Step
Stress: 2e+03 psf

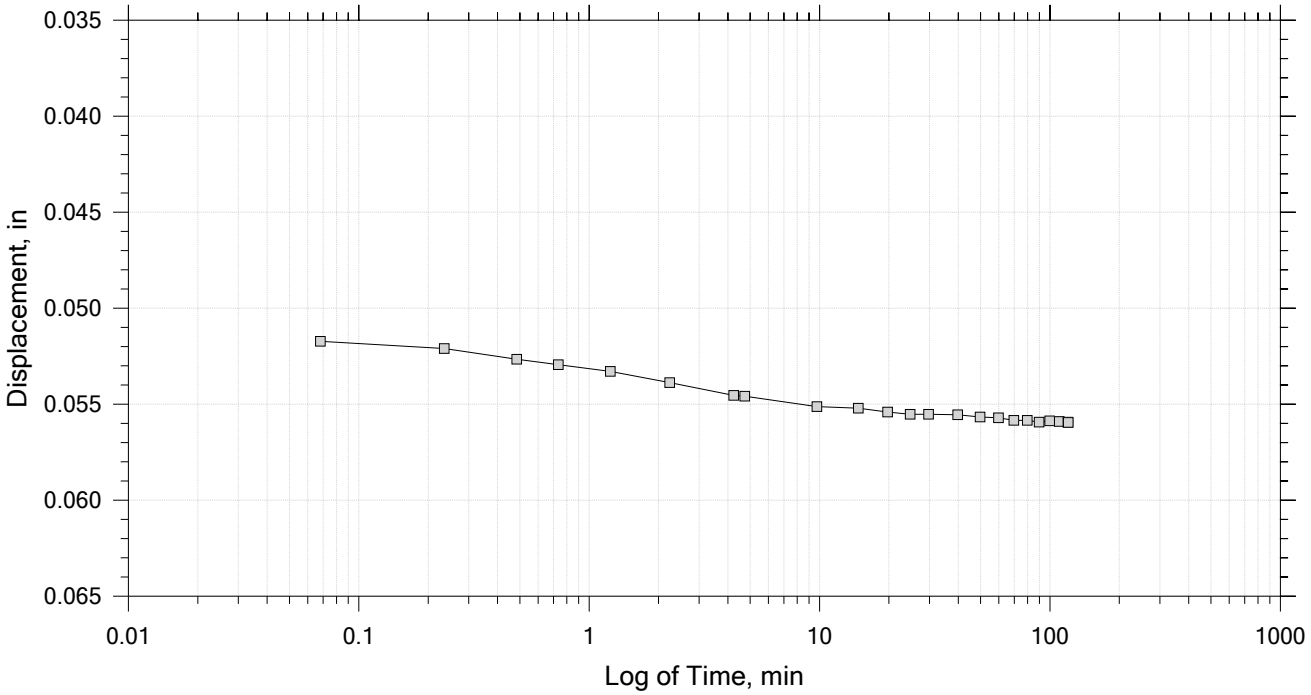


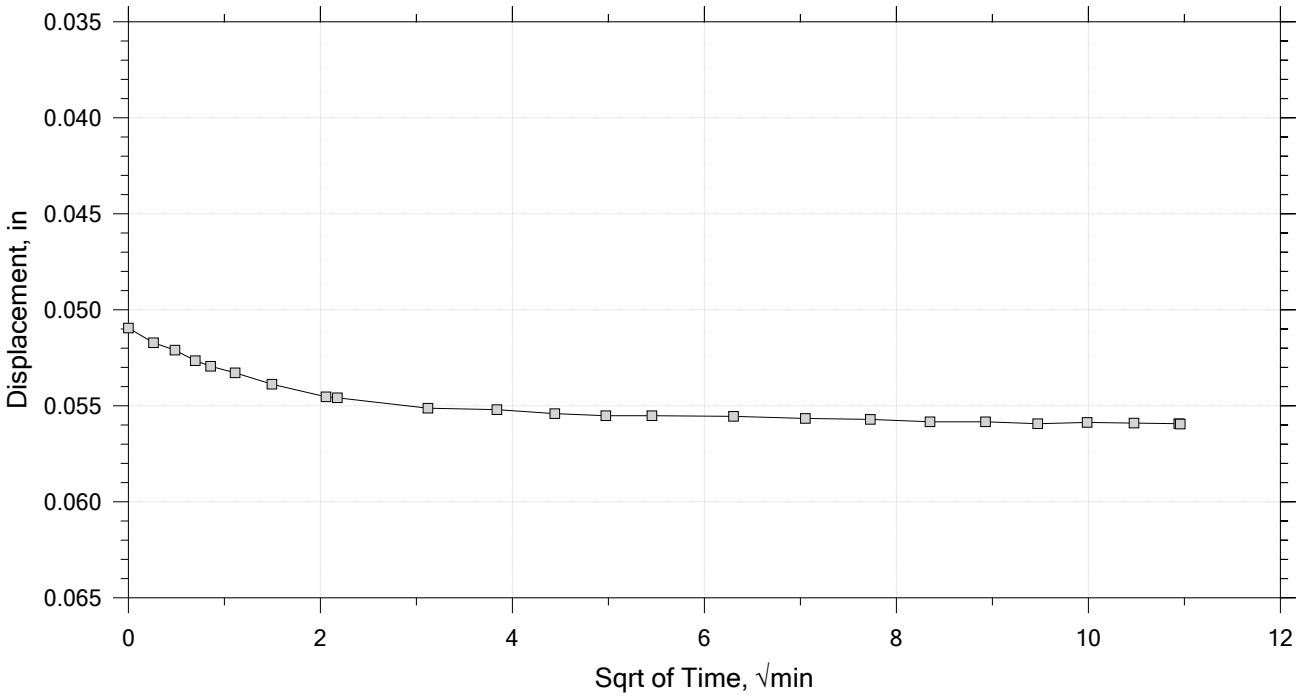


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 12 of 17
Constant Load Step
Stress: 4e+03 psf

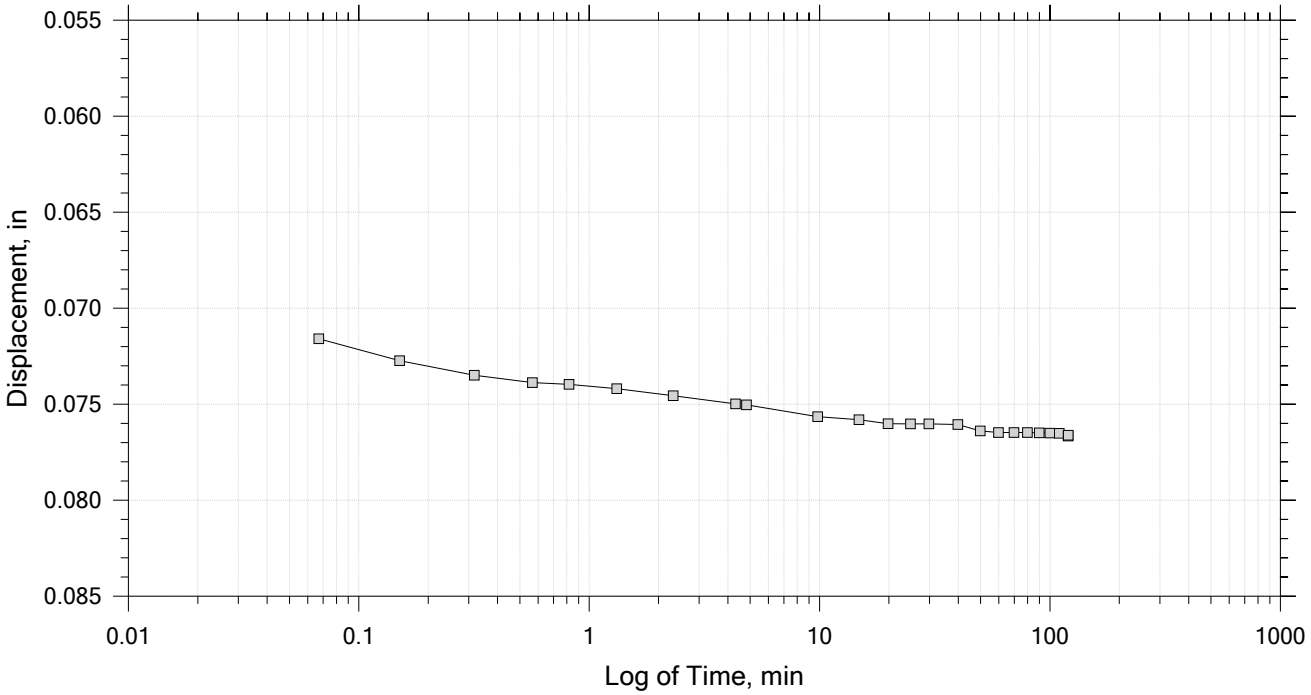


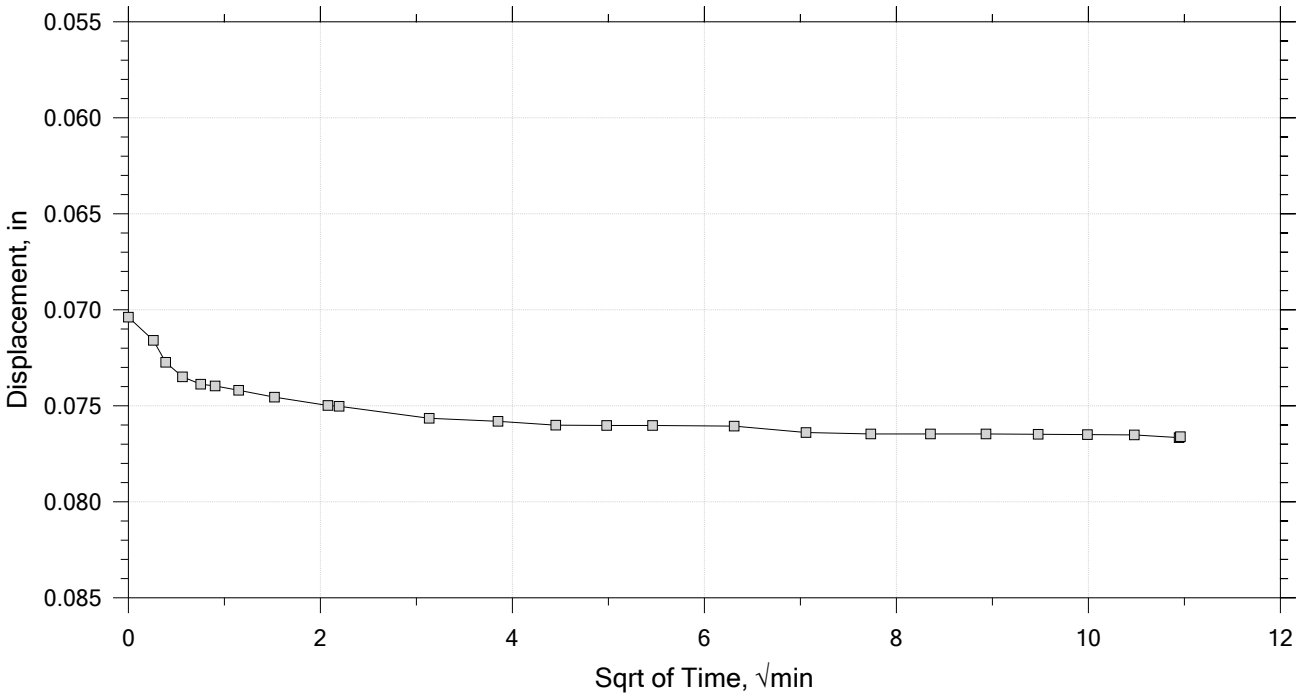


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 13 of 17
Constant Load Step
Stress: 8e+03 psf

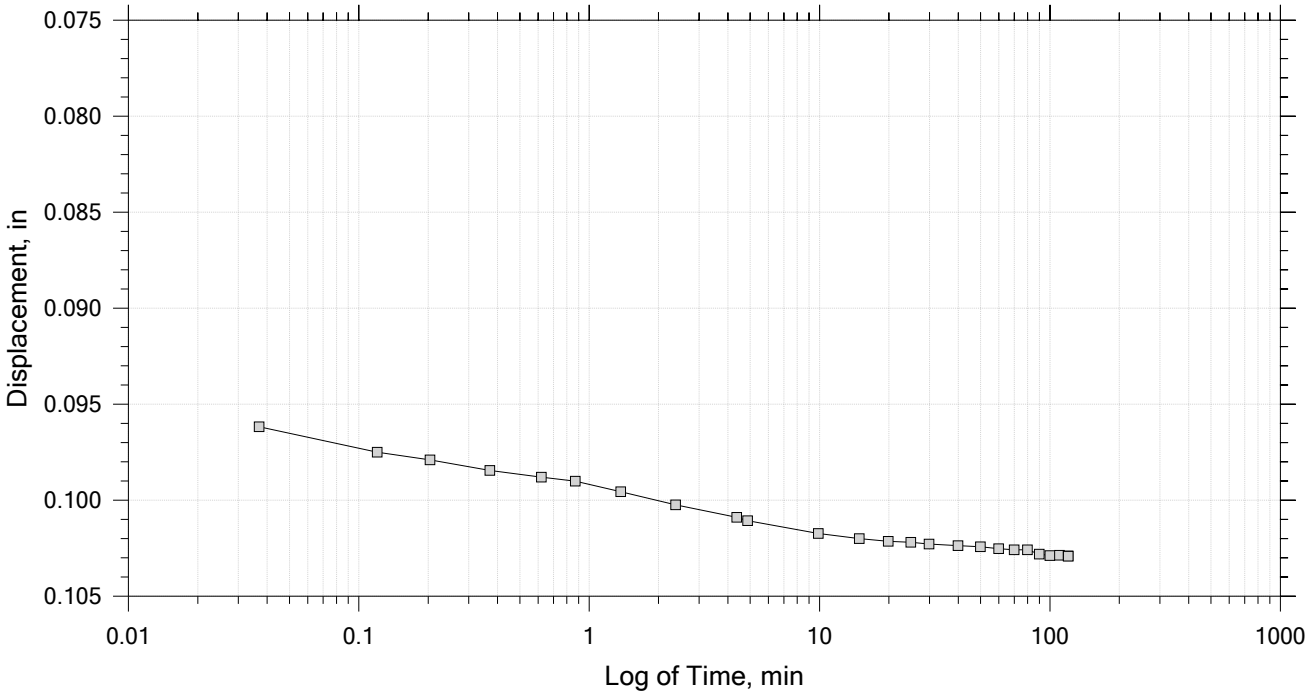


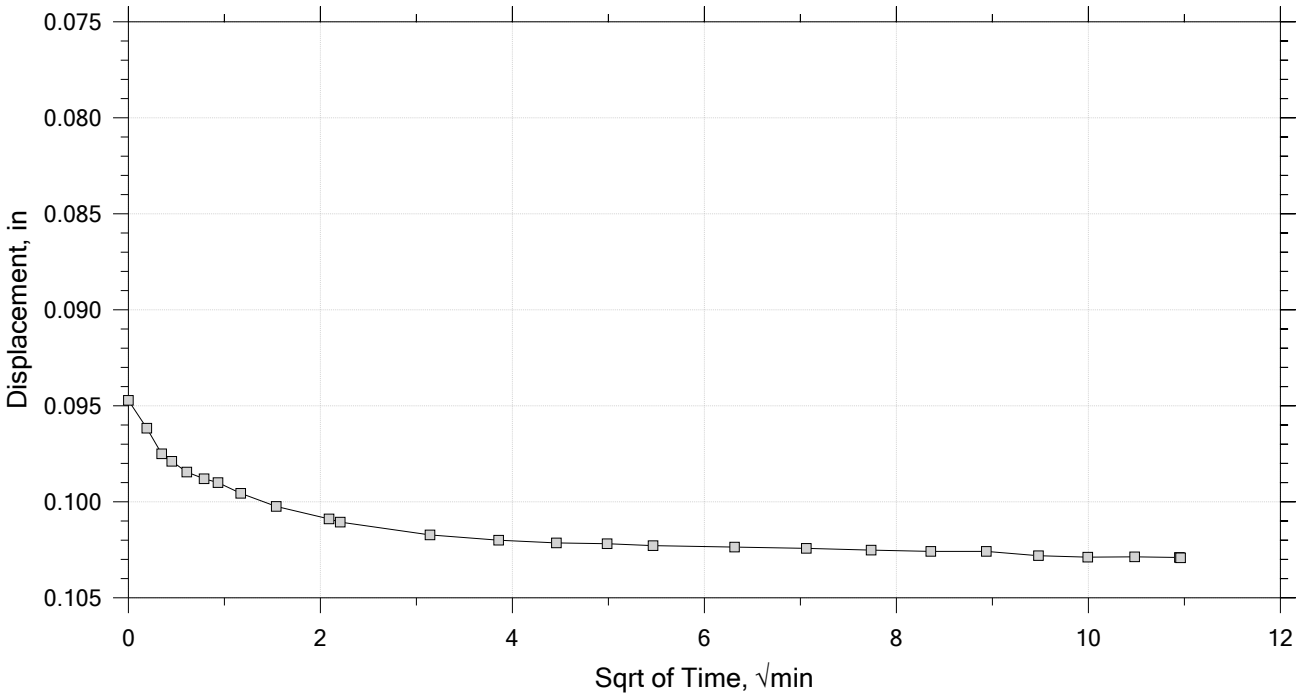


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 14 of 17
Constant Load Step
Stress: 1.6e+04 psf

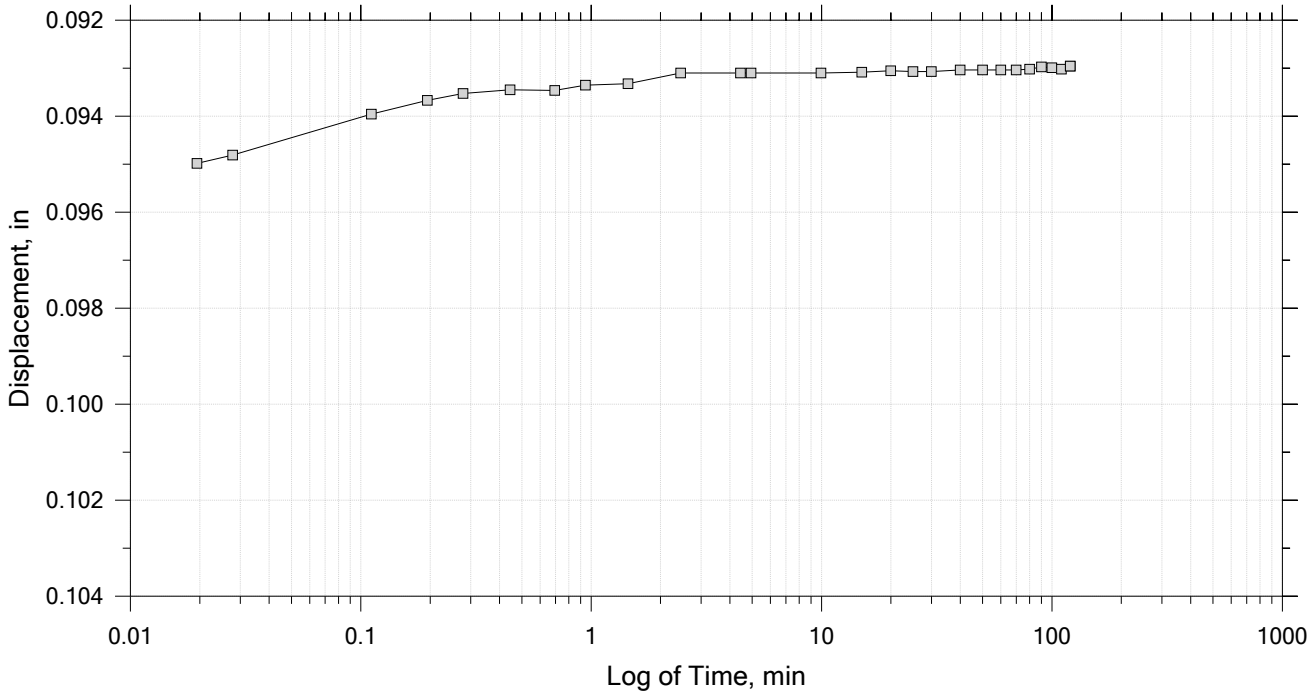


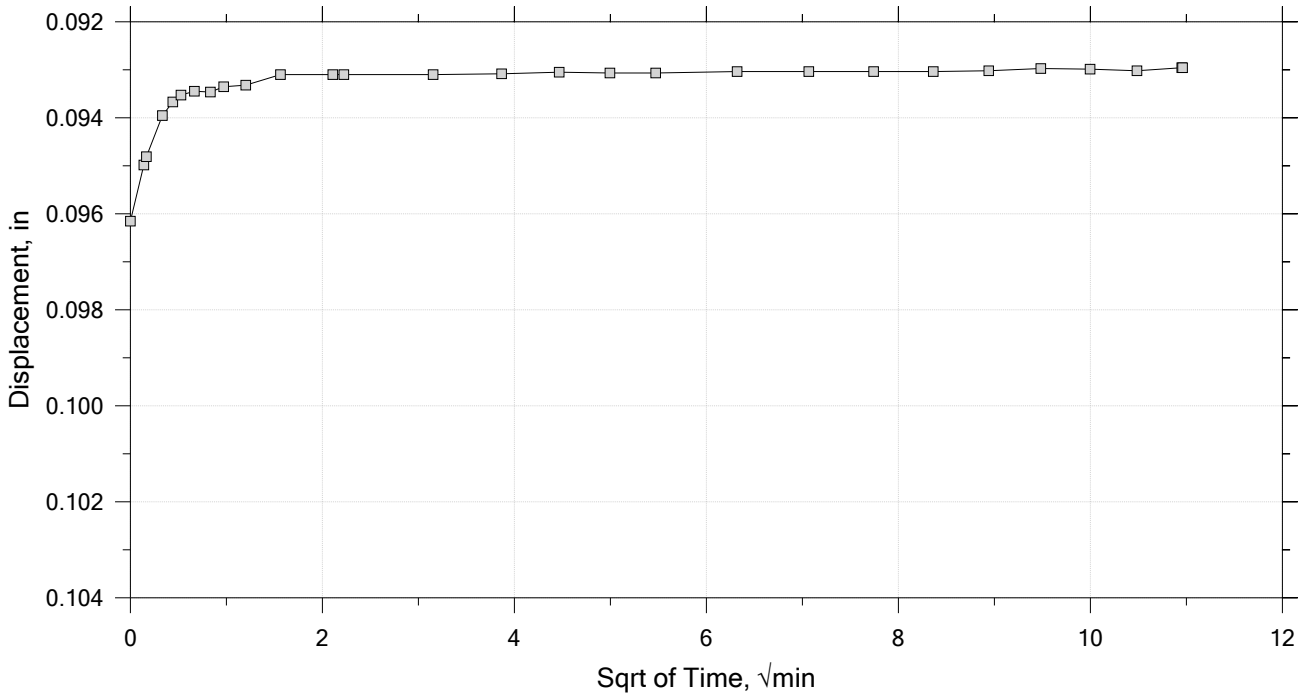


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 15 of 17
Constant Load Step
Stress: 4e+03 psf

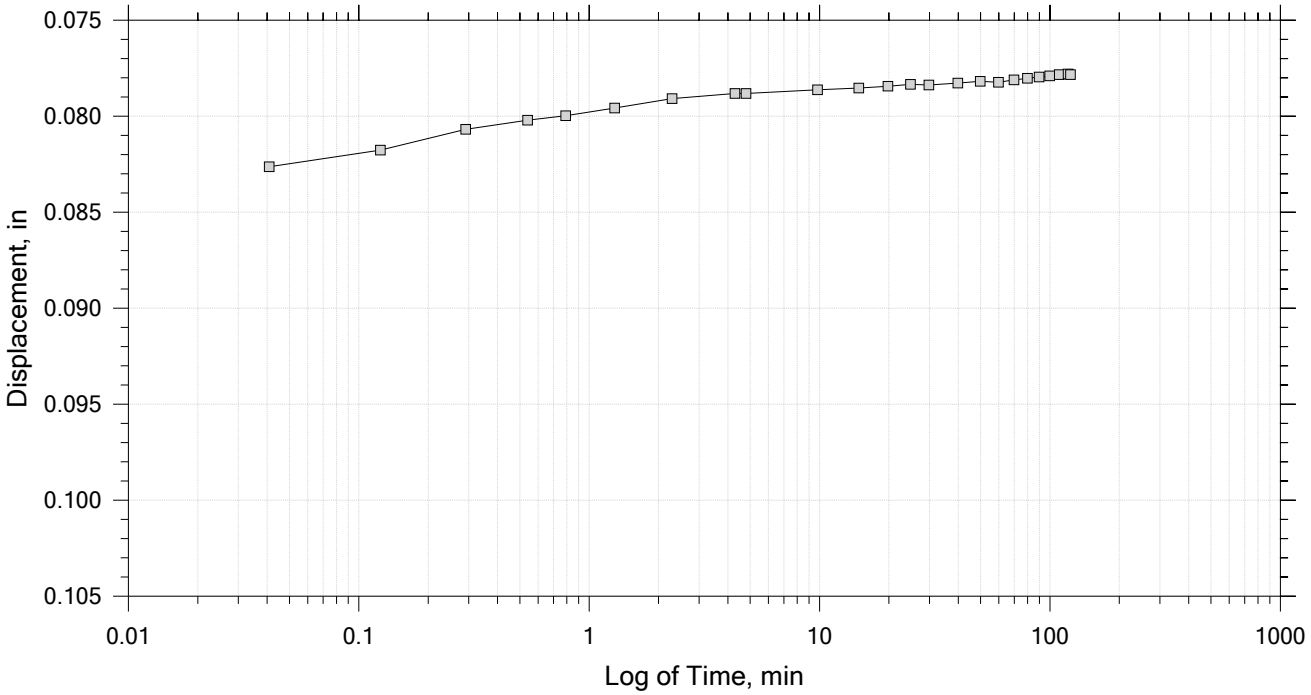


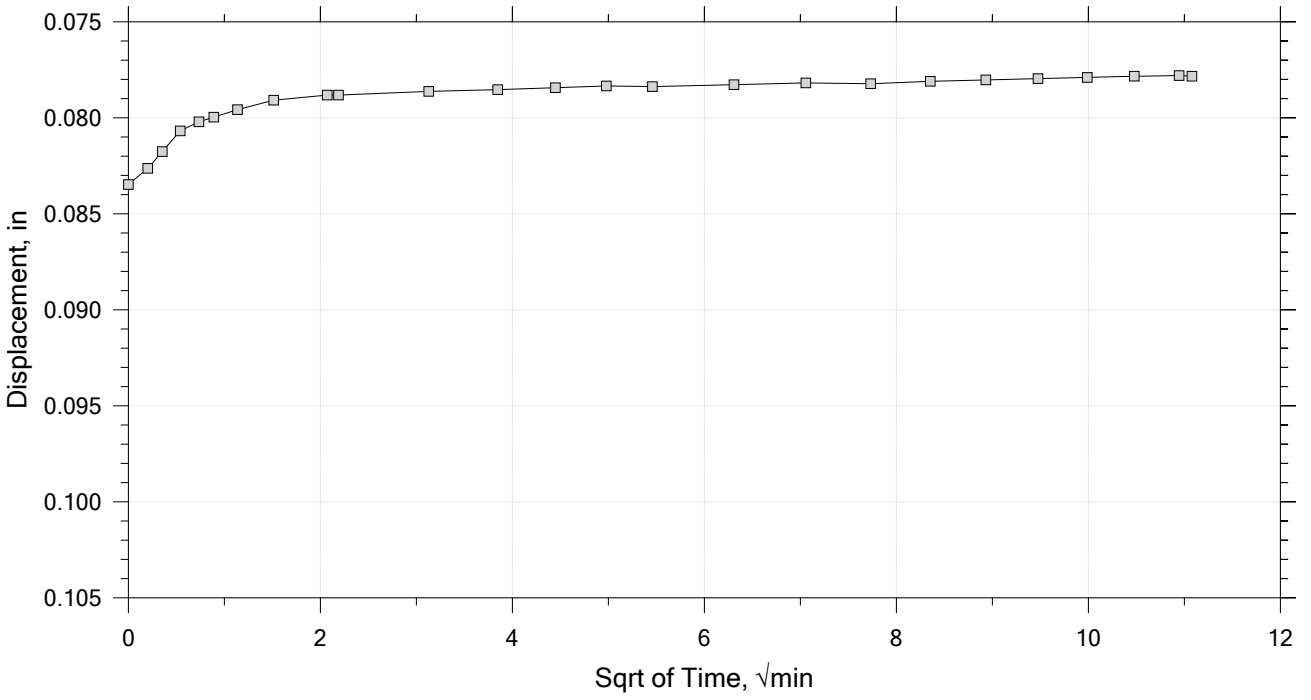


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 16 of 17
Constant Load Step
Stress: 1e+03 psf

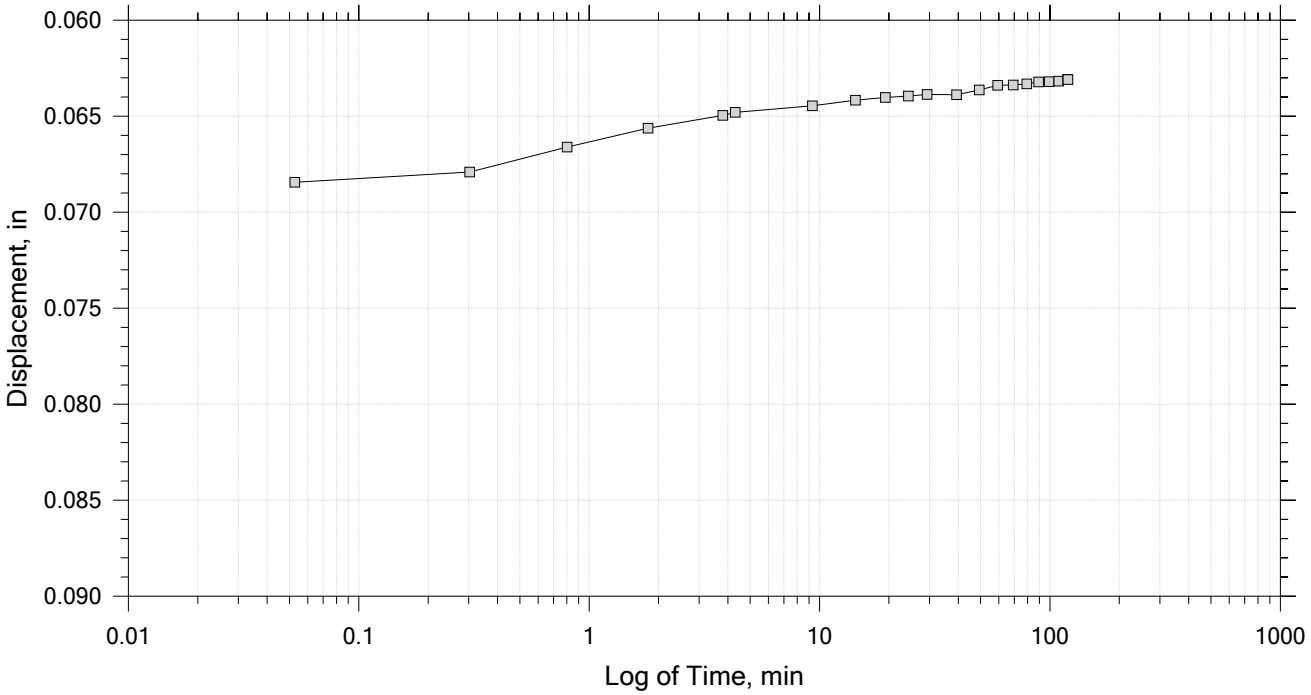


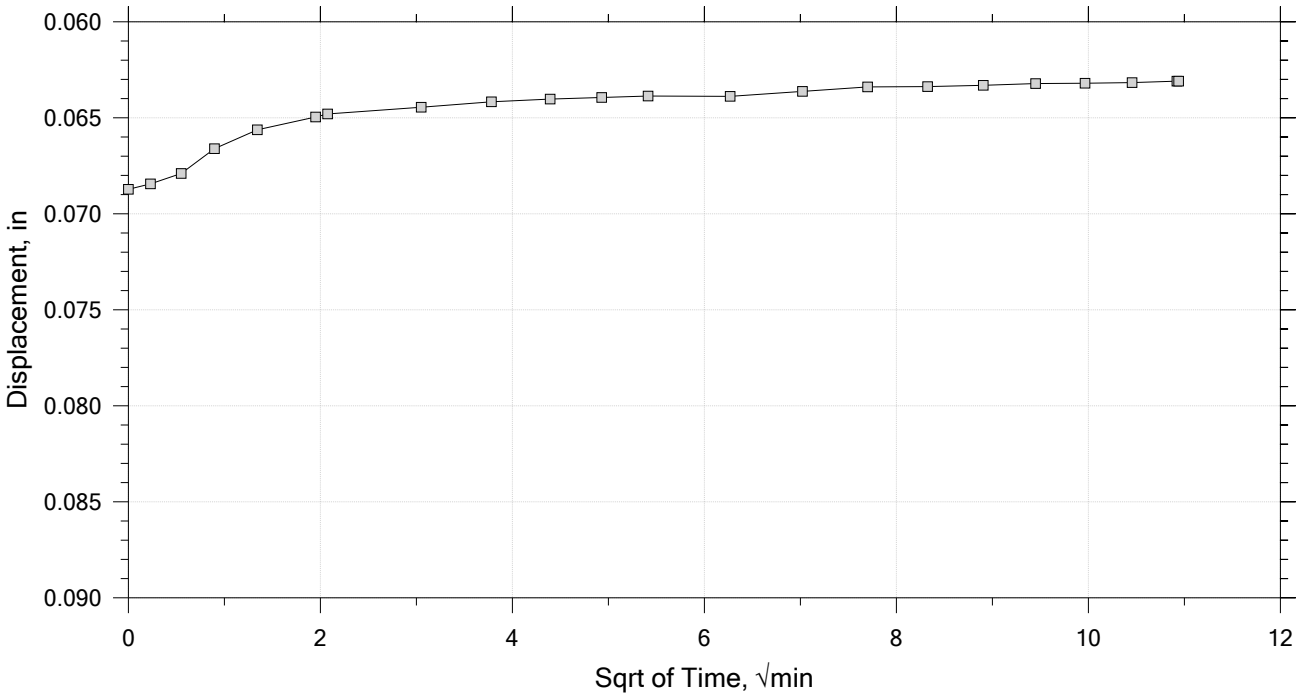


Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 17 of 17
Constant Load Step
Stress: 250 psf





Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Specimen Diameter, in: 2.50	Specific Gravity: 2.85 (Estimated)	Liquid Limit: Non-Plastic
Specimen Height, in: 1.00	Initial Void Ratio: 0.954	Plastic Limit: Non-Plastic
Final Height, in: 0.94	Final Void Ratio: 0.831	Plasticity Index: Non-Plastic

	Before Test Trimmings	Before Test Specimen	After Test Specimen	After Test Trimmings
Container ID		---		
Mass Container, gm	0	16.83	16.83	16.83
Mass Container + Wet Soil, gm	146.6	163.43	167.86	167.86
Mass Container + Dry Soil, gm	117.28	134.11	134.11	134.11
Mass Dry Soil, gm	117.28	117.28	117.28	117.28
Water Content, %	25.00	25.00	28.78	28.78
Void Ratio	---	0.95	0.83	---
Degree of Saturation, %	---	74.65	98.68	---
Dry Unit Weight, pcf	---	91.034	97.164	---

	Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
	Boring Number: B2-3	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
	Test Number: 26623	Preparation: Intact	Elevation: N/A
	Description: Brown Silty SAND		
	Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Log of Time Coefficients

Step	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	Log T50 min	Cv in²/s	Mv in²/lb	k in/s	Ca %
1	125.	0.002930	0.949	0.293	0.000	0.00e+00	3.37e+03	0.00e+00	0.00e+00
2	250.	0.006683	0.941	0.668	0.000	0.00e+00	4.32e+03	0.00e+00	0.00e+00
3	500.	0.01373	0.928	1.37	0.000	0.00e+00	4.06e+03	0.00e+00	0.00e+00
4	1.00e+03	0.02353	0.908	2.35	0.000	0.00e+00	2.82e+03	0.00e+00	0.00e+00
5	2.00e+03	0.03729	0.882	3.73	0.444	1.74e-03	1.98e+03	1.24e-07	0.00e+00
6	500.	0.03166	0.893	3.17	0.000	0.00e+00	5.41e+02	0.00e+00	0.00e+00
7	125.	0.02333	0.909	2.33	1.458	5.32e-04	3.20e+03	6.15e-08	0.00e+00
8	250.	0.02398	0.908	2.40	0.000	0.00e+00	7.48e+02	0.00e+00	0.00e+00
9	500.	0.02648	0.903	2.65	0.000	0.00e+00	1.44e+03	0.00e+00	0.00e+00
10	1.00e+03	0.03175	0.892	3.18	0.000	0.00e+00	1.52e+03	0.00e+00	0.00e+00
11	2.00e+03	0.03878	0.879	3.88	0.000	0.00e+00	1.01e+03	0.00e+00	0.00e+00
12	4.00e+03	0.05595	0.845	5.59	1.939	3.84e-04	1.24e+03	1.72e-08	0.00e+00
13	8.00e+03	0.07661	0.805	7.66	0.000	0.00e+00	7.44e+02	0.00e+00	0.00e+00
14	1.60e+04	0.1029	0.753	10.3	0.923	7.37e-04	4.73e+02	1.26e-08	0.00e+00
15	4.00e+03	0.09296	0.773	9.30	0.000	0.00e+00	1.20e+02	0.00e+00	0.00e+00
16	1.00e+03	0.07783	0.802	7.78	0.395	1.74e-03	7.26e+02	4.56e-08	0.00e+00
17	250.	0.06309	0.831	6.31	1.373	5.17e-04	2.83e+03	5.28e-08	0.00e+00

	Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
	Boring Number: B2-3	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
	Test Number: 26623	Preparation: Intact	Elevation: N/A
	Description: Brown Silty SAND		
	Remarks:		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Sqrt of Time Coefficients

Step	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	Sq.Rt. T90 min	Cv in²/s	Mv in²/lb	k in/s
1	125.	0.002930	0.949	0.293	0.000	0.00e+00	3.37e+03	0.00e+00
2	250.	0.006683	0.941	0.668	0.000	0.00e+00	4.32e+03	0.00e+00
3	500.	0.01373	0.928	1.37	6.311	5.49e-04	4.06e+03	8.04e-08
4	1.00e+03	0.02353	0.908	2.35	24.349	1.40e-04	2.82e+03	1.43e-08
5	2.00e+03	0.03729	0.882	3.73	2.736	1.21e-03	1.98e+03	8.69e-08
6	500.	0.03166	0.893	3.17	95.096	3.46e-05	5.41e+02	6.77e-10
7	125.	0.02333	0.909	2.33	6.479	5.16e-04	3.20e+03	5.96e-08
8	250.	0.02398	0.908	2.40	0.000	0.00e+00	7.48e+02	0.00e+00
9	500.	0.02648	0.903	2.65	211.078	1.59e-05	1.44e+03	8.28e-10
10	1.00e+03	0.03175	0.892	3.18	94.071	3.54e-05	1.52e+03	1.94e-09
11	2.00e+03	0.03878	0.879	3.88	10.505	3.13e-04	1.01e+03	1.15e-08
12	4.00e+03	0.05595	0.845	5.59	6.653	4.82e-04	1.24e+03	2.15e-08
13	8.00e+03	0.07661	0.805	7.66	10.074	3.06e-04	7.44e+02	8.22e-09
14	1.60e+04	0.1029	0.753	10.3	5.193	5.64e-04	4.73e+02	9.64e-09
15	4.00e+03	0.09296	0.773	9.30	0.433	6.64e-03	1.20e+02	2.87e-08
16	1.00e+03	0.07783	0.802	7.78	2.656	1.11e-03	7.26e+02	2.92e-08
17	250.	0.06309	0.831	6.31	6.000	5.09e-04	2.83e+03	5.20e-08

	Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
	Boring Number: B2-3	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
	Test Number: 26623	Preparation: Intact	Elevation: N/A
	Description: Brown Silty SAND		
	Remarks:		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 17

Constant Load Step

Stress: 125 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-2.479		0.000	0.0000	0.0000	0.000	0.954
-2.477		0.000	0.0000	0.0000	0.000	0.954
-2.475		0.000	0.0000	0.0000	0.000	0.954
-2.473		4.55	0.0000	1.584e-05	0.00158	0.954
-2.472		4.55	0.0000	1.584e-05	0.00158	0.954
-2.470		4.55	0.0000	1.584e-05	0.00158	0.954
-2.468		4.55	0.0000	1.584e-05	0.00158	0.954
-2.466		4.55	0.0000	1.584e-05	0.00158	0.954
-2.465		6.83	0.0000	-3.167e-05	-0.00317	0.955
-2.463		6.83	0.0000	-3.167e-05	-0.00317	0.955
-2.462		6.83	0.0000	-3.167e-05	-0.00317	0.955
-2.454		9.10	0.0000	-1.584e-05	-0.00158	0.954
-2.445		9.10	0.0000	3.167e-05	0.00317	0.954
-2.437		11.4	0.0000	1.584e-05	0.00158	0.954
-2.429		11.4	0.0000	6.334e-05	0.00633	0.954
-2.403		18.2	0.0000	0.0001900	0.0190	0.954
-2.394		18.2	0.0000	0.0001900	0.0190	0.954
-2.311		20.5	0.0000	0.0004909	0.0491	0.953
-2.228		20.5	0.0000	0.0006176	0.0618	0.953
-2.144		36.4	0.0000	0.0006651	0.0665	0.953
-1.978		56.9	0.0000	0.0006968	0.0697	0.953
-1.728		59.2	0.0000	0.0007126	0.0713	0.953
-1.478		59.2	0.0000	0.0007443	0.0744	0.953
-0.978		54.6	0.0000	0.001013	0.101	0.952
0.000	0.000	113.	0.0000	0.002748	0.275	0.949
0.022	0.148	114.	0.0000	0.002787	0.279	0.949
2.021	1.422	123.	0.0000	0.002914	0.291	0.949
2.522	1.588	123.	0.0000	0.002945	0.295	0.949
7.522	2.743	123.	0.0000	0.002914	0.291	0.949
7.531	2.744	123.	0.0000	0.002930	0.293	0.949

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 17

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-1.059		123.	0.0000	0.002930	0.293	0.949
-1.057		123.	0.0000	0.002930	0.293	0.949
-1.055		123.	0.0000	0.002930	0.293	0.949
-1.054		127.	0.0000	0.002930	0.293	0.949
-1.052		127.	0.0000	0.002930	0.293	0.949
-1.050		132.	0.0000	0.002945	0.295	0.949
-1.049		132.	0.0000	0.002945	0.295	0.949
-1.047		132.	0.0000	0.002945	0.295	0.949
-1.046		137.	0.0000	0.002961	0.296	0.949
-1.044		137.	0.0000	0.002961	0.296	0.949
-1.042		137.	0.0000	0.002961	0.296	0.949
-1.033		141.	0.0000	0.003025	0.302	0.949
-1.025		143.	0.0000	0.003056	0.306	0.948
-1.017		148.	0.0000	0.003136	0.314	0.948
-1.008		150.	0.0000	0.003151	0.315	0.948
-0.983		152.	0.0000	0.003310	0.331	0.948
-0.975		152.	0.0000	0.003373	0.337	0.948
-0.892		171.	0.0000	0.004086	0.409	0.946
-0.808		191.	0.0000	0.004767	0.477	0.945
-0.725		203.	0.0000	0.005400	0.540	0.944
-0.559		218.	0.0000	0.005764	0.576	0.943
-0.309		232.	0.0000	0.006002	0.600	0.943
-0.059		237.	0.0000	0.006128	0.613	0.942
0.000	0.000	238.	0.0000	0.006160	0.616	0.942
0.441	0.664	244.	0.0000	0.006398	0.640	0.942
1.441	1.200	246.	0.0000	0.006524	0.652	0.942
3.442	1.855	246.	0.0000	0.006588	0.659	0.942
3.941	1.985	246.	0.0000	0.006540	0.654	0.942
8.941	2.990	248.	0.0000	0.006588	0.659	0.942
13.941	3.734	248.	0.0000	0.006556	0.656	0.942
18.942	4.352	248.	0.0000	0.006604	0.660	0.942
23.941	4.893	248.	0.0000	0.006604	0.660	0.942
28.942	5.380	248.	0.0000	0.006604	0.660	0.942
38.942	6.240	248.	0.0000	0.006651	0.665	0.941
48.941	6.996	248.	0.0000	0.006683	0.668	0.941
58.941	7.677	248.	0.0000	0.006651	0.665	0.941
68.941	8.303	248.	0.0000	0.006667	0.667	0.941
78.942	8.885	248.	0.0000	0.006683	0.668	0.941
88.942	9.431	248.	0.0000	0.006667	0.667	0.941
98.941	9.947	248.	0.0000	0.006730	0.673	0.941
108.942	10.438	248.	0.0000	0.006683	0.668	0.941
118.942	10.906	248.	0.0000	0.006699	0.670	0.941
118.950	10.906	248.	0.0000	0.006683	0.668	0.941

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 17

Constant Load Step

Stress: 500 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.920		248.	0.0000	0.006683	0.668	0.941
-0.918		248.	0.0000	0.006683	0.668	0.941
-0.916		248.	0.0000	0.006683	0.668	0.941
-0.915		262.	0.0000	0.006683	0.668	0.941
-0.913		262.	0.0000	0.006683	0.668	0.941
-0.910		237.	0.0000	0.006825	0.683	0.941
-0.909		237.	0.0000	0.006825	0.683	0.941
-0.907		237.	0.0000	0.006825	0.683	0.941
-0.906		250.	0.0000	0.006873	0.687	0.941
-0.904		250.	0.0000	0.006873	0.687	0.941
-0.902		250.	0.0000	0.006873	0.687	0.941
-0.894		271.	0.0000	0.006889	0.689	0.941
-0.885		284.	0.0000	0.006936	0.694	0.941
-0.877		294.	0.0000	0.006984	0.698	0.941
-0.869		305.	0.0000	0.007110	0.711	0.941
-0.844		323.	0.0000	0.007332	0.733	0.940
-0.835		328.	0.0000	0.007411	0.741	0.940
-0.752		364.	0.0000	0.008741	0.874	0.937
-0.669		394.	0.0000	0.009137	0.914	0.937
-0.586		412.	0.0000	0.009850	0.985	0.935
-0.419		446.	0.0000	0.01091	1.09	0.933
-0.169		469.	0.0000	0.01162	1.16	0.932
0.000	0.000	475.	0.0000	0.01190	1.19	0.931
0.081	0.285	478.	0.0000	0.01204	1.20	0.931
0.581	0.762	489.	0.0000	0.01264	1.26	0.930
1.581	1.257	496.	0.0000	0.01287	1.29	0.929
3.580	1.892	496.	0.0000	0.01313	1.31	0.929
4.080	2.020	496.	0.0000	0.01319	1.32	0.929
9.081	3.014	498.	0.0000	0.01333	1.33	0.928
14.081	3.752	498.	0.0000	0.01343	1.34	0.928
19.081	4.368	498.	0.0000	0.01351	1.35	0.928
24.081	4.907	498.	0.0000	0.01368	1.37	0.928
29.081	5.393	498.	0.0000	0.01368	1.37	0.928
39.081	6.251	498.	0.0000	0.01371	1.37	0.928
49.081	7.006	498.	0.0000	0.01376	1.38	0.928
59.080	7.686	498.	0.0000	0.01371	1.37	0.928
69.081	8.311	498.	0.0000	0.01376	1.38	0.928
79.080	8.893	498.	0.0000	0.01373	1.37	0.928
89.081	9.438	498.	0.0000	0.01375	1.37	0.928
99.080	9.954	498.	0.0000	0.01376	1.38	0.928
109.080	10.444	498.	0.0000	0.01378	1.38	0.928
119.080	10.912	498.	0.0000	0.01375	1.37	0.928
119.228	10.919	498.	0.0000	0.01373	1.37	0.928

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 17

Constant Load Step

Stress: 1e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.651		498.	0.0000	0.01373	1.37	0.928
-0.649		498.	0.0000	0.01373	1.37	0.928
-0.647		498.	0.0000	0.01373	1.37	0.928
-0.646		521.	0.0000	0.01376	1.38	0.928
-0.644		521.	0.0000	0.01376	1.38	0.928
-0.642		544.	0.0000	0.01390	1.39	0.927
-0.641		544.	0.0000	0.01390	1.39	0.927
-0.638		544.	0.0000	0.01390	1.39	0.927
-0.637		560.	0.0000	0.01400	1.40	0.927
-0.635		560.	0.0000	0.01400	1.40	0.927
-0.633		560.	0.0000	0.01400	1.40	0.927
-0.625		576.	0.0000	0.01436	1.44	0.926
-0.617		578.	0.0000	0.01457	1.46	0.926
-0.608		592.	0.0000	0.01473	1.47	0.926
-0.600		601.	0.0000	0.01490	1.49	0.925
-0.575		646.	0.0000	0.01546	1.55	0.924
-0.567		660.	0.0000	0.01569	1.57	0.924
-0.483		749.	0.0000	0.01725	1.72	0.921
-0.400		822.	0.0000	0.01894	1.89	0.917
-0.317		872.	0.0000	0.01979	1.98	0.916
-0.150		924.	0.0000	0.02068	2.07	0.914
0.000	0.000	950.	0.0000	0.02115	2.11	0.913
0.100	0.316	967.	0.0000	0.02146	2.15	0.913
0.350	0.591	983.	0.0000	0.02208	2.21	0.911
0.850	0.922	992.	0.0000	0.02236	2.24	0.911
1.849	1.360	997.	0.0000	0.02257	2.26	0.910
3.849	1.962	999.	0.0000	0.02282	2.28	0.910
4.349	2.085	999.	0.0000	0.02282	2.28	0.910
9.350	3.058	999.	0.0000	0.02296	2.30	0.910
14.349	3.788	999.	0.0000	0.02333	2.33	0.909
19.349	4.399	999.	0.0000	0.02337	2.34	0.909
24.349	4.934	999.	0.0000	0.02341	2.34	0.909
29.350	5.418	999.	0.0000	0.02341	2.34	0.909
39.350	6.273	999.	0.0000	0.02344	2.34	0.909
49.350	7.025	999.	0.0000	0.02347	2.35	0.909
59.350	7.704	999.	0.0000	0.02347	2.35	0.909
69.349	8.328	999.	0.0000	0.02350	2.35	0.909
79.350	8.908	999.	0.0000	0.02353	2.35	0.908
89.350	9.453	999.	0.0000	0.02353	2.35	0.908
99.350	9.967	999.	0.0000	0.02352	2.35	0.908
109.349	10.457	999.	0.0000	0.02356	2.36	0.908
119.350	10.925	999.	0.0000	0.02355	2.35	0.908
119.655	10.939	999.	0.0000	0.02353	2.35	0.908

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 17

Constant Load Step

Stress: 2e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.451		999.	0.0000	0.02353	2.35	0.908
-0.448		999.	0.0000	0.02353	2.35	0.908
-0.446		999.	0.0000	0.02353	2.35	0.908
-0.445		1.09e+03	0.0000	0.02393	2.39	0.908
-0.443		1.09e+03	0.0000	0.02393	2.39	0.908
-0.441		1.13e+03	0.0000	0.02413	2.41	0.907
-0.440		1.13e+03	0.0000	0.02413	2.41	0.907
-0.438		1.13e+03	0.0000	0.02413	2.41	0.907
-0.437		1.16e+03	0.0000	0.02437	2.44	0.907
-0.435		1.16e+03	0.0000	0.02437	2.44	0.907
-0.433		1.16e+03	0.0000	0.02437	2.44	0.907
-0.425		1.21e+03	0.0000	0.02477	2.48	0.906
-0.416		1.25e+03	0.0000	0.02516	2.52	0.905
-0.408		1.29e+03	0.0000	0.02553	2.55	0.905
-0.400		1.32e+03	0.0000	0.02591	2.59	0.904
-0.375		1.41e+03	0.0000	0.02722	2.72	0.901
-0.366		1.44e+03	0.0000	0.02767	2.77	0.900
-0.283		1.62e+03	0.0000	0.03053	3.05	0.895
-0.200		1.76e+03	0.0000	0.03200	3.20	0.892
-0.116		1.84e+03	0.0000	0.03284	3.28	0.890
0.000	0.000	1.90e+03	0.0000	0.03372	3.37	0.889
0.050	0.224	1.93e+03	0.0000	0.03409	3.41	0.888
0.300	0.548	1.97e+03	0.0000	0.03509	3.51	0.886
0.550	0.742	1.98e+03	0.0000	0.03561	3.56	0.885
1.050	1.025	1.99e+03	0.0000	0.03596	3.60	0.884
2.050	1.432	1.99e+03	0.0000	0.03628	3.63	0.884
4.050	2.013	2.00e+03	0.0000	0.03653	3.65	0.883
4.550	2.133	2.00e+03	0.0000	0.03653	3.65	0.883
9.550	3.090	2.00e+03	0.0000	0.03680	3.68	0.883
14.550	3.814	2.00e+03	0.0000	0.03683	3.68	0.882
19.550	4.422	2.00e+03	0.0000	0.03688	3.69	0.882
24.550	4.955	2.00e+03	0.0000	0.03699	3.70	0.882
29.550	5.436	2.00e+03	0.0000	0.03706	3.71	0.882
39.550	6.289	2.00e+03	0.0000	0.03707	3.71	0.882
49.550	7.039	2.00e+03	0.0000	0.03710	3.71	0.882
59.550	7.717	2.00e+03	0.0000	0.03715	3.72	0.882
69.550	8.340	2.00e+03	0.0000	0.03714	3.71	0.882
79.550	8.919	2.00e+03	0.0000	0.03720	3.72	0.882
89.550	9.463	2.00e+03	0.0000	0.03718	3.72	0.882
99.550	9.977	2.00e+03	0.0000	0.03723	3.72	0.882
109.550	10.467	2.00e+03	0.0000	0.03723	3.72	0.882
119.550	10.934	2.00e+03	0.0000	0.03728	3.73	0.882
119.906	10.950	2.00e+03	0.0000	0.03729	3.73	0.882

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 17

Constant Load Step

Stress: 500 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.306		2.00e+03	0.0000	0.03726	3.73	0.882
-0.304		2.00e+03	0.0000	0.03726	3.73	0.882
-0.302		2.00e+03	0.0000	0.03726	3.73	0.882
-0.301		2.03e+03	0.0000	0.03733	3.73	0.881
-0.299		2.03e+03	0.0000	0.03733	3.73	0.881
-0.297		1.91e+03	0.0000	0.03723	3.72	0.882
-0.296		1.91e+03	0.0000	0.03723	3.72	0.882
-0.294		1.91e+03	0.0000	0.03723	3.72	0.882
-0.293		1.74e+03	0.0000	0.03718	3.72	0.882
-0.291		1.74e+03	0.0000	0.03718	3.72	0.882
-0.288		1.74e+03	0.0000	0.03718	3.72	0.882
-0.280		1.52e+03	0.0000	0.03702	3.70	0.882
-0.272		1.37e+03	0.0000	0.03685	3.69	0.882
-0.263		1.27e+03	0.0000	0.03668	3.67	0.883
-0.255		1.23e+03	0.0000	0.03660	3.66	0.883
-0.230		1.21e+03	0.0000	0.03655	3.65	0.883
-0.222		1.22e+03	0.0000	0.03655	3.65	0.883
-0.138		1.22e+03	0.0000	0.03655	3.65	0.883
-0.055		733.	0.0000	0.03427	3.43	0.887
0.000	0.000	650.	0.0000	0.03361	3.36	0.889
0.028	0.168	608.	0.0000	0.03327	3.33	0.889
0.195	0.441	535.	0.0000	0.03269	3.27	0.891
0.445	0.667	510.	0.0000	0.03231	3.23	0.891
0.695	0.833	505.	0.0000	0.03224	3.22	0.891
1.195	1.093	501.	0.0000	0.03219	3.22	0.892
2.194	1.481	498.	0.0000	0.03210	3.21	0.892
4.195	2.048	498.	0.0000	0.03199	3.20	0.892
4.695	2.167	501.	0.0000	0.03199	3.20	0.892
9.695	3.114	498.	0.0000	0.03189	3.19	0.892
14.695	3.833	498.	0.0000	0.03191	3.19	0.892
19.695	4.438	501.	0.0000	0.03186	3.19	0.892
24.695	4.969	498.	0.0000	0.03186	3.19	0.892
29.694	5.449	498.	0.0000	0.03183	3.18	0.892
39.694	6.300	498.	0.0000	0.03181	3.18	0.892
49.695	7.049	498.	0.0000	0.03175	3.18	0.892
59.695	7.726	498.	0.0000	0.03174	3.17	0.892
69.694	8.348	498.	0.0000	0.03175	3.18	0.892
79.694	8.927	498.	0.0000	0.03172	3.17	0.892
89.695	9.471	498.	0.0000	0.03169	3.17	0.893
99.695	9.985	498.	0.0000	0.03161	3.16	0.893
109.695	10.474	498.	0.0000	0.03164	3.16	0.893
119.694	10.940	498.	0.0000	0.03162	3.16	0.893
129.176	11.366	498.	0.0000	0.03166	3.17	0.893

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 17

Constant Load Step

Stress: 125 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.691		501.	0.0000	0.03164	3.16	0.893
-0.689		501.	0.0000	0.03164	3.16	0.893
-0.687		501.	0.0000	0.03164	3.16	0.893
-0.686		464.	0.0000	0.03161	3.16	0.893
-0.684		464.	0.0000	0.03161	3.16	0.893
-0.682		419.	0.0000	0.03151	3.15	0.893
-0.681		419.	0.0000	0.03151	3.15	0.893
-0.678		419.	0.0000	0.03151	3.15	0.893
-0.677		412.	0.0000	0.03142	3.14	0.893
-0.675		412.	0.0000	0.03142	3.14	0.893
-0.673		412.	0.0000	0.03142	3.14	0.893
-0.665		391.	0.0000	0.03124	3.12	0.893
-0.657		378.	0.0000	0.03107	3.11	0.894
-0.648		364.	0.0000	0.03090	3.09	0.894
-0.640		353.	0.0000	0.03069	3.07	0.894
-0.615		321.	0.0000	0.03031	3.03	0.895
-0.607		314.	0.0000	0.03023	3.02	0.895
-0.523		262.	0.0000	0.02907	2.91	0.898
-0.440		225.	0.0000	0.02833	2.83	0.899
-0.357		205.	0.0000	0.02770	2.77	0.900
-0.190		180.	0.0000	0.02678	2.68	0.902
0.000	0.000	162.	0.0000	0.02613	2.61	0.903
0.060	0.245	157.	0.0000	0.02592	2.59	0.904
0.310	0.557	146.	0.0000	0.02554	2.55	0.905
0.810	0.900	134.	0.0000	0.02496	2.50	0.906
1.810	1.345	127.	0.0000	0.02456	2.46	0.906
3.810	1.952	123.	0.0000	0.02417	2.42	0.907
4.310	2.076	125.	0.0000	0.02409	2.41	0.907
9.310	3.051	123.	0.0000	0.02385	2.38	0.908
14.310	3.783	123.	0.0000	0.02375	2.38	0.908
19.310	4.394	123.	0.0000	0.02377	2.38	0.908
24.309	4.930	123.	0.0000	0.02372	2.37	0.908
29.309	5.414	123.	0.0000	0.02363	2.36	0.908
39.310	6.270	123.	0.0000	0.02353	2.35	0.908
49.310	7.022	123.	0.0000	0.02348	2.35	0.909
59.310	7.701	123.	0.0000	0.02347	2.35	0.909
69.309	8.325	123.	0.0000	0.02344	2.34	0.909
79.310	8.906	123.	0.0000	0.02341	2.34	0.909
89.310	9.450	123.	0.0000	0.02337	2.34	0.909
99.310	9.965	123.	0.0000	0.02339	2.34	0.909
109.309	10.455	123.	0.0000	0.02339	2.34	0.909
119.309	10.923	125.	0.0000	0.02333	2.33	0.909
119.465	10.930	123.	0.0000	0.02333	2.33	0.909

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 17

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-2.361		123.	0.0000	0.02333	2.33	0.909
-2.359		123.	0.0000	0.02333	2.33	0.909
-2.357		123.	0.0000	0.02333	2.33	0.909
-2.356		125.	0.0000	0.02333	2.33	0.909
-2.354		125.	0.0000	0.02333	2.33	0.909
-2.352		127.	0.0000	0.02334	2.33	0.909
-2.351		127.	0.0000	0.02334	2.33	0.909
-2.349		127.	0.0000	0.02334	2.33	0.909
-2.348		137.	0.0000	0.02339	2.34	0.909
-2.345		137.	0.0000	0.02339	2.34	0.909
-2.343		137.	0.0000	0.02339	2.34	0.909
-2.335		150.	0.0000	0.02337	2.34	0.909
-2.327		162.	0.0000	0.02342	2.34	0.909
-2.318		168.	0.0000	0.02345	2.35	0.909
-2.310		173.	0.0000	0.02347	2.35	0.909
-2.285		187.	0.0000	0.02355	2.35	0.908
-2.277		187.	0.0000	0.02355	2.35	0.908
-2.193		200.	0.0000	0.02364	2.36	0.908
-2.110		200.	0.0000	0.02380	2.38	0.908
-2.027		203.	0.0000	0.02386	2.39	0.908
-1.860		200.	0.0000	0.02386	2.39	0.908
-1.610		200.	0.0000	0.02386	2.39	0.908
-1.360		200.	0.0000	0.02390	2.39	0.908
-0.860		200.	0.0000	0.02388	2.39	0.908
0.000	0.000	238.	0.0000	0.02392	2.39	0.908
0.139	0.373	244.	0.0000	0.02393	2.39	0.908
2.140	1.463	248.	0.0000	0.02399	2.40	0.908
2.640	1.625	248.	0.0000	0.02398	2.40	0.908
7.640	2.764	248.	0.0000	0.02399	2.40	0.908
12.640	3.555	248.	0.0000	0.02396	2.40	0.908
17.639	4.200	248.	0.0000	0.02396	2.40	0.908
22.639	4.758	248.	0.0000	0.02396	2.40	0.908
27.639	5.257	248.	0.0000	0.02401	2.40	0.908
37.640	6.135	248.	0.0000	0.02393	2.39	0.908
47.640	6.902	248.	0.0000	0.02396	2.40	0.908
57.640	7.592	248.	0.0000	0.02399	2.40	0.908
67.639	8.224	248.	0.0000	0.02398	2.40	0.908
77.639	8.811	250.	0.0000	0.02398	2.40	0.908
87.640	9.362	248.	0.0000	0.02394	2.39	0.908
97.640	9.881	248.	0.0000	0.02396	2.40	0.908
107.639	10.375	248.	0.0000	0.02394	2.39	0.908
117.639	10.846	248.	0.0000	0.02399	2.40	0.908
117.648	10.847	248.	0.0000	0.02398	2.40	0.908

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 17

Constant Load Step

Stress: 500 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.375		248.	0.0000	0.02398	2.40	0.908
-0.373		248.	0.0000	0.02398	2.40	0.908
-0.371		248.	0.0000	0.02398	2.40	0.908
-0.370		248.	0.0000	0.02399	2.40	0.908
-0.368		248.	0.0000	0.02399	2.40	0.908
-0.365		255.	0.0000	0.02398	2.40	0.908
-0.364		255.	0.0000	0.02398	2.40	0.908
-0.362		255.	0.0000	0.02398	2.40	0.908
-0.361		257.	0.0000	0.02399	2.40	0.908
-0.359		257.	0.0000	0.02399	2.40	0.908
-0.357		257.	0.0000	0.02399	2.40	0.908
-0.349		284.	0.0000	0.02404	2.40	0.907
-0.340		303.	0.0000	0.02418	2.42	0.907
-0.332		314.	0.0000	0.02432	2.43	0.907
-0.324		325.	0.0000	0.02437	2.44	0.907
-0.299		355.	0.0000	0.02462	2.46	0.906
-0.290		364.	0.0000	0.02466	2.47	0.906
-0.207		416.	0.0000	0.02508	2.51	0.905
-0.124		453.	0.0000	0.02532	2.53	0.905
-0.041		471.	0.0000	0.02545	2.54	0.905
0.000	0.000	475.	0.0000	0.02549	2.55	0.905
0.126	0.355	487.	0.0000	0.02562	2.56	0.904
0.376	0.613	494.	0.0000	0.02569	2.57	0.904
0.626	0.791	496.	0.0000	0.02572	2.57	0.904
1.126	1.061	498.	0.0000	0.02578	2.58	0.904
2.126	1.458	498.	0.0000	0.02576	2.58	0.904
4.126	2.031	498.	0.0000	0.02580	2.58	0.904
4.626	2.151	498.	0.0000	0.02586	2.59	0.904
9.626	3.103	498.	0.0000	0.02586	2.59	0.904
14.626	3.824	498.	0.0000	0.02588	2.59	0.904
19.626	4.430	498.	0.0000	0.02584	2.58	0.904
24.626	4.962	498.	0.0000	0.02584	2.58	0.904
29.626	5.443	498.	0.0000	0.02586	2.59	0.904
39.626	6.295	498.	0.0000	0.02588	2.59	0.904
49.626	7.045	498.	0.0000	0.02599	2.60	0.904
59.626	7.722	498.	0.0000	0.02600	2.60	0.904
69.625	8.344	498.	0.0000	0.02607	2.61	0.903
79.626	8.923	498.	0.0000	0.02610	2.61	0.903
89.626	9.467	498.	0.0000	0.02616	2.62	0.903
99.626	9.981	498.	0.0000	0.02615	2.61	0.903
109.625	10.470	498.	0.0000	0.02621	2.62	0.903
119.626	10.937	498.	0.0000	0.02622	2.62	0.903
129.626	11.385	498.	0.0000	0.02622	2.62	0.903
139.626	11.816	498.	0.0000	0.02624	2.62	0.903
149.625	12.232	498.	0.0000	0.02626	2.63	0.903
159.626	12.634	498.	0.0000	0.02630	2.63	0.903
169.626	13.024	498.	0.0000	0.02627	2.63	0.903
179.626	13.402	498.	0.0000	0.02635	2.64	0.903
189.625	13.770	498.	0.0000	0.02635	2.64	0.903
199.626	14.129	498.	0.0000	0.02638	2.64	0.903

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 17

Constant Load Step

Stress: 500 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
209.626	14.478	498.	0.0000	0.02638	2.64	0.903
219.626	14.820	498.	0.0000	0.02643	2.64	0.903
229.625	15.153	498.	0.0000	0.02637	2.64	0.903
239.626	15.480	498.	0.0000	0.02646	2.65	0.903
249.626	15.800	498.	0.0000	0.02640	2.64	0.903
259.626	16.113	498.	0.0000	0.02643	2.64	0.903
269.626	16.420	498.	0.0000	0.02649	2.65	0.903
278.203	16.679	498.	0.0000	0.02648	2.65	0.903

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 17

Constant Load Step

Stress: 1e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.311		498.	0.0000	0.02648	2.65	0.903
-0.309		498.	0.0000	0.02648	2.65	0.903
-0.307		498.	0.0000	0.02648	2.65	0.903
-0.306		530.	0.0000	0.02646	2.65	0.903
-0.304		530.	0.0000	0.02646	2.65	0.903
-0.302		558.	0.0000	0.02657	2.66	0.903
-0.301		558.	0.0000	0.02657	2.66	0.903
-0.299		558.	0.0000	0.02657	2.66	0.903
-0.298		576.	0.0000	0.02668	2.67	0.902
-0.296		576.	0.0000	0.02668	2.67	0.902
-0.294		576.	0.0000	0.02668	2.67	0.902
-0.285		603.	0.0000	0.02702	2.70	0.902
-0.277		640.	0.0000	0.02732	2.73	0.901
-0.269		667.	0.0000	0.02760	2.76	0.900
-0.260		690.	0.0000	0.02787	2.79	0.900
-0.235		751.	0.0000	0.02833	2.83	0.899
-0.227		767.	0.0000	0.02847	2.85	0.899
-0.144		872.	0.0000	0.02958	2.96	0.897
-0.060		929.	0.0000	0.03026	3.03	0.895
0.000	0.000	950.	0.0000	0.03050	3.05	0.895
0.023	0.152	958.	0.0000	0.03059	3.06	0.895
0.190	0.436	985.	0.0000	0.03082	3.08	0.894
0.440	0.663	995.	0.0000	0.03096	3.10	0.894
0.690	0.830	997.	0.0000	0.03105	3.11	0.894
1.189	1.091	997.	0.0000	0.03110	3.11	0.894
2.189	1.480	997.	0.0000	0.03116	3.12	0.894
4.190	2.047	999.	0.0000	0.03126	3.13	0.893
4.690	2.166	999.	0.0000	0.03128	3.13	0.893
9.690	3.113	999.	0.0000	0.03139	3.14	0.893
14.689	3.833	999.	0.0000	0.03147	3.15	0.893
19.689	4.437	999.	0.0000	0.03148	3.15	0.893
24.689	4.969	999.	0.0000	0.03147	3.15	0.893
29.689	5.449	999.	0.0000	0.03147	3.15	0.893
39.689	6.300	999.	0.0000	0.03156	3.16	0.893
49.690	7.049	999.	0.0000	0.03164	3.16	0.893
59.690	7.726	999.	0.0000	0.03159	3.16	0.893
69.690	8.348	999.	0.0000	0.03159	3.16	0.893
79.690	8.927	999.	0.0000	0.03170	3.17	0.892
89.689	9.470	999.	0.0000	0.03167	3.17	0.893
99.689	9.984	999.	0.0000	0.03177	3.18	0.892
109.690	10.473	999.	0.0000	0.03170	3.17	0.892
119.690	10.940	999.	0.0000	0.03170	3.17	0.892
119.841	10.947	999.	0.0000	0.03175	3.18	0.892

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 17

Constant Load Step

Stress: 2e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.244		999.	0.0000	0.03170	3.17	0.892
-0.242		999.	0.0000	0.03170	3.17	0.892
-0.240		999.	0.0000	0.03170	3.17	0.892
-0.239		1.12e+03	0.0000	0.03227	3.23	0.891
-0.237		1.12e+03	0.0000	0.03227	3.23	0.891
-0.235		1.16e+03	0.0000	0.03245	3.24	0.891
-0.234		1.16e+03	0.0000	0.03245	3.24	0.891
-0.232		1.16e+03	0.0000	0.03245	3.24	0.891
-0.231		1.20e+03	0.0000	0.03261	3.26	0.891
-0.229		1.20e+03	0.0000	0.03261	3.26	0.891
-0.227		1.20e+03	0.0000	0.03261	3.26	0.891
-0.218		1.27e+03	0.0000	0.03291	3.29	0.890
-0.210		1.33e+03	0.0000	0.03324	3.32	0.889
-0.202		1.39e+03	0.0000	0.03346	3.35	0.889
-0.193		1.44e+03	0.0000	0.03373	3.37	0.889
-0.169		1.56e+03	0.0000	0.03444	3.44	0.887
-0.160		1.59e+03	0.0000	0.03487	3.49	0.886
-0.077		1.81e+03	0.0000	0.03672	3.67	0.883
0.000	0.000	1.90e+03	0.0000	0.03732	3.73	0.881
0.006	0.080	1.91e+03	0.0000	0.03737	3.74	0.881
0.090	0.300	1.95e+03	0.0000	0.03759	3.76	0.881
0.256	0.506	1.98e+03	0.0000	0.03772	3.77	0.881
0.506	0.712	1.99e+03	0.0000	0.03778	3.78	0.881
0.756	0.870	1.99e+03	0.0000	0.03783	3.78	0.881
1.256	1.121	1.99e+03	0.0000	0.03794	3.79	0.880
2.256	1.502	2.00e+03	0.0000	0.03801	3.80	0.880
4.257	2.063	2.00e+03	0.0000	0.03816	3.82	0.880
4.756	2.181	2.00e+03	0.0000	0.03820	3.82	0.880
9.757	3.124	2.00e+03	0.0000	0.03835	3.84	0.879
14.756	3.841	2.00e+03	0.0000	0.03842	3.84	0.879
19.756	4.445	2.00e+03	0.0000	0.03835	3.84	0.879
24.756	4.976	2.00e+03	0.0000	0.03835	3.84	0.879
29.756	5.455	2.01e+03	0.0000	0.03858	3.86	0.879
39.756	6.305	2.00e+03	0.0000	0.03861	3.86	0.879
49.756	7.054	2.00e+03	0.0000	0.03858	3.86	0.879
59.756	7.730	2.00e+03	0.0000	0.03862	3.86	0.879
69.756	8.352	2.00e+03	0.0000	0.03867	3.87	0.879
79.757	8.931	2.00e+03	0.0000	0.03867	3.87	0.879
89.756	9.474	2.00e+03	0.0000	0.03870	3.87	0.879
99.756	9.988	2.00e+03	0.0000	0.03872	3.87	0.879
109.756	10.476	2.00e+03	0.0000	0.03880	3.88	0.879
119.756	10.943	2.00e+03	0.0000	0.03877	3.88	0.879
129.757	11.391	2.00e+03	0.0000	0.03881	3.88	0.879
136.114	11.667	2.00e+03	0.0000	0.03878	3.88	0.879

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 12 of 17

Constant Load Step

Stress: 4e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.266		2.00e+03	0.0000	0.03878	3.88	0.879
-0.264		2.00e+03	0.0000	0.03878	3.88	0.879
-0.262		2.00e+03	0.0000	0.03878	3.88	0.879
-0.261		2.20e+03	0.0000	0.03911	3.91	0.878
-0.259		2.20e+03	0.0000	0.03911	3.91	0.878
-0.257		2.33e+03	0.0000	0.03992	3.99	0.876
-0.256		2.33e+03	0.0000	0.03992	3.99	0.876
-0.254		2.33e+03	0.0000	0.03992	3.99	0.876
-0.253		2.42e+03	0.0000	0.04073	4.07	0.875
-0.251		2.42e+03	0.0000	0.04073	4.07	0.875
-0.248		2.42e+03	0.0000	0.04073	4.07	0.875
-0.240		2.57e+03	0.0000	0.04147	4.15	0.873
-0.232		2.69e+03	0.0000	0.04216	4.22	0.872
-0.223		2.79e+03	0.0000	0.04290	4.29	0.871
-0.215		2.89e+03	0.0000	0.04358	4.36	0.869
-0.190		3.12e+03	0.0000	0.04518	4.52	0.866
-0.182		3.18e+03	0.0000	0.04545	4.54	0.866
-0.098		3.57e+03	0.0000	0.04946	4.95	0.858
-0.015		3.78e+03	0.0000	0.05079	5.08	0.855
0.000	0.000	3.80e+03	0.0000	0.05096	5.10	0.855
0.068	0.261	3.88e+03	0.0000	0.05172	5.17	0.853
0.235	0.485	3.95e+03	0.0000	0.05210	5.21	0.853
0.485	0.696	3.98e+03	0.0000	0.05265	5.27	0.852
0.735	0.857	3.99e+03	0.0000	0.05294	5.29	0.851
1.235	1.111	3.99e+03	0.0000	0.05329	5.33	0.850
2.234	1.495	3.99e+03	0.0000	0.05387	5.39	0.849
4.235	2.058	4.00e+03	0.0000	0.05454	5.45	0.848
4.735	2.176	4.00e+03	0.0000	0.05459	5.46	0.848
9.735	3.120	4.00e+03	0.0000	0.05512	5.51	0.847
14.735	3.839	4.00e+03	0.0000	0.05520	5.52	0.847
19.734	4.442	4.00e+03	0.0000	0.05541	5.54	0.846
24.734	4.973	4.00e+03	0.0000	0.05552	5.55	0.846
29.734	5.453	4.00e+03	0.0000	0.05552	5.55	0.846
39.734	6.304	4.00e+03	0.0000	0.05555	5.56	0.846
49.735	7.052	4.00e+03	0.0000	0.05566	5.57	0.846
59.735	7.729	4.00e+03	0.0000	0.05571	5.57	0.846
69.735	8.351	4.00e+03	0.0000	0.05584	5.58	0.845
79.735	8.929	4.00e+03	0.0000	0.05584	5.58	0.845
89.734	9.473	4.00e+03	0.0000	0.05593	5.59	0.845
99.734	9.987	4.00e+03	0.0000	0.05587	5.59	0.845
109.735	10.475	4.00e+03	0.0000	0.05590	5.59	0.845
119.734	10.942	4.00e+03	0.0000	0.05593	5.59	0.845
120.044	10.956	4.00e+03	0.0000	0.05595	5.59	0.845

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 13 of 17

Constant Load Step

Stress: 8e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.184		4.00e+03	0.0000	0.05593	5.59	0.845
-0.182		4.00e+03	0.0000	0.05593	5.59	0.845
-0.180		4.00e+03	0.0000	0.05593	5.59	0.845
-0.179		4.43e+03	0.0000	0.05619	5.62	0.845
-0.177		4.43e+03	0.0000	0.05619	5.62	0.845
-0.175		4.80e+03	0.0000	0.05710	5.71	0.843
-0.174		4.80e+03	0.0000	0.05710	5.71	0.843
-0.171		4.80e+03	0.0000	0.05710	5.71	0.843
-0.170		5.03e+03	0.0000	0.05777	5.78	0.842
-0.168		5.03e+03	0.0000	0.05777	5.78	0.842
-0.166		5.03e+03	0.0000	0.05777	5.78	0.842
-0.158		5.39e+03	0.0000	0.05948	5.95	0.838
-0.150		5.68e+03	0.0000	0.06111	6.11	0.835
-0.141		5.94e+03	0.0000	0.06235	6.23	0.833
-0.133		6.16e+03	0.0000	0.06339	6.34	0.831
-0.108		6.69e+03	0.0000	0.06619	6.62	0.825
-0.100		6.83e+03	0.0000	0.06676	6.68	0.824
-0.016		7.55e+03	0.0000	0.07009	7.01	0.817
0.000	0.000	7.60e+03	0.0000	0.07038	7.04	0.817
0.067	0.259	7.81e+03	0.0000	0.07159	7.16	0.815
0.150	0.388	7.90e+03	0.0000	0.07273	7.27	0.812
0.317	0.563	7.96e+03	0.0000	0.07349	7.35	0.811
0.567	0.753	7.98e+03	0.0000	0.07387	7.39	0.810
0.817	0.904	7.99e+03	0.0000	0.07397	7.40	0.810
1.317	1.147	7.99e+03	0.0000	0.07419	7.42	0.809
2.317	1.522	8.00e+03	0.0000	0.07456	7.46	0.809
4.316	2.078	8.00e+03	0.0000	0.07498	7.50	0.808
4.816	2.195	8.00e+03	0.0000	0.07503	7.50	0.808
9.816	3.133	8.00e+03	0.0000	0.07565	7.56	0.807
14.816	3.849	8.00e+03	0.0000	0.07581	7.58	0.806
19.817	4.452	8.00e+03	0.0000	0.07601	7.60	0.806
24.816	4.982	8.00e+03	0.0000	0.07603	7.60	0.806
29.817	5.461	8.00e+03	0.0000	0.07603	7.60	0.806
39.817	6.310	8.00e+03	0.0000	0.07606	7.61	0.806
49.817	7.058	8.00e+03	0.0000	0.07639	7.64	0.805
59.817	7.734	8.00e+03	0.0000	0.07647	7.65	0.805
69.817	8.356	8.00e+03	0.0000	0.07647	7.65	0.805
79.817	8.934	8.00e+03	0.0000	0.07647	7.65	0.805
89.817	9.477	8.00e+03	0.0000	0.07649	7.65	0.805
99.817	9.991	8.00e+03	0.0000	0.07650	7.65	0.805
109.817	10.479	8.00e+03	0.0000	0.07652	7.65	0.805
119.817	10.946	8.00e+03	0.0000	0.07666	7.67	0.805
120.101	10.959	8.00e+03	0.0000	0.07661	7.66	0.805

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 14 of 17

Constant Load Step

Stress: 1.6e+04 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.131		8.00e+03	0.0000	0.07663	7.66	0.805
-0.129		8.00e+03	0.0000	0.07663	7.66	0.805
-0.127		8.00e+03	0.0000	0.07663	7.66	0.805
-0.126		8.66e+03	0.0000	0.07698	7.70	0.804
-0.123		8.66e+03	0.0000	0.07698	7.70	0.804
-0.121		9.58e+03	0.0000	0.07850	7.85	0.801
-0.120		9.58e+03	0.0000	0.07850	7.85	0.801
-0.118		9.58e+03	0.0000	0.07850	7.85	0.801
-0.117		1.02e+04	0.0000	0.07946	7.95	0.799
-0.115		1.02e+04	0.0000	0.07946	7.95	0.799
-0.113		1.02e+04	0.0000	0.07946	7.95	0.799
-0.105		1.12e+04	0.0000	0.08206	8.21	0.794
-0.096		1.20e+04	0.0000	0.08458	8.46	0.789
-0.088		1.27e+04	0.0000	0.08642	8.64	0.786
-0.080		1.33e+04	0.0000	0.08784	8.78	0.783
-0.055		1.44e+04	0.0000	0.09204	9.20	0.775
-0.046		1.46e+04	0.0000	0.09289	9.29	0.773
0.000	0.000	1.52e+04	0.0000	0.09472	9.47	0.769
0.037	0.192	1.56e+04	0.0000	0.09617	9.62	0.766
0.120	0.347	1.59e+04	0.0000	0.09750	9.75	0.764
0.204	0.451	1.59e+04	0.0000	0.09790	9.79	0.763
0.370	0.608	1.60e+04	0.0000	0.09845	9.85	0.762
0.620	0.787	1.60e+04	0.0000	0.09880	9.88	0.761
0.870	0.933	1.60e+04	0.0000	0.09901	9.90	0.761
1.370	1.170	1.60e+04	0.0000	0.09956	9.96	0.760
2.370	1.539	1.60e+04	0.0000	0.1002	10.0	0.759
4.370	2.091	1.60e+04	0.0000	0.1009	10.1	0.757
4.870	2.207	1.60e+04	0.0000	0.1011	10.1	0.757
9.870	3.142	1.60e+04	0.0000	0.1017	10.2	0.756
14.870	3.856	1.60e+04	0.0000	0.1020	10.2	0.755
19.870	4.458	1.60e+04	0.0000	0.1021	10.2	0.755
24.870	4.987	1.60e+04	0.0000	0.1022	10.2	0.755
29.870	5.465	1.60e+04	0.0000	0.1023	10.2	0.755
39.870	6.314	1.60e+04	0.0000	0.1024	10.2	0.754
49.870	7.062	1.60e+04	0.0000	0.1024	10.2	0.754
59.870	7.738	1.60e+04	0.0000	0.1025	10.3	0.754
69.870	8.359	1.60e+04	0.0000	0.1026	10.3	0.754
79.870	8.937	1.60e+04	0.0000	0.1026	10.3	0.754
89.870	9.480	1.60e+04	0.0000	0.1028	10.3	0.754
99.870	9.993	1.60e+04	0.0000	0.1029	10.3	0.753
109.870	10.482	1.60e+04	0.0000	0.1029	10.3	0.753
119.870	10.949	1.60e+04	0.0000	0.1029	10.3	0.753
120.123	10.960	1.60e+04	0.0000	0.1029	10.3	0.753

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 15 of 17

Constant Load Step

Stress: 4e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.057		1.60e+04	0.0000	0.1029	10.3	0.753
-0.054		1.60e+04	0.0000	0.1029	10.3	0.753
-0.052		1.60e+04	0.0000	0.1029	10.3	0.753
-0.051		1.54e+04	0.0000	0.1027	10.3	0.754
-0.049		1.54e+04	0.0000	0.1027	10.3	0.754
-0.047		1.32e+04	0.0000	0.1023	10.2	0.754
-0.046		1.32e+04	0.0000	0.1023	10.2	0.754
-0.044		1.32e+04	0.0000	0.1023	10.2	0.754
-0.043		1.14e+04	0.0000	0.1018	10.2	0.755
-0.041		1.14e+04	0.0000	0.1018	10.2	0.755
-0.039		1.14e+04	0.0000	0.1018	10.2	0.755
-0.031		8.53e+03	0.0000	0.09958	9.96	0.760
-0.022		6.74e+03	0.0000	0.09829	9.83	0.762
-0.014		5.86e+03	0.0000	0.09714	9.71	0.765
-0.006		5.35e+03	0.0000	0.09649	9.65	0.766
0.000	0.000	5.20e+03	0.0000	0.09615	9.62	0.767
0.019	0.139	4.66e+03	0.0000	0.09498	9.50	0.769
0.028	0.167	4.54e+03	0.0000	0.09481	9.48	0.769
0.111	0.333	4.16e+03	0.0000	0.09395	9.40	0.771
0.194	0.441	4.05e+03	0.0000	0.09367	9.37	0.771
0.278	0.527	4.03e+03	0.0000	0.09353	9.35	0.772
0.444	0.667	4.01e+03	0.0000	0.09345	9.34	0.772
0.694	0.833	4.01e+03	0.0000	0.09346	9.35	0.772
0.944	0.972	4.00e+03	0.0000	0.09335	9.34	0.772
1.444	1.202	4.00e+03	0.0000	0.09332	9.33	0.772
2.444	1.563	4.00e+03	0.0000	0.09310	9.31	0.772
4.444	2.108	4.00e+03	0.0000	0.09310	9.31	0.772
4.944	2.224	4.00e+03	0.0000	0.09310	9.31	0.772
9.944	3.153	4.00e+03	0.0000	0.09310	9.31	0.772
14.944	3.866	4.00e+03	0.0000	0.09308	9.31	0.773
19.944	4.466	4.00e+03	0.0000	0.09305	9.31	0.773
24.944	4.994	4.00e+03	0.0000	0.09307	9.31	0.773
29.944	5.472	4.00e+03	0.0000	0.09307	9.31	0.773
39.944	6.320	4.00e+03	0.0000	0.09304	9.30	0.773
49.944	7.067	4.00e+03	0.0000	0.09304	9.30	0.773
59.944	7.742	4.00e+03	0.0000	0.09304	9.30	0.773
69.944	8.363	4.00e+03	0.0000	0.09304	9.30	0.773
79.944	8.941	4.00e+03	0.0000	0.09302	9.30	0.773
89.944	9.484	4.00e+03	0.0000	0.09297	9.30	0.773
99.944	9.997	4.00e+03	0.0000	0.09299	9.30	0.773
109.944	10.485	4.00e+03	0.0000	0.09302	9.30	0.773
119.944	10.952	4.00e+03	0.0000	0.09296	9.30	0.773
120.122	10.960	4.00e+03	0.0000	0.09296	9.30	0.773

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 16 of 17

Constant Load Step

Stress: 1e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.210		4.00e+03	0.0000	0.09296	9.30	0.773
-0.208		4.00e+03	0.0000	0.09296	9.30	0.773
-0.206		4.00e+03	0.0000	0.09296	9.30	0.773
-0.205		4.00e+03	0.0000	0.09296	9.30	0.773
-0.203		4.00e+03	0.0000	0.09296	9.30	0.773
-0.201		4.00e+03	0.0000	0.09296	9.30	0.773
-0.200		4.00e+03	0.0000	0.09296	9.30	0.773
-0.198		4.00e+03	0.0000	0.09296	9.30	0.773
-0.197		3.99e+03	0.0000	0.09296	9.30	0.773
-0.195		3.99e+03	0.0000	0.09296	9.30	0.773
-0.192		3.99e+03	0.0000	0.09296	9.30	0.773
-0.184		2.39e+03	0.0000	0.08981	8.98	0.779
-0.176		2.49e+03	0.0000	0.08979	8.98	0.779
-0.167		2.52e+03	0.0000	0.08973	8.97	0.779
-0.159		2.45e+03	0.0000	0.08963	8.96	0.779
-0.134		1.92e+03	0.0000	0.08738	8.74	0.784
-0.126		1.82e+03	0.0000	0.08683	8.68	0.785
-0.043		1.39e+03	0.0000	0.08436	8.44	0.790
0.000	0.000	1.30e+03	0.0000	0.08348	8.35	0.791
0.041	0.202	1.21e+03	0.0000	0.08263	8.26	0.793
0.124	0.352	1.14e+03	0.0000	0.08176	8.18	0.795
0.291	0.539	1.06e+03	0.0000	0.08068	8.07	0.797
0.541	0.735	1.02e+03	0.0000	0.08021	8.02	0.798
0.791	0.889	1.01e+03	0.0000	0.07997	8.00	0.798
1.291	1.136	1.01e+03	0.0000	0.07958	7.96	0.799
2.290	1.513	1.00e+03	0.0000	0.07908	7.91	0.800
4.291	2.071	1.00e+03	0.0000	0.07882	7.88	0.800
4.791	2.189	1.00e+03	0.0000	0.07882	7.88	0.800
9.791	3.129	999.	0.0000	0.07863	7.86	0.801
14.790	3.846	999.	0.0000	0.07853	7.85	0.801
19.791	4.449	999.	0.0000	0.07844	7.84	0.801
24.790	4.979	1.00e+03	0.0000	0.07834	7.83	0.801
29.790	5.458	999.	0.0000	0.07837	7.84	0.801
39.790	6.308	999.	0.0000	0.07828	7.83	0.801
49.791	7.056	999.	0.0000	0.07818	7.82	0.802
59.790	7.732	999.	0.0000	0.07823	7.82	0.802
69.790	8.354	999.	0.0000	0.07810	7.81	0.802
79.790	8.933	999.	0.0000	0.07802	7.80	0.802
89.790	9.476	999.	0.0000	0.07796	7.80	0.802
99.790	9.989	999.	0.0000	0.07790	7.79	0.802
109.791	10.478	999.	0.0000	0.07783	7.78	0.802
119.791	10.945	999.	0.0000	0.07780	7.78	0.802
122.726	11.078	999.	0.0000	0.07783	7.78	0.802

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 17 of 17

Constant Load Step

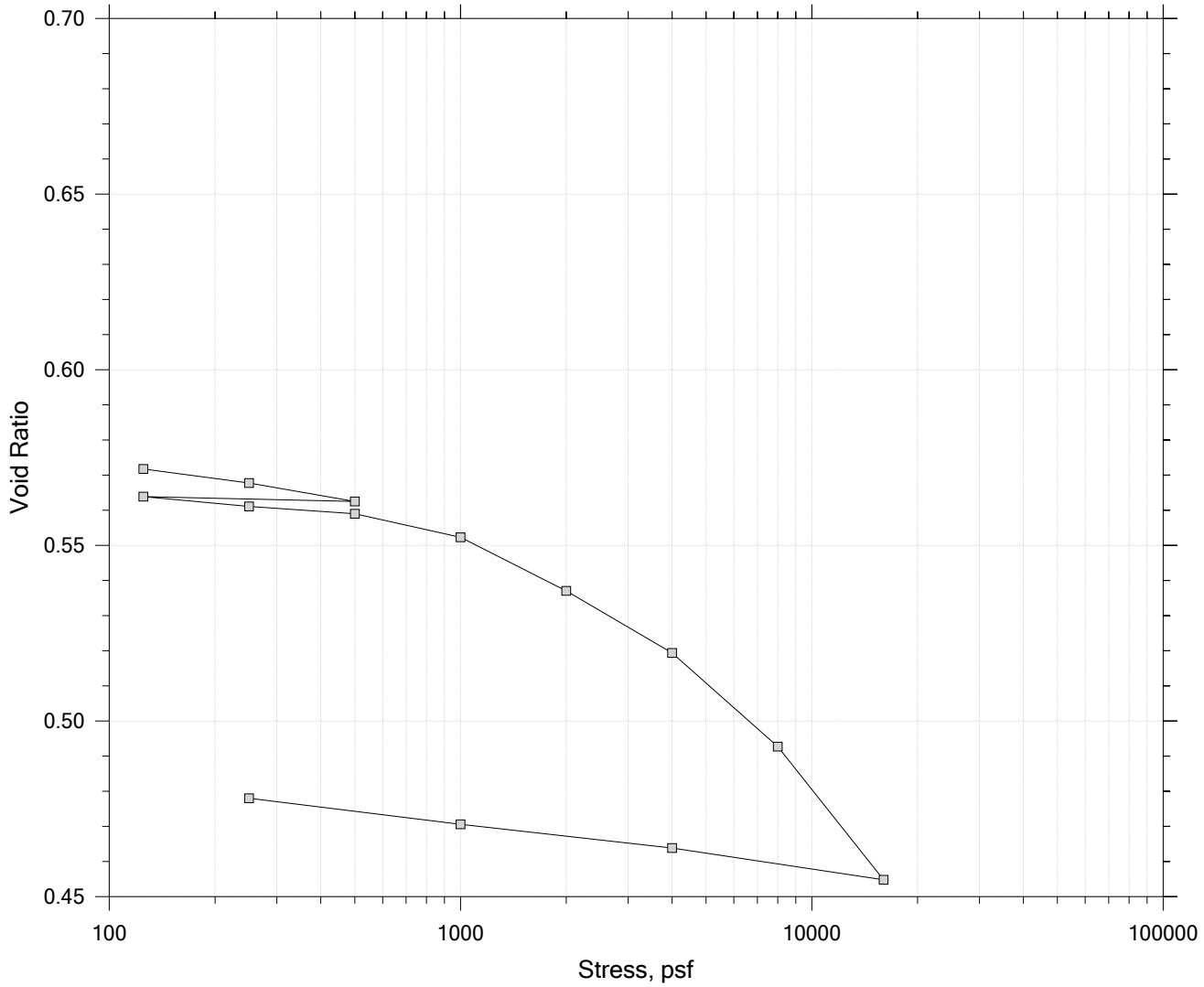
Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio
-0.698		1.00e+03	0.0000	0.07780	7.78	0.802
-0.696		1.00e+03	0.0000	0.07780	7.78	0.802
-0.694		1.00e+03	0.0000	0.07780	7.78	0.802
-0.693		931.	0.0000	0.07771	7.77	0.803
-0.691		931.	0.0000	0.07771	7.77	0.803
-0.689		844.	0.0000	0.07737	7.74	0.803
-0.688		844.	0.0000	0.07737	7.74	0.803
-0.686		844.	0.0000	0.07737	7.74	0.803
-0.685		803.	0.0000	0.07715	7.72	0.804
-0.683		803.	0.0000	0.07715	7.72	0.804
-0.680		803.	0.0000	0.07715	7.72	0.804
-0.672		753.	0.0000	0.07684	7.68	0.804
-0.664		717.	0.0000	0.07650	7.65	0.805
-0.655		692.	0.0000	0.07612	7.61	0.806
-0.647		669.	0.0000	0.07593	7.59	0.806
-0.622		612.	0.0000	0.07519	7.52	0.807
-0.614		599.	0.0000	0.07501	7.50	0.808
-0.530		508.	0.0000	0.07357	7.36	0.811
-0.447		448.	0.0000	0.07245	7.24	0.813
-0.364		407.	0.0000	0.07101	7.10	0.816
-0.197		357.	0.0000	0.06977	6.98	0.818
0.000	0.000	325.	0.0000	0.06872	6.87	0.820
0.053	0.230	316.	0.0000	0.06844	6.84	0.821
0.303	0.550	294.	0.0000	0.06790	6.79	0.822
0.803	0.896	271.	0.0000	0.06661	6.66	0.824
1.802	1.343	257.	0.0000	0.06562	6.56	0.826
3.803	1.950	250.	0.0000	0.06496	6.50	0.827
4.303	2.074	253.	0.0000	0.06480	6.48	0.828
9.303	3.050	250.	0.0000	0.06445	6.45	0.828
14.303	3.782	248.	0.0000	0.06417	6.42	0.829
19.302	4.393	248.	0.0000	0.06402	6.40	0.829
24.302	4.930	248.	0.0000	0.06395	6.39	0.829
29.302	5.413	248.	0.0000	0.06387	6.39	0.830
39.303	6.269	250.	0.0000	0.06388	6.39	0.830
49.303	7.022	248.	0.0000	0.06363	6.36	0.830
59.303	7.701	250.	0.0000	0.06339	6.34	0.831
69.302	8.325	248.	0.0000	0.06338	6.34	0.831
79.302	8.905	248.	0.0000	0.06331	6.33	0.831
89.302	9.450	248.	0.0000	0.06322	6.32	0.831
99.303	9.965	248.	0.0000	0.06320	6.32	0.831
109.303	10.455	248.	0.0000	0.06317	6.32	0.831
119.302	10.923	248.	0.0000	0.06309	6.31	0.831
119.679	10.940	248.	0.0000	0.06309	6.31	0.831

Project Name: I-75 @ Bethlehem Rd	Location: B2-3	Project Number: 6162232368
Boring Number: B2-3	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 15.0-17.0 ft
Test Number: 26623	Preparation: Intact	Elevation: N/A
Description: Brown Silty SAND		
Remarks:		

One-Dimensional Consolidation by ASTM D2435 - Method B

Summary Report

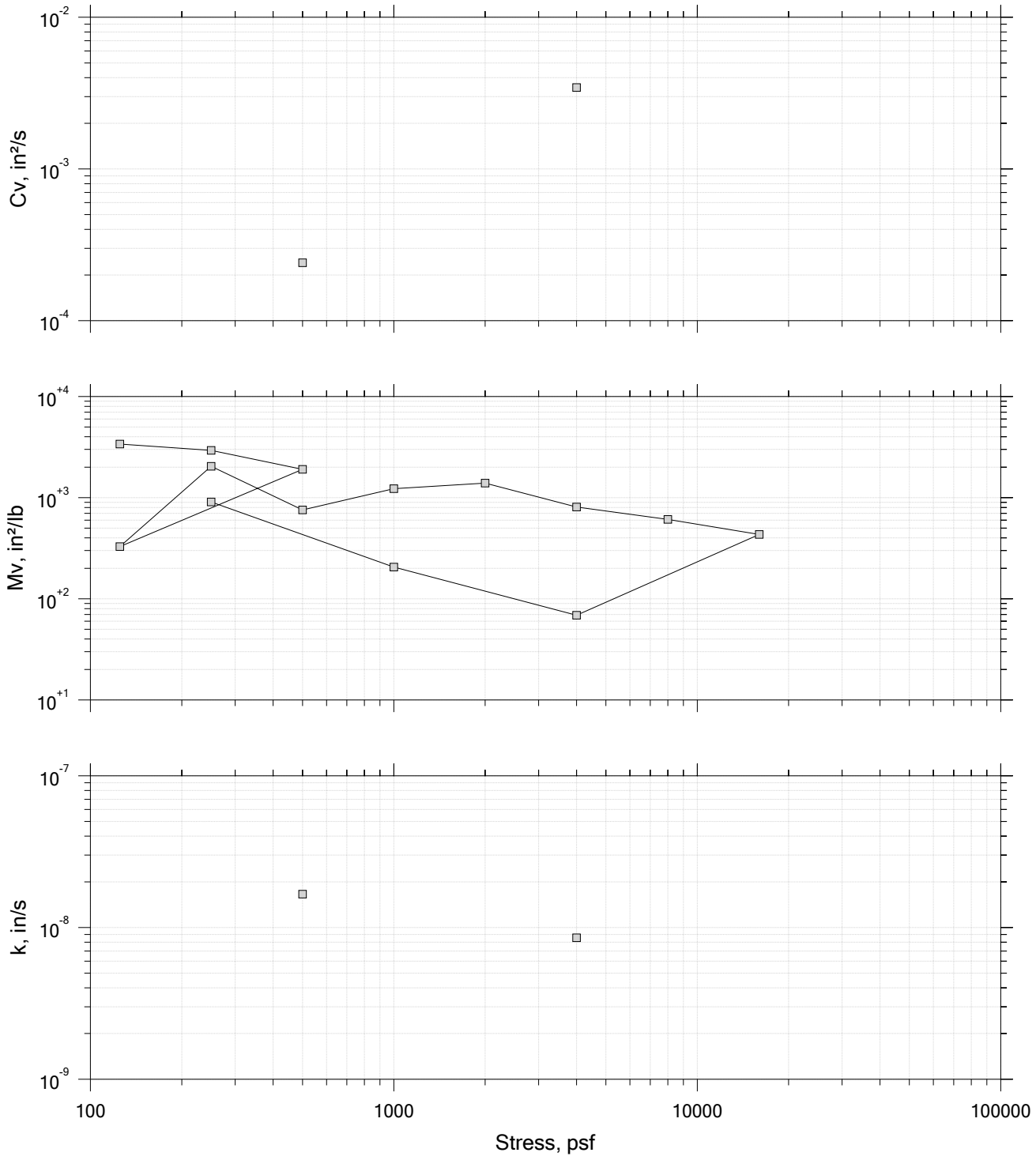


				Before Test	After Test
			Water Content, %	19.36	17.40
			Dry Unit Weight, pcf	106.92	114.04
			Saturation, %	90.70	98.27
Specimen Diameter, in: 2.502		Specimen Height, in: 1.000	Void Ratio	0.58	0.48
LL: 26	PL: 19	PI: 7	GS: 2.70		

	Project Name: See Remarks	Location: B3-1A	Project Number: US-EI-6162232368
	Boring Number: B3-1A	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
	Test Number: 26634	Preparation: Intact	Elevation: N/A
	Description: Brown Silty Clayey SAND		
	Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		
	Displacement at End of Increment		

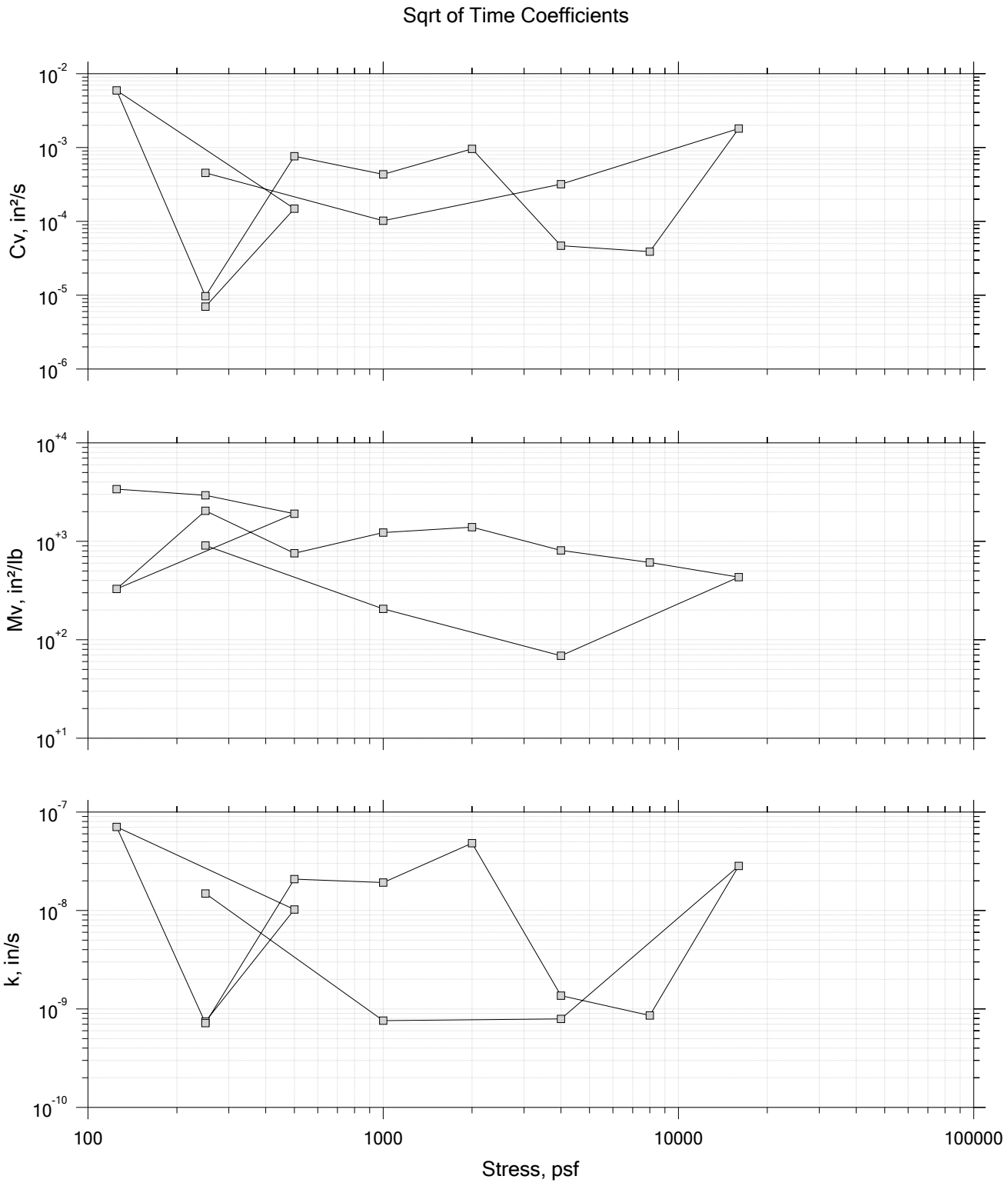
One-Dimensional Consolidation by ASTM D2435 - Method B

Log of Time Coefficients



Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

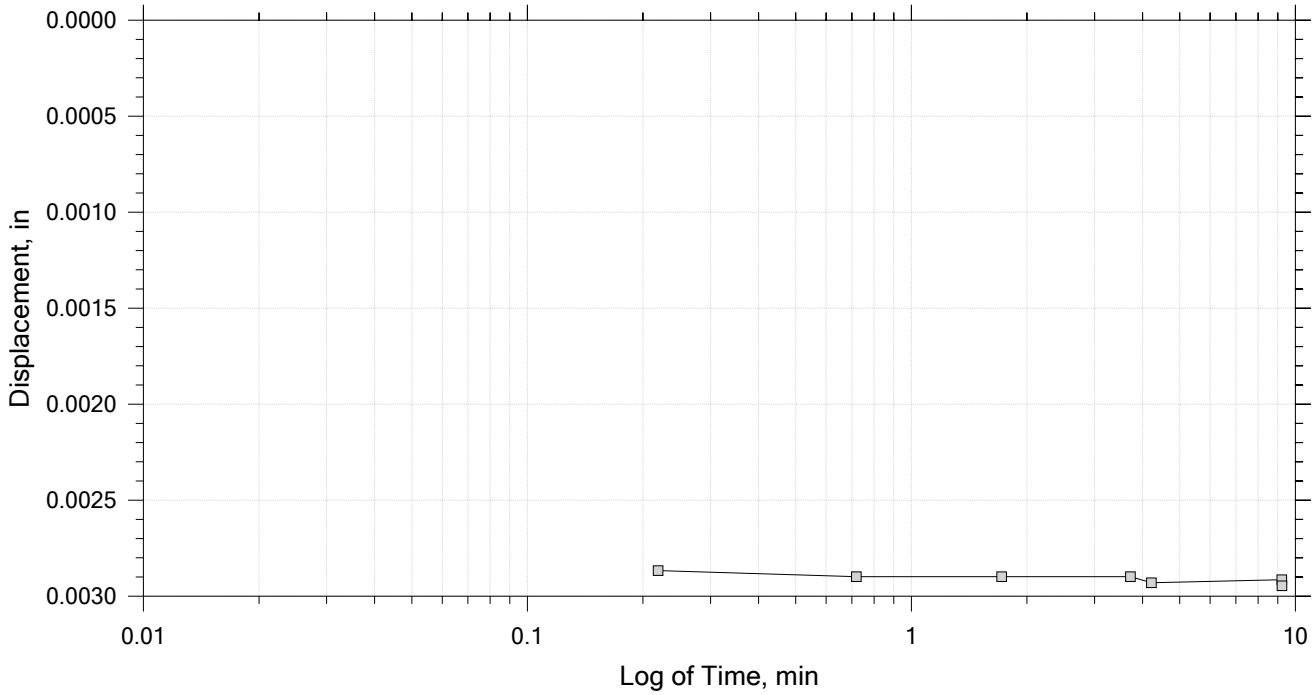
One-Dimensional Consolidation by ASTM D2435 - Method B

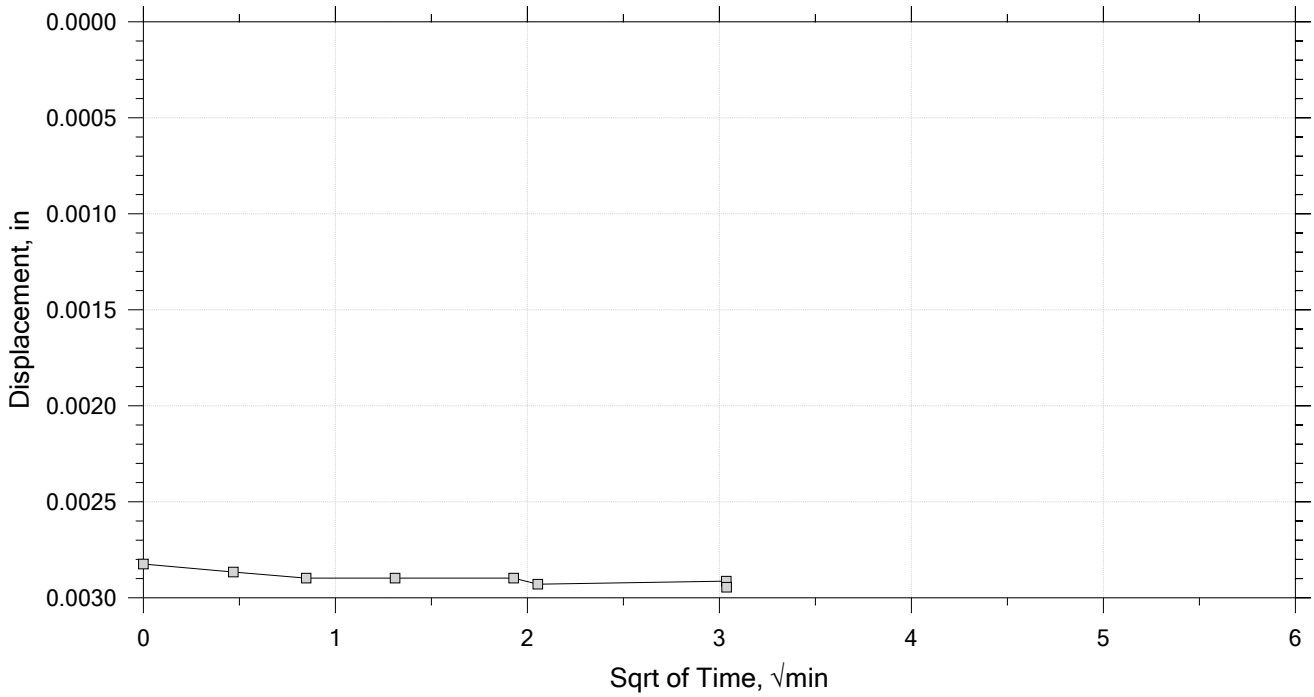


	Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
	Boring Number: B3-1A	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
	Test Number: 26634	Preparation: Intact	Elevation: N/A
	Description: Brown Silty Clayey SAND		
	Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 14
Constant Load Step
Stress: 125 psf

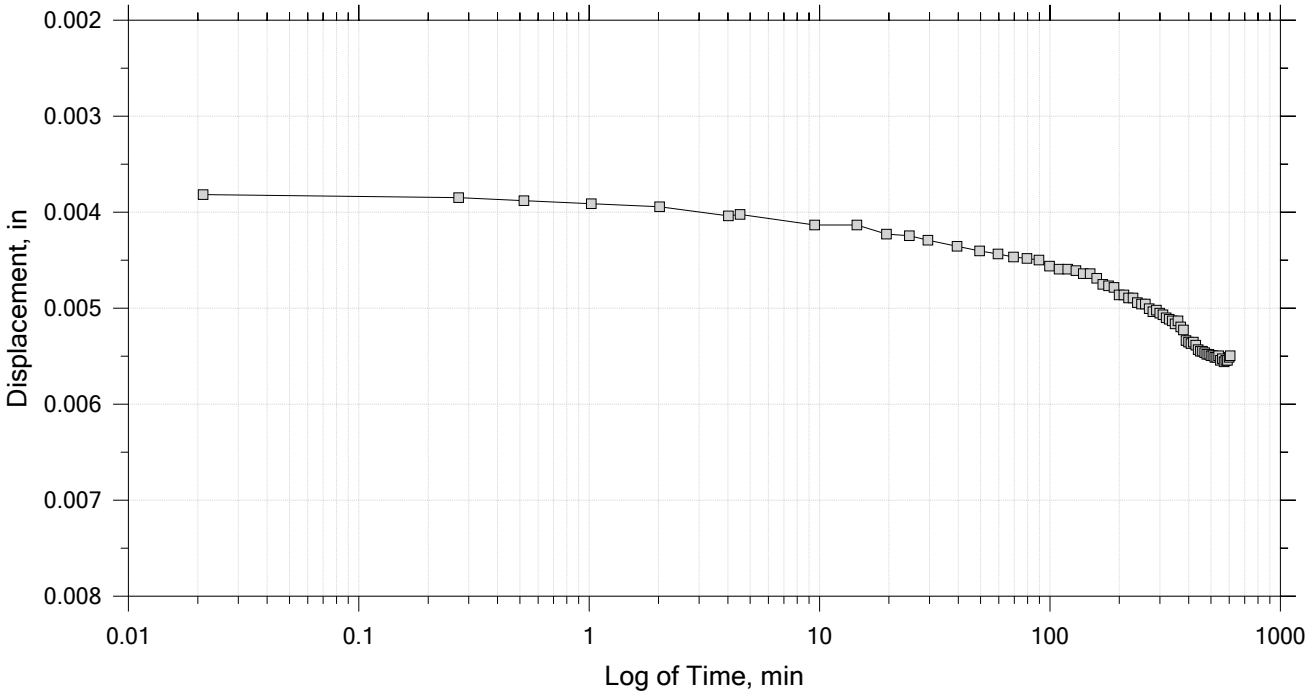


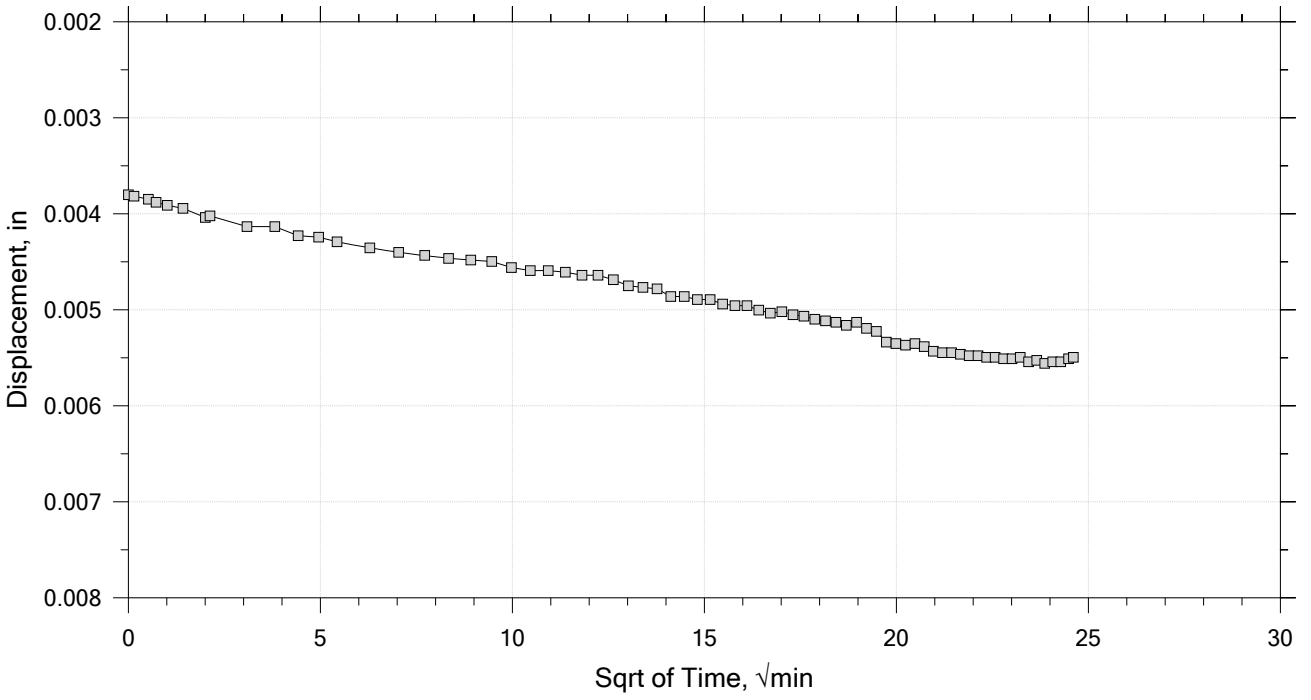


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 14
Constant Load Step
Stress: 250 psf

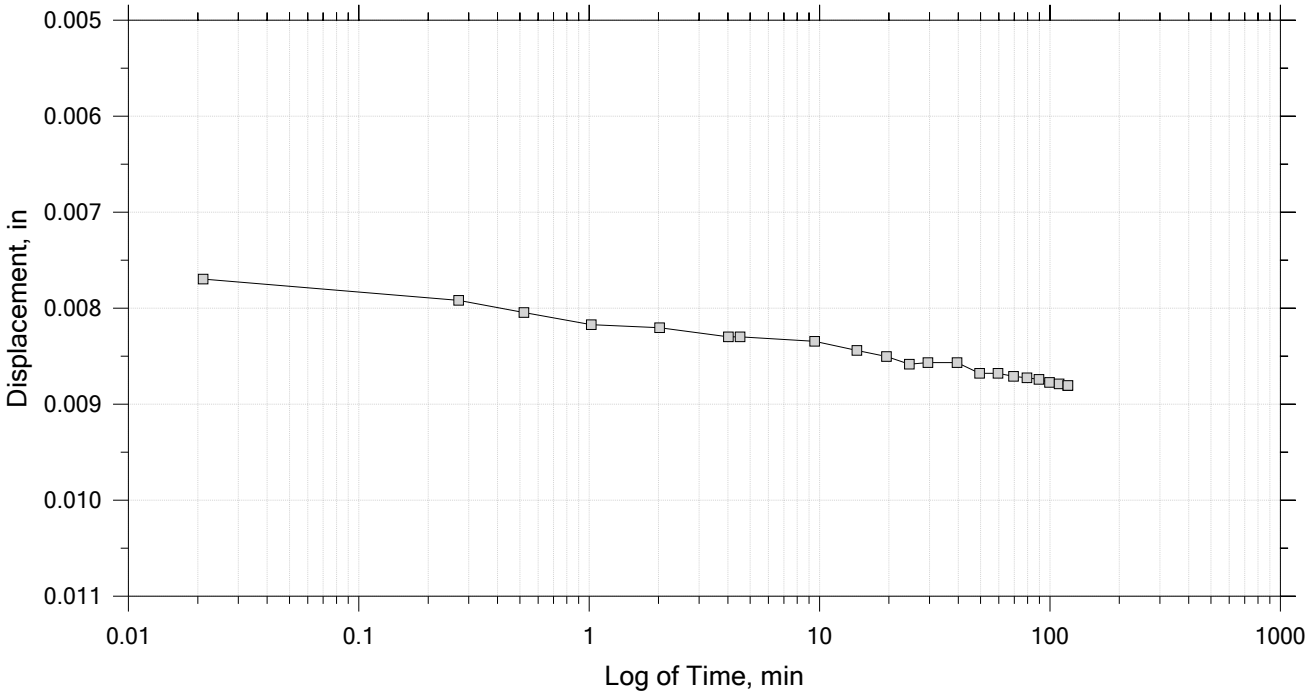


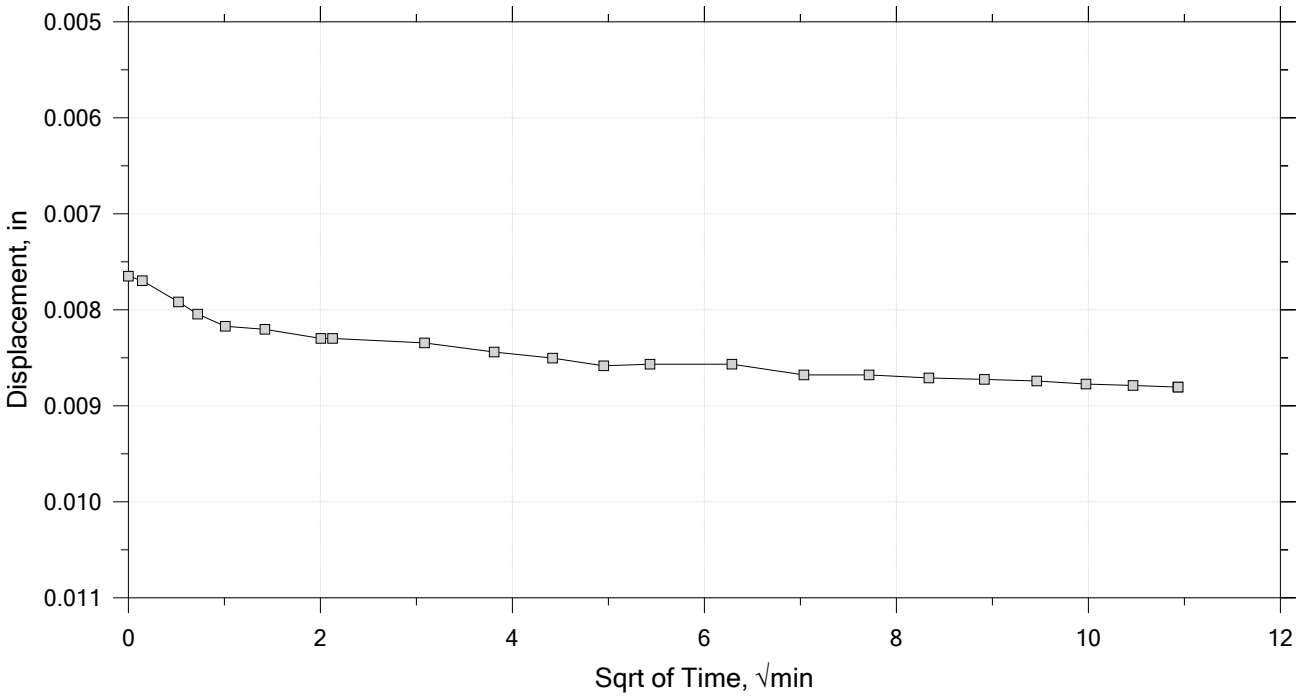


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 14
Constant Load Step
Stress: 500 psf

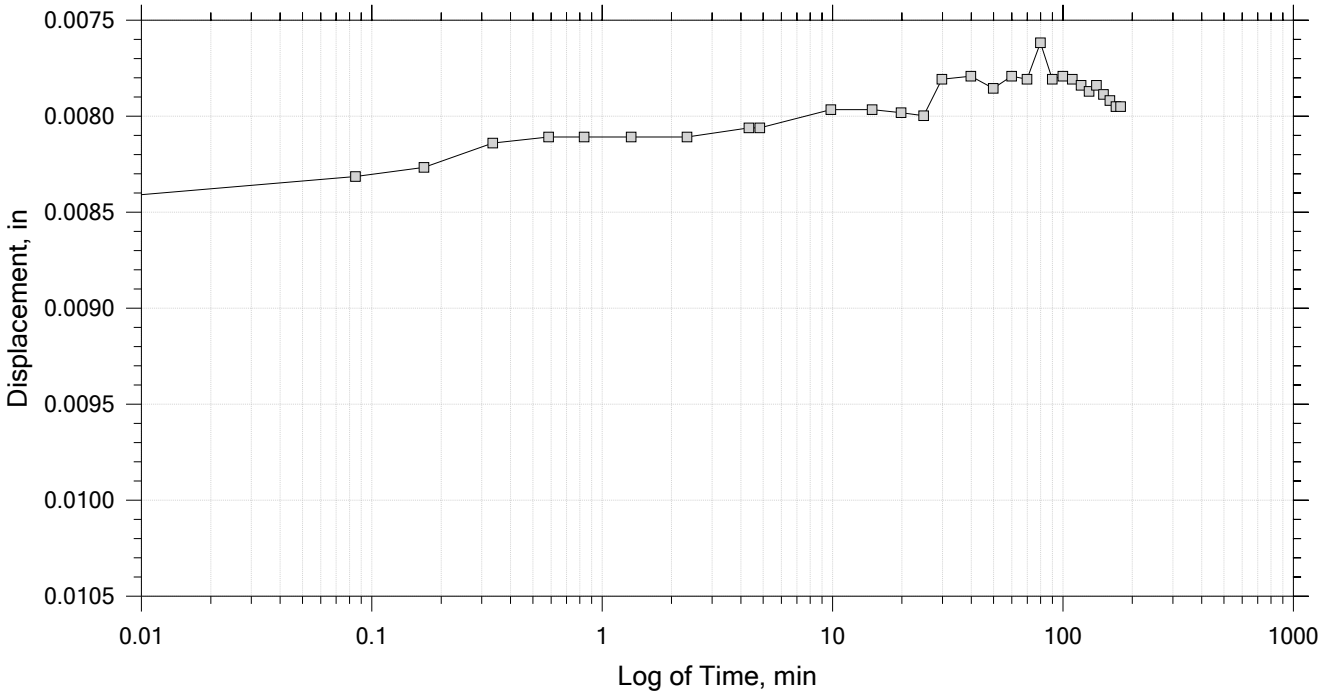


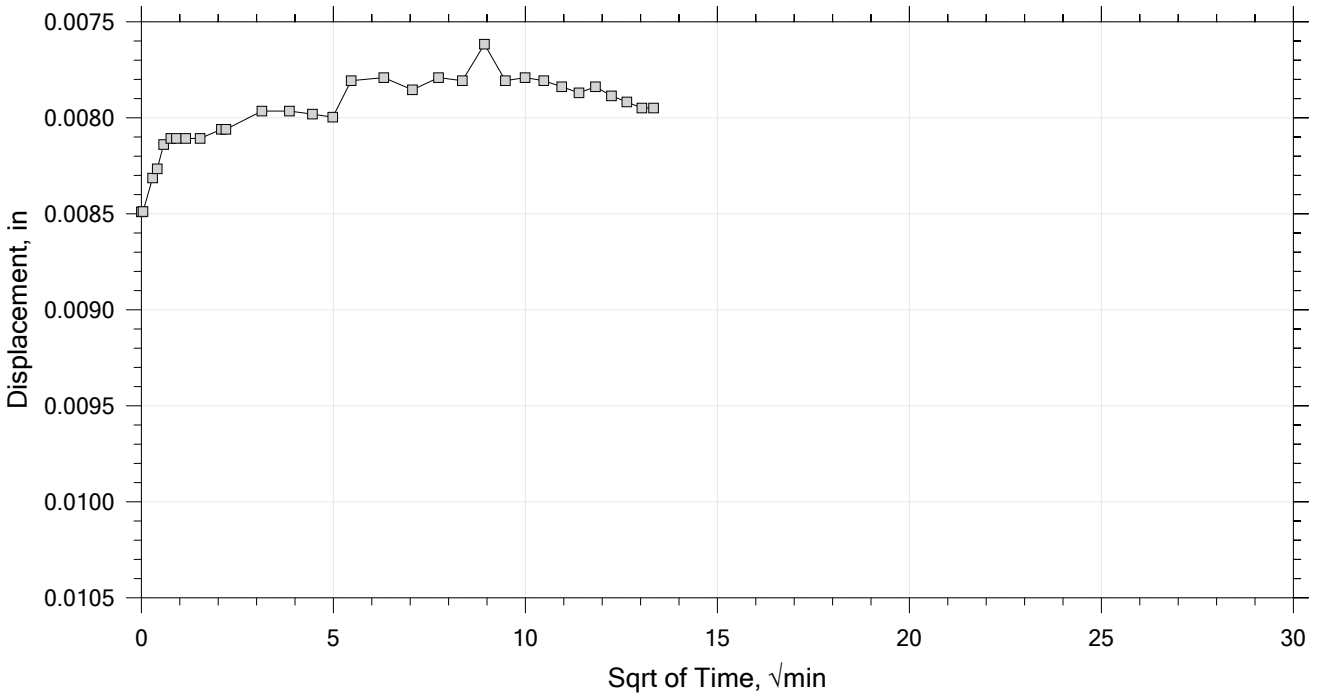


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 14
Constant Load Step
Stress: 125 psf

