GEORGIA DEPARTMENT OF TRANSPORTATION
DESIGN-BUILD AGREEMENT
FOR
THE STATEWIDE ITS DMS DEPLOYMENT DESIGN-BUILD PROJECT
PI NO. 0017389

Dated Advertisement: October 2, 2020

Amendment 1: November 18, 2020

Letting Date: December 18, 2020

Between
Georgia Department of Transportation,
State of Georgia
and
Brooks Berry Haynie & Associates, Inc.
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DESIGN-BUILD AGREEMENT  
Statewide ITS DMS Deployment Design-Build PROJECT

This Design-Build Agreement for the Statewide ITS DMS Deployment Project (this “Agreement”, or “DB Agreement”, or the “DBA”) is entered into and effective as of December 18, 2020 by and between the Georgia Department of Transportation (“GDOT”), an agency of the State of Georgia, and Brooks Berry Haynie & Associates, Inc., a Georgia corporation (“DB Team”).

RECIPIENTS

A. Pursuant to Section 32-2-81 (c) of the Official Code of Georgia Annotated (the “Code”), 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 Section 32-2-81 of the Code, “the term ‘design-build procedure’” means a method of contracting under which the Department 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 project delivery time can be attained.”

C. On October 2, 2020, GDOT issued an RFP with respect to the Project.

D. On December 10, 2020, GDOT received responses to the RFP, as amended, including the response of DB Team (the “Proposal”).

E. As part of the RFP, GDOT required Proposers commit to entering into an Agreement with GDOT for the design and construction of the Project.

F. GDOT evaluated and determined the DB Team was the qualified Proposer with the lowest responsive price based on the selection criteria contained in the RFP.

NOW, THEREFORE, in consideration of the Work to be performed by DB Team, and DB Team’s obligations with respect thereto, the foregoing premises and the covenants and agreements set forth herein, the Parties hereby agree as follows:

Article 1  DEFINITIONS; DB DOCUMENTS; ORDER OF PRECEDENCE; PRINCIPAL PROJECT DOCUMENTS

1.1 Acronyms and Definitions

Acronyms and definitions for certain terms used in this Agreement and the other DB Documents are contained in Exhibit 1 (Acronyms and Definitions). Other definitions may be identified within the text of the DB Documents.
1.2 DB Documents; Order of Precedence

Each of the DB Documents is an essential part of the agreement between the Parties. The DB Documents are intended to be complementary and to be read together with this Agreement as a complete agreement. Each of the DB Documents (other than this Agreement) is hereby expressly incorporated herein by reference.

1.2.1 Subject to Article 1.2.2, in the event of any conflict, ambiguity or inconsistency among the DB Documents, the order of precedence, from highest to lowest, shall be as follows:

1.2.1.1 Supplemental Agreements, Agreement amendments, and all exhibits, riders, and attachments thereto;

1.2.1.2 The Agreement (also referred to as Volume 1) and all exhibits thereto other than Exhibit 2 (Key Personnel and Other Proposal Commitments), and Exhibit 5 (Proposal SOV);

1.2.1.3 Exhibit 2 (Key Personnel and Other Proposal Commitments), and Exhibit 5 (Proposal SOV);

1.2.1.4 Volume 2 “Technical Provisions for Design-Build Agreement” amendments, and all exhibits and attachments to such amendments;

1.2.1.5 Volume 2 “Technical Provisions for Design-Build Agreement”, and all exhibits and attachments to the Technical Provisions;

1.2.1.6 Volume 2, Attachment 3-1 “Manuals” (Technical Documents) amendments; provided that GDOT in its sole discretion may designate that such amendments or portions thereof take precedence over the Technical Provisions to the extent provided in Article 7.2.5;

1.2.1.7 Volume 2, Attachment 3-1 “Manuals” (Technical Documents);

1.2.1.8 The DB Team’s Proposal, including DB Team’s Schematic Plan of Project; provided that certain provisions therein shall supersede the specified provisions of the other DB Documents.

1.2.2 If the Proposal, including DB Team’s Schematic Plan of Project, includes statements, offers, terms, concepts or designs that can reasonably be interpreted as offers to provide higher quality items than otherwise required by the other DB Documents or to perform services or meet standards in addition to or better than those otherwise required, or otherwise contains terms or designs which are more advantageous to GDOT than the requirements of the other DB Documents, as reasonably determined in its sole discretion by GDOT, then DB Team’s obligations hereunder shall include compliance with all such statements, offers, terms, concepts and designs, which shall have the priority of Agreement amendments (Article 1.2.1.1) and Technical Provisions amendments (Article 1.2.1.4), as applicable.
1.2.3 If the DB Documents contain differing provisions on the same subject matter, the provisions that establish the higher quality manner or method of performing the Work or use more stringent standards will prevail. Additional details in a lower priority DB Document shall be given effect except to the extent they irreconcilably conflict, as determined at GDOT’s sole discretion, with requirements, provisions and practices contained in the higher priority DB Document.

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 one or more manual(s) or publication(s) referenced within a DB Document or set of DB Documents with the same order of priority (including within documents referenced therein), the standard, criterion, requirement, condition, procedure, specification or other provision offering higher quality or better 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 DB Document of differing priorities, the order of precedence set forth in Article 1.2.1 will apply. If either Party becomes aware of any such conflict, it shall promptly notify the other party of the conflict in writing. If the DB Team notifies GDOT of a potential conflict, GDOT shall determine if a conflict does exist and if the order of precedence does not determine which takes precedence, GDOT shall promptly issue a written determination respecting which of the conflicting provisions is to be applied.

1.3 Construction and Interpretation of the DB Documents

1.3.1 The headers or captions of the Articles of this Agreement and Sections in the other DB Documents are for convenience only and shall not be deemed part of this Agreement or the DB Documents or considered in construing this Agreement or the DB Documents.

1.3.2 The language in all parts of the DB 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 DB 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 DB 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 DB Documents. Accordingly, in the event of an ambiguity in or Dispute regarding the interpretation of the DB Documents, the DB Documents shall not be interpreted or construed against the Party preparing it, and instead other rules of interpretation and construction shall be utilized. GDOT’s final answers to the questions posed during the Proposal preparation process for this Agreement shall in no event be deemed part of the DB Documents and shall not be relevant in interpreting the DB Documents except as they may clarify provisions otherwise considered ambiguous.

1.3.3 Reserved
1.3.4 All terms defined in the DB Documents 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 Agreement unless the context thereof clearly requires the contrary.

1.3.5 Unless otherwise stated in this Agreement or the other DB Documents, words that have well-known technical or construction industry meanings are used in this Agreement or the other DB Documents in accordance with such recognized meaning.

1.3.6 Wherever the word “including,” “includes” or “include” is used in the DB Documents, it shall be deemed to be followed by the words “without limitation”.

1.3.7 Wherever reference is made in the DB Documents to a particular Governmental Entity, it includes any public agency succeeding to the powers and authority of such Governmental Entity.

1.3.8 As used in this Agreement and the other DB 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.

1.4 Reserved

1.5 Reference Information Documents

1.5.1 DB Team acknowledges that GDOT has provided and disclosed to DB Team the Reference Information Documents (“RIDs”). The RIDs are not mandatory or binding on DB Team. DB Team is not entitled to rely on the RIDs as presenting design, engineering, operating or maintenance solutions or other direction, means or methods for complying with the requirements of the DB Documents, Governmental Approvals or Law.

1.5.2 Except as expressly set forth herein, DB Team acknowledges that GDOT neither represents nor warrants that the information contained in the RIDs is complete or accurate or that such information is in conformity with the requirements of the DB Documents, Governmental Approvals or Laws, and GDOT is neither responsible or liable in any respect for any causes of action, claims or Losses whatsoever suffered by DB Team or any DB Team-Related Entity by reason of any use of information contained in, or any action or forbearance in reliance on, the RIDs.