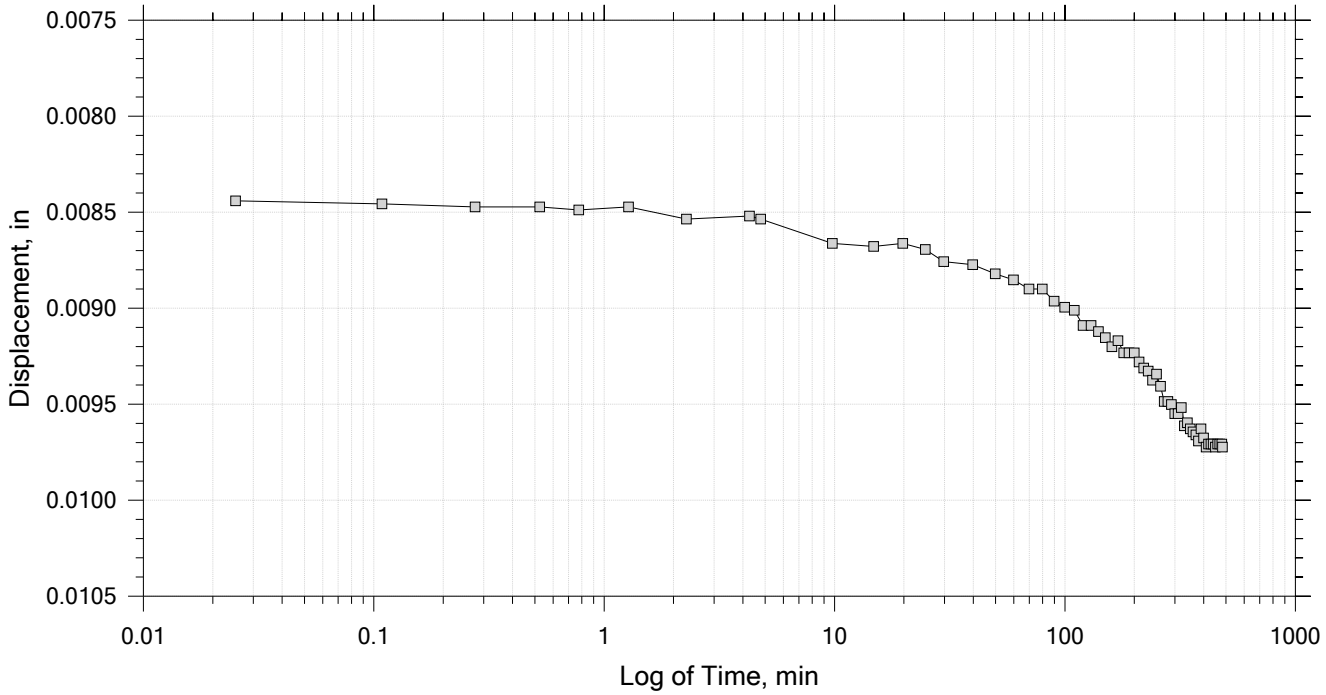


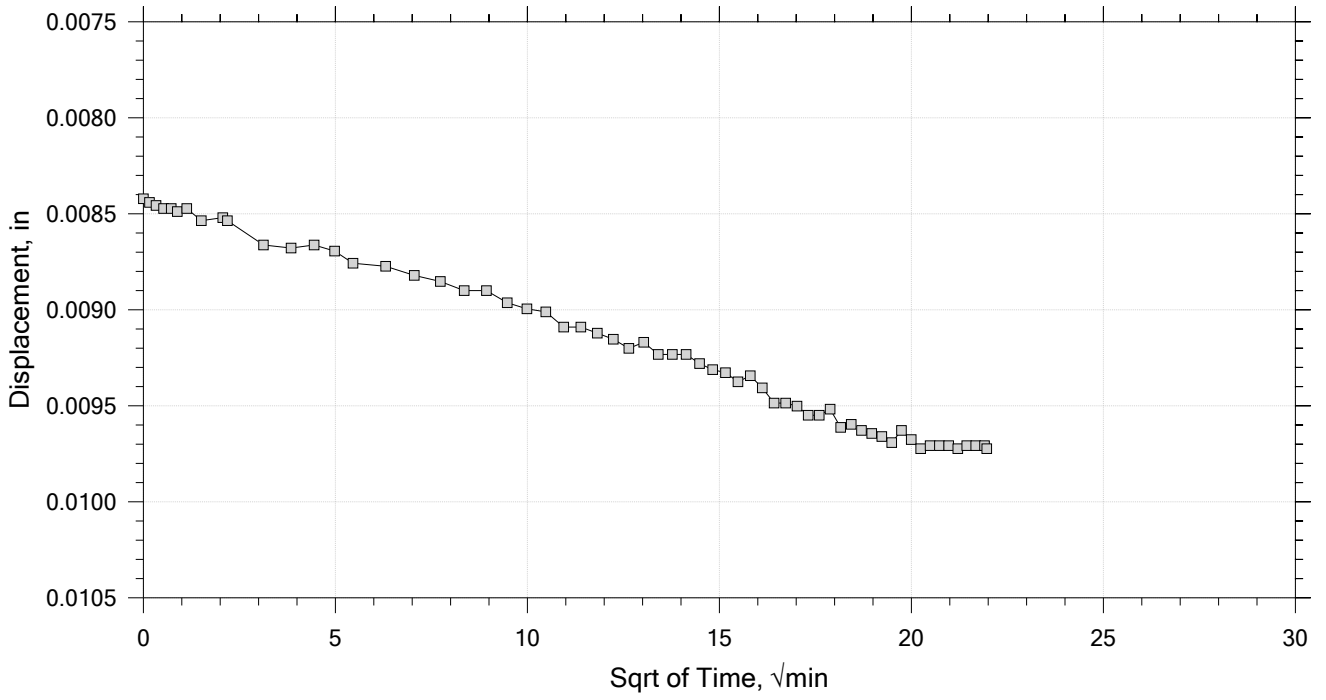


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 14
Constant Load Step
Stress: 250 psf

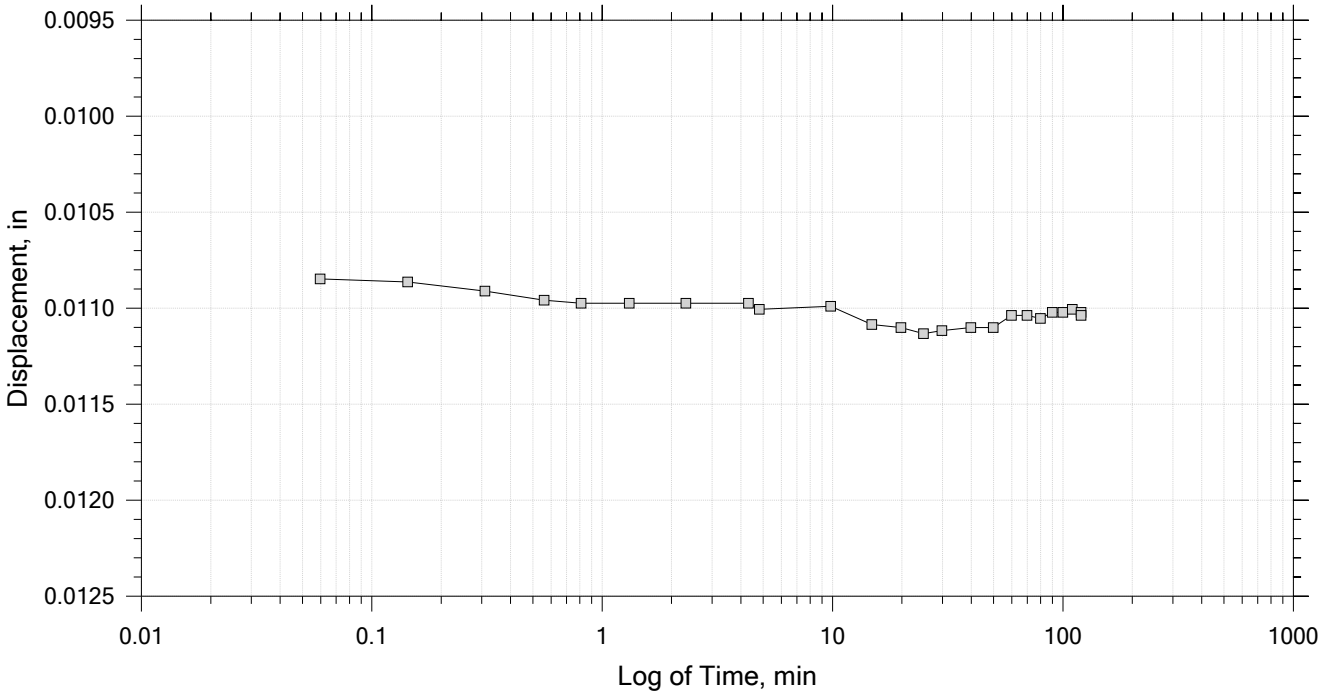


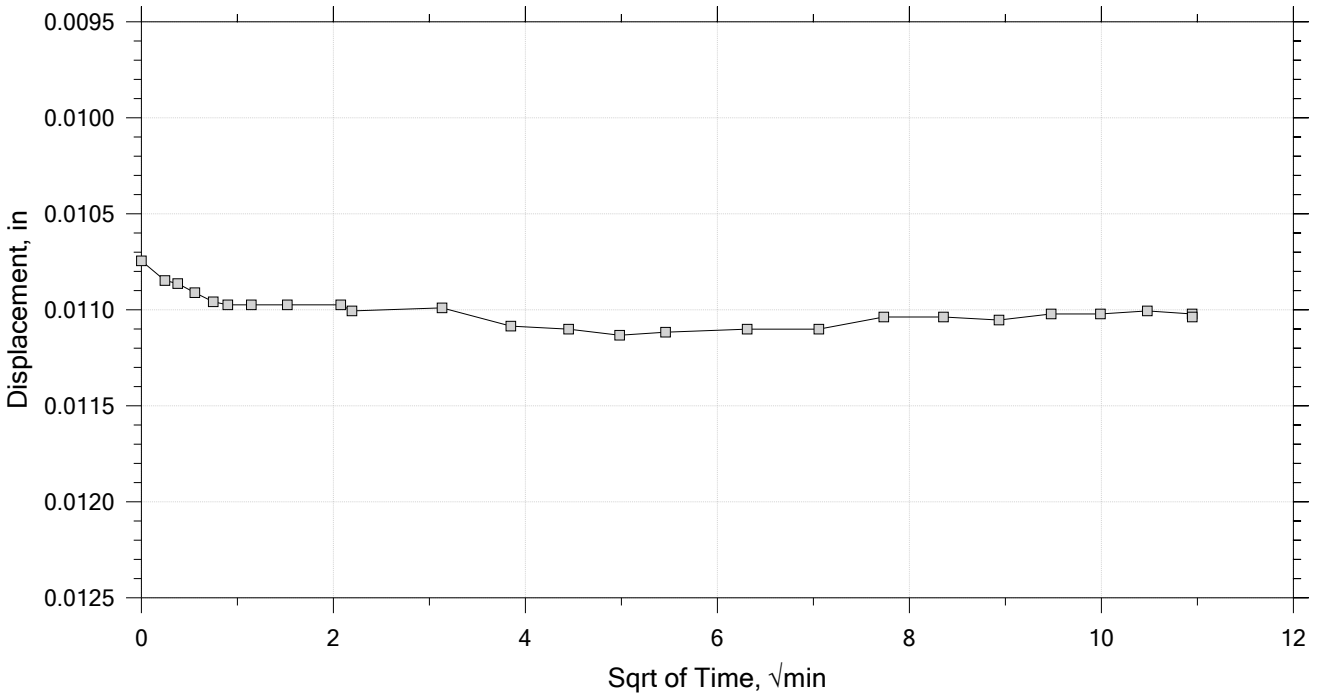


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 14
Constant Load Step
Stress: 500 psf

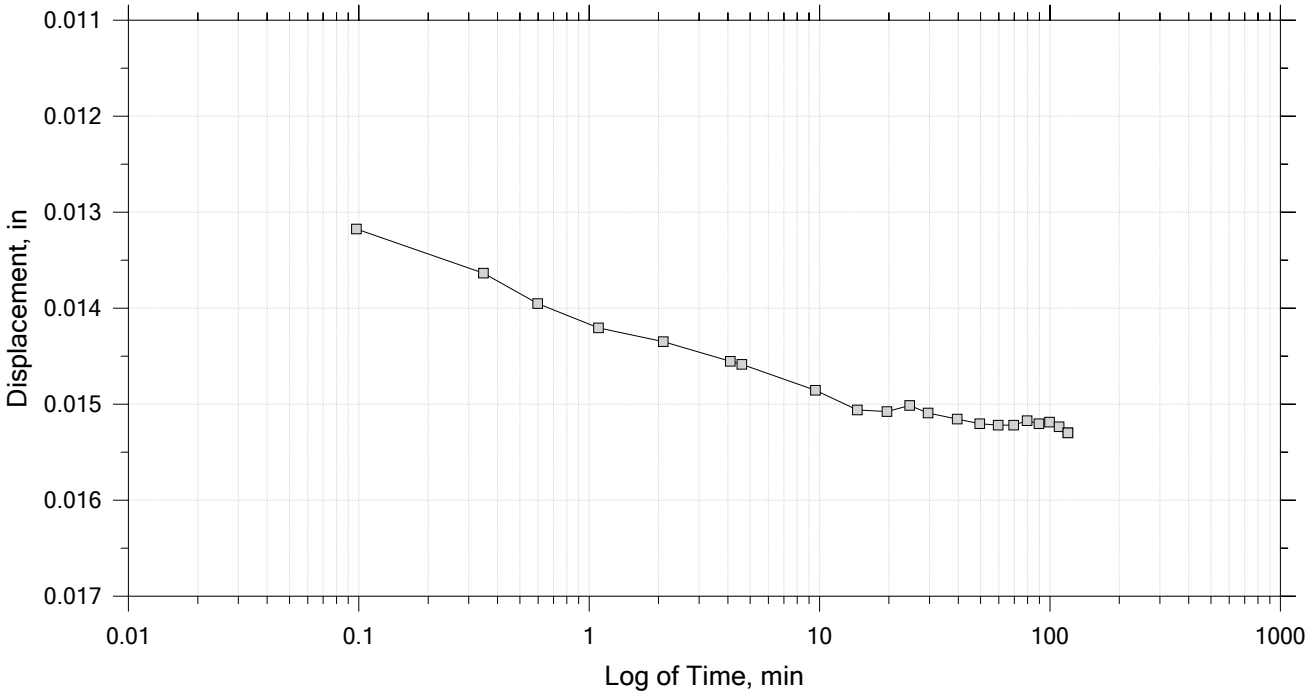


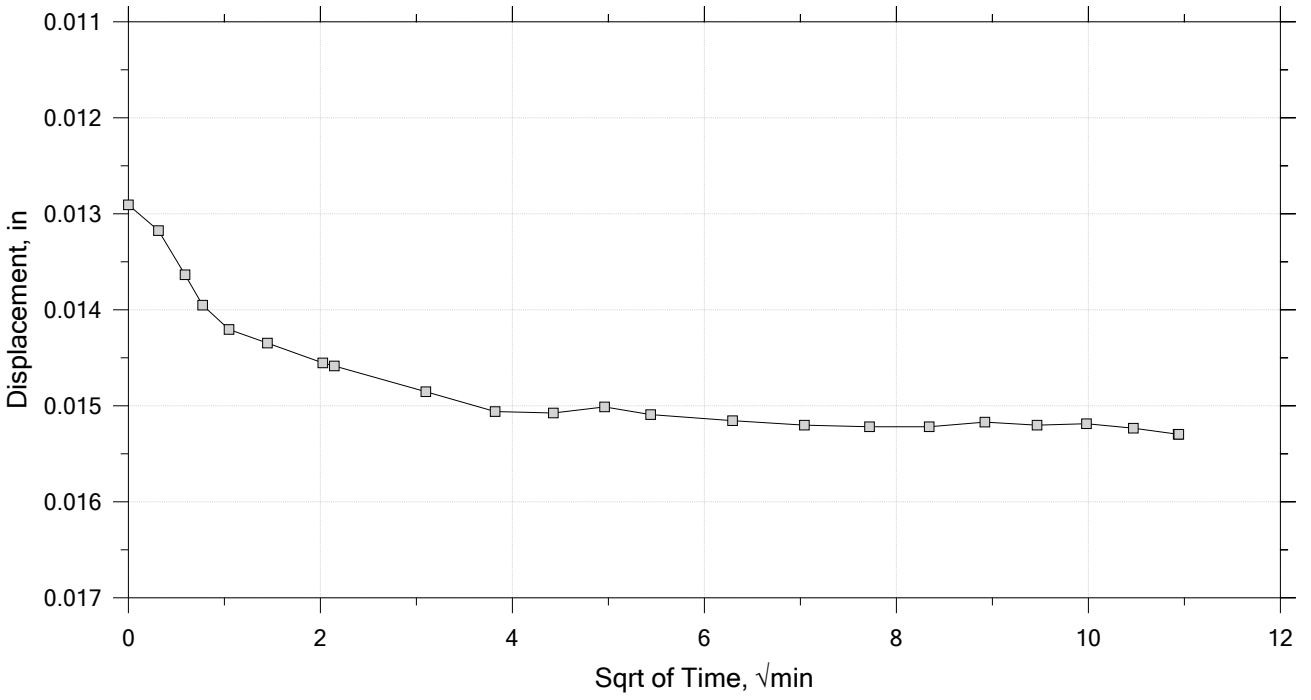


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 14
Constant Load Step
Stress: 1e+03 psf

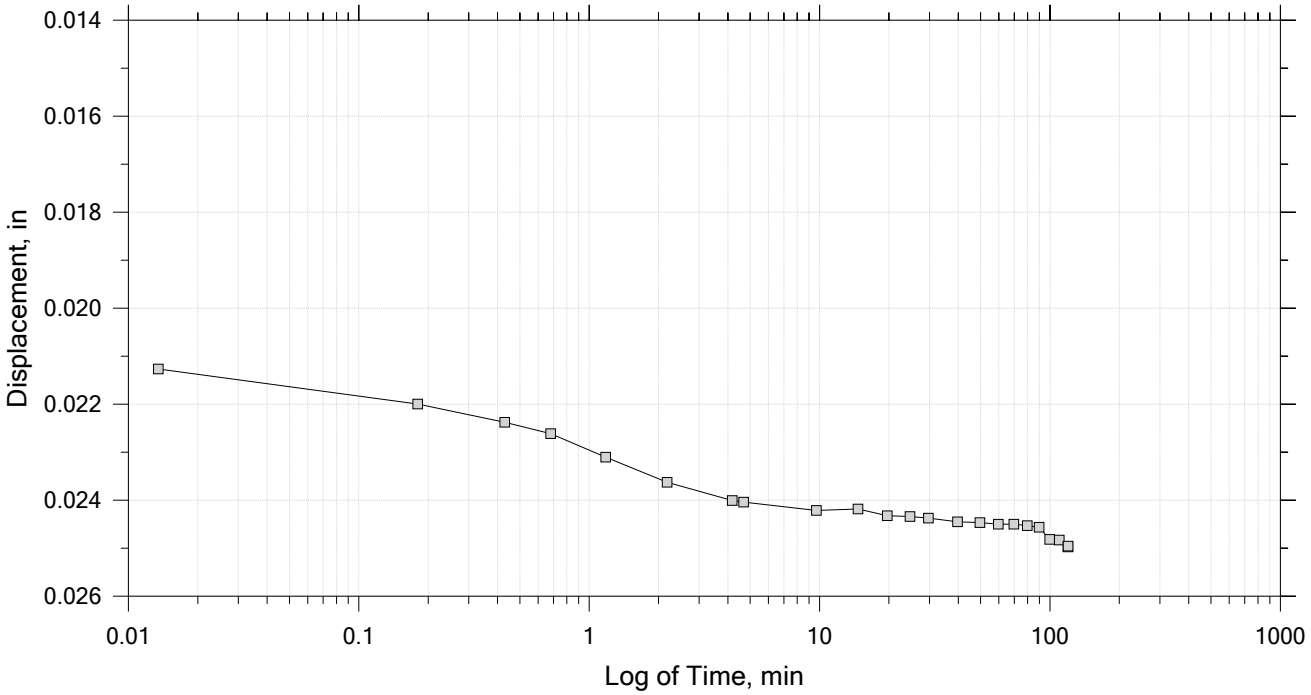


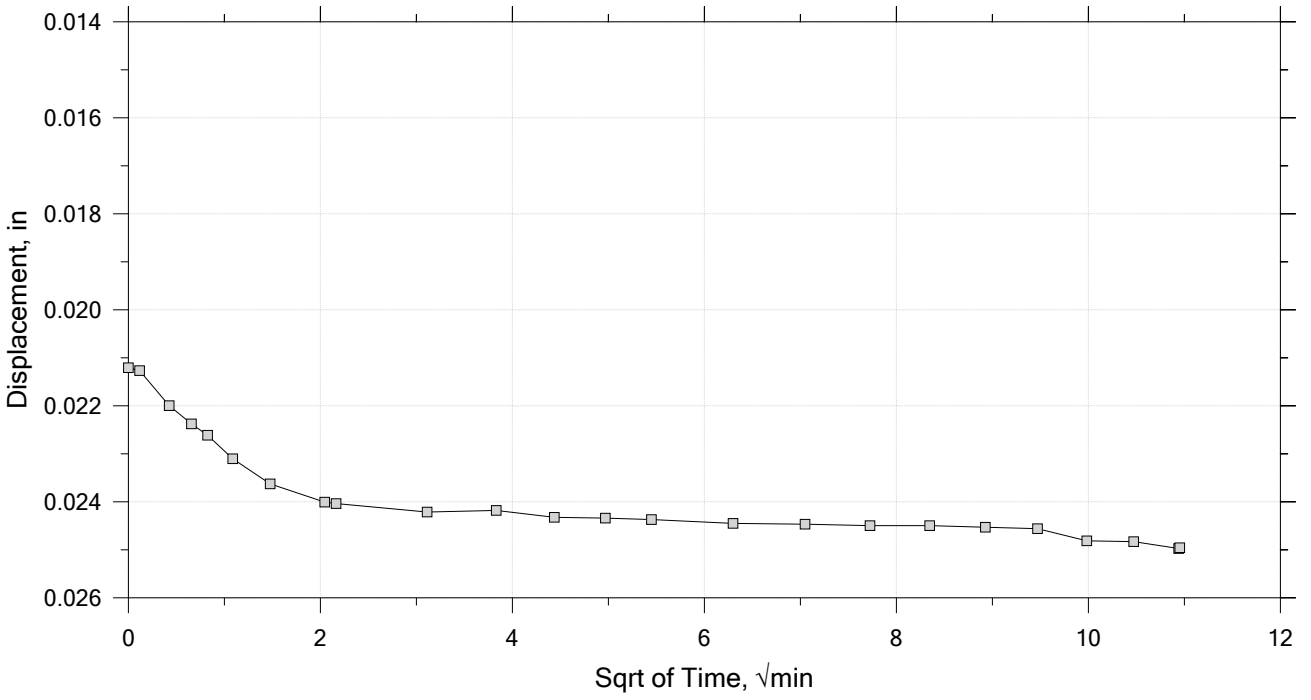


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 14
Constant Load Step
Stress: 2e+03 psf

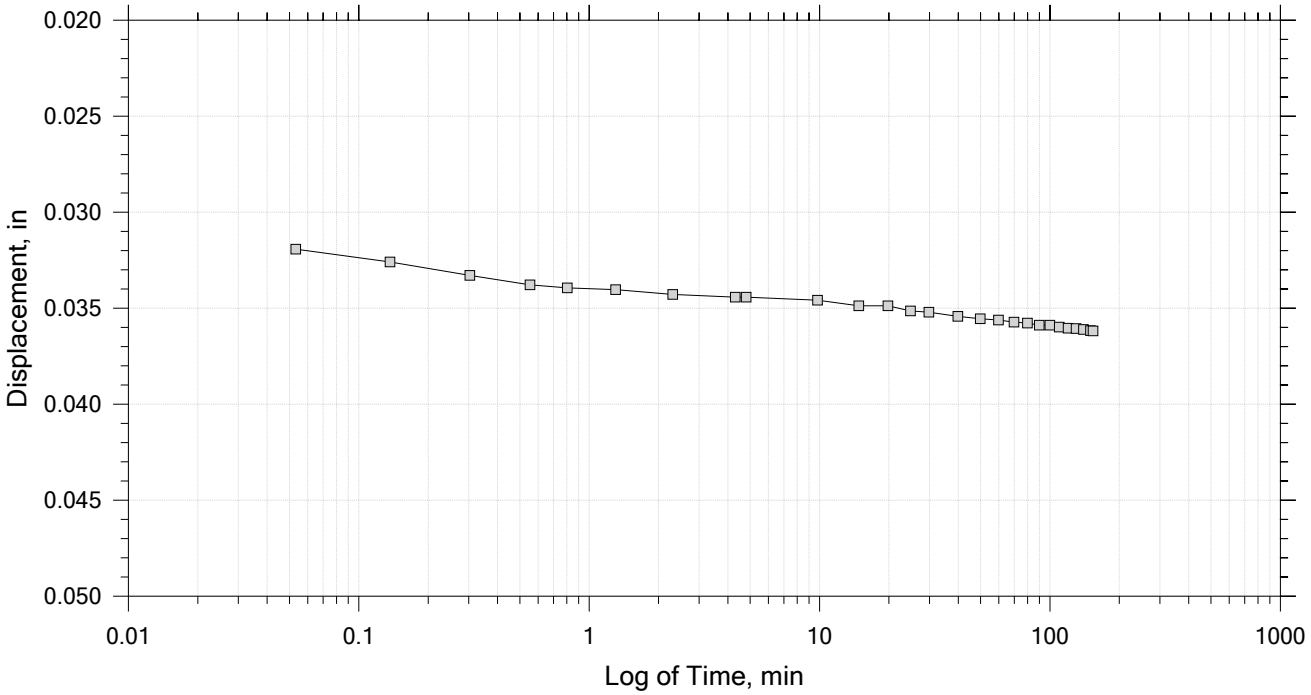


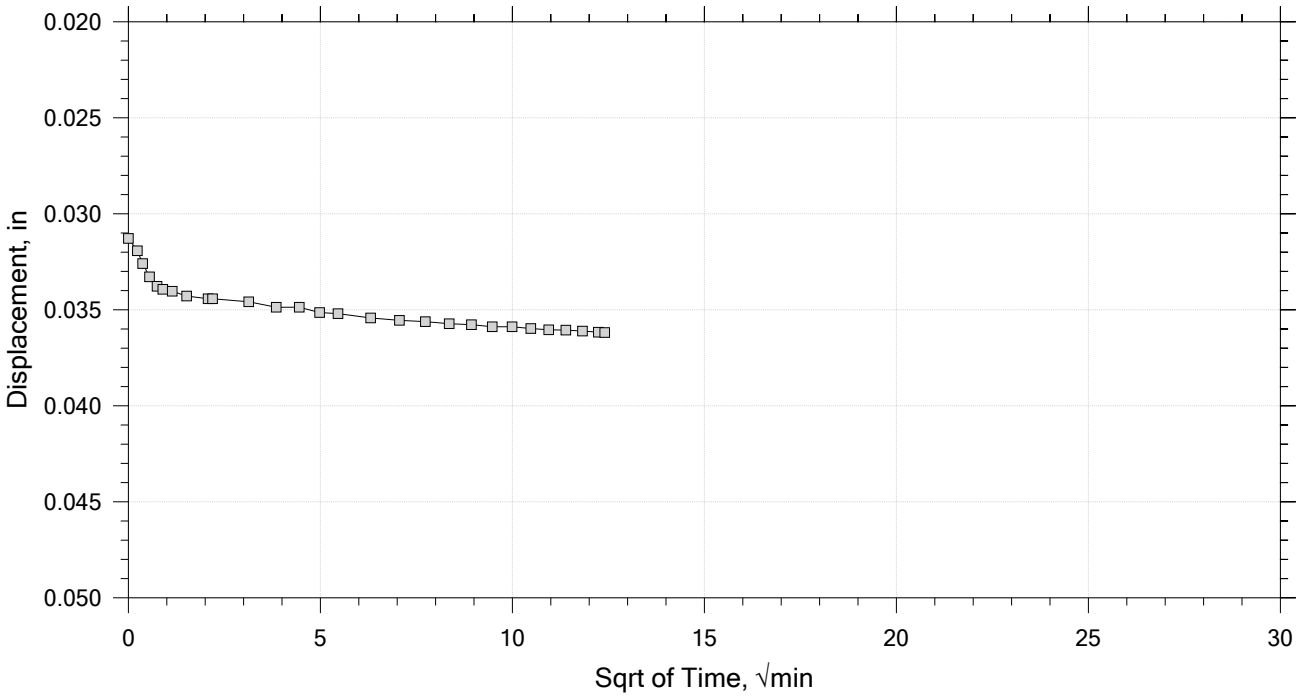


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 14
Constant Load Step
Stress: 4e+03 psf

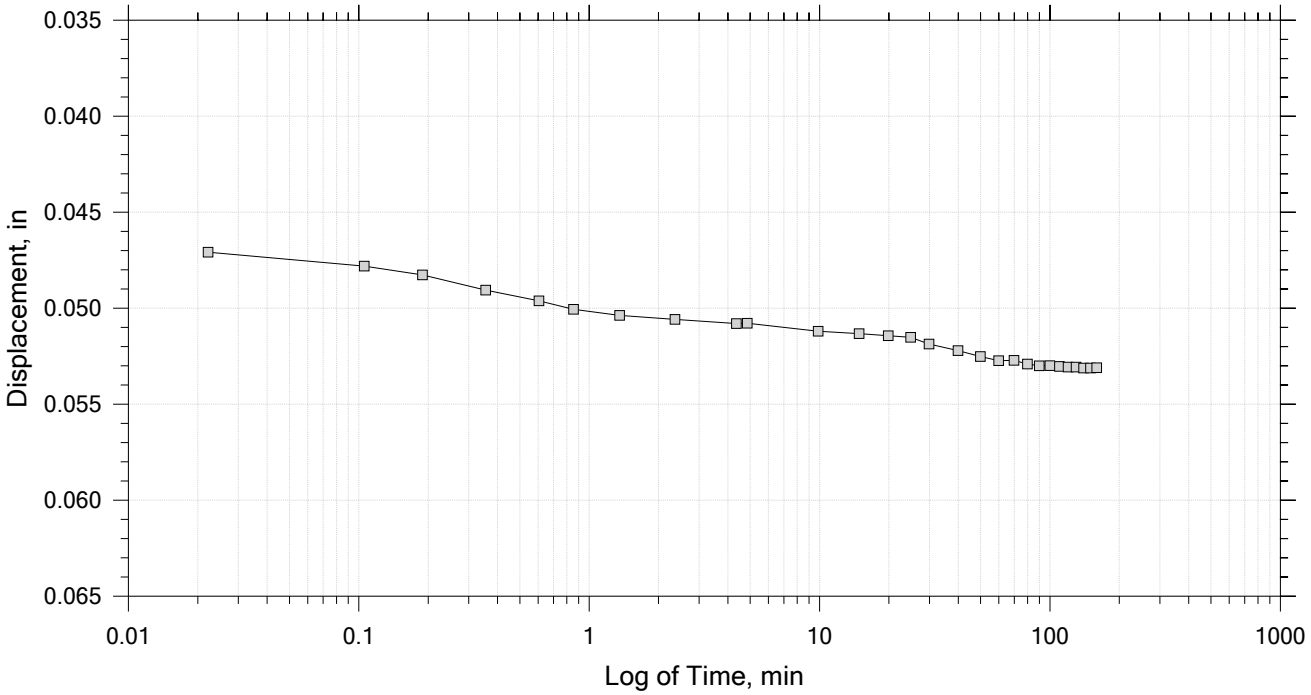


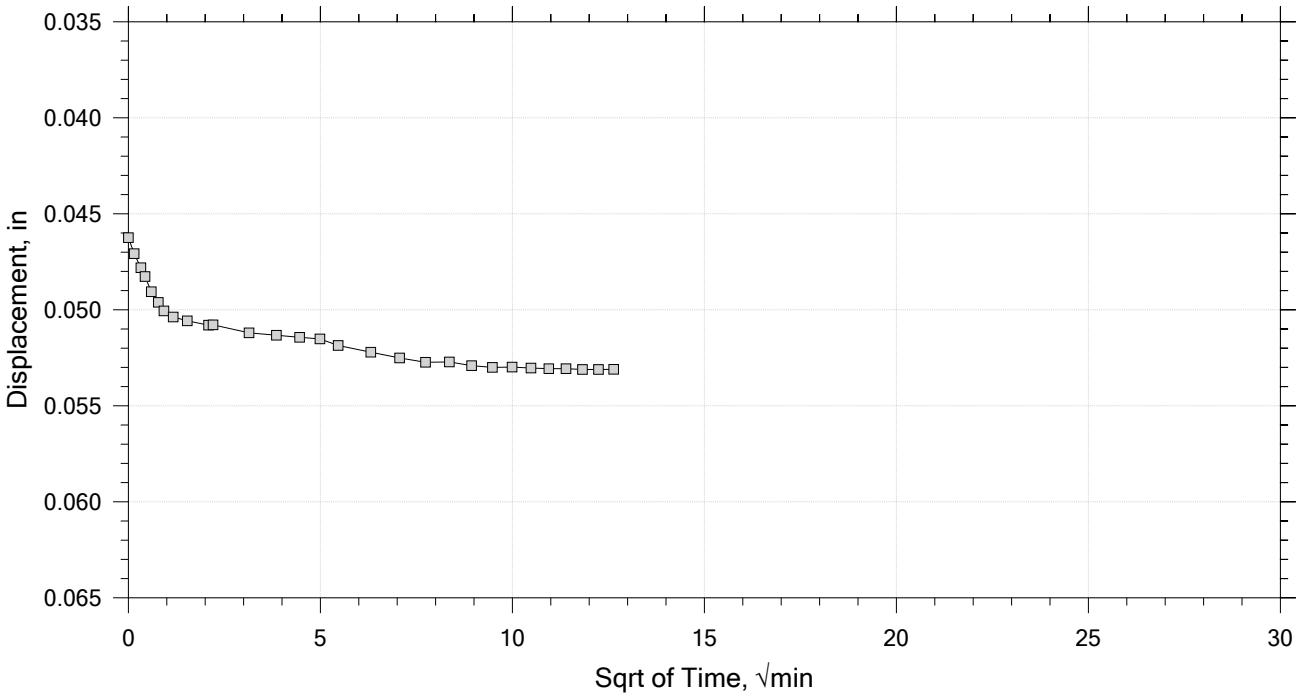


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 14
Constant Load Step
Stress: 8e+03 psf

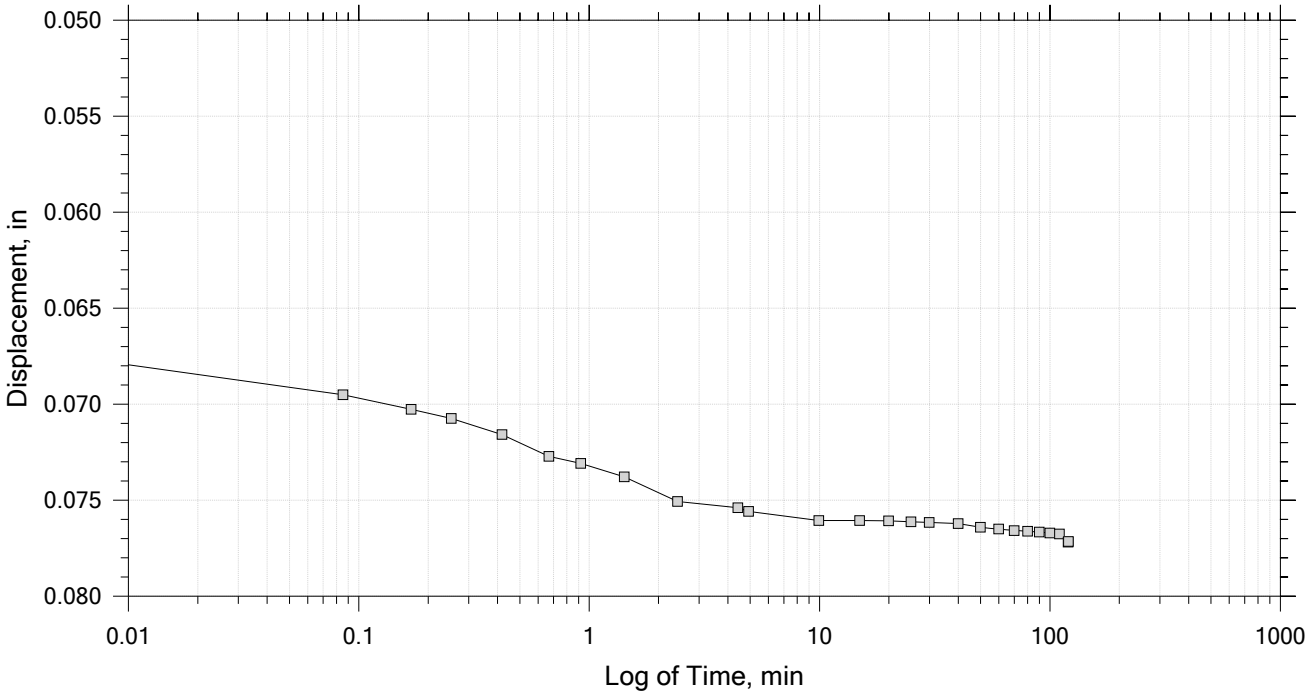


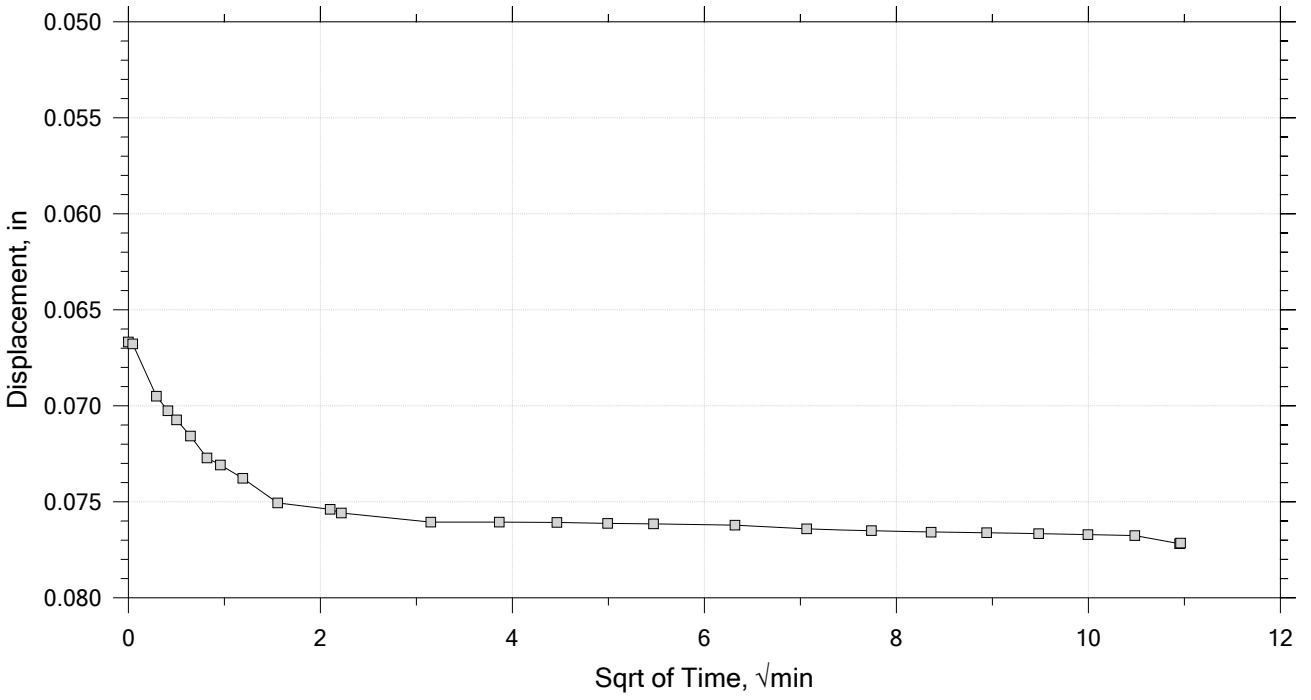


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 14
Constant Load Step
Stress: 1.6e+04 psf

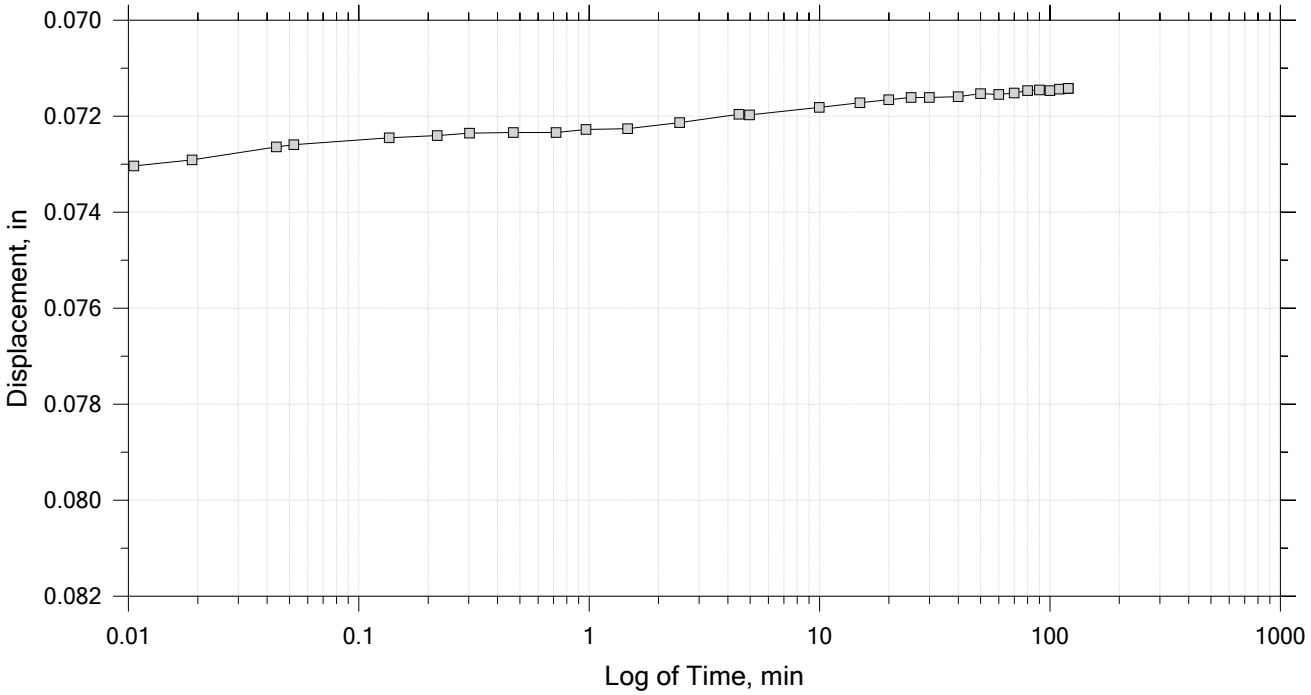


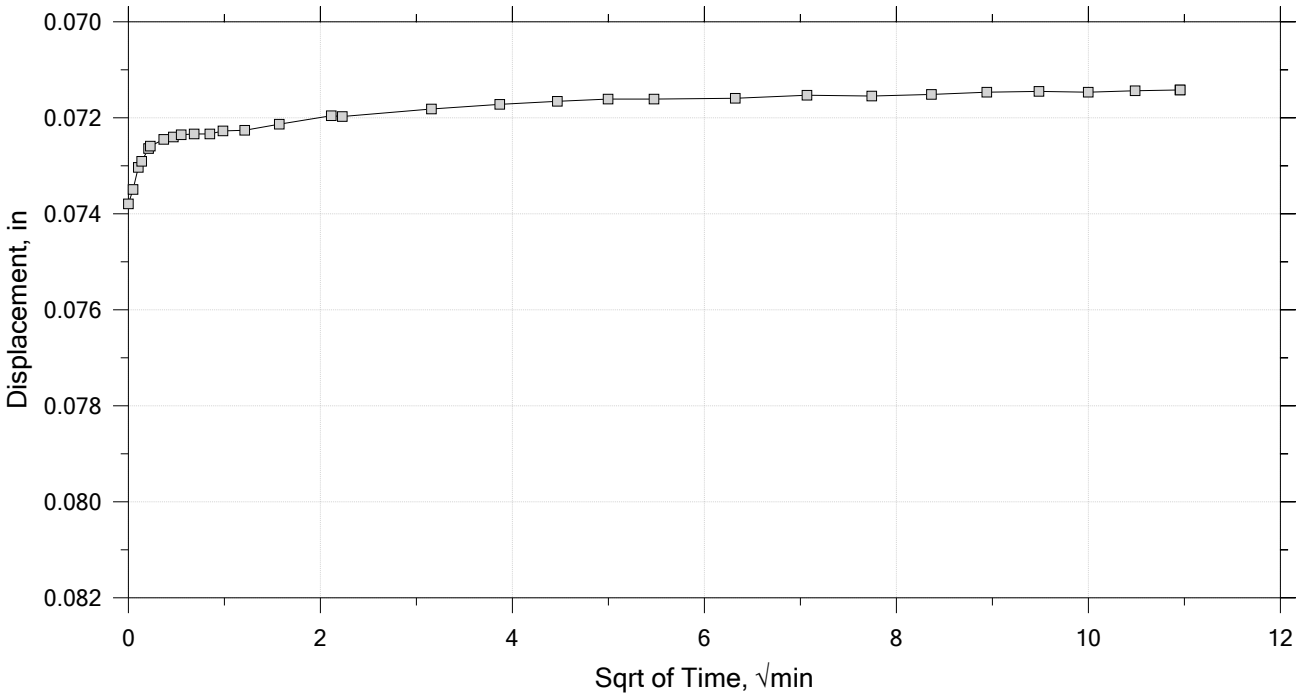


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 12 of 14
Constant Load Step
Stress: 4e+03 psf

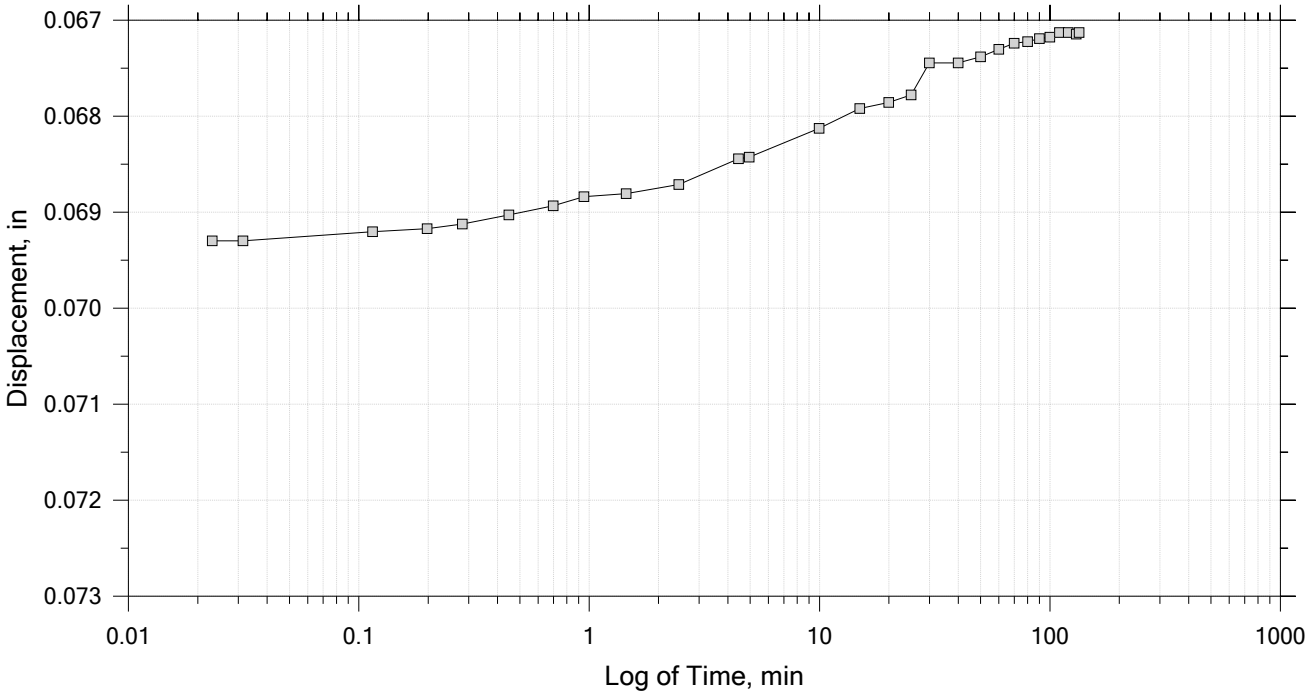


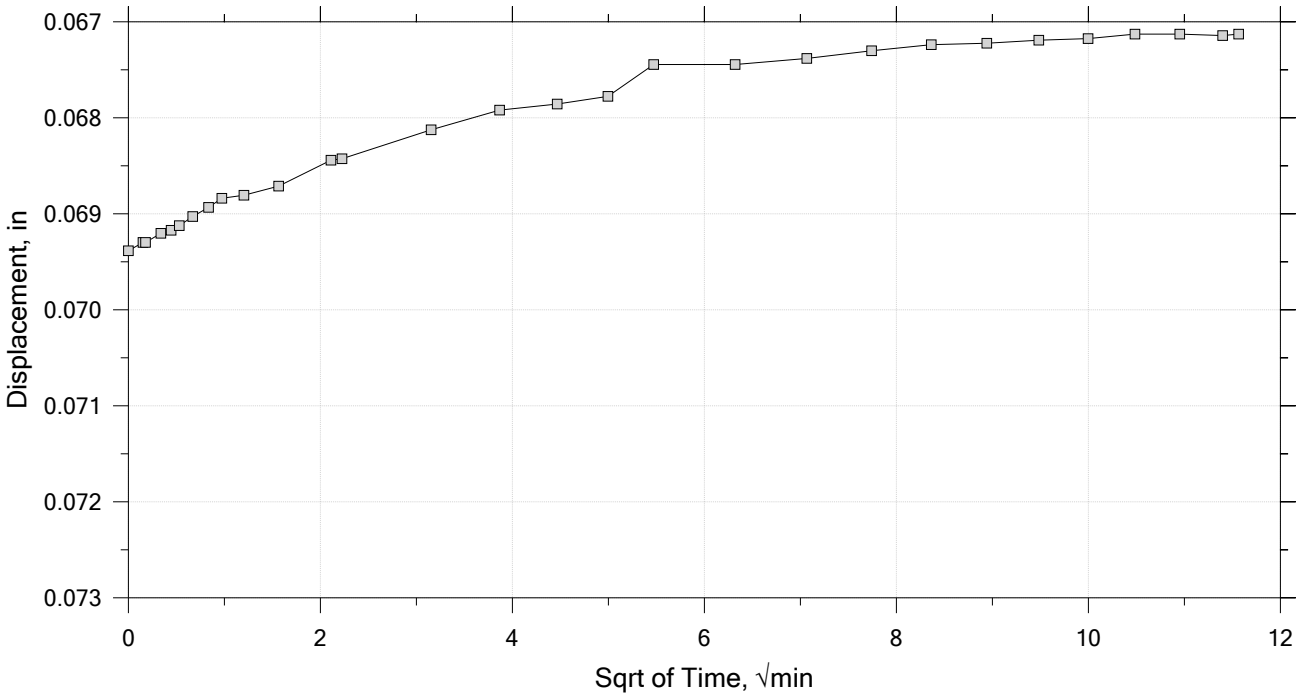


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 13 of 14
Constant Load Step
Stress: 1e+03 psf

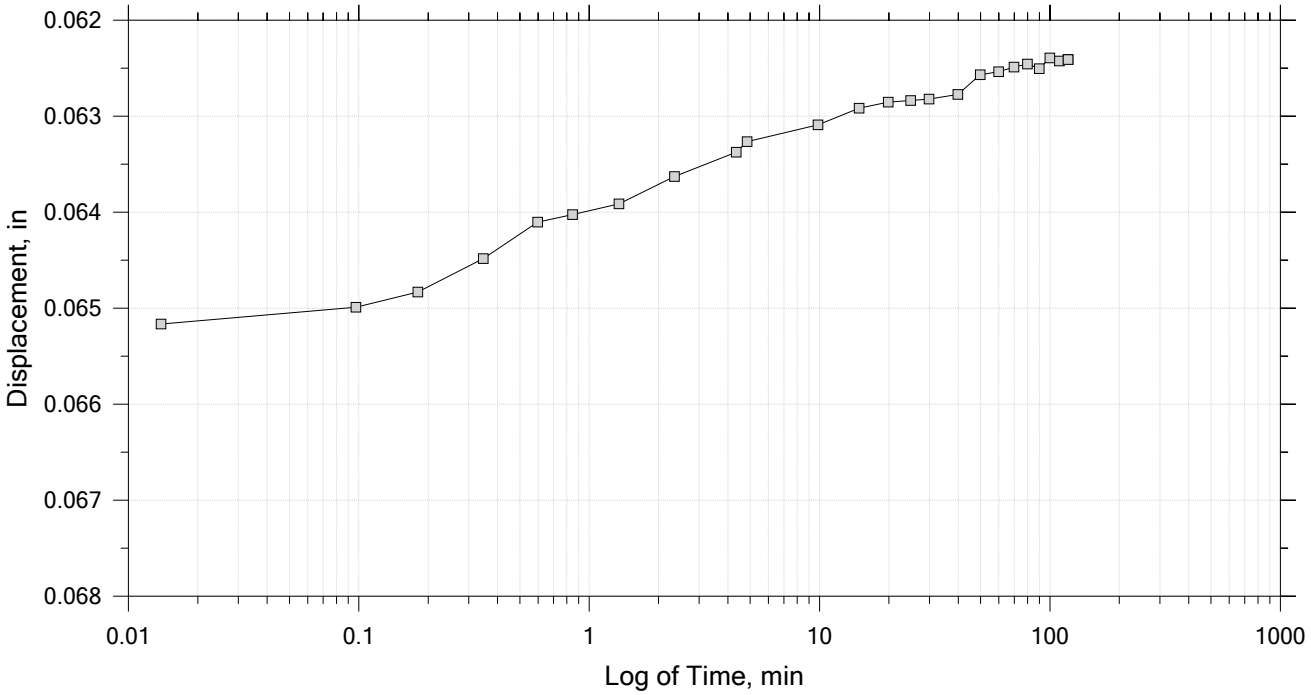


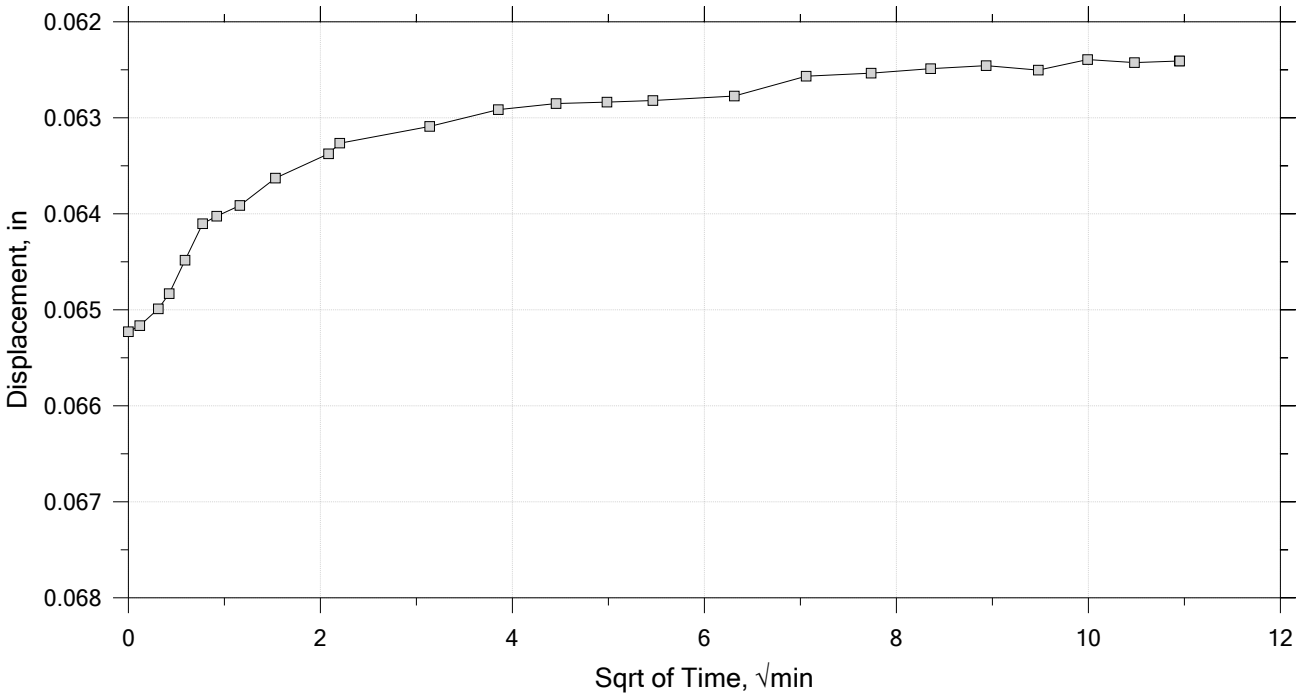


Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 14 of 14
Constant Load Step
Stress: 250 psf





Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Specimen Diameter, in: 2.50	Specific Gravity: 2.70 (Estimated)	Liquid Limit: 26
Specimen Height, in: 1.00	Initial Void Ratio: 0.576	Plastic Limit: 19
Final Height, in: 0.94	Final Void Ratio: 0.478	Plasticity Index: 7

	Before Test Trimmings	Before Test Specimen	After Test Specimen	After Test Trimmings
Container ID		---		
Mass Container, gm	0	16.62	16.62	16.62
Mass Container + Wet Soil, gm	164.65	181.27	178.56	178.56
Mass Container + Dry Soil, gm	137.94	154.56	154.56	154.56
Mass Dry Soil, gm	137.94	137.94	137.94	137.94
Water Content, %	19.36	19.36	17.40	17.40
Void Ratio	---	0.58	0.48	---
Degree of Saturation, %	---	90.70	98.27	---
Dry Unit Weight, pcf	---	106.92	114.04	---

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Log of Time Coefficients

Step	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	Log T50 min	Cv in²/s	Mv in²/lb	k in/s	Ca %
1	125.	0.002945	0.572	0.295	0.000	0.00e+00	3.39e+03	0.00e+00	0.00e+00
2	250.	0.005495	0.568	0.550	0.000	0.00e+00	2.94e+03	0.00e+00	0.00e+00
3	500.	0.008805	0.563	0.880	3.357	2.41e-04	1.91e+03	1.66e-08	0.00e+00
4	125.	0.007950	0.564	0.795	0.000	0.00e+00	3.28e+02	0.00e+00	0.00e+00
5	250.	0.009723	0.561	0.972	0.000	0.00e+00	2.04e+03	0.00e+00	0.00e+00
6	500.	0.01104	0.559	1.10	0.000	0.00e+00	7.57e+02	0.00e+00	0.00e+00
7	1.00e+03	0.01530	0.552	1.53	0.000	0.00e+00	1.23e+03	0.00e+00	0.00e+00
8	2.00e+03	0.02496	0.537	2.50	0.000	0.00e+00	1.39e+03	0.00e+00	0.00e+00
9	4.00e+03	0.03618	0.519	3.62	0.000	0.00e+00	8.08e+02	0.00e+00	0.00e+00
10	8.00e+03	0.05310	0.493	5.31	0.000	0.00e+00	6.09e+02	0.00e+00	0.00e+00
11	1.60e+04	0.07715	0.455	7.72	0.000	0.00e+00	4.33e+02	0.00e+00	0.00e+00
12	4.00e+03	0.07142	0.464	7.14	0.204	3.44e-03	6.88e+01	8.55e-09	0.00e+00
13	1.00e+03	0.06713	0.471	6.71	0.000	0.00e+00	2.06e+02	0.00e+00	0.00e+00
14	250.	0.06241	0.478	6.24	0.000	0.00e+00	9.06e+02	0.00e+00	0.00e+00

wsp	Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
	Boring Number: B3-1A	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
	Test Number: 26634	Preparation: Intact	Elevation: N/A
	Description: Brown Silty Clayey SAND		
	Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Sqrt of Time Coefficients

Step	Applied Stress psf	Final Displacement in	Void Ratio	Strain at End %	Sq.Rt. T90 min	Cv in²/s	Mv in²/lb	k in/s
1	125.	0.002945	0.572	0.295	0.000	0.00e+00	3.39e+03	0.00e+00
2	250.	0.005495	0.568	0.550	499.520	7.01e-06	2.94e+03	7.44e-10
3	500.	0.008805	0.563	0.880	23.475	1.48e-04	1.91e+03	1.02e-08
4	125.	0.007950	0.564	0.795	0.585	5.94e-03	3.28e+02	7.05e-08
5	250.	0.009723	0.561	0.972	357.191	9.72e-06	2.04e+03	7.17e-10
6	500.	0.01104	0.559	1.10	4.544	7.61e-04	7.57e+02	2.08e-08
7	1.00e+03	0.01530	0.552	1.53	7.943	4.33e-04	1.23e+03	1.92e-08
8	2.00e+03	0.02496	0.537	2.50	3.537	9.59e-04	1.39e+03	4.82e-08
9	4.00e+03	0.03618	0.519	3.62	71.054	4.67e-05	8.08e+02	1.36e-09
10	8.00e+03	0.05310	0.493	5.31	82.771	3.90e-05	6.09e+02	8.57e-10
11	1.60e+04	0.07715	0.455	7.72	1.706	1.81e-03	4.33e+02	2.83e-08
12	4.00e+03	0.07142	0.464	7.14	9.503	3.19e-04	6.88e+01	7.92e-10
13	1.00e+03	0.06713	0.471	6.71	29.947	1.02e-04	2.06e+02	7.61e-10
14	250.	0.06241	0.478	6.24	6.794	4.55e-04	9.06e+02	1.49e-08

	Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
	Boring Number: B3-1A	Tester: AG	Checker: TZ
	Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
	Test Number: 26634	Preparation: Intact	Elevation: N/A
	Description: Brown Silty Clayey SAND		
	Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		
	Displacement at End of Increment		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 1 of 14

Constant Load Step

Stress: 125 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.782		0.000	0.0000	0.0000	0.000	0.576	0.000
-0.780		0.000	0.0000	0.0000	0.000	0.576	0.000
-0.778		0.000	0.0000	0.0000	0.000	0.576	0.000
-0.777		0.000	0.0000	3.167e-05	0.00317	0.576	-3.46
-0.775		0.000	0.0000	3.167e-05	0.00317	0.576	-3.46
-0.773		0.000	0.0000	9.502e-05	0.00950	0.576	-3.46
-0.772		0.000	0.0000	9.502e-05	0.00950	0.576	-3.46
-0.769		0.000	0.0000	9.502e-05	0.00950	0.576	-3.46
-0.768		0.000	0.0000	0.0001425	0.0143	0.576	-2.30
-0.766		0.000	0.0000	0.0001425	0.0143	0.576	-2.30
-0.764		0.000	0.0000	0.0001425	0.0143	0.576	-2.30
-0.756		0.000	0.0000	0.0001742	0.0174	0.576	-2.30
-0.748		2.27	0.0000	0.0002059	0.0206	0.576	-2.30
-0.739		0.000	0.0000	0.0002217	0.0222	0.576	-4.61
-0.731		0.000	0.0000	0.0002534	0.0253	0.576	-2.30
-0.706		0.000	0.0000	0.0004592	0.0459	0.576	-3.46
-0.698		0.000	0.0000	0.0005384	0.0538	0.576	-2.30
-0.614		0.000	0.0000	0.001093	0.109	0.575	-2.30
-0.531		2.27	0.0000	0.001314	0.131	0.574	-3.46
-0.448		29.5	0.0000	0.001853	0.185	0.573	-2.30
-0.281		79.6	0.0000	0.002439	0.244	0.573	-1.15
-0.031		111.	0.0000	0.002819	0.282	0.572	-3.46
0.000	0.000	113.	0.0000	0.002825	0.282	0.572	-3.31
0.219	0.468	120.	0.0000	0.002866	0.287	0.572	-2.30
0.719	0.848	123.	0.0000	0.002898	0.290	0.572	1.15
1.719	1.311	123.	0.0000	0.002898	0.290	0.572	0.000
3.719	1.928	123.	0.0000	0.002898	0.290	0.572	1.15
4.219	2.054	123.	0.0000	0.002930	0.293	0.572	0.000
9.219	3.036	123.	0.0000	0.002914	0.291	0.572	2.30
9.227	3.038	123.	0.0000	0.002945	0.295	0.572	1.15

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 14

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.480		123.	0.0000	0.002930	0.293	0.572	2.30
-0.478		123.	0.0000	0.002930	0.293	0.572	2.30
-0.476		123.	0.0000	0.002930	0.293	0.572	2.30
-0.475		132.	0.0000	0.002930	0.293	0.572	-1.15
-0.473		132.	0.0000	0.002930	0.293	0.572	-1.15
-0.470		136.	0.0000	0.002930	0.293	0.572	0.000
-0.469		136.	0.0000	0.002930	0.293	0.572	0.000
-0.467		136.	0.0000	0.002930	0.293	0.572	0.000
-0.466		141.	0.0000	0.002914	0.291	0.572	-2.30
-0.464		141.	0.0000	0.002914	0.291	0.572	-2.30
-0.462		141.	0.0000	0.002914	0.291	0.572	-2.30
-0.454		148.	0.0000	0.002961	0.296	0.572	1.15
-0.445		152.	0.0000	0.003009	0.301	0.572	-1.15
-0.437		159.	0.0000	0.003009	0.301	0.572	0.000
-0.429		166.	0.0000	0.003040	0.304	0.572	0.000
-0.404		177.	0.0000	0.003136	0.314	0.571	2.30
-0.395		182.	0.0000	0.003136	0.314	0.571	1.15
-0.312		207.	0.0000	0.003373	0.337	0.571	2.30
-0.229		220.	0.0000	0.003611	0.361	0.571	0.000
-0.146		230.	0.0000	0.003706	0.371	0.571	0.000
0.000	0.000	238.	0.0000	0.003802	0.380	0.570	1.01
0.021	0.145	239.	0.0000	0.003816	0.382	0.570	1.15
0.271	0.521	243.	0.0000	0.003848	0.385	0.570	1.15
0.521	0.722	245.	0.0000	0.003880	0.388	0.570	2.30
1.021	1.010	248.	0.0000	0.003911	0.391	0.570	1.15
2.021	1.421	245.	0.0000	0.003943	0.394	0.570	0.000
4.021	2.005	248.	0.0000	0.004038	0.404	0.570	1.15
4.521	2.126	248.	0.0000	0.004022	0.402	0.570	1.15
9.521	3.086	248.	0.0000	0.004133	0.413	0.570	1.15
14.521	3.811	248.	0.0000	0.004133	0.413	0.570	1.15
19.521	4.418	248.	0.0000	0.004228	0.423	0.570	4.61
24.521	4.952	248.	0.0000	0.004244	0.424	0.570	3.46
29.521	5.433	248.	0.0000	0.004292	0.429	0.570	5.76
39.521	6.287	248.	0.0000	0.004355	0.435	0.570	8.06
49.520	7.037	248.	0.0000	0.004402	0.440	0.569	12.7
59.521	7.715	248.	0.0000	0.004434	0.443	0.569	15.0
69.521	8.338	248.	0.0000	0.004466	0.447	0.569	20.7
79.521	8.917	248.	0.0000	0.004482	0.448	0.569	27.6
89.521	9.462	248.	0.0000	0.004497	0.450	0.569	30.0
99.521	9.976	248.	0.0000	0.004561	0.456	0.569	32.3
109.521	10.465	248.	0.0000	0.004592	0.459	0.569	36.9
119.521	10.933	248.	0.0000	0.004592	0.459	0.569	42.6
129.521	11.381	248.	0.0000	0.004608	0.461	0.569	47.2
139.520	11.812	248.	0.0000	0.004640	0.464	0.569	42.6
149.521	12.228	248.	0.0000	0.004640	0.464	0.569	44.9
159.521	12.630	248.	0.0000	0.004687	0.469	0.569	39.2
169.521	13.020	248.	0.0000	0.004751	0.475	0.569	41.5
179.520	13.399	248.	0.0000	0.004767	0.477	0.569	36.9
189.521	13.767	248.	0.0000	0.004782	0.478	0.569	36.9
199.521	14.125	248.	0.0000	0.004862	0.486	0.569	34.6

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 2 of 14

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
209.521	14.475	248.	0.0000	0.004862	0.486	0.569	30.0
219.521	14.816	248.	0.0000	0.004893	0.489	0.569	32.3
229.521	15.150	248.	0.0000	0.004893	0.489	0.569	26.5
239.521	15.476	248.	0.0000	0.004941	0.494	0.569	28.8
249.521	15.796	248.	0.0000	0.004957	0.496	0.569	21.9
259.521	16.110	248.	0.0000	0.004957	0.496	0.569	23.0
269.520	16.417	248.	0.0000	0.005004	0.500	0.569	25.3
279.520	16.719	248.	0.0000	0.005036	0.504	0.568	25.3
289.521	17.015	248.	0.0000	0.005020	0.502	0.568	21.9
299.521	17.307	248.	0.0000	0.005052	0.505	0.568	21.9
309.521	17.593	245.	0.0000	0.005067	0.507	0.568	17.3
319.520	17.875	248.	0.0000	0.005099	0.510	0.568	23.0
329.520	18.153	248.	0.0000	0.005115	0.511	0.568	25.3
339.521	18.426	248.	0.0000	0.005131	0.513	0.568	18.4
349.521	18.695	248.	0.0000	0.005162	0.516	0.568	12.7
359.520	18.961	248.	0.0000	0.005131	0.513	0.568	13.8
369.520	19.223	248.	0.0000	0.005194	0.519	0.568	9.22
379.521	19.481	248.	0.0000	0.005226	0.523	0.568	5.76
389.521	19.736	248.	0.0000	0.005337	0.534	0.568	-1.15
399.521	19.988	248.	0.0000	0.005353	0.535	0.568	-1.15
409.520	20.237	248.	0.0000	0.005368	0.537	0.568	-4.61
419.520	20.482	248.	0.0000	0.005353	0.535	0.568	-5.76
429.521	20.725	248.	0.0000	0.005384	0.538	0.568	-5.76
439.521	20.965	248.	0.0000	0.005432	0.543	0.568	-9.22
449.520	21.202	248.	0.0000	0.005448	0.545	0.568	-5.76
459.520	21.436	248.	0.0000	0.005448	0.545	0.568	-6.91
469.520	21.668	248.	0.0000	0.005463	0.546	0.568	-6.91
479.521	21.898	248.	0.0000	0.005479	0.548	0.568	-5.76
489.521	22.125	245.	0.0000	0.005479	0.548	0.568	-6.91
499.520	22.350	248.	0.0000	0.005495	0.550	0.568	-5.76
509.520	22.573	248.	0.0000	0.005495	0.550	0.568	-4.61
519.521	22.793	248.	0.0000	0.005511	0.551	0.568	-5.76
529.521	23.011	248.	0.0000	0.005511	0.551	0.568	-5.76
539.520	23.228	248.	0.0000	0.005495	0.550	0.568	-4.61
549.520	23.442	248.	0.0000	0.005543	0.554	0.568	-3.46
559.521	23.654	248.	0.0000	0.005527	0.553	0.568	-2.30
569.521	23.865	248.	0.0000	0.005558	0.556	0.568	-2.30
579.521	24.073	248.	0.0000	0.005543	0.554	0.568	3.46
589.520	24.280	248.	0.0000	0.005543	0.554	0.568	30.0
599.520	24.485	248.	0.0000	0.005511	0.551	0.568	35.7
605.551	24.608	248.	0.0000	0.005495	0.550	0.568	4.61

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 3 of 14

Constant Load Step

Stress: 500 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.480		248.	0.0000	0.005511	0.551	0.568	3.46
-0.478		248.	0.0000	0.005511	0.551	0.568	3.46
-0.476		248.	0.0000	0.005511	0.551	0.568	3.46
-0.475		277.	0.0000	0.005527	0.553	0.568	1.15
-0.473		277.	0.0000	0.005527	0.553	0.568	1.15
-0.470		266.	0.0000	0.005527	0.553	0.568	3.46
-0.469		266.	0.0000	0.005527	0.553	0.568	3.46
-0.467		266.	0.0000	0.005527	0.553	0.568	3.46
-0.466		275.	0.0000	0.005606	0.561	0.568	2.30
-0.464		275.	0.0000	0.005606	0.561	0.568	2.30
-0.462		275.	0.0000	0.005606	0.561	0.568	2.30
-0.454		291.	0.0000	0.005748	0.575	0.567	2.30
-0.445		298.	0.0000	0.005828	0.583	0.567	3.46
-0.437		309.	0.0000	0.006002	0.600	0.567	3.46
-0.429		325.	0.0000	0.006113	0.611	0.567	3.46
-0.404		359.	0.0000	0.006239	0.624	0.567	5.76
-0.396		345.	0.0000	0.006271	0.627	0.567	4.61
-0.312		405.	0.0000	0.006778	0.678	0.566	5.76
-0.229		441.	0.0000	0.007142	0.714	0.565	3.46
-0.146		459.	0.0000	0.007332	0.733	0.565	4.61
0.000	0.000	475.	0.0000	0.007650	0.765	0.564	3.60
0.021	0.145	477.	0.0000	0.007696	0.770	0.564	3.46
0.271	0.521	489.	0.0000	0.007918	0.792	0.564	2.30
0.521	0.722	493.	0.0000	0.008045	0.804	0.564	1.15
1.021	1.010	495.	0.0000	0.008171	0.817	0.564	3.46
2.021	1.421	498.	0.0000	0.008203	0.820	0.563	0.000
4.020	2.005	495.	0.0000	0.008298	0.830	0.563	0.000
4.520	2.126	498.	0.0000	0.008298	0.830	0.563	1.15
9.521	3.086	498.	0.0000	0.008346	0.835	0.563	3.46
14.521	3.811	498.	0.0000	0.008441	0.844	0.563	33.4
19.521	4.418	498.	0.0000	0.008504	0.850	0.563	58.8
24.521	4.952	498.	0.0000	0.008583	0.858	0.563	26.5
29.521	5.433	498.	0.0000	0.008567	0.857	0.563	12.7
39.521	6.287	498.	0.0000	0.008567	0.857	0.563	6.91
49.521	7.037	498.	0.0000	0.008678	0.868	0.563	6.91
59.521	7.715	498.	0.0000	0.008678	0.868	0.563	5.76
69.521	8.338	498.	0.0000	0.008710	0.871	0.563	3.46
79.520	8.917	498.	0.0000	0.008726	0.873	0.563	3.46
89.521	9.462	498.	0.0000	0.008741	0.874	0.563	3.46
99.520	9.976	498.	0.0000	0.008773	0.877	0.563	3.46
109.521	10.465	498.	0.0000	0.008789	0.879	0.563	4.61
119.520	10.933	498.	0.0000	0.008805	0.880	0.563	3.46
119.602	10.936	498.	0.0000	0.008805	0.880	0.563	2.30

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 4 of 14

Constant Load Step

Stress: 125 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.166		498.	0.0000	0.008821	0.882	0.562	2.30
-0.164		498.	0.0000	0.008821	0.882	0.562	2.30
-0.162		498.	0.0000	0.008821	0.882	0.562	2.30
-0.161		495.	0.0000	0.008852	0.885	0.562	5.76
-0.159		495.	0.0000	0.008852	0.885	0.562	5.76
-0.157		466.	0.0000	0.008884	0.888	0.562	5.76
-0.156		466.	0.0000	0.008884	0.888	0.562	5.76
-0.154		466.	0.0000	0.008884	0.888	0.562	5.76
-0.152		427.	0.0000	0.008916	0.892	0.562	3.46
-0.150		427.	0.0000	0.008916	0.892	0.562	3.46
-0.148		427.	0.0000	0.008916	0.892	0.562	3.46
-0.140		366.	0.0000	0.008805	0.880	0.563	4.61
-0.132		327.	0.0000	0.008773	0.877	0.563	4.61
-0.123		298.	0.0000	0.008757	0.876	0.563	4.61
-0.115		275.	0.0000	0.008741	0.874	0.563	5.76
-0.090		227.	0.0000	0.008662	0.866	0.563	2.30
-0.082		218.	0.0000	0.008599	0.860	0.563	5.76
0.000	0.000	162.	0.0000	0.008490	0.849	0.563	3.50
0.002	0.041	161.	0.0000	0.008488	0.849	0.563	3.46
0.085	0.291	143.	0.0000	0.008314	0.831	0.563	2.30
0.168	0.410	134.	0.0000	0.008266	0.827	0.563	2.30
0.335	0.579	127.	0.0000	0.008140	0.814	0.564	4.61
0.585	0.765	125.	0.0000	0.008108	0.811	0.564	3.46
0.835	0.914	125.	0.0000	0.008108	0.811	0.564	3.46
1.335	1.155	125.	0.0000	0.008108	0.811	0.564	4.61
2.334	1.528	123.	0.0000	0.008108	0.811	0.564	4.61
4.335	2.082	123.	0.0000	0.008060	0.806	0.564	4.61
4.835	2.199	123.	0.0000	0.008060	0.806	0.564	5.76
9.835	3.136	123.	0.0000	0.007965	0.797	0.564	4.61
14.835	3.852	123.	0.0000	0.007965	0.797	0.564	5.76
19.835	4.454	123.	0.0000	0.007981	0.798	0.564	5.76
24.835	4.983	123.	0.0000	0.007997	0.800	0.564	5.76
29.835	5.462	123.	0.0000	0.007807	0.781	0.564	5.76
39.835	6.311	123.	0.0000	0.007791	0.779	0.564	5.76
49.835	7.059	123.	0.0000	0.007855	0.785	0.564	15.0
59.834	7.735	114.	0.0000	0.007791	0.779	0.564	25.3
69.834	8.357	123.	0.0000	0.007807	0.781	0.564	23.0
79.834	8.935	130.	0.0000	0.007617	0.762	0.564	15.0
89.835	9.478	123.	0.0000	0.007807	0.781	0.564	11.5
99.835	9.992	123.	0.0000	0.007791	0.779	0.564	8.06
109.835	10.480	123.	0.0000	0.007807	0.781	0.564	6.91
119.835	10.947	123.	0.0000	0.007839	0.784	0.564	4.61
129.835	11.395	123.	0.0000	0.007870	0.787	0.564	4.61
139.835	11.825	123.	0.0000	0.007839	0.784	0.564	3.46
149.835	12.241	123.	0.0000	0.007886	0.789	0.564	3.46
159.834	12.643	123.	0.0000	0.007918	0.792	0.564	3.46
169.834	13.032	123.	0.0000	0.007950	0.795	0.564	-2.30
177.838	13.336	125.	0.0000	0.007950	0.795	0.564	-2.30

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 14

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.226		125.	0.0000	0.007950	0.795	0.564	-1.15
-0.224		125.	0.0000	0.007950	0.795	0.564	-1.15
-0.222		125.	0.0000	0.007950	0.795	0.564	-1.15
-0.221		123.	0.0000	0.007934	0.793	0.564	-4.61
-0.219		123.	0.0000	0.007934	0.793	0.564	-4.61
-0.217		123.	0.0000	0.007965	0.797	0.564	-1.15
-0.215		123.	0.0000	0.007965	0.797	0.564	-1.15
-0.213		123.	0.0000	0.007965	0.797	0.564	-1.15
-0.212		127.	0.0000	0.007965	0.797	0.564	-2.30
-0.210		127.	0.0000	0.007965	0.797	0.564	-2.30
-0.208		127.	0.0000	0.007965	0.797	0.564	-2.30
-0.200		145.	0.0000	0.007997	0.800	0.564	-2.30
-0.192		159.	0.0000	0.008029	0.803	0.564	-2.30
-0.183		168.	0.0000	0.008060	0.806	0.564	-2.30
-0.175		177.	0.0000	0.008076	0.808	0.564	0.000
-0.150		198.	0.0000	0.008187	0.819	0.563	-2.30
-0.142		205.	0.0000	0.008219	0.822	0.563	1.15
-0.058		230.	0.0000	0.008377	0.838	0.563	0.000
0.000	0.000	238.	0.0000	0.008421	0.842	0.563	-0.805
0.025	0.158	241.	0.0000	0.008441	0.844	0.563	-1.15
0.108	0.329	245.	0.0000	0.008456	0.846	0.563	-1.15
0.275	0.524	248.	0.0000	0.008472	0.847	0.563	0.000
0.525	0.725	248.	0.0000	0.008472	0.847	0.563	-1.15
0.775	0.880	245.	0.0000	0.008488	0.849	0.563	-1.15
1.275	1.129	248.	0.0000	0.008472	0.847	0.563	-1.15
2.275	1.508	248.	0.0000	0.008536	0.854	0.563	0.000
4.274	2.067	248.	0.0000	0.008520	0.852	0.563	-2.30
4.774	2.185	248.	0.0000	0.008536	0.854	0.563	-2.30
9.774	3.126	248.	0.0000	0.008662	0.866	0.563	-5.76
14.774	3.844	248.	0.0000	0.008678	0.868	0.563	-5.76
19.775	4.447	248.	0.0000	0.008662	0.866	0.563	-3.46
24.774	4.977	248.	0.0000	0.008694	0.869	0.563	-4.61
29.774	5.457	250.	0.0000	0.008757	0.876	0.563	-9.22
39.775	6.307	248.	0.0000	0.008773	0.877	0.563	-4.61
49.775	7.055	248.	0.0000	0.008821	0.882	0.562	-8.06
59.774	7.731	248.	0.0000	0.008852	0.885	0.562	-8.06
69.774	8.353	248.	0.0000	0.008900	0.890	0.562	-6.91
79.774	8.932	248.	0.0000	0.008900	0.890	0.562	-9.22
89.775	9.475	248.	0.0000	0.008963	0.896	0.562	-8.06
99.775	9.989	248.	0.0000	0.008995	0.899	0.562	-13.8
109.775	10.477	248.	0.0000	0.009011	0.901	0.562	-6.91
119.774	10.944	248.	0.0000	0.009090	0.909	0.562	-13.8
129.774	11.392	248.	0.0000	0.009090	0.909	0.562	-11.5
139.774	11.823	248.	0.0000	0.009121	0.912	0.562	-15.0
149.774	12.238	248.	0.0000	0.009153	0.915	0.562	-10.4
159.774	12.640	248.	0.0000	0.009201	0.920	0.562	-17.3
169.775	13.030	248.	0.0000	0.009169	0.917	0.562	-13.8
179.775	13.408	248.	0.0000	0.009232	0.923	0.562	-17.3
189.775	13.776	248.	0.0000	0.009232	0.923	0.562	-13.8
199.775	14.134	248.	0.0000	0.009232	0.923	0.562	-17.3

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 5 of 14

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
209.775	14.484	248.	0.0000	0.009280	0.928	0.562	-21.9
219.775	14.825	248.	0.0000	0.009311	0.931	0.562	-13.8
229.775	15.158	248.	0.0000	0.009327	0.933	0.562	-18.4
239.775	15.485	248.	0.0000	0.009375	0.937	0.562	-21.9
249.774	15.804	248.	0.0000	0.009343	0.934	0.562	-17.3
259.774	16.118	248.	0.0000	0.009407	0.941	0.562	-21.9
269.775	16.425	248.	0.0000	0.009486	0.949	0.561	-25.3
279.774	16.726	248.	0.0000	0.009486	0.949	0.561	-20.7
289.775	17.023	248.	0.0000	0.009502	0.950	0.561	-25.3
299.775	17.314	248.	0.0000	0.009549	0.955	0.561	-27.6
309.775	17.600	248.	0.0000	0.009549	0.955	0.561	-23.0
319.774	17.882	248.	0.0000	0.009517	0.952	0.561	-28.8
329.774	18.160	248.	0.0000	0.009612	0.961	0.561	-28.8
339.775	18.433	248.	0.0000	0.009597	0.960	0.561	-25.3
349.775	18.702	248.	0.0000	0.009628	0.963	0.561	-32.3
359.775	18.968	248.	0.0000	0.009644	0.964	0.561	-26.5
369.775	19.230	248.	0.0000	0.009660	0.966	0.561	-30.0
379.775	19.488	248.	0.0000	0.009692	0.969	0.561	-34.6
389.774	19.743	248.	0.0000	0.009628	0.963	0.561	-26.5
399.774	19.994	248.	0.0000	0.009676	0.968	0.561	-32.3
409.774	20.243	248.	0.0000	0.009723	0.972	0.561	-34.6
419.774	20.488	248.	0.0000	0.009707	0.971	0.561	-28.8
429.774	20.731	248.	0.0000	0.009707	0.971	0.561	-34.6
439.774	20.971	248.	0.0000	0.009707	0.971	0.561	-28.8
449.774	21.208	248.	0.0000	0.009723	0.972	0.561	-35.7
459.774	21.442	248.	0.0000	0.009707	0.971	0.561	-28.8
469.774	21.674	248.	0.0000	0.009707	0.971	0.561	-28.8
479.774	21.904	248.	0.0000	0.009707	0.971	0.561	-31.1
482.473	21.965	248.	0.0000	0.009723	0.972	0.561	-31.1

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 6 of 14

Constant Load Step

Stress: 500 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.191		248.	0.0000	0.009723	0.972	0.561	-32.3
-0.189		248.	0.0000	0.009723	0.972	0.561	-32.3
-0.187		248.	0.0000	0.009723	0.972	0.561	-32.3
-0.186		261.	0.0000	0.009707	0.971	0.561	-34.6
-0.184		261.	0.0000	0.009707	0.971	0.561	-34.6
-0.182		282.	0.0000	0.009771	0.977	0.561	-34.6
-0.181		282.	0.0000	0.009771	0.977	0.561	-34.6
-0.179		282.	0.0000	0.009771	0.977	0.561	-34.6
-0.178		298.	0.0000	0.009818	0.982	0.561	-34.6
-0.176		298.	0.0000	0.009818	0.982	0.561	-34.6
-0.174		298.	0.0000	0.009818	0.982	0.561	-34.6
-0.165		327.	0.0000	0.009945	0.994	0.561	-34.6
-0.157		350.	0.0000	0.01006	1.01	0.561	-33.4
-0.149		370.	0.0000	0.01015	1.02	0.560	-32.3
-0.140		386.	0.0000	0.01021	1.02	0.560	-33.4
-0.115		416.	0.0000	0.01034	1.03	0.560	-33.4
-0.107		425.	0.0000	0.01040	1.04	0.560	-31.1
-0.024		470.	0.0000	0.01071	1.07	0.560	-33.4
0.000	0.000	475.	0.0000	0.01075	1.07	0.559	-32.8
0.060	0.244	486.	0.0000	0.01085	1.08	0.559	-31.1
0.143	0.378	493.	0.0000	0.01086	1.09	0.559	-32.3
0.310	0.556	495.	0.0000	0.01091	1.09	0.559	-31.1
0.560	0.748	498.	0.0000	0.01096	1.10	0.559	-30.0
0.809	0.900	498.	0.0000	0.01097	1.10	0.559	-32.3
1.309	1.144	495.	0.0000	0.01097	1.10	0.559	-31.1
2.309	1.520	498.	0.0000	0.01097	1.10	0.559	-31.1
4.310	2.076	498.	0.0000	0.01097	1.10	0.559	-30.0
4.810	2.193	498.	0.0000	0.01101	1.10	0.559	-30.0
9.809	3.132	498.	0.0000	0.01099	1.10	0.559	-24.2
14.810	3.848	498.	0.0000	0.01109	1.11	0.559	-27.6
19.809	4.451	498.	0.0000	0.01110	1.11	0.559	-28.8
24.810	4.981	498.	0.0000	0.01113	1.11	0.559	-27.6
29.810	5.460	498.	0.0000	0.01112	1.11	0.559	-26.5
39.809	6.309	498.	0.0000	0.01110	1.11	0.559	-25.3
49.809	7.058	498.	0.0000	0.01110	1.11	0.559	-24.2
59.809	7.734	498.	0.0000	0.01104	1.10	0.559	-20.7
69.809	8.355	498.	0.0000	0.01104	1.10	0.559	-21.9
79.809	8.934	498.	0.0000	0.01105	1.11	0.559	-19.6
89.809	9.477	498.	0.0000	0.01102	1.10	0.559	-17.3
99.809	9.990	498.	0.0000	0.01102	1.10	0.559	-18.4
109.809	10.479	498.	0.0000	0.01101	1.10	0.559	-16.1
119.810	10.946	498.	0.0000	0.01102	1.10	0.559	-17.3
119.849	10.948	498.	0.0000	0.01104	1.10	0.559	-16.1

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 7 of 14

Constant Load Step

Stress: 1e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.403		498.	0.0000	0.01104	1.10	0.559	-16.1
-0.401		498.	0.0000	0.01104	1.10	0.559	-16.1
-0.399		498.	0.0000	0.01104	1.10	0.559	-16.1
-0.398		559.	0.0000	0.01105	1.11	0.559	-17.3
-0.396		559.	0.0000	0.01105	1.11	0.559	-17.3
-0.394		600.	0.0000	0.01126	1.13	0.559	-17.3
-0.393		600.	0.0000	0.01126	1.13	0.559	-17.3
-0.391		600.	0.0000	0.01126	1.13	0.559	-17.3
-0.390		611.	0.0000	0.01134	1.13	0.559	-17.3
-0.388		611.	0.0000	0.01134	1.13	0.559	-17.3
-0.386		611.	0.0000	0.01134	1.13	0.559	-17.3
-0.377		657.	0.0000	0.01140	1.14	0.558	-16.1
-0.369		689.	0.0000	0.01147	1.15	0.558	-17.3
-0.361		720.	0.0000	0.01153	1.15	0.558	-16.1
-0.352		743.	0.0000	0.01159	1.16	0.558	-16.1
-0.327		793.	0.0000	0.01169	1.17	0.558	-16.1
-0.319		805.	0.0000	0.01169	1.17	0.558	-17.3
-0.236		880.	0.0000	0.01189	1.19	0.558	-18.4
-0.152		916.	0.0000	0.01234	1.23	0.557	-15.0
-0.069		939.	0.0000	0.01272	1.27	0.556	-16.1
0.000	0.000	950.	0.0000	0.01291	1.29	0.556	-17.1
0.098	0.312	966.	0.0000	0.01318	1.32	0.556	-18.4
0.347	0.589	982.	0.0000	0.01363	1.36	0.555	-16.1
0.597	0.773	989.	0.0000	0.01395	1.40	0.554	-17.3
1.097	1.048	991.	0.0000	0.01420	1.42	0.554	-17.3
2.097	1.448	996.	0.0000	0.01435	1.43	0.554	-16.1
4.098	2.024	996.	0.0000	0.01455	1.46	0.553	-19.6
4.598	2.144	996.	0.0000	0.01458	1.46	0.553	-18.4
9.597	3.098	998.	0.0000	0.01485	1.49	0.553	-17.3
14.597	3.821	998.	0.0000	0.01506	1.51	0.553	-18.4
19.597	4.427	998.	0.0000	0.01508	1.51	0.553	-20.7
24.597	4.960	998.	0.0000	0.01501	1.50	0.553	-17.3
29.597	5.440	998.	0.0000	0.01509	1.51	0.553	-13.8
39.598	6.293	998.	0.0000	0.01515	1.52	0.553	-9.22
49.597	7.043	998.	0.0000	0.01520	1.52	0.552	-16.1
59.597	7.720	998.	0.0000	0.01522	1.52	0.552	-10.4
69.597	8.342	998.	0.0000	0.01522	1.52	0.552	-9.22
79.598	8.922	998.	0.0000	0.01517	1.52	0.552	-9.22
89.597	9.466	998.	0.0000	0.01520	1.52	0.552	-8.06
99.597	9.980	998.	0.0000	0.01519	1.52	0.552	-6.91
109.597	10.469	998.	0.0000	0.01523	1.52	0.552	-5.76
119.598	10.936	998.	0.0000	0.01530	1.53	0.552	-5.76
119.735	10.942	998.	0.0000	0.01530	1.53	0.552	-4.61

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 8 of 14

Constant Load Step

Stress: 2e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.321		998.	0.0000	0.01530	1.53	0.552	-5.76
-0.319		998.	0.0000	0.01530	1.53	0.552	-5.76
-0.317		998.	0.0000	0.01530	1.53	0.552	-5.76
-0.316		1.14e+03	0.0000	0.01541	1.54	0.552	-6.91
-0.314		1.14e+03	0.0000	0.01541	1.54	0.552	-6.91
-0.311		1.18e+03	0.0000	0.01565	1.56	0.552	-6.91
-0.310		1.18e+03	0.0000	0.01565	1.56	0.552	-6.91
-0.308		1.18e+03	0.0000	0.01565	1.56	0.552	-6.91
-0.307		1.24e+03	0.0000	0.01590	1.59	0.551	-6.91
-0.305		1.24e+03	0.0000	0.01590	1.59	0.551	-6.91
-0.303		1.24e+03	0.0000	0.01590	1.59	0.551	-6.91
-0.295		1.32e+03	0.0000	0.01622	1.62	0.551	-5.76
-0.286		1.39e+03	0.0000	0.01642	1.64	0.551	-5.76
-0.278		1.42e+03	0.0000	0.01688	1.69	0.550	-5.76
-0.270		1.47e+03	0.0000	0.01726	1.73	0.549	-4.61
-0.245		1.56e+03	0.0000	0.01796	1.80	0.548	-4.61
-0.236		1.58e+03	0.0000	0.01821	1.82	0.548	-5.76
-0.153		1.74e+03	0.0000	0.01995	2.00	0.545	-4.61
-0.070		1.85e+03	0.0000	0.02090	2.09	0.543	-3.46
0.000	0.000	1.90e+03	0.0000	0.02121	2.12	0.543	-3.46
0.013	0.116	1.91e+03	0.0000	0.02127	2.13	0.543	-3.46
0.180	0.424	1.95e+03	0.0000	0.02200	2.20	0.542	-3.46
0.430	0.656	1.98e+03	0.0000	0.02238	2.24	0.541	-3.46
0.680	0.825	1.99e+03	0.0000	0.02261	2.26	0.541	-4.61
1.180	1.086	1.99e+03	0.0000	0.02310	2.31	0.540	-3.46
2.180	1.476	2.00e+03	0.0000	0.02363	2.36	0.539	-4.61
4.180	2.045	2.00e+03	0.0000	0.02401	2.40	0.539	-3.46
4.680	2.163	2.00e+03	0.0000	0.02404	2.40	0.539	-4.61
9.680	3.111	2.00e+03	0.0000	0.02421	2.42	0.538	-6.91
14.680	3.831	2.00e+03	0.0000	0.02418	2.42	0.538	-5.76
19.680	4.436	2.00e+03	0.0000	0.02432	2.43	0.538	-4.61
24.680	4.968	2.00e+03	0.0000	0.02434	2.43	0.538	-4.61
29.680	5.448	2.00e+03	0.0000	0.02437	2.44	0.538	-5.76
39.679	6.299	2.00e+03	0.0000	0.02445	2.45	0.538	-5.76
49.680	7.048	2.00e+03	0.0000	0.02447	2.45	0.538	-4.61
59.680	7.725	2.00e+03	0.0000	0.02450	2.45	0.538	-3.46
69.680	8.347	2.00e+03	0.0000	0.02450	2.45	0.538	-3.46
79.680	8.926	2.00e+03	0.0000	0.02453	2.45	0.538	0.000
89.680	9.470	2.00e+03	0.0000	0.02456	2.46	0.538	-1.15
99.680	9.984	2.00e+03	0.0000	0.02481	2.48	0.537	-2.30
109.679	10.473	2.00e+03	0.0000	0.02483	2.48	0.537	-1.15
119.679	10.940	2.00e+03	0.0000	0.02497	2.50	0.537	-1.15
119.937	10.952	2.00e+03	0.0000	0.02496	2.50	0.537	-2.30

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 9 of 14

Constant Load Step

Stress: 4e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.198		2.00e+03	0.0000	0.02496	2.50	0.537	-2.30
-0.196		2.00e+03	0.0000	0.02496	2.50	0.537	-2.30
-0.194		2.00e+03	0.0000	0.02496	2.50	0.537	-2.30
-0.193		2.37e+03	0.0000	0.02507	2.51	0.537	1.15
-0.190		2.37e+03	0.0000	0.02507	2.51	0.537	1.15
-0.188		2.61e+03	0.0000	0.02542	2.54	0.536	0.000
-0.187		2.61e+03	0.0000	0.02542	2.54	0.536	0.000
-0.185		2.61e+03	0.0000	0.02542	2.54	0.536	0.000
-0.184		2.73e+03	0.0000	0.02570	2.57	0.536	-1.15
-0.182		2.73e+03	0.0000	0.02570	2.57	0.536	-1.15
-0.180		2.73e+03	0.0000	0.02570	2.57	0.536	-1.15
-0.172		2.90e+03	0.0000	0.02640	2.64	0.535	-1.15
-0.163		3.02e+03	0.0000	0.02710	2.71	0.534	-3.46
-0.155		3.13e+03	0.0000	0.02755	2.76	0.533	-2.30
-0.147		3.20e+03	0.0000	0.02798	2.80	0.532	-2.30
-0.122		3.39e+03	0.0000	0.02919	2.92	0.530	-1.15
-0.113		3.45e+03	0.0000	0.02945	2.95	0.530	0.000
-0.030		3.76e+03	0.0000	0.03093	3.09	0.528	-2.30
0.000	0.000	3.80e+03	0.0000	0.03129	3.13	0.527	-2.72
0.053	0.231	3.86e+03	0.0000	0.03193	3.19	0.526	-3.46
0.137	0.369	3.93e+03	0.0000	0.03259	3.26	0.525	-2.30
0.303	0.551	3.96e+03	0.0000	0.03329	3.33	0.524	-2.30
0.553	0.744	3.98e+03	0.0000	0.03378	3.38	0.523	-1.15
0.803	0.896	3.98e+03	0.0000	0.03394	3.39	0.523	-1.15
1.303	1.141	3.99e+03	0.0000	0.03403	3.40	0.523	-1.15
2.303	1.517	3.99e+03	0.0000	0.03428	3.43	0.522	-2.30
4.303	2.074	4.00e+03	0.0000	0.03443	3.44	0.522	-2.30
4.803	2.192	4.00e+03	0.0000	0.03443	3.44	0.522	0.000
9.803	3.131	4.00e+03	0.0000	0.03459	3.46	0.522	-4.61
14.803	3.847	4.00e+03	0.0000	0.03487	3.49	0.521	-2.30
19.803	4.450	4.00e+03	0.0000	0.03487	3.49	0.521	-3.46
24.803	4.980	4.00e+03	0.0000	0.03514	3.51	0.521	-3.46
29.802	5.459	4.00e+03	0.0000	0.03520	3.52	0.521	-3.46
39.803	6.309	4.00e+03	0.0000	0.03542	3.54	0.521	-3.46
49.803	7.057	4.00e+03	0.0000	0.03555	3.56	0.520	-3.46
59.803	7.733	4.00e+03	0.0000	0.03561	3.56	0.520	-3.46
69.802	8.355	4.00e+03	0.0000	0.03573	3.57	0.520	-4.61
79.803	8.933	4.00e+03	0.0000	0.03577	3.58	0.520	-3.46
89.803	9.476	4.00e+03	0.0000	0.03588	3.59	0.520	-3.46
99.803	9.990	4.00e+03	0.0000	0.03588	3.59	0.520	-3.46
109.802	10.479	4.00e+03	0.0000	0.03598	3.60	0.520	-4.61
119.803	10.945	3.96e+03	0.0000	0.03604	3.60	0.520	-4.61
129.803	11.393	4.00e+03	0.0000	0.03606	3.61	0.520	-2.30
139.803	11.824	4.00e+03	0.0000	0.03611	3.61	0.519	-3.46
149.803	12.239	4.00e+03	0.0000	0.03617	3.62	0.519	-4.61
153.824	12.403	4.00e+03	0.0000	0.03618	3.62	0.519	-4.61

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 10 of 14

Constant Load Step

Stress: 8e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.145		4.00e+03	0.0000	0.03620	3.62	0.519	-3.46
-0.143		4.00e+03	0.0000	0.03620	3.62	0.519	-3.46
-0.141		4.00e+03	0.0000	0.03620	3.62	0.519	-3.46
-0.140		4.68e+03	0.0000	0.03636	3.64	0.519	-5.76
-0.138		4.68e+03	0.0000	0.03636	3.64	0.519	-5.76
-0.136		5.34e+03	0.0000	0.03696	3.70	0.518	-4.61
-0.135		5.34e+03	0.0000	0.03696	3.70	0.518	-4.61
-0.133		5.34e+03	0.0000	0.03696	3.70	0.518	-4.61
-0.132		5.65e+03	0.0000	0.03745	3.75	0.517	-6.91
-0.130		5.65e+03	0.0000	0.03745	3.75	0.517	-6.91
-0.128		5.65e+03	0.0000	0.03745	3.75	0.517	-6.91
-0.119		6.09e+03	0.0000	0.03904	3.90	0.515	-4.61
-0.111		6.39e+03	0.0000	0.03980	3.98	0.514	-4.61
-0.103		6.61e+03	0.0000	0.04073	4.07	0.512	-4.61
-0.094		6.80e+03	0.0000	0.04176	4.18	0.511	-4.61
-0.069		7.08e+03	0.0000	0.04350	4.35	0.508	-3.46
-0.061		7.24e+03	0.0000	0.04394	4.39	0.507	-5.76
0.000	0.000	7.60e+03	0.0000	0.04625	4.62	0.503	-4.91
0.022	0.149	7.73e+03	0.0000	0.04708	4.71	0.502	-4.61
0.105	0.325	7.89e+03	0.0000	0.04781	4.78	0.501	-4.61
0.189	0.435	7.94e+03	0.0000	0.04827	4.83	0.500	-5.76
0.355	0.596	7.97e+03	0.0000	0.04906	4.91	0.499	-3.46
0.605	0.778	7.98e+03	0.0000	0.04961	4.96	0.498	-2.30
0.855	0.925	7.99e+03	0.0000	0.05006	5.01	0.497	-2.30
1.355	1.164	7.99e+03	0.0000	0.05037	5.04	0.497	-6.91
2.355	1.535	8.00e+03	0.0000	0.05058	5.06	0.497	-4.61
4.356	2.087	8.00e+03	0.0000	0.05080	5.08	0.496	-10.4
4.855	2.204	8.00e+03	0.0000	0.05079	5.08	0.496	-3.46
9.855	3.139	8.00e+03	0.0000	0.05120	5.12	0.496	-6.91
14.855	3.854	8.00e+03	0.0000	0.05132	5.13	0.495	-9.22
19.855	4.456	8.00e+03	0.0000	0.05143	5.14	0.495	-6.91
24.855	4.985	8.00e+03	0.0000	0.05151	5.15	0.495	-5.76
29.855	5.464	8.00e+03	0.0000	0.05186	5.19	0.495	-6.91
39.856	6.313	8.00e+03	0.0000	0.05221	5.22	0.494	-6.91
49.856	7.061	8.00e+03	0.0000	0.05251	5.25	0.494	-6.91
59.855	7.737	8.00e+03	0.0000	0.05273	5.27	0.493	-5.76
69.855	8.358	8.00e+03	0.0000	0.05272	5.27	0.493	-4.61
79.855	8.936	8.00e+03	0.0000	0.05291	5.29	0.493	-3.46
89.856	9.479	8.00e+03	0.0000	0.05300	5.30	0.493	-1.15
99.855	9.993	8.00e+03	0.0000	0.05299	5.30	0.493	-1.15
109.855	10.481	8.00e+03	0.0000	0.05303	5.30	0.493	9.22
119.855	10.948	8.00e+03	0.0000	0.05307	5.31	0.493	70.3
129.856	11.395	8.00e+03	0.0000	0.05307	5.31	0.493	3.46
139.856	11.826	8.00e+03	0.0000	0.05311	5.31	0.493	-1.15
149.855	12.242	8.00e+03	0.0000	0.05311	5.31	0.493	58.8
159.678	12.636	8.00e+03	0.0000	0.05310	5.31	0.493	19.6

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 11 of 14

Constant Load Step

Stress: 1.6e+04 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.082		8.00e+03	0.0000	0.05311	5.31	0.493	18.4
-0.080		8.00e+03	0.0000	0.05311	5.31	0.493	18.4
-0.078		8.00e+03	0.0000	0.05311	5.31	0.493	18.4
-0.077		9.12e+03	0.0000	0.05330	5.33	0.492	21.9
-0.075		9.12e+03	0.0000	0.05330	5.33	0.492	21.9
-0.073		1.04e+04	0.0000	0.05470	5.47	0.490	21.9
-0.072		1.04e+04	0.0000	0.05470	5.47	0.490	21.9
-0.070		1.04e+04	0.0000	0.05470	5.47	0.490	21.9
-0.069		1.10e+04	0.0000	0.05579	5.58	0.488	20.7
-0.067		1.10e+04	0.0000	0.05579	5.58	0.488	20.7
-0.065		1.10e+04	0.0000	0.05579	5.58	0.488	20.7
-0.056		1.22e+04	0.0000	0.05875	5.88	0.484	21.9
-0.048		1.30e+04	0.0000	0.06003	6.00	0.482	19.6
-0.040		1.35e+04	0.0000	0.06249	6.25	0.478	21.9
-0.031		1.40e+04	0.0000	0.06349	6.35	0.476	21.9
-0.006		1.51e+04	0.0000	0.06634	6.63	0.472	19.6
0.000	0.000	1.52e+04	0.0000	0.06667	6.67	0.471	20.5
0.002	0.045	1.52e+04	0.0000	0.06678	6.68	0.471	20.7
0.085	0.292	1.57e+04	0.0000	0.06950	6.95	0.467	19.6
0.169	0.411	1.59e+04	0.0000	0.07026	7.03	0.466	20.7
0.252	0.502	1.59e+04	0.0000	0.07074	7.07	0.465	18.4
0.419	0.647	1.60e+04	0.0000	0.07158	7.16	0.464	17.3
0.669	0.818	1.60e+04	0.0000	0.07272	7.27	0.462	19.6
0.918	0.958	1.60e+04	0.0000	0.07308	7.31	0.461	17.3
1.418	1.191	1.60e+04	0.0000	0.07378	7.38	0.460	18.4
2.418	1.555	1.60e+04	0.0000	0.07506	7.51	0.458	17.3
4.419	2.102	1.60e+04	0.0000	0.07539	7.54	0.458	13.8
4.919	2.218	1.60e+04	0.0000	0.07558	7.56	0.457	15.0
9.919	3.149	1.60e+04	0.0000	0.07606	7.61	0.456	6.91
14.919	3.862	1.60e+04	0.0000	0.07606	7.61	0.456	4.61
19.918	4.463	1.60e+04	0.0000	0.07608	7.61	0.456	6.91
24.918	4.992	1.60e+04	0.0000	0.07612	7.61	0.456	4.61
29.918	5.470	1.60e+04	0.0000	0.07615	7.62	0.456	3.46
39.918	6.318	1.60e+04	0.0000	0.07622	7.62	0.456	2.30
49.918	7.065	1.60e+04	0.0000	0.07641	7.64	0.456	3.46
59.918	7.741	1.60e+04	0.0000	0.07650	7.65	0.456	1.15
69.919	8.362	1.60e+04	0.0000	0.07658	7.66	0.456	3.46
79.918	8.940	1.60e+04	0.0000	0.07661	7.66	0.456	2.30
89.918	9.483	1.60e+04	0.0000	0.07666	7.67	0.456	4.61
99.918	9.996	1.60e+04	0.0000	0.07671	7.67	0.455	1.15
109.919	10.484	1.60e+04	0.0000	0.07676	7.68	0.455	3.46
119.918	10.951	1.60e+04	0.0000	0.07718	7.72	0.455	3.46
120.135	10.961	1.60e+04	0.0000	0.07715	7.72	0.455	1.15

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 12 of 14

Constant Load Step

Stress: 4e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.032		1.60e+04	0.0000	0.07715	7.72	0.455	3.46
-0.030		1.60e+04	0.0000	0.07715	7.72	0.455	3.46
-0.028		1.60e+04	0.0000	0.07715	7.72	0.455	3.46
-0.027		1.50e+04	0.0000	0.07715	7.72	0.455	6.91
-0.025		1.50e+04	0.0000	0.07715	7.72	0.455	6.91
-0.023		1.14e+04	0.0000	0.07628	7.63	0.456	5.76
-0.022		1.14e+04	0.0000	0.07628	7.63	0.456	5.76
-0.020		1.14e+04	0.0000	0.07628	7.63	0.456	5.76
-0.019		8.70e+03	0.0000	0.07604	7.60	0.457	5.76
-0.017		8.70e+03	0.0000	0.07604	7.60	0.457	5.76
-0.014		8.70e+03	0.0000	0.07604	7.60	0.457	5.76
-0.006		5.88e+03	0.0000	0.07462	7.46	0.459	5.76
0.000	0.000	5.20e+03	0.0000	0.07379	7.38	0.460	4.92
0.002	0.047	4.95e+03	0.0000	0.07349	7.35	0.461	4.61
0.011	0.103	4.53e+03	0.0000	0.07304	7.30	0.461	4.61
0.019	0.137	4.33e+03	0.0000	0.07291	7.29	0.461	2.30
0.044	0.209	4.11e+03	0.0000	0.07264	7.26	0.462	2.30
0.052	0.228	4.08e+03	0.0000	0.07259	7.26	0.462	2.30
0.136	0.368	4.02e+03	0.0000	0.07245	7.24	0.462	2.30
0.219	0.468	4.01e+03	0.0000	0.07240	7.24	0.462	3.46
0.302	0.550	4.00e+03	0.0000	0.07235	7.24	0.462	3.46
0.469	0.685	4.00e+03	0.0000	0.07234	7.23	0.462	1.15
0.719	0.848	4.00e+03	0.0000	0.07234	7.23	0.462	4.61
0.969	0.984	4.00e+03	0.0000	0.07227	7.23	0.462	4.61
1.469	1.212	4.00e+03	0.0000	0.07226	7.23	0.462	3.46
2.469	1.571	4.00e+03	0.0000	0.07213	7.21	0.463	2.30
4.468	2.114	4.00e+03	0.0000	0.07196	7.20	0.463	1.15
4.968	2.229	4.00e+03	0.0000	0.07197	7.20	0.463	2.30
9.968	3.157	4.00e+03	0.0000	0.07182	7.18	0.463	2.30
14.968	3.869	4.00e+03	0.0000	0.07172	7.17	0.463	3.46
19.969	4.469	4.00e+03	0.0000	0.07166	7.17	0.463	2.30
24.969	4.997	4.00e+03	0.0000	0.07161	7.16	0.464	1.15
29.969	5.474	4.00e+03	0.0000	0.07161	7.16	0.464	0.000
39.969	6.322	4.00e+03	0.0000	0.07159	7.16	0.464	24.2
49.968	7.069	4.00e+03	0.0000	0.07153	7.15	0.464	31.1
59.969	7.744	4.00e+03	0.0000	0.07155	7.15	0.464	32.3
69.968	8.365	4.00e+03	0.0000	0.07151	7.15	0.464	32.3
79.968	8.942	4.00e+03	0.0000	0.07147	7.15	0.464	27.6
89.968	9.485	4.00e+03	0.0000	0.07145	7.15	0.464	28.8
99.968	9.998	4.00e+03	0.0000	0.07147	7.15	0.464	26.5
109.968	10.487	4.01e+03	0.0000	0.07144	7.14	0.464	26.5
119.968	10.953	4.00e+03	0.0000	0.07142	7.14	0.464	24.2
120.044	10.956	4.00e+03	0.0000	0.07142	7.14	0.464	24.2

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 13 of 14

Constant Load Step

Stress: 1e+03 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.053		4.00e+03	0.0000	0.07142	7.14	0.464	21.9
-0.051		4.00e+03	0.0000	0.07142	7.14	0.464	21.9
-0.049		4.00e+03	0.0000	0.07142	7.14	0.464	21.9
-0.048		3.47e+03	0.0000	0.07136	7.14	0.464	25.3
-0.046		3.47e+03	0.0000	0.07136	7.14	0.464	25.3
-0.044		2.68e+03	0.0000	0.07052	7.05	0.465	26.5
-0.043		2.68e+03	0.0000	0.07052	7.05	0.465	26.5
-0.040		2.68e+03	0.0000	0.07052	7.05	0.465	26.5
-0.039		2.27e+03	0.0000	0.07033	7.03	0.466	25.3
-0.037		2.27e+03	0.0000	0.07033	7.03	0.466	25.3
-0.035		2.27e+03	0.0000	0.07033	7.03	0.466	25.3
-0.027		1.81e+03	0.0000	0.06999	7.00	0.466	24.2
-0.019		1.56e+03	0.0000	0.06971	6.97	0.467	24.2
-0.010		1.41e+03	0.0000	0.06950	6.95	0.467	23.0
-0.002		1.31e+03	0.0000	0.06939	6.94	0.467	24.2
0.000	0.000	1.30e+03	0.0000	0.06939	6.94	0.467	24.0
0.023	0.152	1.16e+03	0.0000	0.06930	6.93	0.467	21.9
0.031	0.177	1.13e+03	0.0000	0.06930	6.93	0.467	23.0
0.115	0.339	1.04e+03	0.0000	0.06920	6.92	0.467	23.0
0.198	0.445	1.02e+03	0.0000	0.06917	6.92	0.467	24.2
0.281	0.530	1.01e+03	0.0000	0.06912	6.91	0.467	21.9
0.448	0.669	1.01e+03	0.0000	0.06903	6.90	0.468	23.0
0.698	0.835	1.00e+03	0.0000	0.06893	6.89	0.468	23.0
0.948	0.974	1.00e+03	0.0000	0.06884	6.88	0.468	24.2
1.448	1.203	1.00e+03	0.0000	0.06881	6.88	0.468	24.2
2.448	1.564	1.00e+03	0.0000	0.06871	6.87	0.468	20.7
4.448	2.109	1.00e+03	0.0000	0.06844	6.84	0.469	20.7
4.948	2.224	998.	0.0000	0.06843	6.84	0.469	19.6
9.948	3.154	998.	0.0000	0.06813	6.81	0.469	19.6
14.948	3.866	998.	0.0000	0.06792	6.79	0.469	19.6
19.948	4.466	1.00e+03	0.0000	0.06786	6.79	0.469	20.7
24.947	4.995	998.	0.0000	0.06778	6.78	0.470	21.9
29.947	5.472	998.	0.0000	0.06744	6.74	0.470	21.9
39.948	6.320	998.	0.0000	0.06744	6.74	0.470	20.7
49.948	7.067	998.	0.0000	0.06738	6.74	0.470	19.6
59.948	7.743	998.	0.0000	0.06730	6.73	0.470	17.3
69.947	8.363	998.	0.0000	0.06724	6.72	0.470	-86.4
79.948	8.941	998.	0.0000	0.06722	6.72	0.470	55.3
89.948	9.484	1.00e+03	0.0000	0.06719	6.72	0.470	48.4
99.948	9.997	998.	0.0000	0.06718	6.72	0.471	-103.
109.947	10.486	998.	0.0000	0.06713	6.71	0.471	26.5
119.947	10.952	998.	0.0000	0.06713	6.71	0.471	15.0
129.948	11.399	998.	0.0000	0.06714	6.71	0.471	61.1
133.750	11.565	998.	0.0000	0.06713	6.71	0.471	-16.1

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

One-Dimensional Consolidation by ASTM D2435 - Method B

Time Curve 14 of 14

Constant Load Step

Stress: 250 psf

Elapsed Time min	Sq.Rt. of Time min	Stress psf	Displacement Correction in	Corrected Displacement in	Strain %	Void Ratio	Excess Pressure psf
-0.154		998.	0.0000	0.06713	6.71	0.471	-16.1
-0.152		998.	0.0000	0.06713	6.71	0.471	-16.1
-0.150		998.	0.0000	0.06713	6.71	0.471	-16.1
-0.149		855.	0.0000	0.06711	6.71	0.471	-11.5
-0.147		855.	0.0000	0.06711	6.71	0.471	-11.5
-0.144		750.	0.0000	0.06684	6.68	0.471	-16.1
-0.143		750.	0.0000	0.06684	6.68	0.471	-16.1
-0.141		750.	0.0000	0.06684	6.68	0.471	-16.1
-0.140		684.	0.0000	0.06654	6.65	0.471	-15.0
-0.138		684.	0.0000	0.06654	6.65	0.471	-15.0
-0.136		684.	0.0000	0.06654	6.65	0.471	-15.0
-0.128		593.	0.0000	0.06616	6.62	0.472	-16.1
-0.119		536.	0.0000	0.06602	6.60	0.472	-15.0
-0.111		491.	0.0000	0.06594	6.59	0.472	-15.0
-0.103		459.	0.0000	0.06575	6.58	0.473	-17.3
-0.078		395.	0.0000	0.06558	6.56	0.473	-17.3
-0.069		382.	0.0000	0.06554	6.55	0.473	-18.4
0.000	0.000	325.	0.0000	0.06523	6.52	0.474	-20.4
0.014	0.118	314.	0.0000	0.06516	6.52	0.474	-20.7
0.097	0.312	286.	0.0000	0.06499	6.50	0.474	-25.3
0.180	0.425	275.	0.0000	0.06483	6.48	0.474	-30.0
0.347	0.589	264.	0.0000	0.06448	6.45	0.475	-28.8
0.597	0.773	257.	0.0000	0.06410	6.41	0.475	-31.1
0.847	0.920	255.	0.0000	0.06402	6.40	0.475	-34.6
1.347	1.161	252.	0.0000	0.06391	6.39	0.476	-42.6
2.347	1.532	250.	0.0000	0.06363	6.36	0.476	-41.5
4.347	2.085	248.	0.0000	0.06338	6.34	0.476	-47.2
4.847	2.202	250.	0.0000	0.06326	6.33	0.477	-53.0
9.847	3.138	248.	0.0000	0.06309	6.31	0.477	-53.0
14.847	3.853	248.	0.0000	0.06292	6.29	0.477	16.1
19.847	4.455	250.	0.0000	0.06285	6.29	0.477	5.76
24.847	4.985	248.	0.0000	0.06284	6.28	0.477	38.0
29.847	5.463	248.	0.0000	0.06282	6.28	0.477	-31.1
39.846	6.312	248.	0.0000	0.06277	6.28	0.477	55.3
49.847	7.060	248.	0.0000	0.06257	6.26	0.478	8.06
59.847	7.736	248.	0.0000	0.06254	6.25	0.478	19.6
69.847	8.357	248.	0.0000	0.06249	6.25	0.478	32.3
79.846	8.936	248.	0.0000	0.06246	6.25	0.478	56.4
89.847	9.479	248.	0.0000	0.06250	6.25	0.478	56.4
99.847	9.992	248.	0.0000	0.06239	6.24	0.478	9.22
109.847	10.481	248.	0.0000	0.06242	6.24	0.478	61.1
119.846	10.947	248.	0.0000	0.06241	6.24	0.478	184.
119.931	10.951	248.	0.0000	0.06241	6.24	0.478	187.

Project Name: See Remarks	Location: B3-1A	Project Number: 6162232368
Boring Number: B3-1A	Tester: AG	Checker: TZ
Sample Number: ST1	Test Date: 10/7/2024	Depth: 3.5-5.5 ft
Test Number: 26634	Preparation: Intact	Elevation: N/A
Description: Brown Silty Clayey SAND		
Remarks: I-75 at CR 312/Bethlehem Road GDOT PI 0017182		

Compressive Strength of Rock Core

ASTM D7012 Method C

Project Name	I-75 ar CR 312/Bethlehem Rd	**Project No.**	US-EI-6162232368
Tested By	AG/DC	**Reviewed By**	TZ
Test Date	10/18/2024	**Review Date**	10/29/2024

Boring No.	Depth (ft)	Lab ID	Sample Diameter (inch)	Sample Height (inch)	Specimen Weight (grams)	Unit Weight (pcf)	Unconfined Comressive Strength (psi)	Additional Tests Conducted
B3-1/RC1	44.8-45.3	26736	1.98	3.86*	525.8	168.5	6,173	N/A
B3-1/RC2	49.0-49.6	26737	1.98	4.18	580.1	171.7	13,365	N/A
B3-1/RC3	51.0-51.6	26738	1.98	4.07	559.8	170.2	7,048	N/A
B3-1/RC4	58.2-58.7	26739	1.98	4.04	445.0	136.3	810	N/A
B3-1/RC6	70.0-70.7	26740	1.98	3.74*	507.1	167.8	9,318	N/A
B3-2/RC1	34.7-35.1	26741	1.98	3.28*	444.3	170.7	3,205	N/A
B3-2/RC3	45.2-45.5	26742	1.98	3.07*	408.0	164.4	2,389	N/A
B3-2/RC4	48.0-48.5	26743	1.98	4.09	554.3	167.7	3,737	N/A
B3-2/RC5	53.7-54.2	26744	1.98	4.08	553.0	167.7	3,602	N/A

* Did not meet a 2:1 L:D ratio due to limited length of core, compressible strength of such a rock core specimen may differ from a same core material that meets 2:1 ratio.