1.6 Errata to the GDOT Standard Specifications

In interpreting standards, policies and specifications referenced in the latest edition of the GDOT Standard Specifications, Construction of Transportation Systems, as well as the Manuals listed in Volume 2 (Technical Provisions for Design-Build Agreement), Attachment 3-1 (Manuals), the following apply:

(a) References to the “Department” shall mean GDOT.

(b) References to the “Contractor” shall mean the DB Team.
(c) References to “Resident Engineer” or “Engineer” in the context of the provider of compliance judgment may mean the Design Quality Assurance Manager or Engineer of Record, as applicable, or it may mean a GDOT representative, or any combination thereof, depending on the context, and as determined by GDOT in its sole discretion and without recourse for the DB Team.

(d) References to the “Contract” shall mean the DB Documents.

(e) References to “plan(s)” shall mean the DB Documents.

(f) References to “The Work” shall mean the Work.

(g) Cross-references to measurement and payment provisions contained in the referenced standards, policies and specifications shall be deemed to refer to the measurement and payment provisions contained in the DB Documents.

(h) Any conflicts, ambiguities, or lack of clarity in regard to items included in the provisions, terms, or definitions used will be interpreted and defined by GDOT in its sole discretion. The DB Team shall not take advantage of any apparent conflict, omission, ambiguity, inconsistency, inaccuracy, deficiency, or inadequacy related to the application of a requirement, action to be taken, or the definition of roles and responsibilities in the execution of the Work. Should it appear that any definition of roles and responsibilities is contrary to the philosophy of those established by the Agreement, it is the responsibility of the DB Team to request a determination by GDOT related to the respective roles and responsibilities of the DB Team and GDOT.

Article 2   GRANT OF AUTHORITY AND RIGHT OF WAY

2.1 Grant of Authority for Undertaking

2.1.1 GDOT hereby grants to DB Team the revocable right, and DB Team accepts the obligation, to design and construct (including any maintenance obligations during such period as required pursuant to the DB Documents) the Project in accordance with the requirements of this Agreement and the other DB Documents.

2.2 Right of Way; Construction Easement; Ownership

2.2.1 The Project shall be constructed on and within the property as identified in the NEPA Approval and any amendment thereto (the “Property”). GDOT shall provide DB Team with access rights to the Property, together with the Existing Right of Way as set forth in this Article 2.2 (Right of Way; Construction Easement; Ownership).

2.2.1.1 Reserved

2.2.1.2 GDOT reserves the right to enter upon, possess, control and utilize the Property with or without payment of compensation to DB Team in accordance with this Agreement.
2.2.1.3 GDOT has granted, and has further reserved the right to grant, to other parties, utility and other permits and easements and modifications thereto and rights of use to the Property subject to the limitations of the DB Documents.

2.2.2 Existing Right of Way

2.2.2.1 Upon the terms and conditions of this Agreement, including as set forth in this Article 2.2, and subject to the terms and conditions of the DB Documents, as of the Effective Date, GDOT shall and does, subject to and upon issuance of NTP 1:

(a) grant to DB Team a non-exclusive right of access, ingress and egress (and the right to grant to DB Team-Related Entities a non-exclusive right of access, ingress and egress) to all real property comprising the Existing Right of Way, subject to the exclusions and reservations set forth in this Agreement, in accordance with the terms described in the DB Documents.

2.2.2.2 DB Team represents that it has reviewed the Existing Right of Way and confirmed that the access rights to the property and timing for the grant of such rights as identified therein are sufficient and complete so as to allow DB Team access to all areas of the Property as required for the performance and completion of the Work.

Article 3 CONTRACT TIME

3.1 Term of Agreement

This Agreement shall remain in effect until Final Acceptance, subject to the survival of all such obligations as expressly provided herein, including without limitation, any warranty periods (the “Term”); provided that this Agreement shall be subject to earlier termination in accordance with the terms of this Agreement and the DB Documents.

3.2 Project Schedule

3.2.1 As a material consideration for entering into this Agreement, DB Team hereby commits, and GDOT is relying upon DB Team's commitment, to develop, design and fully construct the Project in accordance with the milestones and time periods set forth in this Agreement and the other DB Documents, including without limitation, in the Technical Provisions, the Project Schedule and Completion Deadlines, subject only to delays caused by Relief Events specifically provided hereunder.

3.2.2 The time limitations set forth for DB Team’s performance of its covenants and obligations as required pursuant to the DB Documents, including without limitation performance of the Work as required pursuant to the Completion Deadlines, and Project Schedule, are of the essence, and except where this Agreement expressly provides for extension of time due to a Relief Event or Compensation Event, DB Team waives any right at law or in equity to
tender or complete performance beyond the applicable time period, or to require GDOT to accept such performance. All references to days shall mean Calendar Days unless otherwise specified.

3.2.3 DB Team shall achieve the Substantial Completion on or before the Substantial Completion Deadline and Final Acceptance on or before the Final Acceptance Deadline, time being of the essence.

3.2.4 DB Team hereby represents and warrants that the Project Schedule is in the form described in the Technical Provisions, has been developed in accordance with Volume 2, Section 2.5 (Project Schedule Requirements), and is consistent with the Milestone Deadlines set forth in Exhibit 9 to this Agreement. DB Team shall use the Proposal Schedule as a foundation to prepare the Baseline Project Schedule for GDOT’s review and approval, as set forth in Section 2.5 of the Technical Provisions. The Parties shall use the Proposal Schedule for planning and monitoring the progress of the Work until such time that the Baseline Project Schedule is approved by GDOT. The proposed Baseline Project Schedule shall be consistent with the Proposal Schedule and Milestone Deadlines except to the extent adjustments are allowed as provided in the DB Documents and as approved by GDOT.

3.2.5 All Float contained in the Project Schedule shall be considered a shared resource among GDOT and the DB Team, available to any or all such parties as needed to absorb delay caused to the Critical Path components as set forth in the Project Schedule or Milestone Deadlines, whether on account of Relief Events or other events of delay not constituting Relief Events. All Float shall be shown as such in the Project Schedule on each affected schedule path. GDOT shall have the right to examine the identification of (or failure to identify) Float on the Project Schedule in determining whether to approve or accept the Project Schedule. Once identified, DB Team shall monitor and account for Float in accordance with Critical Path methodology.

3.3 Contract Time, Date of Commencement, and Notice to Proceed

3.3.1 DB Team’s time period for completion of the Work is the period from the day after issuance of NTP 1 through the Final Acceptance Date, as may be adjusted for any Relief Event as expressly provided in the Agreement (the “Contract Time”). All Work shall be performed in accordance with the Milestone Deadlines attached as Exhibit 9 (Milestone Deadlines).

3.3.1.1 GDOT anticipates issuing NTP 1 promptly following the Effective Date, and shall in any case provide for issuance of NTP 1 within 30 days from DB Team’s satisfaction of the conditions for execution of the Agreement. Issuance of NTP 1 authorizes DB Team to commence preliminary design activities in accordance with 23 CFR § 636.103. Prior to completion of the Environmental Documents review process, any such preliminary engineering and other activities and analyses are at the DB Team’s sole risk and shall not materially affect the objective consideration of alternatives in the Environmental Documents review process. Preliminary design activities shall be completed in accordance with the Management Plans, the Technical Provisions, and other
activities anticipated to be performed after NTP 1, including satisfying the conditions to issuance of NTP 3 under Article 3.3.1.3.

3.3.1.2 Issuance of NTP 2 authorizes the DB Team to perform all NTP 1 activities, Final Design activities, and any other activities required for start of the Construction Work in accordance with 23 CFR § 636.103. NTP 2 will be issued once the Environmental Documents are approved, or with NTP 1 if the Environmental Documents have been approved by the Agreement execution date.