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-1
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 10:10:00 AM
Lab ID:	2406F78-001	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	14900	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	7.16	0.01	H	pH Units	R547805	1	06/19/2024 13:00	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-2
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 10:20:00 AM
Lab ID:	2406F78-002	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	20800	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	7.05	0.01	H	pH Units	R547805	1	06/19/2024 13:03	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-3
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 11:35:00 AM
Lab ID:	2406F78-003	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	26000	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	7.21	0.01	H	pH Units	R547805	1	06/19/2024 13:07	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-4
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 11:17:00 AM
Lab ID:	2406F78-004	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	21000	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	7.03	0.01	H	pH Units	R547805	1	06/19/2024 13:12	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-5
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 11:23:00 AM
Lab ID:	2406F78-005	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	22300	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	7.33	0.01	H	pH Units	R547805	1	06/19/2024 13:16	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-6
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 12:00:00 PM
Lab ID:	2406F78-006	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	23100	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	7.15	0.01	H	pH Units	R547805	1	06/19/2024 13:21	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Client:	EGSci Consulting, Inc.	**Client Sample ID:**	WS-7
Project Name:	I-75 Bethlehem	**Collection Date:**	6/13/2024 11:55:00 AM
Lab ID:	2406F78-007	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Resistivity SW9050A								
Resistivity (@100% Moisture Saturation)	23700	0		ohms-cm	R547710	1	06/18/2024 14:00	AH
Laboratory Hydrogen Ion (pH) SW9040C								
pH	6.71	0.01	H	pH Units	R547805	1	06/19/2024 13:26	AH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	F	Analyzed in the lab which is a deviation from the method
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Addendum to Preliminary Geotechnical Exploration Data Report
GDOT PI No. 0017182
I-75 at CR 312/Bethlehem Road
Henry County, Georgia

Prepared for:
State of Georgia
Department of Transportation
Geotechnical Engineering Bureau
Office of Materials and Testing
15 Kennedy Drive
Forest Park, GA 30297

Subconsultant to:
Arcadis US, Inc.
2839 Paces Ferry Road
Suite 900
Atlanta, GA 30339

Prepared by:
EGSci Consulting Inc.
1455 Lincoln Parkway
Suite 500
Atlanta, GA 30346

July 14, 2025

ARCADIS

EGSci consulting inc
Engineering, Geophysics & Geosciences

LEGEND:

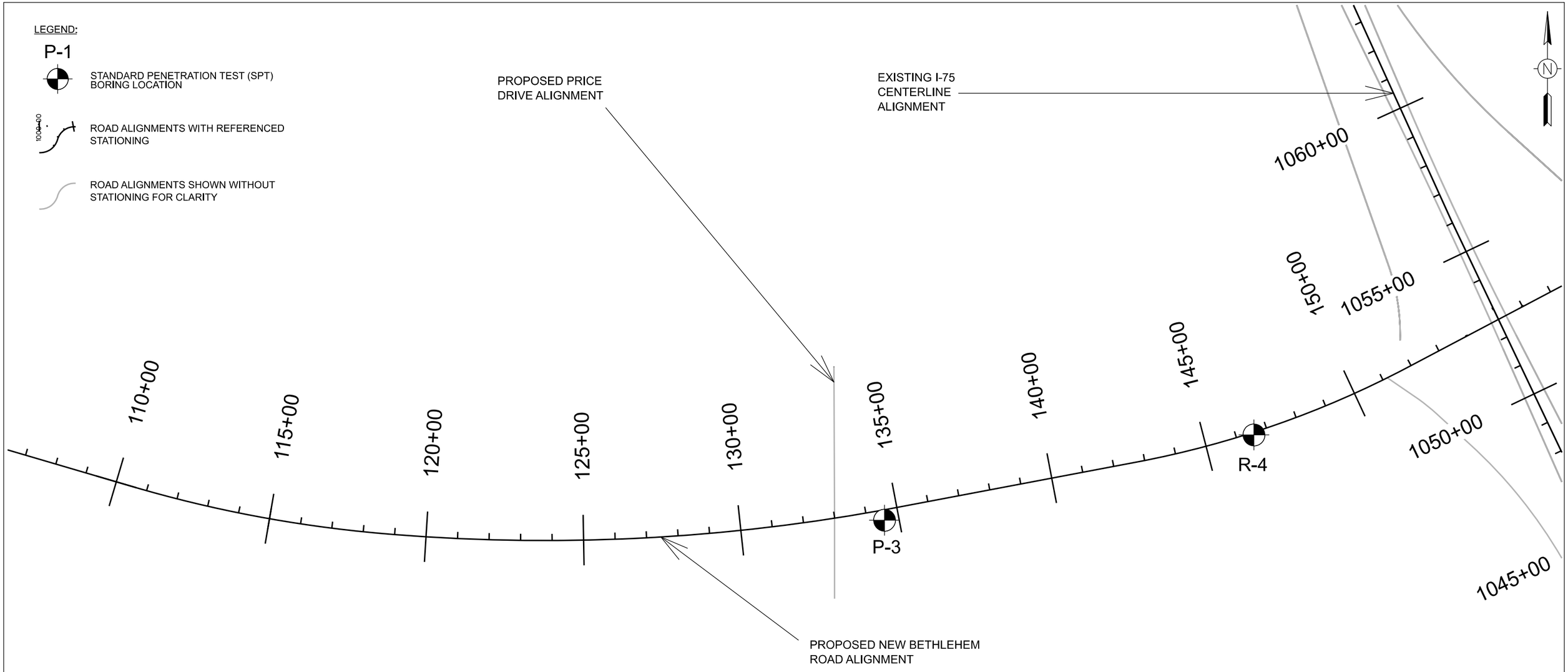
P-1

STANDARD PENETRATION TEST (SPT) BORING LOCATION

1004+00

ROAD ALIGNMENTS WITH REFERENCED STATIONING

ROAD ALIGNMENTS SHOWN WITHOUT STATIONING FOR CLARITY



NOTES:

1. ROAD ALIGNMENTS PROVIDED BY ARCADIS (SEPTEMBER 13 AND 16, 2024); DGN FILES "0017182GEOM-75, 0017182GEOM-CROSS STREETS, 0017182-New_Bethlehem, 0017182GEOM-RAMPS."

2. SURVEY DATA FOR BORING LOCATIONS PROVIDED BY ARCADIS (MAY 7, 2025).

0' 300' 600'

CONSULTANT	EGSci consulting inc	CLIENT	ARCADIS	PROJECT NUMBER	PI NO. 0017182	LOCATION	HENRY COUNTY, GEORGIA
				PROJECT	I-75 @ CR 312/BETHLEHEM ROAD		

ADDENDUM TO PRELIMINARY GEOTECHNICAL EXPLORATION DATA REPORT
BORING LOCATION PLAN

SCALE	1"=300'
FIGURE	1

APPENDIX A

SUBSURFACE EXPLORATION RECORDS

APPENDIX A-1

BORING SUMMARY TABLE

BORING SUMMARY TABLE

ADDENDUM TO PRELIMINARY GEOTECHNICAL EXPLORATION DATA REPORT
I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER	LATITUDE[1]	LONGITUDE[1]	STATION[2] (APPROX.)	OFFSET[2] (FT) (APPROX.)	ELEVATION[1] (FT)	TOTAL DEPTH (FT)
P-3	33.375167	-84.144566	134+54	32.5 R	800.6	20.0
R-4	33.375909	-84.140728	146+56	8.0 R	823.3	35.0

NOTES:

1. Boring locations and ground surface elevations are based on survey data provided by Arcadis on May 7, 2025.
2. Stations and Offsets were estimated based on drawings provided by Arcadis on September 13 and 16, 2024 and survey data provided by Arcadis on May 7, 2025. Stations and offsets referenced correspond to the proposed New Bethlehem Road alignment.

APPENDIX A-2

BORING LOGS

Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING P-3

Sheet 1 of 1

Drilling Date(s): **4/28/2025**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer SN 405184**	Station, Offset: **134+54, 32.5 ft. R (approx.)**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.375167, -84.144566**
Driller: **W. Blake**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **800.6 ft.**
Logged By: **S. Hickman**	Completion Depth: **20.0 ft.**	Benchmark: **N/A**
Reviewed By: **R. Khalil; S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
800.6	0				TOPSOIL						
	0.4				FILL	CH					
		DO	S1	18	SANDY FAT CLAY: stiff, moist, reddish brown, with trace Gravel, and trace Organics.		2-3-6	9		1.25	AS-1: Bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS [% Moisture: 19.4; % Fines: 54.8; LL: 62; PL: 28; GDOT Classification: IIB3].
	3.5	DO	S2	18	S2: very stiff, no Gravel, no Organics, slightly micaceous.		4-7-10	17		2.0	
795.6	5										
	6				RESIDUAL	SM					
		DO	S3	18	SILTY SAND: medium dense, moist, tan, brown, white and black, fine to medium.		3-6-10	16			[S3T from 6.0 - 7.0 ft. BGS: % Moisture: 18.6; % Fines: 47.8]
	7				POORLY GRADED SAND WITH SILT: medium dense, moist, tan, brown, white, and black, fine to coarse.	SP-SM					
	8.5					SM					
		DO	S4	18	SILTY SAND: medium dense, moist, tan, brown, white, and black, fine to coarse, with trace Gravel, saprolitic.		4-9-10	19	16.9		[% Fines: 37.5]
790.6	10										
	13.5	DO	S5	18	S5: tan, brown, and black, slightly micaceous.		4-6-8	14	14.8		[% Fines: 35.8]
785.6	15										Borehole caved in at 15.5 ft. BGS after 24+ hrs. No groundwater observed after 24+ hrs.
											Borehole caved in at 17.0 ft. BGS at drilling completion. No groundwater observed in borehole at drilling completion.
	18.5	DO	S6	18	S6: dense, tan, brown, and black, slightly micaceous.		7-14-17	31			Backfilled with cuttings after 24+ hrs.
780.6	20				Boring terminated at 20.0 ft. BGS.						

EGSci Consulting Inc.
1455 Lincoln Parkway
Suite 500
Atlanta, GA 30346

Project Number: **PI No. 0017182** Project: **I-75 at CR 312/Bethlehem Road** Location: **Henry County, Georgia**		# BORING R-4 Sheet 1 of 2
Drilling Date(s): **4/28/2025**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer SN 405184**	Station, Offset: **146+56, 8.0 ft. R (approx.)**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.375909, -84.140728**
Driller: **W. Blake**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **823.3 ft.**
Logged By: **S. Hickman**	Completion Depth: **35.0 ft.**	Benchmark: **N/A**
Reviewed By: **R. Khalil; S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
823.3	0					TOPSOIL						
	0.4					FILL	CL					
			DO	S1	18	SANDY LEAN CLAY: firm, moist, brown, tan and reddish brown, with trace Gravel and trace Organics.		2-3-2	5	31.9	0.5	[% Fines: 66.4; LL; 39; PL: 20] AS-1: Bulk sample collected in offset boring from 1.0 to 5.0 ft. BGS [% Moisture: 24.7; % Fines: 45.7; LL: 40; PL: 30; GDOT Classification: IIB3].
	3.5					RESIDUAL	SM					
			DO	S2	18	SILTY SAND: medium dense, moist, tan, brown and reddish brown, fine to coarse.		2-6-7	13	17.7		[% Fines: 41.4]
818.3	5											
			DO	S3	18			4-6-6	12			
	8.5					S4: reddish-brown and black.						
			DO	S4	18			3-5-7	12			
813.3	10											
	13.5					S5: reddish-brown and black, slightly micaceous.						
			DO	S5	18			4-7-8	15	23.1		[% Fines: 41.9]
808.3	15											▼ 15.0 ft. BGS at drilling completion and after 24+ hrs.
	18.5					S6: reddish brown, black and white, slightly micaceous.						
			DO	S6	18			4-5-7	12			
803.3	20											

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Suite 500
Atlanta, GA 30346

Project Number: **PI No. 0017182**

Project: **I-75 at CR 312/Bethlehem Road**

Location: **Henry County, Georgia**

BORING R-4

Sheet 2 of 2

Drilling Date(s): **4/28/2025**	Drill Rig and Hammer Type: **CME 45C with Automatic Hammer SN 405184**	Station, Offset: **146+56, 8.0 ft. R (approx.)**
Drilling Company: **Bridger Drilling**	Hammer Efficiency: **90.1%**	Latitude, Longitude: **33.375909, -84.140728**
Driller: **W. Blake**	Drilling Method(s): **Hollow Stem Auger**	Elevation: **823.3 ft.**
Logged By: **S. Hickman**	Completion Depth: **35.0 ft.**	Benchmark: **N/A**
Reviewed By: **R. Khalil; S. Keary**	Boring Location: **Forested area south of Bethlehem Road**	

Elevation (feet)	Depth (feet)	Graphic Log	Sample Type	Sample Number	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6 inches	N-Value (bpf) (field measured)	Moisture (%)	q_u (PP) (tsf)	Additional Remarks
803.3	20					SILTY SAND: medium dense, moist, reddish brown, black and white, fine to coarse, slightly micaceous.	SM					
			DO	S7	18			3-5-8	13			
798.3	25											Borehole caved in at 25.0ft. BGS after 24+ hrs.
												Borehole caved in at 28.0 ft. BGS at drilling completion.
			DO	S8	18			3-5-8	13			
793.3	30											
	33.5					S9: tan, red, white and black, saprolitic.						
			DO	S9	18			3-6-10	16	28.7		[% Fines: 45.6; LL: NP; PL: NP]
788.3	35					Boring terminated at 35.0ft. BGS. Backfilled with cuttings after 24+ hrs.						
783.3	40											

EGSci Consulting Inc.
1455 Lincoln Parkway
Suite 500
Atlanta, GA 30346

APPENDIX B

LABORATORY TESTING DATA

APPENDIX B-1

LABORATORY TEST RESULTS SUMMARY

LABORATORY TEST RESULTS SUMMARY
GDOT 810.2

ADDENDUM TO PRELIMINARY GEOTECHNICAL EXPLORATION DATA REPORT
I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

810.2 TEST NUMBER		19	20	-	-	-	-	-	-
BORING NUMBER		P-3	R-4	-	-	-	-	-	-
STATION (APPROXIMATE)		134+54	146+56	-	-	-	-	-	-
OFFSET (FT) (APPROXIMATE)		32.5 R	8.0 R	-	-	-	-	-	-
DEPTH (FT)		1.0-5.0	1.0-5.0	-	-	-	-	-	-
% PASSING	1 - 1/2" SIEVE	100.0	100.0	-	-	-	-	-	-
	3/4" SIEVE	100.0	100.0	-	-	-	-	-	-
	#10 SIEVE	94.4	91.5	-	-	-	-	-	-
	#40 SIEVE	82.5	79.9	-	-	-	-	-	-
	#60 SIEVE	71.3	65.5	-	-	-	-	-	-
	#200 SIEVE	54.8	45.7	-	-	-	-	-	-
% CLAY		37.1	24.2	-	-	-	-	-	-
FOR MATERIAL PASSING #10 SIEVE	% VOL. CHANGE	9.0	16.6	-	-	-	-	-	-
	% SWELL	2.8	11.6	-	-	-	-	-	-
	% SHRINKAGE	6.7	6.2	-	-	-	-	-	-
	MAX DRY DENSITY (PCF)	110.7	110.7	-	-	-	-	-	-
	% OPT. MOISTURE	17.0	16.3	-	-	-	-	-	-
LIQUID LIMIT		62	40	-	-	-	-	-	-
PLASTIC LIMIT		28	30	-	-	-	-	-	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
SOIL SUPPORT VALUE		-	-	-	-	-	-	-	-
CBR		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% MOISTURE		19.4	24.7	-	-	-	-	-	-
GDOT CLASSIFICATION		IIB3	IIB3	-	-	-	-	-	-

NOTES:

1. Per GDOT GDT 6 and 7, the reported values for Percent Volume Change, Maximum Dry Density, and Percent Optimum Moisture correspond to the Corrected Values for these tests (as applicable). Refer to individual laboratory sheets for uncorrected values.
2. Stations and offsets referenced correspond to the proposed New Bethlehem Road alignment.

EGSci consulting inc

LABORATORY TEST RESULTS SUMMARY

ADDENDUM TO PRELIMINARY GEOTECHNICAL EXPLORATION DATA REPORT
I-75 AT CR 312/BETHLEHEM ROAD
PI NO. 0017182
HENRY COUNTY, GEORGIA

BORING NUMBER		P-3	P-3	P-3	R-4	R-4	R-4	R-4	-
STATION (APPROXIMATE)		134+54	134+54	134+54	146+56	146+56	146+56	146+56	-
OFFSET (FT) (APPROXIMATE)		32.5 R	32.5 R	32.5 R	8.0 R	8.0 R	8.0 R	8.0 R	-
SAMPLE NUMBER		S3T	S4	S5	S1	S2	S5	S9	-
DEPTH (FT)		6.0-7.0	8.5-10.0	13.5-15.0	1.0-2.5	3.5-5.0	13.5-15.0	33.5-35.0	-
% PASSING	1 - 1/2" SIEVE	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
	3/4" SIEVE	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
	#4 SIEVE	100.0	99.9	98.7	96.3	100.0	100.0	100.0	-
	#10 SIEVE	100.0	98.3	96.0	93.7	99.9	99.5	99.8	-
	#40 SIEVE	89.2	67.8	82.8	86.3	90.6	85.9	91.5	-
	#60 SIEVE	75.2	54.6	67.8	79.9	72.8	70.0	79.9	-
	#200 SIEVE	47.8	37.5	35.8	66.4	41.4	41.9	45.6	-
LIQUID LIMIT		-	-	-	39	-	-	NP	-
PLASTIC LIMIT		-	-	-	20	-	-	NP	-
USCS CLASSIFICATION		[SM]	[SM]	[SM]	CL	[SM]	[SM]	SM	-
EROSION INDEX		-	-	-	-	-	-	-	-
RESISTIVITY (OHM-CM)		-	-	-	-	-	-	-	-
pH		-	-	-	-	-	-	-	-
% ORGANIC CONTENT		-	-	-	-	-	-	-	-
% MOISTURE		18.6	16.9	14.8	31.9	17.7	23.1	28.7	-

NOTES:

1. USCS designations in brackets indicate identification based on Visual-Manual Procedure coupled with laboratory results.
2. Abbreviations: NV = Non Viscous; NP = Non-Plastic; N/A = Not Applicable
3. Stations and offsets referenced correspond to the proposed New Bethlehem Road alignment.

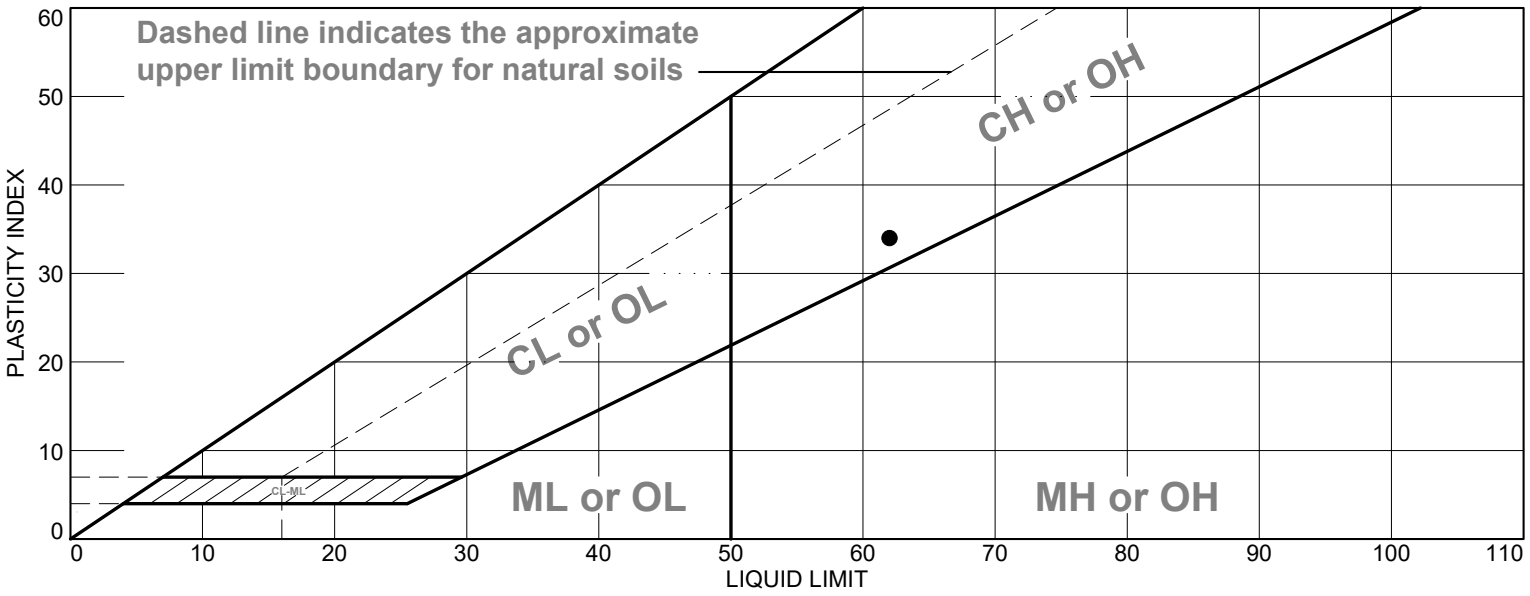
EGSci consulting inc

APPENDIX B-2

LABORATORY TEST DATA SHEETS

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318

ASTM D4318



	Sample Identification	Sampled	Received	Tested	Technician
●	Source of Sample: P-3 Depth: 1.0-5.0' Sample Number: AS-1	05/22/2025	05/22/2025	06/03/2025	NA

	Material Description	USCS	LL	PL	PI	NM	%<#40
●	Red Sandy Fat CLAY	CH	62	28	34	19.4	82.5

	PL Rolling Method	LL Device	Grooving Tool	Test Remarks
●	Hand rolled	Mechanical	Metal	Lab No. 28733

Project No. US-EI-6162232368 **Client:** EGSci

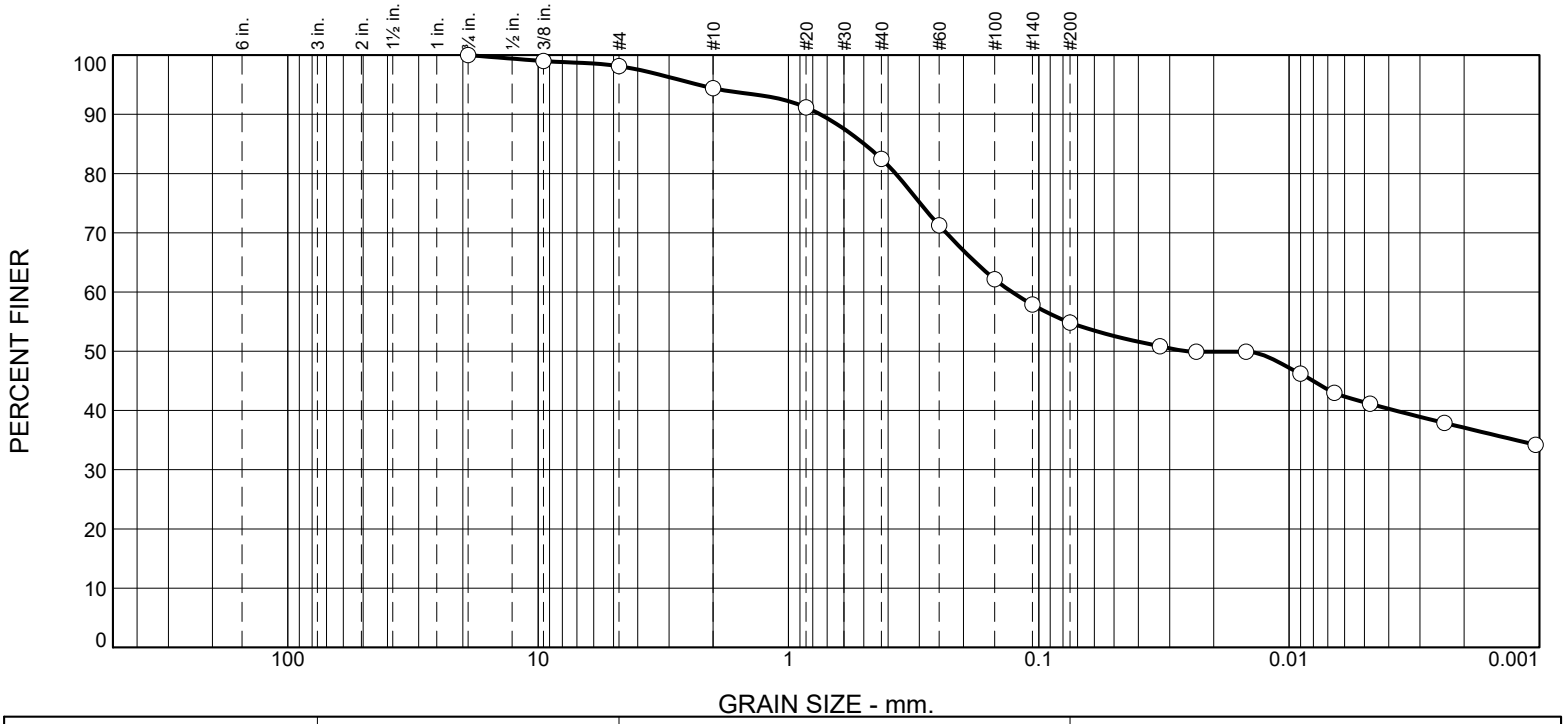
Project: I-75 at CR 312/Bethlehem Road

Checked by: TM

Title: TR

Figure

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.9	3.7	11.9	27.7	17.7	37.1

Test Results (ASTM D422)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
.75	100.0		
.375	99.0		
#4	98.1		
#10	94.4		
#20	91.2		
#40	82.5		
#60	71.3		
#100	62.2		
#140	57.9		
#200	54.8		
0.0328 mm.	50.8		
0.0235 mm.	49.9		
0.0149 mm.	49.9		
0.0090 mm.	46.2		
0.0066 mm.	43.0		
0.0047 mm.	41.1		
0.0024 mm.	37.9		
0.0010 mm.	34.2		

* (no specification provided)

Material Description
Red Sandy Fat CLAY

Sieve Test (ASTM D422)

Test Date: 06/05/2025 **Technician:** WL

Test Notes
Lab No. 28733

Hydrometer Test (ASTM D422)

Test Date: 06/03/2025 **Technician:** WL

Test Notes
N/A

Atterberg (ASTM D4318)

PL= 28 **LL=** 62 **PI=** 34

Coefficients

D_{90}= 0.7466 D_{85}= 0.4981
D_{60}= 0.1279 D_{50}= 0.0254
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

USCS (ASTM D2487)
CH

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

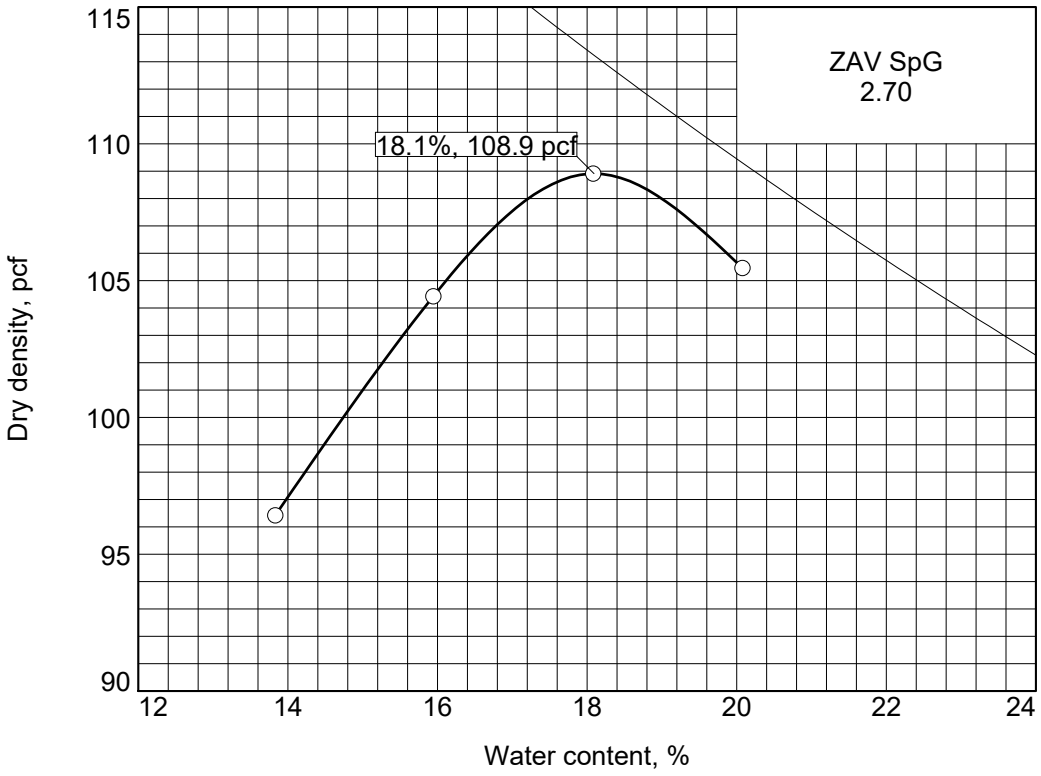
Source of Sample: P-3 **Depth:** 1.0-5.0'
Sample Number: AS-1

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

COMPACTION TEST REPORT

Curve No.



Test Specification:
GDOT GDT 7

Preparation Method	Dry
Hammer Wt.	5.5 lb
Hammer Drop	12 in
Hammer Type:	manual
Layers three **Blows/Layer**	25
Mold Size	0.0332 cu. ft.

Test Performed on Material Passing #10 **Sieve**

NM	19.4	**LL**	62	**PI**	34
Sp.G. (assumed):	2.7				
%>#10	5.6	**%<No.200**	54.8		
USCS	CH	**AASHTO**	A-7-6(16)		
Date Sampled	05/22/2025				
Date Received	05/22/2025				
Date Tested	06/02/2025				
Tested By	WL				

TESTING DATA	1	2	3	4	5	6
WM + WS	6037.4	6209.4	6323.8	6293.9		
WM	4369.6	4369.6	4369.6	4369.6		
WW + T #1	619.8	623.3	662.5	736.0		
WD + T #1	567.3	563.4	591.1	647.2		
TARE #1	187.7	187.7	196.2	204.9		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	13.8	15.9	18.1	20.1		
DRY DENSITY	96.4	104.4	108.9	105.5		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED
Maximum dry density = 110.7 pcf	108.9 pcf
Optimum moisture = 17.0 %	18.1 %

Material Description
Red Sandy Fat CLAY

Remarks:
Lab No. 28733

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road

○ **Source of Sample:** P-3 **Depth:** 1.0-5.0' **Sample Number:** AS-1

Checked by: TM
Title: TR

Figure

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	WL
Project Name	I-75 at CR 312/Bethlehem Road	**Test Date**	6/3/2025
Boring No.	P-3	**Reviewed By**	TM
Sample No.	AS-1	**Review Date**	6/6/2025
Sample Depth	1.0-5.0'	**Lab No.**	28733
Sample Description	Red Sandy Fat CLAY		

	Swell	Shrink
(1) Weight of Mold (g)	447.4	445.1
Mold number / Cal. Due	4046	4150

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9973	(Shrink)	3.9945
Mold Height (in):	(Swell)	1.0000	(Shrink)	1.0023

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	864	416.6	125.8	MF-9	653.8	1059.4	993.8	340.0	65.6	19.3	105.5
Shrink	8510.0	8064.9	2435.6								2041.7

Swell

Initial Dial Reading:	0.309	A
After Soak Dial Reading:	0.337	B
Swell (%):	**2.8**	
((A-B)/Mold HT)		

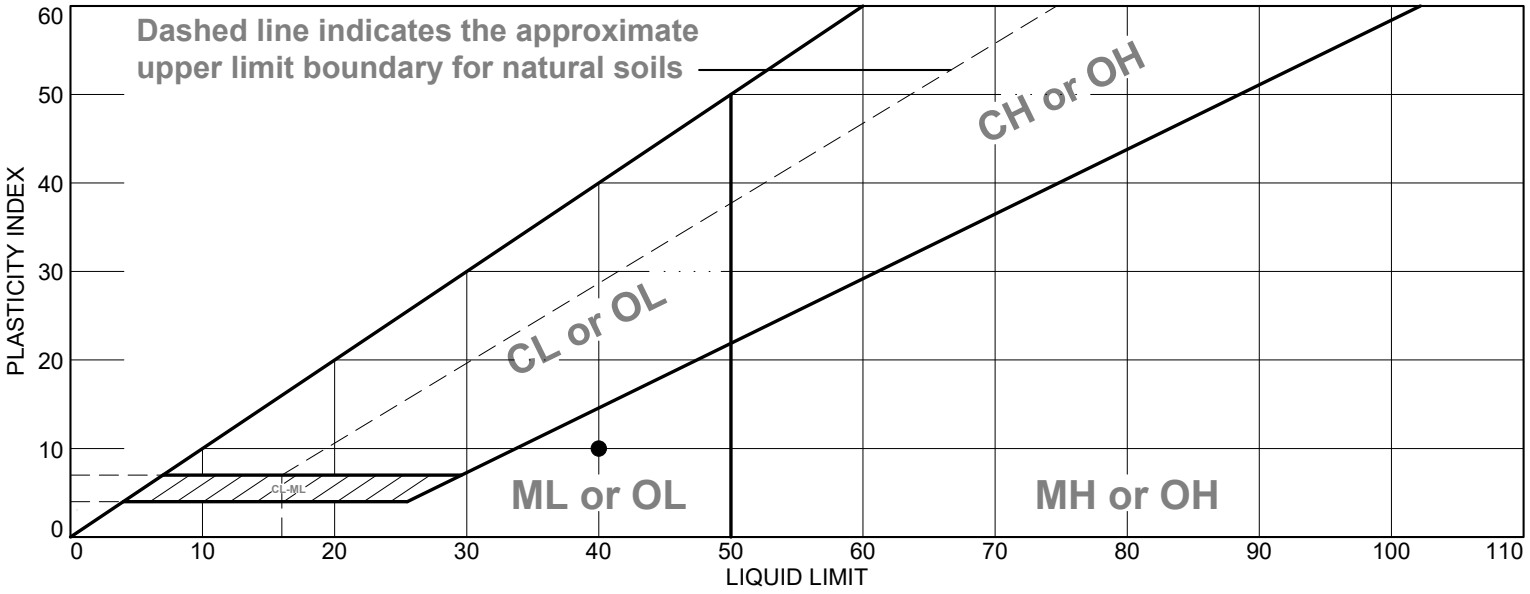
Shrink

Initial Dial Reading (ht):	0.9860	Tare ID: MF-9
After Drying Dial Reading (ht):	0.9600	
After Drying Dia. Reading (d):	3.9050	
	3.9060	
	3.9150	
	3.9150	
Average:	3.9103	
Original Volume (in^3):	12.356	
Final Volume (in^3):	11.528	
Shrinkage (%):	**6.7**	

Total Volume Change (%):	9.5
Plus #10 Sieve Correction Factor:	0.952
Corrected Total Volume Change (%):	**9.0**

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318

ASTM D4318



	Sample Identification	Sampled	Received	Tested	Technician
●	Source of Sample: R-4 Depth: 1.0-5.0' Sample Number: AS-1	05/22/2025	05/22/2025	06/02/2025	NA

	Material Description	USCS	LL	PL	PI	NM	%<#40
●	Red Silty SAND	SM	40	30	10	24.7	79.9

	PL Rolling Method	LL Device	Grooving Tool	Test Remarks
●	Hand rolled	Mechanical	Metal	Lab No. 28725

Project No. US-EI-6162232368 **Client:** EGSci

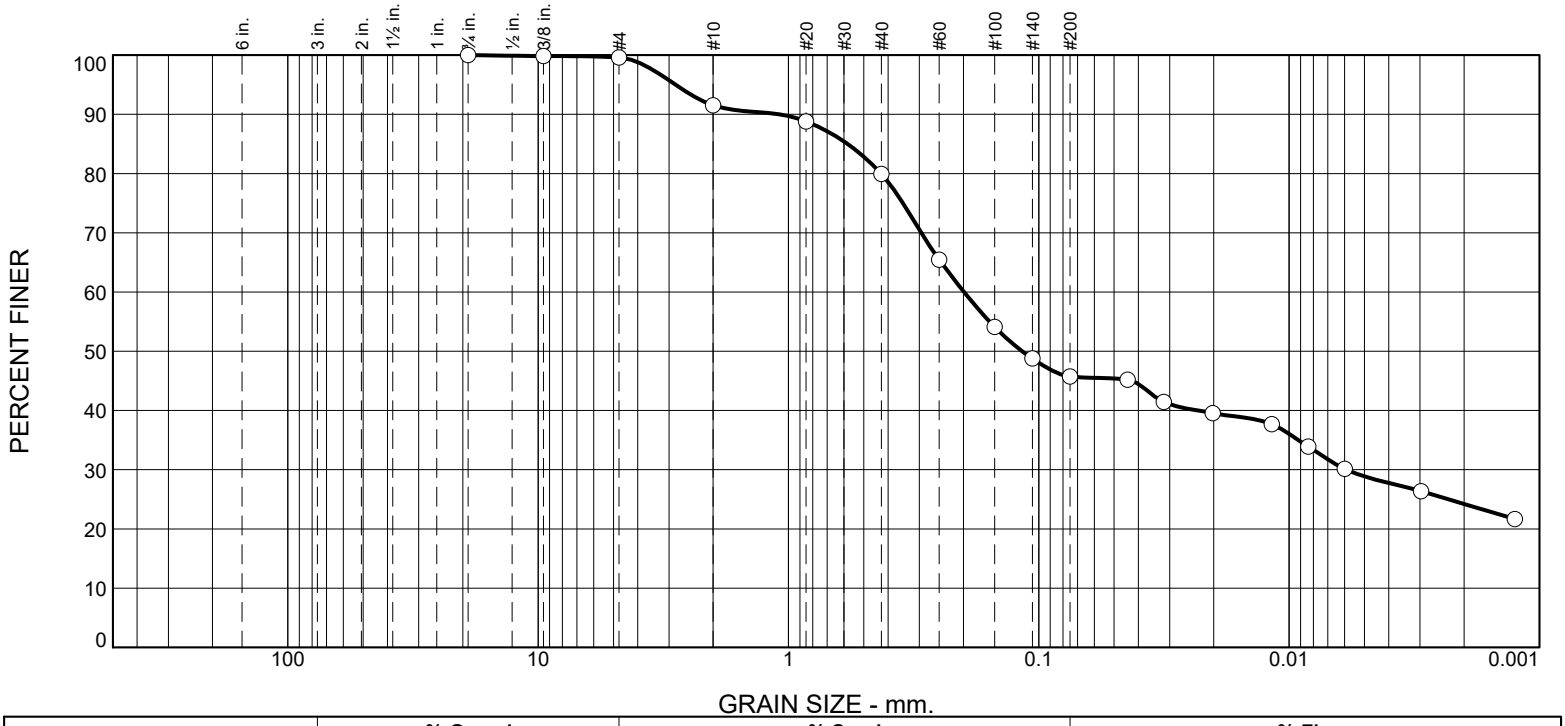
Project: I-75 at CR 312/Bethlehem Road

Checked by: TM

Title: TR

Figure

Particle Size Distribution Report - ASTM D422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	8.1	11.6	34.2	21.5	24.2

Test Results (ASTM D422)			
Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
.75	100.0		
.375	99.9		
#4	99.6		
#10	91.5		
#20	88.8		
#40	79.9		
#60	65.5		
#100	54.1		
#140	48.8		
#200	45.7		
0.0441 mm.	45.2		
0.0317 mm.	41.4		
0.0202 mm.	39.5		
0.0117 mm.	37.7		
0.0084 mm.	33.9		
0.0060 mm.	30.1		
0.0030 mm.	26.4		
0.0013 mm.	21.7		

* (no specification provided)

Material Description
Red Silty SAND

Atterberg (ASTM D4318)
PL= 30 **LL=** 40 **PI=** 10

Coefficients
D_{90}= 1.0881 D_{85}= 0.5799
D_{60}= 0.1988 D_{50}= 0.1165
D_{30}= 0.0059 D_{15}=
D_{10}=
C_u= C_c=

Sieve Test (ASTM D422)
Test Date: 06/05/2025 **Technician:** WL

Test Notes
Lab No. 28725

Hydrometer Test (ASTM D422)
Test Date: 06/03/2025 **Technician:** WL

Test Notes
N/A

USCS (ASTM D2487)
SM

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

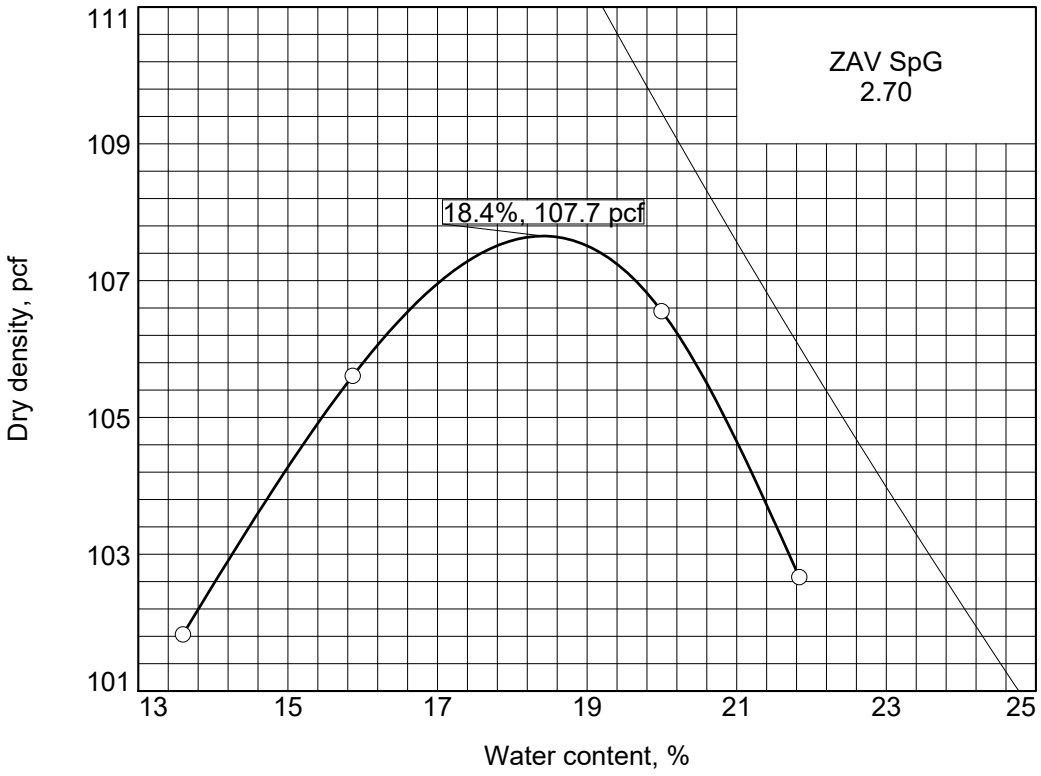
Source of Sample: R-4 **Depth:** 1.0-5.0'
Sample Number: AS-1

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

COMPACTION TEST REPORT

Curve No.



Test Specification:
GDOT GDT 7

Preparation Method	Dry
Hammer Wt.	5.5 lb
Hammer Drop	12 in
Hammer Type:	manual
Layers three **Blows/Layer**	25
Mold Size	0.0332 cu. ft.
Test Performed on Material Passing #10 **Sieve**	
NM 24.7 **LL** 40 **PI**	10
Sp.G. (assumed):	2.7
%>#10 8.5 **%<No.200**	45.7
USCS SM **AASHTO**	A-4(2)
Date Sampled	05/22/2025
Date Received	05/22/2025
Date Tested	06/02/2025
Tested By	WL

TESTING DATA	1	2	3	4	5	6
WM + WS	6270.1	6312.3	6127.1	6228.8		
WM	4369.4	4369.4	4369.4	4369.4		
WW + T #1	594.7	742.1	661.9	469.7		
WD + T #1	524.8	650.8	606.2	415.8		
TARE #1	204.7	194.2	196.5	76.1		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	21.8	20.0	13.6	15.9		
DRY DENSITY	102.7	106.6	101.8	105.6		

GDT 7 CORRECTED TEST RESULTS	UNCORRECTED
Maximum dry density = 110.7 pcf	107.7 pcf
Optimum moisture = 16.3 %	18.4 %

Material Description

Red Silty SAND

Remarks:
Lab No. 28725

Project No. US-EI-6162232368 **Client:** EGSci
Project: I-75 at CR 312/Bethlehem Road

○ **Source of Sample:** R-4 **Depth:** 1.0-5.0' **Sample Number:** AS-1

Checked by: TM
Title: TR

Figure

DOT Volume Change

GDT 6

Project No.	US-EI-6162232368	**Tested By**	WL
Project Name	I-75 at CR 312/Bethlehem Road	**Test Date**	6/3/2025
Boring No.	R-4	**Reviewed By**	TM
Sample No.	AS-1	**Review Date**	6/6/2025
Sample Depth	1.0-5.0'	**Lab No.**	28725
Sample Description	Red Silty SAND		

	Swell	Shrink
(1) Weight of Mold (g)	449.2	448.9
Mold number / Cal. Due	4145	4142

(2) Mold Volume (ft^3):	(Swell)	0.0073	(Shrink)	0.0073
Mold Diameter (in):	(Swell)	3.9958	(Shrink)	3.9973
Mold Height (in):	(Swell)	1.0000	(Shrink)	1.0045

Swell or Shrink	3 Wt. of Soil and Mold (g)	4 Weight of Soil (g) [3 - 1]	5 Wet Density (pcf) [4 / 2]	Pan Number	6 Weigh of Pan (grams)	7 Wt. of Wet Soil & Pan (grams)	8 Wt. of Dry Soil & Pan (grams)	9 Wt. of Soil, (grams) [8 - 6]	10 Wt. of Water (grams) [7 - 8]	11 Moisture Content, % [10 / 9]	12 Dry Density (pcf) 5 / [(1) + 11]
Swell	859.4	410.2	123.9	B-22	540.5	946.9	875.5	335.0	71.4	21.3	102.1
Shrink	856.4	407.5	123.1								101.4

Swell

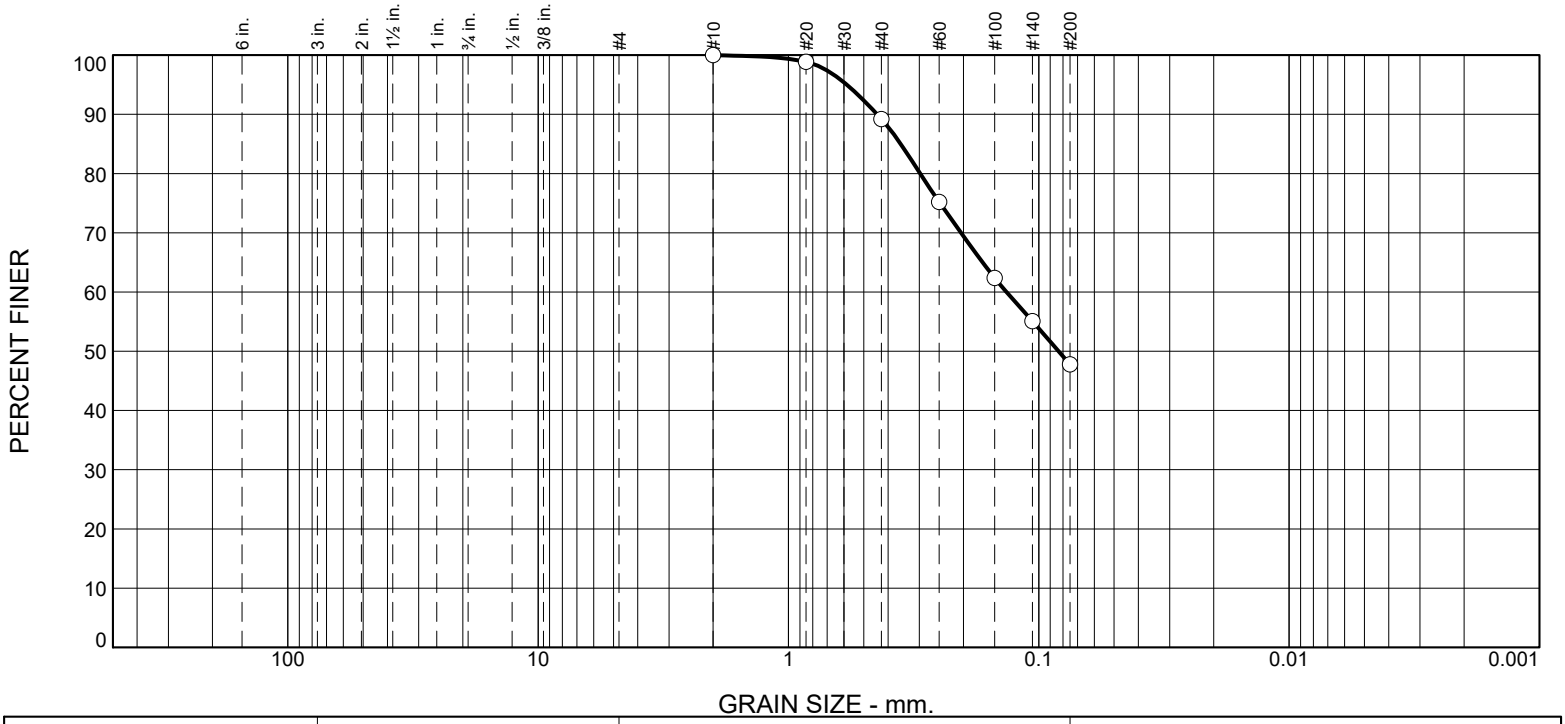
Initial Dial Reading:	0.330	A
After Soak Dial Reading:	0.446	B
Swell (%):	**11.6**	
((A-B)/Mold HT)		

Shrink

Initial Dial Reading (ht):	1.0020	Tare ID: B-22
After Drying Dial Reading (ht):	0.9830	
After Drying Dia. Reading (d):	3.9100	
	3.9050	
	3.9050	
	3.9110	
Average:	3.9078	
Original Volume (in^3):	12.574	
Final Volume (in^3):	11.790	
Shrinkage (%):	**6.2**	

Total Volume Change (%):	17.8
Plus #10 Sieve Correction Factor:	0.928
Corrected Total Volume Change (%):	**16.6**

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	10.8	41.4	47.8	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
#10	100.0		
#20	98.9		
#40	89.2		
#60	75.2		
#100	62.4		
#140	55.1		
#200	47.8		

* (no specification provided)

Source of Sample: P-3 **Depth:** 6.0-7.0'
Sample Number: S3T

Material Description
Reddish Brown Silty SAND

Sieve Test (ASTM D6913)

Test Date: 06/03/2025 **Technician:** NA

Test Notes
Lab No. 28728
As received moisture = 18.6%

Hydrometer Test

Test Date: N/A **Technician:** N/A

Test Notes
N/A

Atterberg (ASTM D4318)
PL= N/A **LL=** N/A **PI=** N/A

Coefficients
D_{90}= 0.4425 D_{85}= 0.3561
D_{60}= 0.1346 D_{50}= 0.0833
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

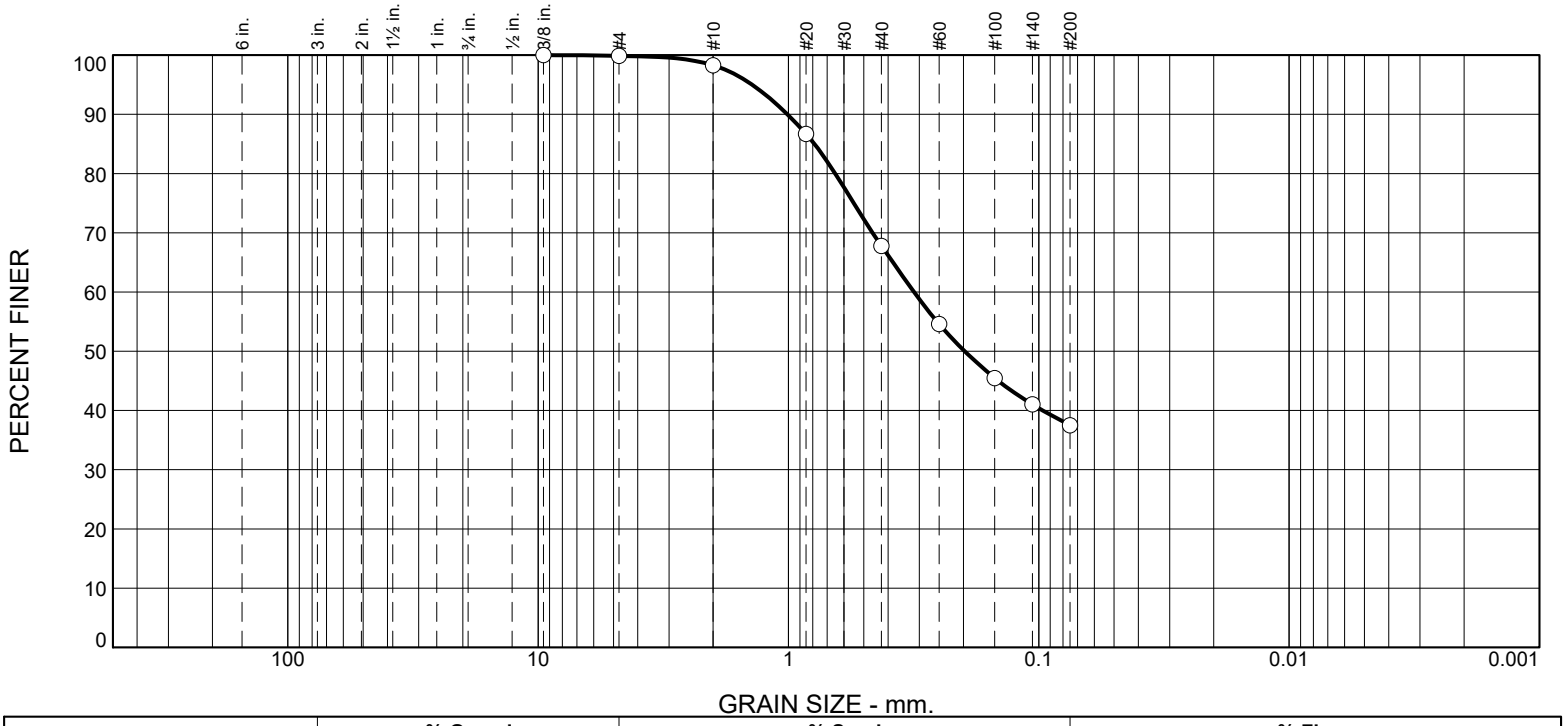
USCS (ASTM D2487)
N/A

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	1.6	30.5	30.3	37.5	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
.375	100.0		
#4	99.9		
#10	98.3		
#20	86.7		
#40	67.8		
#60	54.6		
#100	45.5		
#140	41.0		
#200	37.5		

* (no specification provided)

Source of Sample: P-3 **Depth:** 8.5-10.0'
Sample Number: S4

Material Description
Brown White Silty SAND

Sieve Test (ASTM D6913)

Test Date: 06/02/2025 **Technician:** KG

Test Notes
Lab No. 28730
As received moisture = 16.9%

Hydrometer Test

Test Date: N/A **Technician:** N/A

Test Notes
N/A

Atterberg (ASTM D4318)

PL=N/A **LL=**N/A **PI=**N/A

Coefficients

D_{90}= 1.0094 D_{85}= 0.7870
D_{60}= 0.3150 D_{50}= 0.1975
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

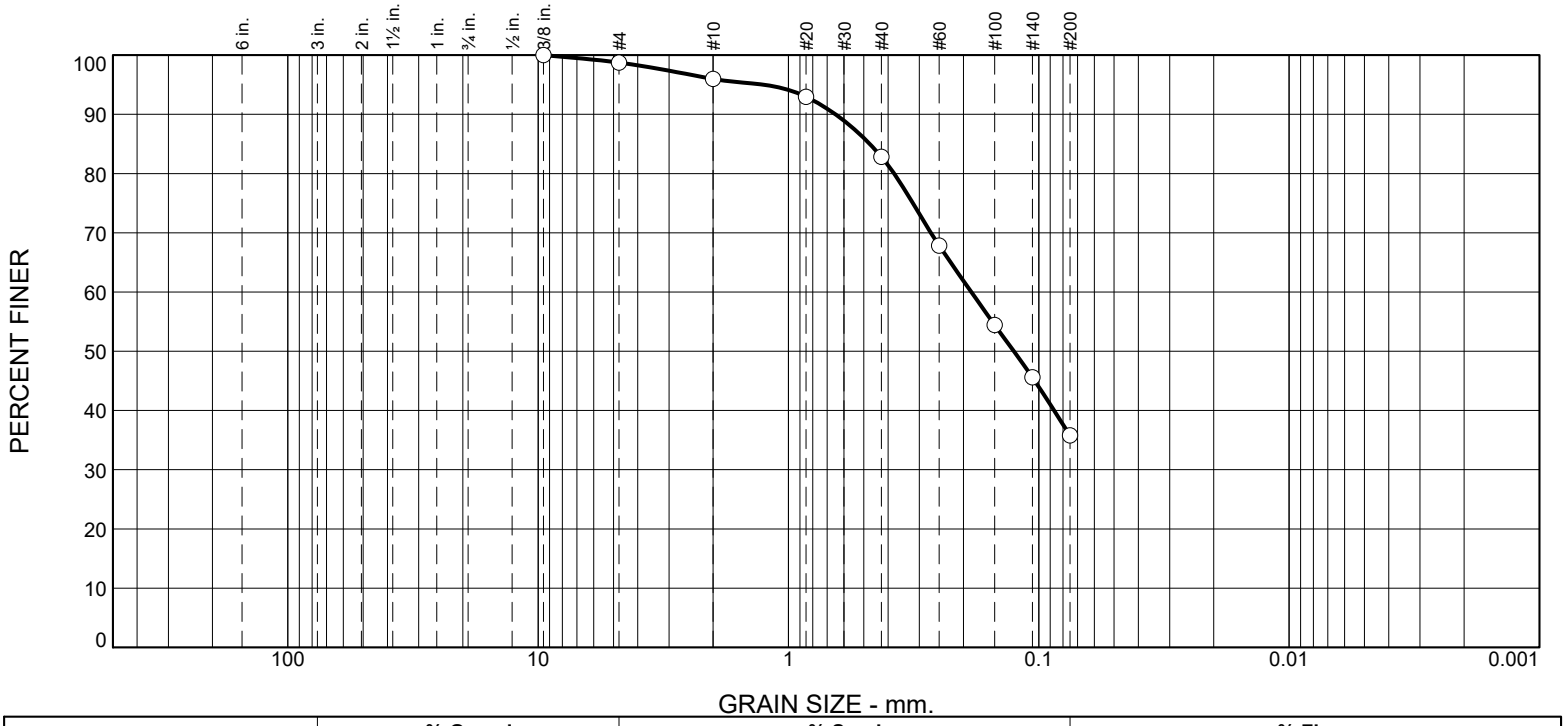
USCS (ASTM D2487)
N/A

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.3	2.7	13.2	47.0	35.8	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
.375	100.0		
#4	98.7		
#10	96.0		
#20	93.0		
#40	82.8		
#60	67.8		
#100	54.4		
#140	45.6		
#200	35.8		

* (no specification provided)

Material Description
Light Brown Silty SAND

Atterberg (ASTM D4318)
PL= N/A **LL=** N/A **PI=** N/A

Coefficients
D_{90}= 0.6486 D_{85}= 0.4734
D_{60}= 0.1860 D_{50}= 0.1258
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

Sieve Test (ASTM D6913)
Test Date: 06/03/2025 **Technician:** NA

Test Notes
Lab No. 28732
As received moisture = 14.8%

Hydrometer Test
Test Date: N/A **Technician:** N/A

Test Notes
N/A

USCS (ASTM D2487)
N/A

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

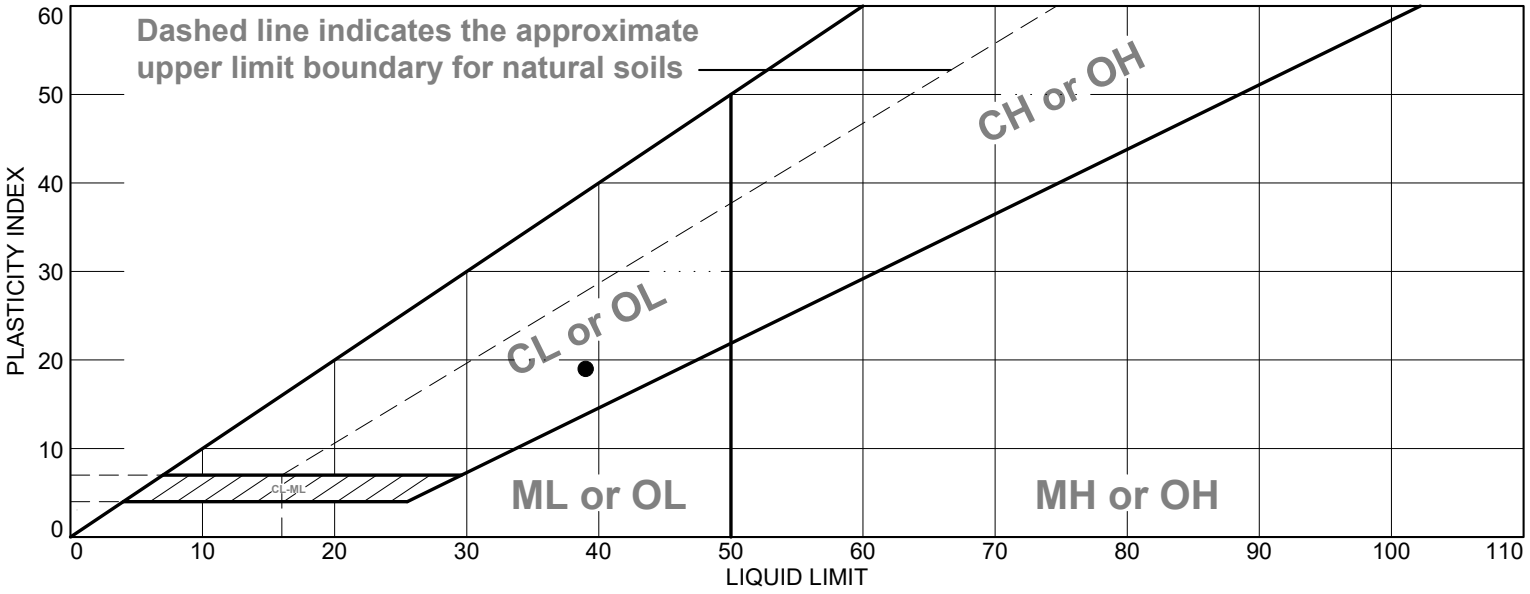
Source of Sample: P-3 **Depth:** 13.5-15.0'
Sample Number: S5

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318

ASTM D4318



	Sample Identification	Sampled	Received	Tested	Technician
●	Source of Sample: R-4 Depth: 1.0-2.5' Sample Number: S1	05/22/2025	05/22/2025	06/03/2025	NA

	Material Description	USCS	LL	PL	PI	NM	%<#40
●	Reddish Orange Sandy Lean CLAY	CL	39	20	19	31.9	86.3

	PL Rolling Method	LL Device	Grooving Tool	Test Remarks
●	Hand rolled	Mechanical	Metal	Lab No. 28726

Project No. US-EI-6162232368 **Client:** EGSci

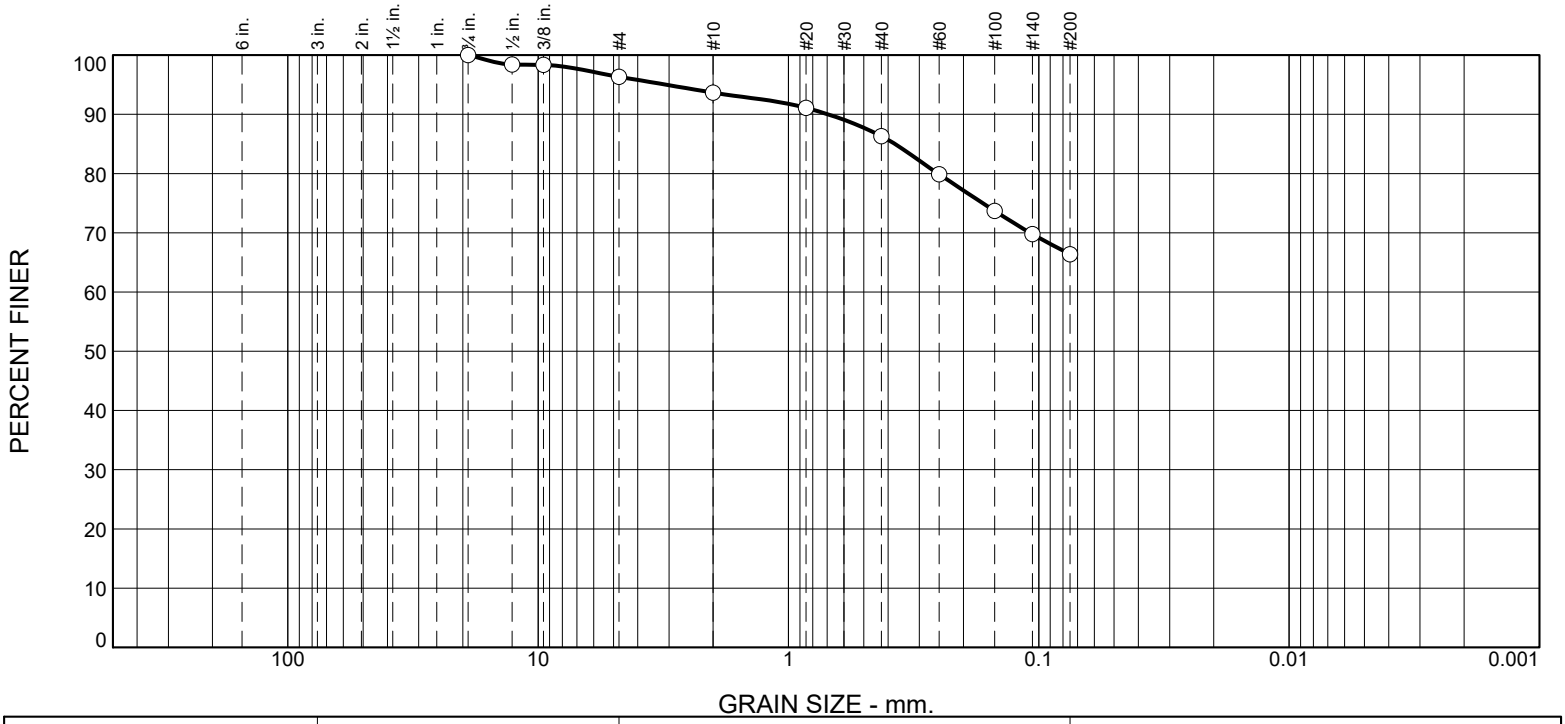
Project: I-75 at CR 312/Bethlehem Road

Checked by: TM

Title: TR

Figure

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.7	2.6	7.4	19.9	66.4	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
.75	100.0		
.50	98.4		
.375	98.4		
#4	96.3		
#10	93.7		
#20	91.1		
#40	86.3		
#60	79.9		
#100	73.7		
#140	69.8		
#200	66.4		

* (no specification provided)

Material Description
Reddish Orange Sandy Lean CLAY

Atterberg (ASTM D4318)
PL= 20 **LL=** 39 **PI=** 19

Coefficients
D_{90}= 0.6947 D_{85}= 0.3755
D_{60}= D_{50}=
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

Sieve Test (ASTM D6913)
Test Date: 06/03/2025 **Technician:** NA

Test Notes
Lab No. 28726

Hydrometer Test
Test Date: N/A **Technician:** N/A

Test Notes
N/A

USCS (ASTM D2487)
CL

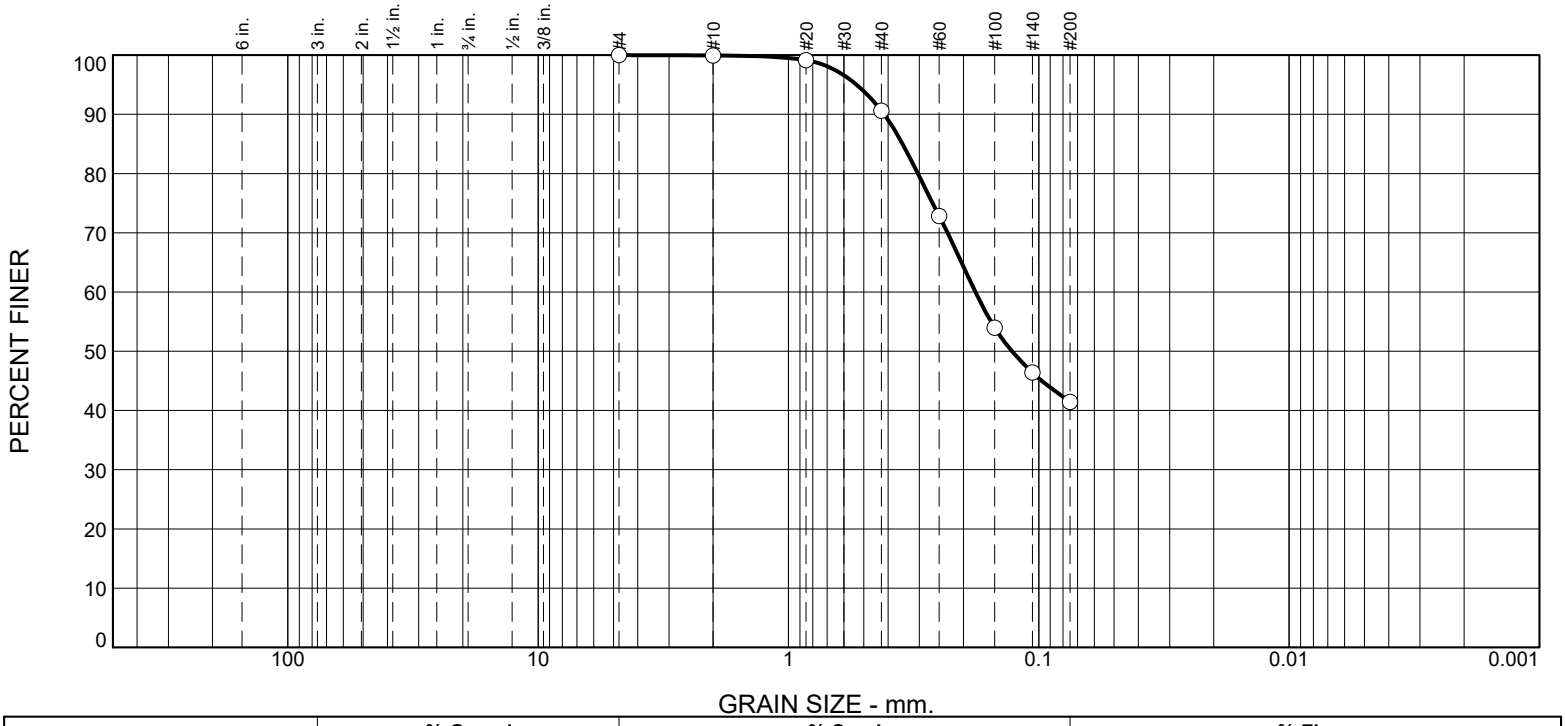
Source of Sample: R-4 **Depth:** 1.0-2.5'
Sample Number: S1

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	9.3	49.2	41.4	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
#4	100.0		
#10	99.9		
#20	99.1		
#40	90.6		
#60	72.8		
#100	54.0		
#140	46.4		
#200	41.4		

* (no specification provided)

Source of Sample: R-4 **Depth:** 3.5-5.0'
Sample Number: S2

Material Description
Reddish Tan Silty SAND

Sieve Test (ASTM D6913)

Test Date: 06/03/2025 **Technician:** NA

Test Notes
Lab No. 28727
As received moisture = 17.7%

Hydrometer Test

Test Date: N/A **Technician:** N/A

Test Notes
N/A

Atterberg (ASTM D4318)
PL= N/A **LL=** N/A **PI=** N/A

Coefficients
D_{90}= 0.4142 D_{85}= 0.3498
D_{60}= 0.1790 D_{50}= 0.1279
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

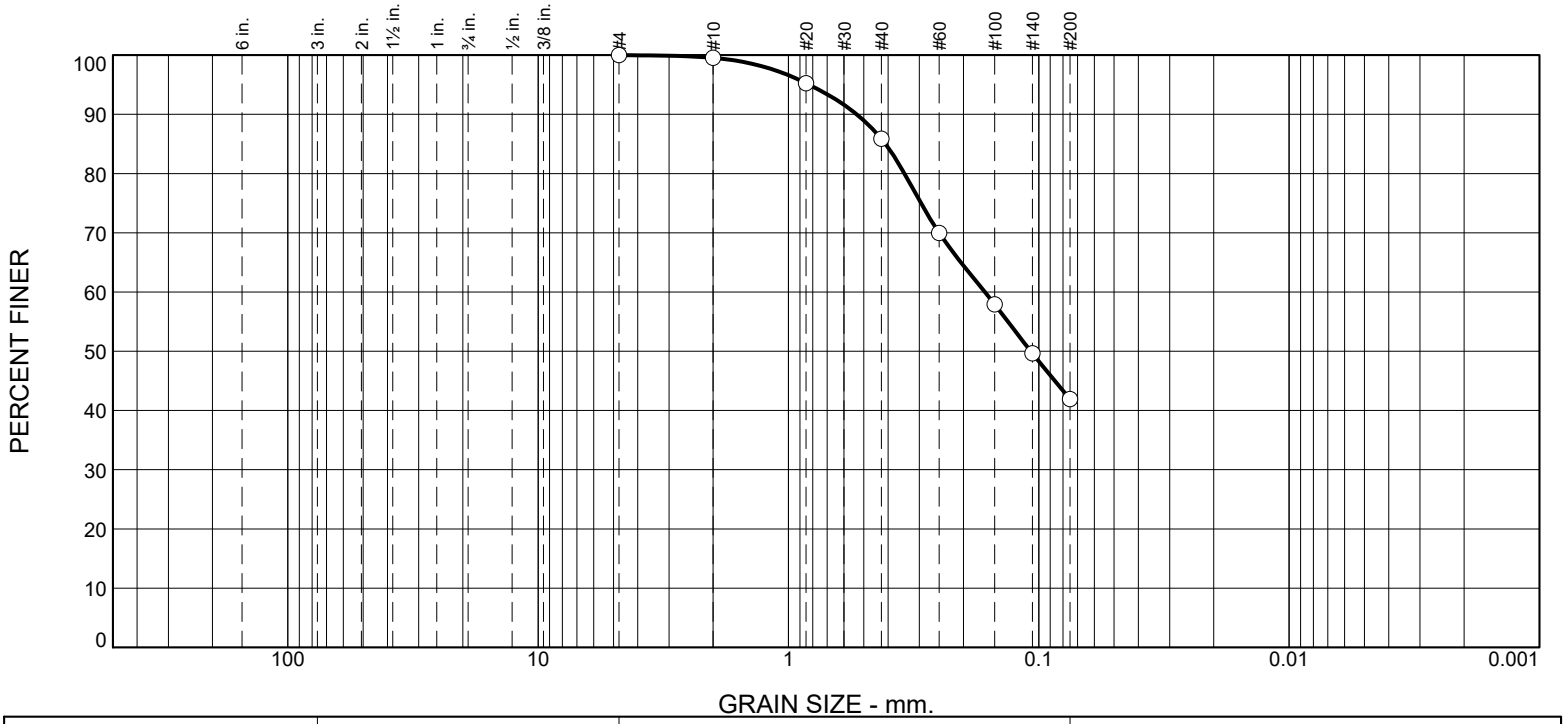
USCS (ASTM D2487)
N/A

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.5	13.6	44.0	41.9	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
#4	100.0		
#10	99.5		
#20	95.3		
#40	85.9		
#60	70.0		
#100	57.9		
#140	49.6		
#200	41.9		

* (no specification provided)

Material Description
Reddish Tan Silty SAND

Atterberg (ASTM D4318)
PL= N/A **LL=** N/A **PI=** N/A

Coefficients
D_{90}= 0.5332 D_{85}= 0.4093
D_{60}= 0.1641 D_{50}= 0.1076
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

Sieve Test (ASTM D6913)
Test Date: 06/03/2025 **Technician:** NA

Test Notes
Lab No. 28729
As received moisture = 23.1%

Hydrometer Test
Test Date: N/A **Technician:** N/A

Test Notes
N/A

USCS (ASTM D2487)
N/A

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

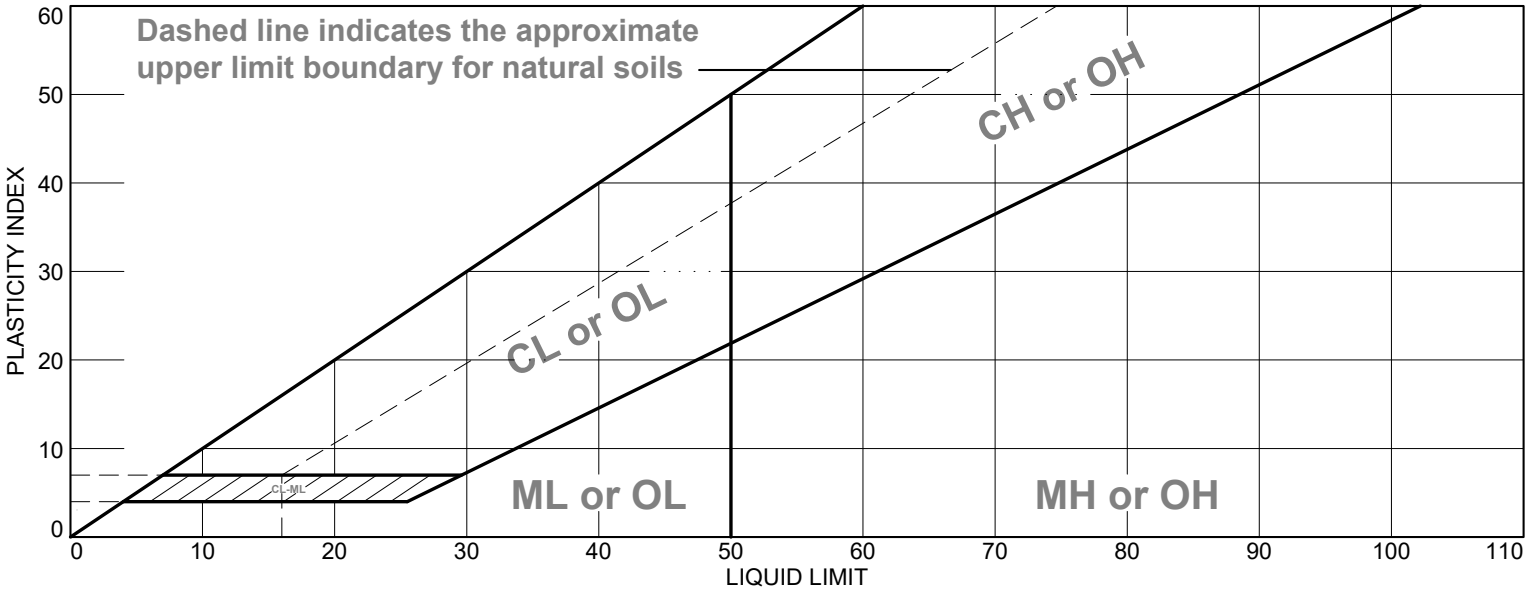
Source of Sample: R-4 **Depth:** 13.5-15.0'
Sample Number: S5

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368

Figure

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318

ASTM D4318



	Sample Identification	Sampled	Received	Tested	Technician
●	Source of Sample: R-4 Depth: 33.5-35.0' Sample Number: S9	05/22/2025	05/22/2025	05/30/2025	WL

	Material Description	USCS	LL	PL	PI	NM	%<#40
●	Brown Tan Silty SAND	SM	NP	NP	NP	28.7	91.5

	PL Rolling Method	LL Device	Grooving Tool	Test Remarks
●	Hand rolled	Mechanical	Metal	Lab No. 28731

Project No. US-EI-6162232368 **Client:** EGSci

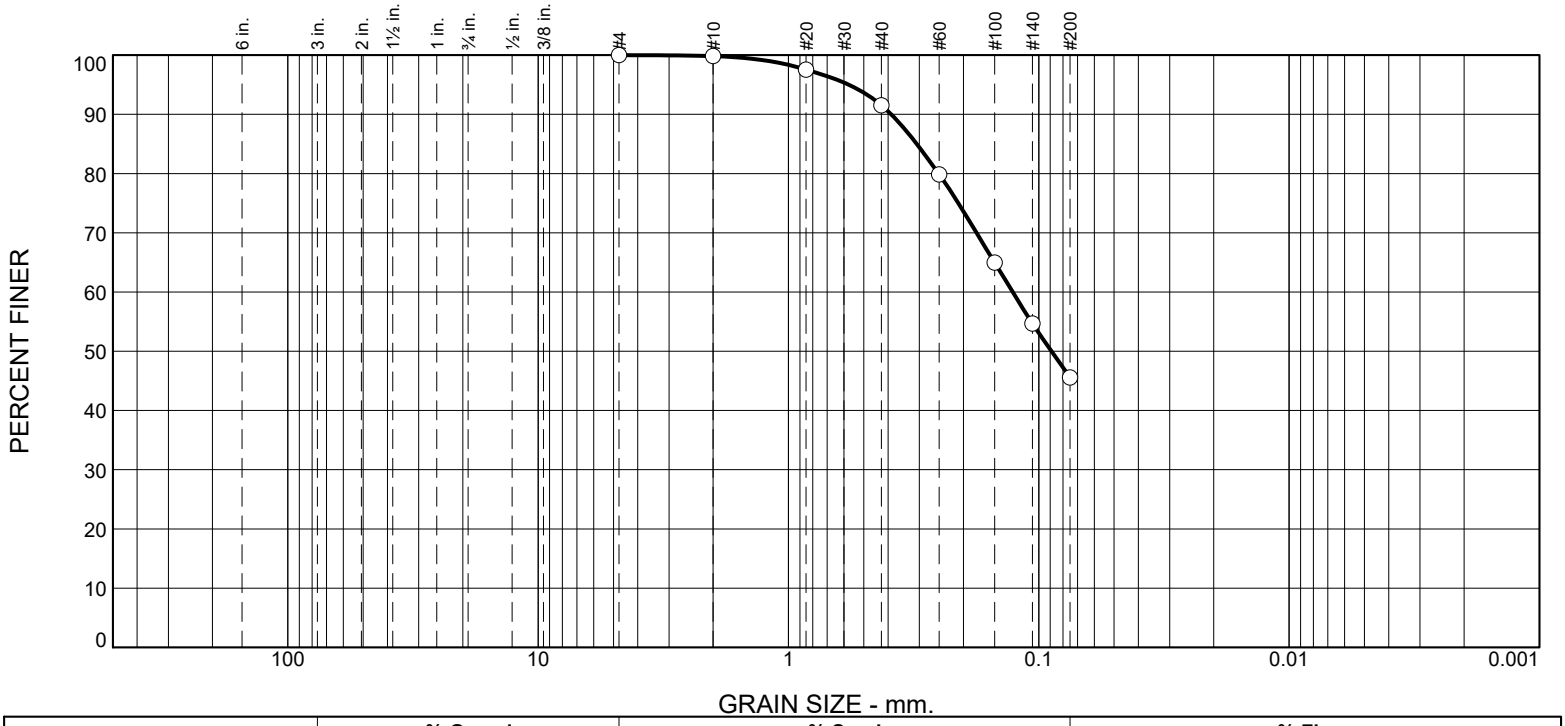
Project: I-75 at CR 312/Bethlehem Road

Checked by: TM

Title: TR

Figure

Particle Size Distribution Report - ASTM D6913



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	8.3	45.9	45.6	

Test Results (ASTM D6913)

Sieve Size or Diam. (mm.)	Finer (%)	Spec.* (%)	Out of Spec. (%)
#4	100.0		
#10	99.8		
#20	97.5		
#40	91.5		
#60	79.9		
#100	65.0		
#140	54.7		
#200	45.6		

* (no specification provided)

Source of Sample: R-4 **Depth:** 33.5-35.0'
Sample Number: S9

Material Description
Brown Tan Silty SAND

Atterberg (ASTM D4318)
PL= NP **LL=** NV **PI=** NP

Coefficients
D_{90}= 0.3883 D_{85}= 0.3073
D_{60}= 0.1271 D_{50}= 0.0890
D_{30}= D_{15}=
D_{10}=
C_u= C_c=

Sieve Test (ASTM D6913)
Test Date: 06/03/2025 **Technician:** NA

Test Notes
Lab No. 28731

Hydrometer Test
Test Date: N/A **Technician:** N/A

Test Notes
N/A

USCS (ASTM D2487)
SM

Date Sampled: 05/22/2025
Date Received: 05/22/2025
Checked By: TM
Title: TR

Client: EGSci
Project: I-75 at CR 312/Bethlehem Road
Project No: US-EI-6162232368
Figure

9 SURVEYING AND MAPPING

9.1 General Requirements

The Design-Builder shall provide accurate and consistent land surveying and mapping necessary to support ROW acquisition, design, and construction of the Project. The Design-Builder is responsible for all surveying responsibilities in accordance with the Project Standards and this TP Section 9.

The Design-Builder shall review existing survey data and determine the requirements for updating or extending the existing survey and mapping data. The Design-Builder is responsible for the final precision, accuracy, and comprehensiveness of all survey and mapping.

9.2 Administrative Requirements

9.2.1 Project Standards

TP Attachment 1-4 (Project Standards) list the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 9 in accordance with the Project Standards.

9.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

9.2.3 Ownership

The documents produced by the Design-Builder's surveyor or the surveyor's Subcontractors shall be the property of GDOT. Release of any such documents must be approved by GDOT in advance.

9.2.4 Property Owner Notification

The Design-Builder shall prepare for GDOT review and approval a survey letter for property owner notification in accordance with the GDOT Automated Survey Manual prior to entering any private property outside the Existing ROW or ROW previously acquired for the project. The Design-Builder shall make a reasonable effort to speak with property owners before entry. If owners are not present, the Design-Builder shall leave a door hanger with the P.I. number and a Design-Builder contact to inform the owners regarding ongoing Work. During the course of the survey Work, the Design-Builder shall not cut trees or bushes of significant size (4 inches or larger caliper as measured 12 inches above the natural ground surface) or value (e.g., hardwoods, pine, fruit or nut bearing). Any brush cut near landscaping/yards shall be removed or disposed of. The Design-Builder shall not leave cut brush on private property.

9.2.5 Units

All survey Work shall be performed in accordance with the GDOT Automated Survey Manual. All survey Work shall be performed in the horizontal and vertical datums specified in the approved survey control package.

9.3 Design Requirements

9.3.1 Overview

The Design-Builder is responsible for the final precision, accuracy, and comprehensiveness of all surveying and mapping.

9.3.2 Survey Control Requirements

The Design-Builder shall ensure that all surveying conforms to the Law and the Georgia Professional Land Surveying Practices Act and shall follow the General Rules of Procedures and Practices of the Georgia Board of Professional Engineers and Land Surveyors.

The Design-Builder shall establish all horizontal and vertical primary Project control from approved control provided by GDOT. If the Design-Builder chooses to use GPS methods, the Design-Builder shall meet the guidelines as defined in the GDOT Automated Survey Manual and shall use the approved control provided by GDOT.

The Design-Builder shall establish and maintain additional survey control as needed and final ROW monumentation throughout the duration of the Project.

The Design-Builder shall tie any additional horizontal and vertical control on the Project to the established primary Project control network.

All survey control points shall be set or verified by a Professional Land Surveyor. This requirement does not apply to local control points used to set the construction layout.

The Design-Builder shall establish and maintain a permanent horizontal and vertical primary survey control network. The control network shall consist of, at minimum, horizontal deltas coordinated and elevated, set in intervisible pairs. Control monuments set by the Design-Builder shall be installed per the GDOT Automated Survey Manual.

Prior to construction and in coordination with GDOT, the Design-Builder shall provide the GDOT Statewide Location Bureau Chief no less than a 90-day notification of planned activities that will disturb or destroy any geodetic control monuments. This will provide time to plan for and execute relocation of geodetic monuments. The Design-Builder shall notify the GDOT Statewide Location Bureau Chief of any monuments which were destroyed between the completion of the survey control package and the beginning of construction. The Design-Builder shall replace all existing horizontal and vertical primary survey control points that have been disturbed or destroyed at the direction of the GDOT Statewide Location Bureau Chief. The Design-Builder shall make all survey computations and observations necessary to establish the exact position and elevation of all other control points based on the primary survey control.

The Design-Builder may use the approved survey control package provided in TP Attachment 9-1 (Approved Survey Control Package). If the Design-Builder chooses not to use the approved survey control package provided in TP Attachment 9-1 (Approved Survey Control Package), the Design-Builder shall deliver to GDOT, for review and acceptance, a survey control package in accordance with the GDOT Automated Survey Manual. In addition, the Design-Builder shall deliver to GDOT a revised survey control package when survey monuments or control points are missing, disturbed, destroyed, or found to be in Error.

Survey control monuments shall be maintained throughout the duration of the D&C Period.

9.3.3 Conventional Methods for Control (Horizontal and Vertical)

If the Design-Builder chooses to use conventional methods to establish additional horizontal control, the Design-Builder shall meet the accuracy of the appropriate level of survey as defined in the GDOT Automated Survey Manual.

9.3.3.1 Horizontal Accuracy Requirements for Conventional Survey

Horizontal control shall be established per the approved survey control package provided in TP Attachment 9-1 (Approved Survey Control Package). If the approved survey control is not adopted, the most recent realization of NAD 83 shall be used, unless tying to another project with an older datum. Approval from the GDOT Statewide Location Bureau Chief shall be obtained prior to initiation of surveys.

Upon request by the Design-Builder, GDOT Statewide Location Bureau will compile and provide to the Design-Builder a survey control package of existing GDOT-approved survey monumented data in the Project vicinity.

9.3.3.2 Vertical Accuracy Requirements for Conventional Surveys

Vertical control shall be established in accordance with the GDOT Automated Survey Manual.

9.3.4 Right of Way Surveys

The Design-Builder shall base all surveys on the primary horizontal and vertical control network established for the Project.

9.3.4.1 Accuracy Standard

The Design-Builder shall perform ROW surveys in accordance with the GDOT Automated Survey Manual and the rules of the Board of Registration for Professional Engineers and Land Surveyors.

9.3.5 Drainage Mapping

The Design-Builder shall be responsible for mapping the location of existing and proposed drainage features in accordance with TP Section 12 (Drainage) and GDOT Standard Specifications Section 156.

9.3.6 Survey Records and Reports

The Design-Builder may use electronic field books to collect and store raw data. The Design-Builder shall preserve original raw data and document any changes or corrections made to field data, such as station name, height of instrument, or target. The Design-Builder shall also preserve raw and corrected field data in hardcopy output forms in a similar manner to conventional field books for preservation.

The Design-Builder shall record field survey data and sketches that cannot be efficiently recorded in the electronic field volume in a hardcopy field note volume and stored with copies of the electronic data.

All field notes shall be recorded in permanently bound books. (Field notes on loose-leaf pages will not be allowed.) The Design-Builder shall deliver copies of all field note volumes to GDOT Statewide Location Bureau Chief upon request. The Design-Builder shall submit the field notes as part of the Record Design Documents per the requirements in TP Section 4.3.5 (Record Design Documents).

The Design-Builder shall provide all created topographic mapping to GDOT in digital terrain model format using the software and version thereof being used by GDOT at the time of the initial survey or subsequent software and version approved by GDOT.

9.4 Construction Requirements

9.4.1 Construction Surveys

The Design-Builder shall comply with the requirements in TP Section 9.3 (Design Requirements).

9.4.2 ROW Monuments

Upon completion of the ROW acquisition and all Construction Work the Design-Builder shall set permanent and stable concrete ROW monuments located on the final ROW line at all points of curvature (PCs), points of tangency (PTs), miters and breaks, points of compound curvature (PCCs), points of reverse curvature (PRCs), and all intersecting crossroad ROW lines. In addition, the Design-Builder shall set permanent and stable concrete ROW monuments located on all final ROW lines where the distance between such significant ROW line points exceeds 1,500 feet. These monuments shall be set in accordance with the accuracy requirements stated in this TP Section 9, the GDOT Automated Survey Manual, and the rules governing property surveys in the State of Georgia.

The Design-Builder shall purchase all materials, supplies, and other items necessary for proper survey monumentation.

9.4.3 Side-Scan Sonar Surveys

For structures in or near rivers, streams, creeks, lakes or other waterways the Design-Builder shall prepare and submit initial (prior to construction activities within the stream) and final (after all in-water construction is complete, including removal of existing bridge and any temporary work bridges) bathymetric charts and sonar images of the streambed/lakebed to ensure the removal of existing bridge and any construction waste or debris, including any temporary construction material, is in accordance with the Design-Build Documents.

The Design-Builder shall use personnel and equipment necessary to produce bathymetric charts and sonar images capable of distinguishing objects 0.5 cubic feet (0.014 cubic meters) or greater. The Design-Builder shall use side-scan sonar equipment capable of printing visible sonar recordings/images of the streambed/lakebed. The Design-Builder shall provide record of experience (in similar size and scope) for the Contractor preparing the bathymetric charts to GDOT. The Design-Builder shall provide the before and after surveys to the USACE office for review.

Prior to commencement of construction activities within the boundaries of the stream, the Design-Builder shall scan the entire Project area from the center of the navigation channel an appropriate distance shoreward, or as directed by GDOT, to ensure that no debris is left in the

waterway. The Design-Builder shall submit initial bathymetric charts and side-scan sonar images to GDOT showing disposition of the streambed/lakebed prior to construction activities.

After complete removal, the Design-Builder shall scan the entire Project area using side-scan sonar equipment within the same boundaries stated above or as directed by GDOT. The Design-Builder shall submit final bathymetric chart and side-scan sonar images to GDOT showing disposition of streambed/lakebed after complete removal. The Design-Builder shall provide correlation between the initial and final bathymetric charts to distinguish changes in the streambed/lakebed as a result of the removal. The Design-Builder shall continue the removal operations if there are areas where the removal is deemed incomplete by GDOT. The Design-Builder shall provide subsequent sonar scans with images until the removal operations are complete and accepted by GDOT.

9.5 Submittals

With respect to surveying and mapping requirements described in this TP Section 9, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 9 Attachments

Attachment No.	***Title***
Attachment 9-1	Approved Survey Control Package

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 9-1

Approved Survey Control Package

Bethlehem Road @ I-75

ARCADIS

SURVEY CONTROL REPORT FEBRUARY 2022

Prepared By:

PLATINUM geomatics

5039 B U Bowman Drive, Suite 400
Buford, Georgia 30518
(678) 288-9869
PlatinumGeomatics.com

County:	**Henry**
Horizontal Datum:	**NAD83 (2011)**
Vertical Datum:	**NAVD88**
State Plane Zone:	**Georgia West**
Length of Project:	**21370'**

Project ID: 0017182

TABLE OF CONTENTS

Horizontal Control Listing	4
Horizontal Control Listing	5
Reference Control Listing	6
Area Map	7
Delta Location Map	8
Δ1	9
Δ2	10
Δ3	11
Δ4	12
Δ5	13
Δ6	14
Δ7	15
Δ8	16
Δ9	17
Δ10	18

TABLE OF CONTENTS

Δ11	19
Δ12	20
Δ13	21
Δ14	22
Δ15	23
Δ16	24
Δ17	25
Δ18	26
Δ19	27
Δ20	28
Δ21	29
Δ22	30
Δ23	31
Georgia SPCS Zone Map	32

HORIZONTAL CONTROL LISTING

Project ID:	0017182
Project Description:	Bethlehem Road @ I — 75
Project Date:	February 2022
County:	Henry
Horizontal Datum:	NAD83 (2011)
Vertical Datum:	NAVD88
State Plane Zone:	Georgia West
Unit of Measurement:	US Survey Foot
Combined Scale Factor:	0.999864549

Point Number	Northing	Easting	Elevation	Description
1	1229228.88	2299081.85	830.18	3/4” Rebar W/ Cap
2	1228388.23	2299507.29	815.88	3/4” Rebar W/ Cap
3	1227893.58	2299896.77	822.98	3/4” Rebar W/ Cap
4	1227200.97	2300378.01	813.13	3/4” Rebar W/ Cap
5	1228159.76	2302574.99	800.83	3/4” Rebar W/ Cap
6	1228155.08	2303074.83	820.93	3/4” Rebar W/ Cap
7	1228316.33	2303884.32	824.60	3/4” Rebar W/ Cap
8	1228371.15	2304559.47	835.99	3/4” Rebar W/ Cap
9	1229671.41	2306794.18	870.11	3/4” Rebar W/ Cap
10	1229271.76	2306955.06	859.77	3/4” Rebar W/ Cap
11	1228790.56	2308838.94	863.60	3/4” Rebar W/ Cap
12	1229430.13	2308683.06	886.80	3/4” Rebar W/ Cap

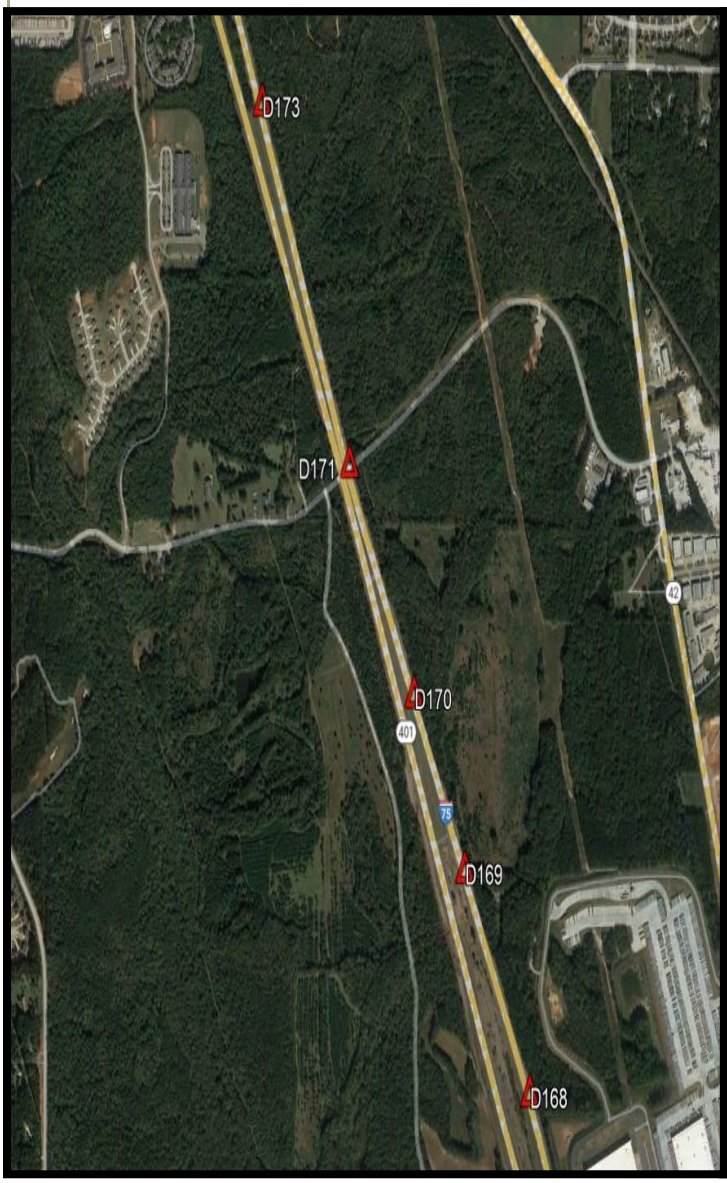
HORIZONTAL CONTROL LISTING

Project ID:	0017182
Project Description:	Bethlehem Road @ I — 75
Project Date:	February 2022
County:	Henry
Horizontal Datum:	NAD83 (2011)
Vertical Datum:	NAVD88
State Plane Zone:	Georgia West
Unit of Measurement:	US Survey Foot
Combined Scale Factor:	0.999864549

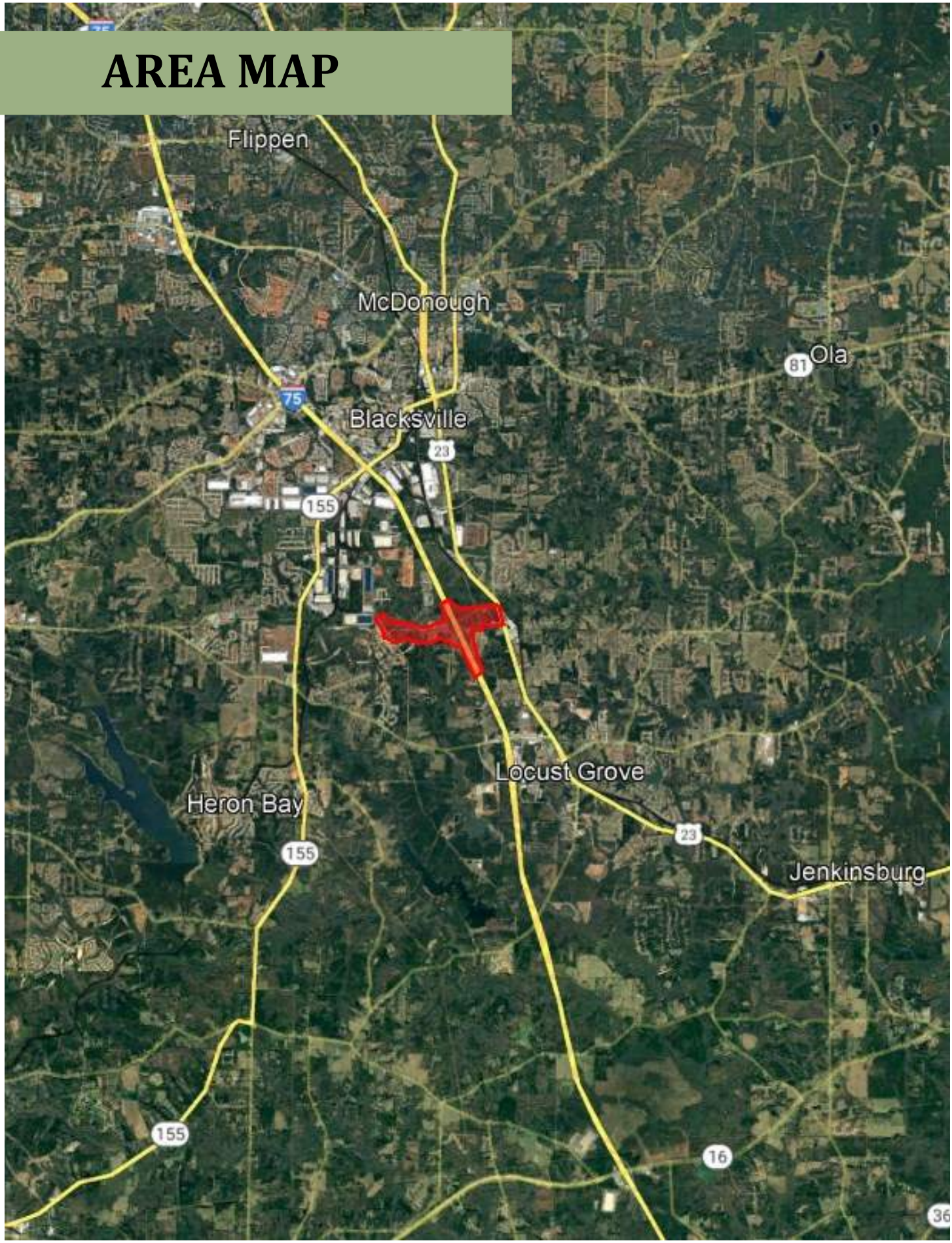
Point Number	Northing	Easting	Elevation	Description
13	1228215.05	2308916.30	859.63	3/4” Rebar W/ Cap
14	1228174.74	2300362.77	826.47	3/4” Rebar W/ Cap
15	1228154.58	2300990.59	803.32	3/4” Rebar W/ Cap
16	1228099.08	2301595.37	770.58	3/4” Rebar W/ Cap
17	1228227.50	2302102.88	774.00	3/4” Rebar W/ Cap
18	1228571.58	2305020.63	857.97	3/4” Rebar W/ Cap
19	1228940.45	2305642.61	857.46	3/4” Rebar W/ Cap
20	1229846.40	2307430.09	881.91	3/4” Rebar W/ Cap
21	1229463.22	2307879.81	854.74	3/4” Rebar W/ Cap
22	1228795.07	2308213.97	859.89	3/4” Rebar W/ Cap
23	1228643.77	2308585.14	860.86	3/4” Rebar W/ Cap

REFERENCE CONTROL PI 0014203 I-75 CVL

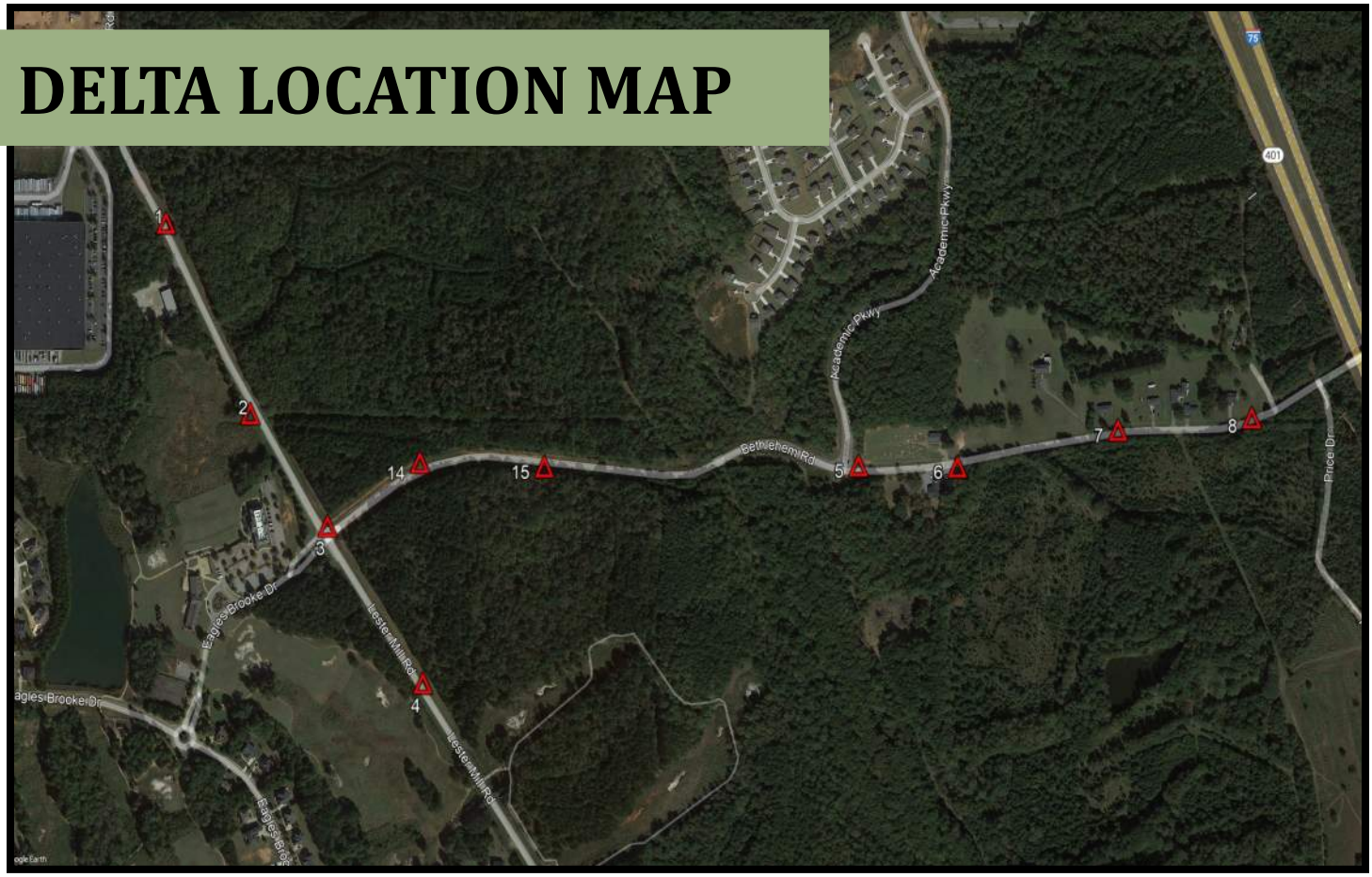
Point Number	Northing	Easting	Elevation	Description
D168	1224506.11	2307343.10	822.51	SLCD
D169	1226007.56	2306567.92	791.68	SLCD
D170	1227185.37	2305960.70	816.82	SLCD
D171	1228731.51	2305190.14	834.94	SLCD
D173	1231159.85	2304145.04	823.90	SLCD
BM51			861.09	SBNCHMK

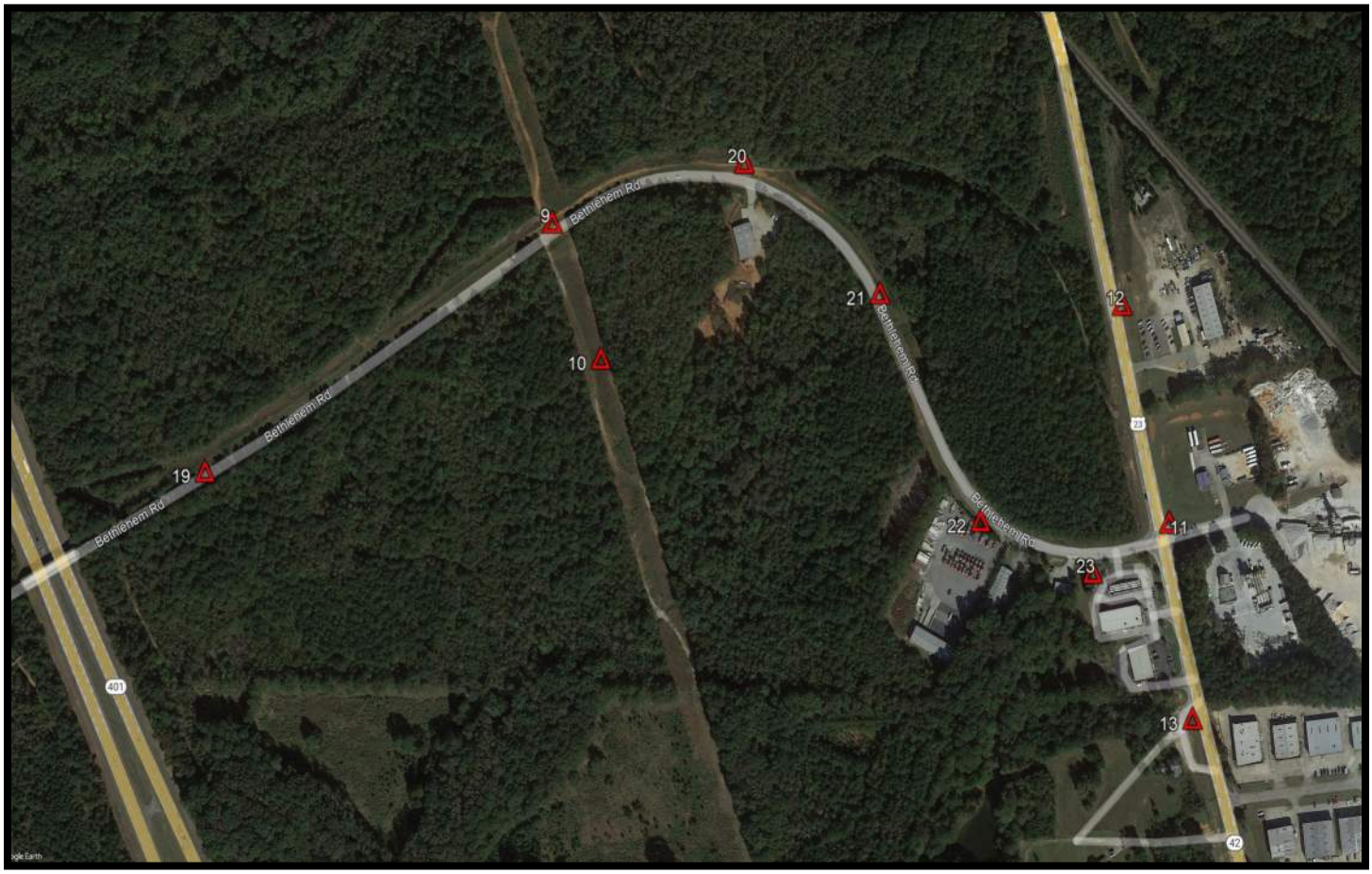


AREA MAP


Flippen
McDonough
Ola
81
75
Blacksville
23
155
Locust Grove
Heron Bay
155
23
Jenkinsburg
155
16
36

DELTA LOCATION MAP

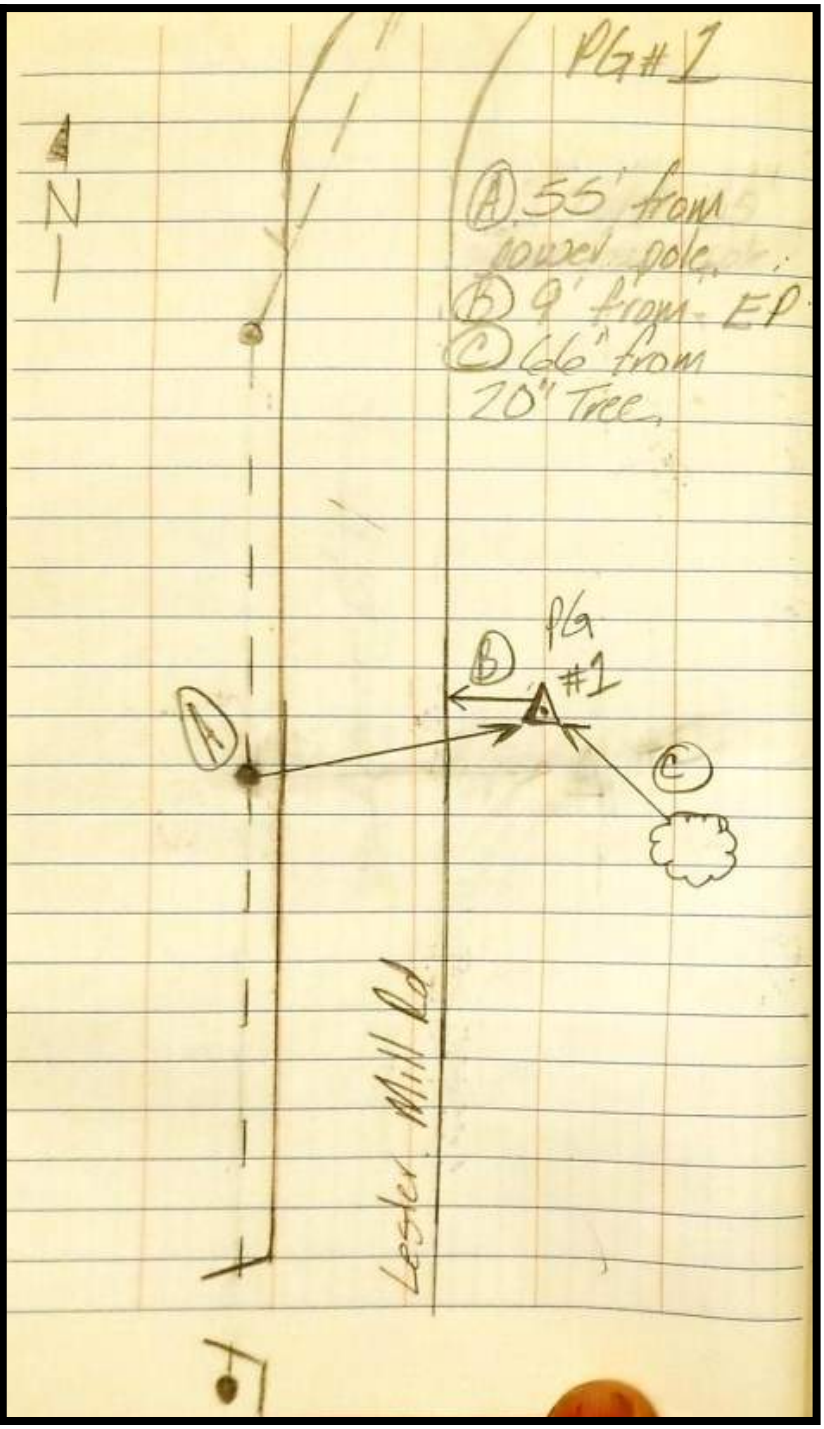




Δ1 3/4" REBAR W/ CAP

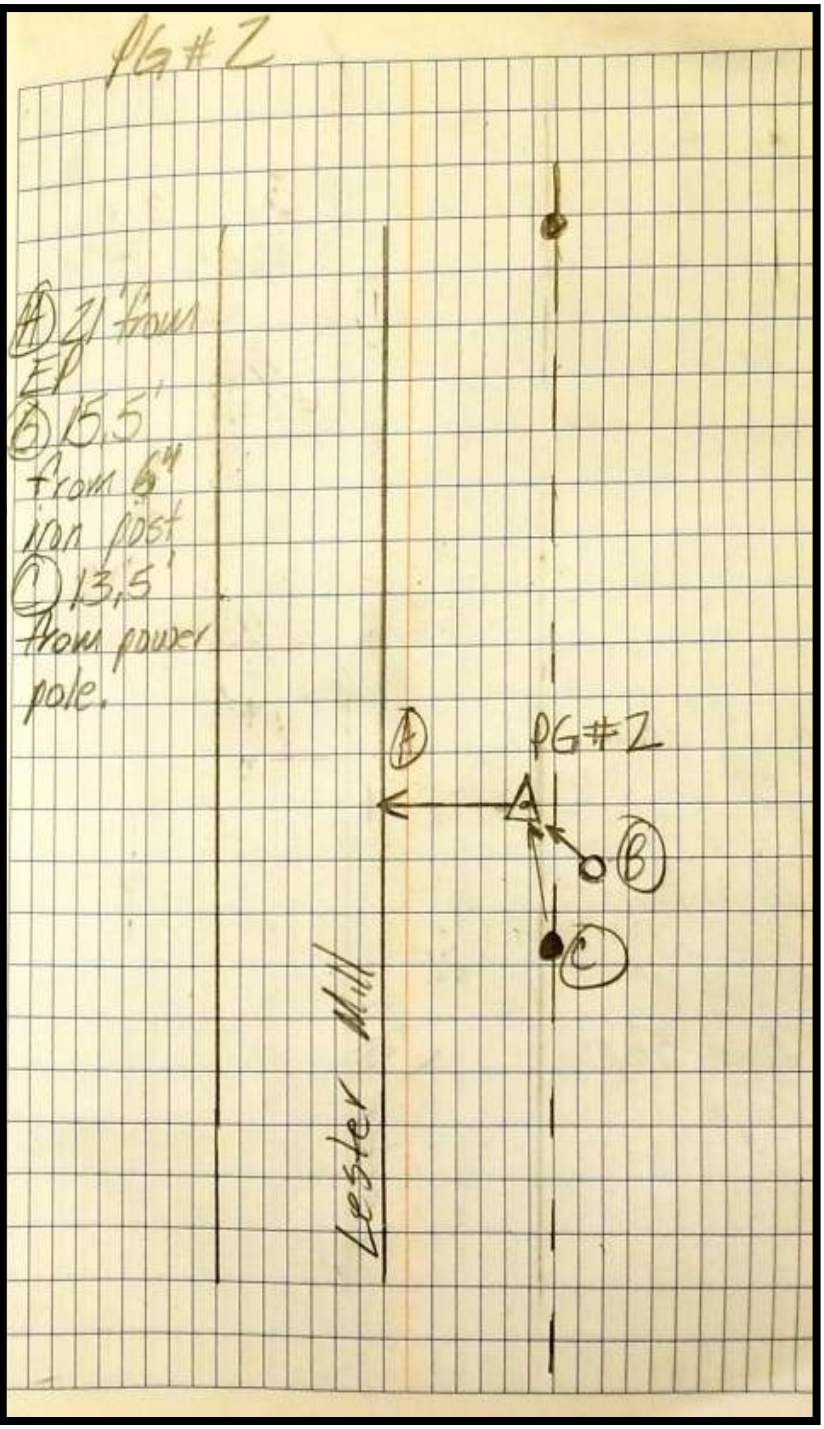
PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1229228.88	Easting: 2299081.85	Elevation: 830.18



Δ2 3/4" REBAR W/ CAP

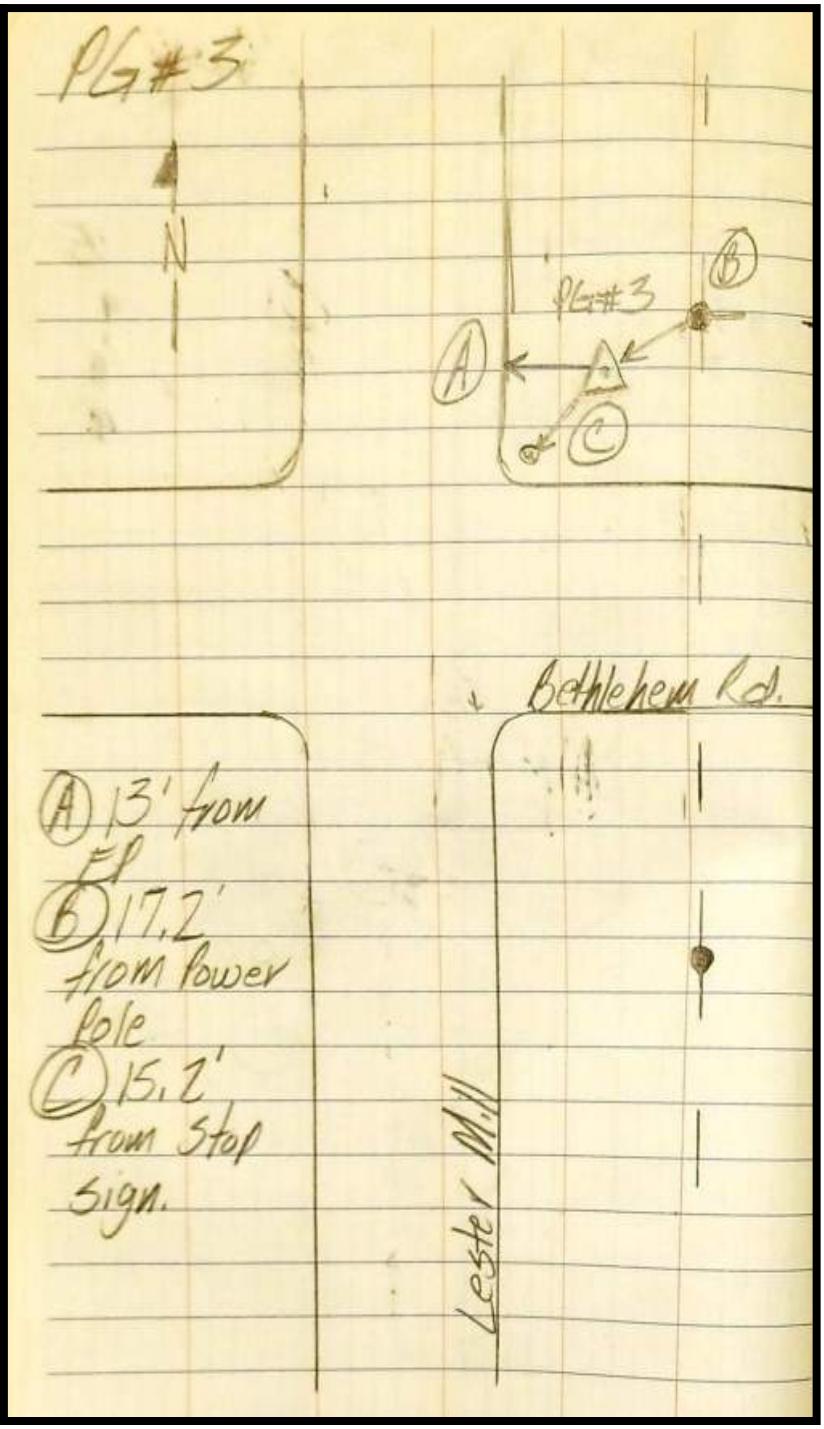
Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1228388.23	Easting: 2299507.29	Elevation: 815.88



Δ3 3/4" REBAR W/ CAP

PLATINUM geomatics

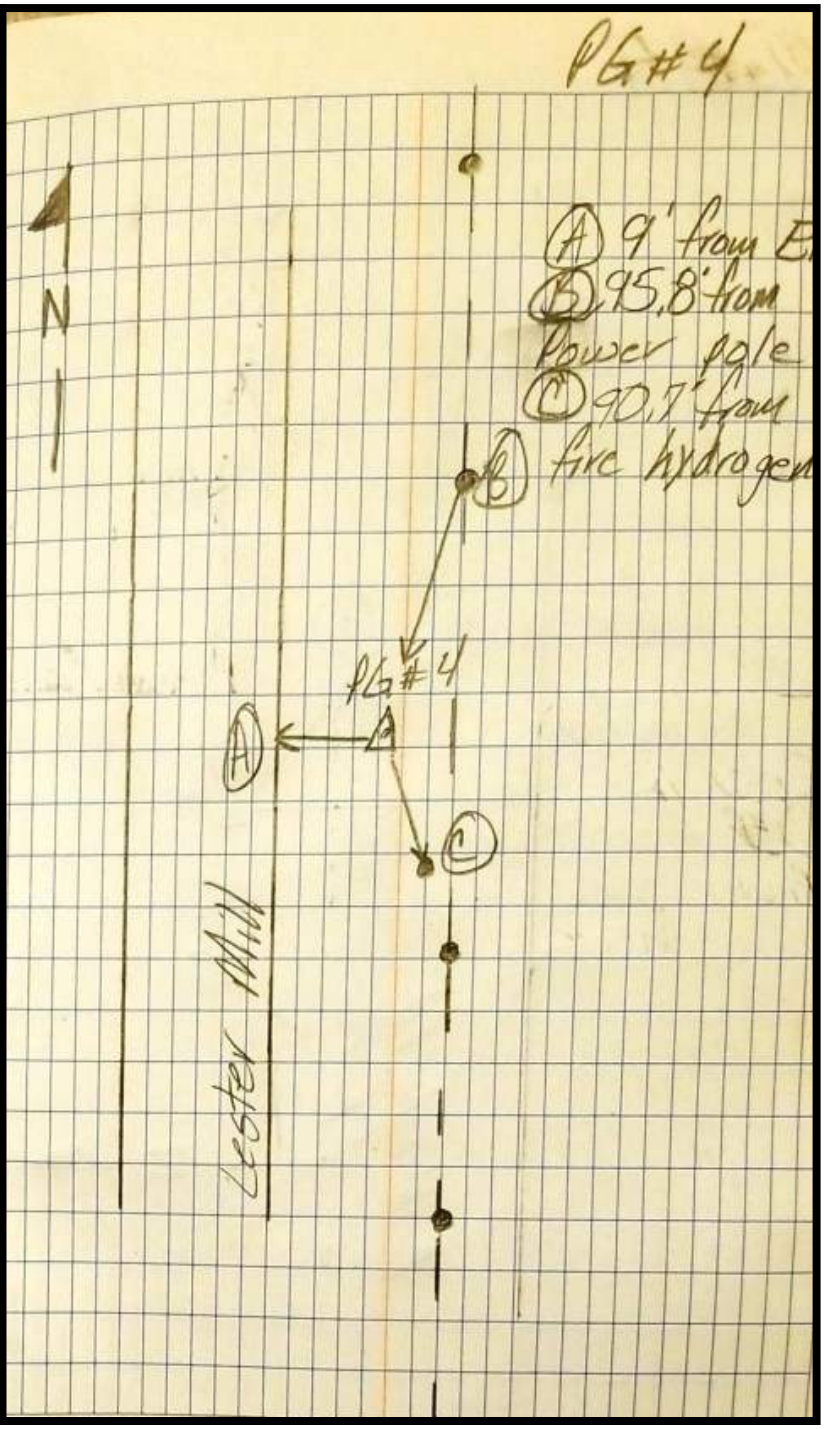
Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1227893.58	Easting: 2299896.77	Elevation: 822.98



Δ4 3/4" REBAR W/ CAP

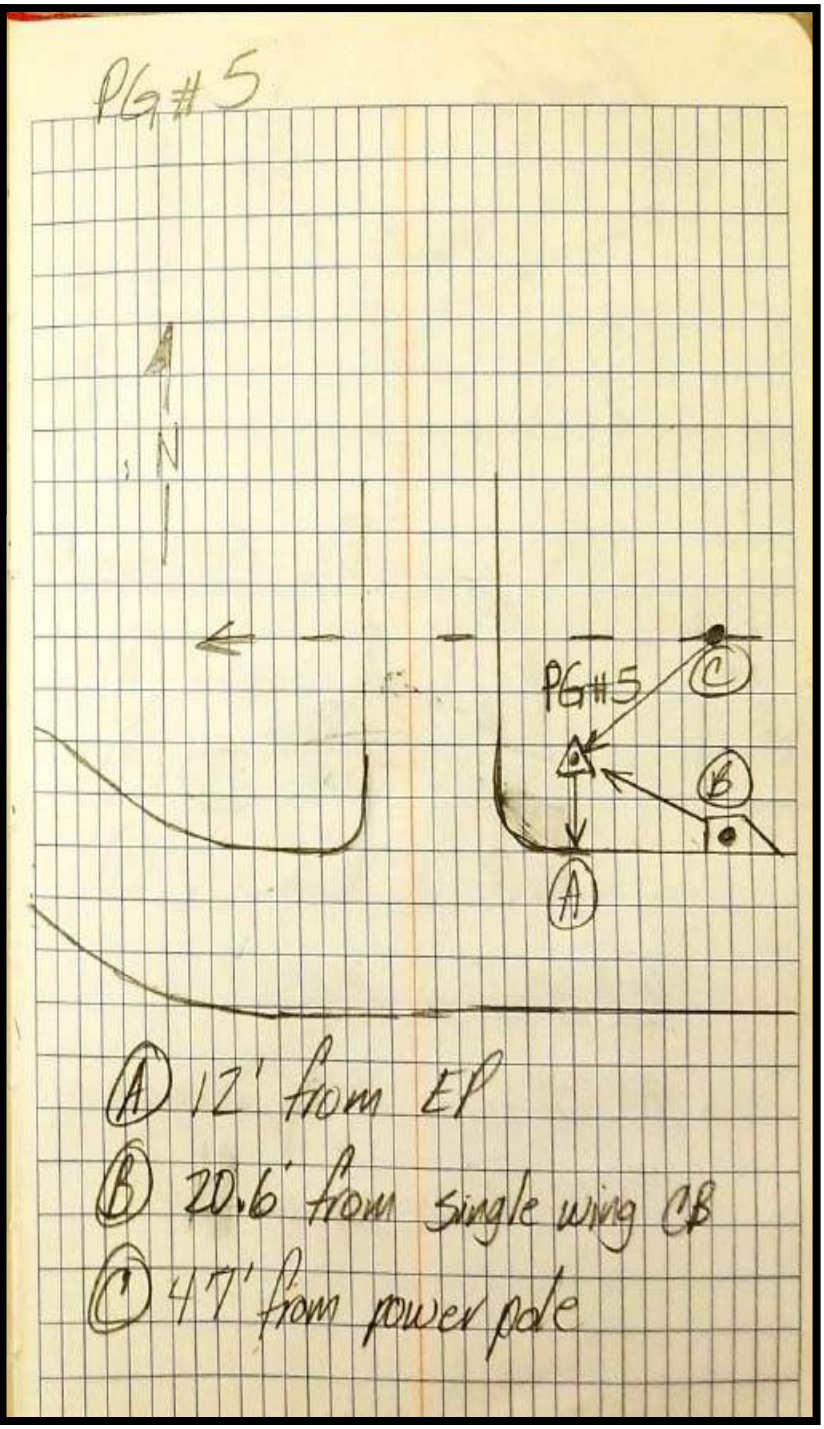
PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1227200.97	Easting: 2300378.01	Elevation: 813.13



Δ5 3/4" REBAR W/ CAP

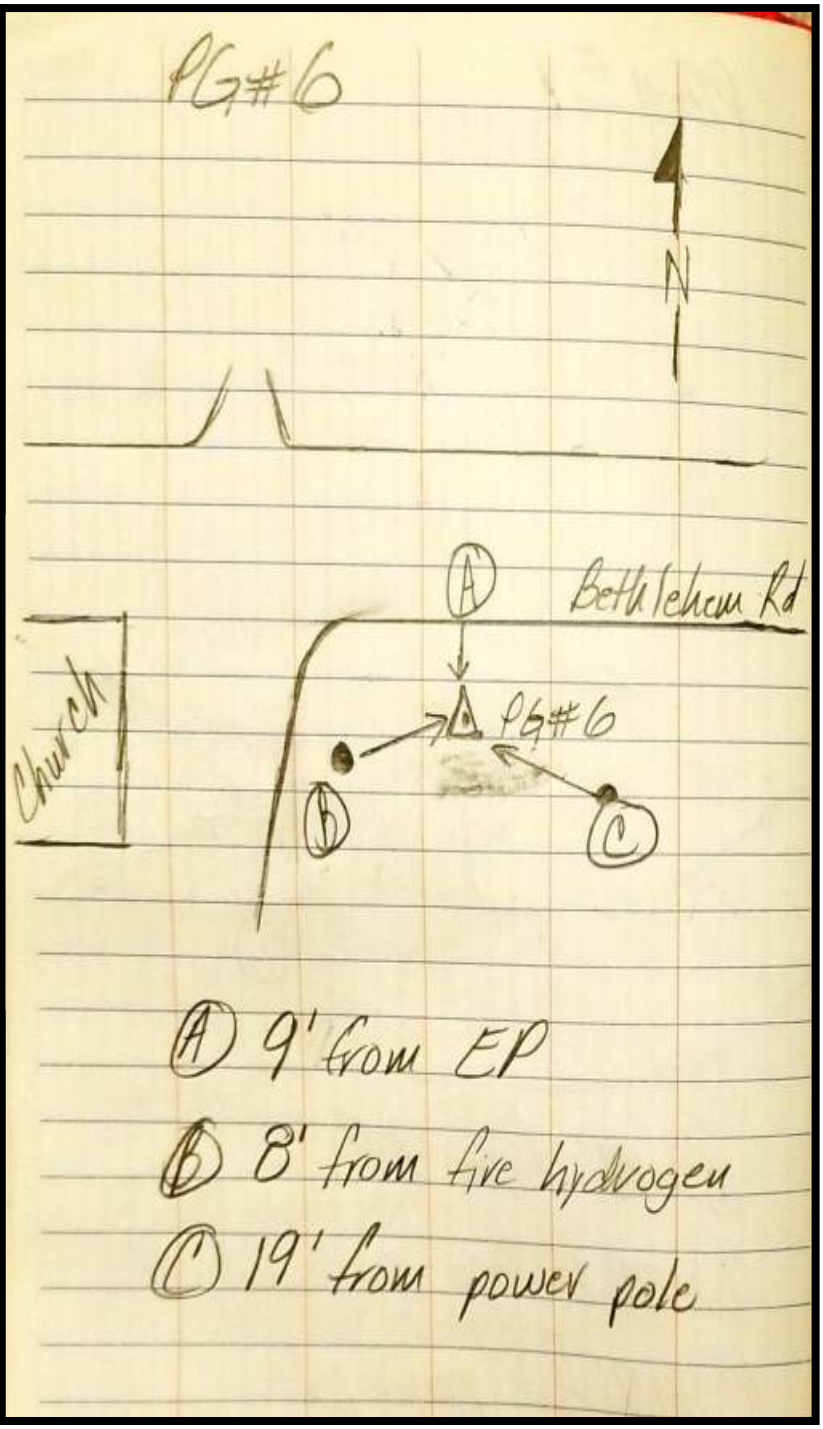
Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1228159.76	Easting: 2302574.99	Elevation: 800.83



Δ6 3/4" REBAR W/ CAP

PLATINUM geomatics

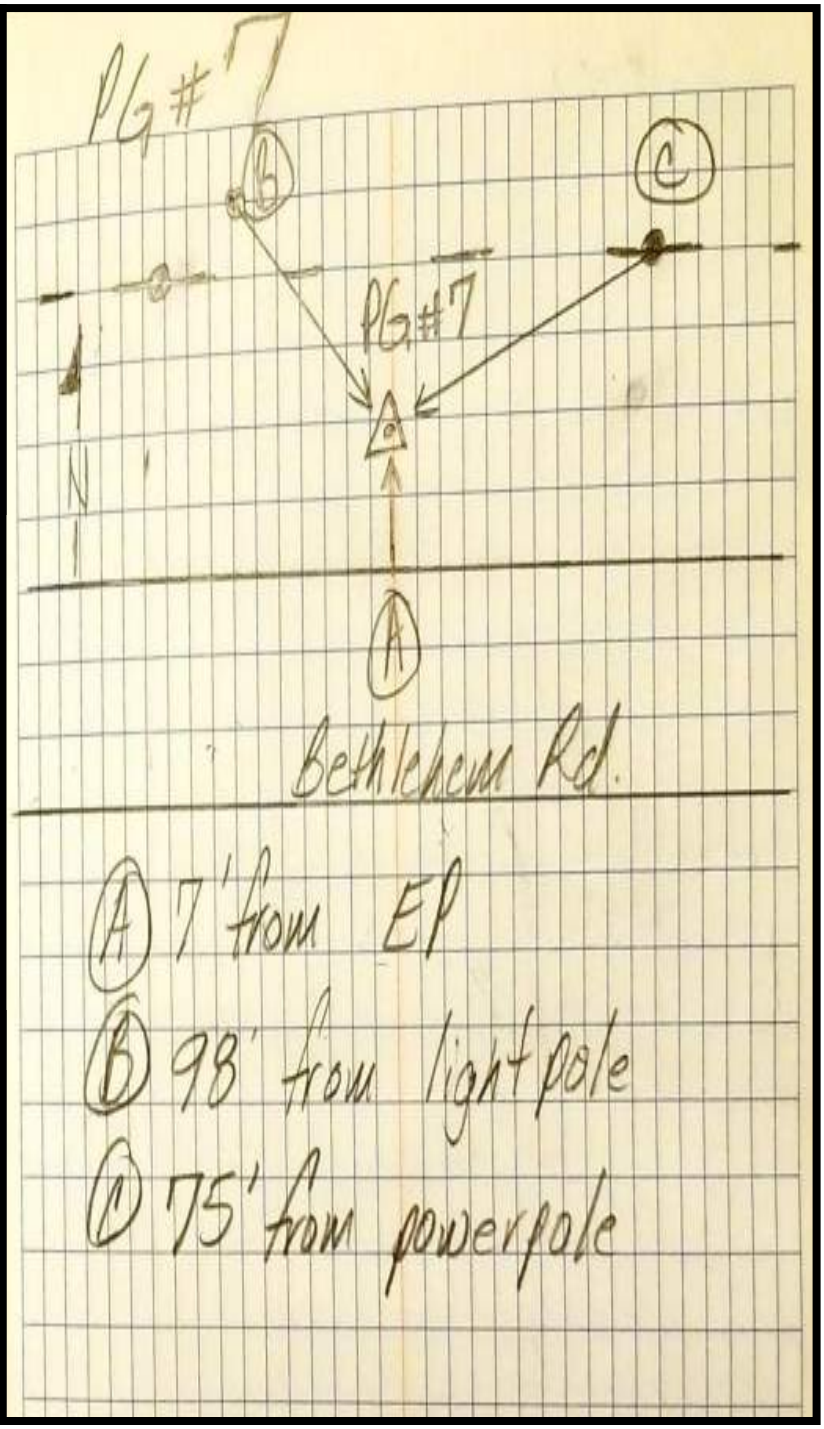
Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1228155.08	Easting: 2303074.83	Elevation: 820.93



Δ7 3/4" REBAR W/ CAP

PLATINUM geomatics

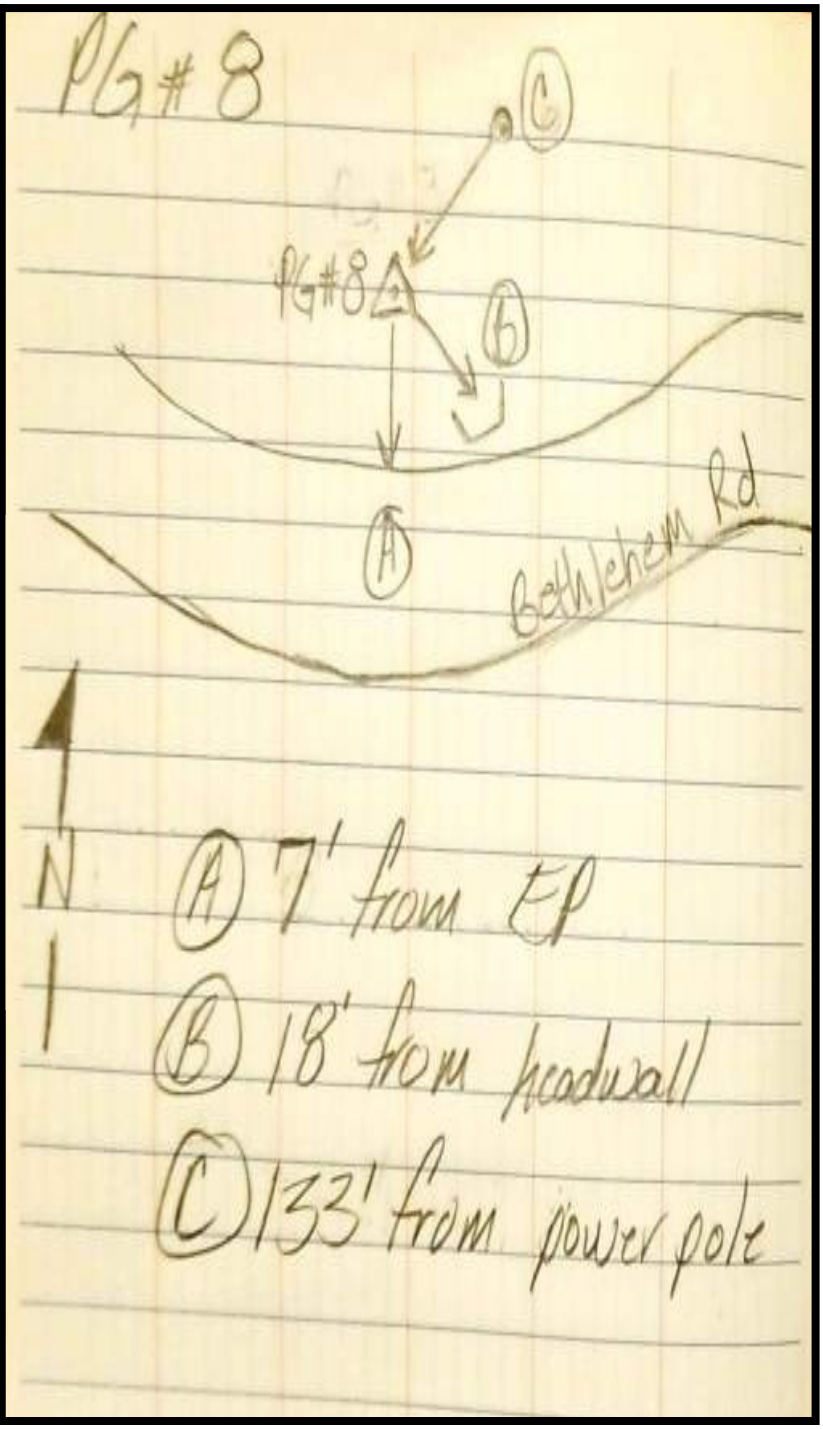
Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1228316.33	Easting: 2303884.32	Elevation: 824.60



Δ8 3/4" REBAR W/ CAP

PLATINUM geomatics

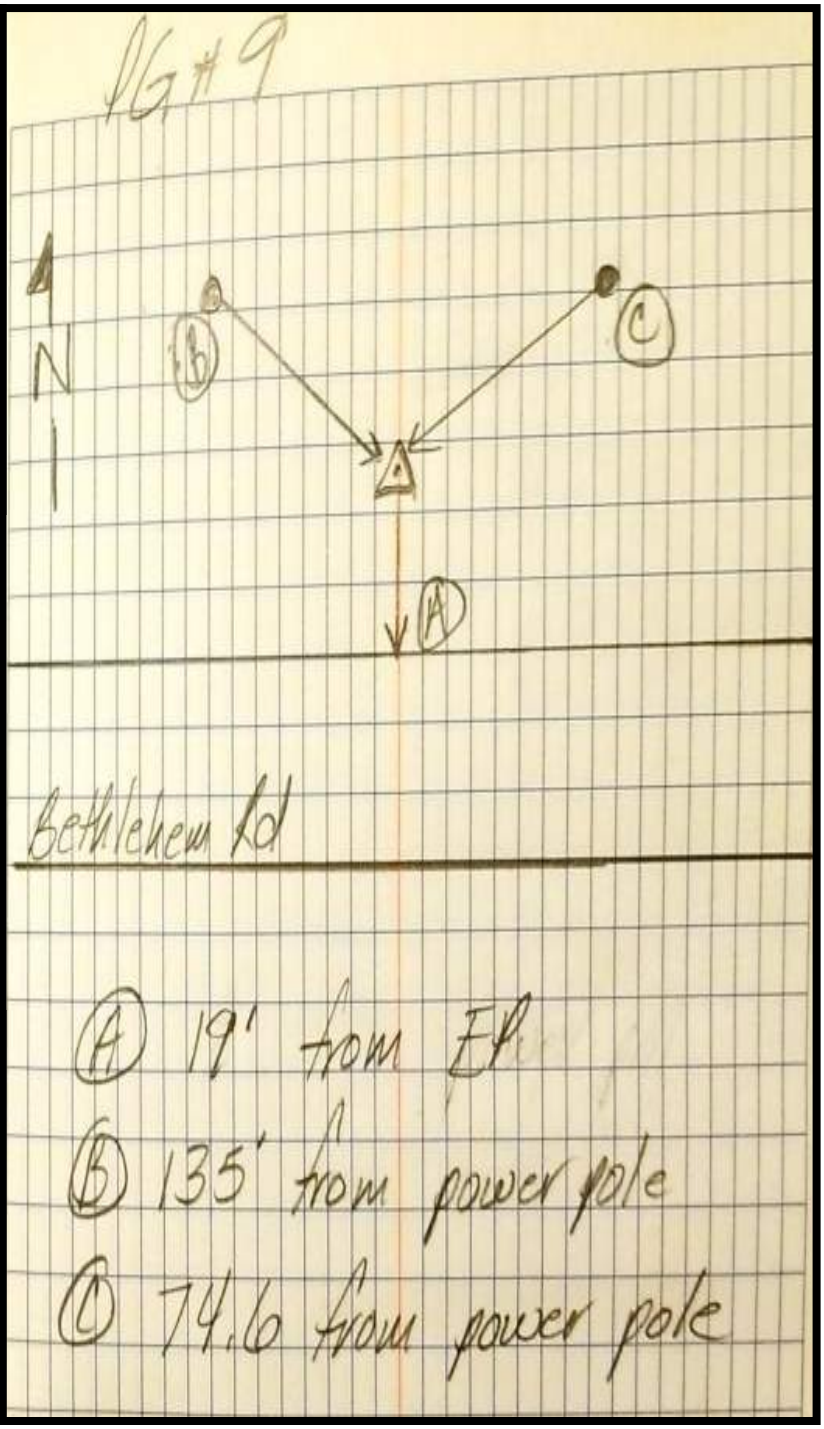
Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1228371.15	Easting: 2304559.47	Elevation: 835.99



Δ9 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
Horizontal Datum: NAD83	Vertical Datum: NAVD88	State Plane Zone: Georgia West
Northing: 1229671.41	Easting: 2306794.18	Elevation: 870.11



Δ10 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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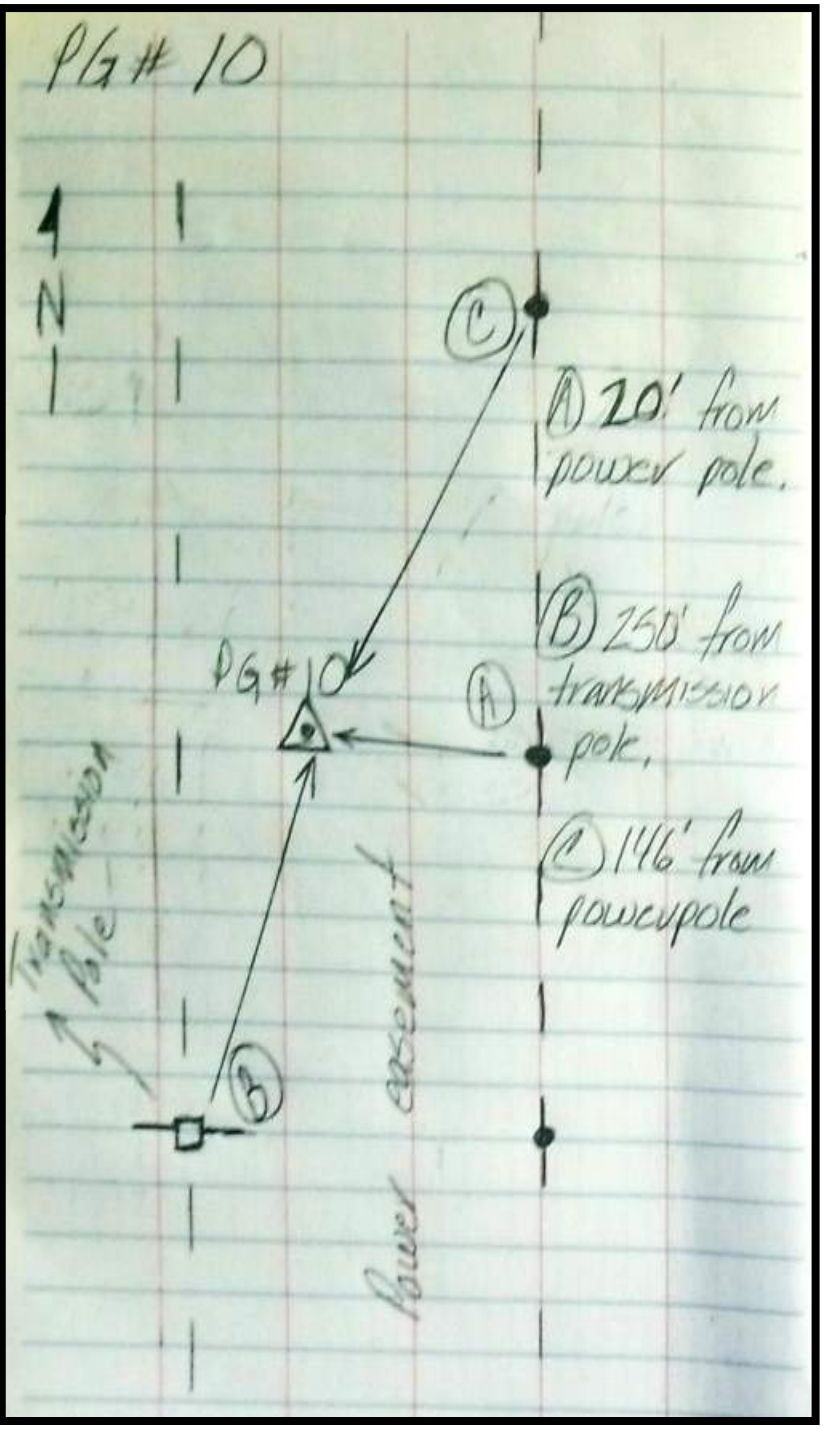
Northing: 1229271.76	Easting: 2306955.06	Elevation: 859.77



Δ11 3/4" REBAR W/ CAP

PLATINUM geomatics

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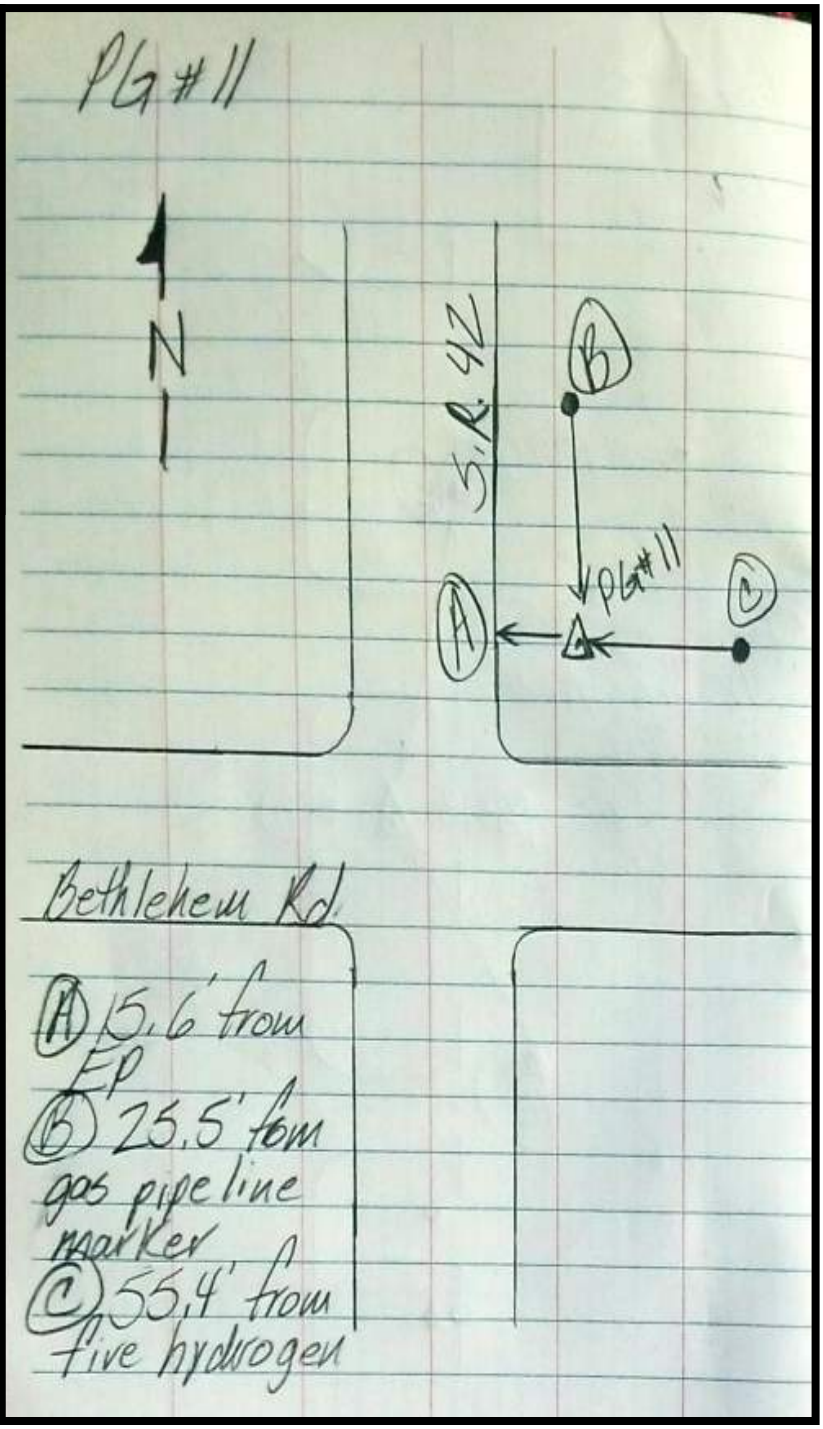

Δ12 3/4" REBAR W/ CAP

PLATINUM geomatics

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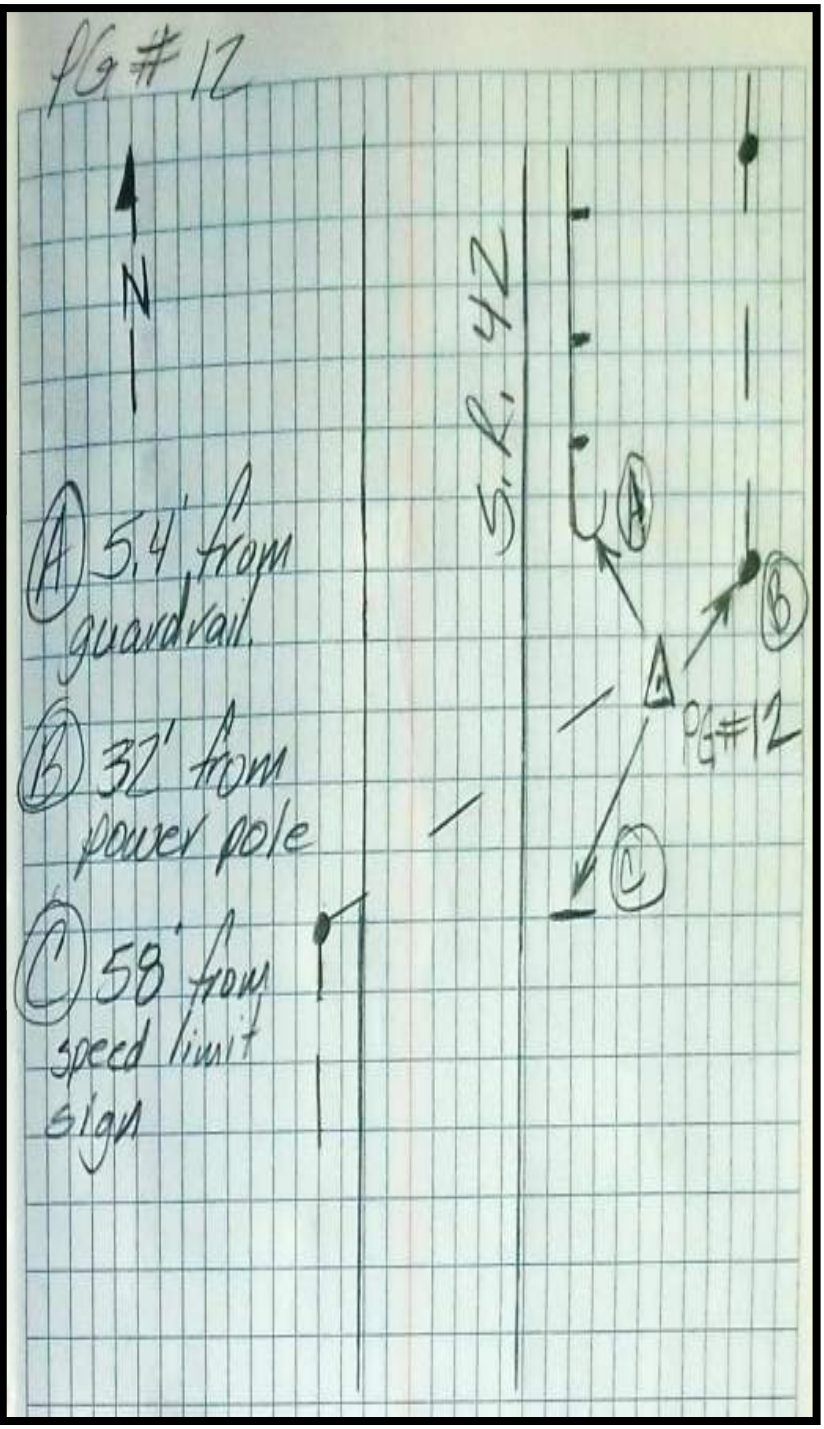

Δ13 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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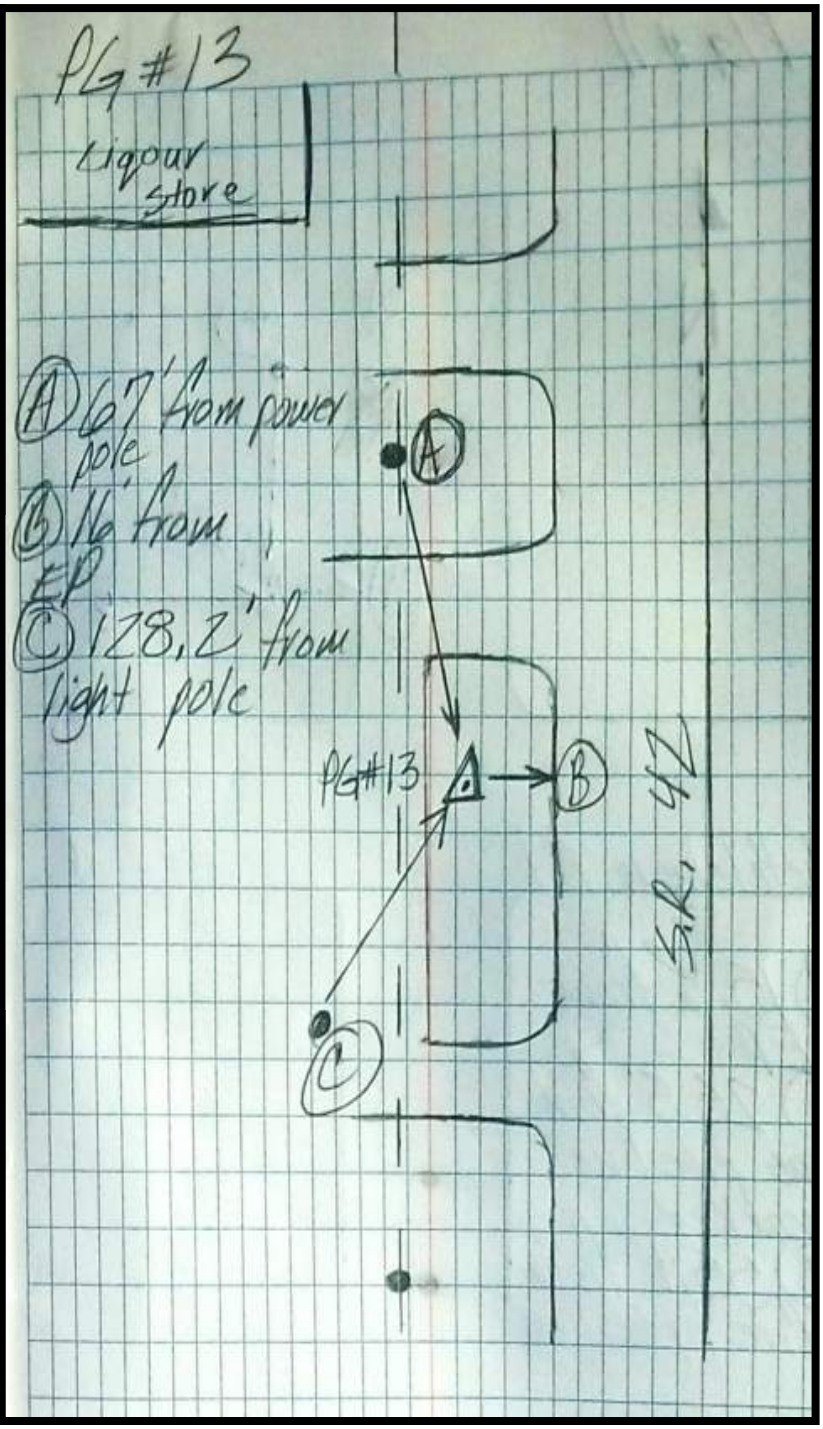

Δ14 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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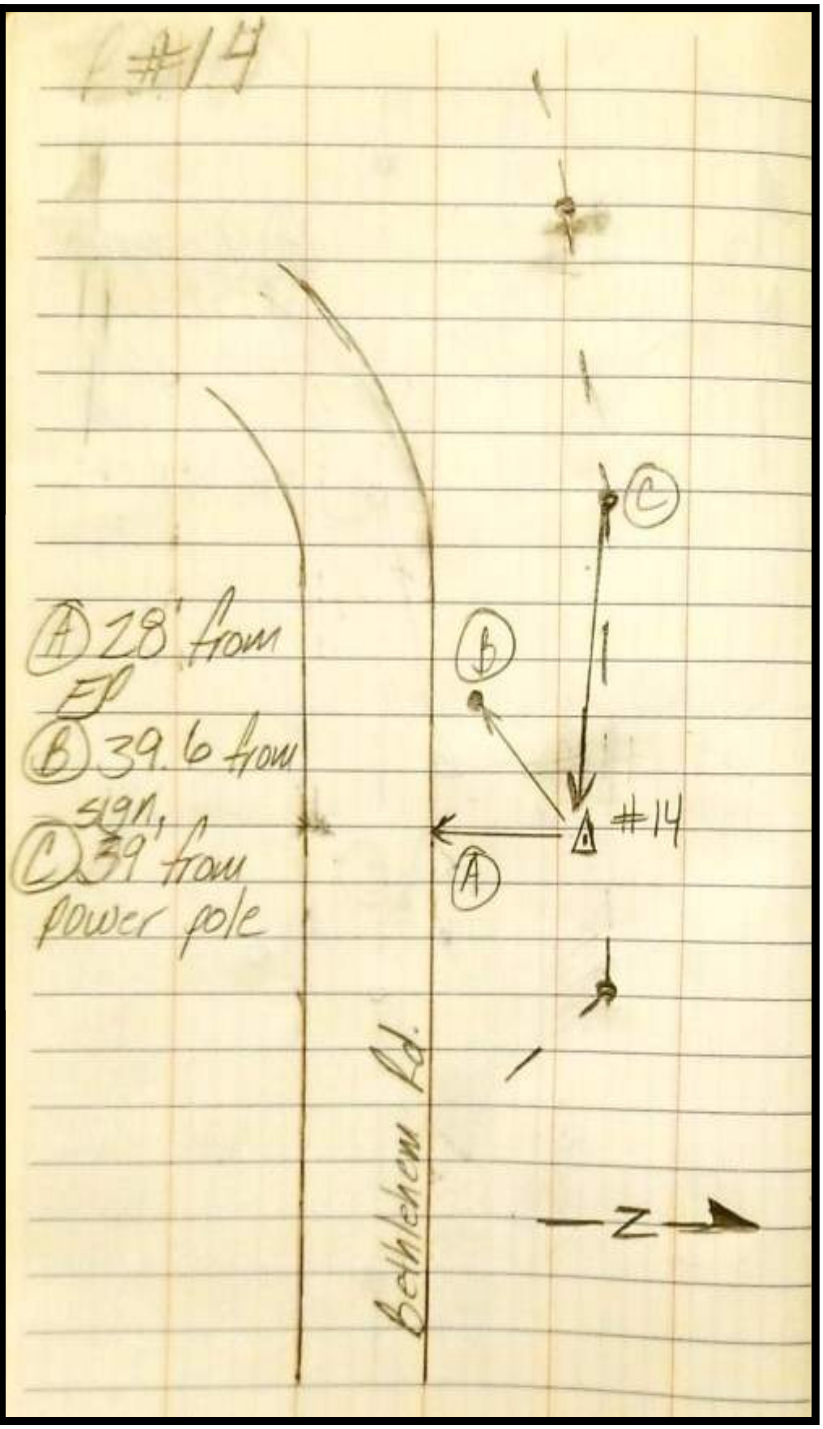

Δ15 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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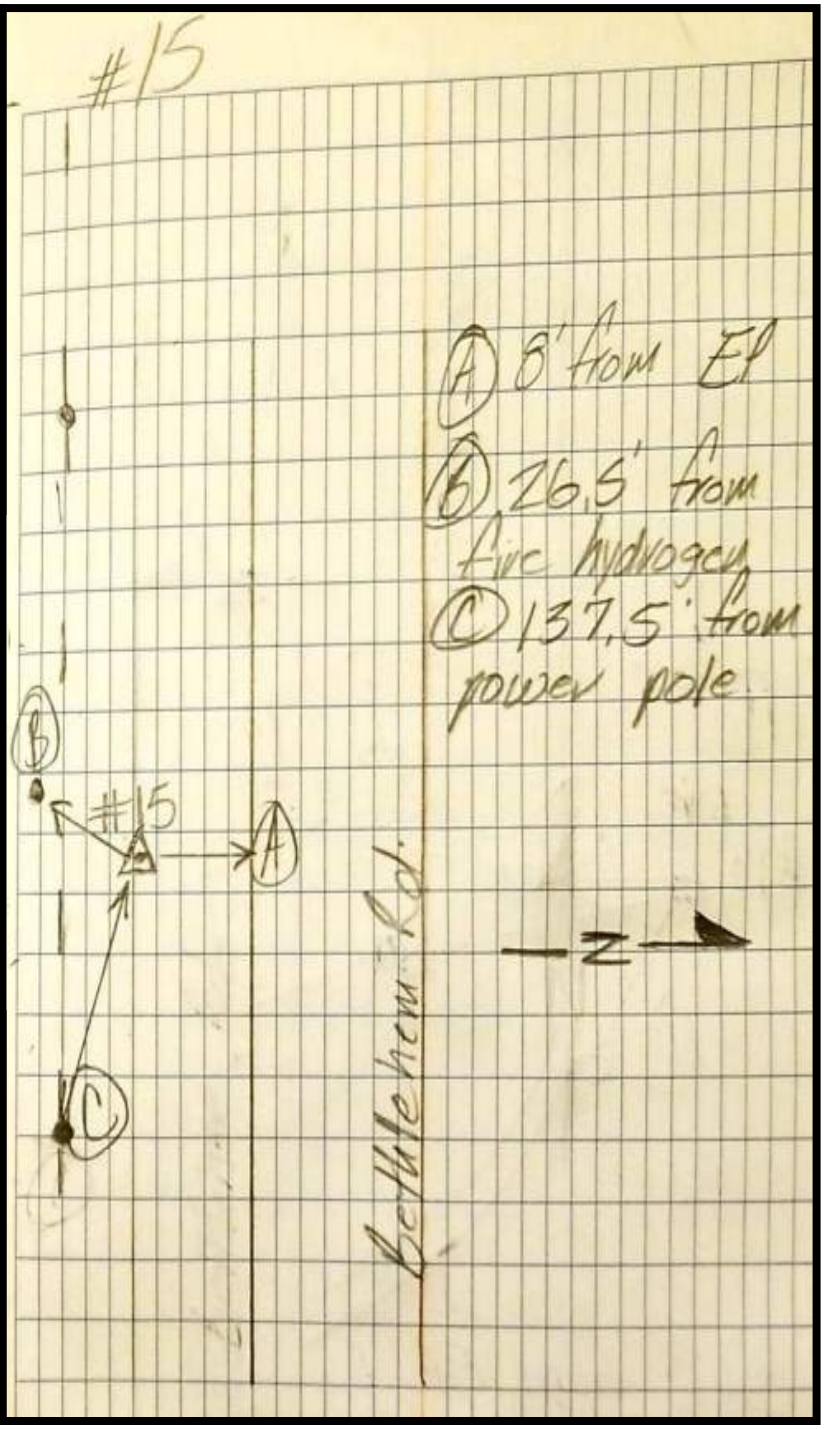

Δ16 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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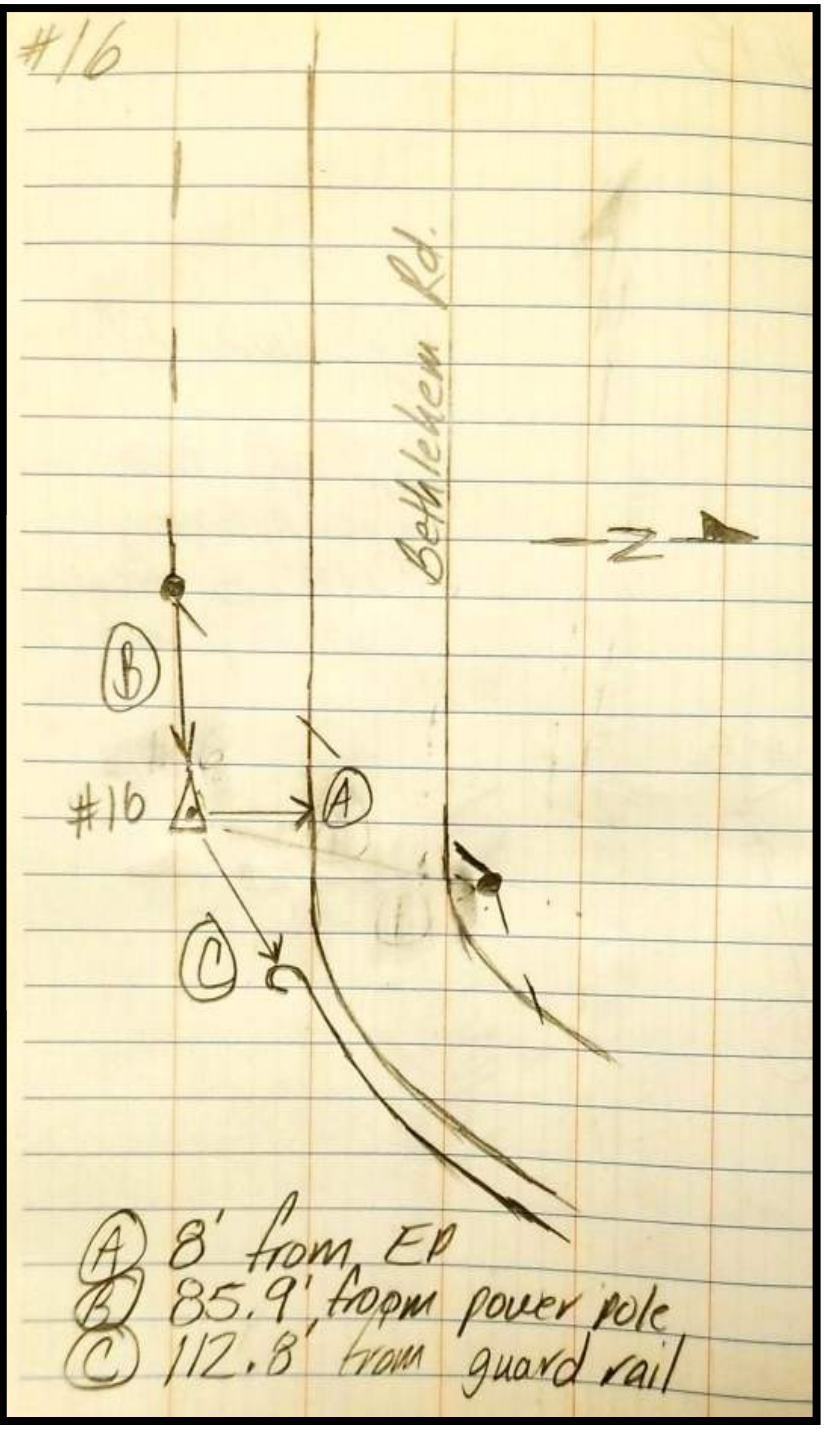

Δ17 3/4" REBAR W/ CAP

PLATINUM geomatics

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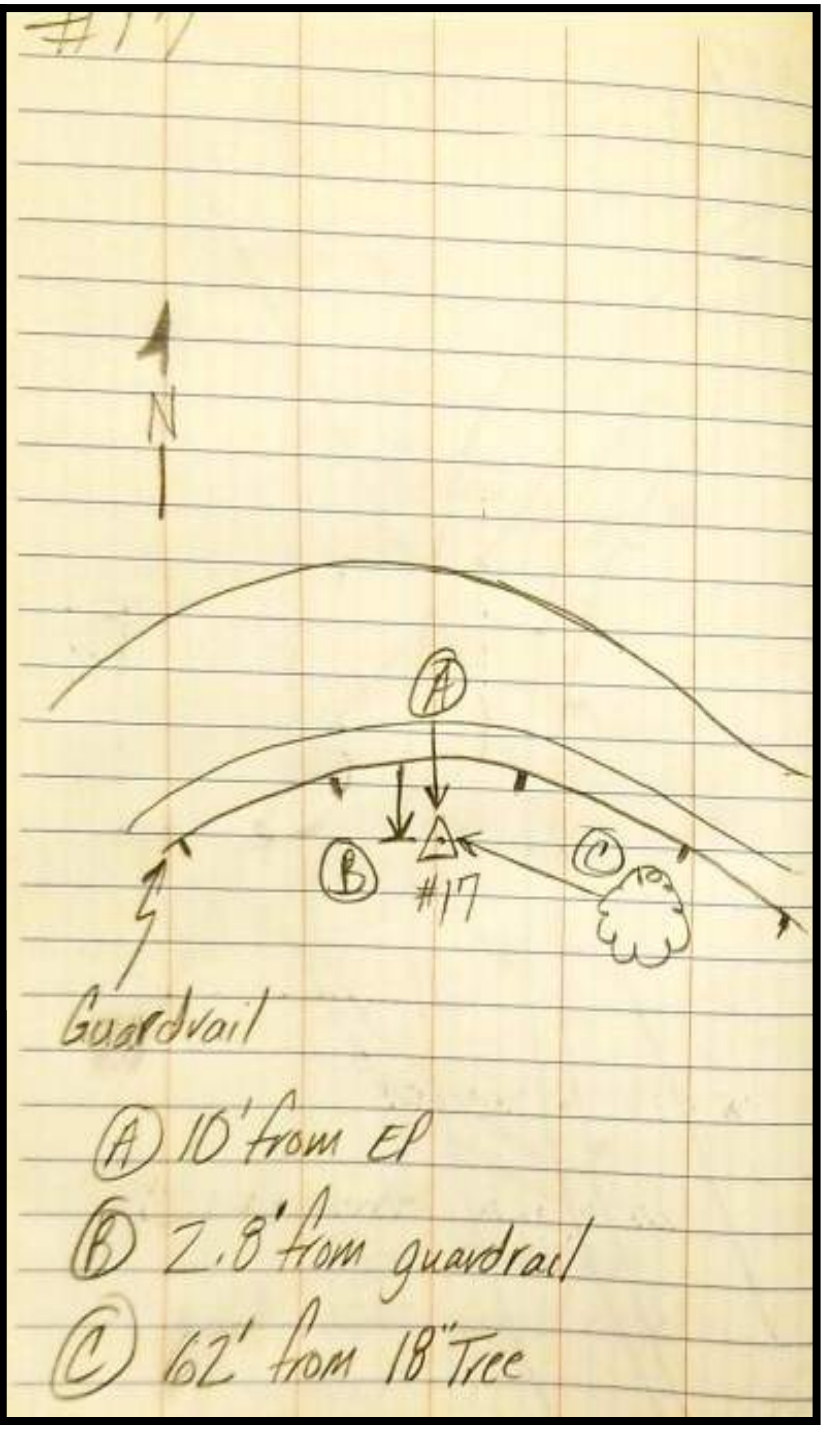

Δ18 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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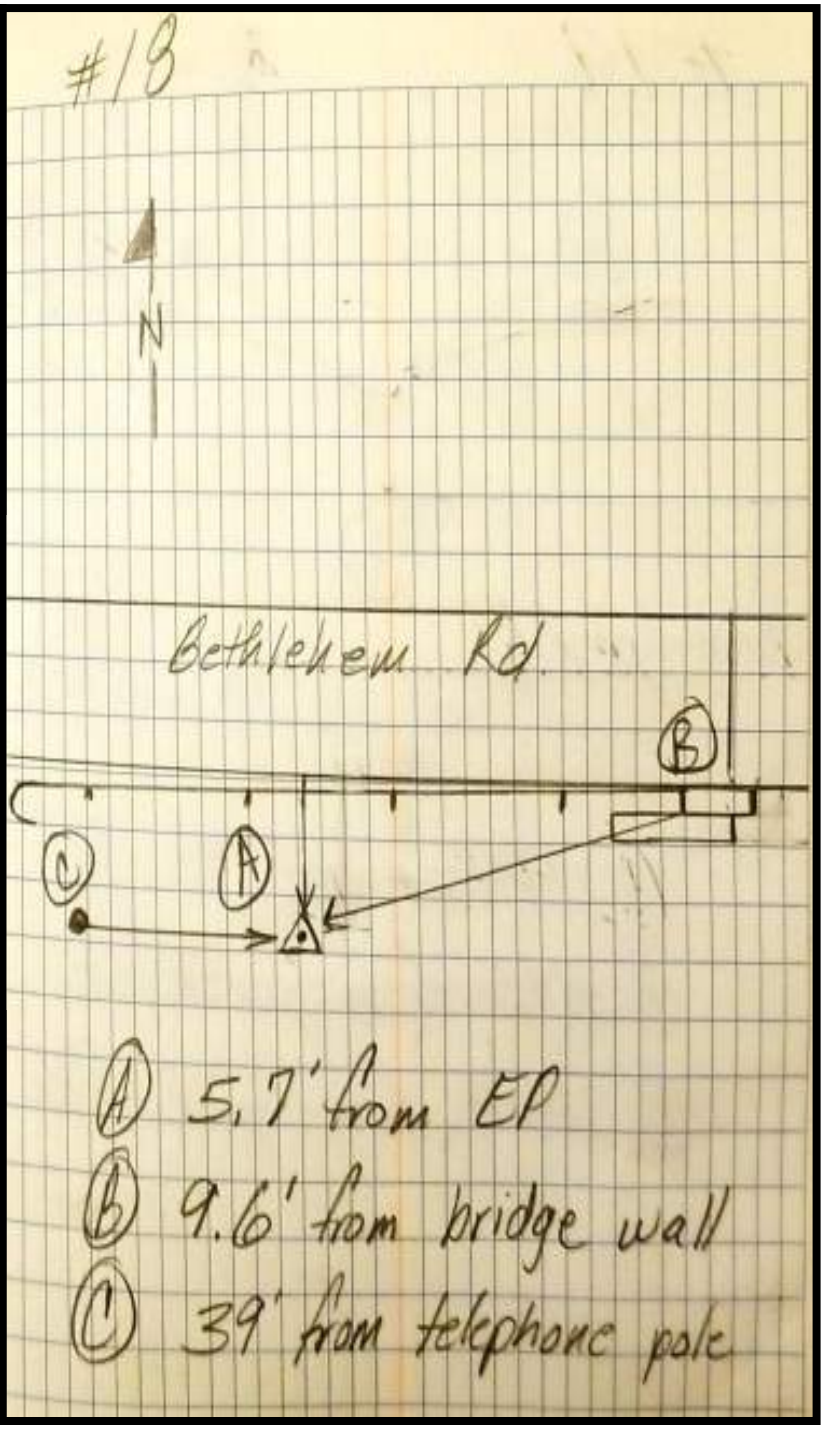

Δ19 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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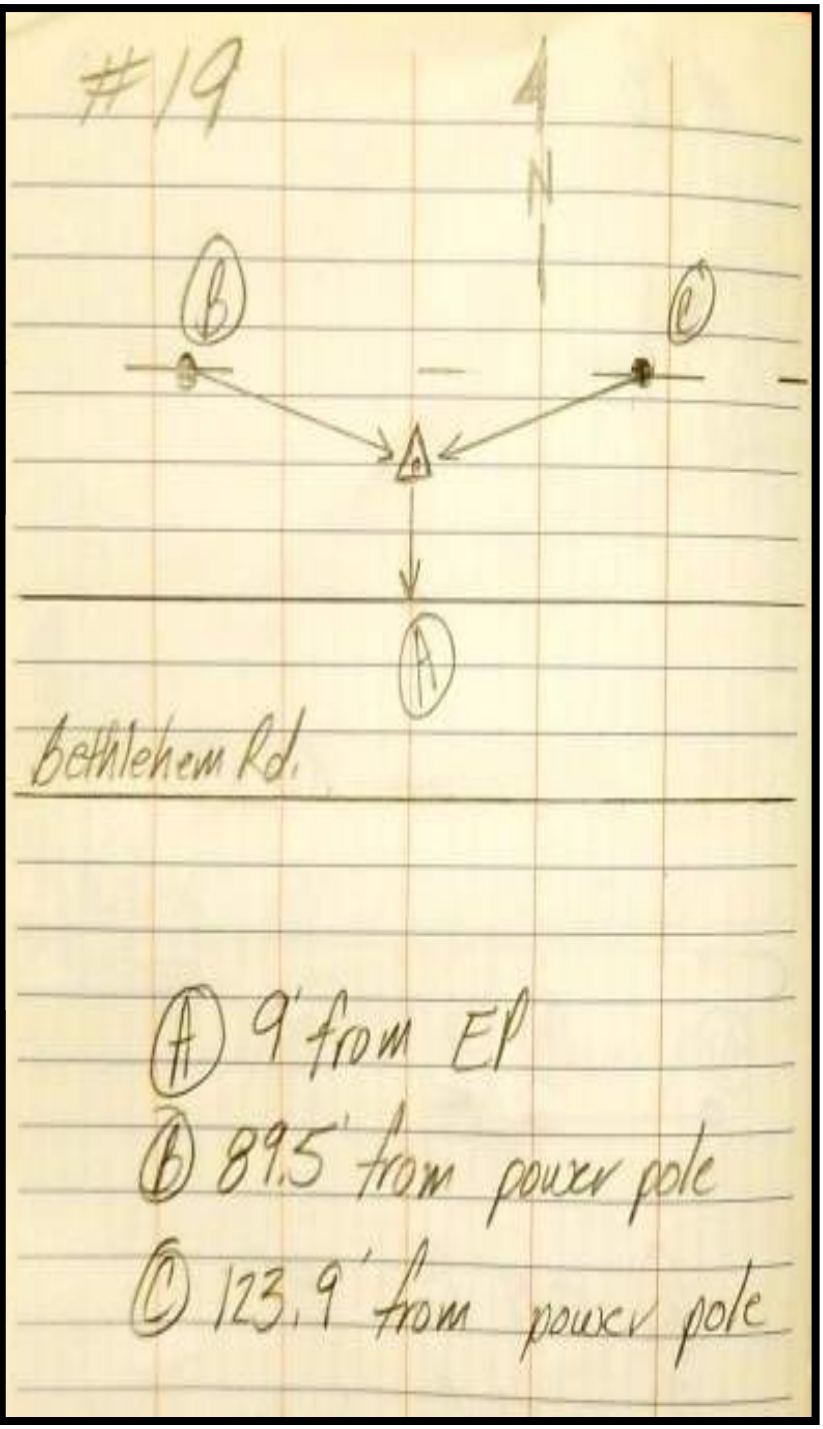

Δ20 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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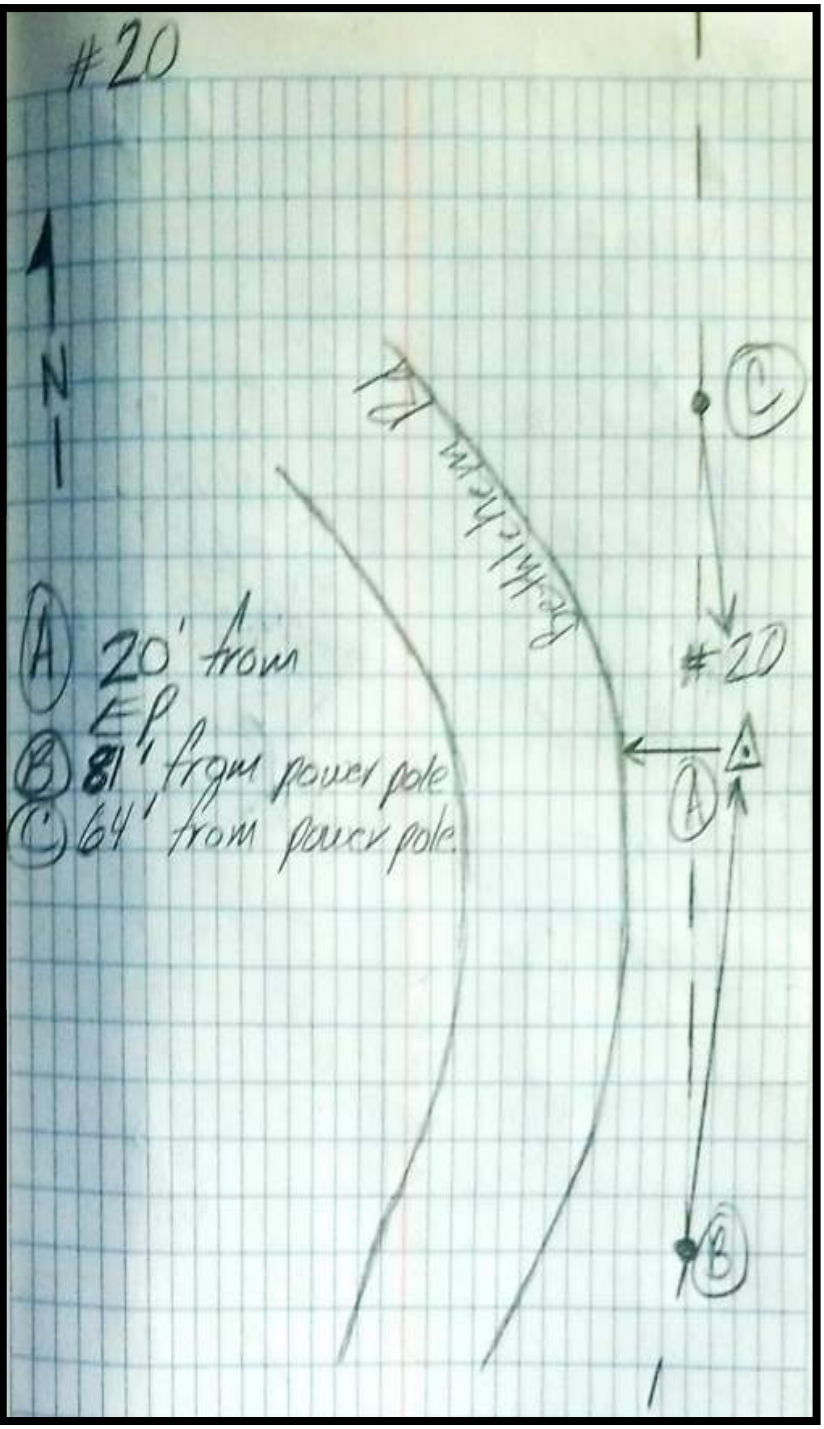

Δ21 3/4" REBAR W/ CAP

PLATINUM geomatics

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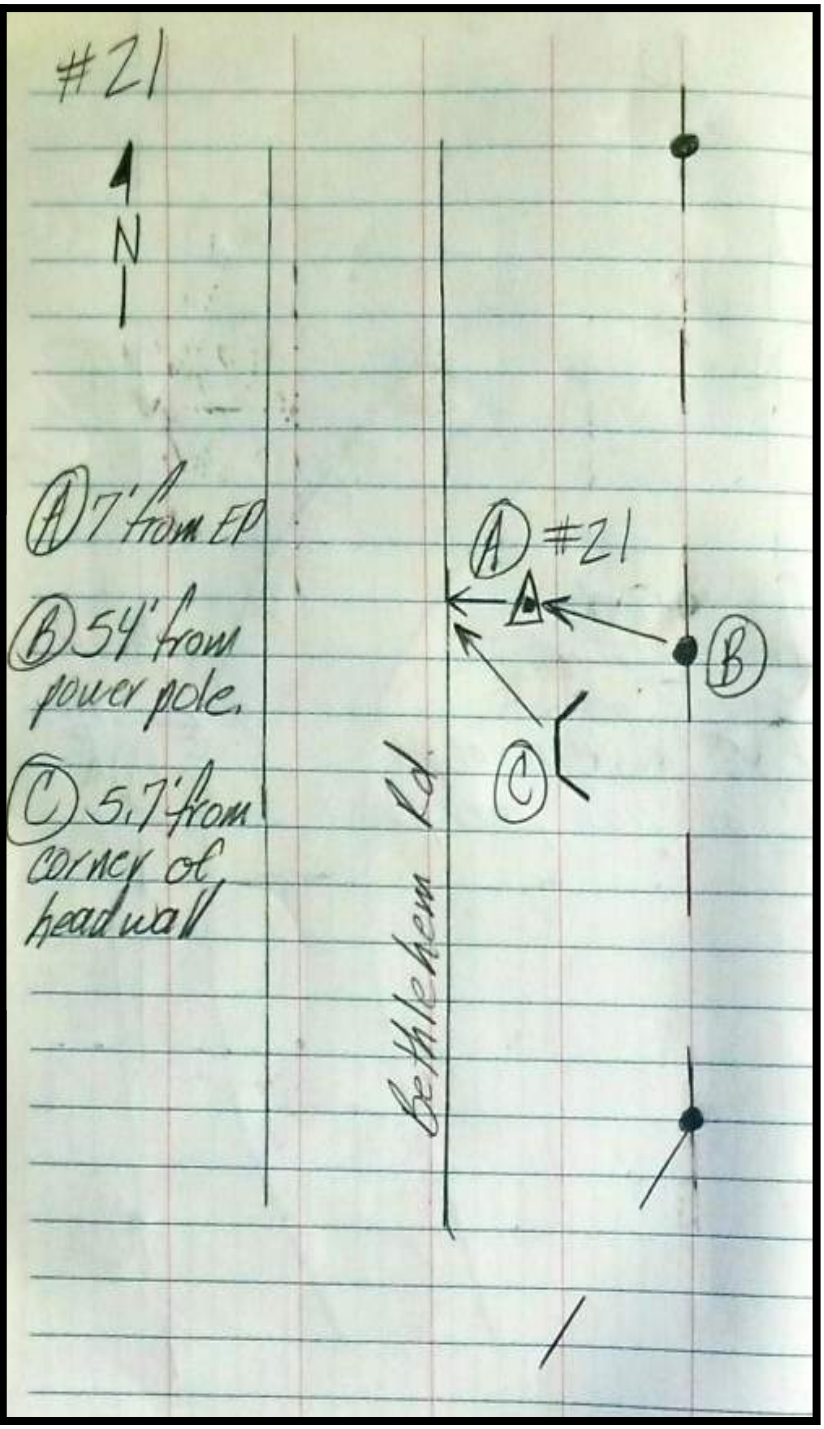

Δ22 3/4" REBAR W/ CAP

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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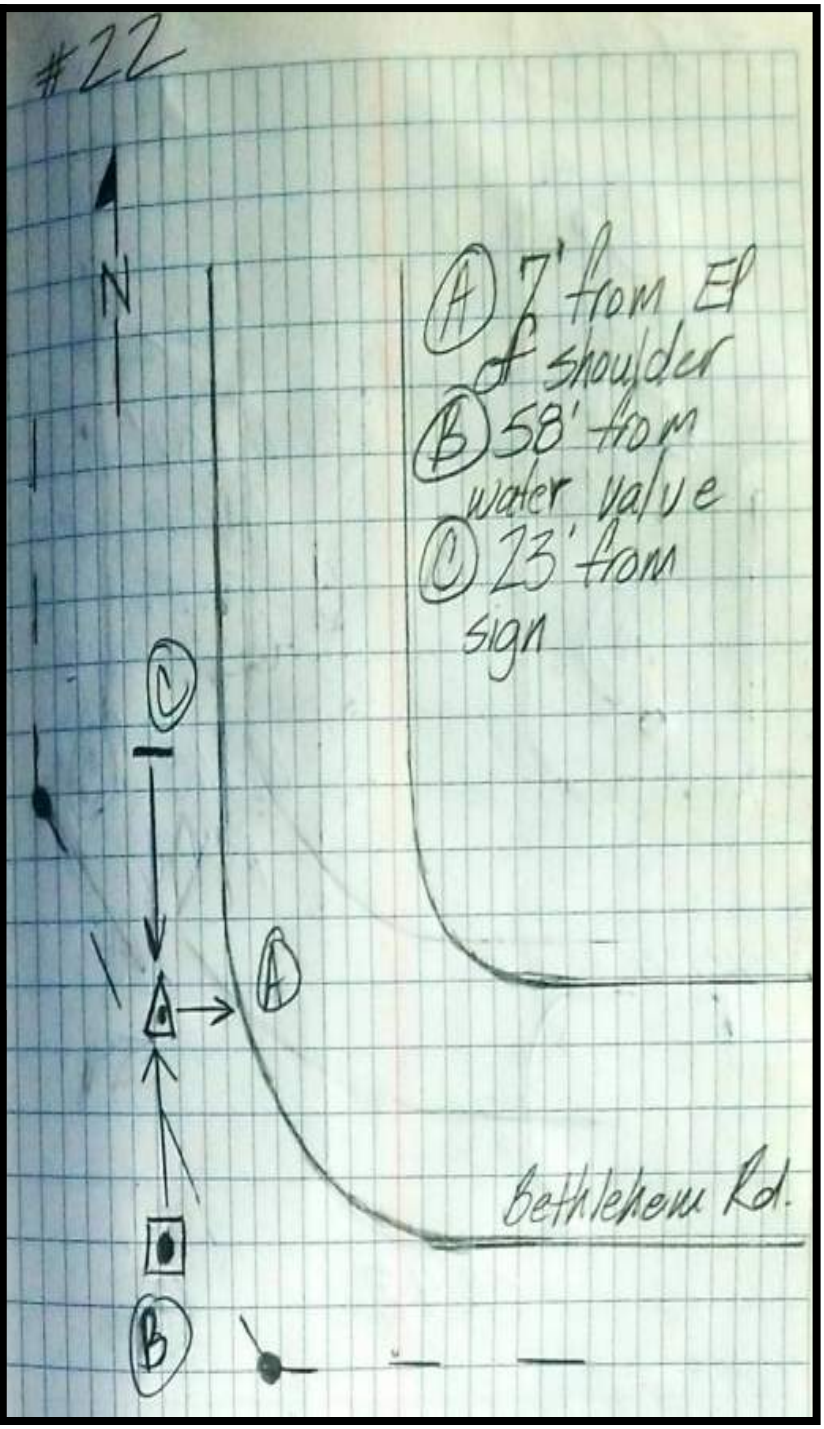
Northing: 1228795.07	Easting: 2308213.97	Elevation: 859.89



Δ23 3/4" REBAR W/ CAP

PLATINUM geomatics

Project ID: 0017182	County: Henry	Date: FEBRUARY 2022
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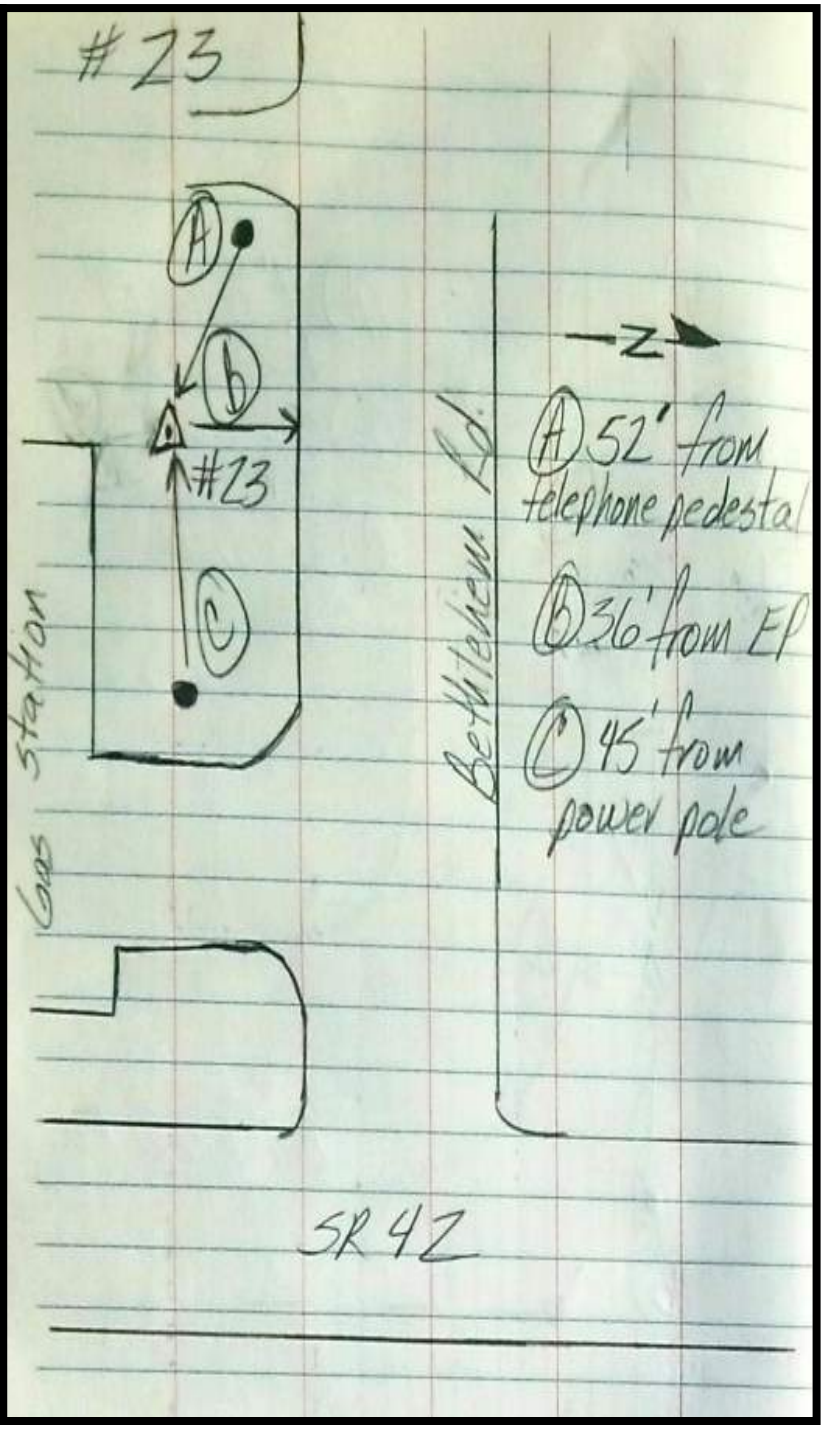
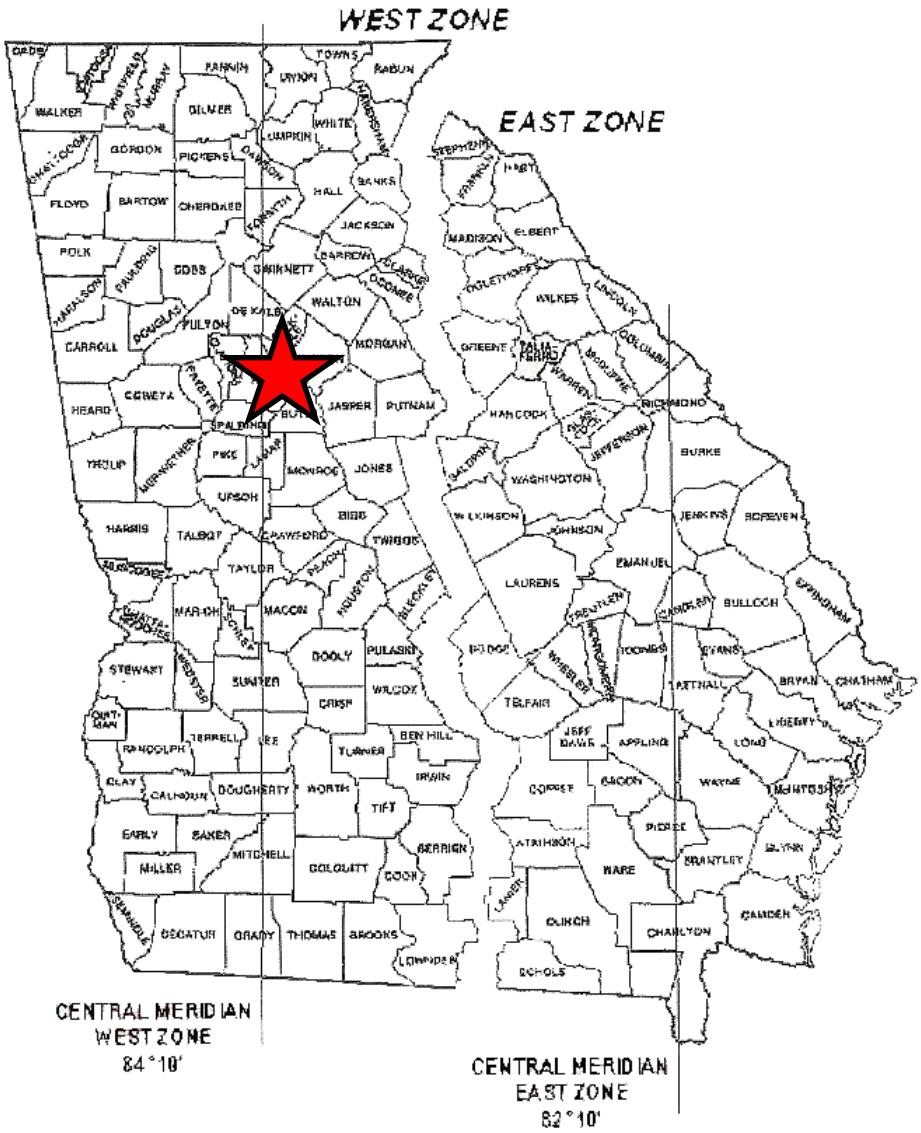
Northing: 1228643.77	Easting: 2308585.14	Elevation: 860.86



GEORGIA SPCS ZONE MAP

GEORGIA STATE PLANE COORDINATE SYSTEM



10 GRADING

10.1 General Requirements

The Design-Builder shall conduct all Work necessary to meet the requirements of grading, including:

1. Clearing and grubbing
2. Excavation and embankment
3. Removal of existing pavements, pipes, buildings, and miscellaneous structures, except as may be specifically noted otherwise
4. Subgrade preparation and stabilization
5. Dust control
6. Aggregate surfacing
7. Earth shouldering

10.2 Administrative Requirements

10.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 10 in accordance with the Project Standards.

10.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

10.3 Design Requirements

The Design-Builder shall ensure that all borrow, stockpile, and waste sites for the Project have obtained all required Environmental Approvals prior to construction activities occurring on those sites. All common fill or excess material disposed of outside the Site shall be placed in either a permitted solid waste facility, a permitted inert waste landfill, or in an engineered fill.

The Design-Builder shall notify GDOT of any non-permitted encroachment in the existing ROW. No action to remove the encroachment shall be taken without GDOT approval.

10.3.1 Removal and Disposal of Material

The Design-Builder shall salvage signal equipment as required in TP Section 16 (Signing, Pavement Marking, Signalization) and ITS equipment as required in TP Section 17 (Intelligent Transportation Systems). No other material has been identified for salvage. The Design-Builder shall take possession of, but not reuse for the Project, all material or equipment not identified for salvage. The Design-Builder shall properly dispose of all material not identified to be salvaged.

No suitable place to bury existing bridge or construction debris is available within the Project Limits. The Design-Builder shall obtain all Environmental Approvals required to provide a disposal site in accordance with the Project Standards to dispose of the existing bridge or construction debris.

10.3.2 Demolition and Abandonment Plan

The Design-Builder shall develop, implement, and maintain until Final Acceptance a Demolition and Abandonment Plan for all existing structures, features, and Utilities, listing the types and sizes, that will be removed, abandoned, or partially abandoned. The Design-Builder shall ensure that said structures are structurally sound after the abandonment procedure. The Demolition and Abandonment Plan shall show the locations of all existing features that will be abandoned and shall show sufficient detail for the abandonment.

10.3.3 Slopes and Topsoil

The Design-Builder shall avoid and minimize disturbance to the identified Waters of the United States (WOTUS). The Design-Builder's grading plan shall be in accordance with the approved NEPA documents; and the Design-Builder shall secure all associated Governmental Approvals required for the RFC Design Documents.

The Design-Builder shall perform finished grading and place topsoil in all non-paved areas for vegetative slope stabilization. The Design-Builder shall also place topsoil in all unpaved areas outside the limits of grading that are disturbed in the course of the Work.

The Design-Builder shall ensure that no construction-related activities (such as staging, construction, vehicular use, borrow or waste activities, sediment basins, trailer placement, etc.) occur under the drip lines of existing trees within the Project Limits. This does not apply to trees that will be removed or destroyed to allow for construction.

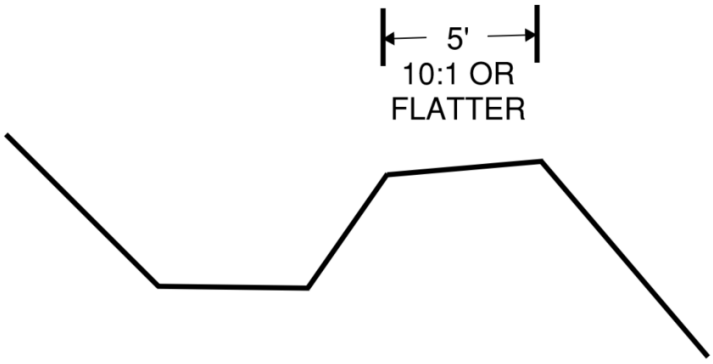
The Design-Builder shall not design or construct permanent slopes steeper than 2:1, except for the front slope of paved ditches at the back of a retaining wall as allowed by GDOT Construction Detail D-49 (Ditch Back of Retaining Wall Swale Ditches; Rip Rap Ditch). The Design-Builder shall not be required to correct existing slopes steeper than 2:1 that are not impacted by the Work and are located outside of the required clear zones.

The Design-Builder shall not design or construct a barn roof side slope (defined as a shallow slope followed by a steeper slope) that includes a foreslope steeper than 3:1, regardless of if the steeper slope is within the clear zone, unless:

1. The entire slope is protected by a roadside safety device; or
2. A minimum 10 foot berm is provided beyond the clear zone. For design speeds greater than 45 mph, the berm shall slope towards the roadway at between 2:1 and 10:1. The Design-Builder shall ensure the slope drains.

Where a new ditch requires a fill slope beyond the ditch backslope, the Design-Builder shall design and construct a berm between the backslope of the ditch and the fill slope. The berm shall be a minimum of 5 feet wide and be sloped at a grade of 10:1 or flatter as shown in TP Figure 10-1 (Fill Slope Behind a Ditch).

Figure 10-1: Fill Slope Behind a Ditch

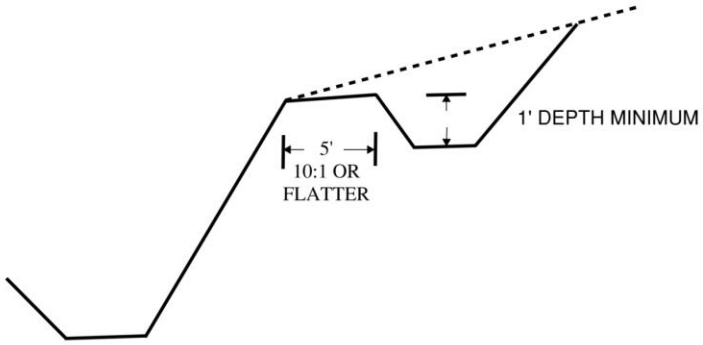


The Design-Builder shall design and construct a surface ditch where water drains towards a cut slope that requires a berm per the requirements in TP Section 8.4.4 (Embankments). In addition, the Design-Builder shall design and construct a surface ditch at the top of the backslope of cut ditches where:

1. Backslope is greater than 10 feet tall as measured from bottom of flat bottom ditch to tie into natural ground.
2. More than 200 feet of natural ground slopes towards the ditch (transversely) for a longitudinal length of at least 200 feet.
3. Natural ground is sloped at a grade 10 percent or greater.

A berm shall be designed and constructed between the surface ditch and the roadside ditch as shown in TP Figure 10-2 (Surface Ditch). The berm shall be a minimum of 5 feet wide and sloped at a grade of 10:1 or flatter. The surface ditch shall be a minimum of 1 foot deep.

Figure 10-2: Surface Ditch



All ditches shall be trapezoidal in shape with a minimum flat bottom width of 2 feet except as allowed in GDOT Construction Detail D-49 (Ditch Back of Retaining Wall Swale Ditches; Rip Rap Ditch) for paved ditches in back of retaining wall.

10.4 Construction Requirements

10.4.1 Clearing Limits and Requirements

Clearing limits, at a minimum, shall encompass roadside clear zones per requirements in TP Section 11.3.7 (Roadside Safety Devices) and as required to provide required stopping and intersection sight distances. Maximum clearing limits shall be the entirety of the Project Limits with the exclusion of non-permitted impacts to Environmentally Sensitive Areas per TP Section 5 (Environmental). The clearing within wetland 6 and perennial stream 3, as defined in TP Attachment 5-4 (Environmental Resource Exhibit), shall be limited to that which is required for construction.

Where required by TP Section 11.3.4.1 (Control of Access Fencing), the installation and maintenance of all limited access fencing located in Environmentally Sensitive Areas shall be in accordance with TP Attachment 5-2 (Environmental Commitments).

10.4.2 Removal of Abandoned Elements

The Design-Builder shall remove all features that are abandoned in place (e.g., parking lots, abandoned pavements, sidewalks, driveways, catch basins, drop inlets, pipes, manholes, curbing, retaining walls, Utilities, foundations, paved floors and slabs, underground tanks, fences, bridges, buildings, and other incidental structures), in accordance with the following requirements:

1. Abandon pavements — The Design-Builder shall ensure existing pavement no longer being used within the Project Limits is obliterated and removed, and the area graded to drain, and grassed.
2. Abandon pipes — The Design-Builder shall ensure abandoned pipes that are left in place are grout filled or filled with flowable fill.
3. Under new pavements — The Design-Builder shall remove all abandoned features to a depth of at least 3 feet below the finished subgrade elevation.
4. Underneath new other structures — The Design-Builder shall remove all abandoned features to at least 3 feet below the foundations of all proposed structures, including installations such as guardrail posts and Utility poles.
5. Elsewhere in the ROW and easement areas, the Design-Builder shall remove all abandoned features to at least 3 feet below the finished surface of slopes and shoulders and 1 foot below natural ground outside construction limits.
6. Abandoned structures within 10 feet vertically of finished grade that may impound water shall be thoroughly cracked or broken. These structures shall include all concrete floors, basements, and catch basins.
7. The Design-Builder shall break floors and slabs so that no section greater than 10 square feet remains intact.

10.5 Submittals

With respect to grading requirements described in this TP Section 10, the Design-Builder shall comply with TP Section 2.9 (Submittals).

11 ROADWAYS

11.1 General Requirements

This TP Section 11 provides requirements for the design and construction of roadway improvements.

11.2 Administrative Requirements

11.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 11 in accordance with the Project Standards.

11.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

11.3 Design Requirements

11.3.1 General Design Requirements

The Design-Builder shall incorporate all other components of the Project into the design of the roadway. Roadways shall be designed to integrate with streets and roadways that are adjacent or connect to the Project.

The Design-Builder shall incorporate all necessary roadway appurtenances, including fences, noise barriers, retaining walls, and hazard protection. Fence type shall be replaced in accordance with GDOT Construction Standard 9031N (Chain Link), Construction Detail F-1 (Woven Wire), or F-4 (Field Fencing). Should the existing type of fence not match the type provided in GDOT's Construction Standards and Construction Details, the Design-Builder shall submit the type of proposed fence to GDOT for approval prior to construction.

The Design-Builder shall design the Project in accordance with the minimum design criteria included in TP Attachment 11-1 (Design Criteria). In addition to the design criteria defined in TP Attachment 11-1 (Design Criteria), the following project specific design criteria shall apply:

1. Bethlehem Road shall have a maximum vertical grade of 5 percent.
2. Price Drive shall have a maximum vertical grade of 8 percent.

The Design-Builder shall design and construct any and all proposed intersection reconstruction or rehabilitation to meet the requirements of the NEPA Approvals.

The Design-Builder shall not be permitted to reduce design speeds on ramps approaching a stop condition below the speeds identified in TP Attachment 11-1 (Design Criteria). Where the Project Standards permit a reduction in design speed (e.g. approaching a roundabout or a stop controlled T-intersection), the reduction in design speed shall apply only to horizontal curve radii and superelevation. All other design criteria (e.g. vertical curves, stopping sight distance, clear zone, etc.) shall be held to the original design speed of the approach to the intersection.

Where a turn lane currently exists on specific individual properties/developments adjacent to the Project and is impacted by the Work, the Design-Builder shall construct the turn lane as close as possible to its original configuration.

The Design-Builder shall design and construct driveways in accordance with the requirements in TP Attachment 11-4 (Driveway Requirements). If additional easement is required to accommodate the final driveway design, the additional easement shall be temporary easement acquired as Design-Builder Proposed/Design-Builder Acquired ROW.

On multi-lane facilities, the Design-Builder shall design and construct the facility such that no more than two adjacent lanes, including any auxiliary lanes, shall be constructed at the same cross slope in non-superelevated sections except on bridges. On bridges, the Design-Builder may construct the bridge with the same slope on either side of the crown point regardless of the number of lanes. The cross slope shall be broken over at intervals of 0.5 or 1 percent.

All new and reconstructed facilities shall be designed and constructed with a normal cross slope of 2 percent. The Design-Builder shall design and construct the cross slope in both tangent and superelevated sections such that the runoff does not drain from a steeper cross slope to a flatter cross slope.

The maximum breakover between the travel lanes and the shoulder shall be 8 percent. The maximum breakover between travel lanes shall be 4 percent. All paved shoulders shall have a minimum cross slope of 2 percent and a maximum cross slope of 10 percent.

11.3.2 Related Transportations Facilities

The Design-Builder shall comply with TP Section 1.3 (Related Transportation Facilities) for connections to Related Transportation Facilities.

11.3.3 Vibration Control

The Design-Builder shall prepare a Vibration Control Plan complying with the requirements of Special Provision 154 (Construction Vibration Monitoring) and any Utility specific vibration requirements per TP Section 7 (Utility Adjustments). Construction vibration monitoring shall be required for all structures located within 75 feet of the proposed Work and identified as a historic resource or located within a historic resource as identified in the Provided Environmental Approvals and any re-evaluation per DBA Section 6.2.11 (Provided Environment Approval Re-evaluation). Construction vibration monitoring shall be required for all structures located on the parcel identified as Bethlehem Church, Parcel ID 111-01016008 (Plat Book 16, pg. 88), per TP Attachment 6-3 (State Proposed ROW Plans) and Resource 4 per TP Attachment 5-1 (Environmental Resource Impact Table). Construction vibration monitoring shall also be required for the duration of any pile driving for any structure, regardless of historic designation, located within 75 feet of the bent requiring pile driving activities.

11.3.4 Control of Access

The Design-Builder shall maintain all existing property access within the Project Limits and shall not revise control of access without GDOT review and written agreement of the affected property owner.

The Design-Builder shall install new curb and gutter and sidewalk, if necessary, across all driveways where access rights have been purchased per the ROW Plans, to tie into existing curb and gutter and sidewalk. Driveways shall be obliterated back to ROW line.

Where easement has been purchased to re-establish the ROW (e.g. placement of new curb line on a parking lot within the new ROW), the Design-Builder shall re-establish the ROW unless the property owner re-established the ROW ahead of construction.

The Design-Builder shall remove and replace existing fencing to provide continuous security to livestock, residential areas, businesses, and all other properties with existing fencing. The Design-Builder shall not use limited access fencing as part of the fencing for private property.

11.3.4.1 Control of Access Fencing

The Design-Builder shall provide fencing within the Project Limits along the limit of access as defined in the Design Documents except:

1. Where a physical barrier (e.g., noise barrier, retaining wall, or concrete barrier wall) within 0 to 10 feet inside of the ROW line prevents access to the ROW. A physical barrier shall be considered preventing access to the ROW if the barrier is at least as tall as the required limited access fencing.
    a. Physical barriers shall not be permitted as part of the fencing for private property.
2. At interchanges, fence may terminate at the point where the ROW intersects the normal ROW along the cross road.
3. Where limit of access occurs on a median barrier between parallel facilities.

Fencing shall be a minimum of 1 foot and a maximum of 10 feet inside the limited access line.

Limited access fence shall be chain link wire fence (GA Standard Detail 9031-N).

Where the Design-Builder constructs maintenance driveways for access from local roadways, the Design-Builder shall install a gate in the limited access fencing in compliance with Construction Detail F-2 (Gate Details for Chain Link & Woven Wire Fences). Gates for limited access fencing shall include a lock. GDOT shall be provided a key for all locks.

The Design-Builder shall comply with the following requirements when removing or replacing the existing limited access fencing:

1. No more than 0.5 miles of fence shall be down at any given time.
2. Fence removal and new fence installation shall be scheduled to provide continuous security to livestock, residential areas, businesses, frontage road areas, and within 1,000 feet of interchanges.
3. All areas shall have fence replaced within seven days.

11.3.5 Reserved

11.3.6 Turning Movement Design

The Design-Builder shall develop the design according to the requirements listed in this TP Section 11.3.6. Roundabout turning movements shall follow the requirements in TP Section 11.3.9.3 (Roundabouts).

1. “Design For” means the design shall be to the indicated standard without impeding other traffic. WB-40 and larger design vehicles may over-track onto full depth shoulders and painted islands.

2. "Accommodate" means the design shall allow for the indicated check vehicle with a temporary impediment to other traffic as noted in TP Section 11.3.6.2 (Turn Movement Requirements).

All intersections shall be designed and constructed such that both the design and accommodate vehicle's turning movements do not permit over-tracking of any portion of the vehicle over ADA ramps and sidewalks.

OSOW check vehicles which require a permit to operate may use all available space, including opposing travel lanes, to traverse through an intersection and do not have to stop within the prescribed travel lane for the turn movement. For all design vehicles and all non-OSOW check vehicles, all intersections shall be designed and constructed such that the design and check vehicles stop fully within the prescribed lane without tracking into adjacent lanes prior to beginning the turning movement (e.g., a right turning vehicle should start the turn fully within the right turn lane).

11.3.6.1 Design/Check Vehicles

1. Turning movement to and from interchange ramps:
    a. Minimum design vehicle: Shall be the design vehicle for the ramp as identified in TP Attachment 11-1 (Design Criteria) for all turning movements to or from the ramps. (Design For)
    b. Minimum check vehicle: Shall be the check vehicle for the ramp as identified in TP Attachment 11-1 (Design Criteria) for all turning movements to or from the ramps. (Accommodate)
2. Turning movement for non-interchange ramps intersections:
    a. Minimum design vehicle for turns to and from the minor roadway: Shall be the design vehicle for the minor roadway as identified in TP Attachment 11-1 (Design Criteria) (Design For).
    b. Minimum check vehicle for turns to and from the minor roadway: Shall be the check vehicle for the minor roadway as identified in TP Attachment 11-1 (Design Criteria) (Accommodate).
    c. Driveway design vehicle for turning movements shall be the vehicle with the most conservative design characteristics (there may be different/multiple design vehicles for different criteria) that is likely to use the facility on a daily basis.
        1) Driveway #9 per TP Attachment 11-4 (Driveway Requirements) shall be designed for full circulation of a SU-40 design vehicle and shall accommodate a WB-67 design vehicle entering and exiting to and from the westbound direction of Old Bethlehem Road.
    d. Driveway check vehicle for turning movement shall be the vehicle with the most conservative design characteristics (there may be different/multiple check vehicles for different criteria) that is likely to use the facility on a less than daily basis. Commercial sites shall be designed and constructed to provide circulation of the check vehicle substantially similar to the existing circulation.

3. U-turn movements:
    a. U-turn movements shall be accommodated at the following median opening locations for the identified design vehicle:
        1) Bethlehem Road at Price Drive design for passenger cars.
        2) Northbound SR 42 at Old Bethlehem Road for passenger cars.
        3) Northbound SR 42 at Bethlehem Road for passenger cars.
    b. All other median openings do not require U-turn accommodations.

11.3.6.2 Turn Movement Requirements

1. Single left (or left/through):
    a. Turning movements shall be designed such that the design vehicle is able to safely navigate the turn while turning into the inside through lane. If multiple receiving lanes are available and turn movement is a protected only movement, the design vehicle may over-track into the additional receiving lanes. (Design For)
    b. Turning movements shall be designed to provide a minimum of 6 feet from projected edge of travel lane to opposing left turn's projected edge of travel lane. (Design For)
    c. Turning movement shall be designed such that any non-OSOW check vehicle is able to safely navigate the turn without impeding opposing traffic but may turn into any receiving lane. (Accommodate)
        1) With the exception of the left turn from SR 42 to Pine Grove Road which may overtrack into the opposing lane on Pine Grove Road.
2. Two or more left turn lanes:
    a. Turning movements shall be designed such that one design vehicle and passenger cars can safely navigate the turn within the prescribed lane. (Design For)
    b. The design vehicle shall be able to turn from any of the available turn lanes. (Design For)
    c. Turning movements shall be designed to provide a minimum of 6 feet from projected edge of travel lane to opposing left turn's projected edge of travel lane. (Design For)
    d. Turning movements shall be designed such that side-by-side design vehicles can safely navigate the turn without impeding opposing traffic. (Accommodate)
    e. Turning movements shall be designed such that any non-OSOW check vehicle is able to safely navigate the turn without impeding opposing traffic but may use all receiving lanes and impede any other vehicle making the same left turn movement. (Accommodate)
3. Single right (or right/through):
    a. Turning movements, including right turn on red, shall be designed such that the design vehicle is able to safely navigate the turn while turning into the outside through lane. If multiple receiving lanes are available and turn movement is a protected movement, design vehicle may over-track into the additional receiving lanes. (Design For)

b. Turning movement shall be designed such that any non-OSOW check vehicle is able to safely navigate the turn without impeding opposing traffic but may turn into any receiving lane. (Accommodate)

4. Two or more right turn lanes:
   a. Turning movements shall be designed such that one design vehicle and passenger car(s) can safely navigate the turn within the prescribed lane.
   b. The design vehicle shall be able to turn from any of the available turn lanes. (Design For)
   c. Turning movements shall be checked such that side-by-side design vehicles can safely navigate the turn. (Accommodate)
   d. Turning movements shall be designed such that any non-OSOW check vehicle is able to safely navigate the turn without impeding opposing traffic but may use all receiving lanes and impede any other vehicle making the same right turn movement. (Accommodate)

11.3.7 Roadside Safety Devices

The clear zone along limited access facilities, including ramps, shall be established as 120 percent of the minimum value defined in GDOT Construction Standard 4000W (Guardrail Warrant Guides). All other clear zones shall be in accordance with GDOT Construction Standard 4000W (Guardrail Warrant Guides). Any fixed non-frangible object within the clear zone, including vertical obstructions with less than 16 feet of clearance to the final groundline, shall require shielding by an appropriate roadside safety device. All proposed roadside safety devices shall meet or exceed current GDOT requirements for crash test and other safety requirements.

Facilities, including ramps, which run generally parallel to limited access facilities shall not be permitted within the clear zone of the limited access facility unless positive barrier separation is provided between the facilities. Ramps are permitted within the clear zone only when entering and exiting the limited access facility.

The Design-Builder shall comply with all minimum offset requirements in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements).

Flat bottom ditches with 4:1 front slopes and 4:1 back slopes shall not be considered traversable and shall not be located within the clear zone of the roadway. Ditches with 4:1 fore slopes and 6:1 back slopes with abrupt slope changes, defined as ditches with flat bottoms less than 4-feet wide, shall not be considered traversable and shall not be permitted within the clear zone of the roadway.

When applying GDOT Construction Standard 4000W (Guardrail Warrant Guides) guardrail warrants, the total slope within the clear zone shall be considered. The Design-Builder shall correct or protect all slopes which warrant protection, regardless of if the existing slope is impacted by construction.

Slopes steeper than 4:1 within the clear zone of limited access facilities, including ramps, require protecting the slope with a roadside safety device.

The Design-Builder shall not be permitted to use a short run of guardrail, less than 250 feet, between two lengths of concrete barrier or bridge rail.

The Design-Builder may use a type 26S barrier for the protection of sign gantries in a depressed median location provided that a 10:1 or flatter slope is provided between the edge of travel lane and the barrier for the length of the barrier and a minimum of 60 feet in advance of required crash cushions.

Overhead sign supports within the clear zone of non-limited access facilities may be protected with guardrail provided that:

1. Design speed is less than or equal to 45 mph.
2. Daily two-way truck traffic does not exceed 1,000 trucks per day.
3. Guardrail is compliant with current Project Standards for the length of need.

All other overhead sign supports shall require shielding with a concrete barrier. If the bridge provides vertical clearance above the sign structure in accordance with TP Section 13.3.1.1 (Vertical Clearances) then the horizontal offset from bridge railing does not apply.

The Design-Builder shall protect bridge columns per the requirements in TP Section 13.3.1 (Design Parameters).

The Design-Builder shall not use guardrail as a roadside safety device for the protection of vertical drop-offs within the clear zone, with the exception of localized drop-offs at pipe and box culvert openings and bridge wingwall locations. The Design-Builder may use guardrail for the protection of pipe and box culvert openings and bridge wingwalls. Where a vertical drop-off is located outside the clear zone, a minimum 10-foot berm shall be provided beyond the clear zone with a slope 4:1 or flatter. Vertical drop-offs shall be defined as any slope steeper than 1:1. The Design-Builder shall not use guardrail for protection of a fill slope where a concrete barrier is located within 10 feet of the toe of slope.

All roadside safety devices shall be located on slopes 10:1 or flatter unless explicitly noted otherwise in the Project Standards.

For calculating the runout length of roadside safety devices, the Design-Builder shall use GDOT Construction Standard 4000W (Guardrail Warrant Guides). Where the design speed is not included in the chart in GDOT Construction Standard 4000W (Guardrail Warrant Guides), the Design-Builder shall use the L_R for the next higher design speed (e.g. for a design speed of 45 mph, the Design-Builder shall use the L_R for a 50 mph design speed). The Design-Builder shall provide proper length of roadside safety device in advance of all hazards per the requirements in GDOT Construction Standard 4000W (Guardrail Warrant Guides).

The Design-Builder shall maintain/provide positive barrier protection on I-75 where the median is less than 64 feet in width.

11.3.7.1 Guardrail

All new guardrail and guardrail terminals/anchors on the Project shall be designed per the Project Standards. All guardrail terminals/anchors shall be MASH tested and on the QPL.

Any guardrail within the Project Limits that the Design-Builder proposes to retain as part of the Final Design shall be compliant with current Project Standards. Where less than 250 feet of guardrail beyond the Project Limits would remain, the Design-Builder shall upgrade the entire

run of guardrail to be compliant with current Project Standards, including required terminals/anchors.

The guardrail runout distance, as defined in GDOT Construction Standard 4000W, shall be free of fixed objects, regardless of it the object is frangible or non-frangible. Where a run of guardrail parallels a concrete barrier/wall of an adjacent facility, the guardrail may be anchored into the parallel barrier using GDOT Construction Standard 4382 (Guardrail Connection at Bridge End or At Concrete Barrier End). The guardrail may be within the 5-foot buffer zone to facilitate the tie-in but shall transition outside the minimum 5-foot buffer as quickly as possible while still meeting required guardrail flare rates.

All type 12 anchors shall be type 12A “tangent” terminals as detailed on GDOT Construction Standard 4384. The Design-Builder shall provide a minimum of 25 feet of type W guardrail between any type T guardrail and the closest portion of any guardrail terminal. For the purposes of applying this criteria all guardrail within the T beam to W beam transition, as defined in GDOT Construction Standard 4385, shall be considered T beam guardrail.

When guardrail is required on interstates, freeways, and other four-lane or greater roadways without curb and gutter, shoulder paving shall be extended beyond the usable paved shoulder to the face of guardrail to conform to GDOT Construction Detail S-4.

The Design-Builder shall provide a minimum 5-foot buffer behind all guardrail, as measured from the front face of the guardrail. This buffer shall be free from all vertical obstructions (including frangible obstructions) and free from buried longitudinal Utilities and longitudinal fiber optic infrastructure.

The Design-Builder shall not use T-beam guardrail at the back of the curb except for bridge protection as per GDOT Construction Standard 4391 (Guardrail Location on Roads with Curb & Gutter) or in transitions from W-beam guardrail to concrete barriers. In all other situations where guardrail is warranted, the Design-Builder shall use W-beam guardrail. The Design-Builder shall place the guardrail a minimum of 8 feet from face of curb where feasible. With the exception of bridge protection per details in GDOT Construction Standard 4391, where it is not feasible to place the guardrail a minimum of 8 feet from the face of curb and gutter, the guardrail shall be placed at the face of curb.

Where guardrail is used at the face of Type 7 curb, the guardrail face shall overlap 1 inch onto the curb to provide a 6-inch offset from the gutter line to the front face of the guardrail.

11.3.7.2 Cast-in-Place Barrier

The Design-Builder shall construct TL-4 MASH-compliant cast-in-place barriers complying with TP Attachment 1-4 (Project Standards). The Design-Builder shall comply with the required flare rates for rigid barriers defined in the Roadside Design Guide for all concrete barriers regardless of if the barrier is located within the roadway clear zone.

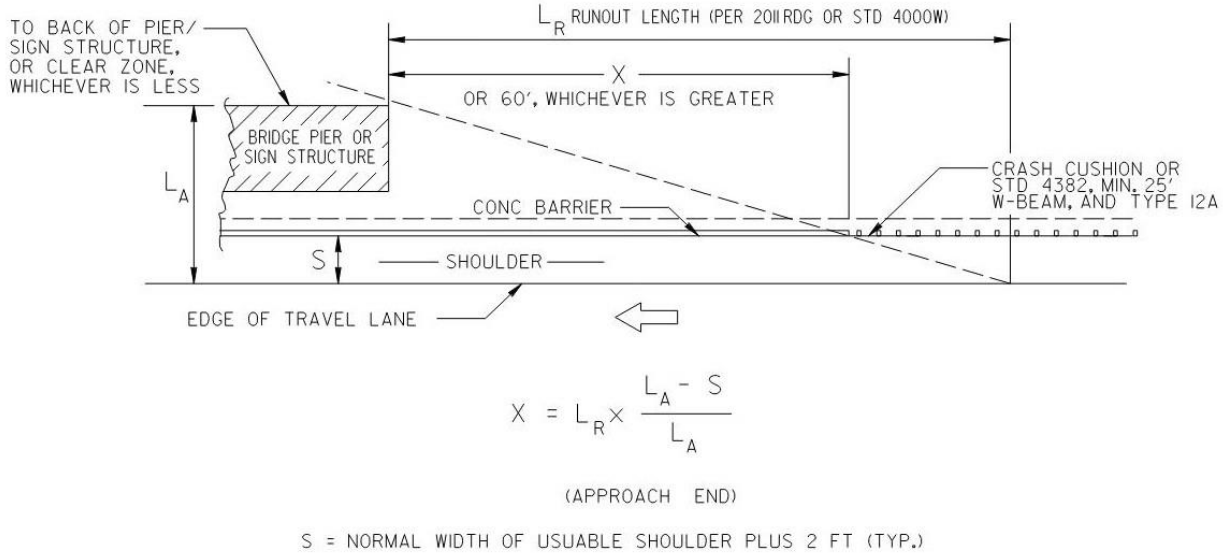
The Design-Builder shall provide glare screens on concrete barriers between mainline and frontage roads with opposing traffic flows. The Design-Builder shall provide glare screens on all freeway concrete median barriers and bridge railings separating opposing traffic flows. Glare screens on bridge railings may be modified from those shown in Georgia Construction Standard 4941A to have a 7 inch width at the base of the glare screen. In locations where there is back to back barrier, glare screens shall only be required on the barrier with the higher top of barrier

elevation. Glare screens shall not be required when there is more than 40 feet between opposing traffic edge of travel lanes.

Existing concrete barriers not impacted by the Work do not require replacement and may be left in place. When less than 60 feet of barrier is proposed to be replaced or for barrier extensions less than 60 feet long, GDOT Construction Standards 4948a, 4948b, and 4948c included in TP Attachment 1-4 (Project Standards), marked as for maintenance repairs only, may be used.

Where concrete barriers are used for protection of vertical drop-offs or non-frangible hazards, including noise barriers, the Design-Builder shall extend the concrete barrier for a distance equal to or greater than the distance X as shown in TP Figure 11-1 (Barrier Runout) in advance of the drop-off or hazard.

Figure 11-1: Barrier Runout



The Design-Builder may transition from concrete barrier to guardrail protection of slopes steeper than 3:1 provided that the concrete barrier has been extended the minimum distance beyond the vertical drop off or point obstruction (e.g., column, sign gantry, or end of noise barrier).

Where type 25S modified or type 26S barrier is used for protection of hazards in a depressed median section, the Design-Builder shall transition to a GDOT Construction Standard 4941 standard median barrier prior to installation of a crash cushion. The Design-Builder shall provide a minimum of 60 feet of barrier in advance of the shielded object. The 60 foot minimum may be inclusive of barrier transitions.

The Design-Builder shall protect the blunt end of the concrete barrier with either:

1. A crash cushion per the requirements in TP Section 11.3.7.3 (Crash Cushions); or
2. Transition to guardrail and use a guardrail anchor per the requirements in TP Section 11.3.7.1 (Guardrail).

11.3.7.2.1 Special Detail Barrier

The Design-Builder shall be permitted the use of the 54-inch tall T80PP traffic rail as detailed in TP Attachment 11-5 (T80PP Traffic Rail) and subject to the following requirements:

1. Only the drilled shaft foundation option for the T80PP traffic rail shall be permitted.
2. The T80PP traffic rail shall only be used when there is no difference in grade between the front and back face of the barrier.
3. The Design-Builder shall provide a minimum of a 2-foot wide graded shoulder behind the barrier and before the shoulder break point.
4. Runs of guardrail shall not be tied directly to the T80PP traffic rail. Guardrail shall be tied to a GDOT Standard Barrier, and then transitioned to the T80PP traffic rail using a 10:1 transition rate for the face of the barrier, and a maximum 6:1 vertical transition rate. Transition and guardrail mounting details shall be submitted as a Design-Builder Provided Specification.
5. The T80PP traffic rail shall only be used in soil conditions that are equal to or better than the soil parameters for which it was tested:
   a. 28-degree angle of internal friction.
   b. 120 pcf unit weight.
   c. 0 psf soil cohesion.
6. Drainage slots shall not be permitted at the base of the T80PP traffic rail.
7. The T80PP traffic rail shall not be considered a GDOT Standard Barrier and shall require a WFI and global stability analysis per the requirements in TP Section 8 (Geotechnical).

11.3.7.3 Crash Cushions

Crash cushions/impact attenuators for all locations requiring crash cushions/impact attenuators shall be products listed on the GDOT QPL-64.

Crash cushions/impact attenuators shall have 10:1 or flatter slopes preceding them for a distance of 60 feet.

11.3.7.4 Cable Barrier

The Design-Builder shall not be permitted the use of cable barrier.

11.3.7.5 Roadside Safety Minimum Offset Requirements

The Design-Builder shall provide an offset from required roadside safety devices to fixed non-frangible objects per the minimum offsets in TP Table 11-1 (Minimum Offsets). These minimum offsets do not apply to obstructions located on median barriers, including type 25S Mod or Type 26S barriers in depressed median sections.

Table 11-1: Minimum Offsets

Barrier Height/Type	***Minimum Offset To:***		
	Noise Barrier	***Sign Gantry Strain Pole/Mast Arm Utility Pole***	***Bridge Columns***
Guardrail	6 feet[1]	6 feet[2]	10 feet[3]
32” Concrete Barrier (Existing GDOT Jersey Barrier)	4 feet	7.33 feet	7.33 feet
42” Concrete Barrier (GDOT Single Slope Barrier)	4 feet	5.25 feet	5.25 feet
54” Concrete Barrier (T80PP Traffic Rail per TP Attachment 11-5 (T80PP Traffic Rail))	2.71 feet	2.71 feet	2.71 feet

Notes:
1. Where permitted in TP Section 22.3.2 (Structural)
2. Where permitted in TP Section 11.3.7 (Roadside Safety Devices)
3. Where permitted in TP Section 13.3.1 (Design Parameters)

Offsets shall be measured:

1. Guardrail – Offsets from guardrail shall be measured from front face of the guardrail to the nearest point of the obstruction.
2. Concrete Barriers – Offsets from concrete barrier shall be measured from top of barrier at the traffic facing side to the nearest point of the obstruction.

11.3.8 Ramp Design Criteria

All mainline General Purpose Lane entrance ramps shall enter the General Purpose Lanes on the right side of the roadway in the direction of travel. All mainline General Purpose Lane exit ramps shall exit the General Purpose Lanes on the right side of the roadway in the direction of travel.

For all entrance ramps, the Design-Builder shall provide acceleration distances complying with Table 10-4 (Minimum Acceleration Lane Lengths for Entrance Terminals with Flat Grades of Less Than 3 Percent) and modified per Table 10-5 (Speed Change Lane Adjustment Factors as a Function of Grade) of the AASHTO Green Book. For entrances with ramp meters, the Design-Builder shall assume a design speed of 0 mph at the ramp meter stop bar. For all entrance ramps, including those with ramp meters, the Design-Builder shall assume a design speed of 0 mph at the intersection with the crossing street.

The Design-Builder shall design all exit terminals per Figure 10-73 (Exit Ramps – Single Lane) and Figure 10-77 (Two-Lane Exit Terminals) of the AASHTO Green Book. For all exit ramps, the Design-Builder shall provide deceleration distances complying with Table 10-6 (Minimum Deceleration Lane Lengths for Exit Terminals with Flat Grades of Less Than 3 Percent) and modified per Table 10-5 of the AASHTO Green Book.

The Design-Builder shall design General Purpose Lane exit ramps to contain at least as many lanes as the existing condition at both the diverge point and at the intersection with the crossing facility.

The Design-Builder shall provide an auxiliary lane between interchanges where there is less than 1,320 feet between the end of the entrance tapers and the beginning of the exit tapers.

The Design-Builder shall design and install a ramp meter on the Bethlehem Road northbound entrance ramp. The Design-Builder shall design the southbound Bethlehem Road entrance ramp for a future ramp meter, but shall not be required to install the actual ramp meter. For all ramp meters, including future ramp meters, located within the project, the stop bar shall be located in a manner to achieve the following:

1. Place the stop bar upstream of the physical gore.
2. Preserve the longest possible storage length on the ramp.

11.3.9 Additional Roadway Design Requirements

When an intersection island is present, the view angle between the right-turn movement and the opposing through movement shall not exceed 112 degrees.

The Design-Builder shall replace all granite curb impacted by the construction in kind.

The Design-Builder shall design lane shifts to either use curvature (including proper superelevation and transitions) or a lane shift taper with a minimum length of:

- Design speeds greater than or equal to 45 mph: L=W*s
- Design speeds less than 45 mph: $L=(W*s^2)/60$

Where:

- L = minimum lane shift taper distance (feet)
- W=width of lane shift (feet)
- s=design speed (mph)

The Design-Builder shall design and construct a minimum 2-foot grassed shoulder beyond the edge of the pavement for all unsupported pavement edges. Unsupported pavement edges shall be defined as lacking curb and gutter or a wall/barrier at the edge of pavement.

The Design-Builder shall not use 24-inch curb and gutter on any state route. The Design-Builder may use 24-inch curb and gutter on non-state routes where it currently exists. The Design-Builder shall not use 24-inch curb and gutter on non-state routes where it currently does not exist.

The Design-Builder shall replace the two existing emergency median crossovers on I-75. A median crossover shall be placed north and south of the Bethlehem Road overpass at I-75. Each crossing shall be placed at a location where mutually exclusive clear zone is provided between the I-75 northbound and southbound General Purpose Lanes. The median crossing shall be a minimum of 24-feet wide with a minimum turning radii of 10 feet. Median crossover side slopes shall be constructed at 1V:10H.

The Design-Builder shall not be permitted to warp the Bethlehem Road cross slope to tie to the profile grade of Price Drive. The cross slope of Price Drive shall be warped to tie into the profile grade of Bethlehem Road. Price Drive shall have a maximum of a 2 percent profile breakover at the intersection with Bethlehem Road.

The Design-Builder shall design and construct a 20-foot raised median on SR 42 from the intersection with Pine Grove Road to past the intersection with Bethlehem Road.

The Design-Builder shall design and construct the roundabouts at the I-75 ramps with a minimum length of 450 feet of raised median between the roundabouts.

11.3.9.1 Lane Configuration

The Design-Builder shall design and construct an additional northbound lane on SR 42 from the intersection with Pine Grove Road to the intersection with Bethlehem Road as shown on TP Attachment 1-6 (Required Lane Configuration). The lane shall include pavement marking hatching to prevent its use as a travel lane, except where it is used as a right turn lane at intersections.

The Design-Builder shall replace existing turn lanes at all intersections.

The Design-Builder shall design and construct the lane configuration in TP Attachment 1-6 (Required Lane Configuration).

The Design-Builder shall provide cul-de-sacs on Old Bethlehem Road at the following locations:

1. Near Lester Mill Road/Greenwood Road – to provide access to the Henry County Water Authority. Cul-de-sac shall be east of the existing bridge over Bethlehem Bottoms. The Design-Builder shall coordinate with Henry County for the exact location.
2. On the west side of I-75 – to provide access to Parcel 23.
3. On the east side of I-75 – to provide access to the ongoing development for Majestic.

Cul-de-sacs shall be designed and constructed for a BUS-36 design vehicle.

The Design-Builder shall design and construct a reduced conflict U-turn (RCUT) at the Bethlehem Road and Price Drive intersection to prevent left turns from Price Drive onto Bethlehem Road. The roundabouts at Bethlehem Road at Greenwood Road/Lester Mill Road/Eagles Brooke Drive and Bethlehem Road/I-75 ramps shall serve as the U-turn movement for vehicles wanting to turn left from Price Drive onto Bethlehem Road.

The Design-Builder shall design and construct a RCUT at the SR 42 and Old Bethlehem Road/Michaels Drive intersection to prevent left turns from Old Bethlehem Road/Michaels Drive onto SR 42. The intersection of SR 42 and Bethlehem Road shall service U-turns of passenger cars wanting to turn left from Michaels Drive to SR 42. No accommodations are required for larger vehicles wanting to turn left from Michaels Drive to SR 42. No U-turn movement is proposed for vehicles coming from Old Bethlehem Road (with vehicles who wanted to go north on SR 42 being signed to use Bethlehem Road to get to SR 42 per the requirements in TP Attachment 16-1 (Span Wire Sign Layout)).

The Design-Builder shall tie SR 42 into the lane configuration present at the time of Substantial Completion at the northern end of the SR 42 construction.

The Design-Builder shall design and construct a minimum 725-foot long right turn lane (second ramp lane) on the I-75 northbound off ramp.

The Design-Builder shall design all new turn lanes and all turn lanes accessing roadways within public right of way to the following minimum lengths:

1. Design speeds less than 35 mph: taper and lengths per the GDOT Regulations for Driveway and Encroachment Control Manual.
2. Design speeds greater to or equal to 35 mph: taper and lengths per Construction Details M-3A or M-3B.

The Design-Builder shall design and construct the I-75 northbound entrance ramp to accommodate a future auxiliary lane to be constructed by the I-75 CVL project (GDOT P.I. No. 0014203). The I-75 northbound entrance ramp gore nose shall be located 1,000 feet north of the future auxiliary lane gore nose located at CVL station 23412+37.44, as defined in TP Attachment 13-3 (CVL Alignment), and shall tie into the future CVL auxiliary lane. The Design-Builder shall then taper the ramp across the future CVL auxiliary lane to tie into the existing I-75 northbound travel lanes. The Design-Builder shall construct the gore of the I-75 northbound entrance ramp with the future CVL auxiliary lane with a cross slope equal to 3 percent. The Design-Builder shall design and construct the northbound entrance ramp with a cross slope of 3 percent north of the I-75 northbound entrance ramp gore.

11.3.9.2 Reserved

11.3.9.3 Roundabouts

The Design-Builder shall design and construct roundabouts at the following intersections:

1. Bethlehem Road at Greenwood Road/Lester Mill Road/Eagles Brooke Drive
2. Bethlehem Road at I-75 southbound entrance/exit ramps
3. Bethlehem Road at I-75 northbound entrance/exit ramps
4. Bethlehem Road at Old Bethlehem Road

All roundabouts shall be designed and constructed with the following requirements:

1. The entry and exit speeds and radii shall meet the criteria in TP Table 11-2 (Roundabout Speeds).

Table 11-2: Roundabout Speeds

Critical Radius	***Description***	***Range of Radii and Corresponding Speeds***
Entry Path Radius, R1	The minimum radius on the fastest through path prior to the yield line. (This is not the same as entry radius.)	Single Lane: R1 ≤ 170’; V1 = 18 to 25 mph Multilane: R1 ≤ 170’; V1 = 20 to 25 mph
Circulating Path Radius, R2	The minimum radius on the fastest through path around the central island.	R2 ≤ 170’; V2 = 15 to 25 mph
Exit Path Radius, R3	The minimum radius on the fastest through path into the exit.[1]	V3 ≤ 35 mph
Left Turn Path Radius, R4	The minimum radius on the path of the left-turn movement.	R4 ≤ 95’; V4 = 10 to 20 mph

Critical Radius	*Description*	*Range of Radii and Corresponding Speeds*
R1 – R4	The difference between entry and circulating speed.	≤ 10 mph
Right Turn Path Radius, R5	The minimum radius on the fastest path of a right turning vehicle.	R5 ≤ 170'; V5 = 15 to 25 mph

Note:

1. The exit speed is the minimum of the predicted speed based on the R3 radius or acceleration from the middle of R2 to the point of interest on the exit; see NCHRP 672 Section 6.7.1.2 Equation 6-4.

2. All multi-lane entries and exits shall have a rectangular rapid flashing beacon (RRFB). All exits with an exit speed over 25 mph shall have a RRFB. All free-flow bypass lanes shall have a RRFB. RRFB shall not be required for movements with no pedestrian crossings. All RRFB shall require a signal permit.
3. Approach alignments shall be left-offset from the circle center.
4. Inscribed Circle Diameter Range:
    a. Single Lane Roundabout: 120–160 feet.
    b. Multilane Roundabout: 180–210 feet.
5. Entry-Exit Radius Range:
    a. Entry radius range: 70–110 feet.
    b. Exit radius range: 400–2,000 feet.
6. Intersection sight distance shall be provided per the requirements in the GDOT Roundabout Design Guide, or a Design Variance shall be required.
7. Roundabouts shall use an urban border area and provide for pedestrian crossings.
8. Landscaping shall be per the requirements in GDOT Construction Detail RA-1 (Roundabout Landscaping Details).
9. Provide GDOT notification when operational.
10. Roundabouts design vehicles shall follow the requirements in TP Table 11-3 (Roundabout Design Vehicle):

Table 11-3: Roundabout Design Vehicle

Major Route	*Minor Route*	*Design Vehicle*
Interstate/Interchange		WB-67
State Route	State Route	WB-67
State Route	Non-State Route	WB-67 for thru movements on the State Route Minor route thru and turning movements per design vehicles in TP Attachment 11-1 (Design Criteria)
Non-State Route	Non-State Route	Design Vehicles per TP Attachment 11-1 (Design Criteria)

11. Roundabout truck movements:

a. WB-67 (where identified as a design vehicle in TP Table 11-3 (Roundabout Design Vehicle)):
    1) Single lane:
        i. Truck may use entire lane and over-track onto truck apron.
    2) Multi-lane:
        i. Shall be designed as case 3: trucks shall maintain their own lane on entry, circulating, and departure. Trucks may over-track onto truck aprons.
b. OSOW (where identified as a check vehicle in TP Attachment 11-1 (Design Criteria)):
    1) The through movement for the route with an OSOW check vehicle shall be designed to accommodate the OSOW vehicle.
    2) The turning movement from one alignment with an OSOW check vehicle to another alignment with an OSOW check vehicle shall be designed to accommodate the OSOW vehicle.
    3) See GDOT Roundabout Design Guide Figure 3-28 (Overtracking Design Considerations for OSOW) for an example of the central island modifications which may be required.

12. All multi-lane roundabouts shall incorporate raised lane dividers according to GDOT Roundabout Design Guide Figure 3-34 (Case 3 Multilane Roundabout Opening Width and Path).
13. All bypass lanes shall have a raised island separation from the circulatory roadway and adjacent approach lanes.
14. For roundabout approaches with design speeds greater than or equal to 50 mph, rumble strips are required per GDOT Construction Detail T-19 (Rumble Strips: Roundabout and Stop Controlled Intersection). Rumble strips are required for all ramp approaches to roundabouts.
15. Where roundabouts are provided at ramp terminals with the crossing facility, limited access shall be measured from the radius of return of the circulating roadway to the crossing facility.
16. Central islands, including those with truck aprons, shall not use the header curbs shown in GDOT Construction Detail RA-2 (Typical Section Asphaltic Concrete Circulatory Roadway). Central islands shall include either a monolithic (with integral curb) slab type truck apron where the truck apron is placed over pavement, or curb and gutter where not placed over pavement. Refer to Figures 3-38A (Roundabout Detailed Section with Monolithic Truck Apron) and Figure 3-38B (Roundabout Detailed Section) of the GDOT Roundabout Design Guide.

11.3.10 Allowable Design Exceptions, Variances, and Deviations

The Design-Builder shall be allowed, at the Design-Builder's option and subject to the logic included in TP Attachment 11-2 (Design Variances), to use the Design Variances included in TP Attachment 11-2 (Design Variances) for the design of the Project to meet the schematic of design provided in the Basic Configuration. If the Design-Builder elects to use a Design Variance on the Project, the mitigation listed in TP Attachment 11-2 (Design Variances) shall be incorporated into the Project. Any revisions to the design which causes a more substandard

condition than that which is documented in the Design Variances included in TP Attachment 11-2 (Design Variances) shall not be permitted.

If the Design-Builder elects not to use the Design Variances included in TP Attachment 11-2 (Design Variances) in the final design of the Project, the Design-Builder shall notify GDOT by submitting a formal rescission letter to GDOT.

All new obstructions within intersection sight distance triangles shall not be permitted regardless of if the obstruction is the most limiting obstruction.

All driveways that are not to single family residences shall meet intersection sight distance for the design vehicles defined in TP Section 11.3.6 (Turning Movement Design).

Any pedestrian fencing on bridge parapet shall be considered an intersection sight distance obstruction.

The maximum grade for a facility shall be defined by the AASHTO Green Book section specific to that facility type. Notes permitting deviation from the maximum grade in special cases, extreme cases, or based on topographical conditions shall be ignored when determining maximum grade requirements. All grades exceeding the maximum grades presented in the Green Book, including those in compliance with the special, extreme, or topographical notes, shall not be permitted.

For the purpose of calculating stopping sight distance, level roadway may be defined as having longitudinal grades less than 3 percent. Stopping sight distance and horizontal sight line offsets shall be measured from the centerline of the inside lane around the curve.