3.3.1.3 Issuance of NTP 3, also referred to as Released for Construction ("RFC"), authorizes DB Team to perform all other Work and activities pertaining to the Project, subject to conforming RFC Plans as may be related to commencement of any Element of the Construction Work. DB Team may not proceed to commence any construction activity with respect to the Project except as authorized pursuant to an RFC. An RFC may be issued for the entire Project or any Construction Phase of the project. GDOT anticipates issuing NTP 3 within five Business Days from DB Team’s satisfaction of the following conditions:

(a) Submittal by DB Team to GDOT and acceptance by GDOT of the Quality Management Plan in accordance with Article 9 (Management Systems and Oversight) of this Agreement and Volume 2, Section 2.3 (Quality Management Requirements);

(b) Submittal by DB Team to GDOT and acceptance by GDOT of DB Team’s Safety Plan under Volume 2, Section 2.4 (Safety and Security);

(c) Submittal by DB Team to GDOT and acceptance by GDOT of DB Team’s Released for Construction Plans for the phases of the Project under Volume 2, Section 3 (Design and Submittals);

(d) Submittal by DB Team to GDOT and acceptance by GDOT of DB Team’s proposed Schedule of Values under Volume 2, Section 2.6 (Payments Requests and Payment);

(e) Submittal by DB Team to GDOT and acceptance by GDOT of the DB Team’s proposed Baseline Project Schedule under Volume 2, Section 2.5 (Project Schedule Requirements);

(f) Submittal by DB Team to GDOT and acceptance by GDOT of DB Team’s Traffic Control Plan under Volume 2, Section 18.3 (Design Requirements) for the approved Project Phase;

(g) Submittal by DB Team to GDOT and acceptance by GDOT of DB Team’s Construction Phasing and Staging Plan of Project, as applicable, under Volume 2, Section 2.2.4 (Construction Phasing and Staging Plan);
3.3.1.4 Notwithstanding any provision to the contrary in this Article 3.3 (Contract Time, Date of Commencement, and Notice to Proceed), DB Team shall not perform, nor be obligated to perform, any portion of the Work prior to issuance of approval of the Environmental Documents, except for Work authorized under 23 C.F.R. 636.103, Preliminary Work.

3.3.2 DB Team shall satisfy all conditions prior to issuance of NTP 3. DB Team shall satisfy all conditions to commencement of the Construction Work and commence such Construction Work with diligence and continuity, by the deadlines therefor set forth in Milestone Deadlines attached as Exhibit 9, and any adjustments set forth therein, all as the same may be extended pursuant to this Agreement.

3.3.3 Prior to the start of any Construction Work, the DB Team shall satisfy conditions set forth in Volume 2, Section 2 (Project Management) and Volume 2, Section 3 (Design and Submittals).

Article 4 CONTROL OF THE WORK

4.1 DB Team Quality Management

The DB Team shall perform the quality control, that is all operation techniques and activities performed or conducted to fulfill the contract requirements, and quality management necessary to meet its obligations under the DB Documents and in accordance with GDOT Standard Specification 105.
4.2 Reserved

4.3 Reserved

4.4 Limitations on DB Team’s Right to Rely

4.4.1 No review, comment, objection, rejection, acceptance, disapproval, certification (including certificates of Substantial Completion and Final Acceptance), concurrence, monitoring, testing, verification sampling, inspection, spot checking, auditing or other oversight by or on behalf of GDOT or their representatives or agents, or lack thereof by GDOT, or their representatives or agents, shall constitute acceptance of materials or Work or waiver of any legal or equitable right under the DB Documents, at Law, or in equity. GDOT shall be entitled to remedies for Nonconforming Work and to identify additional Work which must be done to bring the Work and Project into compliance with requirements of the DB Documents, regardless of whether previous review, comment, objection, rejection, acceptance, disapproval, certification, concurrence, monitoring, testing, inspection, spot checking, auditing or other oversight were conducted or given by GDOT, or their representatives or agents. Regardless of any such activity or failure to conduct any such activity by GDOT, or its representatives or agents, DB Team at all times shall have an independent duty and obligation to fulfill the requirements of the DB Documents. DB Team agrees and acknowledges that any such activity or failure to conduct any such activity by GDOT, or their representatives or agents:

(a) is solely for the benefit and protection of GDOT;

(b) does not relieve DB Team of its responsibility for the selection and the competent performance of all DB Team-Related Entities;

(c) does not create or impose upon GDOT any duty or obligation toward DB Team to cause it to fulfill the requirements of the DB Documents;

(d) shall not be deemed or construed as any kind of warranty, express or implied, by GDOT;

(e) may not be relied upon by DB Team or used as evidence in determining whether DB Team has fulfilled the requirements of the DB Documents;

(f) may not be asserted by DB Team against GDOT as a defense, legal or equitable, to, or as a waiver of or relief from, DB Team’s obligation to fulfill the requirements of the DB Documents; and

(g) shall not be deemed or construed as any assumption of risk by GDOT as to the quality of Work or materials.

4.4.2 DB Team shall not be relieved or entitled to reduction of its obligations to perform the Work in accordance with the DB Documents, or any of its other liabilities and obligations, including its indemnity obligations, as the result of any
activity identified in Article 4.4.1 or failure to conduct any such activity by GDOT. Such activity by GDOT shall not relieve DB Team from liability for, and responsibility to cure and correct Nonconforming Work or DB Team Defaults.

4.4.3 To the maximum extent permitted by Law, DB Team hereby releases and discharges GDOT from any and all duty and obligation to cause DB Team’s Work or the Project to satisfy the standards and requirements of the DB Documents. GDOT is an intended third-party beneficiary of this Article 4.4 (Limitations on DB Team’s Right to Rely).

4.4.4 Notwithstanding the provisions of Articles 4.4.1, 4.4.2 and 4.4.3:

(a) DB Team shall be entitled to rely on written approvals, acceptances, lack of responses from GDOT (i) for the limited purpose of establishing that the approval, acceptance or lack of response occurred or (ii) that are within its sole discretion, but only to the extent that DB Team is prejudiced by a subsequent decision of such party to rescind such approval or acceptance;

(b) DB Team shall be entitled to rely on the certificates of Substantial Completion and Final Acceptance from GDOT for the limited purpose of establishing that Substantial Completion and Final Acceptance, as applicable, have occurred, and the respective dates thereof;

(c) GDOT is not relieved from any liability arising out of a knowing and intentional material misrepresentation under any written statement GDOT delivers to DB Team; and

(d) GDOT is not relieved from performance of its express responsibilities under the DB Documents in accordance with all standards applicable thereto.

4.5 Reserved

4.6 Oversight by GDOT

4.6.1 GDOT shall independently 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 (a) to comply with U.S. Army Corps of Engineers or other applicable federal agency requirements, and (b) to verify on an audit basis DB Team’s compliance with the DB Documents and Management Plans as provided in Article 22.2 (Audits).

4.6.2 DB Team acknowledges and agrees that GDOT will have the right to audit, monitor and inspect DB Team and its Contractors compliance with Good Industry Practice and its responsibilities and obligations under the DB Documents.
4.6.3 GDOT will not conduct formal prior reviews of Design Documents except to the extent necessary or advisable, provided that the aforementioned shall not limit GDOT’s rights pursuant to this Agreement. GDOT reserve the right to conduct “over-the-shoulder” reviews of Design Documents or other Submittals as they may deem necessary or appropriate, including pursuant to Article 17.3.8 (Increased Oversight, Testing, and Inspection), provided that they shall not have any obligation to conduct such reviews nor assume any responsibility for DB Team’s Work, regardless of whether or not electing to perform or performing any such “over-the-shoulder” reviews.

4.6.4 Nothing in the DB Documents shall preclude, and DB Team shall not interfere with, any review, audit or oversight of Submittals, Work or books and records that the GDOT may desire to conduct.