The Design-Builder will be permitted to request additional Design Variances for headwater per the requirements in TP Section 12.3.1 (General Design Obligations). Other than the Design Variances for headwater, no additional Design Exceptions or Design Variances proposed by the Design-Builder shall be allowed.

The Design-Builder shall be allowed, at the Design-Builder's option, the Design Deviations included in TP Attachment 11-3 (Design Deviations) for the design of the Project to meet the schematic of design provided in the Basic Configuration. The Design-Builder may incorporate additional Design Deviations into the Project. The Design-Builder shall provide documentation that sound engineering judgement has been used for all Design Deviations, including those in TP Attachment 11-3 (Design Deviations), incorporated into the design of the Project.

11.3.11 Location and Design Report

In compliance with Georgia State Codes 22-2-109 and 32-3-5, the Design-Builder shall prepare a Location and Design Report with Notice of Location and Design Approval. The Design-Builder shall use the Location and Design Report template in the GDOT Plan Development Process.

11.3.12 Permanent Lighting

The Design-Builder shall make all necessary enhancements or changes to the existing lighting systems to maintain, at a minimum, the existing illumination.

Unless identified as required lighting in TP Section 11.3.12.1 (Required Lighting), the Design-Builder shall remove lighting structures along non-State route facilities impacted by construction

and either reset the lighting structure or replace them with new fixtures in the same perpendicular location to the centerline. Lighting bases, poles, and fixtures shall be matched to existing, similar in appearance and dimensions, and utilize similar materials. Replacement lighting shall be interconnected with existing lighting.

All impacted lighting along State routes within the Project Limits shall be upgraded, as necessary, to meet current illumination requirements.

The Design-Builder shall install mechanical copper wire theft-deterrent devices in all new electrical conduits supplying power to the Project. The Design-Builder shall install electrical pull-box lids that contain locking mechanisms that work with the use of cams to prevent unauthorized access.

All third-party requests for lighting within the Project Limits shall be subject to GDOT acceptance.

The Design-Builder shall design the lighting system to mitigate light spillage while minimizing disturbance to areas outside the ROW. Luminaires shall be LED unless approved otherwise by GDOT. The Design-Builder shall not use mercury vapor nor metal halide. If any existing interchange lighting is impacted by the Project, the Design-Builder shall update all luminaires within the interchange to be of the same type. All lighting physically impacted by the Project shall be reset or replaced. Local luminaire poles, if impacted by construction, shall match existing poles but the luminaires shall be replaced with an equivalent LED.

The Design-Builder shall install breakaway wiring connectors when using luminaire poles with breakaway bases. For all poles located within roadway clear zones, the Design-Builder shall incorporate breakaway devices that are pre-qualified by GDOT. Luminaire poles with breakaway bases shall not be used when mounted on side barriers, median barriers, or bridge structures. Luminaire poles shall not be installed behind noise barriers or in inaccessible areas, such as behind certain retaining walls. Luminaire poles, including for high mast lighting, shall not be placed in the median of I-75.

The Design-Builder shall determine and design appropriate foundation types and lengths for permanent lighting structures. GDOT requires consistent footing design and minimum footing size as shown in TP Table 11-4 (Foundation Criteria).

Table 11-4: Foundation Criteria

Luminaire Height	***Foundation Depth (D)***	***Foundation Diameter (W)***
Less than or equal to 30 feet	6 feet	2 feet
31–35 feet	6 feet	2 feet
36–40 feet	6 feet	3 feet
41–40 feet	6 feet	3 feet
46–50 feet	9 feet	3 feet

Geotechnical studies are required at each high mast tower location per requirements in TP Section 8.3.3.3 (Light Tower Foundation Investigation).

The Design-Builder shall not place ITS cable, fiber-optic lines, signal conductors, or any other non-lighting-related cables or conductors in the lighting conduit, ground boxes, or junction boxes.

The Design-Builder shall coordinate with Utility Owners and ensure power service is initiated and maintained for permanent lighting systems.

Whenever possible, the Design-Builder shall place all understructure lighting in a configuration that minimizes the need for Lane Closures during maintenance and at locations that can be safely accessed. The use of ceiling-mounted fixtures will be allowable on newly constructed bridges, including widened portions of an existing bridge. The use of ceiling-mounted fixtures will also be allowable on existing steel beam bridges, provided the attachment methodology is approved by the GDOT Bridge Office. The use of ceiling-mounted luminaires on existing concrete beams is not allowed. The Design-Builder shall ensure no part of any light structure, mounting hardware, or conduit under structures protrudes below the bridge beams or other structure.

The Design-Builder shall affix an identification decal on each luminaire, ground box, and electrical service for inventory purposes and shall submit inventory information to GDOT in a GDOT-compatible format. This identification shall denote that the elements are property of GDOT and shall provide a contact phone number and address in the event of Emergency.

11.3.12.1 Required Lighting

The Design-Builder shall prepare a photometric lighting study that accounts for luminance, illuminance, veiling luminance, uniformity, and sources for the required lighting. The lighting study shall include nighttime and daytime illumination studies for all new and modified vehicular underpasses detailing the lighting requirements per the GDOT Design Policy Manual. The Design-Builder shall maintain an average horizontal luminance on the roadways that provides consistent illumination. For all identified pedestrian lighting, the Design-Builder shall provide vertical illuminance calculations in sidewalk or shared-use areas, as well as within crosswalk areas.

GDOT Design Policy and Support shall agree to the illumination levels as part of the photometric lighting study. Any increase of the lighting levels beyond those in the Project Standards shall be considered a GDOT Change.

When installing light poles adjacent to local roads, hand holes shall be placed so that a technician can access the handhole while facing the road.

Lighting shall be provided at the following locations:

1. Roundabouts, with transition lighting per RP-8, and classification of:
    a. Bethlehem Road at Greenwood Road/Eagles Brooke Drive/Lester Mill Road – Urban Collector/Local Street with medium pedestrian activities.
    b. Bethlehem Road at I-75 Southbound Entrance/Exit Ramps – Urban Collector/Urban Interstate Ramp with medium pedestrian activities.
    c. Bethlehem Road at I-75 Northbound Entrance/Exit Ramps – Urban Collector/Urban Interstate Ramp with medium pedestrian activities.

d. Bethlehem Road at Old Bethlehem Road – Urban Collector/Local Street with medium pedestrian activities.

2. Full interchange lighting for the Bethlehem Road at I-75 interchange.
3. Bridge underpass lighting per the GDOT Design Policy Manual.
4. Where required transition lighting overlaps either other transition lighting or other required lighting, full roadway lighting shall be provided between the required lighting areas.

11.4 Construction Requirements

The Design-Builder shall replace to original condition any temporarily disturbed parking spaces located within easements that are disturbed due to construction activities unless the removal of the parking was specifically included in the ROW option for the property. ROW options for State Proposed ROW will be available per the parcel availability date in DBA Exhibit 4 (Parcel Acquisition Table).

No open cutting (removal of pavement to construct, repair, or relocate Utilities/drainage structures or for any purposes that cause a full-depth cut of existing pavement and removal of any subgrade beneath) of the travel lane pavements or ramp pavements shall be allowed without prior approval of GDOT. Any pavement that is open cut as described in this paragraph shall be repaired prior to the travel lane or ramp being opened to traffic.

The Design-Builder shall design and construct a minimum 1-foot grassed shoulder beyond the edge of the pavement for all unsupported pavement edges of all temporary conditions during the construction of the Project.

Where the Work impacts existing lighting, the Design-Builder shall maintain existing lighting as temporary lighting during construction and restore or replace in kind prior to Substantial Completion.

11.5 Submittals

With respect to roadway requirements described in this TP Section 11, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 11 Attachments

Attachment No.	***Title***
Attachment 11-1	Design Criteria
Attachment 11-2	Design Variances
Attachment 11-3	Design Deviations
Attachment 11-4	Driveway Requirements
Attachment 11-5	T80PP Traffic Rail

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 11-1

Design Criteria

Attachment 11-1: Design Criteria

1 Limited Access Facilities

General Design Elements	***Limited Access Facilities***	
	I-75	***I-75 Ramps***
Roadway Classification	Interstate	Interstate Ramp
Terrain	Rolling	Rolling
Design Vehicle	WB-67	WB-67
Check Vehicle	OSOW 100 ft Low Boy	OSOW 100 ft Low Boy
Design Speed	70 mph	35min to 60max mph
Horizontal Alignment		
Maximum Super Elevation Rate	8.0%	8.0%[3]
Vertical Alignment		
Crest Vertical Curve (min. K value)	247	29 (35 mph) 151 (60 mph)
Sag Vertical Curve (min. K value)	181	49 (35 mph) 136 (60 mph)
Cross Section Elements		
Number of Basic Lanes	See TP Attachment 1-6 (Required Lane Configuration)	
Lane Width	12 ft	16 ft[1]
Paved Inside Shoulder Width[2]	10 ft	4 ft[3]
Overall Inside Shoulder Width[2]	12 ft	8 ft[3]
Paved Outside Shoulder Width[2]	12 ft	10 ft[3]
Overall Outside Shoulder Width[2]	14 ft	12 ft[3]

Notes:
1. Ramp lane widths are 16 feet for one-lane ramp and 12 feet for two-lane ramps.
2. Ramp inside and outside shoulder widths may be reversed to provide additional stopping sight distance. The combined shoulder width shall remain constant and each shoulder shall be a minimum of 8 feet.
3. Within the curb and gutter limits on the roundabout approaches, the superelevation shall be limited to 4% and a 12-foot urban shoulder width shall be provided.

2 Non-Limited Access Facilities

General Design Elements	***Non-Limited Access Facilities***				
	Bethlehem Rd	***SR 42***	***Eagles Brooke Drive***	***Greenwood Road***	***Lester Mill Road***
Roadway Classification	Collector	Minor Arterial	Local Road	Local Road	Local Road
Terrain	Rolling	Rolling	Rolling	Rolling	Rolling
Design Vehicle	WB-67	WB-67	P,SU-40	WB-67	WB-67
Check Vehicle	OSOW 100 ft Low Boy	OSOW 100 ft Low Boy	S-BUS36	OSOW 100 ft Low Boy	OSOW 100 ft Low Boy
Design Speed	45 mph	45 mph	25 mph	45 mph	45 mph
Horizontal Alignment					
Maximum Super Elevation Rate	4.0%	6.0%	4.0%	6.0%	6.0%
Vertical Alignment					
Crest Vertical Curve (min. K value)	61	61	12	61	61
Sag Vertical Curve (min. K value)	79	79	26	79	79
Cross Section Elements					
Number of Basic Lanes	See TP Attachment 1-6 (Required Lane Configuration)				
Lane Width	12 ft	12 ft	12 ft	12 ft	12 ft
Paved Inside Shoulder Width	N/A	N/A	N/A	N/A	N/A
Overall Inside Shoulder Width	N/A	N/A	N/A	N/A	N/A
Paved Outside Shoulder Width	N/A	N/A	N/A	2 ft	2 ft
Overall Outside Shoulder Width	N/A	10 ft	N/A	8 ft	8 ft
Required Median	20 ft raised[1]	20 ft raised[2]	N/A	N/A	N/A
Urban Border Width	16 ft	16 ft	16 ft	16 ft within roundabout approach	16 ft within roundabout approach
Sidewalk Width	5 ft sidewalk, 10 ft shared use	5 ft sidewalk, 10 ft shared use	N/A	N/A	N/A
Bicycle Lane Width	N/A	N/A	N/A	N/A	N/A

Notes:
1. With allowable reduction between the I-75 ramp roundabouts per typical section in TP Section 13.3.1.3 (Bridge Requirements).
2. See TP Section 11.3.9 (Additional Roadway Design Requirements) for limits of required median.

General Design Elements	***Non-Limited Access Facilities***				
	Old Bethlehem Road (except from Bethlehem Road roundabout to SR 42)	***Old Bethlehem Road (From Bethlehem Road roundabout to SR 42)***	***Price Drive (south of Bethlehem Road)***	***Price Drive (north of Bethlehem Road)***	***Academic Parkway***
Roadway Classification	Local Road	Local Road	Local Road	Local Road	Local Road
Terrain	Rolling	Rolling	Rolling	Rolling	Rolling
Design Vehicle	S-BUS36	S-BUS36	WB-67	SBUS-36	SBUS-36
Check Vehicle	SU-40	WB-67	WB-67	SU-40	SU-40
Design Speed	25 mph	35 mph	25 mph	25 mph	25 mph
Horizontal Alignment					
Maximum Super Elevation Rate	6.0%	6.0%	4.0%	4.0%	4.0%
Vertical Alignment					
Crest Vertical Curve (min. K value)	12	29	12	12	12
Sag Vertical Curve (min. K value)	26	49	26	26	26
Cross Section Elements					
Number of Basic Lanes	See TP Attachment 1-6 (Required Lane Configuration)				
Lane Width	12 ft	12 ft	12 ft	12 ft	12 ft
Paved Inside Shoulder Width	N/A	N/A	N/A	N/A	N/A
Overall Inside Shoulder Width	N/A	N/A	N/A	N/A	N/A
Paved Outside Shoulder Width	2 ft	2 ft	N/A	N/A	N/A
Overall Outside Shoulder Width	8 ft	8 ft	N/A	N/A	N/A
Required Median	N/A	N/A	N/A	N/A	Match Existing
Urban Border Width	12 ft within roundabout approach	12 ft within roundabout approach	16 ft	16 ft	16 ft
Sidewalk Width	N/A	N/A	N/A	N/A	N/A
Bicycle Lane Width	N/A	N/A	N/A	N/A	N/A

General Design Elements	***Non-Limited Access Facilities***			
	Park 42 Drive	***Pine Grove Road***	***Michaels Drive***	***Stonemont Development Driveway***
Roadway Classification	Urban Local Street	Rural Local Street	Local Road	Urban Local Street
Terrain	Rolling	Rolling	Rolling	Rolling
Design Vehicle	SU-40	WB-67	SU-40	WB-67
Check Vehicle	SU-40	OSOW 100 ft Low Boy	WB-67	WB-67
Design Speed	25 mph	25 mph	25 mph	25 mph
Horizontal Alignment				
Maximum Super Elevation Rate	4.0%	6.0%	6.0%	4.0%
Vertical Alignment				
Crest Vertical Curve (min. K value)	12	12	12	12
Sag Vertical Curve (min. K value)	26	26	26	26
Cross Section Elements				
Number of Basic Lanes	See TP Attachment 1-6 (Required Lane Configuration)			
Lane Width	12 ft	10 ft	12 ft	12 ft
Paved Inside Shoulder Width	N/A	N/A	N/A	N/A
Overall Inside Shoulder Width	N/A	N/A	N/A	N/A
Paved Outside Shoulder Width	2 ft	2 ft	2 ft	2 ft
Overall Outside Shoulder Width	6 ft	6 ft	8 ft	6 ft
Urban Border Width	N/A	N/A	N/A	N/A
Sidewalk Width	N/A	N/A	N/A	N/A
Bicycle Lane Width	N/A	N/A	N/A	N/A

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 11-2

Design Variances

Attachment 11-2: Design Variances

Design Variance	***Controlling Criteria***	***Details/Logic***	***Required Mitigation if Implemented***
DV 1	Pipe Cover	I-75 NB existing 36-inch RCP cross drain extension – the extension of the existing cross drain required for the road widening results in substandard pipe cover.	1. Removal of segment of existing pipe and use of 9031U concrete collar at location of full depth pavement reconstruction. 2. Use of Class V concrete pipe for extension. 3. Extension pipe slope at minimum slope for acceptable velocities to maximize cover provided.

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Attachment 11-3

Design Deviations

Attachment 11-3: Design Deviations

Design Deviation	***Criteria (Reference)***	***Locations***
DD01	Minimum length of horizontal curve	• Globally
DD02	Grade breakover at signalized intersection	• Bethlehem Road at SR 42: maximum breakover of 2.5%

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Attachment 11-4

Driveway Requirements

Attachment 11-4: Driveway Requirements

1 Driveway Profiles

The Design-Builder shall design and construct driveway profiles to ensure the design vehicle for the driveway does not scrape the pavement and bottom out. For commercial driveways, the Design-Builder shall design and construct the driveway such that the maximum grade is no more than 1 percent steeper, and within the criteria defined in the GDOT Construction Details, than the maximum grade in Table 1 (ROW Negotiated Maximum Driveway Grades). For residential driveways, the Design-Builder shall design and construct the driveway such that the maximum grade is no more than 3 percent steeper, and within the criteria defined in the GDOT Construction Details, than the maximum grade in Table 1 (ROW Negotiated Maximum Driveway Grades).

Table 1: ROW Negotiated Maximum Driveway Grades

Parcel #	***Commercial/Residential***	***Maximum grade used in negotiations***
14	Commercial	8.4%
20	Commercial	6.4%
17	Commercial	6.0%
30	Commercial	15.0%
29	Commercial	15.0%
31	Commercial	3.6%
32	Commercial	9.0%
35	Commercial	7.8%
34	Commercial	9.6%
39	Commercial	10.0%
36	Commercial	3.1%
40	Residential	11.0%
42	Commercial	10.0%
Coordinate utility driveway access per the requirements in TP Section 7 (Utility Adjustments).		

2 Driveway Widths

For driveways requiring reconstruction, driveway widths shall be as shown in Table 2 (Driveway Widths).

Table 2: Driveway Widths

Driveway Use	***Width (feet)***	
	Minimum	***Maximum***
Current Residential GA Std	14	18
Current Commercial (One Way) GA Std	16	20

Driveway Use	***Width (feet)***	
	Minimum	***Maximum***
Current Commercial (Two Way) GA Std	24	40
Mining, Logging, Farming, Agricultural	18	24

3 Driveway Corner Radii

New driveway corner radii shall be designed to the minimums in Table 3 (Driveway Corner Radii). For existing driveways being replaced/reconstructed, existing driveway corner radii may match the existing driveway corner radii, provided that they are checked and verified to accommodate the design vehicle.

Table 3: Driveway Corner Radii

Driveway Use	***Minimum Radius (feet)***
Residential	15
Agricultural/Commercial	35
When Designed for Trucks	75

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Attachment 11-5

T80PP Traffic Rail

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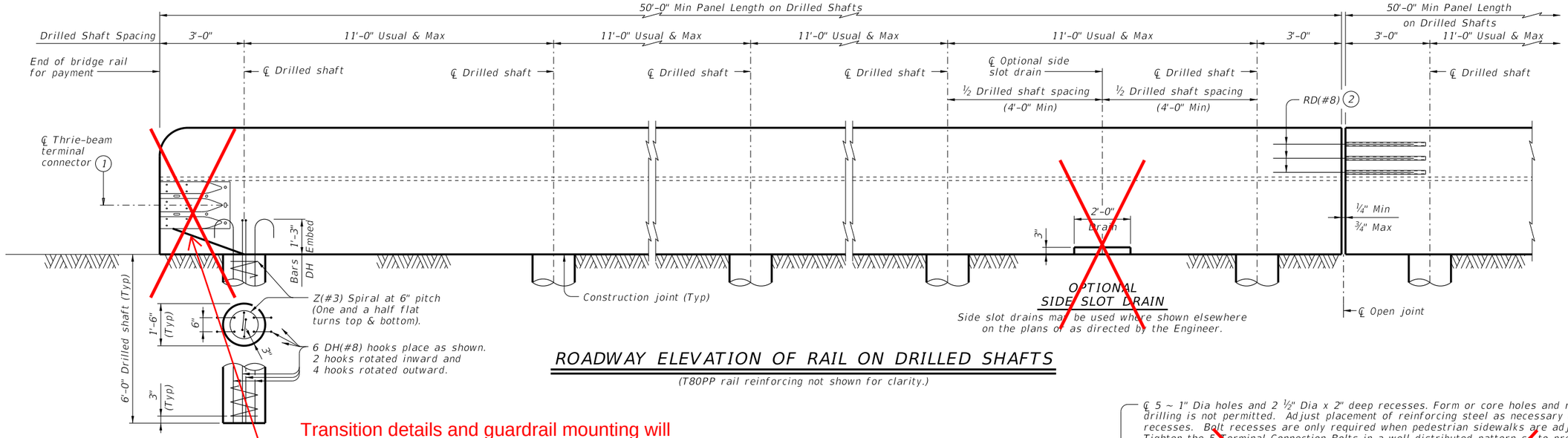


ROADWAY ELEVATION OF RAIL ON DRILLED SHAFTS

(T80PP rail reinforcing not shown for clarity.)

Transition details and guardrail mounting will be provided separately as a Design-Builder Provided Specification

(1) Terminal Connectors and associated hardware are to be paid for under the Item "Metal Beam Guard fence". Attach Metal Beam Guard Fence Transitions to the bridge rail and extend along the embankment unless otherwise shown in the plans.

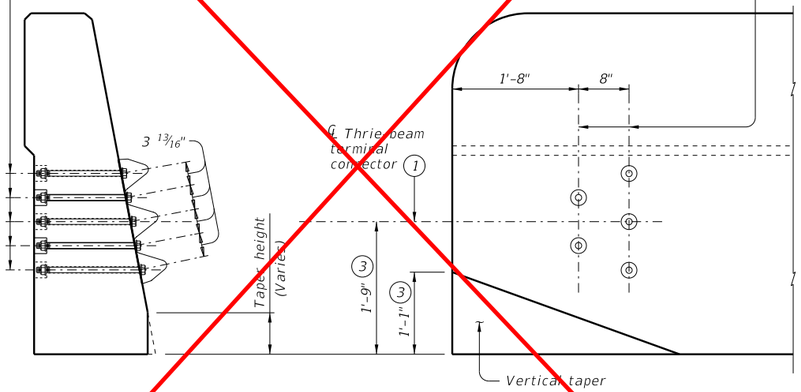
(2) Located at rail joints. For placement and assembly of Bar RD(#8), see "Section Thru Rail On Drilled Shafts" and "Bar RD(#8) Assembly Detail".

(3) Increase 2" for structures with overlay.

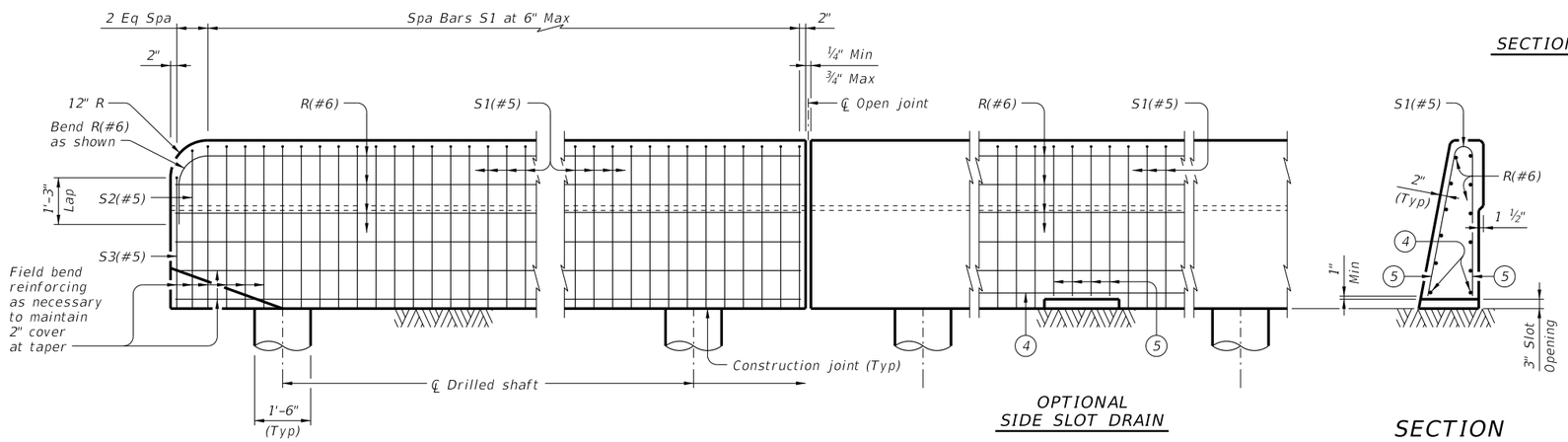
(4) Adjust bottom bars R(#6) as required to maintain 1 ½" cover over slots.

(5) Cut Bars S1(#5) as required to maintain 1" end cover over drain slot.

℄ 5 ~ 1" Dia holes and 2 ½" Dia x 2" deep recesses. Form or core holes and recesses. Percussion drilling is not permitted. Adjust placement of reinforcing steel as necessary to avoid bolt holes and recesses. Bolt recesses are only required when pedestrian sidewalks are adjacent to back of rail. Tighten the 5 Terminal Connection Bolts in a well distributed pattern so to prevent damage or distortion of the Thrie-Beam Connection and the MBGF Transition. Cut bolts off after installation so as to extend no more than ¾" beyond nut. Paint ends of cut-off bolts with zinc-rich paint.



TERMINAL CONNECTION DETAILS



ELEVATION SHOWING RAIL REINFORCING ON DRILLED SHAFT FOUNDATIONS

(Drilled shaft reinforcing and RD(#8) bars not shown for clarity.)

SECTION THRU OPTIONAL SIDE SLOT DRAIN

SHEET 1 OF 4

Texas Department of Transportation

Bridge Division Standard

T80PP TRAFFIC RAIL AND TRAFFIC RAIL FOUNDATION FOR MASH TL-5 PIER PROTECTION

T80PP-RF

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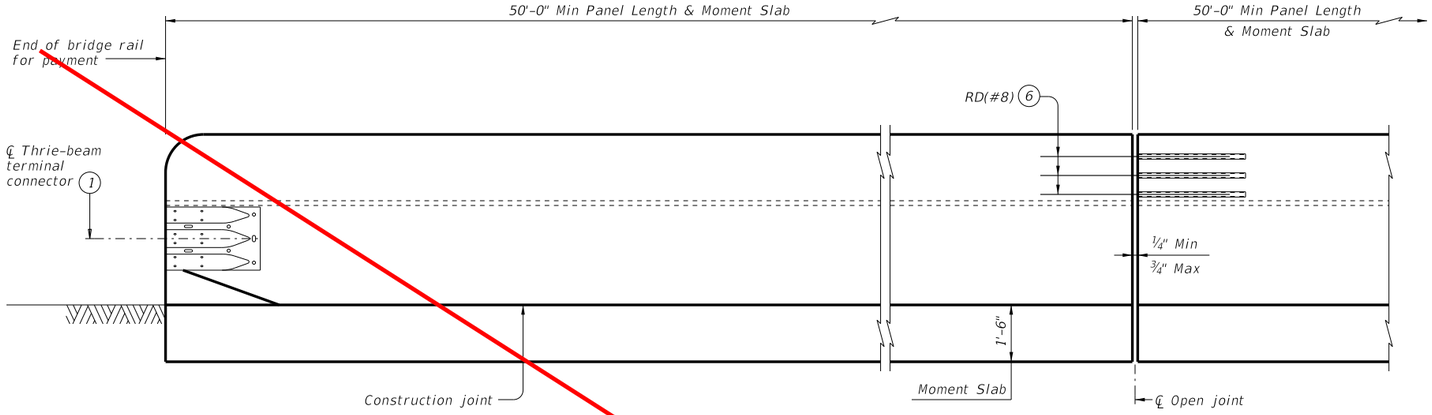
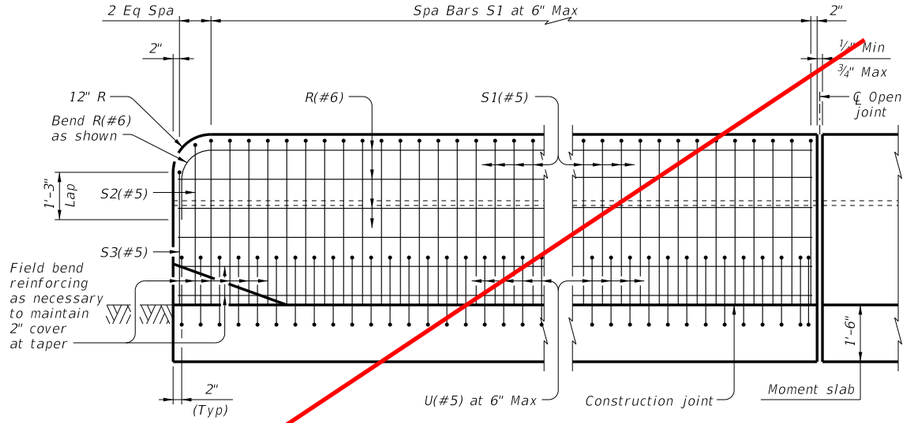
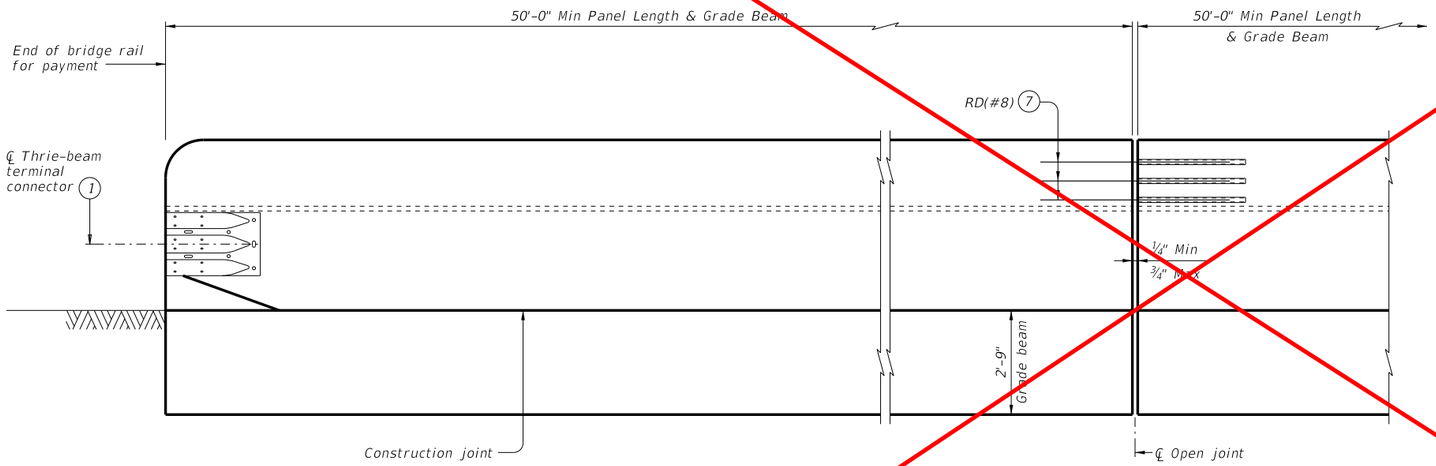


ROADWAY ELEVATION OF RAIL ON MOMENT SLAB

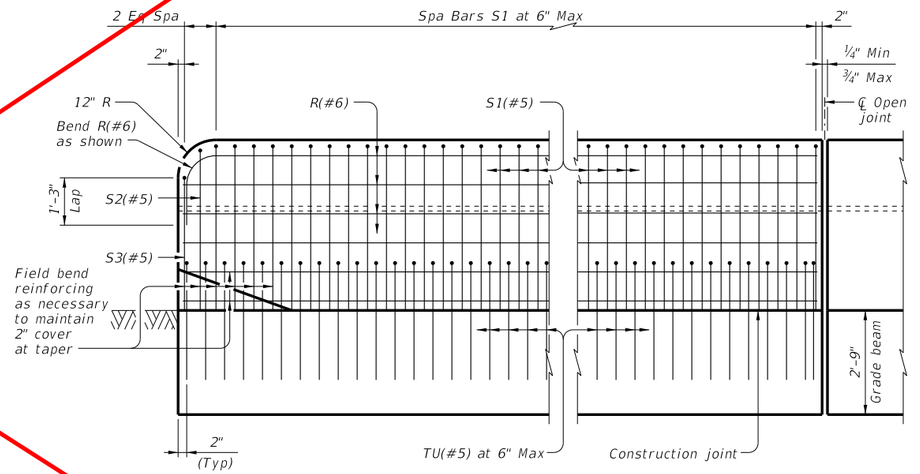


ELEVATION SHOWING RAIL REINFORCING ON MOMENT SLAB

(Moment slab reinforcing and Bars RD(#8) not shown for clarity.)

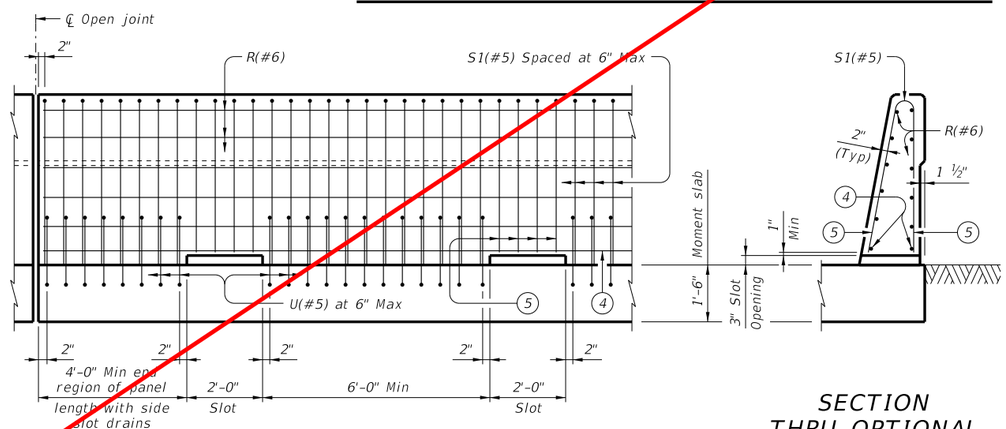


ROADWAY ELEVATION OF RAIL ON GRADE BEAM



ELEVATION SHOWING RAIL REINFORCING ON GRADE BEAM

(Grade beam reinforcing and Bars RD(#8) not shown for clarity.)



OPTIONAL SIDE SLOT DRAIN DETAIL

Side slot drains may be used where shown elsewhere on the plans or as directed by the Engineer. (Showing T80PP rail on moment slab, rail on grade beam is similar. Moment slab reinforcing and RD(#8) bars are not shown for clarity.)

SECTION THRU OPTIONAL SIDE SLOT DRAIN

(1) *Terminal Connectors and associated hardware are to be paid for under the Item "Metal Beam Guard Fence". Attach Metal Beam Guard Fence Transitions to the bridge rail and extend along the embankment unless otherwise shown in the plans.*

(4) *Adjust bottom bars R(#6) as required to maintain 1 ½" cover over slots.*

(5) *Cut Bars S1(#5) as required to maintain 1" end cover over drain slot.*

(6) *Located at rail joints. For placement and assembly of RD(#8) bar, see "Section Thru Rail On Moment Slab" and "Bar RD(#8) Assembly Detail".*

(7) *Located at rail joints. For placement and assembly of RD(#8) bar, see "Section Thru Rail On Grade Beam" and "Bar RD(#8) Assembly Detail".*

Texas Department of Transportation

Bridge Division Standard

T80PP TRAFFIC RAIL AND TRAFFIC RAIL FOUNDATION FOR MASH TL-5 PIER PROTECTION

T80PP-RF

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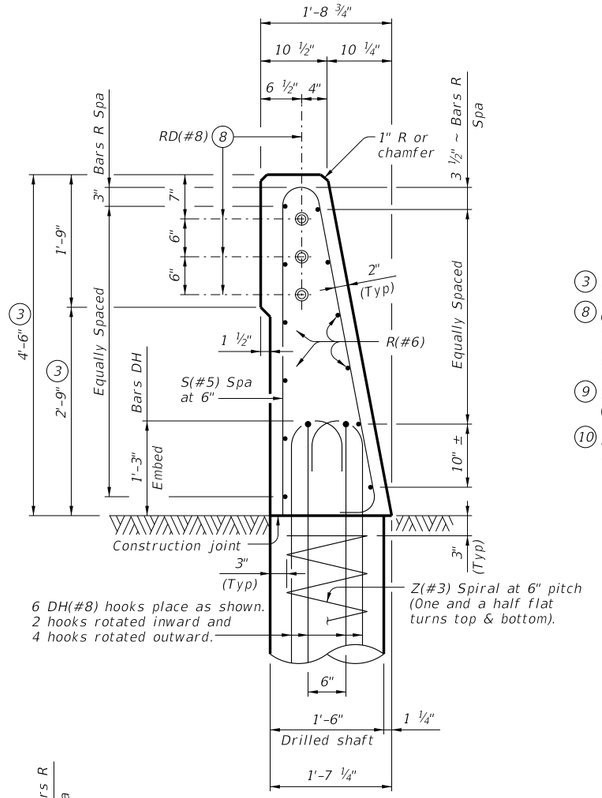


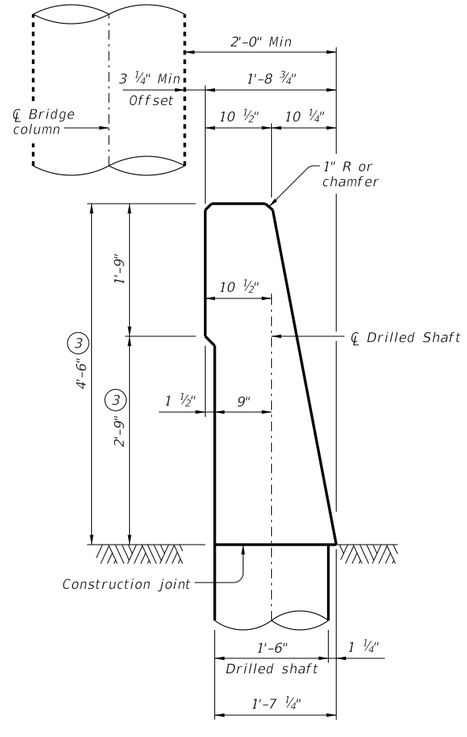
SECTION THRU RAIL ON DRILLED SHAFTS

(3) Increase 2" for structures with overlay.

(8) ℄ 3 Bars RD(#8) placed as shown at each joint. Center Bar RD(#8) at joint locations with 1 ¼" PVC pipe Sch 80 sleeve on one side of joint. See "Bar RD(#8) Assembly Detail".

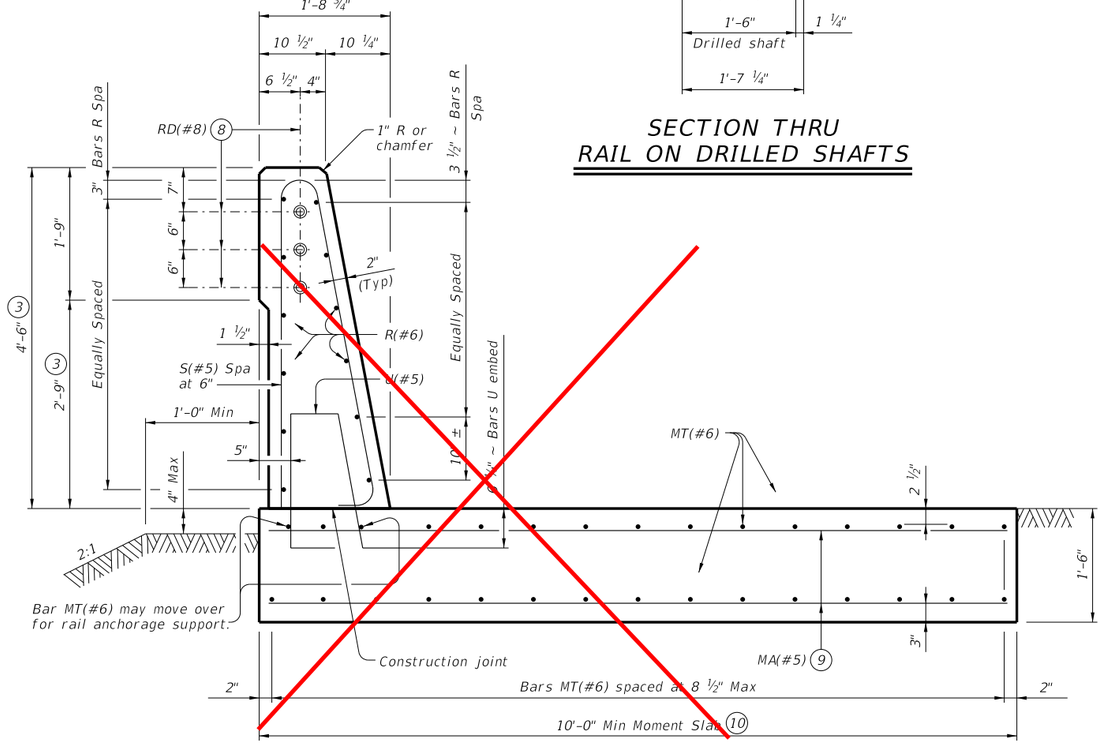
(9) MA(#5) space longitudinally along moment slab at 12" Max (Spaced 2" longitudinally from outside edge of moment slab).

(10) Approximate moment slab concrete = 0.56 CY/LF and reinforcement = 65.4 LB/LF.

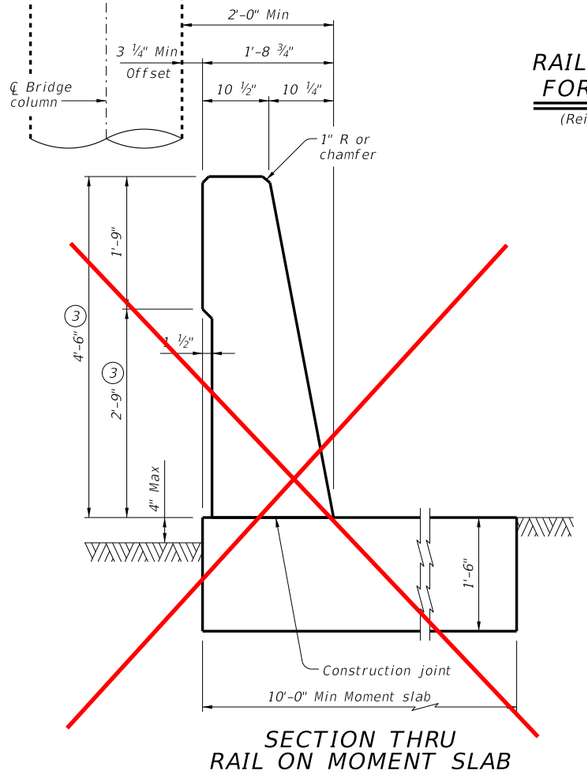


SECTION THRU RAIL ON DRILLED SHAFT FOR PIER PROTECTION

(Reinforcing not shown for clarity.)



SECTION THRU RAIL ON MOMENT SLAB



SECTION THRU RAIL ON MOMENT SLAB FOR PIER PROTECTION

(Reinforcing not shown for clarity.)

SHEET 3 OF 4

Texas Department of Transportation

Bridge Division Standard

T80PP TRAFFIC RAIL AND TRAFFIC RAIL FOUNDATION

FOR MASH TL-5 PIER PROTECTION

T80PP-RF

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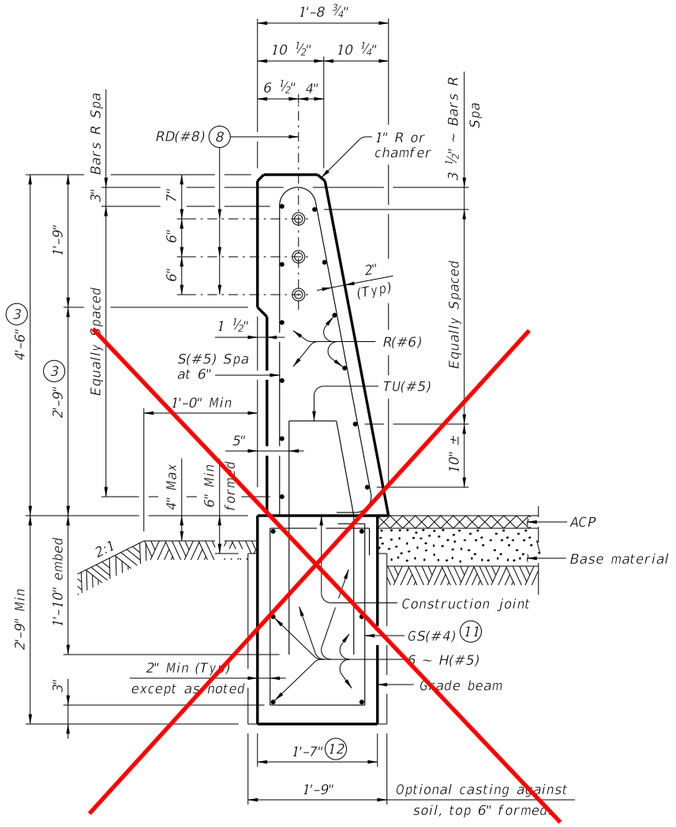
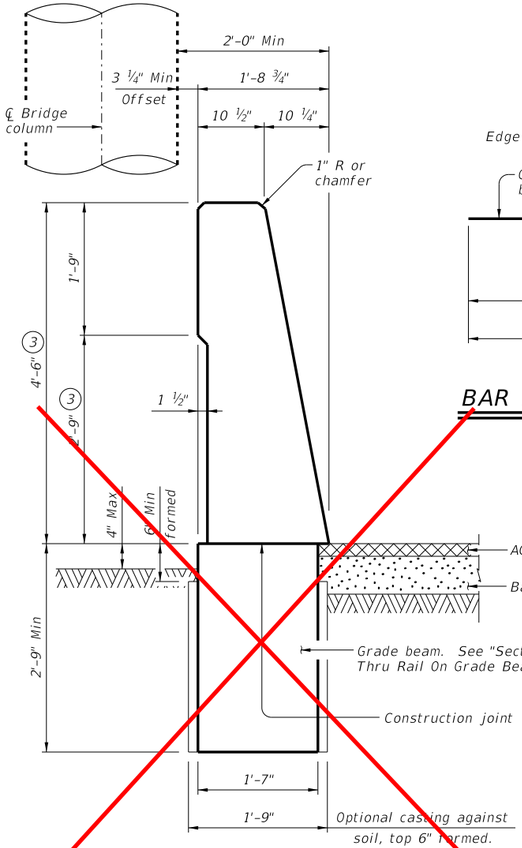
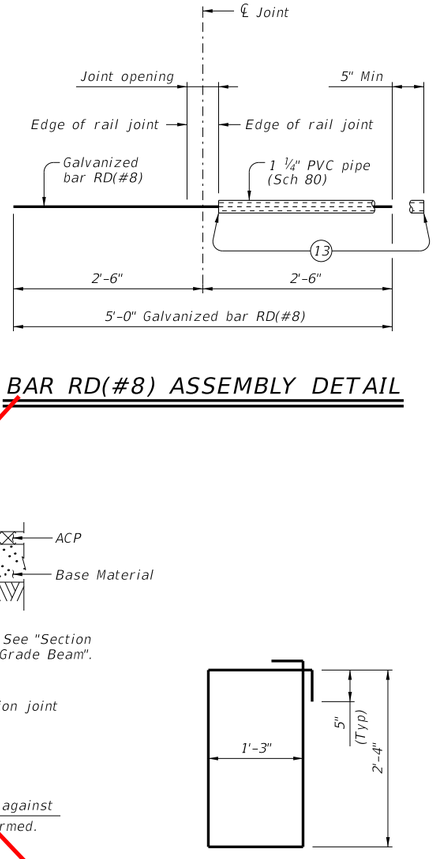


SECTION THRU
RAIL ON GRADE BEAM



SECTION THRU
RAIL ON GRADE BEAM
FOR PIER PROTECTION
(Reinforcing not shown for clarity.)



BAR RD(#8) ASSEMBLY DETAIL

BARS GS(#4)

(3) Increase 2" for structures with overlay.

(8) ℄ 3 Bars RD(#8) placed as shown at each joint. Center RD(#8) bar at joint locations with 1 ¼" PVC pipe Sch 80 sleeve on one side of joint. See "Bar RD(#8) Assembly Detail".

(11) GS(#4) space longitudinally along grade beam at 8" Max. (Spaced 2 ½" longitudinally from outside edge of grade beam).

(12) Approximate grade beam concrete = 0.16 CY/LF and reinforcement = 14.2 LB/LF.

(13) Tape ends of 1 ¼" PVC Sch 80 to prevent concrete or mortar from seeping in.

CONSTRUCTION NOTES:

Align moment slab or grade beam open joints with rail open joints maintaining no less than the minimum rail length. Provide moment slab or grade beam with open joints at no greater than 105' spacing unless shown on the plans or approved by the Engineer.

The back of railing must be vertical unless otherwise shown on the plans or approved by the Engineer.

MATERIAL NOTES:

Galvanize RD(#8) bar as shown.

Provide Class "C" concrete. Provide Class "C" (HPC) if required elsewhere.

Provide Grade 60 reinforcing steel.

Epoxy coat or galvanize all reinforcing steel if required elsewhere.

Deformed Welded Wire Reinforcement (WWR) (ASTM A1064) of equal size and spacing may be substituted for Bars GS(#4), H(#5), U(#5) and TU(#5) unless noted otherwise. Provide the same laps as required for reinforcing bars.

Provide bar laps, where required, as follows:

Uncoated or galvanized ~ #5 = 2'-4"
Epoxy coated ~ #5 = 3'-6"
Uncoated or galvanized ~ #6 = 2'-5"
Epoxy coated ~ #6 = 3'-7"

GENERAL NOTES:

This rail has been successfully evaluated by full-scale crash test to meet MASH TL-5 criteria. This rail can be used for speeds of 50 mph and greater when a TL-3 rated guard fence transition is used. When a TL-2 rated guard fence transition is used, this rail can only be used for speeds of 45 mph and less.

The foundation design resistance is based on the current AASHTO bridge railing requirements with the assumption of fair to good soil support conditions. Poor soil conditions will require suitably deeper and/or wider foundations.

This detail is intended for use as a guide to unusual railing anchorage situations but may be included in the plans, modified as necessary to apply to specific installations required on the project.

Payment for drilled shafts, moment slab and grade beam will be by Class "C" concrete or Class "C" (HPC) concrete for rail foundation.

Payment for railing will be as per Item 450, "Railing" (Ty T80PP).

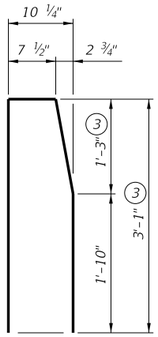
Excavation will be subsidiary to other Items.

See elsewhere in the plans for foundation type.

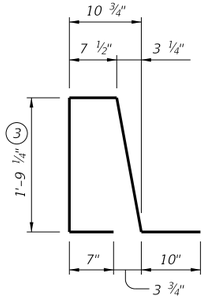
Shop drawings are not required for this rail.

Average weight of railing without rail foundation and no overlay is 828 plf.

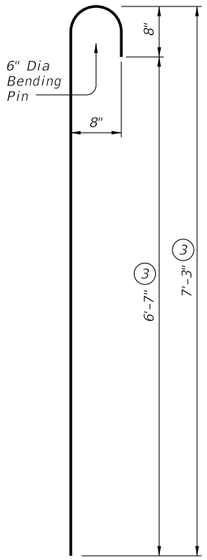
Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are out-to-out of bar.



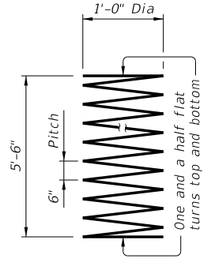
BARS TU(#5)



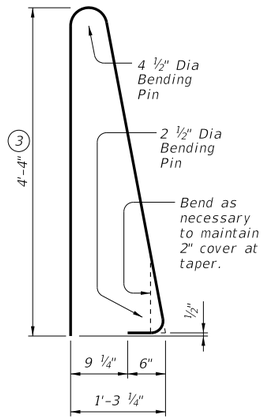
BARS U(#5)



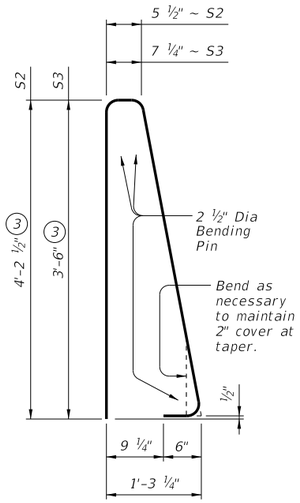
BARS DH(#8)



BARS Z(#3)



BARS S1(#5)



BARS S2-3(#5)

SHEET 4 OF 4

Texas Department of Transportation

Bridge Division Standard

T80PP TRAFFIC RAIL AND TRAFFIC RAIL FOUNDATION
FOR MASH TL-5 PIER PROTECTION

T80PP-RF

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12 DRAINAGE

12.1 General Requirements

This TP Section 12 governs the Design-Builder's design and construction of the drainage system. The physical components of the drainage system shall include existing and proposed riverine bridges, stormwater conveyances (open-channel and closed-conduit), inlets, stormwater management, detention/retention basins, soil erosion control measures, pavement and subgrade drainage, box culverts, stream and wetland restoration, bridge deck drainage, and any other stormwater drainage components described in GDOT's Drainage Design Policy Manual (Drainage Manual). The drainage system shall include all such physical components necessary to convey stormwater runoff that is generated within and flows through the Project Limits. The drainage system shall accommodate all stormwater runoff that flows onto or through the Project, whether originating within or outside the Project, in the design and construction of the drainage system.

12.2 Administrative Requirements

12.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct Work for all drainage systems governed by this TP Section 12 in accordance with the Project Standards.

12.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

12.2.3 Data Collection

The Design-Builder shall collect, organize, and maintain data in connection with the existing drainage facilities and the design and maintenance of the drainage system. The requirements for drainage data are in TP Attachment 12-2 (Requirements for the Drainage Design Report).

Data collection shall include existing drainage systems information and conditions, available drainage design reports, plans from previous projects, and as-built records.

The Design-Builder shall demonstrate in the Drainage Design Report that the design of the drainage system is consistent with the drainage data.

12.2.4 Coordination with Other Agencies

The Design-Builder shall coordinate all drainage system issues with GDOT, affected interested parties, and Governmental Entities, including the EPD, FEMA, USACE, local floodplain/MS4 managers, and the USFWS.

12.3 Design Requirements

12.3.1 General Design Obligations

The Design-Builder shall perform analysis, design, construction, and maintenance of the drainage system to meet the following requirements:

1. Provide capacity per the Drainage Manual for all interim conditions during the Project, including all phases and stages, the conditions depicted in the RFC Design Documents, and all conditions throughout the Term.
2. Convey all stormwater through the Project without any adverse impacts to upstream and/or downstream properties, such as causing risk to health and human safety, exacerbating flooding of structures (25-year storm flows spill outside channel banks, overtop roads, or result in other adverse effects as defined in Section 2.2.3 (Detention Analysis & Downstream Hydrologic Assessment) of GDOT's Stormwater Design Guide), or increasing water surface elevations on properties potentially causing damage to buildings, basements, driveways, carports, and other property improvements.
3. Provide additional mitigation measures where erosion caused by velocities at outfalls to downstream conveyances cannot be mitigated solely by armoring.

The Design-Builder shall design and construct either an embedded box culvert or a bridge for all new crossings of a perennial stream. If an existing pipe culvert on a perennial stream requires replacement, the replacement shall be either an embedded box culvert or a bridge.

12.3.1.1 Allowable Headwater

The Design-Builder shall analyze allowable headwater at all cross drains within the Project Limits. Headwater analysis shall include HWd (allowable headwater depth per Drainage Manual Section 7.3.1 (Allowable Headwater)), freeboard, and 100-year storm ponding limits. Any pipe or box culvert that crosses from one side of the road to the other shall be considered a cross drain. Cross drains may include a longitudinal system. However, both crossings to and from the longitudinal system shall be included in the cross drain analysis. A longitudinal system consisting only of roadway inlet drainage shall not be considered a cross drain.

Where specifically permitted in this TP Section 12.3.1.1, the Design-Builder shall be required to get a Design Variance for cross drains not meeting the freeboard criteria defined in the GDOT Drainage Manual. The Design-Builder shall not be permitted any additional Design Variances for freeboard. HWd and ponding limits do not require a Design Variance but shall meet the requirements defined in this TP Section 12.3.1.1.

12.3.1.1.1 Major Culverts

The Design-Builder shall correct existing substandard headwater conditions for HWd and freeboard at Major Culverts per the requirements in TP Section 12.3.9.5 (Riverine Bridge/Bridge Culvert Design).

For Major Culverts on streams with FEMA floodplains, the ponding limits shall be controlled through the H&H analysis per the requirements in TP Section 12.3.4 (FEMA Requirements). In addition, the Design-Builder shall:

1. For the culverts located on Perennial Stream 8 and Perennial Stream 9, the Design-Builder shall ensure the 100-year storm ponding limits do not encroach upon the footprints of the existing communication tower, equipment, and building. The Design-Builder shall not be required to contain the entirety of the headwater within the stream buffer or ROW.

For Major Culverts on streams without FEMA floodplains, the Design-Builder shall not be permitted headwater which includes ponding outside the stream buffer and the ROW for the 100-year storm.

12.3.1.1.2 New Crossings

For new pipe or box culvert crossings with no existing cross drain that are not Major Culverts:

1. In no case shall the Design-Builder be permitted headwater which includes ponding outside the stream buffer and the ROW for the 100-year storm.
2. In no case shall the Design-Builder be permitted HWd not meeting requirements in Drainage Manual Section 7.3.1 (Allowable Headwater).
3. In no case shall the Design-Builder be permitted a Design Variance for freeboard.

12.3.1.1.3 Increased Flows to Cross Drain

For all retained, extended, or replaced pipe or box culverts that are not Major Culverts with an increased flow:

1. In no case shall the Design-Builder be permitted headwater which includes ponding outside the stream buffer and the ROW for the 100-year storm.
2. In no case shall the Design-Builder be permitted to request a Design Variance for headwater over the shoulder breakpoint for the check year storm.
    a. Where improvements are required to correct headwater over the shoulder breakpoint, the Design-Builder shall be required to correct the headwater to meet freeboard requirements per the Drainage Manual.
3. In no case shall the Design-Builder be permitted to request a Design Variance for headwater above the bottom of subgrade elevation for the design year storm.
    a. Where improvements are required to correct headwater with respect to the subgrade, the Design-Builder shall be required to correct the headwater to meet freeboard requirements per the Drainage Manual.
4. For pipe or box culverts with existing substandard freeboard, the Design-Builder shall not be permitted to request a Design Variance for freeboard less than existing. The Design-Builder shall be required to request a Design Variance to retain any substandard freeboard condition.

12.3.1.1.4 No Increased Flows to Cross Drain

For all retained, extended, or replaced pipe or box culverts that are not Major Culverts without an increased flow:

1. The Design-Builder shall not create new substandard headwater conditions.
2. The Design-Builder shall not be permitted to reduce freeboard at cross drains with existing substandard freeboard conditions without the approval of a Design Variance.
3. The Design-Builder shall in no case be permitted headwater that includes ponding outside the stream buffer and the ROW beyond the existing condition for the 100-year storm.
4. The Design-Builder shall not be required to correct or document with a Design Variance existing substandard headwater conditions unaffected by the Project except for where the 100-year storm headwater is over the shoulder breakpoint. The Design-Builder shall correct the headwater to meet freeboard requirements per the Drainage Manual where the existing conditions 100-year storm headwater is over the shoulder breakpoint. The

Design-Builder shall notify GDOT of all other existing substandard headwater conditions as part of the BECR.

12.3.1.2 Restricted Covenant

The Design-Builder shall design and construct post-construction stormwater BMPs providing 80% TSS removal for 90% of net new impervious area runoff discharging to Perennial Stream 3 (Bethlehem Bottoms), Wetland 6, or Bethlehem Bottoms Restrictive Covenant. The Design-Builder shall design and construct the drainage system, including post-construction stormwater BMPs, such that the 25-year storm flow in Perennial Stream 3 (Bethlehem Bottoms) is not increased more than 1% from the pre-developed conditions.

For outfalls discharging to Perennial Stream 3 (Bethlehem Bottoms), Wetland 6, or Bethlehem Bottoms Restrictive Covenant, the post-construction stormwater BMP calculations and designs shall be certified by a Professional Engineer and documented in the Drainage Design Report. The post-construction stormwater BMPs shall adhere to GDOT details and guidelines. If the Design-Builder elects to use a filtration post-construction stormwater BMP in the southeast quadrant of Perennial Stream 3 (Bethlehem Bottoms) and Wetland 6, an impermeable liner shall be installed.

12.3.2 Use of Existing Drainage Facilities

Where permitted by the design criteria in the Design-Build Documents the Design-Builder may retain existing drainage facilities that convey Project stormwater runoff or convey stormwater through the Project Limits for use within the Project Limits as part of the drainage system.

The Design-Builder shall include where the Design-Builder intends to use any existing drainage system component within the Drainage Design Report and identify on the Design Documents.

Where the Design-Builder rehabilitates, upgrades, or modifies an existing pipe or box culvert, the Design-Builder shall ensure the cross-sectional area is not decreased in the direction of flow with the exception of extending 15-inch diameter pipes. The Design-Builder shall extend all 15-inch diameter pipes with a minimum 18-inch diameter pipe. The Design-Builder shall not reduce any existing pipe below a minimum 18-inch inside diameter. If existing pipes less than 18 inches in diameter require modification which would reduce the cross sectional area, the Design-Builder shall be required to replace the pipe.

The Design-Builder shall verify all existing longitudinal systems meet spread requirements in TP Section 12.3.8.3 (Gutter Spread/Ponding). If existing drainage system components do not meet the spread requirements, the Design-Builder shall add additional inlets to meet the spread requirements unless the substandard spread is allowed by an accepted Design Variance.

The Design-Builder may retain pipes with velocities greater than 12 feet per second.

The Design-Builder may retain box and pipe culverts with existing substandard minimum depth of cover. Where the Design-Builder extends a box or pipe culvert with existing substandard cover, the extended section of the culvert shall not have less cover than the existing portion. The Design-Builder shall not be permitted to reduce cover at existing box or pipe culverts with existing substandard cover. Additional box or pipe culverts with substandard cover shall not be permitted without an approved Design Variance.

Where the Design-Builder retains existing pipe systems and the existing access structures do not meet GDOT's maximum structure spacing requirements in Drainage Manual Section 5.3.4

(Maximum Structure Spacing and Maintenance Access), the Design-Builder will not be required to provide additional access structures to these existing facilities except where additional inlets are required to correct substandard spread.

Where the Design-Builder would connect a new pipe to a blind junction box, the Design-Builder shall replace the existing blind junction box with an accessible structure unless GDOT agrees in writing to allow the existing blind junction box to be replaced with a new blind junction box. Where the Design-Builder would connect a new pipe to another existing drainage structure (e.g., drop inlet, catch basin, manhole, etc.), the Design-Builder shall verify all pipe connections are watertight and the drainage structure is structurally sound.

All existing brick drainage structures located in the foundation of a proposed retaining wall shall be removed and replaced with a cast-in-place or precast structure.

12.3.2.1 Increased Flow to Existing Drainage System

Where portions of the existing drainage system to be retained include an increased flow during the design storm event, the Design-Builder shall rehabilitate, reconstruct, or upgrade those portions of the drainage system so that:

1. The structural condition and integrity of all elements meet the requirements of the Design-Build Documents.
2. The hydraulic capacity is adequate to carry existing stormwater and additional stormwater generated by the Project.

For retained existing drainage facilities with an increased flow that remain in place as part of the drainage system, the EOR shall include with the Final Design Documents a statement that as designed the existing drainage facilities, including pipes and box culverts, are hydraulically sufficient and functional and structurally free from defects as identified in TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table). This shall be accompanied by verification including hydraulic site inspections, calculations, camera pipe inspection report, and bridge inventory reports.

12.3.2.2 No Increased Flow to Existing Drainage System

Where portions of the existing drainage system to be retained do not include an increased flow during the design storm event, and the Project does not reduce the cover below GDOT design requirements, or increase the headwater elevation beyond GDOT design requirements, the Design-Builder shall notify GDOT of deficiencies, including all violations of the hydraulic requirements in the GDOT Drainage Manual, found as part of the Baseline Element Condition Report per requirements in TP Section 19 (Maintenance).

12.3.2.3 Existing Post-Construction BMPs

Where the Project impacts an existing MS4 Post-Construction BMP, the Design-Builder shall modify or replace the MS4 BMP and meet the following requirements:

1. Maintain, at a minimum, the same level of water quality treatment and stormwater runoff quantity control.
    a. Any additional water quality treatment or stormwater runoff quantity control required for the Project shall be in addition to the existing water quality treatment and stormwater runoff quantity control.

2. The Design-Builder shall be permitted to remove or modify the existing MS4 BMP during construction under these conditions:
    a. The Design-Builder shall design the temporary drainage to account for the impact of the removal/modification of the MS4 BMP.
    b. The Design-Builder shall have the final MS4 BMP operational by Substantial Completion.

Where the Project impacts an existing detention facility, the Design-Builder shall modify or replace the detention facility and meet the following requirements:

1. Maintain, at a minimum, the same flow attenuation.
    a. Any additional flow attenuation required for the Project shall be in addition to the existing flow attenuation.
2. Where the temporary impacts do not reduce the flow attenuation, the Design-Builder shall be permitted to modify the existing detention facility during construction under these conditions:
    a. The Design-Builder shall design the temporary drainage to account for the impact of the detention facility modification.
    b. The Design-Builder shall have the final detention facility operational by Substantial Completion.
3. Where the temporary impacts require a modification of the flow attenuation, the Design-Builder shall submit a Temporary Detention Analysis Report to analyze the risks and impacts of the temporary modification to the flow attenuation. The Design-Builder shall not reduce flow attenuation until the Temporary Detention Analysis Report has been approved by the GDOT Office of Design Policy and Support indicating agreement with the requirements identified in the report. The report shall include:
    a. Anticipated modification to the flow attenuation.
    b. Downstream hydrologic assessment of the flow attenuation modification.
    c. Construction duration for the completion of the modifications or replacement of the detention facility.
    d. An explanation of how the temporary drainage design accounts for the impacts of the flow attenuation modification.

The Design-Builder shall not combine GDOT detention with private detention facilities.

12.3.3 Compatibility with Existing Conditions and Future Changes

The Design-Builder shall provide a drainage system compatible with existing drainage facilities and all existing municipal drainage plans or systems on properties adjacent to the Project Limits. The Design-Builder shall preserve existing drainage patterns, with the exception of the following:

1. The Design-Builder is permitted to alter existing drainage patterns with the removal of the existing 36-inch cross drain located at Non-Buffered State Water K. The Design-Builder shall redirect the flow to Perennial Stream 10.

2. The Design-Builder is permitted to alter existing drainage patterns at the intersection of SR 42 and Michaels Drive. The Design-Builder shall redirect the flow to Perennial Stream 10.

For redirected flow to Perennial Stream 10, the Design-Builder shall account for the additional flow for determining detention warrants including effects on downstream conveyances and structures.

The Design-Builder shall design drainage structures that intercept and convey flow from areas outside the Project Limits through the Project (e.g., cross drains and box culverts), with sufficient capacity to accommodate existing outside Project Limits conditions.

12.3.4 FEMA Requirements

The Design-Builder shall prepare and submit computations and risk assessments for all aspects of the drainage system as part of the Drainage Design Report and shall demonstrate that the drainage design includes adequate mitigations for identified risks.

The Design-Builder shall obtain the effective FEMA model and utilize, duplicate, and/or update this model as part of the hydrologic and hydraulic study for assessing the impacts of the Project on the FEMA floodplain and floodway elevations, flow, and widths. Where an effective model is not available or accurate, the Design-Builder shall prepare the necessary corrected effective models for comparison purposes. Where preliminary data or future flood data is available, this data shall be incorporated into the FEMA floodplain analysis.

Where the Project crosses FEMA Zone A floodplain with no effective base flood elevations, the Design-Builder shall determine existing base flood elevations through modeling and design the crossing to limit any increase in base flood elevations in proposed conditions to 1 foot. The Design-Builder shall provide base flood elevations to the community for their information.

At Perennial Stream 10, the Design-Builder will be permitted an increase in base flood elevations up to 1.9 feet. However, the Design-Builder will be required to disclose any increases above 1 foot to the community.

The Design-Builder shall coordinate with FEMA and, to the extent required by state law, the appropriate Governmental Entities regarding any impacts to regulatory floodways and floodplains. The Design-Builder shall not be required to follow local Governmental Entity requirements that are more stringent than the GDOT or federal requirements. In the event a Conditional Letter of Map Revision (CLOMR) is required, the Design-Builder shall obtain Governmental Entity approval and shall prepare and submit to GDOT a draft CLOMR application. The Design-Builder shall allow 18 months for approval to be issued following the subsequent submission to FEMA.

The Design-Builder shall design the Project in compliance with FEMA regulations in FEMA-regulated floodplains.

The Design-Builder shall only use the FEMA model, or a duplicate/corrected FEMA model, for FEMA Zone AE floodplain analysis. GDOT models, including the GDOT approved flows and methodologies as defined in the Drainage Manual and GDOT's Guidance for Hydrologic and Hydraulic Studies, shall be prepared as an additional model and incorporated in the hydrologic and hydraulic study for each crossing.

The Design-Builder shall be responsible for FEMA coordination for all crossings with increased fill in the floodway.

The Design-Builder shall be responsible for community coordination for all crossings with fill in the floodplain and provision of compensatory storage and no-rise criteria as required by the NFIP.

12.3.5 Post-Construction Stormwater Design

The Design-Builder shall design the Project to comply with the Post-Construction Stormwater Design Guidelines contained in the GDOT Stormwater Design Guide. The Design-Builder shall not be required to follow local Governmental Entity requirements that are more stringent than the GDOT or federal requirements. The Design-Builder shall provide supporting documentation for all outfalls regardless of if detention is warranted. The Design-Builder shall survey all ponds and lakes included in the downstream analysis of the Project outfalls.

The Design-Builder shall place a chain link fence around all sides of detention facilities. The fence for the detention facility may be combined with any limited access fencing required per TP Section 11.3.4.1 (Control of Access Fencing). A minimum of 10 feet shall be provided between any required fence and any portion of the post-construction BMP, including grading, to allow for mowing and maintenance activities. Where a wall is used in the construction of the post-construction BMP, the fence may be on the wall. The Design-Builder shall install a gate in the fence and provide GDOT with the keys.

Where detention is determined to be warranted, detention shall be provided unless GDOT Design Policy and Support has accepted the Post-Construction Stormwater/Non-MS4 Detention Report recommendation that detention is not suitable. Detention shall only be provided if warranted and suitable.

If the Design-Builder redirects flow to Perennial Stream 10 as allowed in TP Section 12.3.3 (Compatibility with Existing Conditions and Future Changes) and detention is warranted for a Project outfall discharging to Perennial Stream 10, the Design-Builder shall design and construct the detention to attenuate the 25- and 100-year post-development flows to be equal to or less than pre-development flows. The Design-Builder is permitted to design a special design outlet control structure to attenuate the peak flows and submit the design as a Design-Builder Provided Specification. Non-GDOT published outlet control structure details require structural design and special trash rack design.

The Design-Builder shall place riprap energy dissipators, or approved equal, at the outlet (downstream end) of all new stormwater conveyance and all existing stormwater conveyance where the Project changes the hydraulics.

The Design-Builder shall design and install channel linings in all proposed and modified ditches and channels per the guidance in the Drainage Manual.

12.3.6 Drainage Design Report

The Design-Builder shall prepare and submit to GDOT a Drainage Design Report that provides complete documentation of all components of the drainage data, design criteria, design approach, and maintenance requirements for the drainage system for the final and interim conditions. The Drainage Design Report shall include the components set forth in TP Attachment 12-2 (Requirements for the Drainage Design Report).

12.3.7 Surface Hydrology

12.3.7.1 Design Frequencies

The Design-Builder shall use the design storms in the Drainage Manual.

The Design-Builder shall use the final drainage system design storm frequency for temporary drainage system components when a temporary design storm frequency is not specified in the Drainage Manual. The Design-Builder may request a deviation from the temporary drainage requirements. Such deviation shall be at GDOT Office of Design Policy and Support's sole discretion and shall not be included in the Design-Builder's design until written consent is received from GDOT Office of Design Policy and Support.

12.3.7.2 Hydrologic Analysis

The Design-Builder shall design the drainage system to accommodate the Project drainage areas. These areas may extend outside of the Project Limits.

The Design-Builder shall perform hydrologic analyses for the design of components of the drainage system for each Construction Phase shown on the Construction Phasing and Staging Plan and for the Final Design Documents for the Project according to the Drainage Manual.

12.3.8 Storm Sewer Systems

The Design-Builder shall design enclosed storm sewer systems to collect and convey runoff to appropriate discharge points where precluded from handling runoff with open channels or ditches. The Design-Builder shall not allow stormwater to be conveyed to and/or through the bridge endroll nor released onto the bridge endroll located under a bridge.

The Design-Builder shall convey stormwater to the toe of slope and shall not discharge concentrated stormwater on slopes.

The Design-Builder shall prepare storm sewer analyses and include in the relevant section of Drainage Design Report as shown in TP Attachment 12-2 (Requirements for the Drainage Design Report).

The Design-Builder shall comply with Section 4.5.26 (Pipe Culvert Material Alternates) of the GDOT Geotechnical Design Policy and Guides, and the Soil Survey Report for allowable pipe culvert material.

Permanent slope drain pipe shall be 18 inches in diameter. Permanent slope drain shall outfall at the toe of slope and shall not be connected to other drainage inlets downstream of the slope drain. A junction box with access or a manhole shall be used where GDOT Construction Detail D-01 specifies a concrete collar near the shoulder breakpoint.

When a box culvert penetrates a noise barrier, scour at the entrance and exit of the culvert shall be calculated in accordance with HEC 14 "Hydraulic Design of Energy Dissipators for Culverts and Channels." The Design-Builder shall construct wingwalls at each end of the box culvert.

The Design-Builder shall design and install all precast structures with minimum dimensions from pipe connections to joints as specified in the GDOT Construction Standards.

The following are prohibited:

1. In-line/buried/subsurface/underground detention or stormwater runoff storage through modification of existing drainage or installation of new drainage. The Design-Builder may retain existing in-line/buried/subsurface underground detention not impacted by the Project as stipulated in TP Section 12.3.2 (Use of Existing Drainage Facilities).
2. Blind junctions and/or non-accessible structures. The Design-Builder may retain existing blind junctions and non-accessible structures that are not located under pavement for pipes 36 inches in diameter and greater as stipulated in TP Section 12.3.2 (Use of Existing Drainage Facilities). The use of GDOT Construction Detail D-36 shall not be considered a blind junction for the purposes of applying this criteria.
3. Longitudinal storm sewer pipe under travel lanes.
4. Drop inlets along concrete barrier on high-speed facilities (design speeds greater than 45 mph) as shown in GDOT Construction Standard 1019.
5. Slotted roadside barriers to drain storm water in final conditions. Existing slotted roadside barriers that are not physically impacted or receiving increased flows may remain.
6. Slotted drain inlets.

12.3.8.1 Pipes

Jack or bore steel sleeves shall not be used as the stormwater conveyance pipe.

12.3.8.2 Municipal Separate Storm Sewer System

The Design-Builder shall follow requirements in the Drainage Manual and Stormwater Design Guide for compliance with GDOT's General NPDES Stormwater Permit No. GAR 041000 (MS4 Permit) and implement the minimum control measures and total maximum daily load (TMDL)/impaired stream requirements within the MS4 Permit complying with obligations identified as the Design-Builder's responsibility in TP Attachment 12-1 (MS4 Responsibilities). The Design-Builder shall submit with the Final Design Documents the GDOT BMP details and special grading sheets available on GDOT's website for all proposed BMPs.

The Design-Builder shall submit to GDOT Office of Design Policy and Support, as described in TP Attachment 12-1 (MS4 Responsibilities), annual report data covering the portion of GDOT's MS4 within the Project Limits.

Should the Design-Builder select dry detention basins as a Post-Construction BMP, the maximum total suspended solids (TSS) removal of dry detention basin shall be 60 percent. Increasing the proposed basin volume to achieve 80 percent TSS removal is not acceptable.

Dry detention basins shall drain the channel protection volume, as defined in the Stormwater Design Guide, within 24 to 72 hours.

The Design-Builder shall only propose BMPs in GDOT's Stormwater Design Guide Table 2.5-1.

The Design-Builder shall submit to GDOT a signed and sealed Post-Construction Stormwater Report (PCSR) prepared per the Stormwater Design Guide and the latest PCSR Template published on GDOT's website, including the non-MS4 detention analysis required for the areas outside of the MS4 permitted area. The report will be forwarded to the GDOT Office of Design Policy and Support for their review and acceptance.

The PCSR may be submitted in phases. Each submitted phase shall be logical from a drainage perspective and shall not split project drainage basins across multiple phases. The final PCSR shall include all phases in one cohesive final report. Each outfall level exclusion and infeasible BMP determination shall be made with consideration for the effects on the project as a whole. The Design-Builder shall submit an overall MS4 phasing plan with each submittal of the PCSR. Each phased submittal of the PCSR shall clearly indicate to which portion of the Project it is applicable.

12.3.8.3 Gutter Spread/Ponding

The Design-Builder shall design the drainage system associated with pavement for all phases and stages of the Work defined in the Construction Phasing and Staging Plan and for the Final Design Documents, to limit ponding to the maximum gutter spread listed in the Drainage Manual.

The Design-Builder shall ensure concentrated stormwater is not allowed/released to flow across any travel lane within the Project. The term shallow-concentrated is synonymous with concentrated with respect to flows across travel lanes. The Design-Builder shall only allow sheet flow to flow across travel lanes. The Design-Builder may allow/release shallow concentrated flow across travel lanes from required intersection channelization islands or roundabout lane dividers. The Design-Builder shall ensure gutter spread is met for all travel lanes where channelization islands or roundabout lane dividers are used. The Design-Builder may construct shorts gaps in the lane dividers to meet spread requirements. The Design-Builder shall provide drainage structures providing for 100 percent flow capture approximately 50 feet upstream of all flat superelevation locations.

Inlets and any other drainage structures shall not be placed within any travel lane.

The Design-Builder shall limit gutter spread on shared use paths such that a minimum of 4 feet is available for use without ponding.

12.3.8.4 Retaining Walls and Concrete Side Barriers

The Design-Builder shall not set longitudinal pipes within MSE backfill, with the exception of locations where the roadway alignment is supported on both sides with MSE walls. Each barrier separated movement shall be considered a different roadway alignment for the purposes of determining the allowance of pipes within the MSE backfill. Where longitudinal pipes are permitted within the MSE backfill, the Design-Builder shall meet the requirements in the GDOT Drainage Manual Section 5.3.9 (Pipes and Drainage Structures Near MSE Walls).

Pipe extensions under walls shall require special encasement details.

Concrete pipes within the limits of failure plane influence of MSE or earth anchoring walls (e.g., tie-back walls, soil nail walls, etc.) shall have joints supplemented with external sealing bands conforming to ASTM C 877.

12.3.8.5 Drainage Inlets and Structures

Where non-vehicular traffic is anticipated including pedestrian, bicycle, and wheelchair, the Design-Builder shall design inlets for safe passage. This shall include designing and constructing grate inlets with bars perpendicular to the flow of traffic per GDOT standard details.

12.3.8.6 Bridge Deck Drainage

The Design-Builder shall include bridge approach drains to intercept gutter/shoulder flow at each end of the bridge in the roadway drainage design. The Design-Builder shall ensure stormwater flowing toward the bridge is intercepted upstream of the bridge.

The Design-Builder shall not place open deck drains for bridges over areas designated in TP Section 5 (Environmental) where this restriction is requested via consultation with State/federal agencies due to anticipated impacts of the Project (e.g., protected species, NPS, etc.) or roadways. In these situations, if ponding will exceed width limits, the Design-Builder shall ensure runoff is collected in inlets and conveyed in a closed deck drain system before discharging outside these areas.

For bridge spans crossing over roadways, including for Related Transportation Facilities, open deck drains are not allowed for the entirety of the span, and the Design-Builder shall provide a closed deck drainage system, if required.

The Design-Builder shall design and locate open deck drains to preclude drainage drift onto adjacent bent caps and bearings, onto underlying walls, and onto underlying noise barriers. Where this cannot be achieved, the Design-Builder shall provide a closed deck drainage system.

Where unpainted weathering steel is used with open deck drains, the Design-Builder shall extend deck drain outlets to an elevation not less than 6 inches below the bottom of adjacent weathering steel elements. Such extensions shall be structurally braced and supported.

If the spread on the bridge exceeds the requirements, a closed deck drainage system shall be required.

12.3.9 Hydraulic Structures Culverts/Bridges

To the extent required by state law, the Design-Builder shall analyze existing and proposed cross drains and bridges, for any flooding problems. The Design-Builder shall not be required to follow local Governmental Entity requirements that are more stringent than the GDOT or federal requirements.

The Design-Builder shall ensure all hydraulic computations, designs, and recommendations include reference to and consideration of all approved studies, projects, and ordinances in the area performed/approved by Governmental Entities, including local floodplain managers.

The Design-Builder shall ensure new and replaced box culverts have minimum dimensions of a 4-foot span by 4-foot rise. Existing box culverts may be extended in kind and shall be extended with barrel sizes that are equal to or greater than the existing box culvert barrel size. If there is no GDOT Construction Standard or Construction Detail for the existing size, the Design-Builder shall submit a Design-Builder Provided Specification detailing the barrel reinforcement quantities and dimensions. Extensions of existing culverts do not require embedment unless the existing culvert is embedded.

12.3.9.1 Drainage Report for Hydraulic Structures (Riverine Bridges and Major Culverts)

The Design-Builder shall prepare a Hydrologic and Hydraulic (H&H) Study and any other required documentation for all existing and/or proposed riverine bridge sites and for Major Culverts.

Major Culvert shall be defined as any culvert that meets any of the following conditions:

1. Total span length along the roadway of 20 feet or more.
2. Located on streams where the 100-year floodplain has been delineated on FEMA maps.
3. Located on streams that are named on County and/or USGS maps.
4. Subject to potential flooding problems as identified through local coordination per the requirements in TP Section 12.2.4 (Coordination with Other Agencies).
5. Culverts subject to abnormal flood conditions per Section 8.4.2 of the Drainage Manual (Flow Habit Assumptions).

An H&H Study is not required for Major Culvert extensions meeting all of the following criteria but the Design-Builder shall provide a hydraulic analysis in the Drainage Design Report:

1. Existing culverts extended by less than 50 percent of their existing length.
2. Proposed roadway profile grade over the culvert is not raised.
3. No existing scour or flooding problems and potential for problems is low.

Additional documentation shall include the preparation and submittal of any CLOMR or Letter of Map Revision (LOMR) required for community and/or FEMA coordination. The Design-Builder shall provide all documentation according to the Guidance for Hydrologic and Hydraulic Studies.

12.3.9.2 Method Used to Estimate Flows

The Design-Builder shall ensure the selected hydrologic method is appropriate for the watershed conditions by using methods detailed in Section 3.5 (Hydrologic Analysis Methods) of the Drainage Manual.

The Design-Builder shall use, as appropriate, flow information within FEMA Flood Insurance Studies (FIS), the available historical records, and any subsequent LOMR for the FEMA model.

The Design-Builder shall use an acceptable method for calculating the design flows according to the Drainage Manual for crossings not located within a FEMA FIS or on a gaged waterway.

12.3.9.3 Reserved

12.3.9.4 Hydraulic Analysis

The Design-Builder shall evaluate all bridges for contraction and pier scour potential and design scour protection in accordance with the Drainage Manual and TP Section 13 (Structures).

12.3.9.5 Riverine Bridge/Bridge Culvert Design

For new bridges, full bridge replacements, bridge widenings, and bridge modifications, the Design-Builder shall analyze, design, and construct each bridge structure with the proposed flows to ensure it provides the required freeboard, backwater, flow velocities, consideration for

predicted bridge scour, and bridge abutment protection among other design criteria per the Drainage Manual.

The Design-Builder shall analyze each existing Major Culvert with the proposed flows to ensure the headwater does not exceed that of the allowable headwater per the Drainage Manual. If this requirement is not met, the Design-Builder shall design and construct a replacement structure or an additional structure to result in a drainage system with sufficient capacity to pass the proposed design storm event with a headwater depth no greater than the HWd per the Drainage Manual. The Design-Builder shall design bridges/Major Culverts to maintain the existing channel morphology through the structure.

12.4 Construction Requirements

The Design-Builder shall ensure the design includes temporary erosion control, sediment basins, and other BMPs needed to satisfy the NPDES permit and other regulatory requirements. The Design-Builder shall include all Environmental Commitments related to drainage design and erosion control as noted on the Plans for each stage of construction.

Where three or fewer travel lanes are draining towards a temporary barrier placed between active travel lanes, the flow through the slots in the barrier shall not be considered concentrated flow. Where more than three travel lanes are draining towards a temporary barrier placed between active travel lanes, the Design-Builder shall submit, as part of the Design Documents, a drainage analysis of the effects of the flow going through the drainage slots in the temporary barrier. This drainage analysis shall include calculations for gutter spread on the upstream side of the barrier and the potential for hydroplaning on the downstream side of the barrier. If the analysis shows an increased potential for hydroplaning, the Design-Builder shall not use the temporary barrier in that configuration. The Design-Builder shall use a different barrier type or lane configuration which does not cause an increased potential for hydroplaning.

CE&I acceptance of post-construction BMPs shall be tied to the Notice of Termination for the contributing upstream drainage basins.

12.4.1 Spread on Limited Access Facilities

During Construction Work, the Design-Builder shall not cause additional spread to encroach into existing travel lanes beyond the existing condition on limited access facilities.

12.5 Submittals

With respect to drainage requirements described in this TP Section 12, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 12 Attachments

Attachment No.	*Title*
Attachment 12-1	MS4 Responsibilities
Attachment 12-2	Requirements for the Drainage Design Report

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 12-1

MS4 Responsibilities

Attachment 12-1: MS4 Responsibilities

2022-2027 Permit No. GAR041000	*Best Management Practice (BMP)*	*Activity Description*	*Design-Builder*	*GDOT*	*PMC*	*3rd Party*	*Notes*
4.2.1	***Public Education***						
4.2.1-1	Website education	N/A		X			
4.2.1-2	Training program for contractors and employees	Attend periodic training related to stormwater impacts. • Project Managers and design level staff shall attend GDOT provided courses related to Pre-Construction activities including Overview of Post-Construction Stormwater (O-PCS) and Post-Construction Stormwater for Design Professionals (PCS). Training shall be completed every five years to remain in compliance with requirements. • Construction level staff including Field Superintendents and Inspectors shall attend GDOT provided courses related to Construction Phase activities including Construction Engineering Inspection (CEI) and Georgia Highway Contractors Association (GHCA) courses. Training shall be completed every five years to remain in compliance with requirements.	X				
4.2.1-3	Educational materials	N/A		X			
4.2.1-4	Educational program in high pedestrian areas	N/A		X			

2022-2027 Permit No. GAR041000	***Best Management Practice (BMP)***	***Activity Description***	***Design-Builder***	***GDOT***	***PMC***	***3rd Party***	***Notes***
4.2.1-5	Educational program targeting litter	Implement an educational program that focuses on litter removal, such as the Keep It Clean Georgia program, or similar. Annually evaluate the program to determine if changes are needed to improve the effectiveness of the campaign. Provide a report on any educational program activities targeting litter that were implemented during the reporting period, and on any proposed changes to the program, in each annual report.		X			
4.2.1-6	Posting of SWMP	N/A		X			
4.2.2	***Public Involvement/Participation***						
4.2.2-1	Litter Removal program	Implement a litter removal program that encourages participation by the public, municipalities, and other entities (e.g., Adopt-A-Highway). Details on the program should be described in the SWMP. Annually evaluate the program to determine if revisions are needed to improve the effectiveness of the program. Track and report on the number of GDOT sponsored litter removal programs (e.g., number of miles adopted, litter removal events, number of participants) implemented during the reporting period, and on any proposed program changes, in each annual report.	X	X			Design-Builder responsible for litter removal per TP Section 19 (Maintenance). GDOT responsible for the program.

2022-2027 Permit No. GAR041000	***Best Management Practice (BMP)***	***Activity Description***	***Design-Builder***	***GDOT***	***PMC***	***3rd Party***	***Notes***
4.2.2-2	Public Information Open Houses (PIOHs)	Conduct all appropriate public information open houses as applicable. As part of each public information open house, contact GDOT Office of Design Policy to ensure that a Stormwater Management Program display is provided and displayed at the open house. Provide the number of open houses conducted each year and the number of attendees.	X				See TP Attachment 2-3 (Public Information and Communications) for PIOH requirements.
4.2.2-3	Memorandum of Agreements (MOAs)	N/A		X			
4.2.3	***Illicit Discharge Detection and Elimination***						
4.2.3-1	Outfall Map and Inventory	Provide a list of new outfalls within the Project area indicating the location and geographic coordinates for each outfall. Provide all information per SP 156 in a database called GDOT_MS4_OUTFALLS.gdb and submit this inventory to stormwater@dot.ga.gov each quarter.	X				Required on all GDOT projects with a drainage component within the MS4 Permitted Area.
4.2.3-2	Policy	N/A		X			
4.2.3-3	IDDE Plan	Conduct inspections of outfalls within the Project area each year inspecting the outfalls for the presence of dry weather discharges in accordance with the IDDE plan. For a copy of the IDDE plan, contact the GDOT Office of Design Policy. Provide a copy to GDOT on a quarterly basis of the inspection reports (see the IDDE plan) for each outfall inspected.		X			100% of outfalls inspected in 10 years with a minimum of 5% inspected annually. Report observed illicit discharges to GDOT Office of Design Policy & Support within one Business Day of detection for further action and reporting to EPD.

2022-2027 Permit No. GAR041000	***Best Management Practice (BMP)***	***Activity Description***	***Design-Builder***	***GDOT***	***PMC***	***3rd Party***	***Notes***
4.2.3-4	Procedures for tracing and eliminating any identified illicit discharges	If a dry weather discharge is detected, contact the Environmental Compliance Manager (ECM) within 24 hours of detection for further investigation/action.	X	X			GDOT is responsible for the procedures and any reporting to EPD.
4.2.3-5	Education	N/A		X			
4.2.3-6	Complaint Response	Report all complaints related to illicit discharges to the ECM. Provide a summary of the number of complaints and summary of resolution including the date and time received and resolved each year for the Project area to GDOT.	X				
4.2.3-7	Spill Response	Report all spills in accordance with the IDDE plan and the Georgia Oil or Hazardous Material Spills and Releases Reporting. If a spill occurs and the spill reaches an MS4 structure, report the spill to the ECM.	X				
4.2.4	***Construction Site Stormwater Runoff Control***						
4.2.4-1	Contractual obligation mechanism	N/A		X			
4.2.4-2	Erosion, Sedimentation and Pollution Control Plans (ESPCPs)	Prepare and submit to EPD an ESPCP that complies with the requirements of the most recent Construction Activity Permits, which identify the Manual for Erosion and Sediment Control in Georgia and stream buffer requirements for all land disturbance activities that require coverage.	X				

2022-2027 Permit No. GAR041000	***Best Management Practice (BMP)***	***Activity Description***	***Design-Builder***	***GDOT***	***PMC***	***3rd Party***	***Notes***
4.2.4-3	Erosion and sedimentation complaints	Report all complaints related to construction site runoff to the ECM. Provide a summary of the number of complaints and summary of resolution including the date and time received and resolved each quarter for the Project area to GDOT.	X				
4.2.4-4	Site plan review procedures	N/A		X		X	Post-let GEC.
4.2.4-5	Site inspection procedures	Maintain inspections as required in the most recent Construction Activity Permits, which identify the Manual for Erosion and Sediment Control in Georgia and stream buffer requirements for all land disturbance activities that require coverage. Provide a copy of all inspections performed.	X				Worksite Erosion Control Supervisor (WECS).
4.2.4-6	Construction Site Waste	Ensure through contracts or other mechanisms that construction site operators control waste that may cause adverse water quality impacts in accordance with the Construction Activity Permits. In each annual report, provide the number of contracts executed during the reporting period that contain waste control requirements.	X				
4.2.4-7	Compliance with the contract requirements	N/A	X		X		

2022-2027 Permit No. GAR041000	*Best Management Practice (BMP)*	*Activity Description*	*Design-Builder*	*GDOT*	*PMC*	*3rd Party*	*Notes*
4.2.5	***Post-Construction Stormwater Management***						
4.2.5-1	Inventory	Provide an inventory of all permanent Post Construction Stormwater management structures following GDOT acceptance utilizing SP 156 for required data to be provided on each structure in a database called GDOT_MS4_PCS.gdb.	X				
4.2.5-2	Policy or other regulatory mechanism	N/A		X			
4.2.5-3	Operation and Maintenance	Inspect GDOT accepted Post Construction Stormwater management structures following the frequency in the GDOT Stormwater System Inspection and Maintenance Manual within the Project area utilizing the inspection forms in the current effective GDOT Stormwater System Inspection and Maintenance Manual and in geodatabase format specified by GDOT. Report all maintenance performed on each structure utilizing GDOT Maintenance Activity Codes.		X			GDOT is responsible for inspecting, maintaining, and reporting for all accepted Post Construction Stormwater management structures.
4.2.5-4	BMP Feasibility Analysis	Submit and secure approval of a Post Construction Stormwater Report for all applicable construction projects within the Project area following the specifications in the most current GDOT Drainage Design for Highways manual (GDOT Drainage Manual).			X	X	Post-Let GEC.

2022-2027 Permit No. GAR041000	***Best Management Practice (BMP)***	***Activity Description***	***Design-Builder***	***GDOT***	***PMC***	***3rd Party***	***Notes***
4.2.5.4	***Green Instructure/Low Impact Development***						
4.2.5.4-1	Green Infrastructure/Low Impact Development (GI/LID) feasibility determination	Submit and secure approval of a Post Construction Stormwater Report for the Project following the specifications in the most current GDOT Drainage Manual. Inspect and maintain the GI/LID structures and provide documentation of these inspections and maintenance as described above in BMP 4.2.5-3.	X	X			Design-Builder shall prepare PCSR per TP Section 12 (Drainage). GDOT inspects and maintains the structures.
4.2.6	***Pollution Prevention/Good Housekeeping for Municipal-Type Operations***						
4.2.6-1	Municipal-type Facility Inventory			X			
4.2.6-2	Municipal-type Facility Inspections	Perform annual inspections of all facilities accepted by GDOT requiring coverage under the F-SWPPP within the Project area utilizing the inspection forms in the current effective GDOT F-SWPPP. Update the SWPPP as necessary to reflect changes to the facility, operations or materials stored on site.		X			
4.2.6-3	Facilities Stormwater Pollution Prevention Plan (F-SWPPP)	Provide an annual copy of required maintenance performed and corrective actions implemented including a resolution date for each GDOT accepted facility utilizing the F-SWPPP for guidance.		X			

2022-2027 Permit No. GAR041000	*Best Management Practice (BMP)*	*Activity Description*	*Design-Builder*	*GDOT*	*PMC*	*3rd Party*	*Notes*
4.2.6-4	MS4 Structure Inventory and Map	Provide an inventory of all MS4 structures following GDOT acceptance utilizing SP 156 in the required geodatabase format for required data to be provided on each structure in a database called GDOT_MS4_STRUCTURES.gdb. Update annually as necessary to reflect changes to the Project area.		X			
4.2.6-5	Inspection and Maintenance	Perform inspections on at least 5 percent of all GDOT MS4 structures within the Project area annually utilizing the GDOT Stormwater System Inspection and Maintenance Manual and Esri ArcGIS Field Maps or equivalent such that all structures are inspected over the course of 10 years. Report all maintenance performed on each structure utilizing GDOT Maintenance Activity Codes.		X			
4.2.6-6	Employee Training	All field personnel with supervisory capacity assigned to the Project must attend a GDOT SWPP training course once every five years. For those personnel that have not attended the training course, the training course must be completed within six months of assignment to the Project.		X			
4.2.6-7	Complaint Response	Report all complaints related to runoff/pollution from GDOT accepted facilities within the project area to the ECM. Provide a summary of the number of complaints and summary of resolution including the date and time received and resolved each year for the project area to GDOT.	X				

1 MS4 Reporting Requirements

GDOT's NPDES Phase II MS4 Permit requires an annual report submitted each year documenting compliance with all aspects of the permit from January 1 to December 31 (reporting period). To aid in that reporting, the Design-Builder shall submit quarterly update reports by the dates in the table below documenting activities during the specified dates each quarter for Design-Builder responsible activities identified in the matrix above. Design-Builder shall submit an annual summary report, including Q4, by January 15 of each year.

Quarter	***Dates***	***Quarterly Update Report Due Date***
Q1	January 1 – March 31	April 30
Q2	April 1 – June 30	July 31
Q3	July 1 – September 30	October 31

The Design-Builder shall provide the following sections and information as part of the MS4 quarterly update report.

1.1 Introduction

The Design-Builder shall provide an overview of the location within the MS4 permitted area.

1.2 Public Education

The Design-Builder shall provide a description, date, and employee name of any staff that attended a training session covering activities that may impact stormwater runoff.

1.3 Public Involvement/Participation

The Design-Builder shall populate and provide the table below in the MS4 quarterly update report for tracking PIOHs as applicable.

District	***County***	***Location of PIOH***	***PI Number***	***Date***	***Attendees***	***Project Manager***

1.4 Illicit Discharge Detection and Elimination

The Design-Builder shall populate and provide the table below in the MS4 quarterly update report for each illicit discharge detected. The Design-Builder shall notify the ECM within 24 hours of discovery of the illicit discharge and initiate the corrective action within 24 hours of confirmation of the source to remedy the discharge. The source must be identified within 72 hours. The illicit discharge must be eliminated within 30 days of confirmation of the source. If the source is from offsite activities, the Design-Builder shall contact the ECM for further investigation / action.

Outfall ID	***Report Date***	***Resolved Date***	***Route / Location***	***Nature of Substance***	***Flow (Y/N)***	***Odor***	***Color***	***Turbidity***	***Floatables***	***Description/ Tracing Information/ Notes***	***Actions Taken***	***Status***

The Design-Builder shall provide, as part of the MS4 quarterly update report, the following table and any supporting information (emails, reports, etc.) for all illicit discharge complaints.

Inquiry ID	***Report Date***	***Resolved Date***	***Route / Location***	***Description***	***Actions Taken***	***Status***

The Design-Builder shall conduct daily investigation for spills on site. If a spill is observed, the Design-Builder shall clean up the spill and prevent it from progressing to/through the Drainage System. If the spill reaches the Drainage System, the Design-Builder shall call the Georgia EPD Emergency Operations Center at 800-241-4113 to assist with spill response and control, notify GDOT within 15 minutes of observing the spill. If the spill has not reached the Drainage System, the Design-Builder shall clean it up and notify the ECM.

For spills that reach the Drainage System, the Design-Builder shall complete the following table, include in the MS4 quarterly update report, and provide any back up information (emails, reports, etc.).

Event ID	*Start Date/Time*	*End Date/Time*	*Weather Conditions*	*Route/ Location*	*Nature of Spill*	*Estimated Discharge Amount*	*Responsible Party*	*Response & Clean up Description*	*Status (Closed, Active)*

1.5 Erosion and Sedimentation Complaints

The Design-Builder shall record any erosion and sedimentation complaints received by the public or otherwise in the following table and provide the table and any supporting information on actions taken (emails, reports, etc.) as an appendix to the MS4 quarterly update report.

Project Number	*Date*	*Route/ Location*	*Description*	*Action Taken*	*Status*	*Complaint Type (Who)*	*Completion Date*

1.6 Site Inspection Procedures

The Design-Builder shall provide a record of the monthly erosion control inspections in the following table as an appendix to the MS4 quarterly update report and provide a copy of all inspections performed.

Project Number	*Inspector*	*Contractor*	*Month 1 Insp. Date*	*Month 2 Insp. Date*	*Month 3 Insp. Date*

1.7 Post-Construction Stormwater Management and Green Infrastructure

The Design-Builder shall provide the inspection forms of the GDOT accepted Post Construction Stormwater management structures within the Project area as an appendix to the MS4 quarterly update report and provide a summary utilizing the table below and include in the MS4 quarterly update report.

BMP ID	***BMP Location (coordinates)***	***BMP Type***	***Inspection Date***

The Design-Builder shall report all maintenance performed on each structure utilizing GDOT Maintenance Activity Codes and summarize using the table below within the MS4 quarterly update report.

BMP ID	***BMP Location (coordinates)***	***BMP Type***	***Required Maintenance***	***Description of Actions Taken***	***Date Maintenance Performed***

1.8 Pollution Prevention/Good Housekeeping

The Design-Builder shall provide a summary of the number of complaints and any resolutions including the date and time received for the project area using the following table in the MS4 quarterly update report.

Inquiry ID	***Report Date and Time***	***Resolved Date and Time***	***Route/ Location***	***Description***	***Actions Taken***	***Complaint Origin (Who)***	***Status***

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 12-2

Requirements for the Drainage Design Report

Attachment 12-2: Requirements for the Drainage Design Report

1 General

The Drainage Design Report shall be submitted after NTP2 and shall be updated and re-submitted:

1. Whenever the approach to the design of the Drainage System changes significantly
2. With the Final Design Documents Submittal
3. With the RFC Design Documents Submittal
4. With the Record Design Documents Submittal

2 Drainage Data

The Design-Builder shall gather, compile, and include all data as specified below as a section in the Drainage Design Report.

2.1 Historic Flows and Regulations

The Design-Builder shall research, collect, organize, and include all items as specified below and include as a section in the Drainage Design Report:

1. Water quality regulations imposed by Governmental Entities.
2. National Wetland Inventory and any other wetland/protected waters inventories.
3. Local floodplain ordinances in effective FEMA floodplains.
4. Watershed boundaries, protected waters, areas classified as wetlands, floodplains, and boundaries between regulatory agencies (e.g., watershed districts and watershed management organizations).
5. Any restrictions on discharging stormwater to environmentally sensitive areas, navigable waters, or coastal zones.
6. Dates, durations, and locations of reported stormwater runoff issues within or adjacent to the Project Limits.
7. Events indicating historically inadequate drainage (evidence of flooding or citizen complaints of flooding).
8. Instances of erosion, siltation, blockage, or other maintenance problems associated with drainage.
9. Existing drainage facilities where there is evidence of or a likelihood of Hazardous Materials.
10. Other drainage or environmental studies including those included or referenced in the Provided Environmental Approvals.
11. History of flooding or roads overtopping.
12. Other data and regulations applicable to the design of the Drainage System.

2.2 Management Plans

The Design-Builder shall collect, research, compile, organize, and present all items listed here in a section of the Drainage Design Report:

1. Municipal drainage plans
2. Watershed management plans
3. Coastal zone management plans
4. Records of citizen concerns
5. Existing storm drain plans
6. Bridge hydraulic studies
7. Survey data
8. Data for all culverts, drainage systems, storm sewer systems, and bridges
9. Other records applicable to drainage within the Project Limits

2.3 Existing Drainage Facilities

The Design-Builder shall perform, collect, organize, and include the items below as a section in the Drainage Design Report or as an attached zip file for ease of transmission:

1. Video records and photograph components of the existing Drainage System within the Project Limits that the Design-Builder proposes to remain in place to determine condition, size, material, location, and other pertinent information.
2. The Design-Builder shall include with the drainage data the information collected with respect to existing drainage in the BECR described in TP Section 19.3.1.2 (Baseline Element Condition Report).

3 Drainage Design Records

The Design-Builder shall submit documentation showing the following:

1. Existing drainage areas and calculation of the estimated runoff to the Drainage System.
2. Drainage System data (location, type, material, size, and other pertinent information) in a suitable electronic format such as GIS.
3. A set of all drainage computations, both hydrologic and hydraulic, with all support data.
4. Hydraulic notes, models, and tabulations.
5. Bridge and culvert designs and hydraulic reports (each riverine bridge layout/design submitted at the same time as their corresponding H&H Study).
6. Pond designs, including a graphic display of treatment areas and maintenance guidelines for operation.
7. A correspondence file.
8. A Post-Construction Stormwater Report with a Post-Construction BMP Infeasibility Report as applicable.
9. Storm sewer drainage reports (if applicable) including Temporary and Final Drainage System layout with staged erosion control BMP location details.

10. Ponding limits layout conforming to the requirements in TP Section 12.3.1.1 (Allowable Headwater).

4 Storm Sewer System Analysis

The Design-Builder shall provide for Storm Sewer System analysis including:

1. Introduction that includes Project summary, Project Limits observations, Project Limits data feasibility.
2. Supporting calculations for cross drains, longitudinal drains, culverts, and other components of the Drainage System.
3. Supporting final and interim conditions calculations for hydrologic input, hydraulic calculations, gutter spread, construction stormwater, post-construction stormwater.
4. Drainage area maps with each storm drain inlet and its pertinent existing and proposed data, such as delineated drainage area, topographic contours, runoff coefficients/design curve numbers, times of concentration, land uses, discharges, velocities, and headwater elevations.
5. Detailed tabulation of all existing and proposed storm drains. This includes conveyance size and class or gauge; catch basin spacing/location and detailed structure designs. Tables shall include flow velocity within conveyance systems for the design and check storms.
6. Detailed calculations for riprap at outlet of existing and/or proposed pipes, cross drains and culverts.
7. Detailed calculations for ditches, including, capacity, flow velocity and lining material.
8. Specifications for the pipe bedding material and structural pipe backfill on all proposed pipes and pipe material alternates.
9. Storm drain profiles, including pipe size, length, type, height of fill, class/gauge, gradient, and design hydraulic grade line; and numbered drainage structures with station offsets from the roadway alignment and elevations.

5 MS4 Compliance and Data

The Design-Builder shall include annual report data covering the portion of GDOT's MS4 within the Project Limits 60 days prior to the end of each reporting period, as required in the MS4 Permit.

6 H&H Study

The Design-Builder shall include information required by TP Section 12.3.4 (FEMA Requirements) and TP Section 12.3.9 (Hydraulic Structures Culverts/Bridges).

13 STRUCTURES

13.1 General Requirements

This TP Section 13 governs the Design-Builder's Design and construction of all Structural Elements for the Project, including bridges; box culverts; support structures for signs, signals, and lights; retaining walls and any other structural elements described in the GDOT Bridge and Structures Design Manual (GDOT BDM) (defined as Structural Elements).

13.2 Administrative Requirements

13.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 13 in accordance with the Project Standards.

The Design-Builder may use GDOT Construction Standards and Details on the Project without updating to comply with LRFD standards.

The GDOT BDM requirements take precedence where AASHTO LRFD Bridge Design Specifications and GDOT BDM requirements contradict or conflict.

All permanent Structural Elements shall be considered Typical per LRFD Bridge Section 1.3.5.

Accelerated Bridge Construction not otherwise contemplated in the GDOT BDM and GDOT Project Standards and not otherwise specifically made allowable by this TP Section 13 shall be prohibited. The use of precast substructure elements shall be considered Accelerated Bridge Construction.

The Design-Builder shall not use the GDOT Construction Standard 9017R (Reinforced Concrete Approach Slab w/Asphalt inlay 30-foot Length) on new or replacement bridges. GDOT Construction Standard 9017R shall only be used when widening an existing bridge with an 8-inch paving rest. The Design-Builder shall use special detail 9017S-SD on bridges with an asphalt inlay but without curb and gutter. The Design-Builder shall use special detail 9017T-SF on bridges with an asphalt inlay and curb and gutter and sidewalk.

13.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

13.2.3 Federal Aviation Administration – Special Requirements

Structural Elements within the Project Limits are proximate to a navigation facility and shall be designed and constructed by the Design-Builder to ensure they do not interfere with the operations of said navigation facility, including signal reception.

The Design-Builder shall prepare an FAA Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) for the Project, including preparation and submission of related Form FAA 7460-1 to FAA. The OE/AAA shall include bridges (including any mountings); signing; lighting (including any new high mast poles); and construction equipment. The OE/AAA forms shall be submitted

no earlier than 18 months prior and no later than 180 days prior to planned construction activities.

13.3 Design Requirements

13.3.1 Design Parameters

Bridges crossing over riverine or tidal waters shall also comply with the requirements of TP Section 12 (Drainage).

For Structural Elements within the 500-year flood plain or that are crossing streams or other bodies of water, the Design-Builder shall evaluate and design all Structural Elements to account for the effects of scour due to the 500-year storm event. For example, bridges with elements in the 500-year flood plain shall be considered riverine for the purposes of applying bridge scour requirements of TP Section 12 (Drainage).

The Design-Builder shall incorporate the recommendations of the H&H Study described in TP Section 12 (Drainage) to ensure that the substructures, footings, and foundations of Structural Elements comply with the following requirements:

1. In lieu of requirements in LRFD 2.6.4.4 and LRFD 3.7.5 defining the design flood, provide a capacity to demand ratio of not less than 1.0 of all limit states based on the proposed graded groundline.
2. Provide a capacity-to-demand ratio of not less than 1.0 for AASHTO LRFD Bridge Extreme Event II for the 500-year scour.
3. Meet the minimum embedment requirements of the Project Standards and this TP Section 13.

For this Project, superstructure shall be considered the portion of the bridge above and including the bearings and related anchorages, and the substructure is the remaining portion of the bridge below the superstructure.

The Design-Builder shall not use any portion of an existing bridge in new bridge construction. Existing bridge elements shall not be used for shoring, falsework, or to support temporary works unless approved by the GDOT Office of Bridge Design and Maintenance in their sole discretion.

The Design-Builder shall not use culverts or bottomless culverts to replace existing bridges.

The Design-Builder shall place bents associated with new bridges and bridge replacements such that there is a minimum clearance between the top of stream bank and the nearest exposed edge of a bent. This minimum clearance shall be 5 feet for bents on exposed piles (pile bents) and 10 feet for bents on pile footings, spread footings, or caissons.

The Design-Builder shall offset bridge foundation a minimum of 10 feet from buried hydraulic box culverts to ensure no damage to adjacent structures.

If endrolls are used, the Design-Builder shall use a maximum 2:1 (H:V) slope normal to the end bent for endrolls at bridge end bents.

The Design-Builder shall offset wall foundation elements from buried hydraulic box culverts running generally parallel to the wall a minimum of 10 feet. The Design-Builder shall increase

this offset as necessary to ensure that future maintenance, up to and including full removal and replacement of the box culvert, does not impact the stability of the wall.

The Design-Builder shall design and construct all pipe culverts that run generally parallel to a wall and are on the non-roadway side of the wall to be watertight.

The Design-Builder shall be allowed to place bridge columns for new bridges within the roadway clear zone provided that appropriate roadside safety devices are provided, and the following requirements are met:

1. The Design-Builder shall place the center of columns for all overpasses located over limited access freeway medians on the centerline, unless otherwise specified in TP Table 13-1 (Bridge Requirements) or such placement would cause substandard stopping sight distance.
2. The Design-Builder shall use concrete barrier for protection of all columns within the median of limited access facilities regardless of if the column is in the clear zone.
3. The Design-Builder shall use concrete barrier for protection of all columns within the clear zone on the outside shoulder of limited access facilities.
4. The Design-Builder may use either guardrail or concrete barrier for protection of all columns within the clear zone of non-limited access facilities.
5. The Design-Builder shall meet the minimum required offsets from roadside safety devices per the requirements in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements). All roadside safety devices shall be offset from the columns such that any future widening, as required by this TP Section 13, would maintain the minimum offset requirements defined in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements).
6. The Design-Builder may use a special design detail type 25S modified barrier for the protection of bridge columns in a depressed median location provided that a 10:1 or flatter slope is provided between the edge of travel lane and the barrier for the length of the barrier and for a minimum of 60 feet in advance of required crash cushions.
7. The Design-Builder shall extend the roadside safety devices in advance of the column per the requirements in TP Section 11.3.7 (Roadside Safety Devices).
8. All columns shall be designed for collision loading regardless of the offset from roadside safety devices.

For existing bridge columns within the clear zone, the Design-Builder shall provide the appropriate roadside safety device per the following requirements:

1. The Design-Builder shall use concrete barrier for protection of all columns within the median of limited access facilities regardless of if the column is in the clear zone.
2. The Design-Builder shall use concrete barrier for protection of all columns within the clear zone on the outside shoulder of limited access facilities.
3. The Design-Builder may use either guardrail or concrete barrier for protection of all columns within the clear zone of non-limited access facilities.
4. If the minimum offset, per the requirements in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements) cannot be met, the Design-Builder shall be required to protect the column with a concrete barrier with a minimum height of 54 inches.

5. The Design-Builder shall extend the roadside safety devices in advance of the column per the requirements in TP Section 11.3.7 (Roadside Safety Devices).

The Design-Builder shall perform all Work for Structural Elements such that no impacts occur outside of Project Limits due to such Work, including deflection, settlement, and transfer of loads.

If expanded polystyrene (EPS) is added into Structural Elements, the Design-Builder shall ensure the EPS is high density polystyrene foam bedding material conforming to the following specifications:

1. Compressive strength: 60 psi minimum
2. Water absorption: 0.125 pounds-per-square-foot maximum
3. Oxygen index: 24 minimum
4. Meets the requirements of ASTM D-1621

At a minimum, 10 feet shall be provided between the top of bridge rail barrier at the traffic facing side to the right of way line or permanent easement for the construction and maintenance of the bridge. Any reduction in this offset shall be agreed to in writing with the GDOT Office of Bridge Design and the GDOT Office of Design Policy and Support before incorporating into the Final Design Documents.

13.3.1.1 Vertical Clearances

The Design-Builder shall provide minimum vertical clearances as stated in the GDOT BDM, unless noted otherwise in this TP Section 13. Vertical clearances shall be applied equally to bridge superstructures and bridge substructures, including any appurtenances and attachments. Vertical clearance requirements shall apply to the travel lanes and usable shoulders of all facilities. Vertical clearance requirements shall apply to all future required widening as defined in either this TP Section 13 or the Project Standards.

The Design-Builder shall submit a Temporary Vertical Clearance Request for all temporary vertical clearances below 15.75 feet. A Temporary Vertical Clearance Request is not required for retaining existing bridges with vertical clearance less than 15.75 feet if the existing vertical clearance is not being temporarily reduced.

Clearances in proximity to noise barriers shall be sufficient to facilitate maintenance of the noise barriers, up to and including removal of individual panels in-kind with the original construction method. In no case shall vertical clearances over concrete noise barriers be less than the height of the tallest panel in that section of noise barrier plus 2 feet. In no case shall vertical clearances over metal noise barriers be less than 1 foot. Vertical clearance of noise barriers shall be measured from the top of the post.

Clearance in proximity to sign support structures shall be sufficient to facilitate maintenance of the sign and sign support structure. At a minimum, the Design-Builder shall provide a 1-foot vertical clearance between any portion of the bridge structure and the top of the highest sign on the sign support structure assuming a future full loading of the gantry at that sign height.

Where a bridge passes over a pipe or box culvert, the bridge shall provide a minimum of 15 feet of vertical clearance over the culvert invert to facilitate maintenance of the culvert. The 15-foot

minimum vertical clearance shall apply for the length of the span over the culvert and shall be provided from the invert of the culvert to the outside edge of the bridge.

Where bridges pass over mixed-use trail systems, a minimum of 10 feet of vertical clearance shall be provided over the trail.

The minimum vertical clearance from bottom of lowest bridge beam to any obstruction shall be 1 foot unless a specific greater minimum has been established.

Vertical clearances and drainage profiles shall consider long-term deflection due to creep of prestressed or post-tensioned elements.

The Design-Builder shall design and construct all bridges such that there is a minimum of 3 feet of clearance between bridge superstructure elements and the final groundline. The Design-Builder may provide less clearance over endrolls.

For the purpose of defining minimum vertical clearance requirements, driveways shall be considered local roads.

13.3.1.2 Bridge Design Live Loads and Load Ratings

The Design-Builder shall ensure that each new bridge, full bridge replacement, and bridge widening or modification meets the load rating requirements for the design vehicle, as well as for all state legal live loads as defined in TP Attachment 13-1 (Legal Load Configurations). The Design-Builder shall add an operating rating factor of 1.10 for the H-Mod, Tandem, Timber, HS-Mod, 3s2, and Piggyback to the values defined in TP Attachment 13-1 (Legal Load Configurations.

All new and replacement bridges carrying routes designated as part of the STRAHNET network shall be designed for HET loading per the requirements in TP Attachment 13-5 (HET Loading Requirements). All interstates shall be considered part of the STRAHNET network. Interstate ramps or collector-distributors providing access to or from another STRAHNET facility shall be considered part of the STRAHNET network; all other interstate ramps and collector-distributors shall not be considered part of the STRAHNET network.

The Design-Builder shall submit the load rating calculations and AASHTOWare software files for GDOT approval as part of the Final Design Documents. The Design-Builder shall create Load Rating Templates.

13.3.1.3 Bridge Requirements

A listing of bridge structures for the Project and minimum requirements for each is set forth in TP Table 13-1 (Bridge Requirements). Existing bridges within the Project Limits not listed in TP Table 13-1 (Bridge Requirements) shall be retained with no modifications. The Design-Builder's responsibility for existing bridge repair is limited to the repairs listed in TP Table 13-1 (Bridge Requirements).

Where TP Table 13-1 (Bridge Requirements) denotes bridge removal (or replacement), such removal shall, at a minimum, include removal of all adjacent walls, slope pavement, and other Structural Elements and attachments, and shall include ensuring the site post-removal is safe, stable, and graded.

Table 13-1: Bridge Requirements

Bridge	***Bridge Location***	***Description***
Bridge No. 1	Bethlehem Road over Bethlehem Bottoms	New Bridge 16-foot shared-use path, 2-foot shoulder, two 12-foot travel lanes, 20-foot raised median, two 12-foot travel lanes, 2-foot shoulder, 6.5-foot sidewalk. The minimum length of the bridge shall span wetland 6, perennial stream 3, and the Henry County Water Authority sanitary sewer line. The minimum foundation offset from column to sanitary sewer line shall be 10 feet. The minimum vertical clearance over the Henry County Water Authority sanitary sewer line shall be 20 feet, as measured from the bottom of superstructure to the top of the finished grade. The Design-Builder shall assume a boring depth of 75 feet to rock.
Bridge No. 2	Bethlehem Road over I-75	New Bridge 16-foot shared-use path, 2-foot shoulder, two 12-foot travel lanes, 8-foot raised median, two 12-foot travel lanes, 2-foot shoulder, 6.5-foot sidewalk. The minimum span over I-75 northbound shall be 133 feet from front face of column to front face of column/abutment wall as measured perpendicular to the I-75 northbound travel lanes. An endroll shall not be permitted within the required 133-foot span length. The minimum span over I-75 southbound shall be 133 feet from front face of column to front face of column/abutment wall as measured perpendicular to the I-75 southbound travel lanes. An endroll shall not be permitted within the required 133-foot span length. The Design-Builder shall not be required to place the intermediate bent on the centerline of I-75. Intermediate bent may be anywhere in the I-75 median, provided required shoulder widths, stopping sight distance, and roadside safety device offsets are met. The minimum vertical clearance shall be 17.5 feet. The Design-Builder shall ensure that all bridge foundations, including any abutment walls, are a minimum of 5 feet below the pavement surface.
Bridge No. 3	I-75 northbound off ramp to Bethlehem Road over future CVL	New Bridge 8-foot shoulder, 16-foot travel lane, 12-foot shoulder. Bridge shall span the future CVL alignment with a typical section defined in TP Attachment 13-2 (CVL Typical), horizontal alignment as defined in TP Attachment 13-3 (CVL Alignment) and provide a minimum vertical clearance of 17.5 feet above the assumed vertical profile of the CVL as defined in TP Attachment 13-4 (CVL Profile).

Bridge	***Bridge Location***	***Description***
		The Design-Builder shall ensure that all bridge foundations, including any abutment walls, are a minimum of 8 feet below the assumed top of pavement for the CVL alignment. The Design-Builder shall design and construct all substructure elements based on the additional surcharge due to the CVL construction based off the assumed profile defined in TP Attachment 13-4 (CVL Profile) and the assumed typical section defined in TP Attachment 13-2 (CVL Typical). The Design-Builder shall assume an additional loading of 10 percent of the CVL surcharge. The Design-Builder may construct the additional fill under the bridge as part of the Project, but this shall not relieve the Design-Builder from providing for the additional loading.
Bridge No. 4 Existing Bridge Serial No.: 151-5108-0	Old Bethlehem Road over Bethlehem Bottoms	Existing bridge to remain The Design-Builder shall make no modifications to the existing bridge.

The inside and outside shoulder widths may be reversed on ramps to provide additional stopping sight distance. The combined shoulder width shall not be reduced below the combined shoulder width in TP Table 13-1 (Bridge Requirements).

The Design-Builder shall not construct bridges with bridge skews less than 45 degrees.

The Design-Builder shall be permitted superelevation transition on Bridge Number 3 (I-75 NB off ramp to Bethlehem Road over future CVL). The Design-Builder shall not be permitted superelevation transition on any other bridge.

The Design-Builder shall not locate the low-point of a vertical curve on a bridge or approach slab.

The Design-Builder's final bridge Plan acceptance is contingent on EOR response to GDOT review of the BFI.

13.3.2 Bridge Structure Requirements

13.3.2.1 Prohibitions and Restrictions

The Design-Builder shall not use:

1. Timber bridges
2. Masonry bridges
3. Multi-level bridges
4. Cored slabs
5. Voided slabs
6. Adjacent concrete box beams
7. Spread concrete box beams

8. Trusses
9. Structural plate arches
10. Intermediate or in-span superstructure hinges for bridges
11. Spans less than 30 feet in length
12. Steel girder decking
13. Composite sandwich decking
14. Carbon fiber reinforced polymer (CFRP) wrap and CFRP fabric
15. Rocker links
16. Clamping-based strengthening systems
17. Partial-depth precast concrete panels
18. PSC beams or Florida I-Beams (FIBs) made continuous for live load
19. PSC beams that utilize CFRP Strands
20. Segmental construction
21. Tunnels as defined in AASHTO LRFD Road Tunnel Design and Construction Guide Specifications

The Design-Builder shall be required to use a superstructure type selected from the following:

1. Prestressed concrete beams (PSC beams as further defined and described in GDOT BDM).
2. Reinforced concrete deck girders (RCDGs as further defined and described in GDOT BDM).
3. Steel beams or steel girders.
4. FIBs.
5. Post-tensioned concrete box girders.
6. Existing bridges being widened shall use the same beam type as the existing bridge and may use beam types not otherwise listed to match the existing bridge.

13.3.2.2 Joints and Bearings

The Design-Builder shall minimize the number of deck joints, both construction and expansion. Deck expansion joints may be spaced greater than 400 feet where so determined by the Design-Builder, including evaluation of implications to associated bearings and bearing pads, with confirmation by the EOR that long-term performance is not compromised. The Design-Builder shall not use open deck joints or unsealed deck joints.

Longitudinal expansion joints on structures shall not be located within a wheel path of travel-ways including turn lanes. Wheel paths shall be defined as shown in TP Attachment 8-3 (Wheel Path Definition).

Pot bearings shall not be used. Bearings shall be elastomeric type or disc type.

Superstructure beam and girder ends shall not be located directly underneath deck expansion joint openings, glands, or seals.

For all bents with disc bearings or bearings with sliding surfaces, the Design-Builder shall design the bridge to withstand, at a minimum, loading due to vertical jacking at each such bearing location to facilitate bearing replacement. At a minimum, a 5/8-inch vertical jacking shall be accommodated and a 1/8-inch differential vertical displacement between adjacent bearings during jacking shall be accommodated. Verification of design shall be carried out under strength limit state combinations. Jacking points shall be identified on the Plans. Design for bearing replacement in such cases shall be provisioned without the need for additional temporary support or foundation, without structure strengthening, and without impacts to traffic except for local traffic lane shifts.

Bridges shall be designed to not require restraint against superstructure uplift by tensile elements (e.g., tie-downs) for all limit states.

13.3.2.3 Diaphragms and Cover Plates

The Design-Builder shall be permitted to use concrete and steel diaphragms on a multi-span bridge provided that all diaphragms within a given span are the same material type and all other requirements for use of steel diaphragms are met. For bridge widenings, the Design-Builder shall match the type of diaphragm on the existing bridge. Where an existing bridge has both concrete and steel diaphragms, the Design-Builder may use either steel or concrete for widening the existing bridge. The Design-Builder shall assume all future travelways are existing when selecting diaphragm materials and shall follow the requirements in the GDOT BDM. Steel diaphragms shall not be used for FIB sizes smaller than FIB54.

Steel diaphragms, inclusive of cross frames, shall be hot dip galvanized. The Design-Builder shall use K-type cross frames where steel diaphragms are used with PSC beams, except that channel sections are acceptable for Type I Mod, Type II, and Type III AASHTO beams. The Design-Builder shall ensure that the cross frames for PSC beams include a horizontal member. Cross frames for steel girder bridges may be K-type or X-type cross frames. Steel cross frames for steel girder bridges shall include top and bottom horizontal members.

Cover plates shall not be used on new steel beams. The Design-Builder shall use a larger member size that does not require plates when widening existing bridges that have members with cover plates.

13.3.2.4 Steel Beams

ASTM A709 Grade 50W Steel and Grade HPS 70W Steel may be used for steel bridge superstructure. These steel types shall be treated as weathering steel when applying this TP Section 13 and TP Section 15 (Landscape and Hardscape Enhancements).

For new bridges with steel superstructures and where weathering steel is allowable for use per the GDOT BDM, the Design-Builder shall provide uncoated weathering steel to the maximum extent allowed herein and by TP Section 15 (Landscape and Hardscape Enhancements).

For weathering steel beams and girders that are not painted in their entirety along their full length, the Design-Builder shall place rubber drip bars wrapped transversely across the top and bottom of the bottom flange downslope at 7 feet in front of substructure elements to prevent water from running off the flange onto the concrete.

The width of a flange shall be constant for the entire length of the girder. At the field splice locations where the flange thickness is changed, the thicker flange shall provide a minimum 25

percent more area than the thinner flange. In addition, the thicker flange shall not be greater than twice the thickness of the thinner flange.

Transverse stiffeners shall not be placed on the exposed face of exterior beams or exterior girders.

13.3.2.5 Fracture Critical Members and System Redundant Members

Members that, according to AASHTO LRFD Bridge Design Specifications and as defined in this TP Section 13.3.2.5, are classified as Fracture Critical Members (FCM) shall not be used for bridges. Post-tensioned concrete straddle bent caps are not considered fracture critical members, as the post-tensioning strands provide internal redundancy. Steel I-beam straddles with three or more girders with discrete individual flanges at each beam are not considered fracture critical. The flanges may be bolted together with a connector plate and still be considered individual flanges.

Steel members shall be identified as Fracture Critical Members (FCM) or a System Redundant Member (SRM) in accordance with AASHTO Guide Specifications for Analysis and Identification of Fracture Critical Members and System Redundant Members (FCM/SRM). In addition, the following criteria shall also be used in Identifying an FCM:

1. Steel tension members shall include all steel members that have a portion under tension under any AASHTO LRFD Bridge Design Specifications limit state or under any GDOT BDM limit state.
2. All refined analyses in AASHTO FCM/SRM shall incorporate not less than the following:
    a. Any permanent locked-in effects from erection loads and secondary effects due to prestressing shall be considered.
3. All one-girder steel systems, all one-beam steel systems, any of which with any steel region in tension, shall be designated to contain fracture critical members. This shall apply regardless of the presence of multiple webs, secondary members, built-up regions, cable-supports, or other structural or internal member redundancy.
4. All two-girder/beam steel systems with any region in tension shall be considered to contain fracture critical member unless designated as a System Redundant Member in accordance with AASHTO FCM/SRM.
5. The following straddle bent designs shall be designated to contain fracture critical members:
    a. Steel box girder straddle bent caps.
    b. Steel I-beam straddles with less than three girders.

13.3.2.6 Box Girders and Accessibility

The Design-Builder shall ensure box girder superstructures and substructures are accessible without requiring a Lane Closure or an alignment shift of the traffic below. The Design-Builder shall design box girders and box beam pier caps with a minimum inside depth of 6 feet to facilitate interior inspection. The Design-Builder shall include a minimum access opening of 3 feet in diameter into all cells and between cells of the girders or pier caps to allow free flow of air during inspections. The outside access opening cover shall be hinged to the inside of the box girder and pier caps. The Design-Builder shall incorporate an electrical system (110 V) inside

the box girder and pier caps with lighting and power outlets. The electrical system shall be a dedicated system to power the lights capable of providing a minimum of 5 foot candles of illumination inside the enclosed structure every 10 feet. Outlets shall be capable of providing a minimum of 19 foot candles every 60 feet within the structure. Portable generators shall not be acceptable.

The Design-Builder shall install locks on all hatches and points of access. The Design-Builder shall furnish GDOT with keys for all locks.

The Design-Builder shall maintain a current chain-of-custody document for all locks and keys associated with the Permanent Works and shall hand over all keys, including any duplicates, to GDOT at Substantial Completion. The chain-of-custody document shall be executed by the Design-Builder and provided to GDOT at Substantial Completion. The Design-Builder shall establish a written key control protocol, prior to procurement of any locks for the Permanent Works, that ensures secure management and storage of keys and locks, and to establish which Design-Builder personnel shall have access to keys and locks. The chain-of-custody document and key control protocol shall be available at the Project Office for inspection at any time by GDOT. The Design-Builder shall immediately notify GDOT where access security may have been compromised (e.g., lost keys, unauthorized copies of keys discovered, chain-of-custody document not kept current, violations of Design-Builder key control protocol). The Design-Builder shall remedy the situation, including replacement of locks and issuance of new keys.

13.3.2.7 Painting

Where unpainted weathering steel is to be used for a bridge superstructure, regardless of local painting in the region of substructures pursuant to TP Section 15 (Landscape and Hardscape Enhancements), substructures and walls shall be wrapped with polyethylene sheeting during construction prior to bridge deck and barrier placement, to mitigate staining.

The Design-Builder shall adhere to the following conditions when using unpainted weathering steel on bridge superstructure:

1. Unless otherwise specified herein, weathering steel shall be painted with Paint System VII, with Federal Standard Color 30045 used for the topmost coat, or as approved by GDOT.
2. Paint beam ends at expansion joints and ends of bridge for a distance of 1.5 times the beam depth or a minimum of 10 feet. The entirety of girder region to be embedded in concrete, at a minimum, shall receive a prime coat from Paint System VII.
3. The painting scheme shall be aesthetically consistent (i.e., partial painting of beams do not present to the travelling public a pronounced visual difference when compared with the unpainted portion).
4. At intermediate substructures, steel girders shall be painted for a distance of 0.75 times the depth of girder or 10 feet, whichever is greater, outward and to each side from the centerline of the substructure (e.g., for a total length of girder not less than 1.5 times the depth of girder or 20 feet, whichever is greater).
5. Where end bents are surrounded by MSE walls: the region otherwise painted shall be further extended from the exterior face of the underlying MSE not less than 0.75 times the depth of girder or 10 feet, whichever is greater, outward.

6. Where bridge girder weathering steel is otherwise to be painted: the prime coat shall be wrapped not less than 1 inch on each side of the top of the top flange.

The Design-Builder shall paint steel girders, if they are not weathering steel, using a gray finish color that meets the requirements of Federal Standard (FS) 595C color number FS36622, or as approved by GDOT.

Where fascia beam and girder materials transition between steel and concrete, the entirety of all steel fascia girders for their full length, including diaphragms attaching to fascia girders in the adjacent bay and regardless of the use of weathering steel, shall be painted with paint system VII, with the topmost coat color matched to the coatings of the adjacent concrete beams and girders.

13.3.2.8 Field Splices

Field splices using bolted connections are permissible.

The following requirements shall be met for bolted field splices on steel girders:

1. Bolts shall be placed in double shear.
2. Contact surfaces of bolted parts shall meet class B requirements for slip critical joints in accordance with AASHTO LRFD Bridge Design Specifications.
3. Connections shall be designed as slip critical connections.
4. Bolt lengths shall be such that threads are excluded from the shear plane in the connection.
5. Minimum 7/8-inch diameter bolts shall be used.
6. All erection bolts shall be the same size.
7. All bolt heads used in the field splice shall be on the exterior/exposed face of the girder.
8. All permanent bolts shall be the same diameter at any given splice location, inclusive of all plate splices (e.g., flanges and webs).
9. The effect of the splice shall be accounted for in the vertical clearance when locating the splice. The vertical clearance at the splice location shall be reduced by the bottom flange splice plate, washer, nut, and free end of bolt (see American Institute of Steel Construction Steel Construction Manual “Entering and Tightening Clearance”).
10. All bolts shall be high strength in conformance to the requirements of ASTM F3125 (Type 3 for weathering steel).

13.3.2.9 Substructures

The following elements shall be prestressed (pre-tensioned or post-tensioned). Stresses shall meet the AASHTO LRFD Bridge Design Specifications tensile stress limits in prestressed concrete at AASHTO LRFD Bridge Design Specifications service limit states:

1. Concrete straddle bents in excess of 65 feet in length
2. Bent caps with spans in excess of 65 feet in length, as measured from centerline of column to centerline of column

Straddle bents less than 65 feet in length shall be concrete. Bent caps with spans less than 65 feet in length shall be concrete.

Substructures shall be located such that no portion of the buried substructure is directly above a buried hydraulic structure.

Strut-and-tie analysis shall be performed on hammerhead pier caps, dapped beam ends, corbels, and girders defined as deep beams.

Substructure elements near retaining walls shall be located to provide adequate clearance from wall footings and facilitate constructability of both structures. Columns shall be independent of walls such that the structural stability and capacity of one structure is not dependent on any aspect of the other structure. Columns may be placed within MSE backfill but shall not be coplanar with the MSE panels.

Substructures underneath deck expansion joints shall be sized such that superstructure elements are not located directly beneath the expansion joint openings, glands, and seals.

13.3.2.9.1 Straddle Bents

The design of all straddle bents shall use the following factors for ductility and operational importance as defined in AASHTO LRFD:

- Ductility η_D = 1.0
- Operational importance η_I = 1.0

The design of all straddle bents shall use the following factors and criteria for Redundancy as defined in AASHTO LRFD:

1. Concrete elements η_R = 1.10.
2. Steel elements η_R = 1.20.
3. Redundancy factors shall not be applied to construction loads.
4. Redundancy factors shall be applied to STR I, II, and IV as defined in AASHTO LRFD.
5. Redundancy factors shall be applied to substructure elements, including foundations if they are not a separate component.

13.3.2.10 Use of Florida I-Beam Shapes

FIB shapes may be used and shall be considered as PSC beams for the purposes of applying surface coating. The Design-Builder shall design FIBs in accordance with the GDOT BDM. In addition, the Design-Builder shall provide a minimum positive camber after all dead load deflections have occurred greater than or equal to 1/8 inch.

13.3.2.11 Miscellaneous Requirements

The Design-Builder shall blast-clean steel bridge components that require painting to a near white surface condition according to SSPC-10 and paint per GDOT Standard Specifications.

For new and replaced bridges, the Design-Builder shall ensure the paving rest is 12-inches wide. The paving rest for widened bridges shall match the width of the existing bridge. The Design-Builder shall provide details on the lowering of the moment slab segment adjacent to the bridge paving rest. The Design-Builder shall provide a bond breaker between the moment slab and paving rest.

The Design-Builder shall use Class AA-1 concrete pour strips between construction stages of bridges and between new portions and existing portions to remain for bridge widenings for all beam and girder types. The pour strip width shall be a minimum of 2.5 feet and designed to accommodate the necessary reinforcement, and for form removal if used.

The Design-Builder may provide less than 5 feet between bridge construction stages.

The Design-Builder shall groove the entire length of the bridges transversely. No portion of the bridge deck shall be opened to traffic unless that portion of the deck has been grooved. Sidewalk and shared-use path final surface shall not be grooved.

The Design-Builder shall be permitted to use full-depth precast deck panels.

The Design-Builder shall use shear connectors in the negative moment region of steel girders with the use of full-depth precast deck panels.

If using full-depth precast deck panels, the Design-Builder shall use Ultra High-Performance Concrete (UHPC) for closure pours. Closure pour widths shall be at least 6 inches.

The Design-Builder shall ensure deck drains and their attachments are 1-foot clear of all panel edges and joints. The Design-Builder shall not prestress or post-tension full-depth precast deck panels.

The Design-Builder shall not mount under-bridge lighting to any portion of existing bridge superstructures including decks, beams, and girders.

The Design-Builder shall make bridge superstructures, straddle bents, cross beams, joints, and bearings accessible for long-term inspection and maintenance. Open-framed superstructures shall be accessible with walkways or by use of a 24-foot extension ladder or an under-bridge Aspen A-62 inspection truck.

Fences on barriers shall not be used on bridges without sidewalks. Fences on parapets are required on bridges with sidewalks. Parapet and fence shall be treated to prevent staining from corrosion. Bases shall be grouted using non-shrink, non-metallic Portland cement grout in accordance with ASTM C1107, troweled to provide positive drainage.

Superstructure beams and girders with concrete deck slabs shall be designed as composite structures, assuming no temporary vertical supports will be provided for girders during placement of the permanent dead load.

Utilities shall not be located in deck slabs.

When walls, including GDOT Standard Barriers, are present adjacent to the roadway approach shoulder, the Design-Builder shall design and construct the bridge shoulder width to match the approach roadway. Where necessary, the bridge shoulder width shall be increased to provide for required sight distances. The Design-Builder shall provide a minimum of 250 feet between the end of any concrete barrier and the beginning of any bridge railing. If the concrete barrier would end less than 250 feet from the bridge railing, the concrete barrier shall be extended to the bridge railing.

Barriers, parapets, fencing, and railings shall not be considered structural members when determining capacity of the primary load carrying members of the superstructure system and shall not be considered to contribute to stiffness when evaluating for maximum deflection.

13.3.3 Bridge/Retaining Wall Foundations

Foundation types shall be selected from the following:

1. Driven Piles:
    a. Steel H piles.
    b. Prestressed concrete (PSC) piles.
    c. Metal shell piles.
2. Caissons (drilled shafts).
3. Micropiles may be used for walls but shall not be used for new bridge foundations.
4. Spread footings.

The Design-Builder shall base the foundation design on the recommendations of the accepted BFI or WFI report and the requirements of TP Section 8 (Geotechnical). The Design-Builder shall perform LRFD BFI and WFI for all walls and bridges to be constructed on the Project in accordance with TP Section 8.3.3.1 (Wall Foundation Investigation) and TP Section 8.3.3.2 (Bridge Foundation Investigation).

The Design-Builder shall include in the design the recommendations of the H&H Study described in TP Section 12.3.9.1 (Drainage Report for Hydraulic Structures) to ensure that spread footings, piles, and caissons/drilled shafts have the proper embedment below the scour line.

The Design-Builder shall protect slopes with riprap in accordance with the recommendations of the Drainage Design Report and as specified in this TP Section 13.

The Design-Builder shall place foundations of bridges and other structures, including leveling pads for walls, at sufficient depth to accommodate the requirements of TP Section 1.3 (Related Transportation Facilities).

Where micropile foundations are proposed for use, the service life for the micropiles shall be shown by the Design-Builder to be not less than 75 years.

13.3.4 Bridge Railing and Barriers

The Design-Builder shall ensure all new barrier systems used on the Project match one of the systems provided in Section 3.3.2.1.2 of the GDOT BDM.

Aesthetic treatment shall not be applied to the GDOT Standard Barriers on limited access facilities.

13.3.5 Retaining Walls

The Design-Builder shall minimize the use of retaining walls through the use of earthen embankments. Where earthen embankments are not feasible, the Design-Builder may use retaining walls. Where the GDOT Bridge and Structures Design Manual does not require a

larger offset, the Design-Builder shall provide a minimum of 10 feet between the top of wall/barrier at the traffic facing side and the right of way line or permanent easement for the construction and maintenance of walls. Any reduction in this offset shall be agreed to in writing with the GDOT Office of Bridge Design and the GDOT Office of Design Policy and Support before incorporating into the Final Design Documents.

Acceptable wall types are as follows:

1. MSE, provided that it shall not be used as structural foundations for bridges, shall not be subject to vertical loads from bridges, and shall not support spread footing abutment foundations. MSE stabilization elements (e.g., straps and mesh) shall be provisioned for not less than a 100-year service life within 100 feet of a bridge and not less than a 75-year service life otherwise.
    a. The maximum height of an MSE wall shall be 60 feet.
    b. The Design-Builder shall be permitted MSE panels up to 50 square feet.
2. Cast-in-place reinforced concrete, including GDOT Standard Barrier.
3. Soil-nail with cast-in-place concrete facing.
    a. Where used directly under existing bridge end bents the following requirements shall apply:
        1) The Design-Builder shall submit a monitoring plan for both horizontal and vertical deflection for a minimum of six months after wall completion.
            i. Horizontal and vertical deflections at the top of the wall during construction shall be limited to 0.005H (H is the height of the exposed wall). Deflections at six months after wall completion shall not exceed an additional 15 percent of deflection observed at wall completion.
        2) The Design-Builder shall ensure the wall will have minimum deformation/settlement during construction stages.
        3) Traffic facing-side of soil nail walls shall be a minimum of 10 feet from BFPR.
        4) The Design-Builder shall install a minimum of two digital inclinometers per wall. The inclinometer shall be capable of wirelessly transmitting the readings. The Design-Builder shall coordinate with the GDOT Office of Bridge Design for communication connections.
    b. Soil nail walls shall not be used under the end bents of new bridges.
    c. Other than directly under bridge end bents, soil-nail walls shall not be used in locations subject to live load surcharge, including from parking facilities.
    d. Permanent soil-nail anchorage systems shall be provisioned for not less than a 75-year service life, and shall at a minimum be provisioned with double corrosion protection systems (e.g., Class I as defined and discussed in FHWA-IF-99-015).
4. Soldier pile with cast-in-place concrete facing.
5. Permanent anchored walls (e.g., tie-back walls) with cast-in-place concrete facing. Anchorage systems shall be provisioned for not less than a 75-year service life, and shall at a minimum, be provisioned with double corrosion protection systems (e.g., Class I as defined and discussed in FHWA-IF-99-015).

6. Gravix walls:
    a. Gravix walls shall not be used under bridge end bents.
    b. The maximum height of a Gravix wall shall be:
        1) 40 feet on level backfill. Level shall be defined as 10 percent or flatter.
        2) 36 feet on sloping (steeper than 10 percent) backfill.
7. Secant and tangent pile walls – Design-Builder shall provide details as a Design-Builder Provided Specification.

The Design-Builder shall not use permanent metal walls (including bin walls and sheet pile walls), recycled material walls, concrete masonry unit (CMU) walls, or timber walls.

Where field conditions necessitate the use of load transfer platforms on walls to avoid excessive settlement/differential settlement, the Design-Builder shall use either piles, compacted aggregate piers, or rigid inclusions. The platform shall be either concrete, sand and geogrid, or sand and other geotextiles. Load transfer platforms shall be considered part of the foundation of the wall.

If pipe culverts are to extend through cast-in-place retaining walls, the Design-Builder shall install the pipe so that no wall expansion joints are located within two pipe diameters from centerline of the pipe.

A slip joint shall be detailed on either side of pipe openings and Utility openings where passing through MSE walls.

MSE wall footings shall not be placed directly on top of Utilities. Pressurized Utilities shall not be permitted to pass through the MSE wall panels.

The Design-Builder shall not use weep holes through the face of the retaining walls, except at the base of the walls. The Design-Builder shall locate weep holes through cast-in-place retaining walls no higher than 3 inches above proposed grade.

MSE permanent concrete wall facing panels shall have minimum structural thickness of 5.5 inches.

Transition between coping types along the length of a single wall shall interface with a smooth transition and not include blunt edges.

At wall bends, leveling pad elevations shall be set so that no MSE straps extend under any portion of leveling pad.

Where bridges are near walls, columns and other Structural Elements shall be located to eliminate conflicts with wall footing and facilitate constructability of both structures. Columns shall be independent of walls.

The Design-Builder shall provide a bond breaker between MSE wall coping and adjacent slope paving.

The Design-Builder shall design the top of wall to present a smooth profile with no sharp breaks, peaks, or valleys. Tops of walls shall be sloped to drain. For walls directly in front of bridge

abutments, the top of wall elevation shall be set 1 foot above the bottom of the adjacent end bent cap. Minimal intervals for elevations shown on Design Documents shall be provided at all locations of wall transitions (including angle breaks and bends) but in no case greater than 50 feet in the horizontal direction along the wall alignment. The design of walls shall take into account live load surcharges. The Design-Builder shall apply the appropriate live loading condition (vehicular, transit, etc.) to which each wall is subjected. These live load surcharges shall be based on AASHTO LRFD Bridge Design Specifications and, where applicable, the requirements of the transit owner and operator.

Where storm drain systems run longitudinally within MSE retaining wall earth reinforcement zones and where such run over or adjacent to soil nail or permanent anchor systems, the Drainage Design Report shall address potential risks, and mitigation for such shall be included within the design. Where a storm drain system lies north of the Fall Line, as defined in the GDOT BDM, such risks and mitigations shall consider leaking of deicing salt-laden water.

The Design-Builder may use a permanent shotcrete fascia in lieu of a cast-in-place fascia on soil nail or rock anchor walls provided:

1. The Design-Builder submits a Design-Builder Provided Specification for the use of shotcrete fascia.
2. The shotcrete fascia shall meet the aesthetic requirements of TP Section 15 (Landscape and Hardscape Enhancements) but may be carved and stained. The aesthetic finish shall be considered an embellishment and subject to the requirements in TP Section 15 (Landscape and Hardscape Enhancements).

Where a new wall will be constructed offset from an existing wall, the Design-Builder shall:

1. Design and construct the new wall to be structurally independent from the existing wall; or
2. Certify the wall system as a whole is structurally sound and provides for the required service life of the new wall.

In all cases the Design-Builder may bury the existing wall in place, subject to the minimal removal requirements in TP Section 10.4.2 (Removal of Abandoned Elements).

13.3.5.1 Walls Adjacent to Water

13.3.5.1.1 Impounded Waters (Lakes and Ponds)

Where normal pool is not formally designated, the Design-Builder shall use the ordinary high-water mark (OHWM) in meeting the requirements in Section 8.3.8 (Walls Adjacent to Water) of the GDOT Drainage Manual for Walls Adjacent to Impounded Water.

All required rip rap shall be Type 1 rip rap and shall be a minimum of 2 feet thick.

13.3.5.1.2 Streams

Where bankfull is not clear based on topography, the Design-Builder shall use the OHWM in meeting the requirements in Section 8.3.8 (Walls Adjacent to Water) of the GDOT Drainage Manual Section for Walls Adjacent to Streams. The requirements of Section 8.3.8 of the GDOT Drainage Manual for walls adjacent to streams apply to relocated streams as well.

13.3.5.1.3 Drainage Channels

Where a bridge column and any open drainage channel (ditch, stream, etc.) are located within 50 feet of a wall, the Design-Builder shall perform a 2D flow analysis for the channel to determine the 100-year flood scour potential. The Design-Builder shall provide countermeasures to address the potential scour. Countermeasures shall include armoring solutions. The Design-Builder shall use one of the following software to complete the 2D flow analysis:

1. Aquaveo SMS-SRH2D
2. HEC-RAS 2D
3. Other software as approved by GDOT Office of Bridge Design and Maintenance

13.3.5.2 Riprap Protection Quantities

The Design-Builder shall show riprap protection, as required by this TP Section 13, in the Design Documents.

The retaining wall layout shall address slope maintenance above and below the wall and at the ends of the wall, including erosion countermeasures.

13.3.5.3 Utilities Near MSE Walls

Buried utilities shall not be proposed within the limits of the reinforced backfill of an MSE wall except for a wall that exists only to surround a bridge abutment and other utility placement requirements force utilities to be attached to the bridge being supported by the abutment. In such case that a utility is allowed to be placed in the reinforced backfill of an MSE wall, it shall be placed within a casing that extends a minimum of 10 feet beyond the limits of the reinforced backfill.

Buried utilities running longitudinal to the face of an MSE retaining wall shall not be retained or proposed within the foundation of the wall. The foundation of the wall shall be defined as the footprint of the reinforced backfill plus a 1:1 slope extending downward from that footprint. Excavation for the placement of proposed longitudinal utilities outside the reinforced backfill and wall foundation shall not encroach on a 5-foot buffer at the face of the wall and back of reinforced backfill.

Buried utilities running transverse to the face of an MSE retaining wall shall be within a casing that extends a minimum of 10 feet beyond the face of the MSE wall. If an MSE wall is being placed above an existing utility, the settlement and differential settlement capacity of the utility shall be calculated to ensure that no damage occurs to the utility due to MSE wall induced settlement. Encasement requirements do not replace the requirement to analyze settlement.

All buried utility casing under an MSE wall shall have a minimum of 2 feet of vertical clearance between the bottom of the reinforced backfill and the top of the utility casing.

13.3.6 Aesthetics

Aesthetic treatment of bridges, retaining walls and noise barriers shall comply with TP Section 15 (Landscape and Hardscape Enhancements).

No exposed conduits shall be allowed on bents, columns, bridge beams, overhangs, or any other visible surface, except lighting or ITS conduits may be attached to non-fascia and non-

traffic side of bent columns and caps. Drain pipe exposure shall be minimized from public view. Utilities, including lighting and ITS, shall not be attached to beams.

The Design-Builder shall construct spans on each individual bridge with the same superstructure type over both directions of traffic (e.g., the Design-Builder shall not span one direction with concrete and the other direction with steel). See TP Section 15 (Landscape and Hardscape Enhancements) for additional requirements on use of fascia beams.

For purposes of applying bridge surface finishes and coatings per the Project Standards, all bridge spans not over railroads shall be considered as a bridge over traffic artery.

13.3.7 Drainage Structures

The Design-Builder shall account for maximum anticipated loadings in developing the design of drainage structures.

New drainage structures and new extensions shall not use step-down design. Extensions of existing pipe and box culverts shall be designed for the maximum fill height on the culvert regardless of whether the maximum fill height is on the existing culvert or the extension.

The Design-Builder shall consider energy dissipators, if used, as Structural Elements.

Where the Design-Builder increases loads, modifies load pattern, or modifies load distribution on an existing box culvert, the Design-Builder shall verify the existing box culvert is structurally sufficient to withstand the new loading. If the box culvert is not structurally sufficient, the Design-Builder shall either modify the box culvert or replace the section of box culvert subject to a revised loading. Along with the certification of the box culvert being structurally sufficient per the requirements in TP Section 12.3.2 (Use of Existing Drainage Facilities), the Design-Builder shall submit additional analysis documenting the structural capacity of the box culvert including assumed concrete thickness and reinforcement details. The analysis shall include an assessment of the structural and material properties of the existing culvert.

The Design-Builder shall not use an in-ground structural bridging, including the use of relief platforms/slabs, over the existing structure box culverts.

Where the Design-Builder either modifies load patterns or load distributions on an existing Drainage System pipe, the Design-Builder shall verify existing conditions, including any inspections, any testing, and any other measures deemed necessary by the EOR, for the impacted and adjoining regions of the Drainage System pipe, including any applicable construction loading and surcharges. Such verifications and any resulting modifications shall be as per AASHTO Standard Specifications for Highway Construction using a live loading of not less than HS-20.

13.3.8 Gantry and Structural Supports

The Design-Builder shall determine foundation types and design sign foundations based on geotechnical investigations described in TP Section 8 (Geotechnical).

The Design-Builder shall design overhead sign supports to, at a minimum, accommodate the maximum sign loading as defined in the GDOT Signing and Marking Design Guidelines. The Design-Builder shall use Type I (bridge overhead), Type III (butterfly overhead), Type IV (combination overhead), or Type VIII (butterfly overhead) structures in accordance with TP

Attachment 1-4 (Project Standards). The Design-Builder shall not use Type II sign (cantilever overhead), Type V sign (cantilever overhead), or Type VII (bridge mounted) structures.

The Design-Builder shall not mount support columns for Type I, III, IV, or VIII overhead sign structures or traffic signal mast arms to any portion of new bridge superstructure or to any portion of an existing bridge superstructure. Where an overhead sign structure or mast arm is required to be placed on a bridge, the Design-Builder shall mount it either on the bridge substructure directly, such as the concrete bent cap, or on a column and foundation separate from the bridge entirely. For gantries mounted to the bent cap, the Design-Builder shall design the bridge bent for the additional loads and forces the sign structure will induce on the bridge substructure, including dead load, ice load, wind load, and vibration. The Design-Builder shall develop loads in accordance with the Project Standards. For a sign structure or mast arm mounted to a foundation that is independent from the bridge, the Design-Builder shall design the sign foundation in accordance with the Project Standards.

The Design-Builder shall not mount overhead sign structure or traffic signal mast arms to retaining walls, except the Design-Builder may mount support columns for Type I, III, IV, or VIII overhead sign structures or traffic signal mast arms to cast-in-place reinforced concrete retaining walls provided that the wall, footing, and foundation are designed for the combined loading in accordance with the Project Standards. Portions of other wall types may be substituted with cast-in-place reinforced concrete and related footing and foundation for the purpose of sign supports.

The Design-Builder shall, as part of the Final Design Documents, submit the design of the structural support for overhead signs to GDOT.

Type III and Type VIII structures shall be provisioned with equal square footage of sign on each side of the center structure support, however all supporting elements shall also be designed for a fully unbalanced load case.

The Design-Builder shall use socket weld connections for the base plates of all sign gantries.

13.3.9 Reserved

13.3.10 Preliminary Bridge Plan Layouts

As part of the Preliminary Design Documents, the Design-Builder shall prepare and submit Preliminary Bridge Plan Layouts in accordance with the GDOT BDM guidelines.

Additionally, the Preliminary Bridge Plan Layouts shall include:

1. A typical section with:
    a. The center-to-center spacing of girders
    b. Overhang or distance from outside edge of slab to center of exterior girder
    c. Cross slope of the deck
    d. Deck thickness between girders and deck thickness at the centerline of girder measured from the top surface of deck to top of the flange
    e. Barrier location, height, and width
    f. Gutter-to-gutter and out-to-out dimensions

g. Location of the profile grade

2. Construction staging plan including:
   a. Temporary barrier locations
   b. Lane configuration, including lane widths, for each construction stage
   c. Description of steps in each stage
   d. Calculations evidencing adequate stability and capacity-to-demand greater than 1.0 during construction staging for all AASHTO LRFD Bridge Design Specifications and GDOT BDM limit states
3. Incorporation and denotation of accommodations for future projects
4. Initial spread calculations and a statement on if deck drains will be required

13.3.11 Bridge Demolition Plan

The Design-Builder shall prepare and submit a Bridge Demolition Plan including descriptions of the demolition and removal methods. The Design-Builder shall provide, at a minimum, the following information in the plan:

1. A demolition schedule.
2. Location and method of protection of Utilities.
3. Phasing and sequence of operations indicating construction equipment to be used for each operation being performed.
4. Location and weights of equipment on the structure during demolition.
5. Weights of equipment/materials to be staged/stockpiled on the structure. The Design-Builder shall demonstrate that the existing structure, in its partially demolished condition, is capable of supporting the weight of equipment and materials proposed to be placed on the structure during demolition.
6. When and how critical sections of the structure are to be removed (i.e., fracture critical components, arches, rigid frames) and analysis, as required, to confirm the structural stability of partial or complete parts of the structure being demolished.
7. Method of providing temporary support for elements that will become unstable as a result of the proposed demolition sequence and supporting calculations.
8. Calculations, as required above, to analyze the existing structure and temporary support conditions, prepared by a Professional Engineer.
9. Methods of preventing debris, tools, or other materials from falling into waterways, onto roadways, and onto other areas under the bridge.
10. Methods of protection and safety for the general public, inspection personnel, and construction personnel.
11. Methods of protection for existing elements and structures adjacent to the existing structure.
12. Blasting plan, per requirements in TP Section 8.5.1 (Blasting).
13. Mudline survey information.

14. Schedule and procedure for providing pre and post side-scan sonar surveys. The Design-Builder shall see TP Section 9.4.3 (Side-Scan Sonar Surveys) for requirements.
15. Conformance with applicable permits and Environmental Commitments, as described further in TP Section 5 (Environmental).
16. Additional information as required by Governmental Entities.

The Design-Builder shall not use portions of new bridge to support portions of existing bridge during demolition.

The Design-Builder shall not drop debris or portions of the existing bridge into the water for recovery.

The Design-Builder shall not proceed with demolition Work until the Bridge Demolition Plan has been reviewed and accepted by GDOT. The Design-Builder shall hold a pre-activity meeting at the site prior to starting demolition.

13.4 Construction Requirements

13.4.1 General Construction Requirements

All welding shall be performed by certified welders with current welding certification cards issued by the GDOT Office of Materials and Testing. The Design-Builder shall only use E70XX (excluding E7014 and E7024) low hydrogen electrodes for manual shielded metal arc welding.

Where there is a risk of disturbance to adjacent buildings and Utilities during demolition or modification of existing bridges, the Design-Builder shall describe the approach in the Bridge Demolition Plan.

Items field installed in concrete elements shall use reinforcement and strand locating devices and stop-box drilling equipment to ensure protection of reinforcing steel, prestressing steel, and concrete inserts.

Temporary Works supporting a permanent structure shall provide a capacity-to-demand ratio of not less than 1.0 for AASHTO LRFD Bridge Extreme Event II during the 100 year flood event.

The Design-Builder shall be allowed a tolerance of +/- 0.25 inches in the construction of the top of cap elevation at bearing locations from the approved RFC Plans.

The maximum plumb variation for a PSC girder after deck pour shall be 1/8 inch per foot of height. If the tolerance is exceeded, the engineer shall provide revised girder calculations accounting for the out-of-plumb section to demonstrate that the girder meets all AASHTO LRFD Bridge Design Specifications girder design requirements.

13.4.2 Bridge Drainage During Construction

During staged bridge construction, the Design-Builder shall contain the design storm gutter spread to the same requirements as the final design.

13.4.3 Final Bridge Inspection Prior to Opening / Substantial Completion

GDOT will inspect all bridges constructed prior to Substantial Completion. The Design-Builder shall submit the load rating calculations and AASHTOWare software files for GDOT's approval based on the as-built bridge plans ahead of the GDOT inspection of the new bridge.

As part of the Project Schedule, the Design-Builder shall provide to GDOT an overall schedule of completion for each structure in accordance with the Construction Phasing and Staging Plan and coordinate an inspection schedule with GDOT that will meet the Substantial Completion Date.

13.5 Submittals

The Design-Builder shall submit all studies, calculations, and Plans required for the stage of Submittal in accordance with TP Attachment 2-2 (Basis of D&C Requirements).

With respect to structural requirements described in this TP Section 13, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 13 Attachments

Attachment No.	*Title*
Attachment 13-1	Legal Load Configurations
Attachment 13-2	Reserved
Attachment 13-3	CVL Alignment
Attachment 13-4	Reserved
Attachment 13-5	HET Loading Requirements

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 13-1

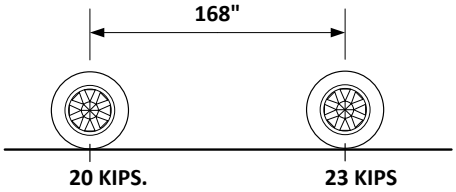
Legal Load Configurations

Table 1.1 Program Default Rating Vehicles

Truck	Gross Weight (Tons)	Tare Weight (Tons)	(Steer) Axle 1 (Kips)	Distance (ft)	Axle 2 (Kips)	Distance (ft)	Axle 3 (Kips)	Distance (ft)	Axle 4 (Kips)	Distance (ft)	Axle 5 (Kips)
H-20	20	n/a	8	14	32						
HS-20	36	n/a	8	14	32	14	32				
H-Mod	21.5	5	20	14	23						
Tandem	33	7	20	15	23	4	23				
Timber	37.1	10	11	10	23	21.8	23	4.2	17.2		
HS-Mod	30	10	14	14	23	14	23				
3S2	40	15	11.2	11	17.2	4	17.2	32	17.2	4	17.2
Piggy back	40	20	12	14	17	28	17	10	17	28	17
EV2	28.75	n/a	24	15	33.5						
EV3	43	n/a	24	15	31	4	31				

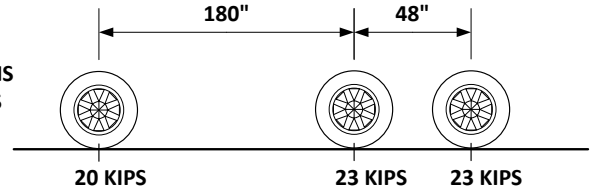
H20-MOD

GVW = 21 TONS
TARE = 5 TONS

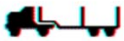


TANDEM

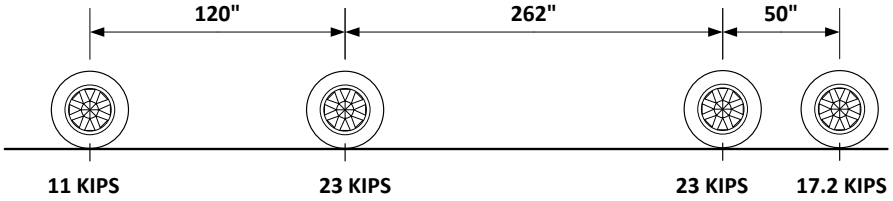
GVW = 33 TONS
TARE = 7 TONS



TIMBER

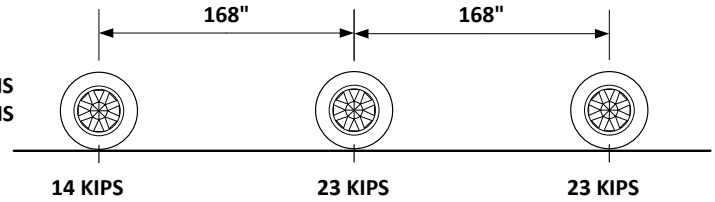


GVW = 37 TONS
TARE = 10 TONS



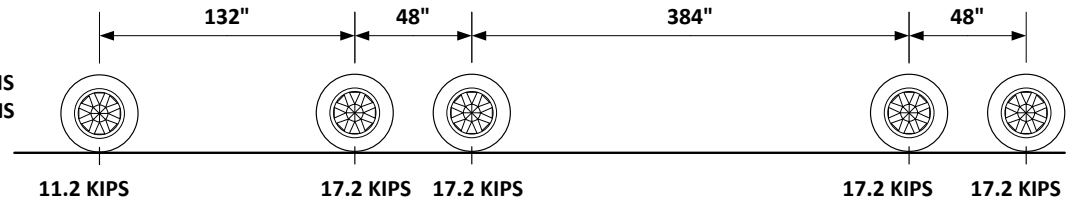
HS20-MOD

GVW = 30 TONS
TARE = 10 TONS



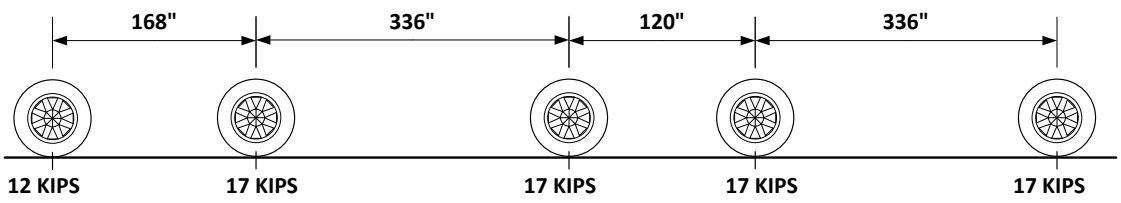
3S2

GVW = 40 TONS
TARE = 15 TONS



PIGGYBACK

GVW = 40 TONS
TARE = 20 TONS



Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 13-2

Reserved

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 13-3

CVL Alignment

Horizontal Alignment Review Report

Report Created: Thursday, April 17, 2025
Time: 3:30:34 PM

Project: Default
Description:
File Name: c:\pw_work\arcadispw01\christopher.seckinger\dms63043\0017182_WORKING_CS.dgn
Last Revised: 4/17/2025 15:24:43

Note: All units in this report are in feet unless specified otherwise.

Alignment Name: ALGN711_NORTH_B
Alignment Description:
Alignment Style: Alignment\MAIN_P_CONSTCL 500

		Station	Northing	Easting
Element: Linear				
START	( )	23371+75.00	1225741.7985	2306767.5732
PC	( )	23377+39.70	1226244.4230	2306510.1632
Tangential Direction:		N27°07'06.34"W		
Tangential Length:		564.70		
Element: Circular				
PC	( )	23377+39.70	1226244.4230	2306510.1632
HPI	( )	23379+22.25	1226406.9015	2306426.9529
CC	( )		1219634.8705	2293604.2028
PT	( )	23381+04.78	1226567.2337	2306339.6785
Radius:		14500.00		
Delta:		1.44° Left		
Degree of Curvature (Arc):		0.40°		
Length:		365.07		
Tangent:		182.55		
Chord:		365.06		
Middle Ordinate:		1.15		
External:		1.15		
Tangent Direction:		N27°07'06.34"W		
Radial Direction:		N62°52'53.66"E		
Chord Direction:		N27°50'22.96"W		

Radial Direction:		N61°26'20.43"E		
Tangent Direction:		N28°33'39.57"W		
Element: Linear				
PT	( )	23381+04.78	1226567.2337	2306339.6785
PC	( )	23395+69.11	1227853.3696	2305639.5899
Tangential Direction:		N28°33'39.57"W		
Tangential Length:		1464.33		
Element: Circular				
PC	( )	23395+69.11	1227853.3696	2305639.5899
HPI	( )	23397+48.65	1228011.0586	2305553.7543
CC	( )		1234785.7328	2318375.0655
PT	( )	23399+28.17	1228170.8245	2305471.8493
Radius:		14500.00		
Delta:		1.42° Right		
Degree of Curvature (Arc):		0.40°		
Length:		359.06		
Tangent:		179.54		
Chord:		359.05		
Middle Ordinate:		1.11		
External:		1.11		
Tangent Direction:		N28°33'39.57"W		
Radial Direction:		N61°26'20.43"E		
Chord Direction:		N27°51'05.76"W		
Radial Direction:		N62°51'28.05"E		
Tangent Direction:		N27°08'31.95"W		
Element: Linear				
PT	( )	23399+28.17	1228170.8245	2305471.8493
PC	( )	23406+89.82	1228848.6012	2305124.3832
Tangential Direction:		N27°08'31.95"W		
Tangential Length:		761.65		
Element: Circular				
PC	( )	23406+89.82	1228848.6012	2305124.3832
HPI	( )	23409+97.12	1229122.0639	2304984.1910
CC	( )		1232867.7282	2312964.1994
PT	( )	23413+04.18	1229404.6302	2304863.3937
Radius:		8810.00		
Delta:		4.00° Right		

Degree of Curvature (Arc):	0.65°
Length:	614.36
Tangent:	307.30
Chord:	614.23
Middle Ordinate:	5.35
External:	5.36
Tangent Direction:	N27°08'31.95"W
Radial Direction:	N62°51'28.05"E
Chord Direction:	N25°08'40.09"W
Radial Direction:	N66°51'11.77"E
Tangent Direction:	N23°08'48.23"W

Element: Linear

PT	( )	23413+04.18	1229404.6302	2304863.3937
END	( )	23413+65.38	1229460.9062	2304839.3357
Tangential Direction:		N23°08'48.23"W		
Tangential Length:		61.20		

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 13-4

Reserved

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 13-5

HET Loading Requirements

Attachment 13-5: HET Loading Requirements

Where bridges are designed for HET Loading, the Design-Builder shall:

1. In addition to other required design load scenarios, the Design-Builder shall design for an owner-specified vehicle with two fully loaded conditions: “300K on 9 axels” and “300K modified” as shown in Figure 1 (HET Axel Loading and Spacing) and Figure 2 (HET Wheel Spacing).
2. Place a single HET vehicle on the bridge to produce maximum load effects.
3. Indicate in the Plans “OWNER-SPECIFIED SPECIAL DESIGN VEHICLE – HET 300K AND 300K MODIFIED (ONLY VEHICLE ON BRIDGE)”.
4. Apply the multiple presence factor for single lane loading in AASHTO when evaluating bridges for HET loading.
5. Apply the criteria for live load deflection in AASHTO when evaluating bridges for HET loading.
6. Utilize only Strength II Limit State when evaluating bridge for owner-specified HET loading.

Figure 1: HET Axel Loading and Spacing

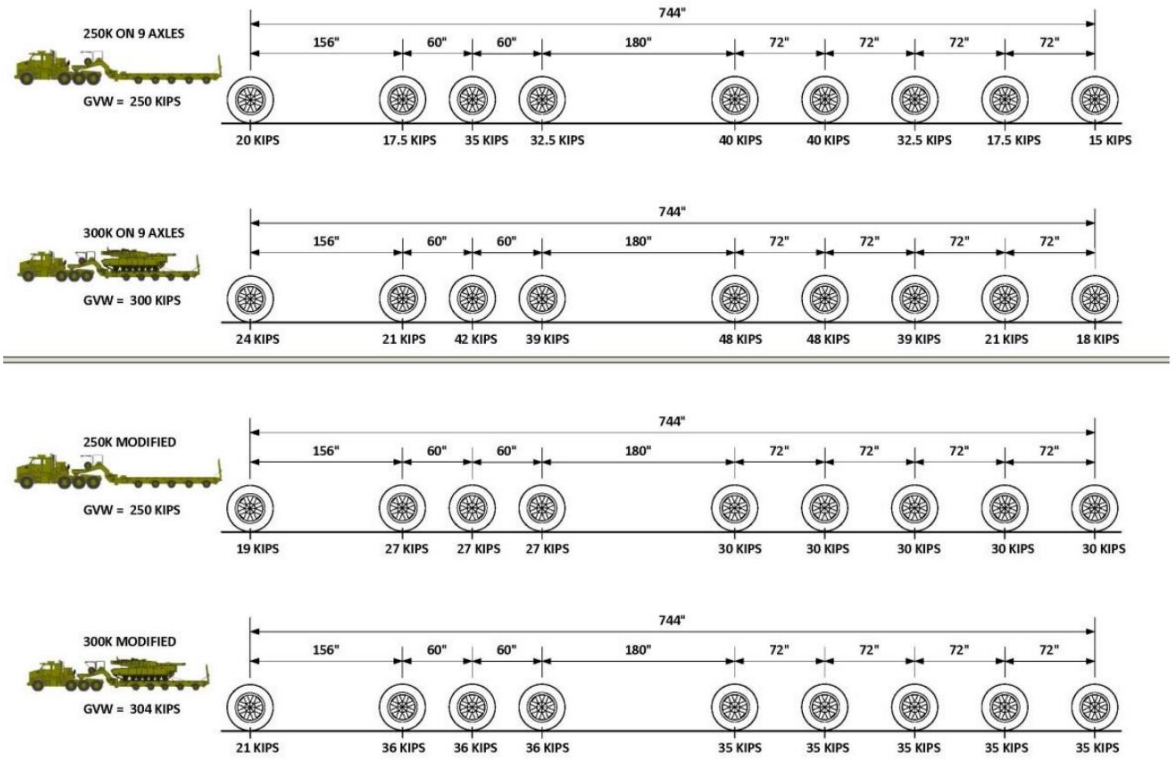
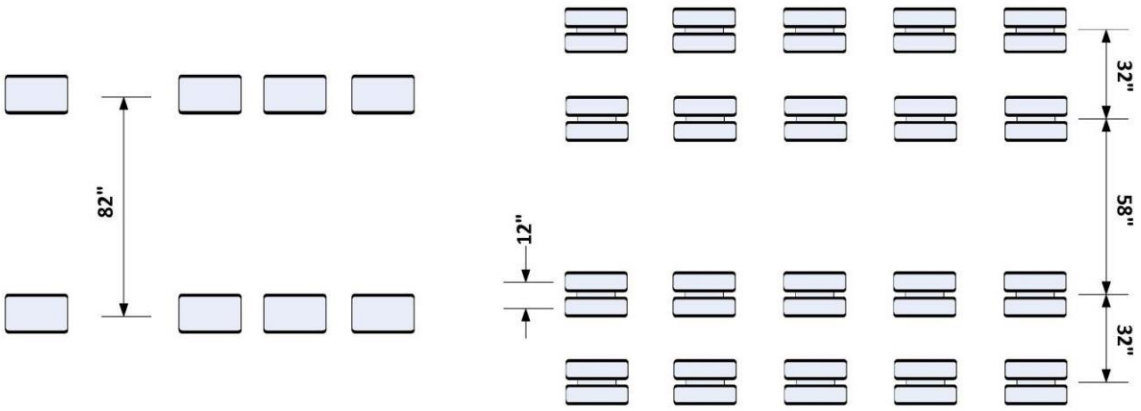


Figure 2: HET Wheel Spacing



14 RAILROAD

14.1 General Requirements

This TP Section 14 defines and sets forth the requirements of the Railroad Work impacting Norfolk Southern Corporation.

Each Railroad or its authorized representative shall have final authority in all matters affecting the safe maintenance of railroad traffic and facilities including, but not limited to, determining impacts to Railroad ROW; determining adequacy of structures and foundations supporting railroad tracks and/or embankments; approving procedures for Work to be performed over its tracks; and determining the necessity for protective services during construction.

14.2 Administrative Requirements

14.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct Railroad Work in accordance with the Project Standards.

14.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

14.2.3 Records and Documents

The Design-Builder shall maintain a record of all negotiation, coordination, design, and construction efforts in relation to the Railroad Work including correspondence, meeting minutes, negotiations, estimates including those from the Railroad for their Work, Plan submissions, design comments, agreements, inspection records, invoices, and change orders. These records shall be provided to GDOT.

All such records shall be kept, maintained, and made available for inspection by GDOT and each of their respective representatives and legal counsel in accordance with DBA Section 20.1 (Maintenance and Inspection of Books and Records).

14.2.4 Schedule and Notification

The Design-Builder shall include and incorporate all Railroad Work items into the Project Schedule including the schedule for obtaining all required approvals, permits, and agreements associated with the Railroad Work, both as specified in the DBA Documents and as anticipated under Railroad Construction Agreements by reference to forms and other documents in the public domain. Prior to the Design-Builder's initial request to begin Railroad Work, the Design-Builder shall furnish to the Railroad and GDOT relevant portions of the Project Schedule, for all Railroad Work in sufficient detail for the Railroad to approve the start of the Work and shall provide the Railroad with relevant updates to the Project Schedule, as the same are made pursuant to TP Section 2 (Project Management).

Prior to commencement of Railroad Work, or once Railroad Work has begun, if commencement of such Railroad Work is delayed, or once begun is then suspended at any time or for any reason, the Design-Builder shall give the Railroad advance notice, as anticipated to be required in accordance with the Railroad Standards or Railroad Construction Agreement, as applicable, before resuming the Railroad Work. Such notices shall include sufficient details of the proposed

Railroad Work to enable the Railroad to determine if and the extent of any protective services that will be required. If protective services are required, no Railroad Work shall be undertaken until the railroad personnel are present at the job site.

The Design-Builder shall anticipate it will take approximately 90 days from Railroad approval of any final design with respect to Railroad Work until Railroad Work that involves construction or related activities that are subject to such design may commence.

14.3 Railroad Agreements

GDOT will acquire necessary property rights in the Railroad ROW following the Design-Builder obtaining final design approval in respect of the Railroad Work from the Railroad. However, The Design-Builder shall obtain all necessary temporary rights of access for the Railroad Work, as described in this TP Section 14.3.

14.3.1 Norfolk Southern Corporation Railroad Standards and Agreements

The Design-Builder shall comply with all applicable Norfolk Southern Corporation Railroad Standards. The Design-Builder shall obtain approval for land access and Railroad Work from Norfolk Southern Corporation. Information regarding the process and applications and Railroad Standards is available online at the website/portal: Public Projects | Norfolk Southern.

In addition to any Railroad Standards provided by the Railroad or located online, the following Railroad Standards are included in TP Attachment 1-4 (Project Standards):

1. Public Project Manual — For Projects Which May Impact Norfolk Southern Railway Company
2. Norfolk Southern — Special Provisions for Protection of Railway Interests
3. Specifications for Pipeline Occupancy of Norfolk Southern Corporation Property
4. Specifications for Wireline Occupancy of Norfolk Southern Corporation Property

Notwithstanding the Order of Precedence in DBA Section 1.2 (DBA Documents; Order of Precedence), the Design-Builder shall comply with the highest standard, quality, manner, quantum or method of performance specified for Railroad Work in any of the DBA Documents.

14.3.1.1 Preliminary Engineering Agreement

The Design-Builder shall enter into a Preliminary Engineering (PE) Agreement with the Railroad in order to proceed with the development and review of plans (“Railroad PE Agreement”). The Railroad PE Agreement will be in accordance with the forms included among the Railroad Standards. Pursuant to the Railroad PE Agreement, it is anticipated that, among other things, the Design-Builder shall prepare 60 percent, 90 percent, and final plans (as defined in the applicable Railroad Standards) for Railroad review and comment.

In the event an amendment to the Railroad PE Agreement is requested by the Railroad, GDOT may in its sole discretion and upon request of the Design-Builder provide assistance as may be needed (e.g., providing information or drawings) in support of the preparation and negotiation of such amendment.

Prior to GDOT entering into a Railroad Construction Agreement with the Railroad, if required and as provided for in TP Section 14.4 (Railroad Construction Agreement), the Design-Builder

shall submit the final design documents with respect to Railroad Work in accordance with the Railroad Standards to the Railroad for approval.

14.3.1.2 Right-of-Entry Agreement

If required by the Railroad in connection with any Railroad Work (including with respect to design and site exploration activities), then subject to the requirements of and processes specified within the Railroad Standards, the Design-Builder shall enter into a Railroad Right-of-Entry (RoE) Agreement with the Railroad or otherwise obtain access in such form and by such method as the Railroad may require under the Railroad Standards. The Design-Builder shall comply with any reasonable information requests from the Railroad.

The Design-Builder shall furnish a copy of the fully executed RoE Agreement to GDOT prior to entering upon Railroad ROW.

14.4 Railroad Construction Agreement

With respect to Railroad Work, after the Railroad has approved the Design-Builder's final design documents, GDOT may enter into a Construction Agreement with the Railroad pertaining to the remaining Railroad Work necessary to complete the Project. The Design-Builder shall comply with the obligations expressly identified in the Railroad Construction Agreement as Design-Builder obligations (including obligations to cause the Design-Builder to perform), which in the latter case have been delegated by GDOT to the Design-Builder under the Railroad Construction Agreement.

In the event an amendment to the Railroad Construction Agreement is requested by the Railroad or otherwise is necessitated as determined in the sole discretion of GDOT, the Design-Builder shall provide GDOT with such assistance as may be needed (e.g., providing information or drawings) in support of the preparation and negotiation of such amendment.

14.5 Insurance Requirements

Prior to entering or encroaching upon Railroad ROW to perform any Work, the Design-Builder shall procure insurance policies in accordance with the requirements in DBA Section 7.10 (Railroad-Highway Matters) and DBA Exhibit 16 (Insurance Coverage Requirements) and shall otherwise satisfy all applicable insurance requirements of the Railroad as set forth in the Railroad Standards.

The Design-Builder shall submit copies of all such policies to GDOT upon placement.

14.6 Design Requirements

14.6.1 General Requirements

The Design-Builder's design shall conform to the requirements set forth in the Railroad Standards. The Design-Builder shall coordinate Project design with the Railroad to the extent required by the Railroad. Coordination may include meetings and Plan submissions for Railroad review per the requirements in TP Section 14.3.1.1 (Preliminary Engineering Agreement). The Design-Builder shall complete the Plans and fully consult the Railroad in such manner as necessary to ensure compliance with all Railroad Standards. The Railroad shall have final approval rights for the design of Work affecting its facilities, Railroad operations and Railroad ROW, approval evidenced by the Railroad executing and delivering the Railroad Construction Agreement.

14.6.2 Drainage

The Design-Builder shall indicate all proposed drainage design elements and encroachments directly or indirectly affecting Railroad ROW in working drawings, sheets, plans, and profiles as specified in the Railroad Standards.

14.6.3 Erosion Control

When the Railroad Work includes land disturbance, the Design-Builder's plans shall indicate the proposed methods of erosion control and shall specifically address means to prevent silt accumulation in railroad ditches and culverts and to prevent impacting the track ballast and sub-ballast. If the plans do not show erosion control, the Design-Builder must submit a proposed method of erosion control and must have the method approved by the Railroad prior to beginning any grading on the Railroad ROW.

Existing track ditches shall be maintained at all times throughout the Railroad Work construction period. After the construction has been completed, all erosion control measures must be removed, all deposits of silt removed, and the ditches restored.

14.6.4 Railroad Utilities

The Design-Builder shall request Railroad signal forces to locate and paint mark or flag Railroad underground utilities in the area to be disturbed for the Railroad Work. The Design-Builder shall locate all Utilities owned by third parties within Railroad ROW and in the immediate vicinity of the Work. This locate work shall be in accordance with TP Section 14.3.1.2 (Right-of-Entry Agreement) and the Project Standards. The Design-Builder shall provide written confirmation to the Railroad and GDOT that all Utilities on Railroad ROW and in the immediate vicinity have been identified and properly located.

The Design-Builder's plans shall show dimensioned location of all proposed utilities within the Railroad ROW and the appropriate measures for protection of all existing utilities.

The Design-Builder shall notify the Railroad in compliance with the Railroad Standards, and delegated or assigned obligations under the Railroad Construction Agreement in advance of operations where excavation, pile driving, or heavy loads may damage Railroad underground utilities on Railroad property in accordance with the Railroad Standards. The Design-Builder shall make every effort to avoid excavation or other disturbance of these lines. However, in the event a disturbance or excavation is required near a buried Railroad signal, communication, or power line, the Design-Builder shall pothole the line manually with careful hand excavation and protect all facilities during the course of the disturbance under supervision and direction of the Railroad.

14.7 Construction Requirements

The operation of the Railroad shall have absolute priority over the performance of construction for the Project. The Design-Builder shall coordinate the Work with the operations of the Railroad.

Railroad Work and operations by the Design-Builder on Railroad ROW shall be:

1. Subject to the inspection and approval of the Railroad;
2. In accordance with the Railroad Standards; and

3. To the extent not specified in the foregoing clauses (1) and (2), in accordance with the DBA Documents.

14.8 Safety and Protective Services

Except as set forth in the subsequent paragraph, the Design-Builder shall arrange and conduct its Railroad Work so that there will be no interference with Railroad operations, including train, signal, and communication services, or damage to the facilities or property of the Railroad or tenants on the Railroad ROW. Whenever Work is liable to affect such operations, safety, facilities, or property, the method of doing such Work shall first be submitted to the Railroad for review and approval, but such approval shall not relieve the Design-Builder from liability.

Whenever Work within Railroad ROW is of such a nature that impediment to railroad operations is unavoidable, e.g., Work requiring use of runaround or detour tracks or speed reductions (i.e. “slow orders”) on existing tracks, the Design-Builder shall schedule and conduct its operations so that such impediment is reduced to the absolute minimum.

The Design-Builder shall arrange with the Railroad for protective services as required by the Railroad. The Design-Builder shall comply with the Railroad’s requirements for Design-Builder safety training prior to performing Work or other activities on Railroad property and shall maintain current registration while working on railroad property. If not detailed in the Railroad Standards, or if not directed otherwise by the Railroad, the Design-Builder shall notify the Railroad prior to commencing any Railroad Work.

During construction all protective services shall be performed strictly in accordance with instructions and directives issued by the Railroad. The Design-Builder shall employ a qualified protective services subcontractor selected from a list provided by Norfolk Southern Corporation to provide flagmen required by the Railroad. The Design-Builder shall allow for 120 business days after the Railroad required documents have been approved before protective services may be provided due to current requests for these services. The Design-Builder shall include all Railroad and/or subcontractor personnel providing protective services at all of the Design-Builder’s regularly scheduled safety meetings while Railroad Work is being performed until such time as the Railroad Work has been completed and accepted by the Railroad.

14.9 Submittals

With respect to the requirements of the Railroad described in this TP Section 14, the Design-Builder shall comply with TP Section 2.9 (Submittals). All Submittals requiring Railroad review, comment, approval, acceptance, or otherwise, shall be submitted and addressed, in such manner, at such intervals, and as may be required pursuant to the Railroad Standards.

The Design-Builder shall comply in all respects with any such Railroad submittal and approval requirements at all times and as a pre-condition of any entry onto the Railroad ROW or with respect to Work impacting Railroad operations or the Railroad ROW contingent thereupon. The Design-Builder shall submit such Railroad Submittals directly to the Railroad and submit a copy of all Submittals and correspondence (including email) to GDOT.

15 LANDSCAPE AND HARDSCAPE ENHANCEMENTS

15.1 General Requirements

The Design-Builder shall design landscape, hardscape, and other aesthetic treatments to meet State and local agency requirements as identified in this TP Section 15.

15.2 Administrative Requirements

15.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 15 in accordance with the Project Standards.

15.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

15.3 Design Requirements

15.3.1 Landscape and Hardscape Enhancement Plans

The Design-Builder shall prepare Landscape and Hardscape Enhancement Plans. The plans may be submitted together or individually.

The Landscape Enhancement Plan shall provide guidelines and requirements for the landscape design of the Project and include all landscape elements to fully communicate the proposed design to GDOT. For landscaping that serves as environmental mitigation (i.e., stream realignments, stream buffer impacts, etc.), the Design-Builder shall obtain the appropriate environmental permit per TP Section 5 (Environmental) for proposed landscaping elements before any construction activities occur within an affected ESA, including clearing and grubbing activities. The Landscape Enhancement Plan for the Project shall include, at a minimum:

1. A plan that indicates plant palettes, locations of plants, plant types, and planting dates for all landscaping, including:
    a. Replacement of existing landscaping per the requirements in TP Section 15.3.3.3 (Existing Landscaping), as applicable.
    b. Landscaping required, as applicable, by Third Party Agreements.
    c. New landscaping required for any reason including:
        1) Environmental mitigation or stream bank restoration.
        2) As part of an MS4 BMP.
        3) Sod.
2. Maintenance responsibility.
3. Maintenance requirements, including required fertilization and mowing schedules.
4. Composite drawings of all Utilities and easements that would overlap with landscaping, markers, or any other identified enhancements.

The Hardscape Enhancement Plan shall include, at a minimum:

1. A master plan that conveys the layout of the various roadway features (e.g., where the depressed sections, elevated sections, and at-grade roadways are located; as well as bridges, retaining walls, noise barriers, signal poles, lighting structures, and other structural components).
2. Drawings showing where elements are located (e.g., fences, signage, potential locations of community improvement opportunity areas, gateway markers, control buildings, bridge enhancements, and landscaping).
3. Color schemes and patterning requirements and their locations.

The completed Hardscape Enhancement Plan shall provide guidelines and requirements for development of the Highway corridor aesthetics. The guidelines shall serve as the primary standard necessary to produce the intended aesthetic form, function, and appearance of the Project.

15.3.2 Landscape and Hardscape Enhancement Principles and Strategies

The Design-Builder shall follow the guidelines and requirements of the Landscape Enhancement Plan, as well as the aesthetics principles, requirements, and strategies established in the Hardscape Enhancement Plan, including:

1. The Project shall be complementary to the indigenous landscape to the fullest extent possible.
2. Simple geometric shapes for structures shall be used to the extent possible for continuity along the entire length of the Project.
3. All structures shall be carefully detailed to achieve the greatest level of quality and fit within the regional context.
4. Color, texture, and form shall be used consistently for all new structures on the Project and are not required to match existing decorative features (e.g., decorative mast arms, sign supports).
    a. Existing decorative hardscape shall be replaced in kind and exempted from matching the color, texture, and form of other new structures on the Project.
5. Where color is used for concrete features, the Design-Builder shall use colored mix concrete or staining applications. No painted concrete features will be allowed, except for painting existing noise barriers per requirements in TP Section 15.3.3.1 (Noise Barriers and Retaining Walls).
6. Graphics, signage, and lighting shall be consistent along the entire length of the Project.
7. Decorative elements shall be fully integrated with the overall landscape design.
8. Visual quality of the landscape shall be consistent along the entire length of the Project.
9. Decorative elements shall be easy to maintain and provide protection from vandalism and graffiti.
10. Aesthetics shall not interfere with safety, constructability, or maintenance.

15.3.3 Aesthetic Features to be Incorporated

The Design-Builder shall address the following aesthetic features in the Landscape and Hardscape Enhancement Plans:

1. Material, finish, color, and texture of bridge elements
2. Materials, finish, and color of barriers and railings
3. Paved slope treatments
4. Finish, color, and texture of retaining walls and noise barriers, including the use of formliners
5. Contour grading, slope rounding, channel treatments, and drainage
6. Sculptural and artistic features of other structures
7. Sidewalks, median, and pedestrian specialty paving, including material, finish, and color
8. Hardscape embellishments at interchanges and intersection
9. Fencing embellishments (other than GDOT standard material)
10. Specialty signage, logos, or emblems
11. Gantry embellishment
12. Architectural embellishment to any permanent building construction within the Project, including ancillary support or operational infrastructure
13. Planted vegetation, excluding erosion control seeding, final turf seeding, and sodding
14. Material finish and color of light poles and mast arms, ambient lighting colors, and general layout conditions

All embellishments for Structural Elements shall be coordinated, at a minimum, with the Design-Builder's structural design team to facilitate constructability and maintain safety requirements.

15.3.3.1 Noise Barriers and Retaining Walls

The Design-Builder shall paint existing noise barriers to remain within the Project Limits to match the proposed noise barriers. Graffiti-proof coating shall be applied on all exposed faces of new noise barriers. All new noise barriers shall be light gull grey in color with an ashlar stone finish on all exposed faces unless modified by the noise barrier voting process. If the noise barrier voting process changes the aesthetic requirements the Design-Builder shall provide aesthetics per the noise barrier voting process, which shall not be considered a GDOT Change. TP Attachment 15-2 (Noise Barrier Aesthetics) shows the potential noise barrier voting aesthetic options. Metal noise barriers are exempt from the ashlar stone finish requirements.

The Design-Builder shall provide light gull gray ashlar finish to the front face of retaining walls (front face to be defined as the side opposite of what is being retained). Light gull gray ashlar finish is not required on the coping elements or GDOT Standard Barriers.

Light gull gray shall be Federal Standard (FS) 595C color number FS36440 unless otherwise approved by GDOT.

Ashlar finish shall be achieved using Custom Rock Formliner pattern 1501-R2, Fitzgerald Formliner pattern 16999, or as approved by GDOT.

A graffiti-proof coating shall be applied to the exposed face of all retaining walls.

15.3.3.2 Bridges and Other Structural Elements

All new bridge substructure columns shall be consistent in form and texture, with similar shapes and details used for all new bridges except for those where Third Party Agreements require aesthetic treatments. New bridge columns on widened or modified bridges shall match the form and texture of the existing columns.

Bridges with all or part of the structure visible to traffic, either passing beneath the bridge or travelling in lanes adjacent to the bridge, shall have fascia beams of constant depth along the entire length of the bridge to maintain a uniform appearance. An exception to this requirement is at locations where the fascia beam material changes from steel to concrete or vice versa. In this case, cheek walls shall be used at piers to mask transitions where superstructure depth change is required due to the change in material type.

Bridges with all or part of the structure not visible to traffic either passing beneath the bridge or travelling in lanes located adjacent to the elevated portions of the bridge are not required to have fascia beams of constant depth throughout the bridge length.

15.3.3.3 Existing Landscaping

The Design-Builder shall preserve existing landscaping to the maximum extent practical. In areas where existing landscaping is disturbed by the Work, the Design-Builder shall replace all landscaping as dictated in the accepted Landscape Enhancement Plan with similar types, calipers, species, and planting patterns as those impacted.

The Design-Builder shall identify and remove invasive exotic pest plants in accordance with A Management Guide for Invasive Plants in Southern Forests (GTR SRS-131) within the Project Limits.

The Design-Builder shall comply with ANSI A300 Part 1 Standard Practices and Best Management Practices in all pruning. No more than 25 percent of the leaf-bearing crown on a tree shall be removed in the pruning process. Trees shall not be pruned in an unbalanced fashion, so that one side has many more branches than another. A ratio of 2/3 to 1/3 crown to clear trunk shall be maintained.

15.3.3.4 Control Buildings

The Design-Builder shall provide a minimum of three design concepts for review and approval for all control building structures in the Hardscape Enhancement Plan. The control facilities, vent stacks, power centers, or any other structure that requires the seal of a Registered Architect, shall require the preparation of concept plans and materials samples.

15.3.3.5 Median and Border Hardscapes

The Design-Builder shall use a concrete raised median on SR 42 between Pine Grove Road and Park 42 Drive. In other locations, the Design-Builder shall pave raised medians less than or equal to 8 feet wide with concrete paving.

Where less than 4 feet in width is provided between the back of curb and the sidewalk, the Design-Builder shall provide colored textured concrete. Except where used at roundabouts, the colored textured concrete shall be Federal Standard (FS) 595C color number FS30152 unless otherwise approved by GDOT. Colored concrete at roundabouts shall follow the GDOT

Roundabout Design Guide requirements. Stamped concrete may be used only where City Parties agree to maintain them.

The Design-Builder shall use concrete paving (4-inch) in hard-to-reach mowing areas or under structures (such as areas near, next to, or between sign posts, and bent columns; or next to retaining walls, freeway ramp gores, paved ditches, flumes, ditch inlets, etc. where the area is less than 8 feet wide) to improve roadway appearance.

15.4 Construction Requirements

The Design-Builder shall provide samples, mock-ups, and catalog cuts to GDOT for review and acceptance a minimum of 60 days prior to the start of production of any embellishment element. Embellishment elements shall be any element or upgrade whose primary function is aesthetics (i.e., aesthetic treatments as requested by Third Party Agreements or upgrades to bridge railings for aesthetic purposes).

The Design-Builder shall provide sample panels of textured concrete surfaces to GDOT for review and acceptance a minimum of 60 days in advance of starting construction.

15.5 Submittals

With respect to landscape and hardscape enhancement requirements described in this TP Section 15, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 15 Attachments

Attachment No.	*Title*
Attachment 15-1	Reserved
Attachment 15-2	Noise Barrier Aesthetics

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 15-1

Reserved

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 15-2

Noise Barrier Aesthetics

TP Attachment 15-2 (Noise Barrier Aesthetics)
Noise Barrier Voting Ballot

My Vote for proposed Noise Barrier XX

☐ Yes, I support the noise barrier

☐ No, I do not support the noise barrier

My Vote for the surface treatment (i.e. pattern) of the owner/ resident side of the Noise Barrier (concrete portions only)

☐ Ashlar

☐ Flat

☐ Rock textured

☐ Brick

Please print clearly:

Name: _____

Address: _____

_____

☐ Owner ☐ Renter

☐ I own multiple properties affected by this noise barrier.

_____

_____

_____

Signature: _____

Date: _____

Deadline for voting: TBD

Link to the project website and survey can be found here. Using your cellular device, open the camera application and point it at the QR code. Tap the notification to open the link associated with the QR code.

16 SIGNING, PAVEMENT MARKING, SIGNALIZATION

16.1 General Requirements

This TP Section 16 includes requirements for the design and construction of all signing, delineation, pavement markings, and signalization for the Project.

16.2 Administrative Requirements

The Design-Builder shall submit to GDOT all requests for new signs, including traffic generators, or modifications of existing sign legends. Such requests are subject to GDOT acceptance.

16.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 16 in accordance with the Project Standards.

16.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

16.3 Design Requirements

16.3.1 Design Plans

The Design-Builder shall confirm all street names with GDOT prior to finalizing the signing and marking plans.

The Design-Builder shall confirm destination, message, and sequence of all interchange advance guide signs with GDOT prior to finalizing the signing and marking plans. The Design-Builder shall be responsible for the design and construction of any shared overhead sign structures.

16.3.2 Permanent Signing and Delineation

16.3.2.1 General Requirements

The Design-Builder shall design and install all signs and delineators required for the Project. These signs include advance guide signs, supplemental signs, exit direction signs, and interchange sequence signs. The Design-Builder shall replace or remove any existing sign that no longer provides correct information or guidance due to the Project, including those signs beyond the Pavement Limits which no longer provide accurate information due to the Project. The Design-Builder shall replace existing signing impacted by the Project. The Design-Builder's Design shall include the locations of proposed ground-mounted and overhead signs as well as existing signs that are to remain, graphic representation of all signs, proposed pavement markings, delineator placement, guide sign and special sign details, clearance diagrams, structural, and foundation requirements. The Design-Builder shall locate signs in a manner that avoids conflicts with other signs, vegetation, lighting, and structures. The Design-Builder shall ensure that signs are clearly visible, provide clear direction and information for Users, and comply with the Project Standards.

The Design-Builder shall use and comply with general notes provided in the GDOT Signing and Marking Design Guidelines Appendix E.

For signing purposes, all interchanges within the Project Limits shall be classified as “Major,” per Section 2E.11 of the MUTCD.

Arrow-per-lane guide signs shall be provided for all multi-lane exits at interchanges with an optional exit lane that carries the through route and with a drop lane over 0.5 miles long, and for all splits that include an option lane. For multi-lane exits with an optional lane and a drop lane less than 0.5 miles long, the signing shall follow what is shown in MUTCD Figure 2E-47.

Arrow-per-lane signs shall follow letter and numeral size requirements for “Category A Major Interchange” in the MUTCD.

All overhead signs on a single structure shall be the same sign height, with the exception of general information or regulatory signs, such as for a rest area or an R554-X.

All guide signs along ramps shall be designed and installed based on freeway classification requirements in the MUTCD and GDOT Signing and Marking Design Guidelines.

Mile post D10-4 signs shall be placed every 1 mile on the inside and outside shoulder along the mainline. Enhanced reference location D10-5 signs shall be placed every 0.2-mile on the inside shoulder in areas where median barrier exists along the mainline.

All signage in raised medians or roundabouts shall be constructed with post inserts as shown in GDOT Construction Detail T-3B.

The green roundabout signs (D1-5) shall be installed prior to making the traffic into a circular pattern around the respective roundabouts. Changeable message boards shall not be used in lieu of permanent signage.

The Design-Builder shall remove all existing sign support structures and foundations no longer supporting a sign. Where sign support structures are removed from barrier wall, the Design-Builder shall replace the wider barrier section with a standard-width section to provide typical roadway shoulder widths.

The Design-Builder shall place ground-mounted signs at the following locations:

1. At service interchanges, a “No Pedestrians Bicycles Motor-Driven Cycles” (R5-10) sign shall be placed on all entrance and exit ramps near the ramp’s intersection with the arterial. The sign shall be clearly visible to anyone walking or cycling who may attempt to use the ramp.
2. The Design-Builder shall install a R1-1 stop sign at all driveways that are not single family residences where left turns are permitted out of the driveway. The Design-Builder shall install a stop bar at all locations that require a stop sign.
3. All exit ramps to service interchanges shall include wrong way (R5-1a) signs on each side of the ramp located approximately half-way down the ramp. All exit ramps shall also include a do not enter (R5-1) sign on each side of the ramp. The R5-1 and R5-1a signs shall be freeway sized signs in accordance with Table 2B-1 of the MUTCD.
4. The Design-Builder shall install a R552-2 sign at the emergency cross over locations in both directions of travel.

5. The Design-Builder shall install a W14-1 sign to denote dead-ends at the following locations:
    a. Old Bethlehem Road, north of Old Bethlehem Road at Bethlehem Road intersection.
    b. Old Bethlehem Road, east of Old Bethlehem Road at Price Road intersection.
    c. Old Bethlehem Road, west of Old Bethlehem Road at Academic Parkway intersection.
6. The Design-Builder shall install guide sign assemblies (M5-1 and M1-1) on SR 42 to provide directional guidance to I-75.
7. The Design-Builder shall coordinate with the City of Locust Grove and Henry County on the removal of the truck restriction signage on Lester Mill Road and Greenwood Road.
8. The Design-Builder shall install No Truck U-Turn signs (R3-1b) at the following locations:
    a. SR 42 at Old Bethlehem Road intersection.
    b. SR 42 at Bethlehem Road intersection.

In addition to the span wire signs required per the Project Standards, the Design-Builder shall install span wire signs at the locations shown in TP Attachment 16-1 (Span Wire Sign Layout).

16.3.2.2 Minimum Sign Spacing

16.3.2.2.1 Overhead Sign Spacing

All sign structures and overhead signs shall be designed and located to ensure that they and any existing GDOT overhead signs to be retained have a minimum sight distance of 1,000 feet and shall meet sign spacing requirements of the Project Standards. For speed limits of 55 mph or greater, the message shall be designed to be legible from a minimum distance of 600 feet for nighttime conditions and 800 feet for normal daytime conditions.

All overhead sign structures on limited access facilities shall be spaced a minimum of 800 feet apart. All overhead sign structures on arterials shall be spaced a minimum of 500 feet apart. Overhead sign structures shall be placed a minimum of 800 feet downstream of any roadway overpass bridge structure. Overhead sign structures shall be placed a minimum of 50 feet upstream of any roadway overpass bridge structure. Overhead sign structures shall be a minimum of 500 feet upstream of the stop bar for any signalized intersection. For any structure with less spacing than required, a line-of-sight analysis shall be submitted and the spacing subject to approval at GDOT's sole discretion.

In the event any existing GDOT overhead signs do not meet sight distance or sign spacing requirements due to the construction of any elements of the Project, the Design-Builder shall replace with new signs and structures in order to meet requirements.

16.3.2.2.2 Post Mounted Sign Spacing

The Design-Builder shall ensure all post mounted signs within the Project Limits are visible for a minimum of 800 feet on limited access facilities and 200 feet on non-limited access roads.

16.3.2.3 Truck Restriction Signs

The Design-Builder shall install truck restriction signs (R554-X) on freeways in locations with three or more General Purpose Lanes in one direction of travel. Where required, a sign shall be

required between each General Purpose interchange in each direction. Signs shall be mounted on an overhead sign structure. Signs shall be designed in accordance with GDOT Construction Detail T-7.

16.3.2.4 Specific Service Signs

The design and installation of logo signs are a function of a third party, Georgia Logos, LLC, which designs, installs, and maintains these signs on the ROW. As part of the Project, the Design-Builder shall move and remount all logo signs that conflict with the Work. GDOT or Governmental Entities may also allow specific service signs, such as logo signs, to be installed by the third party. The Design-Builder shall coordinate and cooperate with GDOT and/or any third party performing such work.

The Design-Builder shall coordinate any changes to logo signs with GDOT's Logo Sign Program Manager. Logo signs shall be relocated if within 800 feet of a special roadside or overhead sign structure or within 100 feet downstream of a post-mounted sign. Relocation of one logo sign for an interchange may require moving other logo signs to provide for the sequence of 24-hour pharmacies, attractions, camping, lodging, food, and gas in the direction of travel.

The Design-Builder shall contact Georgia Logos, LLC phone: 770-447-6399 or 1-800-783-2361 prior to the removal, resetting, or replacement of any logo signs. All logo signs damaged during Construction Work shall be replaced by the Design-Builder.

If special signs are requested, the Design-Builder shall arrange and coordinate a stakeholder meeting with the requesting agencies or individuals.

16.3.2.5 Arterial Signing

For signs located outside the Existing ROW, State Proposed, or Design-Builder Proposed ROW, but within a public right of way, the Design-Builder shall install the signs in existing ROW controlled by local or other Governmental Entities. The Design-Builder shall coordinate with the local or other Governmental Entities for the design and installation of such signs.

Before placing any permanent signs, delineation, third-party signs, or non-standard sign structures on right of way controlled by local or other Governmental Entities, the Design-Builder shall submit to GDOT a sign location plan indicating the proposed location of such items. This may be done as part of the Preliminary Design Documents Submittal, the Final Design Documents Submittal, or as a separate Submittal.

16.3.2.6 Sign Support Structures

Sign support structures shall be designed per the requirements in TP Section 13.3.8 (Gantry and Structural Supports).

The Design-Builder shall place a GDOT structural support number on the outside vertical support of the structure. Requirements for the alphanumeric code are specified in the GDOT Signing and Marking Design Guidelines Section 9.2.

16.3.2.7 Existing Sign Retention Requirements

All existing sign panels within the Project Limits that the Design-Builder proposes to retain as part of the Final Design shall be verified for compliance with current Project Standards. If a sign is not compliant, the Design-Builder shall replace the sign with a new compliant sign.

Where the Design-Builder proposes to retain existing overhead sign structures within the Project Limits as part of the Final Design, the Design-Builder shall verify and demonstrate that the sign structure has sufficient structural capacity to support proposed sign panels and ITS equipment as per the Project Standards and requirements in TP Section 13 (Structures). All verification of the structural capacity shall include shop drawings of the original sign structure. If the overhead sign support structure does not have sufficient structural capacity or the original shop drawing is not available, the Design-Builder shall replace the overhead sign structure and associated foundations and appurtenances prior to Substantial Completion. All impacted cantilever sign gantries shall be replaced.

The Design-Builder shall use new attachment hardware for new or replaced signs on existing retained gantries. The Design-Builder shall submit shop drawings of the new sign hangers. The Design-Builder shall remove any unused walkways and sign attachment hardware from existing retained gantries. If the galvanized coating is damaged, removed, or bare steel is exposed the Design-Builder shall apply a brush-on galvanized compound in accordance with Section 645 of the GDOT Standard Specifications.

16.3.3 Permanent Pavement Marking

The Design-Builder shall ensure that the design and installation of all pavement markings, including raised pavement markings (RPMs) comply with the Project Standards. The Design-Builder shall apply pavement markings with contrast on bridges and all other concrete surfaces in accordance with the Project Standards. RPMs shall be installed where new pavement markings are provided.

All exit ramps to service interchanges shall include a wrong way arrow (Type 4 arrow with RPMs per GDOT Construction Detail T-12B) approximately half-way down the ramp and aligned with the wrong way (R5-1a) signs.

The Design-Builder shall place pavement marking shields as shown in TP Attachment 16-1 (Span Wire Sign Layout) and in accordance with GDOT standard details T-13D and T-12B.

16.3.4 Permanent Signalization

The Design-Builder shall arrange and coordinate stakeholder meetings with local agencies that will assume responsibility for maintaining and operating traffic control devices including traffic signals. The Design-Builder shall provide GDOT with notification of such meetings a minimum of 10 Business Days prior to the start of the meeting. GDOT, at its discretion, may attend such meetings.

Refer to TP Section 11.3.8 (Ramp Design Criteria) for ramp meter requirements.

The Design-Builder shall ensure traffic signals and lighting have separate metered boxes.

The Design-Builder shall, after implementing accepted timing plans submitted in accordance with TP Section 16.3.4.2 (Traffic Signal Timing Plans), submit to GDOT and Governmental Entities responsible for operation and maintenance of the traffic signal system, documentation of all intersection characteristics, timing plan parameters, and installation information necessary for GDOT and/or the Governmental Entity to incorporate the completed signal installation into the central intersection management software in use by GDOT and/or the Governmental Entity.

16.3.4.1 Traffic Signal Requirements

TP Table 16-1 (Traffic Signals) lists the minimum permanent signals to be upgraded as part of the Project. If other signals are impacted by the Work, the Design-Builder shall be required to get a signal permit modification. A signal permit is also required for all new or relocated RRFB and ramp meters.

Table 16-1: Traffic Signals

Intersection	*Permit Owner*	*Permit Required*	*Special Design Requirements*
SR 42 at Bethlehem Road	GDOT	New	Signal shall be signed no right turn on red for the Bethlehem Road to SR 42 movement.
SR 42 at Old Bethlehem Road	GDOT	Revision	

The Design-Builder shall upgrade all signals impacted by the Project to meet current Project Standards. As part of each signal upgrade, the Design-Builder shall:

1. Upgrade all signal cabinets, controllers, and signal heads to current Project Standards.
2. Upgrade all detection devices to current Project Standards.
3. Ensure signal includes ADA-compliant wheelchair ramps.
4. Refresh all stop bar and crosswalk pavement markings.
5. Install new mast arms.

The Design-Builder shall design and install all new and modified signals as semi- or fully-actuated permanent traffic signals, depending on operational requirements. The Design-Builder shall also design and construct all signals in a vertical orientation with the red light on top.

All new and modified permanent signals require installation of mast arms, street name signs, and pedestrian poles in accordance with TP Section 16.3.4.4 (Traffic Signal Support Structures). Signals using span wire installation shall be permitted only if the use of mast arms would require a mast arm over 65 feet in length.

The Design-Builder shall provide interconnection systems between new or modified signals and any other signal system within the Project Limits as required by GDOT or the local Governmental Entity. Connection of the completed intersection to the Governmental Entity's communications network shall be coordinated with the Governmental Entity. For signals that are within the Project Limits and connected to a traffic system network, the Design-Builder shall be responsible for maintaining the signal connection with the central server. The Design-Builder shall also ensure communication is not interrupted to any traffic signals outside the Project Limits due to communication equipment within the Project Limits being impacted. The Design-Builder shall provide all communication hardware/equipment for GDOT or the local Governmental Entity so that any signals within the Project Limits will be able to communicate with the signal systems within and outside the Project Limits. Nothing contained herein shall limit or alter the Design-Builder's obligations defined in TP Section 19.3.3 (Responsibilities for Traffic Signals and Ramp Meters).

The Design-Builder shall provide both pedestrian and vehicle detectors at all traffic signals within the Project Limits per GDOT or the local Governmental Entity's (maintaining agency) requirements. Existing detection at existing traffic signals shall be maintained in operation throughout construction.

If an impacted signal includes a CV roadside unit (RSU), the Design-Builder shall salvage the existing equipment and return to GDOT. GDOT will be responsible for any replacement RSU after Substantial Completion. The Design-Builder shall coordinate with GDOT on whether there is existing RSU equipment within the Project Limits.

The Design-Builder shall coordinate with the GDOT Transportation Management Center (TMC) and the District Traffic Operations to ensure that all signalized locations are permitted, as described in this TP Section 16, prior to submittal of Final Design Documents.

The Design-Builder shall not cause any part of the signals to be inoperable. The District Traffic Signal Engineer and the Traffic Engineer of GDOT or the applicable local Governmental Entity shall check and accept the permanent traffic signal locations prior to Final Acceptance.

16.3.4.2 Traffic Signal Timing Plans

The Design-Builder shall coordinate and implement signal timing plans that fulfill operational goals of the signal and/or system and provide signal coordination with adjacent intersections and arterials for all existing and new traffic signals, modified signals, and interconnected signals. The Design-Builder shall obtain local Governmental Entity signal timing requirements and objectives before implementation. The Design-Builder shall obtain GDOT and/or local Governmental Entity approval of the new traffic signal timing before updating all signal timing parameters as necessary to maintain safe and efficient operation of traffic signals inside and outside of the Project Limits.

16.3.4.3 Traffic Signal Permit

As part of the design process, the Design-Builder shall obtain necessary traffic signal permits or permit revisions by following GDOT and/or local Governmental Entity signal permit processes prior to any new signal installation or existing signal modification.

The Design-Builder shall submit a signal modification permit (or signal modification permit revision) for all impacted signals within the Project. The Design-Builder shall prepare the permit application and submit to GDOT for review. GDOT will review and coordinate with the local governments for final approvals. The Design-Builder shall allow three months for the local governments to process the permits after receipt from GDOT.

The Design-Builder shall coordinate with GDOT and the local Governmental Entity for any additional signal design requirements, including interconnectivity and operations.

16.3.4.4 Traffic Signal Support Structures

The maximum allowable length of mast arms is 65 feet, unless the Design-Builder obtains a local variance through the following process:

1. A local Design Variance recommended by the EOR whose area of expertise includes transportation structures shall be submitted to GDOT for acceptance.

2. The Design-Builder shall cause the local Governmental Entity to provide a letter to GDOT accepting liability for and maintenance responsibility of any mast arms that are the subject of the local Design Variance that fail during service (after Final Acceptance).
3. Mast arm signal poles and foundations shall be designed in accordance with Project Standards.
4. Column-to-base-plate or mast-arm-to-flange socket connections shall be fillet-welded socket connections. Fatigue category I shall be used in determining the fatigue importance factors.
5. The EOR shall review and approve the required Shop Drawings.

All signal heads and overhead street signs shall be attached to mast arm assemblies unless the mast arm would be longer than 65 feet.

The Design-Builder shall ensure traffic signal mast arm support structures consist of a tapered pole, tapered traffic signal mast arm, luminaire arm (if required), anchor bolts, and base plate. The Design-Builder shall ensure cross-section of the pole support, the traffic signal mast arm, and the luminaire arm are round. Multisided tubes are not acceptable.

The Design-Builder shall use concrete backfill for all concrete strain poles as specified in GDOT Construction Detail TS-05 (Strain Pole and Mast Arm Foundations) and shall not be permitted the use of GAB or crushed stone.

16.4 Construction Requirements

16.4.1 Signing and Delineation

The Design-Builder shall use established industry and Utility safety practices when erecting or removing signs located near any overhead or underground Utilities and shall consult with the appropriate Utility Owners prior to beginning such Work.

The Design-Builder shall maintain all advance guide signs and/or exit direction signs in place at all times and shall not obstruct the view of these signs to Users. The Design-Builder shall replace any other removed signs before the end of each workday.

16.4.2 Pavement Marking

The Design-Builder shall install required full-pattern pavement markings on all pavement courses before any roadway is opened to traffic. RPMs shall be placed and/or maintained when the roadway is open to traffic. The Design-Builder shall replace all temporary striping with final permanent striping within 60 days of opening the road to final traffic pattern.

16.4.3 Signalization

All temporary traffic signals which will be in operation for more than 365 days shall require a signal permit.

A signal permit modification is required for all temporary traffic configurations at a signal to include:

1. Addition of a new lane, including new turn lanes
2. Closure of an existing lane, including turn lanes

3. Revisions to the type of left turn phasing (e.g., from protected to permitted)

The Design-Builder shall coordinate with Utility Owners and ensure necessary power service is initiated and maintained until Final Acceptance for permanent signal systems.

The Design-Builder shall maintain signal visibility per the Project Standards or shall install additional temporary supplemental signal heads as required.

Existing signal heads, signal cabinets, and other signal-related equipment impacted by the Project shall be taken down and returned to their respective owners (e.g., City, County, or GDOT) and a list of equipment, location, and respective owner submitted to GDOT. The Design-Builder shall provide GDOT a minimum of 72 hours' advance notice before removing equipment.

All newly installed signals or signals modified by the Design-Builder shall be maintained by the Design-Builder until the signal operation is turned over to the respective owners.

During Construction Work, the Design-Builder shall ensure the signals are working at their optimal level, including signal timing communication and detection.

16.5 Submittals

With respect to signing, pavement marking, and signalization requirements described in this TP Section 16, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 16 Attachments

Attachment No.	*Title*
Attachment 16-1	Span Wire Sign Layout

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 16-1

Span Wire Sign Layout

BETHLEHEM INTERCHANGE
TP ATTACHMENT 16-1

FOR ILLUSTRATION PURPOSE ONLY.
SOME ELEMENTS MAY NOT BE DRAWN TO SCALE.

SCALE IN FEET
0 360 720

PRICE RD
OLD BETHLEHEM RD
BETHLEHEM RD
SHIELD GROUP A
SHIELD GROUP B
SHIELD GROUP C
INTERSTATE 75
42

FACING SOUTHBOUND
OVERHEAD SPAN WIRE

FACING WESTBOUND
TO SOUTH I-75
NORTH I-75
OVERHEAD SPAN WIRE

SHIELD GROUP C DETAILS
SOUTH
NORTH
80 ft
80 ft
TO

SHIELD GROUP A DETAILS
80 ft
80 ft
TO
NORTH
SOUTH

SHIELD GROUP B DETAILS
80 ft
SOUTH
NORTH
80 ft

FACING EASTBOUND
TO NORTH I-75
SOUTH I-75
OVERHEAD SPAN WIRE

FACING NORTHBOUND
OVERHEAD SPAN WIRE

FACING EASTBOUND
TO NORTH 42
TO SOUTH 42

FACING WESTBOUND
TO SOUTH I-75
NORTH I-75
OVERHEAD SPAN WIRE

FACING SOUTHBOUND
ONLY
OVERHEAD SPAN WIRE

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17 INTELLIGENT TRANSPORTATION SYSTEMS

17.1 General Requirements

This TP Section 17 addresses the improvements, infrastructure, requirements, and responsibilities for the GDOT General Purpose Lanes Intelligent Transportation System (GDOT ITS), including requirements for traffic surveillance, traveler information dissemination, Incident management, road weather information, communication, and Maintenance During Construction.

17.2 Administrative Requirements

17.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 17 in accordance with the Project Standards.

17.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

17.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings set forth in TP Table 17-1 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 17-1 (Required Project Meetings). The Design-Builder shall have in each meeting the necessary staff from GDOT and its representatives and shall cause to attend each meeting the necessary Key Personnel, Required Personnel, and other staff having responsibility for the subject matter, authority to make decisions, and ability to implement actions arising at the meeting. The Design-Builder is encouraged to combine meetings when appropriate. The Design-Builder shall lead and facilitate the meetings, prepare and distribute meeting agendas a minimum of 24 hours in advance, and prepare and distribute meeting minutes within three Business Days after the meeting. The Design-Builder shall hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. At a minimum, meeting minutes shall clearly identify the following:

1. Date, time, location, and purpose of meeting
2. Meeting attendees
3. Action items and issues
4. Parties responsible for each action item
5. Due dates for identified action items
6. Status of action items and issues (once completed, note “completed” in next meeting minutes before removing from subsequent minutes)

Table 17-1: Required Project Meetings

Meeting and Section Reference	*Frequency*	*Minimum Design-Builder Attendees*
ITS Design Workshop	Up to two workshops, after roadway geometry is established	EOR
Communication network design kick-off meeting to confirm GDOT network requirements	Prior to beginning design	EOR
ITS Construction Status Meeting	Every other week throughout construction including the installation and testing phases	EOR, ITS Construction Manager
ITS Operational Review	Prior to Substantial Completion	EOR, ITS Construction Manager

17.2.4 General Purpose Lanes ITS

The GDOT ITS equipment includes closed circuit television (CCTV) cameras, ramp meter systems, communications network including network equipment, and communication network hub buildings. The Design-Builder shall conduct all Work necessary to design, locate, procure, construct, furnish, install, test, and integrate all new and replacement GDOT ITS equipment, support structures, power supplies, and associated communications network infrastructure.

The Design-Builder shall coordinate the return of all removed ITS devices with and deliver to the location indicated by the GDOT State ITS Engineer. All equipment shall be placed on pallets, containing a list of materials with the description of each item, their condition, and equipment serial numbers.

17.2.5 ITS Infrastructure Implementation Plan Requirements

The Design-Builder shall prepare and submit an ITS Infrastructure Implementation Plan to demonstrate how the Work will be coordinated throughout the Term to achieve operational status and sustain the ITS in a fully operational state per the requirements in this TP Section 17 and TP Section 19 (Maintenance). The ITS Infrastructure Implementation Plan shall be presented in parts covering the design phase and the construction/implementation phase. The ITS Infrastructure Implementation Plan shall include the following:

1. Organizational structure — personnel and reporting structure of individuals, including subconsultants and subcontractors, that will be involved in the design and construction of the ITS Infrastructure.
    a. Describe the process for escalation and issue resolution in alignment with the reporting structure provided, and coordination of the EOR and the ITS Construction Manager with other Design-Builder construction team members in the prioritization of activities leading to ITS testing, inspection, and acceptance.
    b. Describe reorganization of the reporting structure to align with anticipated staffing changes as the Project progresses and provide updates as these changes occur.
    c. Describe how the Design-Builder's ITS personnel will be empowered with decision-making authority to drive resolution of Project issues.
2. Narrative explaining the Design-Builder's approach to completing Preliminary Design Documents, Final Design Documents, and RFC Design Document ITS infrastructure

Plan sets, including the level of detail proposed for each stage of Plan set, and specific ITS infrastructure items to be included for each stage of Plan set.

3. Narrative and workflow demonstrating an approach consistent with these Technical Provisions including a description of how the Design-Builder intends to meet each planned date for ITS Site acceptance and planned date for ITS Batch Acceptance, if applicable. An ITS Site is a group of ITS devices, network equipment and components accepted by GDOT as part of the ITS Infrastructure Implementation Plan to allow for staged device or system installation progression and testing in accordance with TP Section 17.4 (Site Acceptance). An ITS Batch is the group of ITS Sites included by the Design-Builder and accepted by GDOT in accordance with TP Section 17.4 (Site Acceptance).
4. Detailed plan for provision of continuous coverage of ITS during construction, including temporary ITS consistent with the requirements of this TP Section 17. The Design-Builder shall include in the plan access, security, and password schemes for deployment and control of new and temporary ITS systems that are in accordance with GDOT security standards and policies.
5. Description of how activities associated with ITS Infrastructure development will be addressed.
6. Description of how the Design-Builder will coordinate with all field inspectors, and installation and testing activities of ITS with GDOT consistent with the requirements of TP Section 17.4.2 (Testing and Acceptance).
7. Narrative describing the Design-Builder's approach to coordinate and support integration of ITS devices with GDOT Advanced Transportation Management System (ATMS) software.
8. Narrative describing how the Design-Builder intends to update the ITS Infrastructure Implementation Plan components over the D&C Period, including the timing for adding content.
9. Identification and timing of all activities required to be completed by GDOT.
10. Identification of all lane closures required for the construction, integration, and testing of the ITS devices. All lane closures shall be subject to the requirements in TP Section 18 (Traffic Control).

17.2.6 Improvements at the Transportation Management Center

Any required improvements at the Transportation Management Center (TMC) that are necessary in connection with the Project will be managed by GDOT. These improvements include ATMS software modifications, integration services, and other related improvements as necessary to connect, communicate with, and operate GDOT ITS.

GDOT will appoint a TMC System Integrator (TMC SI) to perform software development and installation of equipment and systems used by GDOT in the TMC, including connection to Design-Builder-provided GDOT ITS. The Design-Builder shall coordinate with the TMC SI to identify integration requirements and shall ensure that the required infrastructure and GDOT ITS necessary to support all activities to be performed by the TMC SI is in place, in accordance with established ITS Batch Acceptance dates. The Design-Builder shall provide asset information and data in the format required for integration of ITS devices into GDOT Office of Traffic

Operations' applications consistent with the requirements in TP Attachment 17-6 (ITS Asset Information).

17.3 Design and Construction Requirements

17.3.1 General

The Design-Builder shall determine the number and specific locations of all ITS components required to meet the requirements in this TP Section 17. The Design-Builder shall, at each Design Documents Submittal, provide the proposed locations of ITS equipment and components for GDOT review and acceptance. The Design-Builder shall review suggested location modifications with GDOT during the ITS design workshop and throughout the preliminary design process.

The Design-Builder shall ensure the ITS design and construction is consistent and compatible with any Related Transportation Facilities. The Design-Builder shall ensure the Design Documents provide horizontal and vertical Plan location, proposed equipment, proposed structures, and types of materials for the entire ITS.

All existing ITS infrastructure within the Project Limits, except for hubs and fiber optic backbone, shall be replaced with new ITS infrastructure. No relocation or reuse of existing equipment is permitted as a part of the Project. This includes support structures, power supplies, and associated communications network infrastructure.

The Design-Builder shall maintain GDOT ITS on the Project, including gantries, electrical power, fiber-optic communications, ITS cabinets, maintenance access, junction boxes, and conduits. All ITS equipment shall be National Transportation Communications for ITS Protocol (NTCIP) compliant.

ITS devices, supporting equipment, fiber, and power infrastructure assets naming shall follow the naming schemes and guidelines in the GDOT Statewide ITS Asset Standard Naming Guidelines and the Site and Fiber Standard Naming Guidelines.

Existing GDOT ITS equipment including all fiber trunk lines, conduit and duct banks, communication network hub buildings, drop fiber and electrical lines, as well as ITS devices and communication devices shall be surveyed and located. The Design-Builder shall identify and notify GDOT of all ITS devices or communications devices needing repair no later than 60 days prior to NTP3. GDOT will perform or cause repairs to be performed of those necessary ITS devices or communications devices identified as needing repair. The Design-Builder shall be responsible for the ITS system and all communication devices within the Project Limits upon issuance of NTP3. The Design-Builder shall perform preventative maintenance, respond to problem notifications from GDOT, make any needed repairs or upgrades as necessary, and repair ITS devices or communications damaged by any party during construction.

Equipment cabinets shall be provided for the ITS roadside equipment at appropriate locations along the alignment and within the Project Right of Way. ITS devices may share a cabinet provided:

1. All cabinet spacing requirements are met for all devices.
2. All cable length requirements are met for all devices.
3. DMS verification CCTVs shall not share a cabinet with the DMS device it monitors.

All ITS devices shall be the latest hardware, software, and firmware provided by the manufacturer. All ITS devices shall be compatible with GDOT ATMS at the time of installation.

17.3.2 Closed Circuit Television

17.3.2.1 CCTV Design Requirements

GDOT ITS CCTV cameras shall be Type 1 as specified in GDOT Standard Specifications, Section 936.

Early in the preliminary design schedule, the Design-Builder shall submit CCTV design for GDOT approval showing that the CCTV design provides 100 percent coverage of the new ramps, adjacent General Purpose Lanes and side street, with no occlusions, from the beginning of the ramp tapers at the General Purpose Lanes, through the ramp junctions at each side street, and to the end of the ramp tapers at the General Purpose Lanes on the other side of the interchange. The Design-Builder shall provide evidence of 100 percent coverage, which may be a 3D view of the General Purpose Lanes as viewed from the proposed camera mounting heights above the roadway. The 3D views shall cover the entire Project Limits and include all possible sight obstructions, including vegetation, existing signs, proposed signs, relocated signs, bridges and overpasses, and vertical and horizontal alignments.

At a minimum, four CCTV cameras shall be installed at the Bethlehem Road interchange. The CCTV cameras shall be located as close to the interchange as physically possible to allow viewing of the interstate, entrance ramps, and cross streets.

CCTV poles shall be of sufficient height to mount all GDOT cameras at nominally 50 feet above the roadway surface. CCTV cameras may be installed on existing strain poles where other ITS equipment resides or on existing sign gantries. When installed on existing strain poles or sign gantry, the CCTV camera shall be installed at a minimum height of 20 feet above the roadway surface. Where CCTV cameras are installed on existing strain poles, the Design-Builder shall verify the existing strain pole is structurally sound and can carry the additional load, including CCTV camera, pole-mounted cabinet, and any other applicable equipment. The Design-Builder shall ensure the distance between the bucket truck parking location and the camera does not require a bucket truck arm length of greater than 70 feet.

If CCTV cameras are connected to overhead sign trusses, the Design-Builder shall:

1. Ensure the maximum 15-foot tubular extension is connected to the sign structure upright and not to any truss portion of the structure.
2. Ensure tubular extensions meet the minimum vibration requirements per GDOT Standards and Specifications.
3. Perform and submit for approval analysis verifying that the sign structure can accommodate the additional loading in conformance with the Design-Build Documents.

The Design-Builder shall verify any existing pole, upright, or extension pole with a new CCTV camera mounted to it is compliant with the vibration requirements in the Project Standards as if it was a newly installed structure. If it does not meet the vibration requirements, the CCTV camera shall not be mounted to the structure. Total deflection at the CCTV mounting height shall meet the requirements set for strain poles for ATMS applications per GDOT Standard Specifications, Section 639. The Design-Builder shall include deflection design calculations in the required structure design Submittals.

17.3.2.2 CCTV Implementation Requirements

For CCTV subsystems that are replacements for existing CCTV, the Design-Builder shall design, furnish, install, integrate, test, and make available for GDOT's use prior to deactivation and removal of the existing CCTV. The Design-Builder shall not deactivate or remove existing CCTV until the replacement CCTV has been integrated, tested, and accepted in accordance with TP Section 17.4 (Site Acceptance).

The Design-Builder shall install camera system assemblies on new concrete strain poles unless otherwise permitted in this TP Section 17.

The Design-Builder shall include milestones for replacement GDOT CCTV cameras and new traffic monitoring GDOT CCTV camera installation in the Project Baseline Schedule.

Regardless of the line-of-sight verification during design, the Design-Builder shall be responsible for constructing a GDOT CCTV camera system meeting the coverage requirements described in TP Section 17.3.2.1 (CCTV Design Requirements). If any roadway segment does not meet the coverage requirements, the Design-Builder shall modify the CCTV placement as necessary to meet the coverage requirements. Modifications for which the Design-Builder shall be responsible include raising or lowering camera mounting heights, providing additional CCTV installations, or other solutions presented by the Design-Builder and submitted to GDOT prior to implementation.

17.3.3 Reserved

17.3.4 Reserved

17.3.5 Communications Network

17.3.5.1 Communications Network General Requirements

The Design-Builder shall design, furnish, install, integrate, and test a communication network for the GDOT ITS between ITS cabinets. Existing communication network hub buildings that shall be used for this Project are listed in TP Table 17-2 (Location of Existing Communications Network Hubs).

Table 17-2: Location of Existing Communications Network Hubs

Current HUB Name	*Owner*	*Location*	*Proposed Status*	*New Hub Size*
HUB-CC	GDOT	SR 155/North McDonough Road	Existing	N/A
Mini HUB #9	GDOT	SR 155/North McDonough Road	Existing	N/A

Lateral fiber to local GDOT ITS cabinets shall also be single-mode fiber-optic cable and IP over Ethernet. The Design-Builder shall design, furnish, and install communication between the ITS cabinets and the local devices attached to the cabinet based on the requirements of the device or devices.

The Design-Builder shall not install conduit duct banks behind noise barriers. The designated order for the installation of new conduit duct banks shall be:

1. Behind the guardrail
2. 10 feet or greater from the paved shoulder
3. Under the paved shoulder, providing justification for this location
4. At least 10 feet in front of the noise barrier, providing justification for this location

17.3.5.2 Communication Network Design Requirements

The Design-Builder shall confirm GDOT communication network requirements at the communication network design kick-off meeting.

All conduit, conduit access (such as Electrical Communication Boxes (ECBs) and pull boxes), fiber and communication cabling, cabinets, patch panels, network switches, and terminal servers shall be solely dedicated to GDOT. Every conduit in each duct bank shall have a unique color and/or striping pattern. The coloring shall be consistent through the Project corridor. The Design-Builder shall not install fiber-optic, other data communication, or composite cable in the same conduit as an electrical power service cable.

For new duct bank installation, the Design-Builder shall meet the following requirements:

1. A conduit duct bank consists of multiple conduits that are co-located within a trench or bore line. A minimal conduit run is two conduit runs within the conduit duct bank. The minimal conduit duct banks are used as follows:
    a. Type 7 Pull Box to Type 4S Pull Box (cabinet) for drop fiber cables (lateral splices)
    b. Type 5 Electrical Communications Box to Type 4S Pull Box (cabinet) for drop fiber cables (lateral splices)
    c. Type 4S Pull Box (cabinet) to Type 4S Pull Box (device pole or overhead span)
    d. Type 2 Pull Box (power service) to Type 2 Pull Box (cabinet)
    e. Ramp Meter System (RMS) SCC to signal heads/FWS/loops for power or detection amplifier RF signal

When conduit or duct banks are installed under roadways or shoulders for lateral crossings, the conduit and duct banks shall be installed by directional boring as shown in GDOT Construction Standards and Details (ITS-07). Directional bores associated with the trunk (fiber backbone) will have four conduits per segment of bore sleeving. The HDPE 2-inch conduits serve as inner duct sleeves.

The communication network for the GDOT ITS shall be designed to be end-to-end, from the field device to the NaviGAtor TMC including the ITS cabinets.

The Design-Builder shall include in the design cabinet dimensions, communication shelf slots, network bandwidth capacity, conduit capacity, backbone fiber availability, and electrical circuit capacity. The Design-Builder shall design all cabinet as well as grounding and electrical service.

The Design-Builder shall determine the link loss budget analysis for all fiber-optic links.

Lateral drop cabling shall be used to reach GDOT ITS Sites. If GDOT provides ITS details during the design phase, the Design-Builder shall adapt the communication network design to accommodate the GDOT communication network requirements.

If fiber optic communication network is not readily available to connect and integrate ITS devices, the Design-Builder shall provide an integrated broadband cellular wireless router that complies with IEEE 802.3 standards for 10/100/1000 Mbps Ethernet and has a 4G LTE or greater throughput. The router shall provide the capability for network traffic to be accessible via a public or private IP connection, via VPN tunnel with SSL, IPsec, and IP pass-through. The Design-Builder shall provide a wireless system with a minimum of one 10/100/1000 Base-T/TX, shielded Ethernet-port, outdoor-rated RJ-45 connector or another Ethernet-compatible weathertight connector, and visual status indicators that include power, signal, ethernet link, and activity. The Design-Builder shall include an external ruggedized antenna for broadband wireless.

17.3.5.3 Communication Network Implementation Requirements

All fiber optics used in this Project shall be outside plant single-mode fiber. The Design-Builder shall provide fiber-optic cables for trunk fiber and lateral fiber, fiber distribution centers, patch panels, splice enclosures, and fiber-optic cable splices as required to connect each ITS equipment cabinet, each communication network hub building, and ITS elements to the backbone communication system.

Either field terminated or pre-terminated drop cable assemblies shall be used for all drop fibers from the fiber optic trunk line to the ITS cabinet or equipment.

Underground splice enclosures shall be furnished and installed at all trunk line splices and at all locations where drop fibers are installed.

Rack-mounted fiber distribution units (FDUs) shall be furnished and installed in all field cabinets. FDUs shall be fitted with LC-connectors.

The Design-Builder shall furnish and install all equipment, cabinets, cabling, and electronic devices needed to connect the ITS devices to the Layer 2 and Layer 3 Ethernet switches, and to connect all GDOT ITS equipment and components to the Layer 2 switch in the local ITS cabinet.

17.3.6 Reserved

17.3.7 ITS Electrical Service (Power) Requirements

The Design-Builder shall coordinate with the electrical power companies and provide electrical power for all GDOT ITS Sites included in the Project. The Design-Builder shall pay the costs for providing electrical power service for temporary and new ITS until Substantial Completion. After Substantial Completion, the Design-Builder shall contact the GDOT Office of Traffic Operations to request the GDOT Utility Service Request Form. The Design-Builder shall complete and submit the GDOT Utility Service Request Form with supporting documentation when transferring Utility service to GDOT. All power connections to existing and proposed ITS sites shall be hardwired. No solar power shall be allowed.

17.3.8 Electrical Design Requirements

17.3.8.1 General Electrical Design Requirements

Electrical power shall be designed based on the electrical service loads at each location where power is required. Electrical service, wire sizes, transformers, surge suppression, meters, grounding, lightning protection, and uninterruptable power supply (UPS) are all considered part of the electrical power systems.

The Design-Builder shall ensure that the electrical power company installs electrical usage meters for GDOT equipment at locations where electrical power service is provided to GDOT.

The Design-Builder shall design electrical loads for all ITS cabinets and GDOT ITS devices. Electrical power calculations shall be provided to GDOT for review and approval during design. Power loading, transformers, and conductor sizes based on National Electrical Code (NEC) standards shall be included in the power calculations. In no case shall electrical service provided at a location be less than 120-volt, 20 amps alternating current (AC). The electrical load at each ITS cabinet shall be based on a factor of 2.25 times the calculated load based on the equipment being provided for that cabinet to allow for future expansion and use of maintenance tools.

The Design-Builder shall space electric pull boxes not more than 500 feet apart. Fiber-optic or other data communication or composite cable shall not be installed in the same conduit or pull box as electrical power service cable.

The Design-Builder shall install mechanical theft deterrent devices in all Project electrical conduits and electrical pull boxes to prevent the removal of electrical wiring and to prevent unauthorized access. Rubber stopper mechanical theft deterrent devices that compress against the electrical wiring and prevent the wires from being easily pulled through the conduits shall be used (or alternate as acceptable to GDOT). The Design-Builder shall also install electrical pull box lids that contain locking mechanisms that work with the use of cams to prevent unauthorized access.

Voltage design drop calculations shall comply with the suggested limits defined in NEC Article 210.19 (A) (1) Informational Note 4 and NEC Article 215.2 (A)(1)(b) Informational Note 2. These calculations shall define all service points, circuits emanating from those points, details of all loads on all circuits, the nominal voltage on each circuit, the voltage drop for each link of each circuit, the percent voltage drop for each circuit, and the wire size selected for each link of each circuit. The Design-Builder shall include sizing and ratings of all circuit breakers, transformers, fused switches, and transfer switches planned for installation. Calculations shall be submitted with the Preliminary and Final Design Documents and with subsequent Submittals with all data appropriately updated. An allowance of 9.0 Amps shall be included at the end of the circuit for a convenience outlet. The Design-Builder shall provide transformers, where used, with ± 2.5 percent and ± 5 percent voltage taps. Do not use to fulfill the voltage drop and wire size requirements of these minimum technical requirements.

Where circuits run in different directions from the service panel, separate circuits, each with its individual circuit breaker, shall be provided. A main disconnect circuit breaker shall be provided at each power service point.

17.3.8.2 Lightning Protection Design Requirements

The Design-Builder shall design all CCTV and poles (including sign structures with ITS devices) to include lightning protection systems per Project Standards, NFPA-780: Standard for the Installation of Lightning Protection Systems, and as described herein.

Each ITS cabinet and ITS pole shall have an exterior earth-ground ring consisting of a system of ground rods connected to a ring of a #2 AWG stranded bare copper ground wire. The earth ring shall include a minimum of two ground rods for ITS cabinets and ITS poles. The Design-Builder shall place ground rods at least 40 feet from adjacent ground rods. The rings shall be connected with #2 AWG stranded bare copper ground wire when ground rods adjacent installations are within 100 feet of each other. At each site, lightning protection that is also connected to the site's earth-ground ring shall be included. Ground with a resistance of five ohms or less shall be measured and documented. All ground rod attachments will be using exothermic weld per NEC.

When new GDOT ITS devices are placed on an existing structure, the Design-Builder shall update the structure's lightning and grounding protection system to the lightning and grounding protection requirements for new structures. The air terminals shall be placed to a height greater than the installed ITS device.

17.3.8.3 Grounding Design Requirements

To facilitate testing and periodic retesting of the grounding array at each ITS pole, ITS cabinet, and communications network hub building, the Design-Builder shall design the grounding system so that the top of all grounding rods is installed in an Electrical Service Type 2 Pull Box. The grounding conductor shall be designed to be exothermically connected to the ground rod at an elevation of 12 inches below the ground line. All ITS equipment and enclosures located at a communication network hub building shall conform to the latest adopted NEC requirements for bonding and grounding. Grounding arrays shall be designed to be interconnected with cabinets, poles, and lightning systems that are within 40 feet of each other. The actual locations of buried connections and ground rods shall be accurately shown in the Record Design Documents.

When new GDOT equipment is placed on an existing structure, the grounding system shall be updated by the Design-Builder to the requirements set forth in this TP Section 17.3.8.3.

Grounding shall meet the minimum requirements of NEC.

17.3.8.4 Reserved

17.3.8.5 Electrical Implementation Requirements

The Design-Builder shall furnish, install, and test the electrical systems as required to meet the power of GDOT ITS cabinet location. The Design-Builder shall furnish, install, and test the electrical services as required by the Project Standards.

At locations (except hub buildings) where electrical power service is provided to GDOT ITS cabinets and devices, the Design-Builder shall coordinate with the electrical power company to install an electrical usage meter for GDOT equipment.

All voltage being provided to the cabinet shall be in accordance with the approved electrical design calculations. The Design-Builder shall test the power from the electrical service disconnect, to the transformer, to the meters, and into the cabinets.

For GDOT ITS, the Design-Builder shall furnish and install all components of the electrical power systems (with the exception of the electrical usage meter) to ensure complete and functioning systems, from equipment cabinets to and including devices. The Design-Builder shall furnish and install the electrical systems to include all required device power supplies, grounding, lightning protection and surge suppression. The Design-Builder shall furnish and install surge suppression on both ends of any underground electrical cable or composite cable carrying electrical power to any device to protect against surges induced from a lightning strike on the ground.

The Design-Builder shall install and ensure electrical service is ready for connection before ITS cabinets are installed. Electrical services shall be activated for all ITS cabinets.

17.3.9 General Maintenance Areas Design Requirements

The Design-Builder shall install all cabinets, foundations, concrete pads, and junction boxes at elevations and locations that facilitate maintenance and provide safe access. The Design-Builder shall not install cabinets behind noise barriers or on the outer edge of elevated sections. The Design-Builder shall install handrails for protection at locations with fall hazards. Stairs and/or platforms for performing maintenance activities shall be provided as specified. The Design-Builder shall provide ITS maintenance areas per the requirements for maintenance areas in TP Attachment 17-3 (ITS Maintenance Area Requirements). Access to all ITS device cabinets shall be from the roadway travel way the ITS device provides primary coverage. The Design-Builder shall submit similar detail for GDOT approval at each site to accommodate slope condition, distance from ground elevation, and other ITS infrastructure during preliminary design.

1. Cabinet heights — for all cabinets, the top of the cabinet shall not be more than 84 inches above the finished grade of the workspace where maintenance personnel would be expected to stand. All cabinet doors shall be accessible by maintenance personnel standing on the finished grade.
2. Cabinet workspace — a minimum 8-foot by 12-foot flat concrete pad shall be provided at each cabinet(s) location for maintenance personnel to stand when accessing all ITS cabinets. The Design-Builder shall provide stairs to reach the maintenance area with fall protection, consisting of galvanized metal handrails for all cabinet workspaces more than 4 feet difference from the shoulder elevation.
3. Communication Junction Box workspace on slopes — for all communication junction boxes located on slopes 2:1 or steeper, and located more than 2 feet above the toe of slope, a minimum 3-foot by 6-foot flat area immediately adjacent to the downslope side of the junction box shall be provided to accommodate maintenance personnel workspace and placement of the junction box lid when removed.
4. Cabinet and Communication Junction Box access on slopes — for all communication junction boxes and cabinets located on slopes 2:1 or steeper and located more than 5 feet in elevation from the shoulder, stairs accessing the junction box or cabinet from the shoulder shall be provided to enable access to the workspace as described above. The stairs shall have a handrail on at least one side.

17.3.10 Reserved

17.3.11 Ramp Meter Systems

The Design-Builder shall include ramp meter systems at major interchanges identified in TP Section 11 (Roadways) and in accordance with the ITS Design Guidelines and TP Section 11.3.8 (Ramp Design Criteria).

The Design-Builder shall coordinate and implement ramp meter timing plans that fulfill operational goals of the ramp meter and/or system. The Design-Builder shall obtain acceptance of the new ramp meter timing before updating all ramp meter timing parameters as necessary to maintain safe and efficient operation of all ramp meters inside of the Project Limits from the State ITS Engineer.

17.3.12 Reserved

17.4 Site Acceptance

The communication network configuration, GDOT ATMS integration, ITS testing, acceptance, and burn-in shall be completed in accordance with the requirements in GDOT Standard Specifications, Section 942. The Design-Builder shall submit a request to implement ITS Batch Acceptance for ITS devices to GDOT that includes the justification for and providing a plan for ITS Batch Acceptance. If ITS Batch Acceptance is used, then the Design-Builder shall follow the requirements on TP Attachment 17-4 (ITS Acceptance Requirements).

17.4.1 Site Acceptance Checklist

The Design-Builder shall provide 14 days' notice to GDOT of readiness to conduct an on-site turnover inspection to be conducted by the Design-Builder using the accepted checklist as a basis. The Design-Builder shall correct any deficiencies found during the on-site turnover inspection before each ITS Site is deemed acceptable for burn-in and turnover to GDOT. If the ITS Site is not fully configured, functional, and ready for testing when GDOT attends, the Design-Builder shall reschedule the test date with the notification periods starting over.

17.4.2 Testing and Acceptance

ITS testing, acceptance, and burn-in plans shall be included in the site acceptance checklist. The Design-Builder testing of specific ITS technologies, electrical components, communication network and infrastructure, communication network hubs, and equipment cabinets shall be conducted in accordance with TP Attachment 17-4 (ITS Acceptance Requirements) if applicable and the test requirements in the Project Standards.

GDOT ITS testing, and Final Acceptance processes are to be conducted according to the applicable Project Standards and as described herein.

17.4.3 Spare Parts

The Design-Builder shall provide spare parts as defined in TP Attachment 17-2 (Spare Replacement Units (GDOT)).

17.4.4 Protection of Existing ITS Infrastructure

The Design-Builder shall ensure all existing GDOT ITS components are protected from damage. Damage caused by the Design-Builder to GDOT ITS due to failure to locate any existing or installed GDOT ITS within the Project Limits shall be the responsibility of the Design-Builder.

GDOT (or their respective maintenance contractors) will repair or replace the damaged ITS field element or infrastructure; the Design-Builder shall be responsible for the total repair or replacement cost along with all non-refundable deductions per DBA Exhibit 17 (Measures of Liquidated Damages and Nonrefundable Deductions).

17.4.5 Existing System Inventory

The Design-Builder shall conduct a field survey and provide a complete inventory of all ITS components and infrastructure in the Project Limits prior to NTP3. Included in the inventory shall be components and infrastructure to be removed and replaced, to be removed and relocated, and to be left in place. The inventory shall identify which components are proposed to be removed and replaced, and to be left in place.

17.4.6 ITS Locates

The Design-Builder shall locate the electrical and fiber-optic conduits and cables within the Project Limits. Available ITS as-built shall be obtained from GDOT prior to performing any field work. All existing, temporary, and new ITS infrastructure and facilities shall be located by the Design-Builder until Final Acceptance. The Design-Builder shall provide ITS locates requested by other consultants, Contractors, or Utilities within 48 hours of receiving requests from GDOT or from any other source from NTP3 to Final Acceptance. The Design-Builder shall notify GDOT of the date and location of each locate request and the date at which the locate was completed.

The Design-Builder shall fully cooperate with all Utility Owners during the design, survey, and construction activities of the Project in accordance with the requirement in TP Section 1.7 (Existing Utility).

17.4.7 Operational Continuity of ITS

The Design-Builder shall maintain continuous ITS operations per the requirements in TP Section 19.5.5.1 (Operational Continuity of ITS).

17.5 Asset Management

The Design-Builder shall submit accurate as-built documentation for all installations of ITS infrastructure, signed and sealed by a Professional Engineer or Professional Surveyor and Mapper registered in the State of Georgia, and meeting, at a minimum, the GDOT Standard Specifications Section 942.3.01.C.3 and as stated in the requirements in this TP Section 17.5.

17.5.1 Submittal Requirements

As part of Record Design Documents, the Design-Builder shall deliver as-builts no later than 30 calendar days after completion of installation and shall be reviewed and accepted by the Department prior to final inspection and in accordance with Project Standards and TP Attachment 17-4 (ITS Acceptance Requirements), if applicable. The Design-Builder shall deliver electronic documentation in an excel file that is in a format compatible with the existing GDOT's ITS asset management system. The format of the as-built data shall support GDOT's existing ITS data structure and accepted by the Department. Include in the as-built documentation the following as a minimum:

1. As-Built Drawings — Provide as-built drawings showing the final location of all new equipment and communications installed, including but not limited to items as described in TP Section 17.5.2 (Components).

2. System Connection Diagrams — Furnish fiber optic splicing diagrams detailing all cable splices, terminations, equipment port assignments, and optical circuits within the communication network. Include diagrams showing the location of all equipment in the new or modified equipment racks or frames in hubs and mini-hubs. The diagrams shall clearly indicate the use of each fiber.
3. GIS files — As-built drawings shall also be provided in electronic files in a format(s) compatible with ArcGIS and Google Earth software. The GIS files shall identify the information as required above.

17.5.2 Components

As-built submittals shall include GIS-based graphical and tabular electronic files with an inventory of all components of the ITS system. As a minimum, the Design-Builder shall identify all conduit, cable, pull boxes, poles, cabinets, ITS devices, hubs, mini-hubs, and power services. The inventory shall include the manufacturer, model, and serial number for each device or completed assembly.

17.5.2.1 Conduit and Cable

The Design-Builder shall identify all conduit and cable with unique line styles for routing (directional bore, in-pavement trench, bridge-attach, etc.) that are clearly identified in a legend. Conduit shall be identified by usage, type, conduit size, quantity, location, depth, and terminations.

The Design-Builder shall identify the type of cable (example – Fiber Optic) and label the number of fiber strands or other identifying features of the cable. Fiber optic cable shall follow the naming convention described in the GDOT Site and Fiber Standard Naming Guidelines.

The Design-Builder shall provide coordinate data for conduit and cable at 100-foot intervals including changes in direction.

17.5.2.2 Pull Boxes

The Design-Builder shall identify all pull boxes by type and coordinates.

17.5.2.3 Poles

The Design-Builder shall identify poles by pole type and coordinates.

17.5.2.4 Cabinets

The Design-Builder shall document the type of cabinet, cabinet coordinates, and inventory of internal components. A list of FDU types and sizes shall be included. Network switch type, size, and identifier shall be part of the list. A cabinet corner “blow up” shall be provided detailing pull box locations with all conduit and cable.

17.5.2.5 Devices

The Design-Builder shall identify all installed ITS devices by coordinates, site location, and site identification. The Design-Builder shall also provide inventory of the device attributes, configuration, and warranty information.

17.5.2.6 Reserved

17.5.2.7 Electrical Power Service

The Design-Builder shall identify electrical power service and coordinates.

17.6 Submittals

With respect to ITS requirements described in this TP Section 17, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 17 Attachments

Attachment No.	*Title*
Attachment 17-1	Reserved
Attachment 17-2	Spare Replacement Units (GDOT)
Attachment 17-3	ITS Maintenance Area Requirements
Attachment 17-4	ITS Acceptance Requirements
Attachment 17-5	Reserved
Attachment 17-6	ITS Asset Information

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 17-1

Reserved

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 17-2

Spare Replacement Units (GDOT)

Attachment 17-2: Spare Replacement Units (GDOT)

The Design-Builder shall provide to GDOT, at a minimum, the number of spare replaceable units for all ITS systems shown in the table below. Required spare replaceable parts are not exclusive to this list. Therefore, the Design-Builder shall supply the number of replaceable parts of the systems shown in the table and any related part that is necessary for proper functioning, even if the related part is not specifically listed in Table 1 (Spare Replacement Units by ITS Device/Component).

Table 1: Spare Replacement Units by ITS Device/Component

ITS/Ancillary Components	***Number of Spare Units***
Closed Circuit Television Camera Subsystem	
Cabinets	5 percent (fully equipped)

The number of spare parts listed shall be supplied by the Design-Builder and shall be rounded up to the next highest whole set. For example, if there are 33 DMS to be installed on the Project, the Design-Builder shall supply four sets of the listed DMS spare parts (i.e., 33/10=3.3, hence four sets).

The Design-Builder shall submit a list of all spare replaceable units, including component name, proposed part number, proposed number in the inventory, and storage requirements, to GDOT for review and approval. GDOT shall have 21 days to inspect all spare replaceable units.

The Design-Builder shall turn over and deliver to GDOT the spare replaceable units to a location determined by GDOT.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

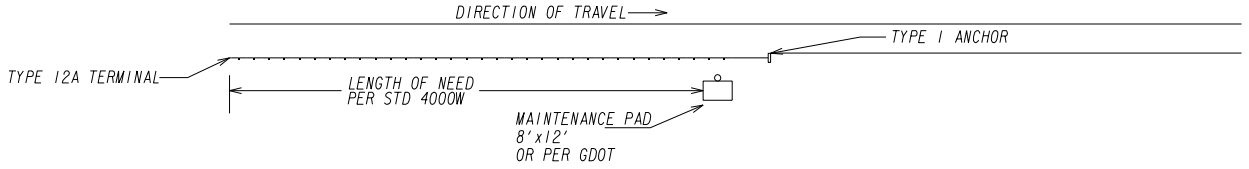
Attachment 17-3

ITS Maintenance Area Requirements

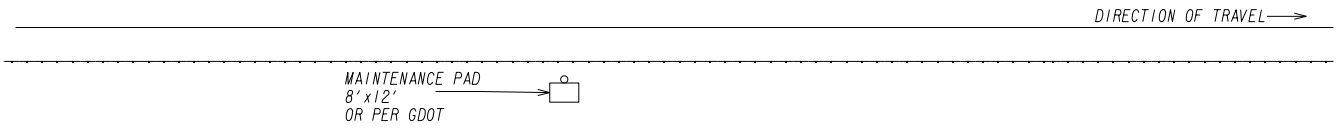
ITS MAINTENANCE ACCESS

GDOT ITS EQUIPMENT

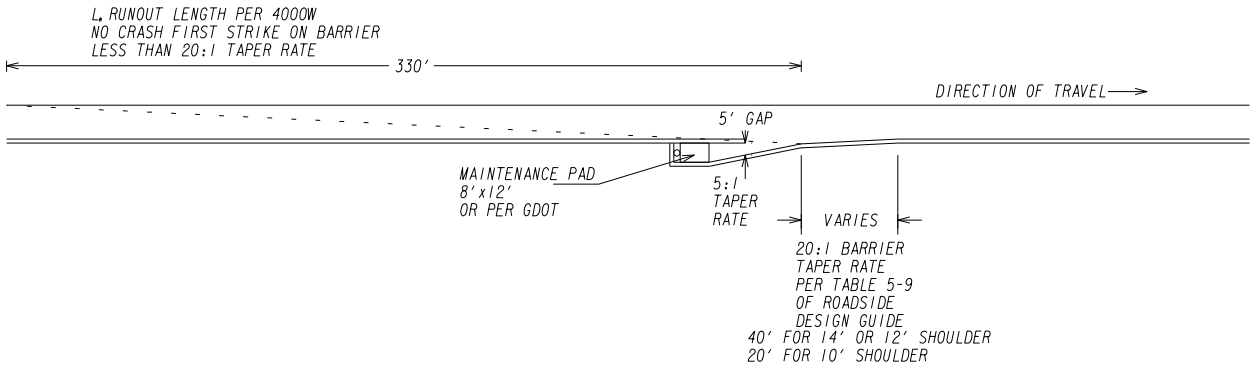
OPTION 1) GUARDRAIL REQUIRED FOR ITS ONLY
(GROUND MOUNTED OR POLE MOUNTED)



OPTION 2) ITS EQUIPMENT WITHIN A RUN OF GUARDRAIL
(GROUND MOUNTED OR POLE MOUNTED)



OPTION 3) ITS WITHIN A RUN OF BARRIER
(GROUND MOUNTED OR POLE MOUNTED)



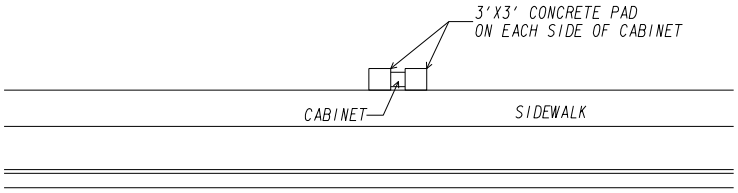
NOTES:
1) CONCRETE BARRIER IS NOT REQUIRED FOR ITS EQUIPMENT.
2) ITS POLE SHALL BE MINIMUM 6' BEHIND GUARDRAIL (FROM FACE OF GUARDRAIL TO FACE OF POLE)
3) 330' RUNOUT LENGTH IS BASED ON A 65 MPH DESIGN SPEED
4) NOISE BARRIER MAY BE MOUNTED DIRECTLY TO BARRIER WHICH IS MORE THAN 4' BEYOND THE 330' RUNOUT DASHED LINE (I.E. 5:1 TAPER AND BARRIER OVERLAP LOCATIONS)

LAST REVISED: 09/03/2020

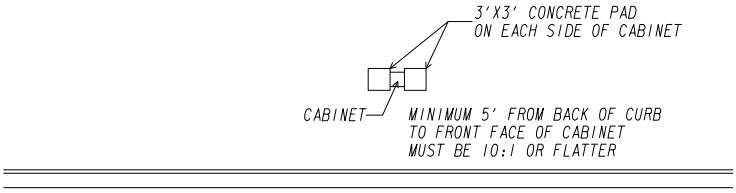
ITS MAINTENANCE ACCESS

ARTERIAL EQUIPMENT
GDOT ITS OR SRTA ETCS

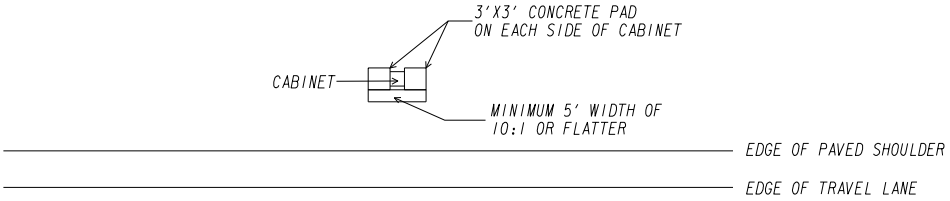
OPTION 1) ARTERIAL WITH SIDEWALK



OPTION 2) ARTERIAL WITH CURB & GUTTER, BUT WITHOUT SIDEWALK



OPTION 3) ARTERIAL WITHOUT CURB & GUTTER



ON ARTERIALS WITHOUT CURB AND GUTTER, THE CABINET SHALL EITHER BE PLACED OUTSIDE THE CLEARZONE AS DEFINED IN GDOT STANDARD 4000W OR SHIELDED AND SUBJECT TO MAINTENANCE ACCESS AS FOLLOWS:

A) GDOT ITS
   i) BEHIND GUARDRAIL (GDOT ITS OPTION 1 OR 2)
   ii) BEHIND BARRIER WITH PEDESTRIAN ACCESS (GDOT ITS OPTION 3)

B) SRTA ETCS
   i) BEHIND GUARDRAIL WITH PEDESTRIAN ACCESS (SRTA ETCS OPTION 1 OR 2)
   ii) BEHIND BARRIER WITH PEDESTRIAN ACCESS (SRTA ETCS OPTION 3)

NOTES:
1) CABINET PLACEMENT SHALL BE SUBJECT TO LATERAL OFFSET TO OBSTRUCTION REQUIREMENTS AS FOUND IN THE GDOT DESIGN POLICY MANUAL. CABINETS SHALL BE CONSIDERED EQUIVALENT TO A SIGNAL CABINET.

LAST REVISED: 09/03/2020

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 17-4

ITS Acceptance Requirements

Attachment 17-4: ITS Acceptance Requirements

1 Introduction

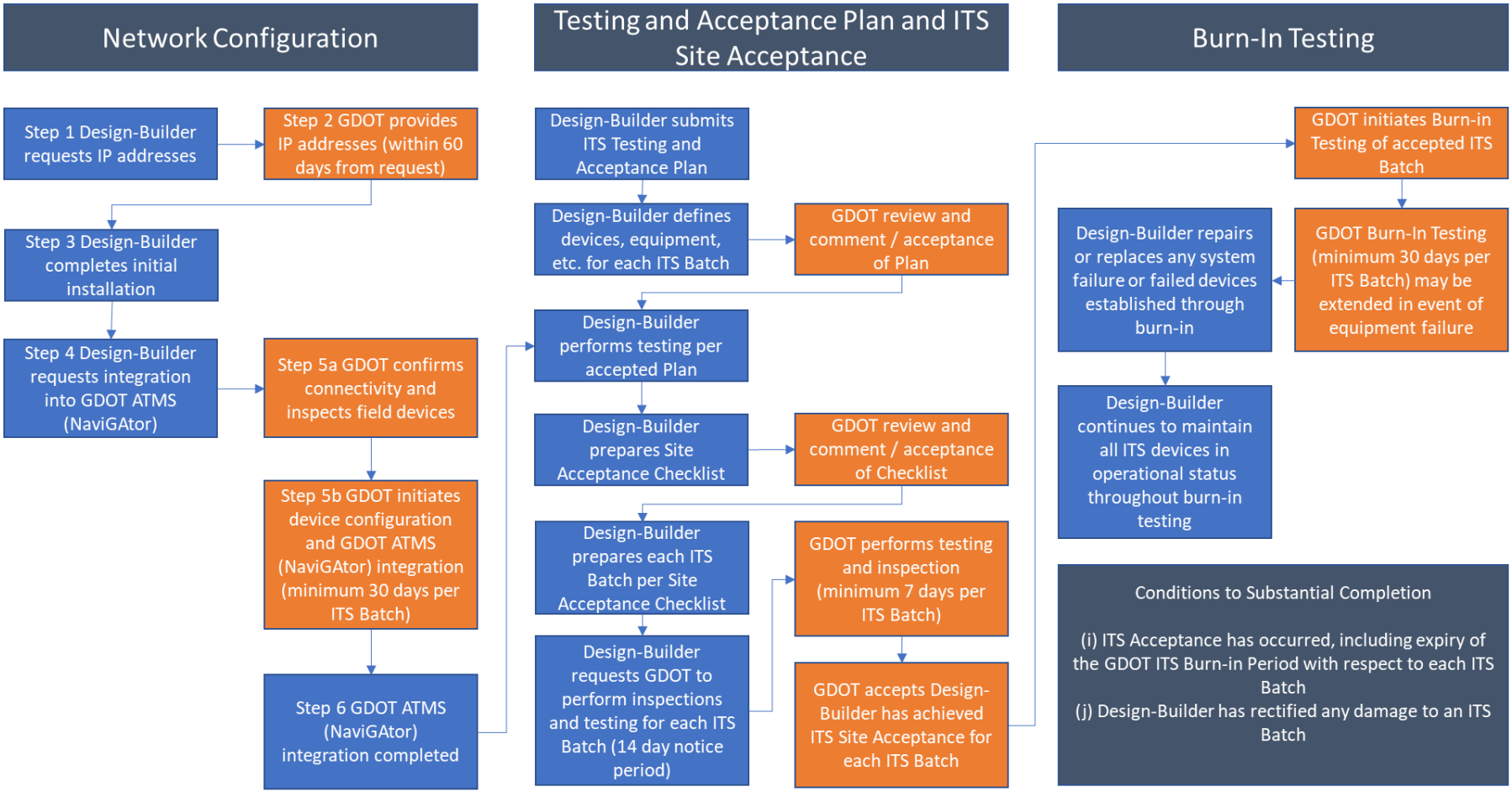
This TP Attachment 17-4 replaces the following parts of GDOT Standard Specifications Section 942 (ITS General Requirements):

1. Section 942.3.03 (Network Equipment Configuration and Integration Requirements).
2. Section 942.3.04 (Testing Requirements): Part A (Test Roles and Responsibilities); Part B (ITS Test Plan); and Part C (ITS Test) Subsection 3b (Burn-in Test).

All other parts of GDOT Specification Section 942 (ITS General Requirements) remain in force.

This TP Attachment 17-4 provides the sequencing, Design-Builder obligations, and GDOT responsibilities with respect to network configuration; GDOT ATMS (NaviGAtor) integration; the ITS testing and acceptance plan (including inspection); ITS Site Acceptance; ITS Batch Acceptance; and ITS burn-in testing as shown in Figure 1 (Overview of Design-Builder and GDOT Responsibilities).

Figure 1: Overview of Design-Builder and GDOT Responsibilities



2 Network Configuration and Integration Procedures

The procedures for network configuration and integration are as follows:

1. Step 1: Request Network Addressing Information:
    a. The Design-Builder shall request GDOT to provide network addressing (IP, mask, and gateway) information for all ITS equipment.
    b. If a staged equipment configuration is desired, the Design-Builder shall identify that request at this time and shall submit the staging plan.
2. Step 2: Receipt of Network Addressing Information:
    a. Once the Design-Builder's completed request is received by GDOT, GDOT will provide the network address information within 60 days in spreadsheet or document tabular form.
3. Step 3: Complete Initial Installation:
    a. The Design-Builder shall:
        1) Complete installation of field equipment, including support poles, field cabinets, power service, field and network devices, and fiber communications infrastructure.
        2) Complete equipment configuration to include complete inspection review of all ITS devices.
        3) Furnish network routing switch SFPs to GDOT.
        4) Furnish fiber patch cords needed in the hub buildings but make no connections to the network routing switch.
        5) Configure the network addressing information into the network equipment.
        6) Provide network links that are active.
        7) Provide in the same tabular form the equipment model and serial numbers for each network equipment device in its installed location.
4. Step 4: Request Integration into NaviGAtor:
    a. Upon completion of all activities in step 3 above, the Design-Builder shall request in writing for GDOT to complete device configuration and integration of the ITS equipment into NaviGAtor.
    b. The Design-Builder shall submit the request for configuration/integration and the location/model/serial number information for each ITS device to be configured.
5. Step 5: Integration into NaviGAtor:
    a. GDOT will confirm network connectivity and addressing information in all devices prior to acceptance of the Design-Builder's request in step 4.
    b. Upon successful confirmation of network connectivity, GDOT will have 30 days to complete device configuration and systems integration of the ITS equipment into NaviGAtor for each ITS Batch.
    c. The Design-Builder may continue with remaining field construction that has no impact on any equipment or communications infrastructure associated with the network configuration.

   d. Any Design-Builder-caused disruption of the equipment or communications infrastructure or any requirement from the Design-Builder for device re-configuration during item 2 of this step 5 will result in resetting the 30-day period to allow GDOT to complete the device configuration and system integration into NaviGAtor.

6. Step 6: NaviGAtor Integration Completion:
   a. GDOT will notify the Design-Builder when network configuration into NaviGAtor is successfully completed, at which time the network equipment configuration procedure will be considered complete.
   b. The Design-Builder may then continue with remaining Project activities, including delivering the requirements of the ITS testing and acceptance plan and ITS Site Acceptance.

3 Testing and Acceptance Plan and ITS Site Acceptance

3.1 General

The Design-Builder shall submit the ITS testing and acceptance plan that includes test procedures and test schedule for conducting tests as specified herein.

Test categories shall include:

1. Pre-installation test.
2. Stand-alone test.
3. Acceptance test. Refer to GDOT Specification Section 942.3.04.C for minimum test requirements.

ITS test forms from GDOT shall be used as a starting point for ITS testing and acceptance plan development. The test requirements for ITS design elements unique to the Project shall be reflected in the ITS testing and acceptance plan.

3.2 Phasing of Testing and Acceptance

As part of the ITS testing and acceptance plan the Design-Builder shall:

1. Submit a request in writing with justification for a staged device or system installation progression and testing for groups of devices.
2. Include details of the ITS devices, network equipment, components, and ITS Sites to be included within each ITS Batch.
3. Submit the ITS Acceptance Schedule including a Gantt chart with other key milestone dates including Substantial Completion, identifying the dates on which the Design-Builder intends to:
   a. Prepare each ITS Site for ITS Site Acceptance such that each ITS Site complies with all the requirements set forth on the Site Acceptance Checklist.
   b. Request that GDOT initiates the GDOT ITS burn-in for each ITS Batch.
   c. Achieve ITS Batch Acceptance for each ITS Batch.

The ITS Acceptance Schedule shall not require GDOT ITS burn-in for more than two ITS Batches concurrently.

The Design-Builder shall ensure that devices and equipment are in the correct state for testing and inspection by GDOT and shall allow in the ITS Acceptance Schedule a minimum of seven days per ITS Batch for GDOT's testing and inspection activities and a 14-day notice period in accordance with TP Section 17.4.1 (Site Acceptance Checklist).

If any devices are incorrectly configured and installed, or are not ready for testing when GDOT attends, GDOT will abandon the inspection and testing and the Design-Builder shall re-schedule the test and inspection date with the same notification and testing periods.

3.3 General ITS Testing Requirements

The Design-Builder shall meet the following general ITS test plan requirements:

1. Test each device by confirming physical location, verifying orientation of devices, checking for physical access to the field cabinet, voltage testing, local communication connectivity testing, grounding, cable management, and device-specific function testing.
2. Demonstrate that furnished and installed hardware, cables, and connections operate correctly and that functions are in accordance with the requirements described in the specifications and manufacturer's recommendations.
3. Perform local communication connectivity testing to ensure communication between each device and the respective local field switch or wireless router, including links to the Layer 3 network routing switches of two or more adjacent hub buildings.
4. Complete power and communications installation prior to scheduling ITS Site Acceptance of each ITS Site.

3.4 Testing and Acceptance Plan Requirements

The ITS testing and acceptance plan shall include the following minimum requirements:

1. A step-by-step outline of the test procedures and sequences to be followed demonstrating compliance with the testing requirements for all ITS devices and components.
2. A description of expected operation, output, and test results (pass/fail criteria).
3. An estimate of the test duration and proposed testing schedule.
4. A test results data form is used to record data and quantitative results obtained during the tests.
5. A description of any special equipment, setup, test software, manpower, or conditions required for each respective test.

The number of test cases shall reflect the complexity of each ITS device or subsystem and the content of test cases covers all functionalities and requirements.

3.5 Test Documentation

The Design-Builder shall provide test documentation that meets the following requirements:

1. Submit ITS test documentation for ITS device testing to GDOT.
2. Submit a 8.5-inch by 11-inch report in PDF that is indexed and sorted and includes tabulated test data to GDOT for review.

3.6 Test Equipment

The Design-Builder shall provide test equipment that meets the following requirements:

1. Provide test cables and equipment for ITS related tests including:
   a. Laptop with manufacturer test software with NTCIP, as applicable.
   b. Patch cables and adapter cables.
   c. Digital multi-meter and cable testers.
2. Test equipment shall provide accuracy greater than that of the required parameters of the equipment being tested.

4 Burn-In Testing Requirements

4.1 Conditions Precedent to Burn-In

Conditions precedent for GDOT to commence burn-in testing shall be as follows:

1. GDOT has accepted system operational test results submitted by the Design-Builder.
2. GDOT has accepted as-built plans for the ITS Work.
3. The Design-Builder has completed all actions on the Site Acceptance Checklist.
4. The Design-Builder has achieved ITS Site Acceptance for the ITS Batch.

4.2 Burn-In Test Description and Requirements

GDOT will conduct burn-in to demonstrate day-to-day full operations of the system from the TMC and that all requirements defined in the Design-Build Documents, including functional/system performance requirements, electrical requirements, data communication requirements, environmental requirements, documentation, and interface requirements with other components of the system are fully satisfied.

The Design-Builder shall repair or replace any system failure or failed ITS device during any portion of the burn-in test without disrupting the system's operation. After repairing the equipment, GDOT will determine that it functions properly.

The Design-Builder shall be responsible for the maintenance, repair, or replacement of ITS devices between NTP3 and the Substantial Completion Date.

4.3 GDOT Burn-In Period

The GDOT ITS burn-in period shall be defined as follows:

1. The test period shall be a minimum of 30 days for each ITS Batch. The test duration may be extended based on the issues or failures experienced during the test.
2. The test period shall be paused in the event of a device or system failure and restarted upon correction of the failures.
3. ITS Batch Acceptance will be granted on the 30th day of the test period if no failures occur.
4. If equipment failure occurs during the 1st through 15th day, then ITS Batch Acceptance will be withheld until all the equipment is functioning properly for 30 consecutive days after repair.

5. If equipment failure occurs during the 16th through 30th day, ITS Batch Acceptance will be withheld until all the equipment is functioning properly for 15 consecutive days after repair.
6. If a specific piece of equipment has malfunctioned more than three times during the test period, the Design-Builder shall replace the defective equipment with a new unit and GDOT will continue the burn-in test period for the entire batch an additional 30 days.

Georgia Department of Transportation

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For

Design-Build Agreement

P.I. No. 0017182

Attachment 17-5

Reserved

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For

Design-Build Agreement

P.I. No. 0017182

Attachment 17-6

ITS Asset Information

TP-17 Attachment 17-6 ITS Asset Information
V1.0 - 5/25/2023

Needed For

| | | |

18 TRAFFIC CONTROL

18.1 General Requirements

The Design-Builder shall design, construct, and maintain the traffic control in conformance with the requirements stated in this TP Section 18. The Design-Builder shall provide for the safe and efficient movement of people, goods, and services through and around the Project, while minimizing negative impacts to Users, residents, and businesses. This TP Section 18 defines requirements, restrictions, and allowable durations applicable to Lane Closures for the mainline, roadways, and pedestrian and recreational facilities.

18.2 Administrative Requirements

18.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct the Work governed by this TP Section 18 in accordance with the Project Standards.

18.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

18.2.3 Required Meetings

The Design-Builder shall, at a minimum, hold the Project meetings set forth in TP Table 18-1 (Required Project Meetings). The meetings shall, at a minimum, be at the frequency and include the attendees identified in TP Table 18-1 (Required Project Meetings). The Design-Builder shall invite the necessary staff from GDOT and its representatives and shall cause to attend each meeting the necessary Key Personnel, Required Personnel, and other staff having responsibility for the subject matter, authority to make decisions, and ability to implement actions arising at the meeting. The Design-Builder is encouraged to combine meetings when appropriate. The Design-Builder shall lead and facilitate the meetings, prepare and distribute meeting agendas a minimum of 24 hours in advance, and prepare and distribute meeting minutes within three Business Days after the meeting. The Design-Builder shall hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. At a minimum, meeting minutes shall clearly identify the following:

1. Date, time, location, and purpose of meeting
2. Meeting attendees
3. Action items and issues
4. Parties responsible for each action item
5. Due dates for identified action items
6. Status of action items and issues (once completed, note “completed” in next meeting minutes before removing from subsequent minutes

Through meetings with local agencies, the Design-Builder shall arrange and coordinate its Work with that of Related Transportation Facilities. The Design-Builder shall provide GDOT with notification of such meetings a minimum of 10 Business Days prior to the date of the meeting. GDOT, at its discretion, will attend such meetings.

Table 18-1: Required Project Meetings

Meeting and Section Reference	*Frequency*	*Minimum Design-Builder Attendees*
Pre-activity meeting for Traffic Control TP Section 3.4.2 (Pre-Activity Meetings)	10 days prior to the start of Work on any phase or prior to executing a stage change	CPM, DPM, CQCM, TCM, WTCS
Traffic interruption meetings TP Section 18.2.5 (Notifications and Traffic Interruption Requests)	As needed during design, weekly after NTP3 to Final Acceptance	TCM, WTCS
TMP stakeholder meetings TP Attachment 2-3 (Public Information and Communications)	Monthly	TCM
GDOT District TIR Coordination Meeting TP Section 18.3 (Design Requirements)	As needed prior to NTP3, weekly NTP3 to Final Acceptance	TCM and/or WTCS
TMP coordination meeting TP Attachment 18-2 (Requirements for the TMP)	Monthly	TCM
Temporary Traffic Control Incident TP Section 18.5.4 (Design-Builder Responsibility to Maintain Temporary Traffic Control)	As specified	CPM, TCM, WTCS

18.2.4 Transportation Management Plan

The Design-Builder shall prepare, implement, and maintain a Transportation Management Plan (TMP) as described in TP Attachment 18-2 (Requirements for the TMP).

18.2.5 Notifications and Traffic Interruption Requests

In accordance with the requirements in TP Attachment 2-3 (Public Information and Communications), and the requirements stated in this TP Section 18, the Design-Builder shall provide GDOT and appropriate Stakeholders notice and supporting public information documentation in advance of the implementation of any Lane Closure. The Traffic Control Manager (TCM) shall coordinate with GDOT regarding all Lane Closures (or on any event that results in a Lane Closure).

In accordance with the procedures in TP Attachment 18-3 (Traffic Interruption Request), the Design-Builder shall submit a Traffic Interruption Request (TIR) to GDOT in advance of any impact to traffic due to the Design-Builder's Work (e.g., Lane Closures, pacing, mobile operations, detours), and the Design-Builder shall obtain GDOT concurrence prior to performing the associated Work. This requirement shall also apply prior to NTP3 to all Lane Closures required to support design.

The Design-Builder shall not submit a TIR, after NTP3:

1. For Lane Closures not included in a previously accepted TTCP unless GDOT has accepted the use of a GDOT Construction Standard identified in TP Attachment 1-4 (Project Standards).
2. For Work which Plans have not been Released for Construction without prior acceptance by GDOT.

3. For any short-term Lane Closure for a reoccurring period beyond 21 days.

The Design-Builder shall ensure that TIRs remain current and in good standing. The Design-Builder shall include all planned Lane Closures and indicate the title and page number (or equivalent descriptor to determine the location and scope of the work) from the accepted TTCP to be used for each Lane Closure in the Two-Week Detail Schedule in accordance with TP Section 2 (Project Management). The Design-Builder shall provide all communication requirements in the TMP including those for notifications and confirmations of TIRs.

In addition to the notification requirements for TIRs and their associated Lane Closure, the Design-Builder shall notify GDOT a minimum of 30 days in advance of any partial openings or changes in traffic patterns which will impact User expectations (e.g., opening of new ramps, auxiliary or turning lanes, major traffic shifts). For instances the Design-Builder did not provide the required advance notification, any associated Lane Closure TIRs will be rejected until the required advance notification is obtained.

Lane Closure Deductions in accordance with DBA Exhibit 12 (Lane Closure Deductions) shall apply to any Lane Closure that occurs for which the Design-Builder failed to: submit a TIR, obtain GDOT concurrence, or comply with any notification or coordination requirements.

Unless otherwise specified, the Design-Builder shall notify Users by placing portable changeable message sign (PCMS) (covering all applicable directions of travel) a minimum of 14 days in advance of any major traffic modifications or any Lane Closure that impacts two or more mainline lanes, mainline ramps, roadways, or intersection signal configuration. Where available and when possible, the Design-Builder shall coordinate and use overhead changeable message signs on the regional ITS system.

18.3 Design Requirements

18.3.1 Temporary Traffic Control Development

The Design-Builder shall develop and maintain a detailed Construction Phasing and Staging Plan as described in TP Attachment 2-2 (Basis of D&C Requirements), a TMP as specified by TP Attachment 18-2 (Requirements for the TMP), and an associated TTCP in accordance with TP Section 18.3.2 (Temporary Traffic Control Plans), TP Section 4 (Design Documents), and TP Attachment 18-1 (Temporary Traffic Control).

18.3.2 Temporary Traffic Control Plans

The Design-Builder shall develop either typical TTCP or site specific TTCP for all Lane Closures, including all traffic shifts, detours, bridge widenings, traffic pacing, or other activities that disrupt traffic or pedestrian flow.

The Design-Builder may develop typical TTCP for repeated short-term Lane Closures that are applicable in multiple locations and indicate where the typical TTCP will be utilized. The Design-Builder shall not use (or combine the use of) the GDOT Construction Standard Lane Closures or Design-Builder typical TTCP where site conditions are different from those indicated or identified in the standard (e.g., complex lane movements, oncoming or exiting ramps, introduction of auxiliary lanes).

TTCPs shall be in accordance with the MUTCD, TP Section 18.3.1 (Temporary Traffic Control Development), and TP Attachment 18-1 (Temporary Traffic Control).

The Design-Builder shall ensure that each TTCP submitted in accordance with this TP Section 18 identifies the planned staging, opening, and modifications to temporary and permanent traffic control devices in a manner that protects GDOT, its contractors, and ITS during the Work to achieve operational status.

For all TTCP, the use and need of guide signs (and associated structures) for long term impacts to traffic on Interstate I-75 shall be in compliance with MUTCD Section 2E. Temporary relocation or removal of existing overhead signs shall not be allowed for a period exceeding seven consecutive days.

Information included in the TTCP, including applicable references to Section 19 Plans, shall be of sufficient detail to allow verification of design criteria. The TTCPs, including applicable references to Section 19 Plans, shall include the following as needed to reflect the Work performed and complexity of the Lane Closure:

1. Detailed Design Documents showing typical sections, cross-sections, alignment, traffic locations, drop-off conditions, and lanes for each step of the change.
2. Approved detour routes in accordance with TP Section 18.4.4.3 (Total Lane Closure and Detour of Minor Roadways) with associated signage and messaging.
3. Intended location of ingress and egress to the Work areas.
4. The method to be used in, and the limits of the obliteration of conflicting lines and markings, including the application of intermediate asphalt surface overlays.
5. Type, location, and extent of new lines and markings.
6. Location, modification, or removal of all existing signage (including all sign structures), in conjunction with the installation and size of all temporary or permanent signage (including all proposed sign structures), all temporary reductions in mainline speed limits, and all other required information to maintain and inform Users of roadway conditions. Any intended use of PCMS, along with intended message, shall be included in the details. The Design-Builder shall maintain signing continuity on all roadways within the Project at all times (e.g., relocating existing signs, installing temporary signs).
7. Horizontal and vertical alignment and superelevation rates, including profile grades along each edge of existing pavement.
8. Drainage details for both temporary and permanent structures in place during the construction stage shown on the plan.
9. Location, length, and spacing of channelization and protective devices (temporary barrier, guardrail, barricades, etc.).
10. Any associated phasing details, notes, and sequencing of shifts to accomplish the proposed Work.
11. Placement and plan for the use of law enforcement vehicles (especially for traffic pacing operations).
12. Modifications to the existing intersection traffic signals (e.g., installation of temporary signals, modification of traffic loops, signal timing).

18.3.2.1 Design Parameters

The Design-Builder shall comply with the requirements in the Project Agreement and the following design parameters for development of the TTCP:

1. Design Vehicle — The Design-Builder shall maintain existing turning movements and ensure turning movements for the temporary condition accommodate a design vehicle with similar characteristics as existing geometry.
2. Design Speed — The design speed for temporary conditions shall not be less than the posted speed. If the design speed of an existing element at a particular location is less than the posted speed applicable to the temporary condition (as may be amended from the current posted speed), then the design speed for that element at that particular location may remain the same in the temporary condition. The posted speed shall be modified or reduced in accordance with TP Attachment 18-1 (Temporary Traffic Control); in which case temporary speed limit signs shall also be utilized and identified in the TTCP.
3. Number of Lanes — Except as otherwise allowed by this TP Section 18, the minimum number of traffic lanes to be maintained for each traffic movement shall equal the existing number of lanes available (prior to the issuance of NTP1) on each roadway system located within the Site.
4. Length of Closure — The maximum allowable length of each Lane Closure, denoted in miles, shall not exceed the limits identified in TP Attachment 18-1 (Temporary Traffic Control).
5. Duration of Closure — The Lane Closure duration shall have the following designations:
    a. Long-term — Any Lane Closure that occupies or remains at one location for a period longer than one day.
    b. Short-term — Any Lane Closure that will occur daily or nightly for a defined period of time not to exceed one day.
    c. Weekend Closure — Any Lane Closure that will continuously affect the roadway for more than 24 hours. This schedule is specific to Lane Closures on the roadway beginning Friday evening and ending Monday morning.
6. Lane Width and Shoulder Width — During construction, the minimum shoulder and lane widths for mainline, frontage roads, roadways, and crossing streets shall be in accordance with TP Attachment 18-1 (Temporary Traffic Control).

18.4 Lane Closure Hours and Restrictions

Lane Closures shall be implemented in accordance with all applicable restrictions and requirements set forth in the Design-Build Documents. Lane Closures not in compliance with all applicable restrictions and requirements set forth in the Design-Build Documents shall be subject to Lane Closure Deductions in accordance with the Design-Build Documents and DBA Exhibit 12 (Lane Closure Deductions). Lane Closures occurring during restricted hours shall be subject to Lane Closure Deductions in accordance with the Design-Build Documents and DBA Exhibit 12 (Lane Closure Deductions).

18.4.1 Special Events and Holidays

The Design-Builder shall not implement any new Long-term Lane Closures or perform any Short-term Lane Closures, (including flagging operations, pacing, or mobile operations) on the

required number of lanes (including shoulders), during the Special Events and Holidays defined in TP Table 18-2 (Special Events and Holidays). Any such Lane Closures shall be subject to increased Lane Closure Deductions in accordance with DBA Exhibit 12 (Lane Closure Deductions). Notice of annual Holidays is issued by the State in the month of July for the following calendar year.

Table 18-2: Special Events and Holidays

Ref.	*Event Day or Holiday*	*Hours*
1	Memorial Day Weekend	Noon Friday through 5:00 a.m. Tuesday
2	Independence Day*	Noon July 3 through 5:00 a.m. July 5
3	Labor Day Weekend	Noon Friday through 5:00 a.m. Tuesday
4	Thanksgiving Holiday Weekend	Noon Wednesday through 5:00 a.m. Monday
5	Christmas Holiday*	Noon December 23 through 5:00 a.m. December 26
6	New Year's Day*	Noon December 31 through 5:00 a.m. January 2
7	One "Floating" Event or Holiday – Date may be set by GDOT annually or by 45 day advance notification.	Maximum duration: Starting noon the day prior to the date of event/holiday, continuing through the day of event/holiday, and ending 5:00 a.m. following the date of event/holiday.
8	Juneteenth*	Noon June 18 through 5:00 a.m. June 20
9	Atlanta Motor Speedway NASCAR Weekend	Noon Thursday through 10:00 p.m. Monday. Typically occurs in June.

*For instances that Independence Day, Christmas, Juneteenth, or New Year's Day falls on a Friday, Saturday, or Sunday the holiday restrictions shall be modified to noon Thursday through 10:00 p.m. Monday.

18.4.2 Mainline

18.4.2.1 Lanes on the I-75 Mainline

TP Table 18-3 (Lane Closure Restrictions for the I-75 Mainline) identifies allowable Lane Closures and the hours in which such Lane Closures are permitted. The Design-Builder shall not reduce the existing number of lanes open to traffic except as shown in TP Table 18-3 (Lane Closure Restrictions for the I-75 Mainline). Additional restrictions and requirements for these Lane Closures are set forth in this TP Section 18.4.2.1.

Table 18-3: Lane Closure Restrictions for the I-75 Mainline

Day of Week	***Daytime Hours for Lane Closure***	***Nighttime Hours for Lane Closure***	***Restricted Hours Subject to Lane Closure Deductions***
Allowable Lane Closure: One Lane			
Northbound Sunday – Thursday	Not Allowable	9:00 p.m. to 4:59 a.m.	5:00 a.m. to 8:59 p.m.
Southbound Sunday – Thursday		9:00 p.m. to 5:59 a.m.	6:00 a.m. to 8:59 p.m.
Northbound and Southbound Friday and Saturday		9:00 p.m. to 6:59 a.m.	7:00 a.m. to 8:59 p.m.
Allowable Lane Closure: Two Lanes			
Northbound Sunday – Thursday	Not Allowable	10:00 p.m. to 3:59 a.m.	4:00 a.m. to 9:59 p.m.
Southbound Sunday – Thursday		10:00 p.m. to 4:59 a.m.	5:00 a.m. to 9:59 p.m.
Northbound and Southbound Friday and Saturday		10:00 p.m. to 5:59 a.m.	6:00 a.m. to 9:59 p.m.
Allowable Lane Closure: Three Lanes			
Not Allowable			

The Design-Builder shall comply with each of the following restrictions and requirements:

1. The Design-Builder shall not implement a Lane Closure that impacts all travel lanes (including shoulders) on I-75 in either direction (i.e., a total closure of I-75 in either direction) except for pacing as defined in TP Section 18.4.2.5 (Pacing and Work Over the Mainline).
2. A Lane Closure of an auxiliary lane that is parallel to the mainline travel lanes shall be considered the same as a Lane Closure of a mainline travel lane.
3. The temporary use of the mainline shoulder as a substitute for one of the mainline travel lanes is acceptable for Short-term Lane Closures.
4. Split lanes shall not be allowed in any configuration.

18.4.2.2 Reserved

18.4.2.3 Shoulders

The Design-Builder shall comply with the following additional restrictions and requirements for Lane Closures of shoulders:

1. The restrictions specified in TP Table 18-3 (Lane Closure Restrictions for the I-75 Mainline) for allowable one-Lane Closures shall apply to Short-term Lane Closures of shoulders on I-75.
2. Long-term shoulder closures that meet the requirements specified in TP Attachment 18-1 (Temporary Traffic Control) are not subject to the restricted hours in TP Table 18-3 (Lane Closure Restrictions for the I-75 Mainline).
3. The Design-Builder may cause a Lane Closure on a mainline shoulder to perform Work that requires the temporary use of the shoulder without submission of a TIR described in TP Attachment 18-3 (Traffic Interruption Request) provided:
    a. The Lane Closure is less 45 minutes.
    b. The Lane Closure is solely for inspection purposes or spot debris removal.
    c. The Lane Closure consists of a limited number of vehicles used by the Design-Builder.
    d. All applicable safety requirements specified in the Design-Build Documents, the Safety Plan, and TP Attachment 18-1 (Temporary Traffic Control) shall be implemented.

The procedures and associated activities or instances related to such Lane Closures shall be included in the Design-Builder's TMP and any performance concerns shall be addressed in the monthly TMP coordination meeting.

For the avoidance of doubt, spot debris removal is limited to debris within the shoulder, in the median, or outside the travel lanes. Based on traffic system operations, safety concerns, noncompliance with requirements, or Lane Closure durations exceeding 45 minutes, GDOT may (at its sole discretion) change the acceptance or requirements for such a Lane Closure (e.g., require the Design-Builder submit a TIR).

For instances where it becomes apparent the Lane Closure will exceed 45 minutes, the Design-Builder shall proceed with a TIR and safely establish temporary traffic control measures in accordance with this TP Section 18 and its associated attachments.

18.4.2.4 Mobile Operations

The Design-Builder shall comply with each of the following additional restrictions and requirements for Lane Closures resulting from mobile operations:

1. Mobile operations shall be in accordance with the requirements of TP Attachment 18-1 (Temporary Traffic Control).
2. A mobile operation shall not be performed that utilizes more than two mainline travel lanes.

3. A mobile operation Lane Closure on the mainline shall follow the restrictions specified for the number of impacted lanes specified in TP Table 18-3 (Lane Closure Restrictions for the I-75 Mainline).
4. The procedures around mobile operations shall be included in the Design-Builder's TMP and any performance concerns shall be addressed in the monthly TMP coordination meeting.

18.4.2.5 Pacing and Work Over the Mainline

The Design-Builder shall comply with each of the following additional restrictions and requirements for Lane Closures resulting from pacing and Work over the mainlines:

1. Traffic pacing shall be in accordance with the requirements of TP Attachment 18-1 (Temporary Traffic Control). In addition to safely performing Work over the mainline, pacing may also be used to place traffic into a new alignment.
2. Traffic pacing shall be performed during the lifting and setting of any overhead element, and the Work shall be staged to support the setting and securing of the element within the break of traffic due to the pacing operation.
3. The Work is to be performed in a manner in which active or live loads (e.g., lifting and setting of bridge beams or overhead sign structures) are not performed over live traffic.
4. When overhead Work is to occur or is planned to occur within half a travel lane width from an active travel lane, then the planned Lane Closure shall require the closure of an additional lane adjacent to the overhead Work.
5. The Design-Builder shall stage the Work (e.g. bridge demolition or bridge deck placement) in a manner that ensures a sufficient number of lanes are closed and adequate means are in place to protect Users from the overhead Work.
6. Lane Closures consisting of one Lane Closure, two Lane Closures, or three Lane Closures (or more) on the mainline in combination with a traffic pacing operation to perform the intended overhead Work is only permitted during the hours specified in TP Table 18-4 (Lane Closure Restrictions for Pacing or Work Over the Mainlines). This applies to all mainlines.
7. When the Work over mainline occurs at a roadway intersecting the mainline, the mainline traffic may be detoured around the work zone through the use of the intersection ramps. The mainline traffic is to be detoured back onto the mainline at the same roadway intersection. Such detours shall only occur within the allowable time periods identified in TP Table 18-4 (Lane Closure Restrictions for Pacing or Work Over the Mainlines).

Table 18-4: Lane Closure Restrictions for Pacing or Work Over the Mainline

Day of Week	***Daytime Hours for Lane Closure***	***Nighttime Hours for Lane Closure***	***Restricted Hours Subject to Lane Closure Deductions***
Allowable Lane Closure			
Northbound and Southbound Sunday - Saturday	Not Allowable	11:00 p.m. to 4:59 a.m.	5:00 a.m. to 10:59 p.m.

18.4.3 Other Ramps

TP Table 18-5 (Lane Closure Restrictions for Intersection Ramps) identifies allowable Lane Closures and the hours in which such Lane Closures are permitted on ramps entering and exiting a Major or Minor roadway. The Design-Builder shall not reduce the existing number of lanes open to traffic except as shown in TP Table 18-5 (Lane Closure Restrictions for Intersection Ramps). Additional restrictions and requirements for these Lane Closures are set forth in this TP Section 18.4.3.

Table 18-5: Lane Closure Restrictions for Intersection Ramps

Day of Week	***Daytime Hours for Lane Closure***	***Nighttime Hours for Lane Closure***	***Restricted Hours Subject to Lane Closure Deductions***
Allowable Lane Closure: One Lane			
Sunday – Saturday	Not Allowable	9:00 p.m. to 4:59 a.m.	5:00 a.m. to 8:59 p.m.
Allowable Lane Closure: Two or More Lanes			
Not Allowable			

Unless a total ramp Lane Closure is being implemented on a mainline exit or entrance ramp at roadway intersections, the Design-Builder shall comply with each of the following restrictions and requirements:

1. The Design-Builder shall install additional channelization and signing to ensure safe operation.
2. Access to the intersecting roadways shall be maintained at all times, a minimum of one lane shall remain open at all times, and no turning movements shall be restricted at the intersection.
3. A Lane Closure of a turn lane, an auxiliary lane, or an additional receiving lane that is parallel to a ramp travel lane shall be considered the same as a Lane Closure of a ramp travel lane.
4. The number of lanes impacted by the Lane Closure (including turning, auxiliary or additional receiving ramp travel lanes) shall comply with the allowable time periods identified in TP Table 18-5 (Lane Closure Restrictions for Intersection Ramps).
5. Shoulder Lane Closures of a mainline entrance or exit ramp at roadway intersections shall be permitted during any time period, provided that all of the following conditions are met:
    a. Shoulder Lane Closures do not occur on both the inside and outside shoulder concurrently for a two-lane ramp.
    b. The minimum horizontal opening width for the impacted mainline ramp is maintained as specified in TP Attachment 18-1 (Temporary Traffic Control).

For a total ramp Lane Closure implemented on a mainline exit or entrance ramp at roadway intersections, the Design-Builder shall comply with the TP Attachment 18-4 (Approved and Design-Builder Identified Detours) and each of the following restrictions and requirements:

1. Lane Closures shall occur during the allowable time periods identified in TP Table 18-5 (Lane Closure Restrictions for Intersection Ramps).

2. The Design-Builder shall ensure access for emergency services at all times or shall previously establish an alternate route.
3. The Design-Builder shall not perform a total ramp Lane Closure or restrict access to two consecutive mainline entrance or exit ramps in the same direction of mainline travel concurrently (or cause such restriction to occur) which includes Lane Closures on ramps on Related Transportation Facilities or beyond the Site.
4. Total ramp Lane Closures at roadway intersections shall only occur in one direction of mainline travel (e.g., southbound, northbound, eastbound, westbound).
5. The intersecting roadway shall remain open to through traffic.
6. The Design-Builder has satisfied all obligations required in the Design-Build Documents regarding reporting, messaging, TTCP, and notification.

18.4.4 Major and Minor Roadways

Where a local Governmental Entity has jurisdiction of a roadway, the Design-Builder shall be responsible for obtaining all permits associated with performing a Lane Closure on such roadway. The Design-Builder shall copy GDOT on all correspondence and be invited to all coordination meetings as described in TP Section 18.2.3 (Required Meetings). The Design-Builder shall confirm all permits have been obtained and submit a copy of the permit along with the TIR.

Roadways are referred to as major roadways and minor roadways in accordance with the designations in TP Table 18-6 (Major Roadways) and TP Table 18-7 (Minor Roadways). Any roadway impacted by the Design-Builder and not included in one of these tables shall meet the restrictions and requirements of a Minor Roadway.

Table 18-6: Major Roadways

Major Roadways	*Jurisdiction*
None	NA

Table 18-7: Minor Roadways

Minor Roadways	*Jurisdiction*
SR 42	GDOT
Bethlehem Road	City of Locust Grove
Old Bethlehem Road	City of Locust Grove/Henry County
Greenwood Road	Henry County
Lester Mill Road	City of Locust Grove
Eagles Brooke Drive	City of Locust Grove
Price Drive	City of Locust Grove
Michaels Drive	City of Locust Grove
Pine Grove Road	City of Locust Grove
Park 42 Drive	Private Road
Academic Parkway	Henry County

Minor Roadways	*Jurisdiction*
Stonemont Driveway	Private Road

When roadways are closed to through traffic, the Design-Builder shall provide temporary signage and barricades in accordance with TP Attachment 18-1 (Temporary Traffic Control) and TP Attachment 18-4 (Approved and Design-Builder Identified Detours).

18.4.4.1 Major Roadways

There are no Major Roadways for this Project.

18.4.4.2 Minor Roadways

TP Table 18-8 (Lane Closure Restrictions for Minor Roadways) identifies allowable Lane Closures and the hours in which such Lane Closures are permitted. Additional restrictions and requirements for these Lane Closures are set forth in this TP Section 18.4.4.2.

Table 18-8: Lane Closure Restrictions for Minor Roadways

Day of Week	*Daytime Hours for Lane Closure*	*Nighttime Hours for Lane Closure*	*Restricted Hours Subject to Lane Closure Deductions*
Allowable Lane Closure: One Lane			
Sunday – Saturday	Not Allowable	8:00 p.m. to 5:59 a.m.	6:00 a.m. to 7:59 p.m.

The Design-Builder shall comply with each of the following restrictions and requirements:

1. Minor roadways shall remain open to traffic at all times. A total Lane Closure is not permitted unless a Lane Closure detour is approved by the local Governmental Entity.
2. Lane Closure of a turning lane or a storage lane that is parallel to a minor roadway travel lane shall be considered the same as a Lane Closure of a minor roadway travel lane.
3. Whenever a minor roadway is closed, the nearest adjacent roadway shall maintain a minimum of two traffic lanes open in each direction at all times.

18.4.4.3 Total Lane Closure and Detour of Minor Roadways

Requirements for approved detours and Design-Builder identified detours are in TP Attachment 18-4 (Approved and Design-Builder Identified Detours). In addition, the Design-Builder shall comply with the following:

1. Restrictions on the implementation of a detour in TP Table 18-2 (Special Events and Holidays).
2. Whenever a minor roadway is closed, the nearest adjacent roadway shall maintain a minimum of two traffic lanes open in each direction at all times.
3. All obligations required in the Design-Build Documents regarding reporting, messaging, TTCP, and notification.

All Lane Closures resulting from detours not in compliance with all applicable restrictions and requirements set forth in the Design-Build Documents shall be subject to applicable Lane Closure Deductions.

18.4.4.4 Work over Minor Roadways

For Work that occurs over minor roadways, the Design-Builder shall provide (through the use of PCMS) advance notification to Users. A minimum of 14 days prior to the accepted date of closure, the Design-Builder shall place advance notification informing Users of potential delay due to the Lane Closure and sufficient signage in advance of the work zone providing for available alternate routes.

The Design-Builder shall comply with each of the following restrictions and requirements:

1. The Work shall performed in a manner in which active or live loads (e.g., lifting or setting of bridge beams or overhead sign structures) are not performed over live traffic.
2. The Design-Builder satisfies all obligations required in the Design-Build Documents regarding reporting, messaging, TTCP, and notification.
3. Any Lane Closure utilized on minor roadways to support overhead Work shall only be performed during the allowable time periods identified in TP Table 18-8 (Lane Closure Restrictions for Minor Roadways).
4. The control of traffic shall be accomplished through the utilization of flagmen or available traffic signals. Uniformed law enforcement shall be present when required by TP Section 18.5.3 (Uniformed Law Enforcement).

All Lane Closures resulting from Work not in compliance with all applicable restrictions and requirements set forth in the Design-Build Documents shall be subject to applicable Lane Closure Deductions.

18.4.4.5 Pedestrian and Recreational Facilities

The Design-Builder shall provide for ingress and egress to public and private properties, residences, and amenities (including sidewalks, parks, and bus stops) at all times during the Term of the Project.

18.4.5 Modifications to Lane Closure Hours and Restrictions

If the Design-Builder requests a modification to Lane Closure time periods or Lane Closure restrictions and requirements as specified in this TP Section 18, the Design-Builder shall submit their request to GDOT in writing.

The submitted request to modify Lane Closure requirements shall contain a description of the requested modification, sufficient information supporting the need for the requested modification as it relates to required Work, traffic analysis in accordance with TP Attachment 18-2 (Requirements for the TMP), additional supporting information that demonstrates the operational impact resulting from the requested modification, and any additional information requested by GDOT.

GDOT may (at its sole discretion) accept the requested modification and that acceptance will define the allowable time modifications, restrictions, number of times allowed for the implementation, and duration of the requested modification. GDOT's acceptance will be valid only for the specific Work associated with the Design-Builder's specific request and shall not constitute a change to the requirements and restrictions stated in this TP Section 18 and its associated attachments.

18.5 Construction Requirements

All Work activities shall be in accordance with the Design-Build Documents, accepted Project Management Plans, and TTCPs.

18.5.1 Notifications

At least 30 days prior to implementing a Lane Closure that restricts access or detours traffic, the Design-Builder shall coordinate with Emergency Services to identify alternate routes during the Lane Closure.

For Lane Closures that impact the Project's surrounding area, school districts, or other Governmental Entity established transit service stops or routes, the Design-Builder shall arrange and coordinate with each entity at least 45 days prior to implementing the Lane Closure to ensure the safe convenient passage for Users.

The Design-Builder shall comply with the requirements in TP Attachment 2-3 (Public Information and Communications) with respect to notification of impacts due to detours.

The Design-Builder shall notify GDOT, stakeholders, and the public in accordance with TP Attachment 2-3 (Public Information and Communications).

The Design-Builder shall notify Users of the total Lane Closure and detour through the use of PCMS installation a minimum of 30 days in advance of the accepted date of closure.

18.5.2 Access to Other Facilities

The Design-Builder shall comply with each of the following restrictions and requirements:

1. The Design-Builder shall maintain continuous access to all existing bicycle and pedestrian facilities.
2. The Design-Builder shall maintain continuous access to all adjacent streets and roadways.
3. The Design-Builder shall maintain continuous access for ingress and egress to public and private properties.

All Construction Work performed by the Design-Builder that restricts or removes access shall be considered a Lane Closure of the nearest adjacent roadway and shall be subject to its associated Lane Closure Deductions.

18.5.3 Uniformed Law Enforcement

The Design-Builder shall use or cause to be utilized uniformed law enforcement in conditions including:

1. When workers are present within the clear zone, as described in TP Attachment 18-1 (Temporary Traffic Control), and adjacent to high-speed traffic without positive protection devices.
2. Any Lane Closure impacting two or more travel lanes, entrance/exit ramps, or during traffic pacing operations.

3. Functioning signalized intersections when Lane Closures shifts traffic or restricts movement causing interference with User flows or will not allow the activated traffic signal to guide the traffic through the signalized intersection.
4. Traffic control setup or removal that presents significant risks for workers and Users.

18.5.4 Design-Builder Responsibility to Maintain Temporary Traffic Control

The Design-Builder shall monitor the performance of TTCPs in place throughout the Term in accordance with the Design-Build Documents.

The Design-Builder shall meet with GDOT within 24 hours if at any time the Design-Builder's Lane Closure operation does not meet the intent of the TMP or any specific TTCP results in:

1. The implemented Lane Closure increases the historic travel time delay by 45 minutes or greater.
2. Incident directly related to the means of temporary traffic control device deployment.
3. Three recorded incidents within a specific temporary traffic control area.
4. A fatality.

The objective of this meeting is to discuss changes to the TTCP to improve traffic conditions. The TCM shall coordinate this effort. The Design-Builder shall consider all options available, including modifying start times, day of the week, number of impacted lanes, or modifying the use, placement, or location of the traffic control devices. After modifications are identified to improve the traffic conditions, the Design-Builder shall submit a revised TTCP within 72 hours of identification.

Upon GDOT acceptance of the revised TTCP, a TIR shall be immediately submitted for processing in accordance with TP Section 18.2.5 (Notifications and Traffic Interruption Requests), and the Design-Builder shall implement the revised Lane Closure measures within 24 hours of TTCP acceptance.

In the event the Design-Builder can demonstrate to the satisfaction of GDOT, that no reasonable alternative TTCP solution is obtainable, then the Design-Builder shall implement contingency plans included in the accepted TMP, or revise and/or develop additional mitigation strategies and contingency plans (e.g., methods to better inform Users on drive time expectations, alternative construction means to shorten the extent of impact, modifying the location or time of day for performance of the Work). All contingency and mitigation strategies shall be included in the Design-Builder's TMP in accordance with TP Attachment 18-2 (Requirements for the TMP).

18.6 Submittals

With respect to traffic control requirements described in this TP Section 18, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 18 Attachments

Attachment No.	*Title*
Attachment 18-1	Temporary Traffic Control
Attachment 18-2	Requirements for the TMP
Attachment 18-3	Traffic Interruption Request

Attachment No.	***Title***
Attachment 18-4	Approved and Design-Builder Identified Detours
Attachment 18-5	Traffic Analysis Tool

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 18-1

Temporary Traffic Control

Attachment 18-1: Temporary Traffic Control

1 General Description

The Design-Builder shall ensure that all Temporary Traffic Control Plans (TTCPs) are consistent with this TP Attachment 18-1 and the Work Zone Safety and Mobility Policy, as supplemented by the Design-Build Documents and Project Management Plans. The Design-Builder shall remove, furnish, install, monitor, and maintain the necessary traffic control devices; including signs, barricades, pavement markings, flagging, and other means for guidance and protection for vehicular and pedestrian traffic movement through and around the site. This Work shall include both maintaining existing traffic control devices and installing additional devices as necessary in the Work zone.

1.1 Worksite Traffic Control Supervisor

1.1.1 Requirements

The WTCS shall install and maintain all traffic control devices in accordance with the requirements of TP Section 18 (Traffic Control). The WTCS shall hold an unexpired certificate issued by the American Traffic Safety Services Association (ATSSA) Work Site Traffic Supervisor Certification program or the National Safety Council Certification program. Online classes will not be accepted.

The WTCS shall be available on a 24-hour basis to perform assigned duties. If the Work requires traffic control activities to be performed during the daylight and nighttime hours, it may be necessary for the Design-Builder to designate an alternate WTCS. An alternate WTCS must also meet the same requirements and qualifications as the primary WTCS.

The WTCS shall have full authority to act on behalf of the Design-Builder in implementing the TTCP.

The WTCS shall supervise the installation of traffic control devices and any modifications to traffic control devices as required by the TTCP (and subsequent revisions). The WTCS shall have a copy of Part 6 of the MUTCD and the TTCP on hand at the work site.

No Work may be performed unless the certified WTCS is on the Lane Closure site.

The primary WTCS or alternate WTCS shall be available on a full-time basis to maintain traffic control devices with access to all personnel, materials, and equipment necessary to respond effectively to an Emergency situation within two hours of notification.

1.1.2 WTCS Inspections

The WTCS shall perform, at a minimum, weekly inspections of all implemented traffic control devices in the Work Zone. The inspections shall commence once the Design-Builder installs the advance Highway Work Zone sign, as described in Section 2.8.4 (Highway Work Zone Signing) of this TP Attachment 18-1 and shall continue until Final Acceptance. An inspection shall include both daytime and nighttime reviews. The inspection shall be reported on a Traffic Control Inspection Report, (TC-1 or most recent version). Unless modified by the Design-Build Documents, deficiencies shall be corrected within a 24-hour period. Failure to comply with these provisions shall be grounds for dismissal of the identified WTCS personnel from the assigned duties and the Design-Builder shall identify a suitable replacement satisfying the requirements set forth in TP Attachment 2-1 (Key Personnel and Required Personnel).

TRAFFIC CONTROL INSPECTION REPORT (TC-1)

Project No.: _____ County: _____

Contractor: _____ Date:_____ Daytime: _____

Nighttime: _____

PURPOSE: To provide adequate warning, delineation, and channelization to assist in guiding road users in advance of and through the work zone by utilizing proper pavement markings, signs, and other MUTCD compliant devices.

RESPONSIBILITY: The Worksite Traffic Control Supervisor (WTCS) has the duty of ensuring that all traffic control devices are installed and maintained according to the requirements of the Traffic Control Plan.

DEFICIENCIES: Items noted below required corrective measures be performed with the next

____ hours/days.

LOCATION	DESCRIPTION	ACTION REQUIRED

(use additional sheets if needed)

Signature: _____ WTCS or DOT performing inspection

DOT inspection presented to WTCS Date:_____ Time: _____

TO BE COMPLETED BY THE WTCS

The attached deficiencies were corrected by Date:_____ Time: _____

Signature _____ Return TC-1 to DOT inspector.

The WTCS certifies that all traffic control devices in use on the project are MASH/NCHRP 350 crashworthy compliant.

Page 1 of 2 (TC-1)

Traffic Control Checklist	Satisfactory	Unsatisfactory	Non-applicable
Signs	S	U	N

- Are the signs correctly installed?
- Signs are in place according to TTC plans. Signs are plumb and level. Signs are at the proper height.
- Are the signs visible and readable to the public both daytime and nighttime?
- Is retroreflectivity good?
- Are signs not in use including PCMS properly stored?

TTC Devices S U N

- Are they MASH/NHCRP 350 approved? Do they meet MUTCD and Special Provision 150 requirements?
- Are they installed according to manufacture recommendation?
- Are they in acceptable/marginal condition? Are they stable? Is the retroreflectivity good?

Clear Zone S U N

- Are all material and equipment stored beyond the clear zone?
- If stored in clear zone, are they protected by positive barrier?
- Are drop-off marked and healed according to Special Provision 150?

Positive Barriers S U N

- Are the barriers in acceptable/marginal condition and FHWA approved?
- Are the barrier reflectors proper and in good condition?
- Do the barriers extend to the proper advancement length? Are the tapers according to GA Standards?

Attenuators and Guardrails S U N

- Are the proper attenuators assemblies in use?
- Gating Is the recovery area free of debris and provide the necessary recovery area?
- Is the assembly in accordance with manufacture recommendation?
- Are the guardrails properly anchor and/or attached to the barrier?
- Are shoes and transition sections in accordance with Standards?

Pavement Markings S U N

- Are the pavement making visible and legible?
- Can they be seen during the daytime and nighttime?
- Are there no conflicting pavement markings?
- Are the pavement markings including RPM installed and maintained according to section 150?

Page 2 of 2 (TC-1)

2 Construction Requirements

2.1 General

2.1.1 Implementation Requirements

No construction activities shall be started on any Project phase until the appropriate traffic control devices have been placed in accordance with the TTCP. Changes to traffic flow shall not commence unless all labor, materials, and equipment necessary to make the changes are available on the Project.

2.1.2 Traffic Shift Requirements

All preparatory Construction Work relative to a traffic shift, which does not interfere with traffic, shall be accomplished prior to commencing. The WTCS shall verify that all conditions have been met prior to proceeding with the traffic shift. If at any time the GDOT determines the Design-Builder's traffic control operations do not conform with the TMP or TTCP, the Design-Builder shall immediately revise or discontinue such operations to correct the deficient conditions.

When any Lane Closure is implemented to shift or change the location of traffic or to the flow patterns of traffic, including pedestrian traffic, to the extent possible the permanent safety features (listed below) shall be installed and fully operational prior to commencing the Lane Closure. If staging or site conditions prevent the installation of permanent features, then the equivalent temporary devices shall be utilized. This Construction Work shall also include any necessary removal and reinstallation of guardrail panels to achieve the required panel lap to accommodate the appropriate shift and traffic flow including the final traffic flow configuration.

Safety features shall include:

1. Cable Barrier
2. Guardrails including anchors and delineation with properly lapped panels
3. Impact attenuators
4. Traffic signals
5. Warning devices
6. Pavement markings including, but not limited to: words, symbols, stop bars, arrows, hatching, and crosswalks
7. Roadway signs including regulatory, warning, and guide

For typical roadway type projects, new street lighting is not considered a safety feature, unless identified as such in TP Section 11.3.12 (Permanent Lighting). All existing lighting on the Project is to be considered as safety lighting and existing lighting levels are to be maintained through the construction phasing. Temporary lighting may be used to maintain existing lighting levels while the permanent lighting is being installed.

2.1.3 Maintenance of Traffic Control Devices

Traffic control devices shall be in acceptable condition when first installed on the Project. The traffic control devices shall be maintained until removal or Final Acceptance is obtained. Once identified by the Design-Builder or GDOT, all unacceptable traffic control devices shall be corrected or replaced within 24 hours. Failure to address traffic control device deficiencies shall

be grounds for the Lane Closure to be unapproved and subject to applicable Lane Closure Deductions.

When not in use, all traffic control devices shall be removed, placed, or covered so as not to be visible to traffic. All construction warning signs shall be removed by Final Acceptance.

2.1.4 Personnel — Worker Safety Apparel

In accordance with MUTCD (Section 6C.04) all Personnel within the Site who are exposed either to traffic or to Construction Work vehicles and equipment within the Temporary Traffic Control (TTC) zone shall wear high-visibility safety apparel that meets the Performance Class 2 or better.

2.1.5 Highway Work Zone Speed Reduction

For limited access (interstate) Highways and controlled access multi-lane divided Highways, the posted speed limit shall only be reduced as stated below.

When any one or more of the following TTCP conditions for the intended Lane Closures (of any type and duration) are anticipated or encountered the existing posted speed limit shall be reduced:

1. The difference in elevation exceeds 2 inches adjacent to a travel lane as shown in Detail 150-E and Detail 150-F.
2. Any areas where equipment or workers are within 10 feet of a travel lane and the work zone is not behind positive protection.
3. Temporary portable concrete barriers located 2 feet or less from the traveled way.

For instances where the posted speed limit is 65 or 70 mph, the speed limit shall be reduced by 10 mph. For instances where the posted speed limit is 60 mph, the speed limit should be reduced by 5 mph. For instances where the posted speed limit is 55 mph or less, the Design-Builder shall only reduce the speed limit with the prior approval of GDOT. For any case, the reduction in the speed limit shall not exceed 10 mph. All reduction in the speed limit shall be reflected on the TTCP.

When the above conditions are not present, and the continuity of the TTCP and corridor operation supports, the speed limit shall be immediately returned to the existing posted speed limit. A speed reduction shall not be put in place for the entire length of the Project unless conditions warranting the speed reduction are present for the entire Project length. All existing speed limit signs within the temporary speed reduction zone shall be covered or removed while the temporary reduction in the speed limit is in effect. All signs shall be erected to comply with the minimum requirements of the MUTCD.

2.2 Shoulder/Lane Closures/Detours

2.2.1 Approval/Restrictions

All Lane Closures of any type or duration are subject to GDOT's acceptance through a TTCP or TIR Submittal. The Design-Builder shall notify and request all Lane Closures as described in TP Section 18 (Traffic Control), TP Attachment 18-3 (Traffic Interruption Request), and TP Attachment 2-3 (Public Information and Communications).

2.2.2 Closure Length

The physical length of any short-term (as defined in TP Section 18.3.2.1 (Design Parameters)) Lane Closure shall not exceed 2 miles in length, excluding the length of the taper; however, the length of a work zone should be held to the minimum length required to accomplish the intended Construction Work.

The advanced warning signs for the Project should not overlap with the advanced warning signs for lane shifts, Lane Closures, etc.

2.2.3 Short-Term Duration

For short-term Lane Closures on mainline, the Design-Builder TTCP shall be compliant with Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” or Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway.”

2.2.4 Shoulder Closures

All long-term (as defined in TP Section 18.3.2.1 (Design Parameters)) Lane Closure of the shoulder shall be implemented in accordance with Table 1 (Shoulder Closure), unless otherwise accepted by GDOT in writing.

When the proposed long-term Lane Closure of the shoulder maintains at least one paved usable shoulder that is 8 feet or greater, that Lane Closure shall not exceed 1 mile in length, excluding the length of the taper. There shall be at least 1 mile separation between consecutive long-term Lane Closures on the shoulder (i.e., end of first closure to start of next closing taper). When the existing (inside, outside, or both) shoulder conditions exceeds 8 feet of paved surface, no long-term Lane Closure condition shall occur in which both shoulders are removed or reduced to less than 8 feet unless the Lane Closure is accepted by GDOT in writing, and shall not exceed 2,500 feet in length, excluding the length of the taper. Further there shall be at least 2 miles of separation between consecutive long-term Lane Closures of the shoulder which require both shoulders (inside and outside) to be removed or reduced to less than 8 feet.

For instances of long-term Lane Closures on the shoulder, in which the existing shoulder condition (both inside and outside) are less than 8 feet paved, the long-term Lane Closure shall not exceed 2,500 feet in length, excluding the length of the taper. Further there shall be at least 2 miles of separation between consecutive long-term Lane Closures of the shoulder which require both shoulders (inside and outside) to be removed or reduced to less than 8 feet.

Table 1: Shoulder Closure

Existing Inside Shoulder Condition	***Existing Outside Shoulder Condition***	***Proposed Long-term Lane Closure of Inside Shoulder***	***Proposed Long-Term Lane Closure of Outside Shoulder***
Equal to (or greater than) 8 feet paved surface	Equal to (or greater than) 8 feet paved surface	Shall maintain an outside shoulder not less than 8 feet paved	Shall maintain an inside shoulder not less than 8 feet paved
Equal to (or greater than) 8 feet paved surface	Less than 8 feet paved	Shall not exceed 2,500 feet in length (unless outside shoulder has been improved to 8 feet or greater paved surface)	Shall maintain an inside shoulder not less than 8 feet paved

Existing Inside Shoulder Condition	***Existing Outside Shoulder Condition***	***Proposed Long-term Lane Closure of Inside Shoulder***	***Proposed Long-Term Lane Closure of Outside Shoulder***
Less than 8 feet paved	Equal to (or greater than) 8 feet paved surface	Shall maintain an outside shoulder not less than 8 feet paved	Shall not exceed 2,500 feet in length (unless inside shoulder has been improved to 8 feet or greater paved surface)
Less than 8 feet paved	Less than 8 feet paved	Shall not exceed 2,500 feet in length (unless outside shoulder has been improved to 8 feet or greater paved surface)	Shall not exceed 2,500 feet in length (unless inside shoulder has been improved to 8 feet or greater paved surface)

A shoulder closure will require a shoulder taper of (1/3) L (L=merging taper length). Traffic drums shall be used for the taper. Arrow boards are not required.

If traffic barriers are used to close the shoulder, the taper shall be in accordance with Section 3.14 (Temporary Barriers) of this TP Attachment 18-1.

2.2.5 Lane Closures

2.2.5.1 Transition Area — Taper

Drums, as described in Section 3.4 (Channelization Devices) of this TP Attachment 18-1, shall be used on all transition tapers.

In accordance with MUTCD (Section 6B.08), the minimum length for a merging taper for a Lane Closure on the travelway shall be as shown in Table 2 (Taper Lengths).

Table 2: Taper Lengths

Posted Speed Limit, MPH	***Lane Width 9 Feet***	***Lane Width 10 Feet***	***Lane Width 11 Feet***	***Lane Width 12 Feet***	***Maximum Drum Spacing in Tapers, (Feet)***
	Minimum Taper Length (L) in Feet				
20	60	70	75	80	20
25	95	105	115	125	25
30	135	150	165	180	30
35	185	205	225	245	35
40	240	270	295	320	40
45	405	450	495	540	45
50	450	500	550	600	50
55	495	550	605	660	55
60	540	600	660	720	60
65	585	650	715	780	65
70	630	700	770	840	70

Posted Speed Limit, MPH	*Lane Width 9 Feet*	*Lane Width 10 Feet*	*Lane Width 11 Feet*	*Lane Width 12 Feet*	*Maximum Drum Spacing in Tapers, (Feet)*
	Minimum Taper Length (L) in Feet				
75	675	750	825	900	75

If site conditions require a longer taper, then the taper shall be lengthened to fit individual situations.

The length of shifting tapers should be at least one-half (L).

For multiple mainline Lane Closures:

1. A maximum of one lane at a time shall be closed with each merge taper.
2. A minimum tangent length of two (L) shall be installed between each individual Lane Closure taper. The tangent length is part of the transition area.

2.2.5.2 Activity Area

The activity area consists of a buffer zone and the work area. Unless specified otherwise, the Design-Builder shall comply with Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” which states, “Buffer zones of 300’ minimum, 500’ desirable are required for tangent sections and shall be increased for horizontal or vertical curves due to sight distance considerations.”

The Design-Builder shall comply with Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway” which requires a 50-foot buffer. The buffer shall be increased for horizontal or vertical curves due to sight distance considerations.

The channelization devices shall be spaced at a maximum of 80 feet.

2.2.5.3 Termination Area

The Design-Builder shall comply with Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” that requires a 150-foot buffer and a minimum 200-foot downstream taper.

The Design-Builder shall comply with Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway” that requires a 150-foot downstream taper.

2.2.6 Removal of Lane Closures

To provide the greatest possible convenience to the public, the Design-Builder shall remove all signs, pavement markings, and devices immediately when Construction Work associated with the Lane Closure is complete, temporarily suspended for any length of time, or as directed by GDOT. All portable signs and portable sign mounting devices shall be removed from the roadway to an area which will not allow the sign message to be visible and will not allow the sign or sign mounting device to be impacted by traffic. All devices shall be stored beyond the clear zone or behind positive protection.

2.2.7 Exit and Entrance Ramps

On multi-lane Highways, where traffic has been shifted to the inside lanes, the exit and entrance ramps shall have drums placed on both sides of the ramp. This requirement shall apply to any situation where traffic is shifted to contra flows or inside staging lanes to facilitate reconstruction

work in the vicinity of exit and entrance ramps. The temporary ramp taper length should be greater than, or equal to, the existing taper length. Interim Exit gore signs shall be placed at the ramp divergence. The “Exit Open” sign shown in Figure TA- 42 of the MUTCD shall be utilized. For exit ramps, drum spacing shall be decreased to 10 feet: a) for 200 feet in advance of the temporary gore; b) for the first 100 feet of the temporary gore; and c) throughout the exit ramp. For on-ramps, drums should be used 200 feet prior to the ramp and end 100 feet past the merge taper. The drum spacing for the on ramp may be decreased but should not obstruct the view of the drivers (i.e., for the ramp vehicles).

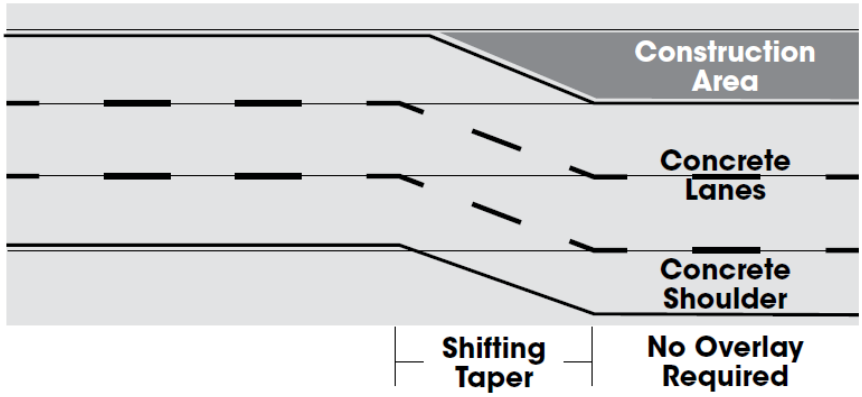
2.2.8 Temporary Pavement Overlay

When the Design-Builder performs a temporary widening, traffic shift, level-up or transition overlay on existing interstate or divided highway pavement, the Design-Builder shall ensure all travel lanes (including temporary travel lanes) are the same pavement type through the area of shift taper, level-up, or transition.

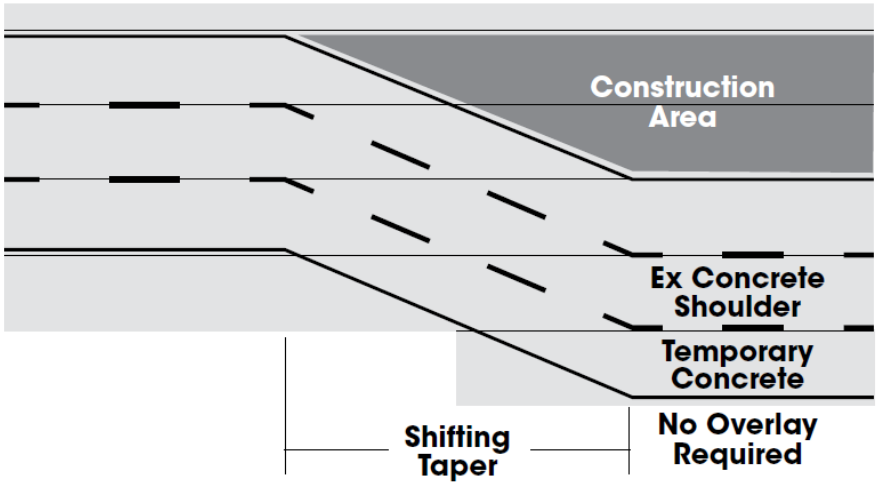
The length of the overlay shall begin a minimum of 100 feet prior to the traffic lane transition or shifting taper and continue for the length of the transition until a full lane width of temporary widening is obtained and the travel lanes are tangent to the center line of the travelway (with an appropriate asphalt transition on the departure).

The Design-Builder shall protect the existing pavement joints. The Design-Builder shall maintain the pavement from ruts and potholes for the duration the shift remains in place. Temporary asphalt overlay of concrete pavements will be allowed during the staging of the work, provided the overlays are milled after the staging is complete and concrete pavement is returned to a condition meeting the BECR. The details below provide additional clarity on when a temporary asphalt overlay is required.

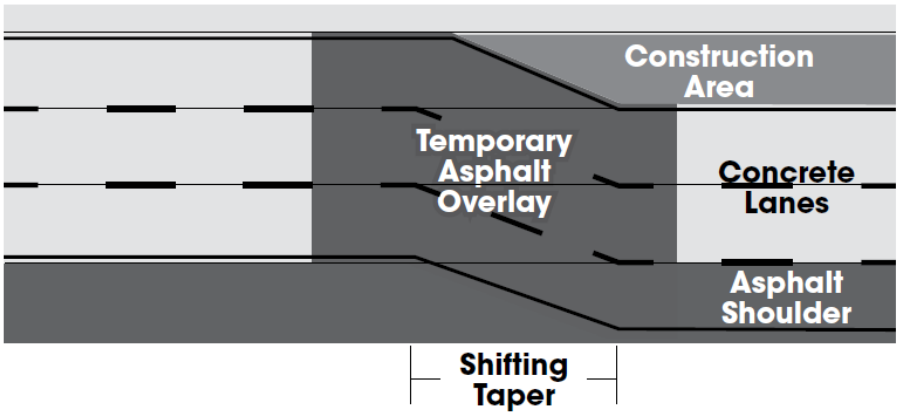
Temporary Pavement Overlay Detail 1



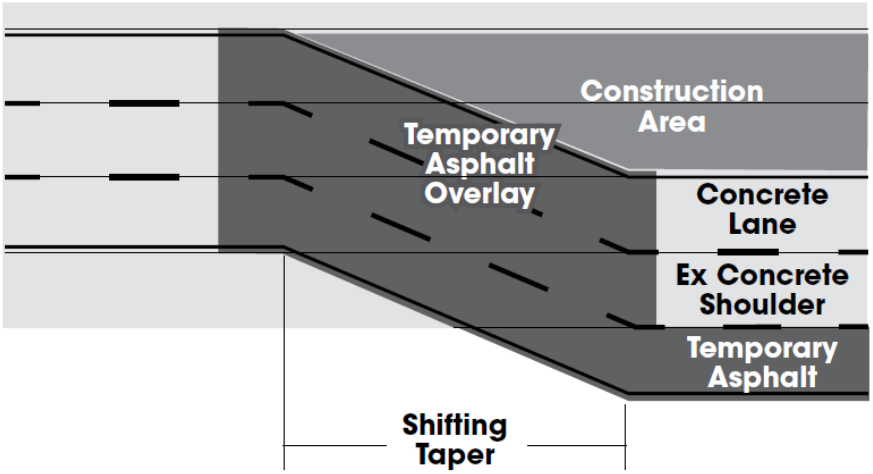
Temporary Pavement Overlay Detail 2



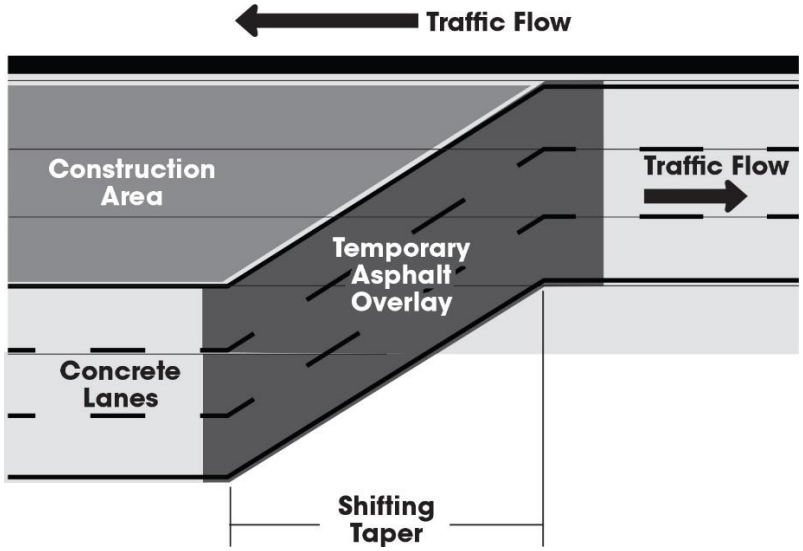
Temporary Pavement Overlay Detail 3



Temporary Pavement Overlay Detail 4



Temporary Pavement Overlay Detail 5



Such temporary pavement shall be removed promptly when no longer necessary for the satisfactory progress of the Construction Work.

2.2.9 Temporary Pavement

The default temporary pavement design shall follow Table 3 (Temporary Pavement Chart) unless the Design-Builder otherwise develops a temporary pavement design submittal in accordance with TP Section 8 (Geotechnical). Temporary PCC pavement needs to match the thickness of any existing PCC pavement for temporary widening situations. Temporary PCC pavement shall not be used as an overlay.

Table 3: Temporary Pavement Chart

PAVEMENT CHART

CURRENT ADT (one-way)	① 12.5 SUPERPAVE 165 lb/yd²	② 19 mm SUPERPAVE 220 lb/yd²	③ 25 mm SUPERPAVE 330 lb/yd²	④ 8" GRADED AGGREGATE BASE -OR- OTHER BASE MATERIAL
UNDER 750	X	X		X
750-1500	X	X		X
1500-6000	X	X	X	X
OVER 6000	X	X	X*	X

*USE 25 mm SUPERPAVE-440 lb/yd² IF DETOUR IS TO BE IN OPERATION FOR LONGER THAN 2 YEAR.

2.3 Mobile Operations

A mobile operation is a continuously operating or rolling Lane Closure which has a minimum speed of 3 mph. Mobile operations may be implemented to perform maintenance operations, including sweeping, debris pick-up, and pavement markings.

In addition to the minimum requirements set forth in the MUTCD, the following equipment and warning devices are also, at a minimum, required:

1. All vehicles shall be equipped with the official slow-moving vehicle symbol sign. All vehicles shall have a minimum of two flashing or rotating beacons visible in all directions. All protection vehicles shall have an arrow panel mounted on the rear. All vehicles requiring an arrow panel shall have, as a minimum, a Type B panel. All vehicle mounted signs shall be mounted with the bottom of the sign at a minimum height of 48 inches above the pavement. All sign legends shall be covered or removed from view when Work is not in progress.
2. The lead vehicle may be a separate vehicle or the work vehicle applying the pavement markings may be used as the lead vehicle. The lead vehicle shall have an arrow panel mounted so that the panel is easily visible to oncoming (approaching) traffic. The arrow panel shall operate in the caution mode.
3. The Work vehicles shall have an arrow panel mounted on the rear. The arrow panel should typically operate in the caution mode.
4. A protection vehicle shall always follow the last Work vehicle and shall be equipped with a truck mounted attenuator that shall be certified for impacts not less than 62 mph in accordance with MASH/NCHRP350 Test Level Three.
5. The mobile operation shall be performed in a manner in which active traffic is maintained on only one side of the mobile operation.
6. The mobile operation shall only constitute the use of two or fewer mainline travel lanes.

2.4 Traffic Pacing Method

2.4.1 Pacing of Traffic

Before traffic pacing is placed in operation, the Design-Builder shall secure GDOT's acceptance of the TTCP. The TTCP shall include the Design-Builder's proposed plan of operation, sequence of Work, type and location of advance notification messaging (including the message), and methods of providing for the safe passage of vehicular and pedestrian traffic. When included in an accepted TTCP, traffic may be paced allowing the Design-Builder up to 20 minutes maximum to work in or above all lanes of traffic for the following purposes:

1. Placing bridge members or other overhead bridge work activities
2. Placing overhead sign structures
3. Other Construction Work items requiring interruption of traffic

The Design-Builder shall provide a uniformed law enforcement officer with patrol vehicle and blue flashing light for each direction of pacing. The law enforcement officers and all workers involved in the traffic pacing operation shall meet prior to the planned Lane Closure to review and understand all procedures before the Lane Closure sequence begins. The law enforcement officer, WTCS, and flaggers at ramps shall be provided with a radio which will provide continuous contact with the Design-Builder.

When ready to start the traffic pacing activity, the law enforcement vehicle will act as a pilot vehicle slowing the traffic, thereby providing a gap in traffic allowing the Design-Builder to perform the intended Construction Work. Any on-ramps between the pace and the work area shall be blocked during pacing of traffic, with a flagger properly dressed and equipped with a Stop/Slow paddle. Each ramp shall be opened after the law enforcement vehicle has passed.

Pilot vehicles shall travel at a safe pace speed. The Design-Builder shall provide a vehicle to proceed in front of the law enforcement vehicle and behind the other traffic in order to inform the Design-Builder's work force when all vehicles have cleared the area.

Traffic shall not be permitted to stop while implementing the traffic pacing method. At the expiration of the 20 minutes, the roadway constituting the Construction Work area shall be cleared of all equipment, materials, personnel, and other items, and the roadway shall be re-opened. Prior to repeating the traffic pacing Lane Closure, the traffic queue shall dissipate and the traffic flow shall reflect anticipated steady flow conditions.

The minimum time to allow for the traffic to dissipated shall be 30 minutes, or as agreed upon by the WTCS and GDOT. Additionally, if traffic queues extend beyond the most distant advance warning signs then the advance warning signs shall be reset beyond experienced traffic queue prior to repeating traffic pacing Lane Closure.

The WTCS shall determine and field locate the modified advance notice signs locations. When possible, PCMS signs should be in advance of the last available exit prior to the Lane Closure to allow Users the choice of an alternate route.

If traffic pacing cannot support the intended construction activity, then the Design-Builder shall abandon the traffic pacing operation, revise the work plan and TTCP associated with the Construction Work, and reschedule the revised Lane Closure through the TIR submittal in accordance with TP Section 18.2.5 (Notifications and Traffic Interruption Requests).

2.5 Work Zone

2.5.1 Work Zone Restrictions

2.5.1.1 Interstates

For Interstates, the Design-Builder shall implement a shoulder Lane Closure when the Construction Work is located within 12 feet of the travelway, unless the travel lanes and Construction work zone are separated by temporary barrier and the minimum shoulder width is provided.

The Design-Builder may alternate the location of the shoulder Lane Closures when the work zone is separated by at least 0.5 miles of distance.

2.5.1.2 Non-Interstate Divided Highways and Non-Divided Highways

The Design-Builder shall implement a shoulder Lane Closure when the Construction Work is located within 12 feet of the travelway unless the travel lanes and Construction work zone are separated by temporary barrier and the minimum shoulder width is provided.

The Design-Builder may alternate the location of the shoulder Lane Closures when the work zone is separated by at least 0.5 miles of distance in rural areas or at least 1,500 feet of distance in urban areas.

2.5.1.3 Major and Minor Roadways

For two-lane roadway sections where full width sections of the existing subgrade, base, or surfacing are to be removed and reconstructed, the Design-Builder shall maintain one-lane traffic through the construction area by removing and replacing the undesirable material for half the width of the existing roadway at a time. Replacement should be made such that paving is

completed to the level of the existing pavement in the adjacent lane by the end of the day or before opening all the roadway to traffic.

2.5.2 Work Zone Geometric Limitations

The Design-Builder shall not reduce the total number of available traffic lanes including turning lanes that existed prior to NTP1, except as specifically allowed by the Design-Build Documents and as accepted by GDOT as part of a TTCP.

The Design-Builder shall maintain the minimum lane width of 11 feet for:

1. Mainline as defined in TP Section 18 (Traffic Control)
2. Major roadways as listed in TP Section 18 (Traffic Control)
3. Minor roadways, as listed in TP Section 18 (Traffic Control)

For Interstates and Non-Interstate Divided and Non-Divided Highways, the following modifications to the shoulder widths, which existed prior to NTP1, are allowed and shall not be considered a Lane Closure:

1. Shoulders greater than 8 feet in width, the minimum width shall be 8 feet
2. Shoulders less than 8 feet in width, the minimum width shall be 1 foot

For major and minor crossing streets where the travel lanes are reduced to one lane in each direction, the overall minimum horizontal width for shoulder and lane opening shall be 24 feet.

If a ramp is reduced to one lane, the overall minimum horizontal width for shoulder and lane opening shall be maintained at 22 feet.

For major and minor roadways where the travel lanes are reduced to one lane in each direction, the overall minimum horizontal width for shoulder and lane opening shall be 24 feet.

For travel lane clearances of existing two-lane facilities, all portions of the Work shall maintain the following minimum requirements:

1. Horizontal — The combined dimensions of the paved shoulder and the roadway surface remaining outside the Work zone shall be no less than 16 feet in width.
2. Vertical — The overhead clearance shall not be reduced to less than 16 feet at any location.

Two-lane, two-way roadways may have temporary horizontal restrictions of less than 16 feet during flagging operations. The minimum horizontal clearance should be restored before the flagging operation is removed.

Whether shown in the Design-Build Documents or proposed by the Design-Builder, the restrictions above apply to all shifts, Lane Closures, and detours inside and outside the Project Limits. It shall be the responsibility of the Design-Builder to verify that these minimum requirements have been met before proceeding with any phase of the Construction Work. When a concrete traffic barrier is utilized, a minimum of 1-foot offset from the edge of travelway to the edge of traffic barrier is required.

2.5.3 Clear Zone

At the end of the work shift, all equipment, materials, and temporary traffic control devices not in use should be moved out of the clear zone or behind positive protection (e.g. guardrail or concrete traffic barrier). The clear zone is defined by Georgia Standard 4000W "Lengths of Advancement, Clear Zone Distances, Fill Height Embankment." For urban roadway with curb, the minimum set back is 6 feet from the curb face. If stored behind positive protection, proper lengths of advancement should be maintained. If stored behind guardrail, the items shall be a minimum 5 feet from the face of the guardrail and not in the recovery zone of the anchor.

The WTCS shall monitor the Construction Work to ensure that all the rocks, boulders, construction debris, stockpiled materials, equipment, tools, and other potential hazards are kept clear of the travel lane.

2.5.4 Milled Surface Restrictions

No milled asphaltic concrete surface on the Interstate or Highway shall be allowed to remain open to traffic. For major and minor roadways, a milled surface on any asphaltic concrete surface shall not be allowed to remain open to traffic for a period of time that exceeds 30 days.

2.5.5 Construction Vehicles

The Design-Builder's vehicles shall travel in the direction of normal roadway traffic and shall not reverse direction except at intersections, interchanges, or approved temporary crossings. The Design-Builder may submit a TTCP which requests that construction traffic be allowed to travel in the opposite direction of normal traffic only when it would be necessary to accommodate specific construction activities. If the Design-Builder's TTCP Submittal is accepted, the construction traffic shall be separated from normal traffic by appropriate positive protection and traffic control devices.

All Design-Builder construction traffic is prohibited from crossing active interchange entrance and exit ramps. Flagging operations on active interchange entrance and exit ramps to support ingress and egress to work zones shall not be an acceptable traffic control operation. All TTCPs shall designate and provide adequate entry and exit transition areas.

The parking of Design-Builder's and/or workers' personal vehicles within the Project Limits or adjacent to traffic is prohibited except in specific areas identified on an accepted TTCP. It shall be the responsibility of the WTCS to ensure that any vehicle within the Project Limits is necessary for the execution and completion of the construction activities performed under the associated TTCP.

2.5.6 Environmental Impacts

The Design-Builder shall ensure that dust, mud, and other debris from construction activities do not interfere with normal traffic operations or adversely impact adjacent properties.

2.5.7 Nighttime Work Lighting

Adequate temporary lighting shall be provided at all nighttime locations where workers or equipment will be located.

2.5.8 Removal/Reinstallation of Miscellaneous Items

In the prosecution of the Construction Work, if it becomes necessary to remove existing traffic control or roadside devices (e.g., signs, markers, guardrail, etc.). When deemed in acceptable

condition by GDOT, they shall be removed, stored and reinstalled to the proposed line and grade.

2.5.9 Work Zone Law Enforcement

Work zone law enforcement consists of utilizing a uniformed law enforcement officer equipped with patrol vehicle and blue flashing lights to enforce traffic laws in Construction Work zones and the administration of this service. The Design-Builder will be responsible for negotiating a rate of reimbursement and making reimbursement to that law enforcement agency.

The Design-Builder, through the WTCS, will be responsible for coordinating, scheduling, utilizing, and administering work zone law enforcement. GDOT may require the use of work zone law enforcement at specific times and locations.

The WTCS daily inspection report shall include a form signed by the police officers and signed by the Design-Builder's WTCS attesting that the police officers were utilized during the time recorded.

2.6 Differences in Elevations Between Travel Lanes and Shoulders

2.6.1 Differences in Elevations

A difference in elevations due to construction between travel lanes and/or shoulders within the clear zone should be limited to the following:

1. A difference of 2 inches or less between adjacent travel lanes should remain for a maximum period of 14 days.
2. A difference of 2 inches or less between adjacent travel lane and paved shoulder should remain for a maximum of 30 days. Traffic control devices shall be in accordance with Detail 150-G.
3. A difference of greater than 2 inches is permitted for continuous operations. Traffic control devices shall be in accordance with Detail 150-E.
4. A difference of greater than 2 inches between travel lanes and/or shoulders for non-continuous operations will not be allowed for more than a 24-hour period. For the first 24 hours, traffic control shall be in accordance with Detail 150-E. After 24 hours, the section should be healed according to Detail 150-H. This condition can exist for a maximum of 60 days.

2.6.2 Healed Section

Healed section and traffic control devices should be placed in accordance with Detail 150-H. Handling and hauling of any crushed stone used to heal shall be kept to a minimum. GDOT shall determine if the crushed stone used to heal meets the specifications for gradation and quality.

2.6.3 Emergency Situations

Inclement weather, traffic accidents, and other events beyond the control of the Design-Builder may prevent the Construction Work from being completed as required above. The Design-Builder shall notify GDOT in writing stating the conditions and reasons that have prevented the Design-Builder from complying with the time limitations. The Design-Builder shall also outline a plan detailing immediate steps and time to complete the necessary work to bring the condition into conformance with the Design-Build Documents.

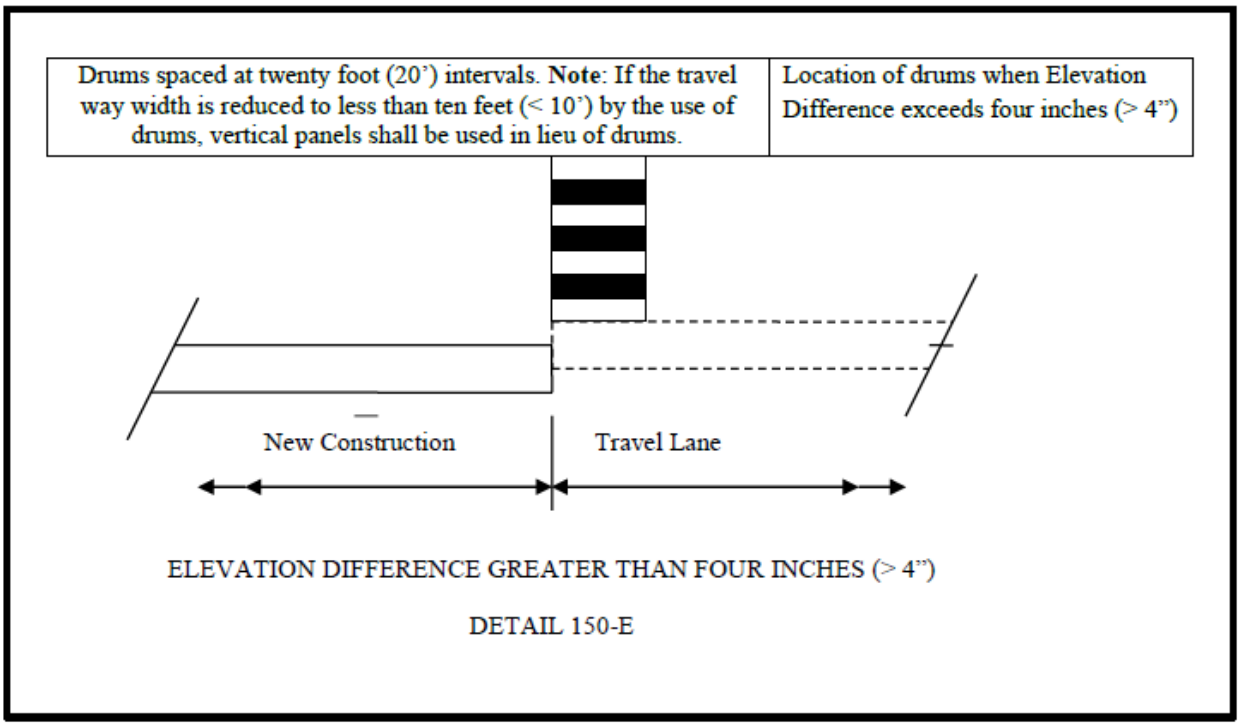
2.6.4 Plating

Plating for drainage structures, Utility facilities, etc. is prohibited on the interstates, Highways, and any roadway facility with a posted speed greater than 45 mph. Plating on secondary roads will require the prior acceptance of GDOT.

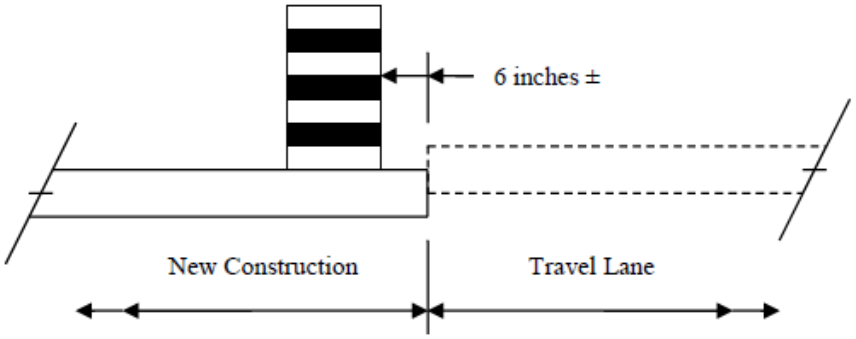
The plate shall completely cover the pavement cut or excavation. The plate shall be adequately secured and shall provide a safe and reasonable transition to the adjoining roadway surface. An asphalt wedge can be used to provide a smooth transition over the plate. Warning signs W8-24 shall be utilized in the TTCP and posted in advance to warn Users about plates in roadway in accordance with the MUTCD. Plating should not remain in place for more than four days.

2.6.5 Asphaltic Concrete Resurfacing

When the placement of asphaltic concrete materials creates a difference in elevation greater than 2 inches between the earth shoulder (grassed or un-grassed) and the edge of travel lane or between the earth shoulder and a paved shoulder that is less than 4 feet in width, the Design-Builder shall place and maintain drums in accordance with the requirements in Section 2.5.1 (Work Zone Restrictions) of this TP Attachment 18-1. When the edge of the paved surface is tapered with a safety edge, drums may be spaced at a distance in feet that is two times the speed limit in mph. Drums shall remain in place and be maintained until the difference in elevation has been eliminated by the placement of the appropriate shoulder materials.



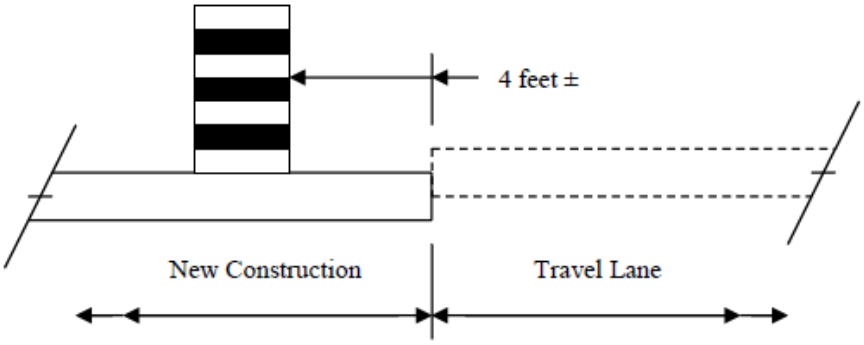
Drums spaced at forty foot (40') intervals.	Location of drums when Elevation Difference is greater than two inches (> 2") to four inches (4")



ELEVATION DIFFERENCE GREATER THAN TWO INCHES (> 2") TO FOUR INCHES (4")

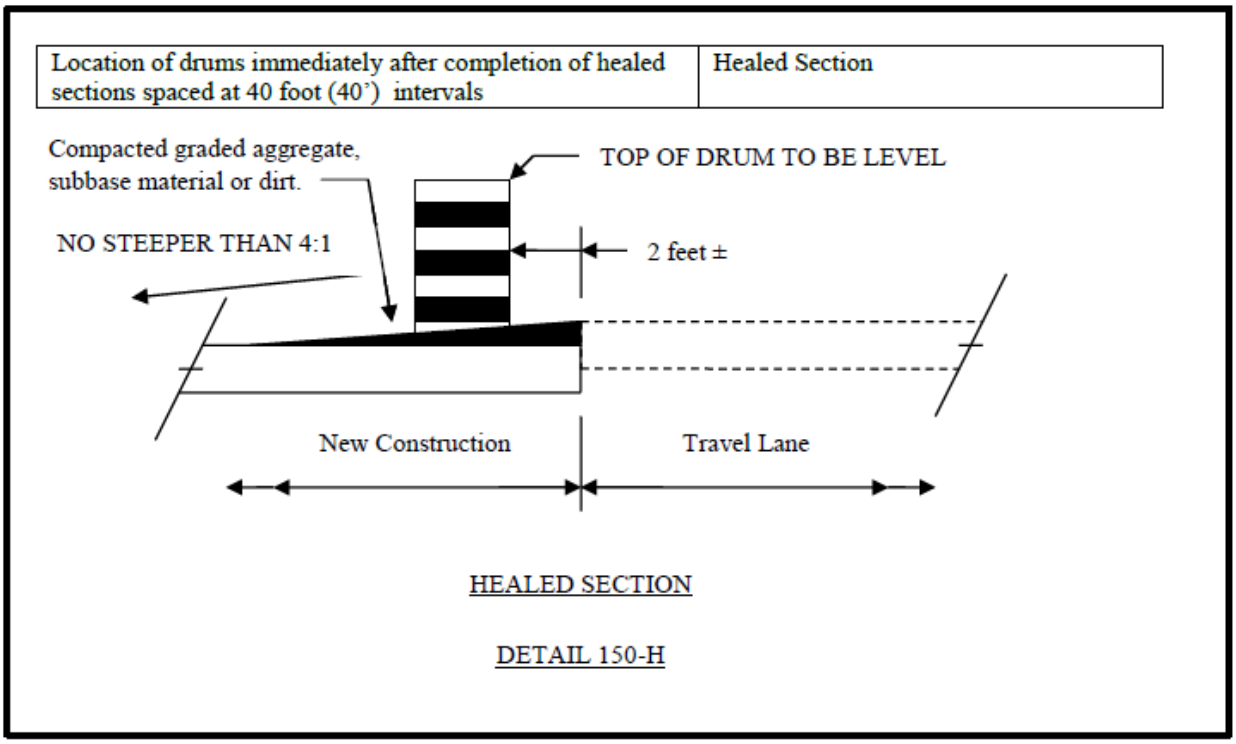
DETAIL 150-F

Drums spaced at eighty foot (80') intervals.	Location of drums when Elevation Difference is two inches (≤ 2") or less.



ELEVATION DIFFERENCE OF TWO INCHES (≤ 2") OR LESS

DETAIL 150-G



2.7 Signing — General

2.7.1 Signing Requirements of the TTCP

When existing regulatory, warning, or guide signs are required for proper traffic and pedestrian control, the Design-Builder shall maintain these signs in accordance with the TTCP.

The Design-Builder shall continuously review the status of all existing signs, temporary signs, and permanent sign installations. The Design-Builder shall maintain signing continuity on all active roadways within or intersecting the Project Limits by relocating existing signing, removing conflicting or non-applicable signing, or installing temporary and permanent signing. The installation, relocation, or elimination of roadway signs (including signing structures) that are part of the Project will be denoted in the TTCP.

The Design-Builder shall make every effort to eliminate the use of interim signs as soon as the Construction Work allows for the installation of permanent signs.

All existing illuminated signs shall remain lighted and be maintained by the Design-Builder. Existing street name signs shall be maintained at street intersections.

Any signs or portions of a sign that are not applicable to the TTCP shall be covered so as not to be visible to traffic or shall be removed from the roadway when not in use. The WTCS shall review all traffic shifts and changes in the traffic patterns to ensure that all conflicting signs have been removed. The review shall confirm that the highest priority signs have been installed and that signs of lesser significance are not interfering with the visibility of the high priority signs. High priority signs include signs for road closures, shifts, detours, Lane Closures, and curves. Any signs, such as speed zones and speed limits, passing zones, littering fines and litter pick up, that reference activities that are not applicable due to the presence of the construction workers shall be removed, stored, and reinstalled when the Construction Work is completed.

2.7.2 Sign Visibility

All existing, interim, and new permanent signs shall be installed so as to be completely visible and legible for an advance distance in compliance with the MUTCD. Any clearing required for maintaining the line of sight to existing, interim, or permanent signs shall be done as part of the requirements of the TTCP. The clearing shall include any advance warning signs, both interim and permanent, that are installed as a part of the Work including advance warning signs that are installed outside the Project Limits. Limbs, brush, construction equipment, and materials shall be kept clear of the driver's line of sight to all signs that are part of the TTCP.

2.7.3 Removal of Existing Signs and Supports

All existing signs and supports which are to be removed shall be stored and protected if this material will be required later in the Construction Work as part of the TTCP. If the signs or supports are not to be utilized in future Work, then the signs or supports will become the property of the Design-Builder unless otherwise specified in the Design-Build Documents.

2.7.4 Logo Signs

When logo signs along the mainline must be removed and remounted during the prosecution of the Construction Work. If the Design-Builder is unable to remount logo signs at their permanent location, then the logo sign shall be temporarily installed in a location approved by the PCE. If the logo signs are temporarily set, they shall remain so until such time that the construction in the area will allow for the logo signs to be placed in their permanent location. Once the logo signs are remounted at their permanent locations, they shall not be removed again.

The logo signs shall be placed in their permanent location per Georgia Standards 9054A, 9054B, and 9054C.

2.7.5 Interim Guide, Warning and Regulatory Signs

Interim guide, warning, or regulatory signs required to direct traffic and pedestrians shall be furnished, installed, reused, and maintained by the Design-Builder in accordance with the MUTCD, the Project Management Plans, and Design Documents, or as directed by GDOT. These signs shall remain the property of the Design-Builder. When the signs are used for long-term stationary operations as defined MUTCD (Section 6G.02), the bottom of all interim signs shall be mounted 7 feet to 8 feet above the level of the pavement edge or sidewalk. The sign's offset shall be 6 feet to 12 feet from the pavement edge or 2 feet minimum for sidewalks according to MUTCD (Figure 6F-1) (6G-1, 6H-1, and 6I-1).

Portable signs may be used when the duration of the Work is less than three days. Portable signs shall be used for all punch list work. Portable interim signs shall be mounted a minimum of 1 foot above the level of the pavement edge for directional traffic of two lanes or less and at 7 feet for directional traffic of three or more lanes according to MUTCD (Figure 6F-2). Signs shall be mounted at the height recommended by the manufacturer's crashworthy testing requirements.

Lane Closures that exist for a duration longer than three calendar days may be signed and marked as per the details in Georgia Standard 9121 provided the prior approval of GDOT is obtained. The approved lane drop shall utilize only the signs and markings shown for the termination end of the lane drop in Georgia Standard 9121. All warning signs in the lane drop sequence shall be used.

All sign blanks shall be rigid whether the sign is mounted as a portable sign, on a Type III barricade, or as a permanent mount height sign.

2.7.6 Wrong-Way Signs

The Design-Builder shall maintain the existing wrong-way and associated pavement markings through the various phases of Construction Work. Once the existing wrong-way signage and pavement markings are relocated or modified due to phased construction, they shall be installed or implemented in accordance with TP Section 16.3.3 (Permanent Pavement Marking).

2.7.7 Existing Special Guide Signs

Existing special guide signs on the Project shall be maintained until conditions require a change in location or legend content. When a change is required, existing signs shall be modified and continued in use if the required modification can be made within existing sign borders using design requirements (legend, letter size, spacing, border, etc.) equal to that of the existing signs or of the additional requirements in this TP Attachment 18-1. Differing legend designs shall not be mixed in the same sign.

2.7.7.1 Special Guide Signs

Special guide signs are those expressway or freeway guide signs that are designed with message content (legend) that applies to a particular roadway location. When an existing special guide sign is in conflict with Construction Work to be performed, the Design-Builder shall remove the conflicting sign and reset it in a new, non-conflicting location which has been accepted by GDOT.

2.7.7.2 Interim Special Guide Signs

When it is not possible to utilize existing signs, either in place or relocated, the Design-Builder shall furnish, erect, maintain, modify, relocate, and remove new interim special guide signs in accordance with the Design Documents or as directed by GDOT. Interim special guide signs that may be required in addition to, or a replacement for, existing expressway and freeway (interstate) signs shall be designed and fabricated in compliance with the minimum requirements for guide signing contained in Chapter 2E “Guide Signs – Freeway and Expressway” of the MUTCD. All interstate shields on these signs shall be 48 inches and 60 inches for two-numeral and three-numeral routes, respectively.

The road name of the exit or route shield shall be placed on the exit gore sign.

2.7.7.3 Interim Overhead Guide Sign Structures

Interim overhead special guide sign structures are not required to be lighted unless specifically required by the Design-Build Documents. If lighting is required, the sign shall be lighted as soon as erected and shall remain lighted, during the hours of darkness, until the interim sign is no longer required.

2.7.7.4 Permanent Special Guide Signs

The installation of new permanent special guide signs and the permanent modification or resetting of existing special guide signs, when included in the Design-Build Documents, shall be accomplished as soon as practical to minimize the use of interim special guide signs. If lighting is required by the Design Documents, all new permanent overhead special guide signs shall be lighted as soon as erected.

2.7.8 Stop Sign Regulated Intersections

For intersections that utilize stop signs to control the flow of traffic and to restrict the movement of vehicles, the stop signs shall be maintained for the duration of the Work or until such time that the stop condition is eliminated or until an interim or permanent traffic signal can be installed to provide proper traffic control. The traffic signal shall be installed and properly functioning before the removal of the existing stop signs is permitted. If the existing intersection has enhanced traffic control features, such as stop lines, double indicated stop signs, oversized signs, advanced warning stop ahead signs, rumble strips on the approaches, or flashing beacons located overhead or on the shoulders then these features shall be maintained for the duration of the Project or until the permanent traffic control devices have been implemented.

Whenever the staging of the Construction Work requires that the traveled way be relocated or realigned, the Design-Builder shall reinstall all enhanced traffic control features noted above on the newly constructed sections of the Project.

When staging requires the relocation or realignment of an existing stop condition, it may be necessary to consider the addition of enhanced traffic control features even though none existed at the original location. By way of example, only horizontal and vertical alignment changes at a new location may have decreased or restricted sight distance or the stop condition may occur sooner than in the previous alignment. If these or similar conditions occur, then Design-Builder shall consider additional measures to enhance motorists' awareness of the changes even though the TTCP may not address enhanced features. Stop signs should be a minimum of 36 inches for interim situations. The use of 48-inch stop signs may be warranted under Project specific conditions. Flags may be used on interim/permanent stop signs that are mounted at 7 feet in height for a short duration in order to direct additional attention to a new or relocated stop signs. Flags should not be used for durations exceeding two weeks unless unusual or site-specific conditions warrant a longer period of time. The use of Type A flashing red lights attached to the stop signs may be appropriate during the same period that the flags are in use to increase attention.

The use of rumble strips and/or portable changeable message signs (PCMS) may be considered. The messages displayed on any PCMS shall have the prior acceptance of GDOT and the messages shall be included as part of the TTCP for the interim staging.

2.7.9 Low Shoulder Signing

2.7.9.1 Low Shoulder for Construction/Reconstruction/Resurfacing Projects

"Low Shoulder" (W8-9) signs shall be erected when a difference in elevation, less than 4 feet from the traveled way, exceeds 1 inch but does not exceed 3 inches between the travel lane and any type of shoulder. "Low Shoulder" (W8-9) signs shall be a minimum dimension of 48-inches by 48-inches.

The spacing of the signs shall not exceed 1 mile and the signs shall be placed immediately past each crossroad intersection. The "Low Shoulder" signs shall remain in place until the difference in elevation is eliminated and the shoulder has been dressed and permanently grassed for a minimum of 30 days. These signs shall be black borders on fluorescent orange background.

2.7.9.2 Shoulder Drop-Off for Construction/Reconstruction/Resurfacing Project

"Shoulder Drop-Off" (W8-17) signs shall be used when a difference in elevation, less than 4 feet from the traveled way, exceeds 3 inches and is not protected by positive barrier protection.

These warning signs shall be placed in advance of the drop-off. “Shoulder Drop-Off” (W8-17) shall be a minimum dimension of 48-inches by 48-inches.

The spacing of the signs shall not exceed 1 mile and the signs shall be placed immediately past each crossroad intersection. The “Shoulder Drop-Off” signs shall remain in place until the difference in elevation is eliminated and the shoulder has been dressed and permanently grassed for a minimum of 30 days. These signs shall be black borders on fluorescent orange background.

2.7.10 Bump Signing

A “Bump” sign (W8-1) shall be utilized when a transverse joint in the pavement structure has a vertical difference in elevation of 0.75 inches or greater in depth with no horizontal taper to ramp the traffic from one elevation to the other. This condition typically occurs at approach slabs during pavement milling operations and at transverse joints in asphaltic pavement lifts. Other conditions include Utility and storm drainage repairs that require concrete placement for patching and/or steel plating. “Bump” (W8-1) shall be a minimum dimension of 48-inches by 48-inches.

The W8-1 sign shall be placed sufficiently in advance to warn the motorist of the condition.

2.7.11 Uneven Lanes Signing

“Uneven Lanes” (W8-11) signs shall be used when a difference in elevation between the adjacent travel lanes exceeds 0.75 inches. These warning signs shall be placed in advance of the travel lane condition and remain in place until the difference in elevation is eliminated. These signs shall be black borders on fluorescent orange background.

2.8 Advance Warning Signs

2.8.1 General

The advance warning signs shall be in accordance with MUTCD and Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” and Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway.”

When the TTC zone already has advanced warning (W20-1) signs installed the W20-1 signs required for Lane Closures under Standard 9106 and 9107 shall be eliminated.

For interstate, limited access, and multi-lane divided Highways, an additional PCMS shall be placed 1 mile in advance of a Lane Closure with a message denoting the appropriate Lane Closure 1 mile ahead. No other message shall be displayed on this PCMS. The PCMS shall be placed on the outside shoulder in accordance with Detail 150-B (PCMS). This is in addition to the other traffic control devices required by Standard 9106.

Advance warning signs shall be placed ahead of the Work area in accordance with Part 6 of the MUTCD and shall include a series of at least three advance road work (W20-1) signs placed at the termini of the Project. The series shall have the legend “Road Work 1500 Ft”; “Road Work 1000 Ft”; and “Road Work 500 Ft.”

At grade intersecting roadways and on-ramps shall be signed with a minimum of one “Road Work Ahead” sign.

When work terminates at a T-intersection, a minimum of one “Road Work Ahead” sign shall be placed in advance of the intersection and one “End Road Work” sign shall be placed at the termination end of the intersection. Field conditions may require the use of additional warning signs.

2.8.2 State Routes

Advanced warning signs on State Routes shall be a minimum dimension of 48-inches by 48-inches. When a State Route intersects a Related Transportation Facility which consists of adding travel lanes, reconstructing an existing roadway, or new location work, the State Route approaches shall have a minimum of three (W20-1) advanced warning signs (1,500 feet, 1,000 feet, 500 feet). The termination end of an intersecting State Route shall have “End Road Work” signs.

The W20-1 signs shall be placed at the termini of the Project or sufficiently in advance of the termini to allow for lane shifts, Lane Closures, and other activities which may also require advanced warning signs. The advanced warning signs for the Project should not overlap with the advanced warning signs for lane shifts, Lane Closures, etc.

The length of a work zone should be held to the minimum length required to accomplish the Construction Work. If the Project has multiple individual work zones within the Project Limits, each work zone shall be signed individually provided the advance warning signs for each work zone can be installed without overlapping. As soon as the Construction Work is completed at any individual work zone, the warning signs shall be removed from that location. Clean-up work and punch list work shall be performed with portable signs.

Project mileage indicated on the G20-1 sign shall be the actual Project mileage rounded up to the nearest whole mile. Projects less than 2 miles in length or individual work sites that are part of a multiple work site project may delete this sign. The G20-1 sign shall be 48-inches by 24-inches and the G20-2 sign shall be 48-inches by 24-inches.

2.8.3 Interstates and Limited Access Multilane Divided Highways

In addition to the W20-1 signs required at 500 feet, 1,000 feet, and 1,500 feet, multi-lane divided Highways shall also have additional advanced warning signs installed with the legend “Road Work” (2 miles, 1 mile, and 0.5 mile). All construction warning signs on divided Highways shall be double indicated (i.e., on the left and right sides of the roadway). If the use of the 0.5-mile, 1-mile, and 2-mile advanced warning signs cause an overlap with other Work or do not benefit field conditions then GDOT may review the use of these signs and eliminate their installation. When the posted speed limit is 50 mph or less, the 0.5-mile, 1-mile, and 2-mile signs shall be eliminated (especially in urban areas).

The W20-1 advance warning signs for “Road Work” (500 feet, 1,000 feet, and 1,500 feet) shall be temporarily covered when work involving the advanced warning signs for lane shifts and Lane Closures overlap these signs. The “Road Work ½ Mile,” “Road Work 1 Mile,” and “Road Work 2 Miles” shall be in place when the 500, 1,000, and 1,500 feet signs are temporarily covered.

When the TTC zone already has advanced warning (W20-1) signs installed, the W20-1 signs required for Lane Closures under Standard 9106 should be eliminated.

2.8.3.1 Ramp Work on Limited Access Highways

The Work zone shall not be signed for the entire length of the mainline of a limited access Highway when only short individual interchange, or ramp Work is being performed.

When Work is restricted to ramp reconstruction or widening activities, the advance warning signs on the mainline section of the limited access Highway shall be limited to the use of portable advance warning signs. These portable advance warning signs shall only be utilized when Work activity is within the gore point of the ramp and the mainline traveled way or Work is active in the acceleration/deceleration lane adjacent to the mainline traveled way. Portable advance warning signs (W20-1) (1,500 feet, 1,000 feet, 500 feet) shall be installed on the traveled way of the limited access Highway when the above conditions are present. The advance warning signs shall be installed only in one direction where Work is active. All portable signs shall be double indicated. When Work is not active, the ramp work shall be advanced warned by the use of a single 48-inch by 48-inch “Road Work Ahead” (W20-1) with an “On Ramp” sign (W13-4P) along the right shoulder of the mainline traveled way prior to the beginning of the taper for the deceleration lane. Differences in elevation shall be in compliance with the requirements of this TP Attachment 18-1 prior to the removal of the portable (W20-1) advanced warning signs from the mainline.

The Design-Builder shall phase all Construction Work in and around exit ramps so that there is an exit gore sign and an exit direction sign in place for all exits at all times.

2.8.4 Highway Work Zone Signing

In accordance with Georgia Code, O.C.G.A. § 40-6-188, all sections or segments of the roadway under construction or reconstruction shall be signed as a Highway Work Zone except non-state Highway two-lane two-way resurfacing projects. Two conditions can be applied to a Highway Work Zone:

1. Condition 1 is when no reduction in the existing speed limit is required.
    a. No Reduction in the Existing Posted Speed Limit in Highway Work Zone:
        1) Signing shall be posted at the beginning point of the Highway Work Zone warning the traveling public that increased penalties for speeding violations are in effect. The beginning point of Highway Work Zone is at the Project Limits, start of Work zone, or at the start of the first taper. The HWZ-2 sign shall be placed a minimum of 600 feet in advance of the Highway Work Zone and shall not be placed more than 1,000 feet in advance of the Work zone. If no speed reduction is required, it is recommended that the HWZ-2 sign be placed 750 feet from the work area between the “Road Work 500 Ft” and the “Road Work 1000 Ft” signs.
        2) HWZ-2 signs shall be placed at intervals not to exceed 1 mile for the length of the Project. HWZ-2 signs should be placed on the mainline after all major intersections except State Routes. State Routes shall be signed as per the requirements for intersecting roadways below.
        3) The existing speed limit shall be posted at the beginning of the Work zone. Existing speed limit signs (R2-1) shall be maintained.
        4) Intersecting State routes shall be signed in advance of each intersection with the Work zone with an HWZ-2 sign to warn motorists that increased fines are in effect. All other intersecting roadways that enter into a designated Highway Work Zone shall be signed in advance of each intersection with the Work zone. When

construction equipment and personnel are present in the intersection on the mainline of a multi-lane roadway, the intersecting side roads shall be signed in advance with HWZ-2 signs. As soon as the Work operation clears the intersection, the signs may be removed.

5) Sign HWZ-3 shall be posted at the end of the Highway Work Zone indicating the end of the zone and indicating that increased penalties for speeding violations are no longer in effect.

6) When a designated Highway Work Zone is no longer necessary, all signs shall be removed immediately.

2. Condition 2 is when worksite conditions require a reduction of the speed limit through the designated Work zone. Properly marking a Highway Work Zone shall include the following minimum requirements:

   a. Reducing the Speed Limit in a Highway Work Zone:

      1) Highway Work Zone signs shall be posted as required in Condition 1 above in accordance with Detail 150-C.

      2) A “Reduce Speed Ahead” sign shall be posted 600 feet prior to the reduced speed limit.

      3) Then a “Speed Limit” sign (R2-1) for the reduced speed limit shall be erected at the beginning of the Work zone. Additional signs shall be placed at whichever is least:

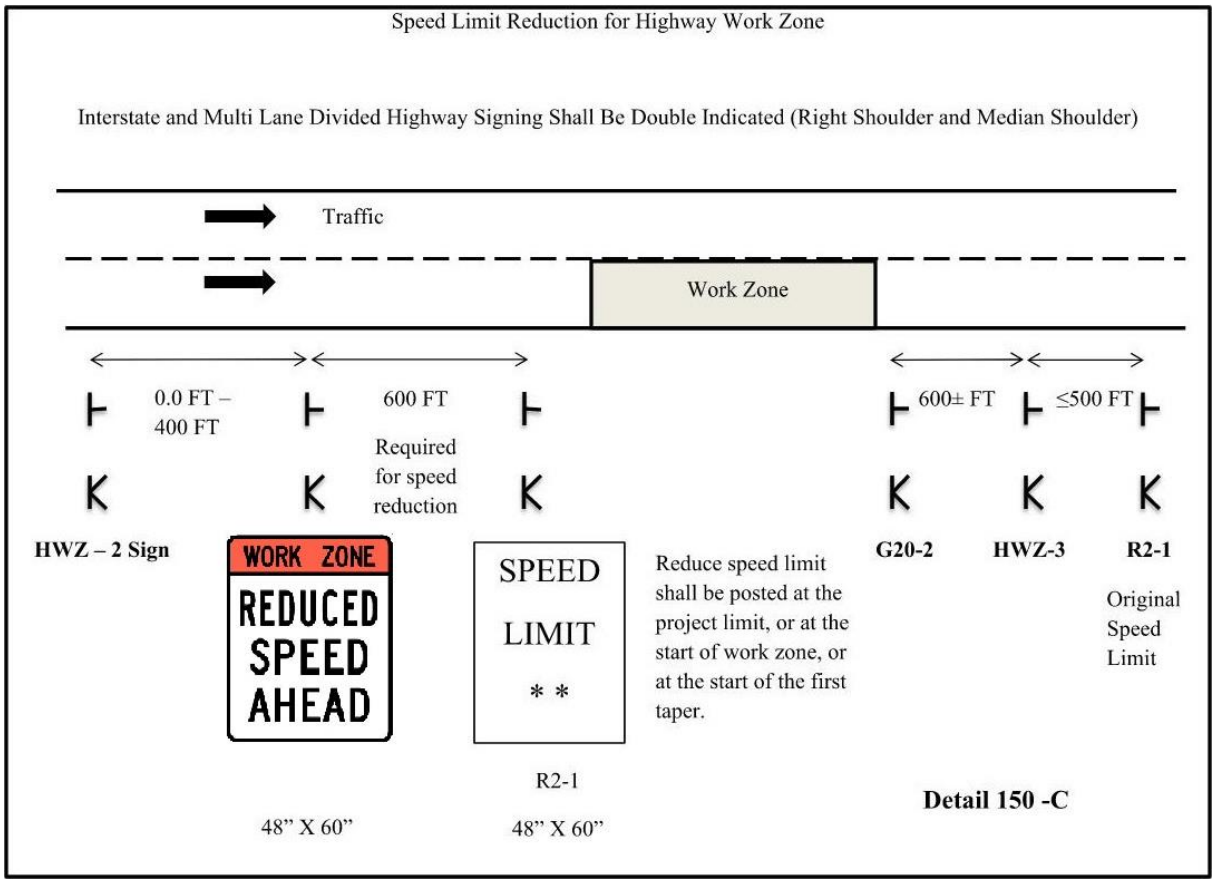
         i. On non-interstate roads, after every junction with a numbered (state or U.S.) route.

         ii. On interstate entrance ramps, 1,500 feet from the end of the entrance taper. Detail 150-D.

         iii. On non-interstate and interstate, a maximum spacing of no greater than 1 mile apart.

         iv. On interstates and multi-lane divided Highways, the speed limit signs shall be double indicated when the reduced speed is in use.

Additional signs may be necessary to adjust for actual field conditions.


Speed Limit Reduction for Highway Work Zone
Interstate and Multi Lane Divided Highway Signing Shall Be Double Indicated (Right Shoulder and Median Shoulder)
Traffic
Work Zone
0.0 FT – 400 FT
600 FT
Required for speed reduction
600± FT
≤500 FT
HWZ – 2 Sign
WORK ZONE
REDUCED SPEED AHEAD
48" X 60"
SPEED LIMIT * *
R2-1
48" X 60"
Reduce speed limit shall be posted at the project limit, or at the start of work zone, or at the start of the first taper.
G20-2
HWZ-3
R2-1
Original Speed Limit
Detail 150 -C

HWZ-2;

3" Radius, 1" Border, 1" Indent, Black on Fluorescent orange;
"WORK ZONE", C 2K specified length;

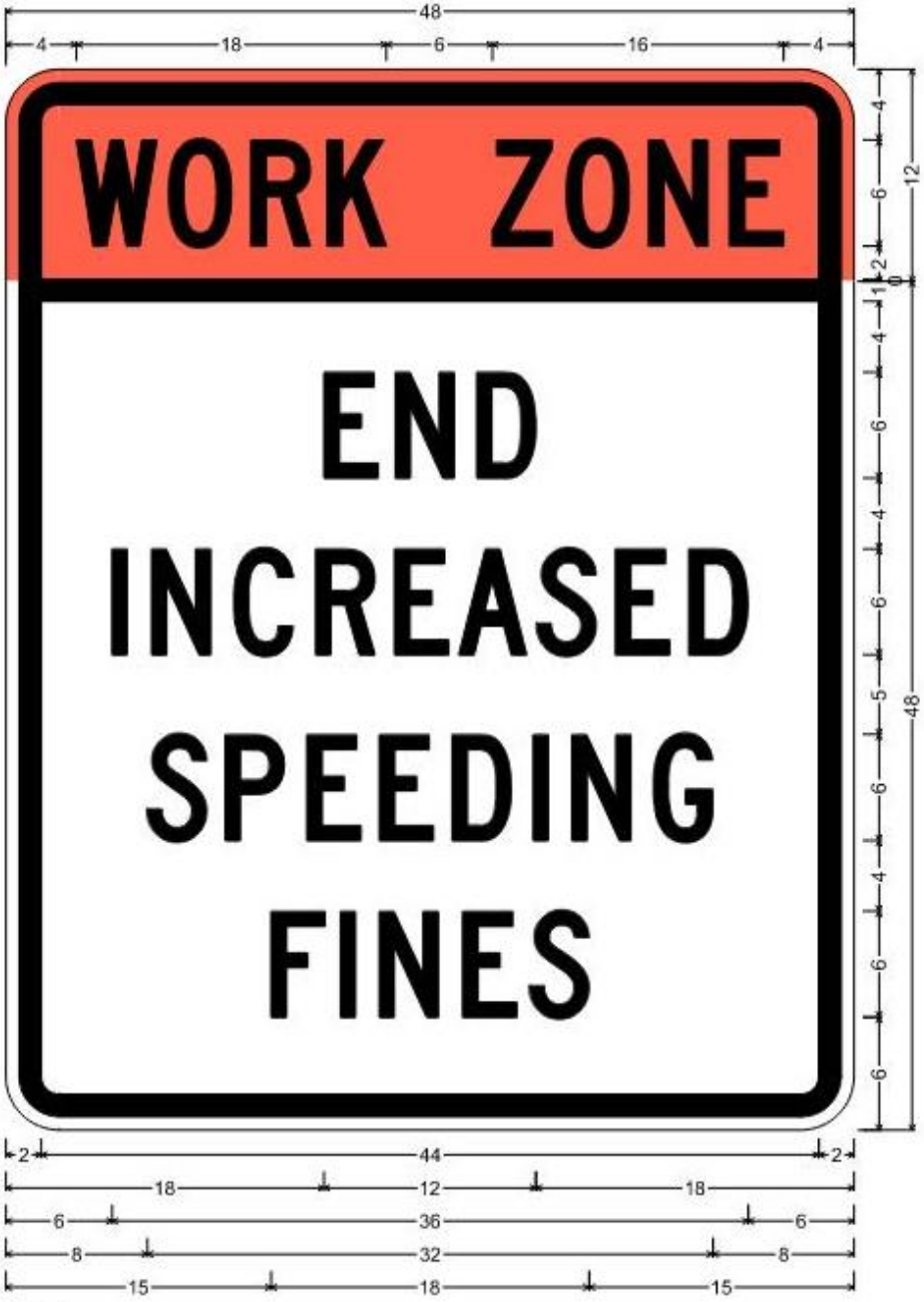
3" Radius, 1" Border, 1" Indent, Black on White;
"SPEEDING", C 2K specified length; "FINES", C 2K specified length;
"INCREASED", C 2K specified length;

3" Radius, 1" Border, 1" Indent, Black on White;
"MINIMUM", D 2K specified length; "FINE $100", D 2K specified length;

HWZ-2

1. All HWZ-2 sign panels shall be rigid.

2. The size of the HWZ-2 sign shall not be reduced for use on two-lane roadways.



HWZ-3;

3" Radius, 1" Border, 1" Indent, Black on Fluorescent orange;
"WORK ZONE", C 2K specified length;

3" Radius, 1" Border, 1" Indent, Black on White;
"END", C 2K specified length; "INCREASED", C 2K specified length;
"SPEEDING", C 2K specified length; "FINES", C 2K specified length;

HWZ-3

1. All HWZ-3 sign panels shall be rigid.

2. The size of the HWZ-3 sign shall not be reduced for use on two-lane roadways.

2.8.5 Shoulder Closure Signs

In accordance with MUTCD (Section 6N.06), when paved shoulders, having a width of 8 feet or more are closed, at least one advance warning sign shall be used. The sign should read "Shoulder Closed" (W21-5a). The signs are only posted on the side with the shoulder Lane Closure. Where the downstream end of the shoulder Lane Closure extends beyond the distance that can be perceived by Users, a supplementary plaque bearing the message "Next XX Feet" (W16-4P) or "Miles" (W7-3aP) should be placed below the "Shoulder Closed" (W21-5a) sign. These signs shall be placed 500 feet prior to the shoulder Lane Closure. For multi-shoulder Lane Closures, the "Shoulder Closed" sign shall be repeated after 2 miles at 500 feet prior to the next shoulder Lane Closure.

2.8.6 Installation/Removal of Work Area Signs

Advanced warning signs shall not be installed until the actual beginning of Construction Work or temporary traffic control activities. Any permanent mount height signs installed as the Construction Work is preparing to start shall be covered until all signs are installed unless all signs are installed within seven days after beginning installation.

All temporary traffic control devices shall be removed as soon as practical when these devices are no longer applicable. When Construction Work is suspended, the temporary traffic control devices that are no longer appropriate, shall be removed or covered.

Portable signs shall be utilized to accomplish the completion of all punch list items. The portable signs shall be removed daily. All permanent mount height signs shall be removed prior to the beginning of the punch list work except "Low/Soft Shoulder" signs and any signs that have the prior written approval of GDOT to remain in place while the punch list work is in progress.

2.8.7 Methods of Signing for Traffic Pacing

At a point not less than 1,000 feet in advance of the beginning point of the pace, the Design-Builder shall place a PCMS with the message "Traffic Slowed Ahead Short Delay."

2.9 Pedestrian Considerations

The Design-Builder shall maintain all existing pedestrian facilities including access to transit stops. Where pedestrian routes are closed, the Design-Builder shall provide alternate routes. Closures of existing, interim, and final pedestrian facilities shall be included in an accepted TTCP prior to implementation. When existing pedestrian facilities are disrupted, closed, or relocated in an area of traffic control, the temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility. The Design-Builder shall notify the maintaining Governmental Entity 30 days prior to the closure. Prior to closure, detectable barriers (that are detectable by a User with a visual disability traveling with the aid of a long cane), as described by the MUTCD, shall be placed across the full width of the closed sidewalk. Barriers and channelizing devices used along a temporary pedestrian route shall be in compliance with the MUTCD.

TTCP devices used to delineate a temporary pedestrian facility shall be in compliance with Section 2.8.2 (State Routes) of this TP Attachment 18-1. The Design-Builder shall maintain appropriate signs as described in the MUTCD to allow safe passage of pedestrian traffic or to advise pedestrians of walkway closures (refer to MUTCD Figures TA-28 and TA-29 for guidance). Advance closure signing shall be placed at intersections rather than midblock

locations so that pedestrians are not confronted with a midblock Construction Work area that will induce them to attempt a midblock crossing. TTC devices and construction material shall not intrude into the usable width of the pedestrian walkway. Signs and other devices shall be placed such that they do not narrow or restrict any pedestrian passage to less than 48 inches.

2.9.1 Pedestrian Signs

A pedestrian walkway shall not be severed or relocated for non-construction activities (e.g., parking for construction vehicles and equipment). Movement by construction vehicles and equipment across designated pedestrian walkways should be minimized. When necessary, construction activities shall be controlled by flaggers. Pedestrian walkways shall be kept free of mud, loose gravel, or other debris.

When temporary covered walkways are used, they shall be lighted during nighttime hours. When temporary traffic barrier is used to separate pedestrian and vehicular traffic, the temporary barrier shall meet the Manual for Assessing Safety Hardware (MASH) Test Level 3 and/or NCHRP-350 Test Level Three. The barrier ends shall be protected in accordance with Georgia Standard 4960. Curbing shall not be used as a substitute for temporary concrete traffic barriers when temporary concrete traffic barriers are required. All temporary handrails shall be OSHA compliant, and tape, rope, or plastic chain strung between TTC devices are not considered as detectable and shall not be used as a control for pedestrian movements.

The WTCS shall inspect the activity area daily to ensure that effective pedestrian TTC is being maintained. The inspection of temporary traffic control for pedestrian traffic shall be included as part of the TC-1 report.

2.9.2 Temporary Pedestrian Facilities

Temporary pedestrian facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. The geometry, alignment, and construction of the facility shall meet the applicable requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).”

2.9.2.1 Temporary Walkways with Detectable Edging

A smooth, continuous hard surface (firm, stable, and slip resistant) shall be provided throughout the entire length of the temporary pedestrian facility. Compacted soils, sand, crushed stone, or asphaltic pavement millings shall not be used as a surface course for walkways.

Regardless of the materials used, temporary walkways shall be constructed with sufficient thickness and durability to withstand the intended use for the duration of the associated Construction Work. If concrete or asphalt is used as the surface course for the walkway, it shall be a minimum of 1.5-inches thick. Temporary walkways constructed across unimproved streets and drives shall be a minimum thickness 4 inches for concrete and 3 inches for asphalt. Joints formed in concrete sidewalks shall be in accordance with Section 441 of the GDOT Standard Specifications Construction of Transportation Systems. Concrete surfaces shall have a broom finish.

If plywood is used as a walkway, it shall be a minimum of 0.75-inches thick, pressure treated, and supported with pressure treated longitudinal joists spaced a maximum of 16 inches on center. The plywood shall be secured to the joist with galvanized nails or galvanized deck screws. Nails and screws shall be countersunk to prevent snagging or tripping of pedestrians. A slip resistant friction course shall be applied to any plywood surface that is used as a walkway.

The Design-Builder may propose alternate types of temporary walkways provided that the Design-Builder can document that the proposed walkway meets the requirements of the ADAAG. Alternate types of temporary walkways shall have the prior written accepted of GDOT.

Temporary walkways shall be constructed and maintained so there are no abrupt changes in grade or terrain that could cause a tripping hazard or could be a barrier to wheelchair use. The Design-Builder shall construct and maintain the walkway to ensure that joints in the walkway have a vertical difference in elevation of no more than 0.25 inches and that the horizontal joints have gaps no greater than 0.5 inches. The grade of the temporary walkway should parallel the grade of the existing walkway or roadway and the cross slope should be no greater than two percent.

A width of 60 inches, if practical, shall be provided throughout the entire length of any temporary walkway. The temporary walkway shall be a minimum width of 48 inches. When it is not possible to maintain a minimum width of 60 inches throughout the entire length of temporary walkway, a 60-inch by 60-inch passing space shall be provided at least every 200 feet to allow individuals in wheelchairs to pass.

Temporary walkways shall be constructed on firm subgrade. The Design-Builder shall compact the subgrade according to Section 209 of the GDOT Standard Specifications Construction of Transportation Systems. The Design-Builder shall furnish and install any needed temporary pipes prior to constructing any walkway to ensure positive drainage away from or beneath the temporary walkway. Once the walkway is no longer required, the Design-Builder shall remove any temporary materials and restore the area to the original conditions or as shown in the Plans.

2.9.2.2 Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps shall be constructed in accordance with Section 441 of the GDOT Standard Specifications Construction of Transportation Systems and Construction Detail A-3 Curb Cut (Wheelchair) Ramps Concrete Sidewalk Details. Ramps shall also include a detectable warning surface in accordance with Construction Detail A-4 Detectable Warning Surface Truncated Dome Size, Spacing and Alignment Requirements. Other types of material for the construction of the temporary curb cut wheelchair ramps, including the detectable warning surface, may be used provided the Design-Builder can provide documentation that the material to be used meets the requirements of the ADAAG. When a wheelchair ramp is no longer required, the Design-Builder shall remove the temporary materials and restore the area to existing conditions or as shown in the Plans.

2.9.2.3 Temporary Audible Information Device

Temporary audible information devices, when required by code, shall be installed in compliance with the ADAAG. The devices shall be installed in accordance with the manufacturer's recommendations. Prior to installation, the Design-Builder shall provide GDOT with a set of manufacturer's drawings detailing the proper installation procedures for each device. When no longer required, the devices shall remain the property of the Design-Builder.

2.10 Flagging Operations

2.10.1 Flaggers

Flaggers shall be provided as required to handle traffic, as specified in the Design-Build Documents, Project Management Plans, and the TTCP.

2.10.2 Flagger Certification

All flaggers shall meet the requirements of the MUTCD and shall have received training and a certificate upon completion of the training from one of the following organizations:

1. National Safety Council
2. American Traffic Safety Services Association (ATSSA)

Certifications obtained by online classes are not accepted.

Failure to provide certified flaggers as required above shall be reason for GDOT to suspend work involving the flaggers until the Design-Builder provides certified flaggers. Flaggers shall have proof of certification and valid identification (photo ID) available any time they are performing flagger duties.

2.10.3 Flagger Appearance and Equipment

Flaggers shall wear Performance Class 3 or better high-visibility clothing. Flagger stations shall be illuminated at night according to MUTCD (Section 6M.08). They shall use a Stop/Slow paddle meeting the requirements of the MUTCD (Section 6D.02) for controlling traffic. The Stop/Slow paddles shall have a shaft length of 7 feet minimum. The Stop/Slow paddle shall be retroreflectorized for both day and night usage. In addition to the Stop/Slow paddle, a flagger may use a flag as an additional device to attract attention. This flag shall meet the minimum requirements of the MUTCD (Section 6D.02). The flag shall, as a minimum, be 24-inches square and red or red/orange in color.

2.10.4 Flagger Warning Signs

Signs for flagger traffic control shall be placed in advance of the flagging operation, in accordance with the MUTCD and Georgia Standard 9102 “Traffic Control Detail for Lane Closure on Two-Lane Highway.” In addition, signs at regular intervals, warning of the presence of the flagger shall be placed beyond the point where traffic can reasonably be expected to stop under the most severe conditions for that day’s Work.

2.10.5 Pilot Vehicle Requirements

Pilot vehicles shall be required during placement of bituminous surface treatment or asphaltic concrete on two-lane roadways unless otherwise specified. Pilot vehicles shall meet the requirements of the MUTCD (Section 6E.04).

When a pilot vehicle is used on a two-lane two-way roadway, the speed limit should not be reduced. For special conditions specific to the Work, on two-lane two-way roadways or multi-lane highways, the Design-Builder may reduce the posted speed limit with the prior approval of GDOT.

2.10.6 Automated Flagger Assistance Devices

The Design-Builder may request, in writing, the use of Automated Flagger Assistance Devices (AFAD). The equipment shall meet the requirements of MUTCD (Section 6L.02). As a part of this request, the Design-Builder shall also submit an alternate TTCP in the event of a failure of the AFAD. Any alternate plan that requires the use of flaggers shall include the use of certified flaggers. The Design-Builder shall obtain the approval of GDOT before the use of any AFAD will be permitted.

2.10.7 Portable Temporary Traffic Control Signals

The Design-Builder may request, in writing, the substitution of portable temporary traffic control signals for flaggers on two-lane two-way roadways provided the temporary signals meets the requirements of the MUTCD and the additional requirements included within this TP Attachment 18-1. As a part of this request, the Design-Builder shall also submit an alternate TTCP in the event of a failure of the signals. Any alternate plan that requires the use of flaggers shall include the use of certified flaggers. The Design-Builder shall obtain the acceptance of GDOT before the use of any portable temporary traffic control signals will be permitted.

2.11 Traffic Signals

The Design-Builder shall be responsible for the sequence of operations, staging, or relocation, or shifting of any components of an existing traffic signal system. The Design-Builder shall include details within the applicable TTCP.

Following such relocation or shifting to the traffic signals, the Design-Builder shall be responsible for subsequent maintenance or coordination with the responsible local Governmental Entity in accordance with TP Section 19 (Maintenance).

2.12 Ramp Metering

If included within the Project Limits, the Design-Builder shall be responsible for the sequence of operations, staging, relocation, or shifting of any components of an existing ramp metering signal system during all stages of construction. Additionally, once new ramp metering locations are installed the Design-Builder shall make the ramp meter locations functional and they shall remain in service. The Design-builder shall maintain all ramp metering signal and associated appurtenant devices from the time that the system is installed or modified until Final Acceptance. The Design-Builder shall include details within the applicable TTCP. Following such relocation or shifting, the design and installation shall be in accordance with TP Section 11.3.8 (Ramp Design Criteria). The Design-Builder shall be responsible for subsequent maintenance of the signal in accordance with the Design-Build Documents.

2.13 Pavement Markings

2.13.1 General

Full pattern pavement markings in conformance with Section 3A and 3B, except 3B.02, of the MUTCD are required on all courses before the roadway is opened to traffic, unless noted in this TP Attachment 18-1.

During construction and maintenance activities on all roadways open to traffic, both existing, temporary, and permanent pavement markings shall be fully maintained. If the pavement markings are, or become, unsatisfactory in accordance with the Design-Build Documents, due to wear, weathering, or Construction Work, the Design-Builder shall restore the pavement markings within 24 hours.

Markings on the final surface course, which must be removed, shall be a removable type. The Design-Builder will be permitted to use paint, thermoplastic, or tape on pavement which is to be overlaid as part of the Project. Partial (skip) reflectorization (i.e., reflectorizing only a portion of a stripe) will not be allowed.

2.13.2 Installation and Removal of Pavement Markings

2.13.2.1 Installation

All pavement markings, both temporary and permanent, shall be applied to a clean surface. The Design-Builder shall furnish the layout and pre-line the roadway surface for the placement of pavement markings applied as part of the Design Documents and associated TTCP. All temporary marking tape and raised pavement markings (RPMs) on the final surface shall be removed prior to the placement of the permanent pavement markings.

The Design-Builder shall sequence the Work in such a manner as to allow the installation of the pavement markings in the final lane configuration at the earliest possible stage of the TTCP phasing.

2.13.2.2 Removal

Markings no longer applicable shall be removed in accordance with Section 656 of the GDOT Standard Specifications Construction of Transportation Systems.

For all phases of TTCP in which the Design-Builder is performing mainline lateral shifts or detours (see Section 2.1.2 (Traffic Shift Requirements) of this TP Attachment 18-1) the Design-Builder shall create a “blank canvas” of mainline pavement by either temporarily overlaying the entire width of pavement with asphalt; or uniformly treating (e.g., bead blasting, water blasting, micro-mill, etc.) the entire width of pavement in such a manner that color and texture contrast of the pavement surface shall not be imprinted or add to User confusion when using the newly established traffic control condition.

The elimination of conflicting pavement markings by overpainting with unapproved paint or any type of liquid asphalt is not acceptable.

The condition and acceptability of pavement marking removal will be determined in accordance with Section 1.1.2 (WTCS Inspections) and Section 2.1.2 (Traffic Shift Requirements) of this TP Attachment 18-1. If at any time the WTCS or GDOT determines the Design-Builder’s pavement marking removing operations insufficient, the Design-Builder shall immediately revise its operations or means of removal and correct the deficient or conflicting conditions.

2.13.2.3 Intermediate Surface

Interim markings shall be removed by methods that will cause minimal damage to the pavement surface, while also ensuring that Users will not be confused or misdirected by any residual markings remaining on the intermediate surface. The use of approved black-out tape and black-out paint (manufactured for the sole purpose of covering existing pavement markings) may be permitted on some interim surfaces, provided the results are satisfactory to GDOT.

2.13.2.4 Final Surface

No interim paint or thermoplastic markings will be permitted on any final surface unless the interim markings are in alignment with the location of the permanent markings and the interim marking will not interfere or adversely affect placement of the permanent markings. The proposed method of removal for layout errors that require markings to be removed from the final surface shall have the prior acceptance of GDOT. Section 400 of the GDOT Standard Specifications Construction of Transportation Systems shall apply when corrective measures are required. The use of black-out tape or black-out paint will not be permitted under any circumstance to correct layout errors on any final surface.

Traffic shifts that are done on the final surface shall be accomplished using temporary traffic marking tape that can be removed without any blemishing of the final surface. Temporary traffic marking tape shall be used on the following final surfaces: asphaltic concrete, Portland Cement Concrete, and bridge deck surfaces. The Design-Builder may propose alternate traffic markings and removal methods on the final surface. Prior to any approval, the Design-Builder shall field demonstrate to the satisfaction of GDOT that the proposed traffic markings can be removed without any blemishing of the final surface.

2.13.2.5 Preparation and Planning for Traffic Shifts

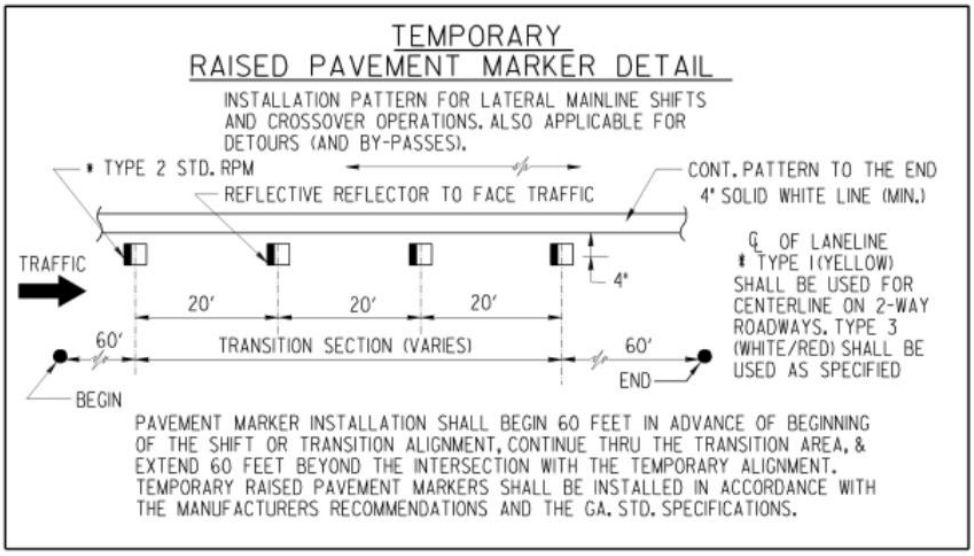
When shifting of traffic necessitates removal of centerline, lane lines, or edge lines, all such lines shall be removed prior to, during, or immediately after any change so as to present the least interference with traffic. Temporary traffic marking tape shall be used as a substitute for the existing traffic markings being removed.

Before any change in traffic lane alignment, marking removal equipment shall be present on the project for immediate use. If marking removal equipment failures occur, the equipment shall be repaired or replaced (including leasing equipment if necessary), so that the removal can be accomplished without delay.

Except for the final surface, markings on asphaltic concrete may be obliterated by an overlay course. Only the minimum asphaltic concrete thickness required to cover lines will be allowed. Excessive build-up will not be permitted. When an overlay for the sole purpose of eliminating conflicting markings is not allowed, the markings no longer applicable shall be removed by blasting (e.g., sand or water blasting), grinding, or other specified manner included in the Project Design Documents which removes the pavement markings without materially damaging the pavement surface or texture.

2.13.3 Raised Pavement Markers

Retroreflective RPMs should be placed as listed below for all asphaltic concrete pavements before the roadway is open to traffic, unless noted in this TP Attachment 18-1.



On the final surface, RPMs shall be placed according to the timeframes specified for full pattern pavement markings. When Portland Cement Concrete is an intermediate or final surface and is

open to traffic, one day is allowed for cleaning and drying before the installation of RPMs is required.

RPMs are not allowed on the right edge lines under any situation.

Retroreflective RPMs should be placed and/or maintained on intermediate pavements surfaces on all Highways that are open to traffic. This includes all resurfacing projects along with widening and reconstruction projects. The RPMs shall be placed as follows:

1. Supplementing Lane Lines:
    a. 80-foot center on skip lines with curvature less than three degrees (includes tangents).
    b. 40-foot centers on solid lines and all lines with curvature between three degrees and six degrees.
    c. 20-foot centers on curves over six degrees.
    d. 20-foot centers on lane transitions or shifts.
2. Supplementing Ramp Gore Lines:
    a. 20-foot centers, two each, placed side by side.
3. Other Lines:
    a. As shown on the Design Documents.

2.13.4 Exceptions for Temporary Pavement Markings

Some exceptions to the time of placement and pattern of pavement markings are permitted as noted below; however, full pattern pavement markings are required for the completed Project.

2.13.4.1 Two-Lane, Two-Way Roadways Skip Lines

If used, temporary tape or paint skip (broken) stripe may only be used for a maximum of three days. The stripes shall be at least 2 feet long with a maximum gap of 38 feet. On curves greater than 6 degrees, a 1-foot stripe with a maximum gap of 19 feet shall be used. In lane shift areas, solid lines are required.

RPMs may be substituted for the temporary skip (broken) stripes. If RPMs are substituted for the 2-foot skip stripe, three RPMs spaced at equal intervals over a 2-foot distance will be required.

RPMs shall be retro-reflective, shall be the same color as the tape or painted pavement markings for which they are being substituted, and shall be visible during daytime operation.

The type of temporary pavement marker and method of attachment to the pavement shall be approved by the Office of Materials and Testing but in no case will the markers be attached by the use of nails. Flexible reflective markers, Type 14 or Type 15, may be used for a maximum of three days as a temporary marker on cross-streets. Any flexible reflective markers in use shall be from the QPL-76.

The temporary RPMs shall be maintained until the full pattern pavement markings are applied. At the time full pattern markings are applied, the RPMs serving as the temporary pavement

markings shall be removed in a manner that will not interfere with application of the full pattern pavement markings.

2.13.4.2 Two-Lane, Two-Way Roadways No Passing Zones

Passing zones shall be re-established in the locations existing prior to resurfacing. No changes to the location of passing zones shall be done without the written approval of GDOT. For periods not to exceed three days where interim skip centerlines are in place, no-passing zones shall be identified by using post or portable mounted “Do Not Pass” regulatory signs (R4-1) 24-inches by 30-inches at the beginning and at intervals not to exceed 0.5 miles within each no-passing zone. A post or portable mounted “Pass With Care” regulatory sign (R4-2) 24-inches by 30-inches shall be placed at the end of each no-passing zone. Post mounted signs shall be placed in accordance with the MUTCD. Portable signs shall be secured in such a manner to prevent misalignment and minimize the possibility of being blown over by weather conditions or traffic.

2.13.4.3 Two-Lane, Two-Way Roadways Edge Lines

1. Bituminous Surface Treatment Paving — Edge lines will not be required on intermediate surfaces (including asphaltic concrete leveling for bituminous surface treatment paving) that are in use for a period of less than 60 days except at bridge approaches, on lane transitions, and lane shifts. On the final surface, edge lines shall be placed within 30 days of the time that the final surface was placed.
2. All Other Types of Pavement — Edge lines will not be required on intermediate surfaces that are in use for a period of less than 30 days except at bridge approaches, on lane transitions, and lane shifts. On the final surface, edge lines shall be placed within 14 days of the time that the surface was placed.

2.13.4.4 Multi-Lane Highways – With No Paved Shoulders or Paved Shoulders 4 Feet or Less (≤ 4 Feet)

1. Undivided Highways (Includes Paved Center Turn Lane):
    a. Centerlines and No-Passing Barrier — Full Pattern centerlines and no-passing barriers shall be restored before opening to traffic.
    b. Lane lines — Interim skip (broken) stripe may be used for periods not to exceed three days. Skip lines are not permitted in lane shift areas. Solid lines shall be used.
    c. Edge lines — Edge lines shall be placed on intermediate and final surfaces within three days of obliteration.
2. Divided Highways (Grass or Raised Median):
    a. Lane lines — Full pattern skip stripe shall be restored before opening to traffic. Skip lines are not permitted in lane shift areas. Solid lines shall be required.
    b. Centerline/Edge line — Solid lines shall be placed on intermediate and final surfaces within three days of obliteration.

2.13.4.5 Limited Access Roadways and Roadways with Paved Shoulders Greater Than 4 Feet (> 4 Feet)

1. Same as above except as noted in (b) below.

2. Edge lines:
    a. Asphaltic Concrete Pavement — Edge lines shall be placed on intermediate and final surfaces prior to opening to traffic.
    b. Portland Cement Concrete Pavement — Edge lines shall be placed on any surface open to traffic no later than 1-day after work is completed on a section of roadway. All water and residue shall be removed prior to daily striping.

2.13.4.6 Ramps for Multi-Lane Divided Highways

A minimum of one solid line edge stripe shall be placed on any intermediate surface of a ramp prior to opening the ramp to traffic. The other edge stripe may be omitted for a maximum period of three days on an intermediate surface. Appropriate channelization devices shall be spaced at a maximum of 25-foot intervals until the other stripe has been installed.

The final surface shall have both stripes placed prior to opening the ramp to traffic.

2.13.4.7 Miscellaneous Pavement Markings

1. Final Surface:
    a. School zones, railroads, symbols, words, and other similar markings shall be placed on final surfaces conforming to Section 652 of the GDOT Standard Specifications Construction of Transportation Systems within 14 days of completion of the final surface. Final pavement markings shall conform to Section 652 of the GDOT Standard Specifications Construction of Transportation Systems.
2. Intermediate Surface:
    a. Intermediate surfaces that will be in use for more than 45 days shall have the miscellaneous pavement markings installed to conform to the requirement of Section 652 of the GDOT Standard Specifications Construction of Transportation Systems.
3. Stop Line:
    a. All stop signs and traffic signals shall have temporary 12-inch stop lines placed in accordance with MUTCD (Section 3B.19) on all surfaces prior to opening to traffic. The use of temporary tape is accepted for this use.

3 Materials and Traffic Control Devices

3.1 Traffic Control Devices

3.1.1 NCHRP 350 and MASH

All devices shall be certified in accordance with the Manual for Assessing Safety Hardware (MASH) Test Level 3 and/or the National Cooperative Highway Research Program (NCHRP) 350 Test Level 3 as applicable unless modified by a Special Provision. In addition, temporary work zone devices, including portable barriers, manufactured after December 31, 2019, must have been successfully tested under the 2016 edition of MASH requirements.

3.1.2 Approval

All traffic control devices with applicable Qualified Products List (QPL) categories shall come from the appropriate QPL. Products not on the QPL may be used with an approval letter from the GDOT Office of Materials and Testing. If there are no applicable QPL, the Design-Builder shall provide proof of MASH/NCHRP 350 certification. The proof may be a letter or written

statement from the manufacturer that the product is MASH/NCHRP 350 approved. Decal certifications are not proof of certification and are not required.

3.1.3 Quality Guidelines for All Temporary Traffic Control Devices

Any traffic control devices found to be nonconforming with the current ATSSA "Quality Guidelines for Temporary Traffic Devices and Features" (regardless of total numbers or length of time installed on the Project) are unacceptable and shall be replaced within 24 hours.

3.2 Retroreflectivity Requirements

3.2.1 Signs

Reflective sheeting shall meet the requirements of Section 913 of the GDOT Standard Specifications Construction of Transportation Systems and QPL-29.

All construction warning signs (black on fluorescent orange) shall meet the minimum reflectivity and color requirements of ASTM D4956 Type XI regardless of the mounting height. All other sign reflectorization shall be in accordance with the Plans, Design-Build Documents, and "GDOT Signing and Marking Design Guidelines."

3.2.2 Channelization Devices

Reflective sheeting shall meet the requirements of Section 913 of the GDOT Standard Specifications Construction of Transportation Systems and QPL-29.

All channelization devices (white/ fluorescent orange and white/red) shall meet the minimum retroreflectivity requirements of ASTM D4956 Type IV or Type VI.

3.3 Arrow Panels

Arrow panels shall meet the requirements for MUTCD (Section 6L.06) and QPL-79.

Portable sequential arrows, sequential chevron, or flashing arrow panels shall be a minimum size of 48-inches high by 96-inches wide with not less than 15 lamps used for the arrow. The arrow shall occupy virtually the entire size of the arrow panel and shall have a minimum legibility distance of 1 mile. The minimum legibility distance is the distance at which the arrow panel can be comprehended by an observer on a sunny day and clear night. Arrow panels shall be equipped with automatic dimming features for use during hours of darkness. The arrow panels shall also meet the requirements for a Type C panel as shown in the MUTCD (Section 6L.06). The sequential or flashing arrow panels shall not be used for Lane Closures on two-lane, two-way Highways when traffic is restricted to one-lane operations in which case, appropriate signing, flaggers, and when required, pilot vehicles will be deemed sufficient.

The arrow panels shall be placed on the shoulder at or near the point where the lane closing transition begins. The panels shall be mounted on a vehicle, trailer, or other suitable support. Vehicle mounted panels shall be provided with remote controls. Minimum mounting height shall be 7 feet above the roadway to the bottom of the panel, except on vehicle mounted panels which should be as high as practical.

For Emergency situations, arrow display panels that meet the MUTCD requirements for Type A or Type B panels may be used until Type C panels can be located and placed at the site. The use of Type A and Type B panels shall be held to the minimum length of time possible before

having the Type C panels in operation. The Design-Builder shall notify GDOT, in writing, when any non-specification arrow display panel is being used in support of the Construction Work.

3.4 Channelization Devices

Channelization shall clearly delineate the travelway through the work zone and alert drivers and pedestrians to conditions created by Construction Work activities in or near the travelway. Channelization shall be in accordance with the Design-Build Documents, Project Management Plans, and the Design Documents.

3.4.1 Drums

3.4.1.1 Design

Drums shall meet the minimum requirement of the MUTCD (Section 6K.06). Drums shall have 6-inch wide stripes – white/fluorescent orange.

3.4.1.2 Application

Drums shall be used as the required channelizing device to delineate the full length of a Lane Closure, shift, or encroachment, except as modified by this TP Attachment 18-1.

3.4.1.3 Longitudinal Channelization

Drums shall be spaced as listed below for various roadside work conditions. Spacing shall be used as follows:

1. 40 Foot Spacing Maximum:
    a. For difference in elevation greater than 2 inches
    b. For healed sections no steeper than 4:1 as shown in Detail 150-H
2. 80 Foot Spacing Maximum:
    a. For difference in elevation of 2 inches or less
    b. Flush areas where equipment or workers are within 12 feet of the travel lane
3. 200 Foot Spacing Maximum:
    a. Where equipment or workers are more than 12 feet from travel lane. The drum lateral offset clearance to be 4 feet from the travel lane
    b. For paved areas (not in service), 8 feet or greater in width that are paved flush with a standard width travel lane
    c. For disturbed shoulder areas not completed to typical section that are flush to the travel lane and considered a usable shoulder

3.4.1.4 Removal of Drums

Drums may be removed once the shoulders are completed to typical section, grassed, guardrail and other safety devices are installed and appropriate signs advising of conditions such as soft or low shoulder.

3.4.2 Vertical Panels

3.4.2.1 Design

All vertical panels shall meet the minimum requirements of the MUTCD (Section 6K.05). All vertical panels shall have a minimum of 270 square inches of retroreflective area facing the traffic, be a minimum 36 inches high, and a minimum of 8-inches wide with a stripe width of 6 inches: white/fluorescent orange.

3.4.2.2 Application

Vertical panels shall only be used when traffic drums reduce the travel lane to less than 10 feet; vertical panels shall be used to restore the travel lane to 10 feet or greater. They shall not be used in the transition zone including the tapers and the tangent lengths between tapers.

3.4.3 Cones

3.4.3.1 Design

All cones shall be a minimum of 28 inches in height regardless of application and shall meet the requirements of the MUTCD (Section 6K-1). Retroreflectivity may be deleted from all cones.

3.4.3.2 Application

On interstate, Highway, or State routes cones shall be prohibited. On Major and Minor roadways, cones may only be used for longitudinal channelization in the activity zone where Work takes place for short-term stationary Lane Closures. They shall not be used in the transition zone including the tapers and the tangent lengths between tapers. The use of cones for nighttime Work will not be permitted. Cones shall not be stored or allowed to be visible within the Project Limits during nighttime.

Cones may be used for daytime flagging operations including tapers at flagging stations.

3.4.4 Barricades

3.4.4.1 Design

Type 3 barricades shall meet the minimum requirements of the MUTCD (Section 6K.07). The Design-Builder has the option of choosing Type 3 barricades from the QPL-34 or the Design-Builder may utilize generic barricades that are approved by the FHWA. When barricades have been specifically crash tested with signs attached, the Design-Builder shall attach the signs as per the manufacturer's recommendations to ensure crashworthiness. If the barricades were not tested with the signs, crashworthy compliance may require that rigid signs be mounted separate from the Type 3 barricade.

The use of Type 1 and Type 2 barricades will not be permitted.

3.4.4.2 Application

Type 3 barricades shall be placed as required by TTCP, Design Documents, or as directed by the EOR or WTCS.

When a barricade is placed so that it is subject to side impact from a vehicle, a drum shall be placed at the side of the barricade to add target value to the barricade.

3.4.5 Warning Lights

3.4.5.1 Design

All warning lights shall meet the requirements of the MUTCD (Section 6L.07).

3.4.5.2 Application:

Type A low-intensity flashing lights or Type C Steady-Burn lights shall be used as shown in the TTCP, Design Documents, or as directed by the EOR or WTCS.

3.5 Flashing Beacon

The flashing beacon assembly, when specified, shall be used in conjunction with construction warning signs, regulatory, or guide signs to inform traffic of special road conditions which require additional driver attention. The flashing beacon assembly shall be installed in accordance with the requirements of Section 647 of the GDOT Standard Specifications.

3.6 Guardrail

Guardrail shall comply with Section 641 of the GDOT Standard Specifications.

When the removal and installation of guardrail is required, as a part of the Construction Work, the following time restrictions shall apply:

From the time that the existing guardrail or temporary positive barrier protection is removed, the Design-Builder has 14 days to install the new guardrail and anchors. During the interim, the location without guardrail shall be protected with drums spaced at a maximum spacing of 20 feet. The guardrail blunt end is to be treated as a fix object and shall be protected. The maximum length of rail that can be removed at any time without being replaced with positive barrier protection is a total of 2,000 linear feet of existing rail or the total length of one run of existing rail, whichever is less. Based on existing roadside conditions GDOT may review the work and require that the guardrail be installed earlier than the maximum time allowed.

The Design-Builder shall install new guardrail, such that it limits traffic exposure to fixed objects. Within the same workday, portable impact attenuators shall be installed on the approach to fixed objects that cannot be protected with guardrail. Truck mounted attenuators may be used to shield exposed fixed objects for periods not to exceed 14 days.

When the roadway is open to traffic, guardrail panels shall be lapped to comply with the directional flow of traffic. Should the staging of the Construction Work require that the lap of the guardrail be changed, this construction activity shall be completed before the roadway is opened to traffic.

The laps on anchors shall be in accordance with the manufacturer’s recommendations and installation instructions. As a result, a trailing anchor may be lapped opposing the flow of traffic.

3.7 Interim Signs

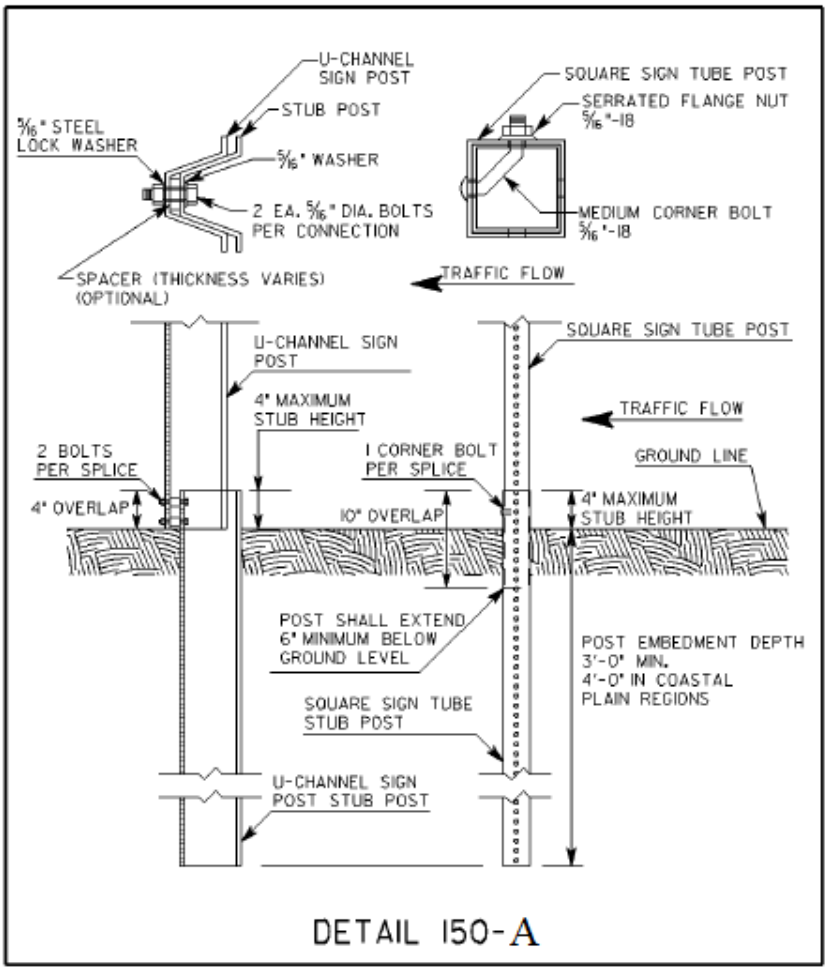
3.7.1 Posts

The permanent mounting height to the bottom of sign shall be 7 feet to 8 feet measured vertically from the bottom of the sign to the elevation of the near edge of the pavement or from the walkway. Posts for all temporary signs should be square tubular post meeting the requirements of Section 911 of the GDOT Standard Specifications Construction of

Transportation Systems, QPL-35, and Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail). Ground mounted signs that are greater than 48-inches wide shall be mounted on two posts. For barrier mounted sign, single post mount is allowed.

The posts shall not extend beyond the top of the sign. The signs shall be substantially plumbed and leveled.

Ground mounted signs greater than 9 square feet shall be mounted on two posts. All posts replaced or installed shall be square tubular posts. Unprotected temporary posts shall be spliced as shown in Detail 150-A, unless full length unspliced posts are used. Unprotected post splices will not be permitted any higher than 4 inches above the ground line to lessen the possibility of affecting the undercarriage of a vehicle. Installation of posts may require establishment of openings in existing pavements, islands, shoulders, etc.



3.7.2 Sign Blanks and Panels

All temporary traffic control sign blanks and panels shall conform to Section 912 of the GDOT Standard Specifications Construction of Transportation Systems. Alternative sign blank materials (composites, polycarbonates, fiberglass reinforced plastics, recycled plastics, etc.) shall have a letter of approval from the Office of Materials and Testing for use as interim construction signs before these materials are allowed to be incorporated into the Work, unless

these rigid sign blanks are currently approved as a crashworthy sign blank material under QPL 34.

Unless specified elsewhere in the Design-Build Documents, Project Management Plans, or Design Documents, and/or directed by the GDOT, sign sizes are according to the following:

1. All construction sign sizes should follow the dimensions provided in MUTCD Table 6G-1, 6H-1, and 6I-1 “Temporary Traffic Control Zone Sign and Plaque Sizes” under the column for “Freeway or Expressway.”
2. For all other signs used just for staging, the sign sizes should follow the dimensions provide in MUTCD Table 2B-1 “Regulatory Sign and Plaque Sizes” for the largest size permanent signs.
3. Plywood blanks or panels will not be permitted.
4. The use of flexible signs will not be permitted.
5. For Utility Work not included in the Design-Build Documents, the Utility may use flexible signs within the Project Limits.

3.8 Pavement Markings

All temporary pavement markings shall conform to the requirements of Section 652, Section 653, Section 657, Section 658, and Section 659 of the GDOT Standard Specifications and QPL-46, unless otherwise specified within this TP Attachment 18-1.

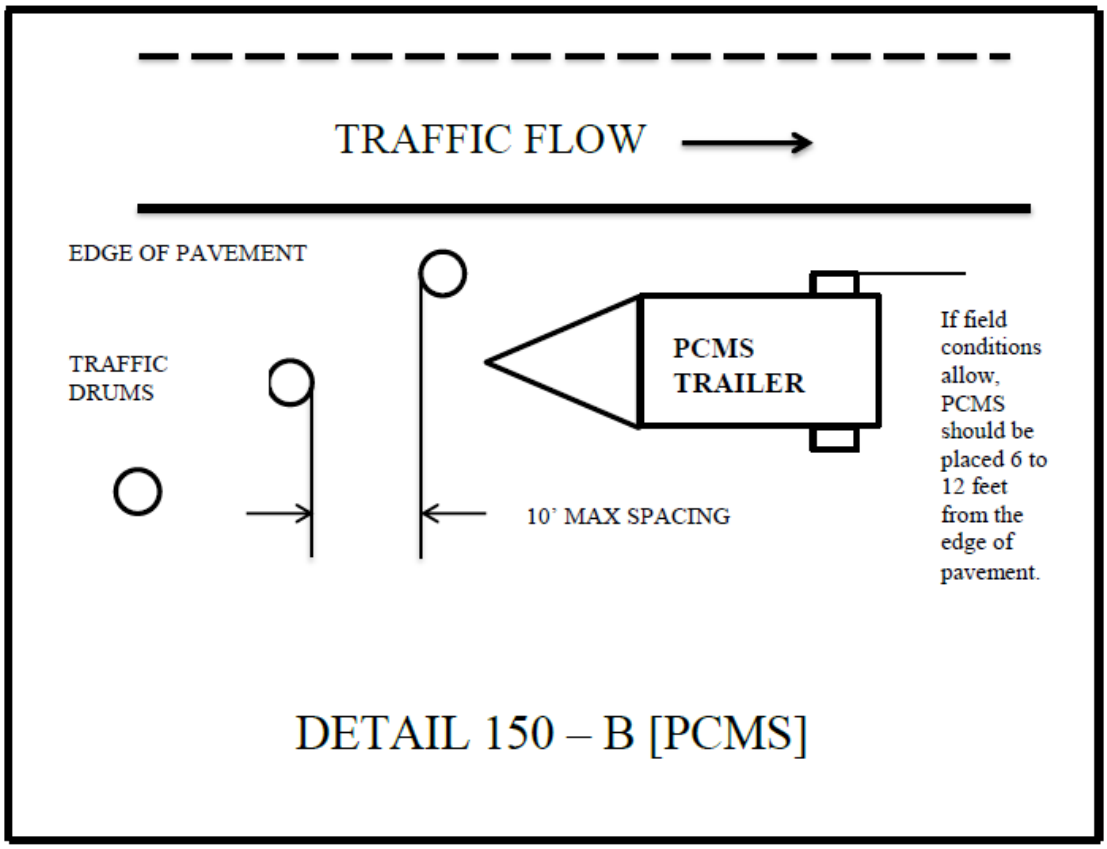
1. All traffic striping for 45 days or less shall be 4 inches or greater in width.
2. All temporary striping beyond 45 days applied on intermediate surfaces shall be a minimum 5 inches in width or as shown on Design Documents. On final surfaces when temporary pavement markings will be overlaid or eradicated, the temporary striping shall be a minimum 5 inches in width.
3. All temporary pavement markings applied to final surfaces which will not be overlaid or grinded may be 4 inches in width or as shown on the Design Documents.

3.9 Portable Changeable Message Signs

PCMS shall meet the minimum requirements of Section 632 of the GDOT Standard Specifications Construction of Transportation Systems, MUTCD (Section 6L.05) and be on QPL-82. The maximum amount of messages allowed to be flashed on one PCMS is two phases (flashes). The language and the timing of the messages shall comply with the MUTCD and Section 632 of the GDOT Standard Specifications Construction of Transportation Systems, or as accepted on the TTCP. When used as an advanced device, the PCMS shall typically be placed ahead of the construction activities. If the PCMS is used as a substitute for another device, then the requirements for the other device apply.

Any PCMS in use, which is not protected by positive barrier protection, shall be delineated by a minimum of three drums. The drum spacing shall not exceed a maximum of 10 feet as shown in Detail 150-B. When the PCMS is within 20 feet of the opposing traffic flow, the trailing end of the PCMS shall be delineated with a minimum of three drums spaced in the same manner as the approach side of the PCMS.

When not in use, the PCMS shall be removed from the roadway, unless protected by positive barrier protection. If the PCMS is protected by positive barrier protection, the sign panel shall be turned away from traffic when not in use.



3.10 Portable Impact Attenuators

Portable impact attenuator unit/arrays installation shall conform to the requirements of Section 648 of the GDOT Standard Specifications Construction of Transportation Systems, Manufacturer's recommendations, and Georgia Standard 4960 "Temporary Barrier (End Treatment Options)." When gating attenuators are used, the Design-Builder shall maintain the appropriate recovery area in accordance with the manufacturers' recommendations.

Generic sand/water loaded modules are prohibited. Manufacturers' sand/water loaded modules with specific arrays that have been NCHRP 350/MASH approved may be used in appropriate locations.

The test level of protection provided shall equal or exceed the existing posted speed limit. Test level 3 shall be used for 45 mph or above.

3.11 Portable Temporary Traffic Control Signals

The use of portable TTC signals shall meet the following minimum requirements: Only two-lane, two-way roadways will be allowed to utilize portable TTC signals.

All portable TTC signals shall meet the physical display and operational requirements of conventional traffic signals described in the MUTCD.

Each signal face shall have at least three lenses. The lenses shall be red, yellow, or green in color and shall give a circular type of indication. All lenses shall be 12 inches nominal in diameter.

A minimum of two signal faces shall face each direction of traffic. A minimum of one signal head shall be suspended over the roadway travel lane in a manner that will allow the bottom of the signal head housing to be not less than 17 feet above and not more than 19 feet above the pavement grade at the center of the travel lane. The second signal head may be located over the travel lane with the same height requirements or the second signal head may be located on the shoulder. When the signal head is located on the shoulder, the bottom of the signal head housing shall be at least 8 feet but not more than 15 feet above the pavement grade at the center of Highway.

Advance warning signs and appropriate pavement markings shall be installed as part of the temporary signal operation.

The signals shall be operated in a manner consistent with traffic requirements. The signals may be operated in timed-mode or in a vehicle-actuated mode. The signals shall be interconnected in a manner to ensure that conflicting movements cannot occur. To ensure that the appropriate operating pattern, including timing, is displayed to the traveling public, regular inspections, including the use of accurate timing devices shall be made by the WTCS. If, at any time, any part of the system fails to operate within these requirements then the use of the signal shall be suspended, and the appropriate flagging operation shall begin immediately.

The WTCS shall continuously monitor the portable traffic control signal to ensure compliance with the requirements for maintenance under the MUTCD. The signal shall be maintained in a manner consistent with the intention of the MUTCD, with emphasis on cleaning of the optical system. Timing changes shall be made only by the WTCS. The WTCS shall keep a written record of all timing changes.

The portable temporary signal shall have two power sources and shall be capable of running for seven days continuously.

The Design-Builder shall have an alternate TTCP in the event of failure of the signal.

3.12 Raised Pavement Markers

RPMs shall meet the requirements of Section 654 of the GDOT Standard Specifications Construction of Transportation Systems and QPL-76.

3.13 Rumble Strips

Rumble strips incorporated into the TTCP shall meet the requirements of Section 429 of the GDOT Standard Specifications Construction of Transportation Systems and the MUTCD. Existing rumble strips that are positioned in the traveled way to warn traffic of a stop condition shall be reinstalled prior to opening to traffic. Based on the following requirements:

1. Intermediate surfaces that will be in use for more than 45 days shall have rumble strips reinstalled on the traveled way in the area of a stop condition.
2. Rumble strips shall be installed on the final surface within 14 days of the placement of the final surface in the area of the stop condition.

3. Prior to the removal of any rumble strips located in the travel lane, stop ahead (W3-1) warning signs shall be double indicated ahead of the stop condition. These warning signs shall be a minimum of 48-inches by 48-inches. These warning signs shall remain in place until the rumble strips have been reinstalled on the traveled way. Any existing warning signs for the stop ahead condition shall be removed or covered while the 48-inch by 48-inch (W3-1) signs are in place.
4. When the rumble strips have been reinstalled, these warning signs shall be promptly removed, and any existing signs placed back in service.

3.14 Temporary Barriers

3.14.1 Design

Temporary barriers shall meet the requirements of Sections 620 of the GDOT Standard Specifications Construction of Transportation Systems. Temporary barrier not on bridges shall have a lateral offset to an obstruction or drop off which follows the guidelines set by AASHTO Roadside Design Guide Chapter 5 (Roadside Barriers). The barrier to obstruction or drop off distance shall not be less than the dynamic deflection of the barrier.

The approach end of the taper shall be in accordance with the Project Standards. Temporary barriers shall not be used as a channelization device. Their use is in accordance with MUTCD (Section 6K.09).

3.14.2 Application

Temporary barriers shall be placed as required by the Design-Build Documents, Project Management Plans, and the Design Documents, or directed by the EOR or WTCS. When temporary barrier is located 20 feet or less from a travel lane, reflectors shall be fixed to the top of the barrier at intervals not greater than 40 feet in the longitudinal section and 20 feet in the taper section and shall be mounted approximately 2 inches above the barrier. If both lanes of a two-lane two-way roadway are within 20 feet or less of the barrier, then the reflectors shall be installed for both directions of traffic.

The reflectors shall be 100 square inches (ASTM Type VII or VIII/ Type XI) reflective sheeting mounted on flat-sheet blanks with yellow on the left side and white on the right. The reflectors shall be attached to the barrier with adhesive or by a drilled-in anchor type device. The reflectors shall not be attached to a post or board that is placed between the gaps in the barrier sections.

Approach end of temporary barrier shall be protected according to Georgia Standard 4960 “Temporary Barrier (End Treatment Options)” or by a portable impact attenuator.

On interstates or other controlled access Highways where lane shifts or crossovers cause opposing traffic to be separated by less than 40 feet, portable barrier shall be used as a separator.

In the design of the TTCP or the application of temporary barriers for Lane Closures, the Design-Builder shall utilize temporary glare screens where vehicle headlights could potentially shine in driver eyes in the opposing direction in accordance with TP Section 11.3.7.2 (Cast-in-Place Barrier) or other screen accepted by GDOT.

3.15 Temporary Guardrail Anchorage — Type 12

Materials used in the temporary guardrail anchorage-Type 12 shall meet the requirements of Section 641 of the GDOT Standard Specifications Construction of Transportation Systems and the Project Standards included in TP Attachment 1-4 (Project Standards). Materials salvaged from the Project, which meet the requirements of Project Standards, may be utilized if available.

Installation shall also include sufficient additional guardrail and appurtenances to affect the transition and connection to temporary concrete barrier as required by the details in Georgia Standard 4960 “Temporary Barrier (End Treatment Options).”

3.16 Temporary Traffic Signals

Temporary traffic signals shall meet the requirements of Section 647 of the GDOT Standard Specifications and the MUTCD.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 18-2

Requirements for the TMP

Attachment 18-2: Requirements for the TMP

1 General

The Transportation Management Plan (TMP) is the Design-Builder's comprised set of coordinated strategies to manage the communication, coordination, implementation, and maintenance of the Project's Temporary Traffic Control Plans (TTCP), associated Lane Closures, traffic control devices, and work zone impacts. The TMP shall describe the policies, process and procedures, and staffing required to develop, implement, manage, and measure the performance of the implemented temporary traffic control, including that of its Subcontractors, on the traffic traveling on or through the Site.

The Design-Builder is solely responsible for developing the content of the TMP in accordance with the Design-Build Documents, TP Attachment 1-4 (Project Standards), the information contained herein, and any additional information the Design-Builder deems appropriate.

2 TMP Management

The Design-Builder shall monitor the effectiveness of the TMP, TTCPs, and associated Lane Closures through planning, coordination, analysis, and reporting, including Site assessments of the installed traffic control devices and work zone impact analysis based on available Project data and verifying performance against the experienced outcomes.

The TMP shall remain updated and reflect all additions and modifications to processes and procedures that have not been effective; resulted from concerns raised in various coordination and review meetings; or performance issues experienced through the duration of the Construction Work. The Design-Builder shall update and re-submit the TMP as set out in TP Section 2.3.2 (Management Plan Updates).

The Traffic Control Manager (TCM) shall oversee the development and maintenance of the TMP, and the implementation and effectiveness of the included process and procedures during all phases of the Work.

The TCM shall be the point of contact for all traffic control issues and for coordinating closures within the Project Limits.

After the issuance of NTP3, as per TP Section 18.2.3 (Required Meetings), the Design-Builder shall hold meetings at GDOT's request to discuss and assess how well the TMP and associated TTCP is managing the Site work zone areas to date. The purpose of the meeting is to assess the experienced safety and mobility impacts, discuss intended or required modifications to established procedures, modifications to time or type of TTCP, and provide the opportunity to verify that all key stakeholders have been receiving timely notifications where required.

3 TMP Outline

The TMP shall include:

1. Introductory material:
    a. Cover page.
    b. EOR seal, sign, and date.
    c. Revision page.

d. List of abbreviations and symbols.

e. Terminology.

2. Roles and responsibilities:

   a. Describe the responsibility and duties of the TCM and other Design-Builder required or intended personnel in respect to their roles in the management of traffic and implementing Project temporary traffic control measures, process, and procedures contained in the TMP.

   b. Name, cell phone number, email address, and employer of each Person. GDOT will provide the Design-Builder with a list of GDOT representatives from the Project traffic management team that shall be included in the TMP.

   c. Organizational chart showing the chain of reporting and a description for how these individuals will function as a team.

3. Design-Builder communication:

   a. The Design-Builder shall ensure all points of contact and all contact information remains up to date.

   b. Internal communication plan for traffic control implementation:

      1) Coordination between TCM, Lead Contractor Project Manager (CPM), and associated personnel.

      2) TCM to the Worksite Traffic Control Supervisors (WTCS) (associated traffic control implementation personnel).

   c. Emergency communication plan including a 24-hour contact list and phone tree protocol (hierarchy of member notification) for all Project team members (including local Emergency services, Utility Owners with facilities within Project Limits, GDOT, and local Governmental Entities).

   d. Coordination and communication plan for Traffic Interruption Requests (TIR). Procedures detailing the responsible personnel, collection and verification of required information (e.g., permits, TTCP, Lane Closure details, etc.), and communication (internal and external), to execute TIRs in accordance with TP Attachment 18-3 (Traffic Interruption Request).

   e. Communication and coordination plan with local Governmental Entities, Utility Owners, Emergency service providers, school districts, and other related stakeholders along the Project corridor; including the planned implementation of detours, impacts to service, coordination of additional detours, identifying alternate routes, and fulfillment of Design-Build Document obligations.

      1) Identify all local Governmental Entities, school districts, and Emergency services, etc. (along with contact information).

   f. Communication and notification procedures, including responsible personnel, to communicate (both internally and externally to GDOT) a failure to remove Lane Closures within the prescribed time periods in accordance with TP Section 18 (Traffic Control) and in conjunction with the requirements of TP Attachment 2-3 (Public Information and Communications).

g. Related Transportation Facility coordination and communication plan that includes when to hold meetings, how to share information, risks perceived, and any expectations or requests of GDOT in assisting in mitigating the identified risks.

h. Daily confirmation of Lane Closures for the following day based on approved TIR via email to GDOT.

i. Coordination, communication, and implementation plan to discontinue the operation of the flex shoulders if applicable.

4. Existing conditions baseline:

   a. Design-Builder methodology for establishing field sourced traffic data:

      1) The Design-Builder may utilize field sourced traffic data accepted for use by GDOT. The accepted traffic data is supplied through the GDOT Traffic Analysis and Data Application (TADA) and is accessed at https://www.dot.ga.gov/GDOT/Pages/RoadTrafficData.aspx. The GDOT TADA data is a reliable traffic data source; however, it may not be inclusive of all areas along the corridor or provide all the necessary data to evaluate the intended Lane Closures.

      2) If the Design-Builder elects to not use data from TADA or required to supplement traffic data, the Design-Builder shall collect traffic data in accordance with the current FHWA Traffic Monitoring Guide at https://www.fhwa.dot.gov/policyinformation/tmguide/.

      3) Within this section, the Design-Builder shall include a data quality validation process and procedure, indicating the responsible individuals, and procedures performed to ensure the reliability of the data:

         i. Proposed methodology of accounting and distributing historic data to account for the removal of the existing flex shoulders.

         ii. Proposed methodology of accounting and distributing traffic data to account for the temporary closing of exit ramps.

         iii. Proposed methodology and considerations utilized in requesting modifications to the restrictions in TP Section 18.4 (Lane Closure Hours and Restrictions) or DBA Exhibit 12 (Lane Closure Deductions) for GDOT acceptance. If the Design-Builder requests to modify the restrictions identified in TP Section 18.4 (Lane Closure Hours and Restrictions) or DBA Exhibit 12 (Lane Closure Deductions), the Design-Builder shall submit a work zone capacity analysis indicating the impacts of the requested change as detailed in Section 4 (Work Zone Capacity Calculation) of this TP Attachment 18-2. Such analysis shall determine baseline queueing and delay for the interstate mainline. However, at GDOT's sole-discretion, GDOT may require additional evaluation of the impacts of the Lane Closure depending on the complexity and extent of impacted travel way facilities.

5. Work zone impact assessment:

   a. Identify Milestones that drive work zone impacts.

   b. Impact assessment of Project design and management strategies (in conjunction with each other):

      1) Construction approach/phasing/staging strategies.

2) Work zone impact management strategies (e.g., procedures for signing and pavement marking transitions during construction from one stage to the next, and from interim to permanent signing and marking).

6. Selected work zone impact management strategies:
   a. The Design-Builder shall identify stakeholder (e.g., local Governmental Entities, school district, MARTA) impacts and outline the proactive plan to determine mitigation efforts.
   b. Procedures to coordinate with the appropriate local Governmental Entities' operating signal networks along the Project or Project detour routes to ensure temporary system compatibility, establish responsibilities for temporary signal installation, maintenance, operation and removal, and coordinate traffic signal timing with local signal networks.
   c. Procedures and processes for installing and maintaining the safe ingress and egress of construction vehicles in the work zone including acceleration and deceleration lanes for construction vehicles.
   d. Procedures for night Construction Work.
   e. Provisions to provide continuous access to established truck routes and Hazardous Materials routes, and to provide suitable detour routes, including obtaining any approvals required by the appropriate Governmental Entities for these uses.
   f. Based on the Construction Phasing and Staging Plan in coordination with the TTCP, identify all the progress points when a traffic control pre-activity meeting would be beneficial based on the requirements of TP Section 18 (Traffic Control).
   g. Safety concerns and mitigation strategies, including staging of equipment or PCMS.
7. Monitoring:
   a. Procedures for monitoring impacts (e.g., Incidents, excessive delays, etc.) during the Construction Work.
   b. Provisions for measuring and validating baseline speeds of the Mainline in the construction zone(s) throughout the Construction Period.
   c. Using the TC-1 included in TP Attachment 18-1 (Temporary Traffic Control) as an example, provide a Traffic Control Inspection Report to be used on the Project.
8. Maintenance of traffic control devices:
   a. Procedures for maintenance of traffic control devices, including pavement markings and traffic barriers, if used.
   b. Procedures to modify TTCP or maintenance practices to adapt to changing circumstances and lessons learned.
9. Contingency plans:
   a. Descriptions of contact methods, personnel available, and response times for any deficiencies requiring attention during non-work hours.
   b. Action plan demonstrating how the Design-Builder will respond to conditions that require temporary traffic control to be temporarily removed due to conditions such as:
      1) Incidents.

2) During periods where a snow or ice event is forecasted.
3) Upon notification by GDOT of an additional Special Event or holiday in accordance with TP Section 18.4.1 (Special Events and Holidays).

4 Work Zone Capacity Calculation

4.1 Purpose

The Design-Builder shall perform this analysis for all TTCPs in accordance with TP Section 18.3.1 (Temporary Traffic Control Development). This analysis may be included as part of the TMP or with the submittal of the TTCP. If the Design-Builder proposes to implement multiple TTCPs at the same time, the Design-Builder shall model the impact of all proposed TTCPs to be in place at the same time. The work zone traffic analysis tool is only applicable to the interstate or freeway mainline. The Design-Builder may propose alternative methods, such as PTV Vissim, for establishing queueing and delay baselines for the interstate or freeway mainline and accepted by GDOT. To establish the queueing and delay baselines for major and minor roadways identified in TP Section 18.4.4 (Major and Minor Roadways) the Design-Builder shall propose alternative methods such as PTV Vissim. Any alternative work zone traffic analysis tool shall be accepted by GDOT prior to use in traffic analysis.

When performing the work zone traffic analysis to request a modification to the requirements, the Design-Builder shall not request a Lane Closure or series of Lane Closures that result in any one of the following:

- Increase the travel time through the corridor greater than 45 minutes over the historic travel time through the corridor.
- Result in overlapping traffic queues or the queue backs into an upstream or downstream Lane Closure.
- The average queue length exceeds 1.5 miles in length for the duration of the Lane Closure, unless the Design-Builder obtains GDOT acceptance.

When performing this analysis, the Design-Builder shall identify Lane Closures on ramps or major and minor crossing streets to determine whether such closures result in a queue back onto the mainlines. When this queue back up occurs, additional reduction in mainline capacity shall be calculated.

4.2 Methodology

Accurately estimating freeway mainline work zone queuing and delay is an important step in safely and efficiently planning Lane Closures for mainline work zones. To standardize how mainline work zone capacity analysis is performed, the work zone traffic analysis tool, in TP Attachment 18-5 (Traffic Analysis Tool), was developed for calculating mainline work zone capacity and estimating queue and associated delay.

The maximum number of vehicles that can travel on a freeway at a given time is considered its capacity. In Chapter 10 of the Highway Capacity Manual, 7th Edition, base capacities of freeway facilities are provided. For a freeway mainline with a free-flow speed of 70 mph, the base capacity is 2,400 passenger cars per hour per travel lane. In work zones, the capacity of freeway travel lanes will be greatly reduced due to the characteristics of the work zone site.

Delay is the amount of travel delay incurred by vehicles traversing a work zone. Estimating the potential delay resulting from a freeway work zone closure helps identify the impact to the road

Users and adjacent roadway networks. Motorists who do not find the delay acceptable may divert from their original route and travel on adjacent roadways.

Queues occur when traffic is stopped or slowed. In freeway work zones, queues are typically the result of either an incident or the volume of a freeway exceeding its capacity. In planning work zone closures, it is important to accurately estimate the length of queue from a potential work zone closure in which the freeway volumes are expected to exceed the capacity of the work zone.

Time spent traveling in a vehicle is a resource with economic value. Therefore, when road users incur travel delay, there is an economic cost associated with delaying the road users. In freeway work zones, when the volume of a roadway exceeds the capacity, a queue of vehicles will form thereby delaying motorists.

The equation below shall be used to determine freeway work zone capacity:

C = (1600 pcphpl + I - R) * H * N, where:

- C = estimated work zone capacity (vph).
- I = adjustment factor for work intensity ranging from 0 to -500 (see Table 1 (Work Intensity Adjustment Factor)). Justification for utilizations less than Level 6 shall be documented.
- R = adjustment value for presence of an entrance ramp near the starting point of the Lane Closure, which is in the advance warning area. R is equal to 0 if no ramp is present, and R=160 pcphpl if entrance ramp is present (following the logic that entering traffic causes turbulence in the traffic flow approaching the work zone, indirectly reducing the work zone lane capacity 10 percent).
- H = adjustment factor for heavy vehicles, H=100/ [100 + P(E-1)], where P = percentage of heavy vehicles E = passenger car equivalent for heavy vehicles (values ranging from 2.0 to 2.5 are recommended, depending on terrain; the default minimum value is 2.1).
- N= number of lanes open through the work zone.

Table 1: Work Intensity Adjustment Factor

Level	***Work Intensity***	***I (Penalty)***	***I (Examples of Application)***
1	Lightest	0	Infrequent or intermittent routine maintenance operation (e.g., median barrier, guardrail installation/repair, short-term shoulder operation).
2	Light	-100	Routine Maintenance During Construction operations that impact travel lanes (e.g., pavement repair).
3	Moderate	-200	Maintenance During Construction operations predominate Work is during off-peak time periods or short-term Lane Closures.
4	Heavy	-300	Construction Work or Maintenance During Construction operations predominate work is during off-peak time periods, establish or utilize long-term Lane Closures or extended period of short-term Lane Closures in one area.

Level	***Work Intensity***	***I (Penalty)***	***I (Examples of Application)***
5	Very Heavy	-400	Construction Work or Maintenance During Construction operations that require modification of existing traffic condition, location, or traffic control devices (includes re-striping operation).
6	Heaviest	-500	Use of temporary concrete barrier or presence of continuous Construction Work areas greater than 0.5 miles.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 18-3

Traffic Interruption Request

Attachment 18-3: Traffic Interruption Request

1 General

The Traffic Interruption Request (TIR) is a communication tool for the Design-Builder and GDOT to anticipate and coordinate impacts to traffic across the complex of roadway systems. The intent of a TIR is to communicate the level of attention and detail required to describe the impacts to the User.

The Design-Builder shall expect this process and the TIR requirements to evolve throughout the Term.

2 TIR Procedure

The Design-Builder shall submit a TIR to GDOT for all Lane Closures described in TP Section 18 (Traffic Control) and detours, pacing activities, openings to traffic, traffic shifts, and other traffic interruptions. The TIR is critical to ensure for the Project team, the Traffic Management Center (TMC), the GDOT Office of Construction, and the GDOT Communications Office stay informed of construction activities affecting traffic.

GDOT will review and accept the TIR for compliance with the Design-Build Documents, PMP, and the Design-Builder's previously approved TTCP for each phase and/or stage of the construction. The Design-Builder shall not submit a TIR, nor will GDOT accept, for activities that are not included in a previously approved TTCP.

The Design-Builder shall submit a TIR after NTP2 for any field Work requiring a Lane Closure to support the design, including subsurface exploration, Utility locates, surveying, and BECR inspection activities.

After NTP3 the Design-Builder shall only submit a TIR for construction activities that are included in a previously approved TTCP and for which Design Documents have been Released for Construction.

The TIR shall be completed and submitted for acceptance through the PMCS. The Design-Builder shall work with GDOT to customize the workflow to meet the requirements of the Project. The Design-Builder shall call or email the PMT daily to confirm or cancel the planned work included in the TIR.

3 TIR Requirements

The Design-Builder shall use the most current information available for the TIR as the Project progresses. The most recent TIR glossary and form are located online at: https://www.dot.ga.gov/DriveSmart/Travel/TravelPrograms/NewTIRForm.zip.

Notes for filling out the form:

1. Location — Do not give station numbers. Give as much specific information as needed to describe the location and the number of lanes closed.
2. Purpose — Describe the work taking place (i.e., milling and resurfacing, striping, setting beams, Utility Work, etc.).
3. If the report submitted is for several days, note "DAILY" on the top of the form.

4. If conditions during construction or traffic interruption reduce the horizontal clearance to less than 16 feet and/or reduce the vertical clearance to less than 15 feet, the reduced clearances shall be clearly noted under “Additional Information.”
5. If an oversize load detour is initiated, the Design-Builder shall provide this information on the form. The TCM shall send a copy of the form to Permits via e-mail, (OS/OW-Traffic Interruption Reports), or fax to 404-635-8164 (OW) and 404-635-8501 (OS). This applies regardless of county or route.
6. The form should contain only one activity per report, unless multiple activities will occur simultaneously in the same general location and during the same time frame.
7. The name of the WTCS on location during the TIR scheduled work shall be listed on the form as “Contractor Contact 1.” “Contractor Contact 2" should also be a Person who is on location during the scheduled work.
8. When the Lane Closure begins and all traffic control is being put in place, the WTCS shall notify the TMC that the traffic interruption has begun by calling 1-888-424-4929, or 404-624-2653. When the interruption is complete, all traffic control has been removed, and all lanes are open to traffic, the WTCS shall notify the TMC by phone that the traffic interruption has ended.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 18-4

Approved and Design-Builder Identified Detours

Attachment 18-4: Approved and Design-Builder Identified Detours

1 Approved Detours

There are no pre-approved detours for the Project.

2 Design-Builder Identified Detours

The Design-Builder may propose detours not identified in Section 1 (Approved Detours) of this TP Attachment 18-4 provided that the requirements listed below, as well as public outreach requirements per the Environmental Procedures Manual are met.

1. The closure shall be only for the duration required for the Construction Work.
2. Whenever a crossing street/roadway bridge is closed, the nearest adjacent crossing street/roadway bridge shall remain open.
3. The Design-Builder shall comply with all traffic control requirements and implement a detour accepted by GDOT as part of the TTCP and per the requirements in TP Section 18.4.4.3 (Total Lane Closure and Detour of Minor Roadways).
4. The Design-Builder shall obtain approval by local Governmental Entities prior to utilizing their facilities for a detour and shall provide any enhancements (e.g., temporary signals) required to mitigate impacts from a detour.
5. Conduct early coordination with local Governmental Entities, local Emergency Services, school board, the District Office by use of detour letter for review and feedback on proposed detour.
6. The Design-Builder shall comply with the requirements in TP Attachment 2-3 (Public Information and Communications) with respect to notification of impacts due to detours along with the following:
    a. Present proposed detour at a public outreach event such as public detour open house to obtain public input.
    b. Submit a detour report where roadway closures are anticipated to exceed five days in duration and obtain a Notice of detour approval.
    c. Advertise the Notice of detour approval within 30 days of detour approval once a week for four consecutive weeks in the newspaper in which the sheriff's advertisements are carried. The advertisement shall be in each county involved in detour.
    d. Provide notice to the local Governmental Entity, local Emergency Services, and the school board of the planned closure at least 30 days in advance of the accepted date of closures.

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 18-5

Traffic Analysis Tool

Attachment 18-5: Traffic Analysis Tool

1 Instructions on Using the Work Zone Traffic Analysis Tool

The work zone analysis tool is available for two types of data analysis: short-term (weekly data) and long-term (up to annual data). Each tool follows the same methodology to provide queue information and travel delay for up to four closure scenarios using a field sourced traffic volume data. The capacity calculation methodology is outlined in TP Attachment 18-2 (Requirements for the TMP). The following is a guide to the use of the tools.

The tool requires the use of Microsoft Excel with macros enabled. There are several worksheets within the file that have user interaction. Each section below describes the use of each worksheet.

2 Inputs Worksheet

The Inputs worksheet contains the project information, Lane Closure inputs, and results of the capacity equation for a single lane.

The Project Inputs section includes the highway, direction, stationing for current and upstream work zones, area type, normal (non-construction) posted speed limit, passenger car equivalency factor, auto and heavy vehicle (HV) user costs, and per lane capacity in passenger car equivalents (pce). These are all determined by EOR/TCM and should include explanation of how each value was determined.

The Lane Closure Inputs section includes the Lane Closure type, declaration of ramp presence in work zone, and intensity of construction within the work zone. Each of the three inputs are available for four different closures. In each closure, the Lane Closure type is selected from the drop-down list within each cell. The user can input if an entrance ramp is present within 1,500 feet of the work zone lane taper. The construction intensity is a range of six options, from lightest to moderate to heaviest.

The Results section shows the results of the Lane Closure Inputs and calculates the estimated queue discharge rate (QDR) or capacity of each closure type chosen above. These QDRs are used in calculations elsewhere in the workbook. There is the option for an EOR/TCM determined adjustment. Supplemental documentation is required for the use of an adjustment.

The Duration Inputs section determines when each Lane Closure occurs throughout the weeks' worth of data. Select the start and ending hours for each of the four Lane Closures. The tool will determine if a Lane Closure overlaps another closure and notifies the EOR/TCM if an overlap is detected. Note that the time and days directly relate to the traffic volume input daily and hourly information.

The Heavy Vehicles Percentages display the HV percent data based on input elsewhere in the workbook.

3 Volume Import Worksheet

The Volume Import worksheet is used throughout the workbook to determine the impacts of the Lane Closure scenarios. Currently, the EOR/TCM must download and insert/paste data into the appropriate columns. Work is ongoing to allow for direct import of TADA-based data (or

accepted Design-Builder data source), as detailed in TP Attachment 18-2 (Requirements for the TMP).

In columns A through F, there are 24 rows for seven days' worth of volume data. Care shall be applied to ensure that the columns remain in the structure provided and shown below:

ABC	***D***	***E***	***F***
DateHourPDir	PDirHV	NDir	NDirHV

PDir refers to northbound or eastbound, and NDir refers to southbound or westbound, depending on the highway direction chosen in the Inputs worksheet.

If no HV information is available, the EOR/TCM can input truck percentages. The EOR/TCM can also increase the input volumes by a specific percentage per direction. Additionally, the EOR/TCM can input a diversion percent which assumes vehicles divert from the work zone to another route.

4 Volume Stats Worksheet (Annual Tool Only)

The Volume Stats worksheet reviews the data within the Volume Import worksheet and displays how much data is represented throughout the dataset. Users should use this information to understand how much of the time period to be analyzed is represented by traffic volumes.

5 Calculations Worksheet

The Calculations worksheet uses the data from the Inputs worksheet, and the volumes from the Volume Import worksheet to determine what hours of the week are impacted by a Lane Closure scenario, if volume for that hour exceeds QDR capacity, determines queue lengths and delays. The growth factors input on the volume import worksheet are displayed as well as the diversion delay (if a diversion percentage is input). If these input values are changed on this worksheet, they will be updated elsewhere in the workbook. There is typically very little EOR/TCM input necessary for this worksheet.

6 Weekly Chart Worksheet

The Weekly Chart worksheet summarizes the calculations and summarizes the results in tables representing each hour of every day of the week. There are tables per direction for:

- Queue miles
- Queue minutes of delay per vehicle
- Total costs (queue + diversion) shown in tens of thousand dollars
- Adjusted volumes
- Estimated capacity

The tables for the annual tool are presented in separate tabs named for each bullet above. The tables are formatted to display areas of significant impact based on the key above each table. For the queue miles tables, time periods that report queue lengths longer than the project spacing are indicated by a red outline based on the project stationing input. Like previous sheets, the growth and diversion percentages are shown and editable. Any changes to either will be reflected throughout the workbook. Below all the tables is an explanation for each output table.

19 MAINTENANCE

19.1 General Requirements

The Design-Builder shall maintain the Project in a manner that provides a safe and reliable transportation system as described in this TP Section 19 and DBA Section 7.13 (Maintenance During Construction Work).

In performance of the Maintenance During Construction, the Design-Builder shall comply with the following requirements:

1. Maintain the Project through continuous and effective Work prosecuted day by day, with adequate equipment and forces so that all areas within the Project Limits are kept in satisfactory condition at all times.
2. Avoid adverse impact to owners and occupiers of land adjacent to the Project and to Related Transportation Facilities. Coordinate with Related Transportation Facilities such that maintenance areas do not overlap.
3. Coordinate with and enable GDOT and others with statutory duties, functions, or rights of access to access the Site or Related Transportation Facilities to perform such duties and functions.
4. Provide and keep updated a Maintenance Management Plan (MMP).
5. Perform monthly inspections to identify Maintenance Defects that are unsafe or have the potential to become unsafe, or to identify conditions that could adversely affect the Project in addition to including Maintenance Defects (i.e., traffic control).
6. Maintain records of inspections and proposed remedy of all Maintenance Defects using the PMCS.
7. Mitigate hazards and remedy all Maintenance Defects, including those identified by GDOT, the Design-Builder, and third parties within the specified Maintenance Defect Remedy Periods prescribed in TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table).
8. Maintain pavement markings including striping. Remove all inactive striping or temporary striping completely after each Construction Phase or shift in lanes.
9. Support GDOT and other responders during traffic Incidents as required in this TP Section 19.

19.2 Administrative Requirements

19.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 19 in accordance with the Project Standards.

19.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

19.2.3 Metered Utility Consumption

The Design-Builder shall assume the responsibilities for the cost of metered Utility consumption and for the maintenance of Utility service for the elements in TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table) within the Site shown in TP Table 19-1 (Utility Service Matrix).

Table 19-1: Utility Service Matrix

Element	*Responsibility*
Temporary Roadway Safety Lighting (Mainline)	Design-Builder
Crossing Street Lighting (City Party Roadway)	Governmental Entity
Existing Traffic Signals	Governmental Entity
Proposed Permanent Traffic Signals	Governmental Entity
Existing and New ITS	GDOT
Temporary ITS	Design-Builder

The Design-Builder shall ensure that the elements for which the Design-Builder is responsible for the cost of metered Utility consumption are separately metered from any elements that are the responsibility of GDOT, City Parties, or Governmental Entities.

19.2.4 MMP Requirements

The Design-Builder shall prepare, submit, implement, monitor compliance with, and update an MMP meeting the requirements set forth in TP Attachment 19-2 (Requirements for the MMP).

The Design-Builder shall include within the MMP the Proposal Commitments contained in DBA Exhibit 2 (Proposal Commitments) applicable to Maintenance During Construction.

19.2.5 Maintenance Quality Management

The Design-Builder shall be solely responsible for ensuring the quality of all Maintenance During Construction and shall implement processes to ensure the accurate recording of all Maintenance Defects and Noncompliance Events.

19.3 Maintenance Work

19.3.1 Baseline Condition

The Design-Builder shall document the baseline condition of the Project prior to NTP3 with the creation of a Baseline Element Condition Report (BECR). Maintenance Defects identified in the approved BECR are not the responsibility of the Design-Builder to remedy except as identified elsewhere in these Technical Provisions.

19.3.1.1 Baseline Inspections

The Design-Builder shall perform inspections to identify and record existing Maintenance Defects within:

1. The Site
2. Local roads outside the Site that are planned to be used for hauling, staging, or other construction-related activity

3. Related Transportation Facilities that may be affected by the Work

The Design-Builder shall provide GDOT a minimum of 10 days' notice to witness the inspections and/or tests.

19.3.1.2 Baseline Element Condition Report

The Design-Builder shall prepare the Baseline Element Condition Report (BECR) and submit it to GDOT for acceptance no later than 30 days prior to NTP3. The BECR shall include the following:

1. Record of each Maintenance Defect by element as defined in TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table).
2. Drawings and charts identifying the location of Maintenance Defects identified.
3. Digital photographs and high-resolution digital video depicting the existing condition, including:
    a. Existing facilities.
    b. Existing interior of drainage pipe systems being retained.
    c. Structures.
    d. ESAs.
    e. Existing temporary, and permanent benchmarks.
    f. Aboveground Utilities.
    g. Trees and plants to remain.
    h. Existing ROW fence.
4. Photographic records and measurements associated with locations shall be accurate to the nearest 10 feet.
5. The most recent pavement condition survey of mainline and ramps performed and provided by GDOT.

19.3.1.3 Maintenance Defects between Baseline Inspections and NTP3

If the time period between GDOT acceptance of the BECR and NTP3 exceeds four weeks, the Design-Builder may amend the BECR providing details of any Maintenance Defects that occurred between the completion of the Baseline Inspections and NTP3. This amendment shall be submitted to GDOT for acceptance, and all information shall be in accordance with TP Section 19.3.1.2 (Baseline Element Condition Report).

19.3.2 Maintenance of Local Roads

The Design-Builder shall conduct maintenance for elements on local roads within the Pavement Limits and local roads used for detours.

The Design-Builder shall restore haul roads in accordance with TP Attachment 19-3 (Restoration of Haul Roads).

19.3.3 Responsibilities for Traffic Signals and Ramp Meters

The Design-Builder shall assume responsibility for Maintenance During Construction per TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table) for any traffic signal and ramp meter within the Project Limits that is:

- Disturbed or damaged by the Work
- Needs to be relocated, repositioned, or modified as a result of the Work

The Design-Builder shall coordinate as necessary with the owner of the traffic signal. Such responsibility shall commence on the date that such disturbance, damage, or modification takes place and shall continue until the Final Acceptance Date.

19.3.4 Design-Builder Responsibility for Hazard Mitigation

The Design-Builder shall remedy a Maintenance Defect within the hazard mitigation remedy period whenever one or more of the following conditions exist:

1. An immediate or imminent health or safety hazard to Users or workers
2. A risk of immediate or imminent structural failure or deterioration
3. An immediate or imminent risk of damage to a third party's property
4. An immediate or imminent risk of damage to the Environment
5. A risk of system or device communication loss including damage to the fiber network
6. A risk that loss of power may occur to ITS devices or ITS Sites
7. A risk that damage to any element may adversely affect attached ITS equipment

19.3.5 Identification of Maintenance Defects

The Design-Builder shall identify and record Maintenance Defects through inspections described in TP Section 19.4 (Inspections), notifications by GDOT, and reports or complaints by third parties.

The Design-Builder shall self-identify Maintenance Defects and the Maintenance Defect Remedy Period shall commence upon the earlier of:

- The date and time the Design-Builder became aware of the Maintenance Defect.
- The date and time the Design-Builder should have known of the Maintenance Defect. GDOT reserves the right to provide notification to the Design-Builder of a Maintenance Defect in writing or during a joint inspection.

19.3.5.1 Maintenance Defect Remedy

The Design-Builder shall be responsible for the repair of Maintenance Defects within the Maintenance Defect Remedy Period as stated in TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table). Following self-identification or notification by GDOT or a third party of a Maintenance Defect, the Design-Builder shall record the proposed timing and details of hazard mitigation and/or permanent repair of the Maintenance Defect. Upon completion of hazard mitigation within the required Maintenance Defect Remedy Period, the Design-Builder shall ensure the hazard mitigation remains in place so that the immediate hazard does not recur. Upon completion of hazard mitigation the Design-Builder shall perform a permanent repair of each Maintenance Defect within the required Maintenance Defect Remedy Period and

such permanent repair shall be sufficient to prevent recurrence of the Maintenance Defect throughout the Construction Period. Failure to remedy a Maintenance Defect within the required Maintenance Defect Remedy Period shall be recorded as an NCR.

19.3.6 Obligations for Elements

Whenever an activity by the Design-Builder disturbs, alters, or removes any element not listed in TP Attachment 19-1 (Maintenance Defect Definition and Remedy Table), the Design-Builder shall immediately report the impact to GDOT. Unless otherwise instructed by GDOT, the Design-Builder shall restore the affected element to its original condition before it was disturbed, altered, or removed. The Design-Builder shall coordinate and cooperate with GDOT and its contractors during the performance of repairs. The Design-Builder shall comply with the notification and repair requirements for Design-Builder-caused damage to the ITS set forth in TP Section 19.5.5 (ITS Maintenance and Coordination with GDOT Office of Traffic Operations).

19.3.7 Obligation to Notify GDOT of Certain Circumstances

Within 24 hours of becoming aware of any of the following circumstances, the Design-Builder shall notify GDOT and provide information that will facilitate repair or other action by GDOT or third party:

1. A Maintenance Defect that the Design-Builder considers it is not required to remedy, with an explanation why the Design-Builder considers such remedy to be the responsibility of another party
2. Any activity by GDOT, a GDOT-Related Entity, or a third party that the Design-Builder considers may have adversely affected or has the potential to adversely affect an element
3. Any maintenance activity with respect to an element within the Project Limits that the Design-Builder considers should be performed by GDOT or a third party, with an explanation of any adverse effect on an element that may be avoided or mitigated by the maintenance activity
4. Any Maintenance Defect observed by the Design-Builder during the course of an inspection that, in the opinion of the Design-Builder, represents an immediate or imminent health or safety hazard to Users or road workers

19.4 Inspections

19.4.1 Inspection General Requirements

The Design-Builder shall provide trained and competent personnel to plan and implement a program of inspections for the Project which are performed monthly at a minimum and that comply with the following:

- Verifies the continuing safety of the Project for Users
- Prioritizes remedy of Maintenance Defects
- Takes account of Incidents, Emergencies, and extreme weather affecting the Project

The Design-Builder shall ensure that personnel performing inspections are certified as inspectors, or otherwise appropriately qualified to perform the inspections.

19.4.2 Snow and Ice Damage and Post-Winter Inspections

Refer to TP Section 19.5.3 (GDOT Snow and Ice Control Activities and Design-Builder Clean Up) for details of GDOT's anticipated snow and ice control activities throughout the Construction Period. Whenever the Design-Builder considers that a Maintenance Defect is directly attributable to the actions of GDOT, a GDOT-Related Entity, or a Separate Contractor in the performance of snow and ice control activities, the Design-Builder shall record such Maintenance Defect and shall indicate that the Maintenance Defect was potentially the result of damage caused by snow and ice control. Regardless of the cause of any Maintenance Defect, the Design-Builder shall repair all Maintenance Defects within the required Maintenance Defect Remedy Period.

The Design-Builder shall conduct an annual post-winter inspection no earlier than March 1 and no later than April 15 each year with GDOT staff to inspect the Maintenance Defects flagged as potentially the result of damage caused by snow and ice control (including those that have been repaired at the date of the inspection) and to establish whether such Maintenance Defects were directly attributable to the actions of GDOT, a GDOT-Related Entity or a Separate Contractor in the performance of snow and ice control activities.

The Design-Builder shall notify GDOT a minimum of five days prior to conducting the post-winter inspection and shall provide transportation and safety equipment for up to two GDOT personnel. GDOT will evaluate the Maintenance Defects identified as potentially the result of damage caused by snow and ice control, together with the observations and results recorded during the post-winter inspection, to determine the Design-Builder's entitlement to compensation (if any), in accordance with DBA Article 13 (Relief Events; Compensation Events).

19.5 Coordination and Interfaces

19.5.1 Operational Support Responsibilities

The Design-Builder shall provide the operational support activities outlined in this TP Section 19.5. These activities are summarized in TP Table 19-2 (Summary of Design-Builder Operational Support Responsibilities) for convenience only, and the full requirements for each operational activity are provided in the relevant section referenced in the "Activity" column of TP Table 19-2 (Summary of Design-Builder Operational Support Responsibilities). The Design-Builder shall support and complement the activities of GDOT and other entities having operational responsibilities within and adjacent to the Site in a manner that minimizes impact to Users. For each operational activity, the Design-Builder shall perform the Design-Builder obligations in the specified section listed in TP Table 19-2 (Summary of Design-Builder Operational Support Responsibilities).

Table 19-2: Summary of Design-Builder Operational Support Responsibilities

Activity	*GDOT / Others Operational Responsibilities*	*Design-Builder Operational Support Responsibilities*
Traffic Incident Attendance (TP Section 19.5.2 (Traffic Incident Attendance and Support))	Identify and manage traffic Incidents, dispatch responders, liaise with Emergency services, provide messaging to Users, initiate temporary traffic control, and clear the roadway for traffic to resume.	Attend the scene of traffic Incidents, respond to the requests of the Incident Commander (as used by GDOT and defined by the National Incident Management System(NIMS)) to provide and supplement temporary traffic control, perform temporary and permanent repairs of damage to the Project resulting from traffic Incidents.
Towing (TP Section 19.5.2.4 (Liaison with Towing and Recovery Incentive Program))	Heavy towing services under the Towing Recovery and Incentive Program (TRIP).	Cooperate with towing companies during performance of the Work.
Third Party Claims (DBA Section 16.5.4 (Defense and Indemnification Procedures))	Provide the Design-Builder with notification of a traffic Incident and dispatch to assist with Third Party Claims processes.	Pursue third parties or their insurance for recovery of costs as a result of damage.
Snow and Ice (TP Section 19.5.3 (GDOT Snow and Ice Control Activities and Design-Builder Clean Up))	Weather forecasting, snow and ice pre-treatment, and snow and ice clearance.	Provide clean-up of abrasives after winter storms, attend post-winter season inspections and keep the Project in good repair throughout winter season.
ITS Operations (TP Section 19.5.5 (ITS Maintenance and Coordination with GDOT Office of Traffic Operations))	Maintain the new ITS after Substantial Completion. Operate the ITS, including messaging to Users.	Maintain in operational condition all existing ITS and replacement ITS within the Project Limits. Protect the ITS and take immediate action in the event of ITS-Maintenance Defects.

19.5.2 Traffic Incident Attendance and Support

19.5.2.1 General Traffic Incident Attendance and Response Obligations

Unless defined elsewhere in the Design-Build Documents, definitions in this TP Section 19.5.2 shall be in accordance with TP Section 18 (Traffic Control).

The Design-Builder shall attend and shall provide supplementary temporary traffic control for Incidents when requested by GDOT.

19.5.2.2 Temporary Traffic Control for Incidents

Upon arrival at the scene of an Incident, the Design-Builder shall report to the Incident Commander and when requested shall:

1. Install, maintain, and remove temporary traffic control as directed by the Incident Commander and as necessary to ensure the safety of Users and all responders. This shall include implementation of short-term temporary traffic control to supplement, upgrade, or replace temporary traffic control provided by other responders.
2. Deploy the necessary available equipment and manpower to reopen the roadway if such assistance is requested by the Incident Commander or is beyond the capabilities of other responders. This duty does not include the provision of heavy towing equipment and is restricted to activities that the Design-Builder can provide with immediately available equipment and manpower.

19.5.2.3 Removal of Debris and Repair

The Design-Builder shall perform the following:

1. Assist in the relocation of materials the minimum distance necessary to eliminate traffic hazards in the shortest possible time, using available equipment and manpower where cargo or spilled loads (non-hazardous) are involved in accordance with the TIME Task Force Guidelines for the Mitigation of Motor Vehicles Fluid Spills at Crash Scenes (Non-Cargo).
2. Identify the schedule of permanent repairs that may be needed following the Incident.

19.5.2.4 Liaison with Towing and Recovery Incentive Program

The TRIP Program or successor system is used by GDOT and the Georgia TIME Task Force to manage large-scale commercial vehicle Incidents and their quick, safe clearance within the Project Limits. The responsibilities of the towing companies providing heavy towing and recovery services under the TRIP program are set forth in the Georgia TIM Guidelines and include hazardous waste removal associated with Incidents. The Design-Builder shall perform the following:

1. Keep an updated record on the contact details of the towing operators assigned within the Project Limits.
2. Cooperate with the companies providing TRIP services during attendance at Incidents.

The Design-Builder is prohibited from providing any service that could be construed as competing with services assigned by GDOT under the TRIP.

19.5.3 GDOT Snow and Ice Control Activities and Design-Builder Clean Up

Prior to a forecasted snow or ice event, the Design-Builder shall coordinate with GDOT to understand the activities that GDOT intends to perform and the materials that GDOT intends to apply and shall cooperate with GDOT to support GDOT’s snow and ice control activities, including temporarily vacating active Work zones.

The Design-Builder shall clear and dispose of accumulations of winter maintenance materials, such as abrasives applied by GDOT to the roadway, from both the roadway and the drainage system no later than April 1 of each year.

19.5.4 Emergency Maintenance

If the Design-Builder becomes aware of an Emergency, an Incident, a Maintenance Defect, or any other hazard as a result of which the normal use of any part of the Project would compromise the safety of Users, the Design-Builder shall immediately inform GDOT with a recommendation for a Lane Closure or other action necessary to mitigate the hazard.

19.5.5 ITS Maintenance and Coordination with GDOT Office of Traffic Operations

This TP Section 19.5.5 identifies the Design-Builder's obligations for ITS maintenance, damage to ITS, and coordination with GDOT for Maintenance During Construction.

19.5.5.1 Operational Continuity of ITS

The Design-Builder shall provide and maintain existing ITS devices, temporary ITS devices, and new ITS devices. The Design-Builder shall perform the following:

1. Maintain all existing temporary, and new ITS devices and communication in continuous operational status while new ITS devices are installed and existing devices are relocated or replaced to avoid any adverse impact on the ability of GDOT Office of Traffic Operations to anticipate traffic Incidents, reduce congestion, and provide information to Users.
2. Ensure that GDOT Office of Traffic Operations has continuous and uninterrupted CCTV coverage of all travel lanes within the Project.
3. Perform all adjustments, including temporary support poles, temporary ITS devices, and network communication during the installation of new ITS devices.
4. Provide all necessary equipment to keep existing temporary, and new ITS devices in continuous operational service and in communication such as jumper cables, CAT 5 or CAT 6 cable, switches, and additional cabinets.
5. Provide or maintain all electrical power service for existing temporary and new ITS devices in accordance with the requirements of TP Section 17 (Intelligent Transportation Systems).

19.5.5.1.1 ITS Operational Status

If, as a result of planned ITS relocation or other planned construction activity, the Design-Builder identifies any existing or new ITS device that needs to be taken out of service or will be subject to interruption of operational status, the Design-Builder shall notify GDOT no later than 72 hours before implementing such construction activity. Such notification shall not excuse the Design-Builder from providing continuous operational status unless an outage of the ITS is included in a plan accepted by GDOT and the Design-Builder meets all the requirements of the plan.

19.5.5.1.2 ITS Performance Requirements

Where Maintenance Defects are identified in ITS devices, components, field elements, or ITS infrastructure, the Design-Builder shall provide GDOT with Notice when:

1. The Maintenance Defect poses a risk of ITS system or device communication loss including damage to the fiber network.
2. Loss of power may occur to ITS devices and/or sites.
3. Gantry damage may adversely affect attached ITS equipment.
4. Damage to a barrier may adversely affect ITS situated on or near the barrier.
5. There is any other risk that may impact GDOT's ability to operate the ITS.

19.5.5.1.3 Damage and Repair of ITS

The Design-Builder shall notify GDOT no later than two hours following the Design-Builder's first awareness of any Design-Builder-caused damage to any ITS device, component, field element, or ITS infrastructure. The Design-Builder shall replace any such damaged element with an equivalent in new condition per the Project Standards. All replacement equipment or components shall be subject to the testing and acceptance requirements specified in TP Section 17 (Intelligent Transportation Systems).

19.6 Submittals

With respect to maintenance requirements described in this TP Section 19, the Design-Builder shall comply with TP Section 2.9 (Submittals).

TP Section 19 Attachments

Attachment No.	*Title*
Attachment 19-1	Maintenance Defect Definition and Remedy Table
Attachment 19-2	Requirements for the MMP
Attachment 19-3	Restoration of Haul Roads

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 19-1

Maintenance Defect Definition and Remedy Table

Attachment 19-1: Maintenance Defect Definition and Remedy Table

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
1) GENERAL PAVEMENT					
1.1	Ride quality	Location and depth of any individual discontinuity (e.g., bumps and depressions) that is greater than 0.75 inches.	24 hours	N/A	Visual Inspection / Physical Measurement
1.2	Edge drop-offs	Location and depth of any individual edge drop-offs from travel lane to shoulder that is greater than 2 inches for more than 10 feet in length.	24 hours	28 days	
2) CONCRETE PAVEMENT					
2.1	Faulting	Location and measurement of any difference in elevation between adjacent slabs exceeding 0.5 inches.	24 hours	28 days	Visual Inspection / Physical Measurement
2.2	Punchouts/ Pothole	Location and number of any punchout with a maximum dimension of 24 inches or more exceeding 0.25 inches vertical fault dimension compared to adjacent intact slab.	24 hours	28 days	
2.3	Failed Joints and Cracks	Location and length of any individual spalling of joints or cracks more than 1 inch in width and greater than 3 feet in length.	24 hours	28 days	
3) ASPHALT PAVEMENT					
3.1	Ruts	Location and depth of any individual rut that is greater than 0.5 inch in depth.	24 hours	28 days	Visual Inspection / Physical Measurement: 1-foot straight edge used for localized areas
3.2	Potholes	Location and depth of any potholes measuring 1 square foot in area and 1.25 inches or greater in depth.	24 hours	28 days	Visual Inspection / Physical Measurement
3.3	Raveling	Location and area of any raveling greater than 100 square feet.	24 hours	28 days	

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
4) STRUCTURES					
4.1	Structures General	Structures with differential settlement between the bridge deck elevation, approach slab, and/or adjacent pavement of more than 0.5 inches.	24 hours	90 days	The National Bridge Inspection Standards (NBIS) of the Code of Federal Regulations, 23 Highways – Part 650 • The Federal Highway Administration's Bridge Inspector's Reference Manual • Physical Measurement
4.3	Bridge Deck Drainage	The presence of debris, leaks, structural Defects, and/or ponding of water on the deck due to an obstructed or damaged drainage system.	24 hours	28 days	• The National Bridge Inspection Standards (NBIS) of the Code of Federal Regulations, 23 Highways – Part 650 • The Federal Highway Administration's Bridge Inspector's Reference Manual • Physical Measurement
4.5	Sign gantries, signal gantries, bridge mounted sign structures, light structures, ITS structures, and high masts	Sign gantries, signal gantries, bridge mounted sign structures, light structures, ITS and ETCS structures, and high masts are not structurally sound and/or have one of the following: • Defects in surface protection systems • Loose nuts and bolts	24 hours	90 days	Visual Inspection
4.6	Retaining Walls - General	Any of the following are present: • Instances of erosion greater than 1-foot deep • Evidence of movement or settlement	24 hours	90 days	Visual Inspection
4.7	Streaming Cameras	Non-functional equipment.	24 hours	7 days	Visual Inspection

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
5) DRAINAGE					
5.1	Non-bridge class culverts (Box Culverts)	Any of the following are present: • Any combination of vegetation, debris, or silt causing loss in cross-section of the structure • Gaps in expansion joint sealants • Scour damage immediately up or down stream • Impact damage	24 hours	90 days	Visual Inspection
5.2	Travel way and Shoulder	Standing water 0.5 inches or greater in depth.	1 hours	3 days	Visual Inspection / Physical Measurement
5.3	Discharge systems	Surface water discharge systems not performing their proper function and not discharging in compliance with the relevant legislation and permits.	24 hours	90 days	Visual Inspection
5.4	Erosion	Erosion greater than 1-foot deep over an area greater than 100 square feet along ditches, swales, ponds, and channels.	24 hours	90 days	Visual Inspection / Physical Measurement
5.5	Channels and ditches – Permanent Erosion Control Measures	Where permanent erosion control measures such as rock or concrete riprap are utilized: • Undermining greater than 2-inch depth or damaged erosion control measures	24 hours	90 days	Visual Inspection
5.6	Curb & Gutter	Any of the following are present: • Vegetation, sediment, trash, debris, chemicals, metals, fauna victims (roadkill), other pollutants, or any material adversely impacting the drainage flow • Broken or crushed curb and gutter • Missing grates	24 hours	90 days	Visual Inspection
5.7	Pipe System	Any of the following are present: • Blockage or obstruction greater than 25% of the drainage device cross section (about 1/3 D) • Broken or damaged drainage structures • Separation between structures in the drainage system	24 hours	90 days	Visual Inspection (Video inside the system not required)

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
6) PAVEMENT MARKINGS, OBJECT MARKERS, BARRIER MARKERS, AND DELINEATORS					
6.1	Permanent or Temporary Pavement markings (striping, words, symbols, etc.)	Any of the following are present: • Dirty and not visible during the day • Nonreflective at night (including in wet conditions) • Damaged, not whole • Not the correct color, type, width and length • Not correctly located and/or not placed to meet the MUTCD and GDOT Pavement Marking Standards	24 hours	45 days	Portable retro reflectometer, which uses 30 meter geometry, meeting the requirements described in ASTM E 1710
6.3	Raised Reflective Markings	Any one of the following are present: • Dirty and/or not clearly visible • Not the correct color and/or type • Not reflective or retroreflective in accordance with GDOT standards • Not correctly located, aligned and/or at the correct level • Damaged and/or not firmly fixed to the pavement	24 hours	60 days	Visual Inspection
6.4	Delineators	Any one of the following are present: • Dirty and/or not clearly visible • Not of the correct color and/or type • Not legible and/or reflective • Not straight and vertical	24 hours	30 days	Visual Inspection
7) GUARDRAILS, SAFETY BARRIERS, GLARE SCREENS, AND IMPACT ATTENUATORS					
7.1	Guardrails and Cable Barriers	Damaged to an extent they are non-functional; components are not intact and/or are not connected correctly.	24 hours	21 days	Visual inspection for compliance with NCHRP 350 Standards
		Covered in undesirable vegetation.	28 days	60 days	
7.2	Impact Attenuators and End Terminals	Any one of the following are present: • Inappropriately placed, incorrectly installed, and/or damaged in a way that decreases functionality • A component is not in compliance with the manufacturer • A component is not intact and/or connected correctly	24 hours	7 days	Visual Inspection

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
7.3	Concrete Traffic Barrier	Any one of the following are present: • Any broken pieces measuring more than 10% of barrier • Exposed rebar • Covered in vegetation	24 hours	60 days	Visual Inspection
7.4	Glare Screens	Panels are not continuous and securely fastened throughout the system with missing, damaged, or broken sections or components.	24 hours	90 days	Visual Inspection
8) TRAFFIC SIGNS					
8.1	Mounted overhead signs (including bridge mounted signs)	Any one of the following are present: • Dirty, not visible, not legible, and/or not reflective both during day and night including in wet conditions. • Not correctly located; not at the correct height. • Structural and/or electrical issues. • Identification markers are not visible and/or not correctly located. • Visibility distances do not meet the stated requirements. • Obsolete and redundant signs have not been removed or replaced. • Sign information is not of the correct size, location, type, and wording does not meet its intended purpose and statutory requirements. • Structures and elements do not have clear access provided. • Replacement and repair materials and equipment are not in accordance with the requirements of the MUTCD and GDOT Signing and Marking Guidelines.	24 hours	90 days	Visual Inspection

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
8.2	Ground Mounted Regulatory Signs, Warning Signs, Guide Signs	Any one of the following are present: • Dirty, not visible, not legible, and/or not reflective both during day and night including in wet conditions. • Not correctly located, not at the correct height. • Structural and/or electrical issues. • Identification markers are not visible and/or not correctly located. • Visibility distances do not meet the stated requirements. • Obsolete and redundant signs have not been removed or replaced. • Sign information is not of the correct size, location, type and wording does not meet its intended purpose and statutory requirements. • Structures and elements do not have clear access provided. • Replacement and repair materials and equipment are not in accordance with the requirements of the MUTCD and GDOT Signing and Marking Guidelines.	12 hours	14 days	Visual Inspection
9) TRAFFIC SIGNALS					
9.1	Traffic Signals, pedestrian elements, and vehicle detectors	Any one of the following are present: • Lenses are not clean and/or visible. • Not correctly aligned. • Inoperative. • Damaged by accident or vandalism. • Not structurally and electrically sound. • Incorrect signal timing and operation. • Incorrectly positioned. • Not fully functional at all times.	24 hours	7 days	• Visual inspection • Traffic signal technical inspection • Traffic signal issue reporting log
9.2	Traffic Controllers	Not operating correctly and/or damaged; access not secured.	24 hours	7 days	

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
10) LIGHTING					
10.1	Roadway Lighting	Any one of the following are present: • Doesn't provide acceptable uniform lighting quality. • Lanterns are not clean or are incorrectly positioned. • Damaged by accident or vandalism. • Light poles are not upright or structurally unsound.	24 hours	28 days	Nighttime inspection or automated logs
10.2	Electrical Supply	Electricity supply, feeder pillars, cabinets, switches, and fittings are not electrically, mechanically, and structurally sound nor functioning.	24 hours	28 days	Testing to meet NEC regulations, visual inspection
10.3	Access Panels	Not secured; damaged.	24 hours	28 days	Visual Inspection
11) FENCES, WALLS AND SOUND ABATEMENT					
11.1	Bridge Fencing	Fencing is damaged and not functional.	24 hours	28 days	Visual Inspection
11.2	Right-of-Way Fencing	Fencing is damaged and not functional.	24 hours	90 days	Visual Inspection
12) ROADSIDE MANAGEMENT					
12.1	Sight Distance	Vegetation that obstructs the view of the traveling public, including sight distance at intersections, roadway curves, sign visibility, and/or vegetation that threaten to fall onto the roadway or ROW.	24 hours	N/A	Visual Inspection
12.2	Roadway	Presence of general waste items including debris, foliage clippings, dead animals.	24 hours	7 days	Visual Inspection
		Dead and diseased trees, limbs, or leaning trees that present a safety threat to Users.	8 hours	N/A	Visual Inspection
12.5	Grassed Areas	Grass and Vegetation exceeding an average height of 10 inches.	24 hours	28 days	Visual Inspection
12.6	Accident Investigation Sites	Presence of general waste items including debris, residue, supplies, vegetation.	24 hours	28 days	Physical Measurement
13) REST AREAS AND PICNIC AREAS (NOT USED)					
14) EARTHWORKS, EMBANKMENTS AND CUTTINGS (NOT USED)					

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
15) ITS EQUIPMENT					
15.1	ITS Equipment - General	Any one of the following present: • Equipment and cabinet identification numbers are not visible. • Sites are not well drained and access is obstructed. • Communications cable markers, cable joint markers, and duct markers are not visible or are missing.	48 hours	14 days	• Visual inspection • ATMS System Verification
15.2	Pull Boxes and Electrical Communication Boxes	Not easily accessible, clean, free from water, and/or free from damage to box and lids.	48 hours	14 days	Visual Inspection
15.3	CCTV Systems	Faults that limit the availability of operators to monitor the area network.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.4	Dynamic Messaging Signs	Hardware issues that limit connectivity or functionality.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.5	Vehicle Detection System	Non-functional equipment.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.6	Fiber Optic Network	Faults in connectivity and communication.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.7	Electrical Power Service	All components of the electrical power service are free from defects that would limit power connectivity to ITS devices.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.8	Hub Buildings	Damaged or not water safe from water damage.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.9	Ramp Meters	Non-functional equipment.	48 hours	N/A	• Visual inspection • ATMS System Verification
15.10	Traffic Counting Stations and Devices	Non-functional equipment.	48 hours	N/A	Visual Inspection
16) TOLLING FACILITIES AND BUILDINGS (NOT USED)					
17) AMENITY (NOT USED)					
18) SNOW AND ICE CONTROL (NOT USED)					

19-1 Ref Sec	*Element*	*Maintenance Defect Definition*	*Maintenance Defect Remedy Period*		*Inspection and Measurement Method*
			Hazard Mitigation	*Permanent Repair*	
19) INCIDENT RESPONSE					
19.1	Incident Attendance	Failure to attend an Incident when requested by GDOT.	1 hour	24 hours	Attendance Confirmed by GDOT TMC.
20) CUSTOMER RESPONSE					
20.1	Response to inquiries	Failure to follow-up with the customer within 72 hours of initial inquiry or failure to resolve customer concerns/requests to GDOT's satisfaction within two weeks of the initial inquiry.	48 hours	48 hours	Records of inquiries and customer complaints to GDOT.
20.2	Customer Contact Line	Telephone line not manned during business hours and/or lack of a 24 hour availability of messaging system.	24 hours	24 hours	Instances of line out of action or unmanned.
21) SWEEPING AND CLEANING (NOT USED)					

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 19-2

Requirements for the MMP

Attachment 19-2: Requirements for the MMP

1 MMP General Requirements

The Maintenance Management Plan (MMP) shall set forth the Design-Builder's plan and processes to meet the requirements of the Design-Build Documents for Maintenance During Construction and shall be consistent with the requirements in TP Section 19 (Maintenance). MMP processes shall be clear, auditable, measurable, and achievable.

2 General Management and Administration

The Design-Builder shall provide the organizational structure for Maintenance During Construction and how it will enable the Design-Builder's obligations for Maintenance During Construction Work to be met. The Design-Builder shall describe and show on organization charts the reporting lines to GDOT and internally, the roles and responsibilities assigned to each position and the Contractors to be engaged with a description of the Work to be performed by them. The Design-Builder shall update the organizational chart within 30 days after a change of any manager listed below.

The Design-Builder shall show on the organization charts the following at a minimum:

1. GDOT Project Manager
2. Design-Builder Project Manager*
3. Manager responsible for maintenance, including quality and safety*
4. Individual responsible for training program*
5. Field crews responsible for hazard mitigation and repair of Maintenance Defects
6. Field crews responsible for inspections and Maintenance Defect identification
7. Field crews responsible for providing support to Incidents

For each individual (*) the Design-Builder shall identify the employing organization and show positions and activities to be undertaken by Contractors.

The Design-Builder shall include processes and procedures for:

1. Administrative activities including reporting, record keeping, processing of contracts, invoices, and receivables
2. Requests for permitting, issuance of permits, compliance and enforcement of permits in coordination with GDOT
3. Addressing Design-Builder-caused damage

3 Qualifications, Experience and Training

The Design-Builder shall provide evidence that personnel have appropriate training. A table shall be provided as shown below defining responsibility for development and implementation of training programs, and who will conduct the training and certification process for each staff position, including maintenance personnel, Contractors, and maintenance crew members on the topics below.

Table 1: Personnel Training

Training Program	*Person Responsible to Develop and Deliver*	*Staff Positions Requiring Training*	*Frequency of Training*	*Link to Training Program*
Inspections, Maintenance Defect identification				
Hazardous Materials, response, and mitigation of traffic incidents involving contamination or waste				
Other training programs (details to be added by the Design-Builder)				

4 Maintenance Records

The Design-Builder shall describe the approach, processes, and protocols for creating, tracking, updating and revising maintenance records. The Design-Builder shall use the PMCS to record and track the following attributes of the Maintenance Defects:

1. Description, date and time of identification of Maintenance Defects
2. Planned actions, date and time for hazard mitigation, and permanent repair of Maintenance Defects
3. Date, time, and types of inspections performed to identify Maintenance Defects
4. Details including date and time of actual repairs performed

The Design-Builder shall define the individuals responsible for creating and updating each item and management reviews. The Design-Builder shall describe how the PMCS will be used to populate and generate information for the various reports and records and if support is required from GDOT to make the system work.

The Design-Builder shall use the PMCS to track and archive all Maintenance Work documents.

4.1 Recording of Complaints

The MMP shall include the process by which the Design-Builder shall immediately refer to GDOT all complaints and reports received from third parties and record the following:

1. Date and time of the complaint
2. Location and nature of the problem
3. Complainant contact information
4. Date and action taken to address the complaint

4.2 Recording of Traffic Accidents and Incidents

The MMP shall include the process by which the Design-Builder shall record an accident/Incident involving a Design-Builder contractor that occurs in any of the following circumstances:

1. As a result of the performance of the Work
2. Within the work zone of a TTCP implemented by the Design-Builder

The Design-Builder shall record the following:

1. Date and time of the traffic accident/Incident
2. Location of the Incident
3. Nature of the Incident
4. All parties involved in the Incident, including names, addresses, telephone numbers and their involvement (including witnesses)
5. Responsible party and insurance information
6. Action taken to address the Incident
7. Documentation of traffic control in place at the Incident

Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017182

Attachment 19-3

Restoration of Haul Roads

Attachment 19-3: Restoration of Haul Roads

1 General Requirements

Haul roads are routes used for transporting materials to the Project. The Design-Builder shall take reasonable measures to protect roads used for hauling.

The Design-Builder shall restore haul roads that are county roads and city streets within the State per this TP Attachment 19-3. These requirements do not apply to haul roads on the State Highway system. The Design-Builder shall provide a haul route plan with access points for depicting how the deliveries and hauling to and from the Project for soil, concrete, and asphalt will be performed.

All construction vehicles shall comply with load restriction and vehicle delineation requirements when used on roads open to the public.

2 Construction

The Design-Builder shall restore the haul road to a condition equal to that which existed before hauling operations were started prior to Substantial Completion or when hauling operations are completed, whichever comes first. The Design-Builder may include the baseline haul road condition in the BECR.

An obligation to restore the road will not be relieved in the event that other traffic uses the haul road concurrently. If another contractor who is also under contract with GDOT hauls material over the same route, GDOT will determine the amount of maintenance and restoration obligation for each contractor.

3 Quality Acceptance

When the restoration work on a haul road is completed, a joint inspection of the haul road route will be made in conjunction with the Design-Builder, GDOT, and the governmental agency or political subdivision charged with the control and maintenance of the restored road.

20 BICYCLE AND PEDESTRIAN FACILITIES

20.1 General Requirements

The Design-Builder shall design and construct all required bicycle and pedestrian facilities for the Project in accordance with the requirements of this TP Section 20. The Design-Builder shall ensure the bicycle and pedestrian facilities of the Project are consistent with State, regional, and local bicycle and pedestrian plans. The Design-Builder shall coordinate the Elements of the Project with the existing and planned pedestrian and bicycle facilities of local and county administrations for pedestrians and cyclists.

20.2 Administrative Requirements

20.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct all Work governed by this TP Section 20 in accordance with the Project Standards.

20.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

20.3 Design Requirements

20.3.1 Bicycle and Pedestrian Accommodation

This TP Section 20 presents the minimum bicycle and pedestrian requirements for the Project. The Design-Builder shall design and construct sidewalks and bicycle facilities where they currently exist and where required by State or federal regulations. The Design-Builder shall design and construct additional facilities as noted below:

1. Bethlehem Road: A 10-foot-wide shared-use path on the north side of the road from the Eagles Brooke Drive/Lester Mill Road/Greenwood Road/Bethlehem Road roundabout to the Bethlehem Road/SR 42 intersection.
2. Bethlehem Road: A 5-foot-wide sidewalk on the south side of the road from the Eagles Brooke Drive/Lester Mill Road/Greenwood Road/Bethlehem Road roundabout to the Bethlehem Road/SR 42 intersection.
3. Price Drive: A 5-foot-wide sidewalk on both sides of the road from the Price Drive/Bethlehem Road intersection to the Price Drive/Old Bethlehem Road intersection and connecting to the parking lot of Bethlehem Baptist Church.
4. SR 42: A 10-foot shared-use path on the east side of the road from the Pine Grove Road/SR 42 intersection to the Bethlehem Road/SR 42 intersection.
5. SR 42: A 5-foot sidewalk on the west side of the road from the Pine Grove Road/SR 42 intersection to the Bethlehem Road/SR 42 intersection.

20.3.2 Pedestrian Facilities

Sidewalks shall comply with the Title II provisions of the ADA Accessibility Standards. The Design-Builder shall install pedestrian signals and curb ramps for the final configuration of all signalized intersections within the Project Limits. All pedestrian facilities shall be designed to incorporate ambulatory, visibility, and auditory needs of all Users.

The Design-Builder shall incorporate the following sidewalk requirements into the Final Design Documents:

1. ADA ramps and all sidewalks within the radius of return shall be 8-inch concrete.
2. ADA ramps shall be provided at all intersection quadrant curb returns for all impacted signals.
3. Crosswalks shall be provided at intersections that are modified as part of the Project where sidewalks exist on either side of the intersection. ADA ramps shall be provided at each end of a crosswalk.
4. All new or replaced sidewalks shall be offset from the back of curb and gutter with a minimum 2-foot-wide strip.
5. All sidewalks shall be a minimum of 5-feet wide, except on bridges, where sidewalks shall be a minimum of 6.5-feet wide. Shared-use paths shall be a minimum of 10-feet wide, except on bridges where shared-use paths shall be a minimum of 12-feet wide. Sidewalk and shared-use path widths shall not be reduced below their existing widths.

Handrails shall be provided if the edge of sidewalk is within 4 feet of a drop-off 2:1 (H:V) or steeper and over 30 inches in height.

20.3.3 Final Design

The Design-Builder shall incorporate into the Final Design Documents the following elements related to bicycle and pedestrian facilities:

1. Alignment, profile, cross-section, and materials
2. Points of connection to existing and proposed bicycle and pedestrian facilities, such as a connection to an existing or proposed shared-use path, sidewalk, or bike lane on a Related Transportation Facility
3. Signing, signalization, and pavement markings
4. Methods of illumination, where applicable
5. Requirements of the Landscape Enhancement Plan and Hardscape Enhancement Plan

20.4 Submittals

With respect to bicycle and pedestrian requirements and Submittals described in this TP Section 20, the Design-Builder shall comply with TP Section 2.9 (Submittals).

21 RESERVED

22 NOISE BARRIERS

22.1 General Requirements

This TP Section 22 governs the Design-Builder's Design and construction of all noise barriers for the Project.

22.2 Administrative Requirements

22.2.1 Project Standards

TP Attachment 1-4 (Project Standards) lists the Project Standards.

The Design-Builder shall conduct the Work governed by this TP Section 22 in accordance with the Project Standards.

The Design-Builder shall be permitted the use of concrete noise barrier posts in lieu of the steel posts specified in GDOT Construction Detail N-1A. Details of the concrete noise barrier posts shall be submitted as a Design-Builder Provided Specification.

22.2.2 Key Personnel and Required Personnel

See requirements in TP Section 2.2.2 (Key Personnel and Required Personnel).

22.3 Design Requirements

22.3.1 General

The Design-Builder shall provide noise barriers that are reflective type unless otherwise required by GDOT.

The Design-Builder shall design, construct, and maintain the noise barriers to achieve the decibel reduction requirements included in TP Section 5 (Environmental).

The Design-Builder shall design noise barrier aesthetics per the requirements in TP Section 15 (Landscape and Hardscape Enhancements).

The Design-Builder may incorporate the existing noise barriers that are within the Project Limits into the design, provided the existing barriers, as constructed, meet the Project noise abatement requirements in TP Section 5 (Environmental).

The Design-Builder shall analyze the noise barriers for the installation of noise-absorptive material in accordance with the GDOT Noise Policy. The use of noise-absorptive material shall be considered a Design-Builder Noise Barrier Change Request and is subject to the process defined in DBA Section 14.6.3.2 (Design-Builder-Proposed Noise Barrier-Related Changes).

22.3.2 Structural

The Design-Builder shall use precast concrete panels with finish as described in TP Section 15 (Landscape and Hardscape Enhancements) for all ground-mounted noise barriers. The Design-Builder may use interlocking steel panels (Type B) on bridge barriers and on retaining walls.

Noise barriers shall not be mounted to GDOT Standard Barriers.

All materials used to construct noise barriers shall conform to the requirements as set forth in TP Section 1 (General Requirements). Weight of material for noise barrier panels installed on bridges shall be limited to a maximum of 7 pounds per square foot of face of wall.

Precast concrete panels shall have thickness per Georgia Construction Detail N-5 (Sound Barrier Type C Precast Concrete Panels) with allowance for a 5-inch panel for up to 20-foot pile spacing. Panel thickness shall be exclusive of formliner projections which shall be in addition to the required concrete panel thickness.

Noise barriers mounted to bridge barriers shall be designed to resist all loading to which the barrier will be subjected, including impact, wind, and ice loading. The bridge deck overhang on new and existing decks shall have adequate capacity to accommodate these loads.

The maximum height of noise barriers on bridges shall be limited to 12 feet above the bridge deck measured at traffic face of bridge barrier.

The maximum height of noise barriers attached to walls shall be limited to 18 feet above the coping or shoulder at traffic face of barrier. Noise barriers within MSE backfill shall be considered structure-mounted for application of wind loading, but otherwise shall follow ground-mounted requirements.

For ground-mounted noise barriers, the minimum height shall be 6 feet and the maximum height shall be 30 feet, measured along a panel from the lowest groundline to top of wall. Noise barrier posts exceeding the design height limitations in GDOT Construction Standards and Details, due to installation on a longitudinal slope, will require a Design-Builder Provided Specification for the special design and details of the longer posts required due to panel embedment. Foundations for free-standing barriers shall be coordinated with sub-surface structures such as pipes and culverts, and foundation spacings shall be detailed to avoid conflict.

The Design-Builder shall provide a design that meets the requirements identified in TP Section 5.4 (Noise Barriers) and the following:

1. Wind loads for the structural design of noise barriers shall be in accordance with AASHTO LRFD Bridge Design Specifications and meet the minimum requirements provided in GDOT Standard Specification 624.
2. Gust Effect Factor, G for structure-mounted noise barrier wall shall be equal to 1.0.
3. Noise barriers within the clear zone of non-limited access facilities may be protected with guardrail provided that:
    a. Design speed is less than or equal to 45 mph.
    b. Daily two-way truck traffic does not exceed 1,000 trucks per day.
    c. Meet offset requirements per requirements in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements).
    d. Guardrail is a minimum of 31 inches in height for the length of need.
4. All other noise barriers within the clear zone shall be protected with concrete barrier.
    a. New/Replacement Noise Barrier:

1) Offset distance from MASH-compliant concrete barriers shall be per the requirements in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements).

2) Noise barrier systems not meeting the minimum offset stated above shall be designed to withstand MASH collision load, as defined in the GDOT Bridge and Structures Design Manual Section 7.4 (Noise Barriers), for the crash test level of the barrier placed in front of it. GDOT Standard Barriers shall be considered test level 4.

b. Existing Noise Barrier to remain:

1) Existing noise barriers to remain can have less than the minimum offsets defined in TP Section 11.3.7.5 (Roadside Safety Minimum Offset Requirements) and do not have to be modified to withstand MASH collision loads. The Design-Builder shall add flashing per GDOT Construction Detail N-2 (Sound Barrier Details at Concrete Side Barriers).

5. All new noise barriers shall use the noise barrier foundation details in the GDOT Construction Details. Where the gap between the concrete barrier and the noise barrier exceeds the maximum distance in GDOT Construction Detail N-2, the flashing shall not be required. Where flashing is not provided, the Design-Builder shall ensure positive drainage in the area between the concrete barrier and the noise barrier to ensure there will be no standing water.

All bottom panels of free-standing noise barriers shall be embedded a minimum of 6 inches below finished ground line.

The Design-Builder shall provide transition details acceptable to GDOT between ground-mounted and structure-mounted noise barriers showing direct connection or overlapping barriers. The Design-Builder shall provide minimum overlap lengths of four times the offset between noise barriers. The offset shall be a minimum of 10 feet.

The Design-Builder shall ensure positive drainage for ground-mounted, barrier-mounted, and free-standing barrier installations.

Existing noise barriers that will be retained shall be repaired to replace any missing or damaged panels, posts, or foundations.

22.3.3 Noise Barrier Access

The Design-Builder shall provide a maintenance vehicle access envelope in front of or behind all new noise barriers. The roadway shoulder may be used for the maintenance vehicle access envelope provided that:

1. The shoulder is a minimum of 10 feet wide.
2. The noise barrier is located within 10 feet of the back of the roadside safety device protecting the noise barrier.
3. The height difference between the edge of paved shoulder and the bottom of noise barrier at ground level is less than 5 feet in fill sections.
4. The slope between the roadside safety device and the noise barrier is 4:1 or flatter as measured transversely from the envelope.

Where the maintenance vehicle access envelope is not located on the shoulder, the maintenance vehicle access envelope shall meet the following requirements:

1. Minimum width of 10 feet.
2. Minimum vertical clearance of 12 feet.
3. Sloped 4:1 or flatter as measured transversely from the envelope.
4. Be free of obstructions
5. Provide access to and from the roadway such that the maintenance design vehicle can exit and re-enter the roadway:
    a. Without backing into the travel lanes; and
    b. Without driving more than 100 feet backwards along the maintenance vehicle access envelope.
    c. Maintenance design vehicle:
        1) Roadways with a minimum 10-foot-wide paved shoulder for a minimum of 200 feet in length past the maintenance vehicle access envelope driveway: 32-foot service vehicle.
        2) Other roadways: 32-foot service vehicle with a 30-foot trailer.
6. Maintenance vehicle access envelope shall not be used for access to non-GDOT utilities or as a shared-use path.
7. Maintenance vehicle access envelope shall not be required to be paved and may be graded to drain and grassed.

The Design-Builder shall not be required to provide maintenance vehicle access envelopes for noise barriers to remain. The Design-Builder shall replace any vehicle accessible area impacted by the Work for existing noise barriers to remain.

Regardless of the maintenance vehicle access envelope location, access doors shall be provided:

1. Within 200 feet of each end of each bridge and bridge culvert.
2. To provide access to utilities, ITS equipment, strain poles, sign gantries, bridge columns, and other ancillary roadway features as coordinated with GDOT.
3. A minimum of one access door every 1,000 feet for emergency personnel access.

Access doors shall not be located in noise barriers mounted to bridges, retaining walls, or where a steep (2:1 or steeper) drop-off of the final grade is within 10 feet of the noise barrier. In lieu of access doors, gaps may be provided in the walls with an offset overlap adequate to meet the noise mitigation requirements. All access doors shall be double-door type. The Design-Builder shall provide GDOT with proper accessibility by providing keys to the doors.

22.4 Construction Requirements

Noise barriers shall be constructed as early as possible in the Construction Phase to shield adjacent properties from construction-related noise impacts. Existing noise barriers shall remain in place unless written justification for removal by required construction activities or other identified safety concerns is accepted by GDOT. Where existing noise barriers are proposed to

be removed prior to construction of new noise barriers, alternative noise abatement measures shall be provided, subject to GDOT review and acceptance, prior to construction. An Existing Noise Barrier Removal and Replacement Plan, including a schedule of existing noise barrier demolition activities and installation of proposed noise barriers, shall be submitted to GDOT.

The Design-Builder shall begin construction of new noise barrier walls within 60 days of the start of demolition of an existing noise barrier wall unless otherwise approved by GDOT. The Design-Builder shall complete construction of any new noise barrier wall intended to replace an existing noise barrier wall within 180 days from the start of demolition of the existing noise barrier wall, unless otherwise approved by GDOT.

22.5 Submittals

With respect to noise barrier requirements described in this TP Section 22, the Design-Builder shall comply with TP Section 2.9 (Submittals).

23 RESERVED