4.7 Rights of Cooperation and Access; Increased Oversight

4.7.1 DB Team shall coordinate and cooperate, and require its Contractors to coordinate and cooperate, with GDOT and any such parties as provided in Article 4.6 (Oversight by GDOT) to facilitate the full, efficient, effective and timely performance of all such monitoring, inspection, sampling, measuring, testing, reporting, auditing, and other oversight functions. DB Team shall cause its representatives to be available at all reasonable times for consultation with GDOT and such other parties as required.

4.7.2 Without limiting the foregoing and subject to GDOT complying with DB Team’s reasonable safety requirements, DB Team shall afford GDOT:

(a) safe and unrestricted access to the Project at all times,

(b) safe access during normal business hours to DB Team’s Project offices and operations buildings,

(c) safe access during normal business hours to the Project Specific Locations and

(d) unrestricted access to data respecting the Project design, construction, operations and maintenance, and the Utility Adjustment Work.

Without limiting the foregoing, DB Team shall deliver to GDOT upon request accurate and complete books, records, data and information regarding Work, the Project and the Utility Adjustment Work, in the format required by the Technical Provisions.

4.7.3 GDOT shall have the right to increase the type and level of their oversight as provided in Article 4.6 Oversight by GDOT and Article 17.3.8 (Increased Oversight, Testing, and Inspection).
4.8 Limits of Responsibility for Oversight, Review, Recommendations, Inspection and Acts by GDOT

4.8.1 Although GDOT, and its representatives and agents, may consult with DB Team during the course of the Work, no such party shall have control over, charge of, or responsibility for any of the Work, including without limitation, any design or engineering thereof, or means, methods, techniques, sequences or procedures in connection therewith, nor shall any such party be responsible for DB Team’s failure to perform the Work in accordance with the requirements of the DB Documents. Any such review is not for the purpose of determining the accuracy and completeness of information or work product, all of which are DB Team’s responsibility. Any review, recommendation, acceptance, inspection, response, act or omission with respect to any Submittals, or with respect to the Project, the Work (whether Construction Work or Design Work), or the Construction Documents shall be pursuant to, and solely in furtherance of the inspection powers as set forth in O.C.G.A. § 50-21-24(8).

4.8.2 DB Team shall, at all times and notwithstanding any such acts or omissions by GDOT as provided in this Article 4 (Control of the Work) or elsewhere in this Agreement, be fully responsible for all architectural design and engineering required for the Project. DB Team expressly waives and releases (a) all claims for right of contribution against either GDOT, or its respective representatives and agents, other than for such parties’ sole negligence, arising from or related to any third-party claims, including without limitation for personal injury, death, or property damage, and (b) all claims and defenses by DB Team against either GDOT, or its respective representatives and agents in derogation of the limitations of this Article 4, including this Article 4.8 (Limits of Responsibility for Oversight, Review, Recommendations, Inspections and Acts by GDOT), and/or that any or all of such parties otherwise have, or by their acts or omissions, assumed any responsibility for, or related to, the design or construction of the Project, or any means, methods, or techniques in respect thereof. DB Team hereby further expressly waives any claim or defense the basis of which is to assert that GDOT may not delegate the responsibility for any Element of the design and construction of the Project involving public roadways, signs, or traffic controls to DB Team as provided in this Agreement.

Article 5 CONTRACT SUM, PAYMENTS, AND PUBLIC FUNDS

5.1 Payment of Contract Sum

5.1.1 GDOT shall pay DB Team the Contract Sum for Work properly performed in accordance with the DB Documents. DB Team, in consideration for all Work performed in accordance with the DB Documents, shall be entitled to receive the Contract Sum, which amount is inclusive of all fees, overhead, profit, insurance and bond premiums, labor and material costs, installations, delivery, warehouse and handling charges, duties, taxes and other assessments.
5.2 Reserved

5.3 Reserved

5.4 GDOT Monetary Obligations and Overall Limitation of Liability

5.4.1 Notwithstanding anything to the contrary in the DB Documents, in no event shall GDOT’s outstanding liability to DB Team under the DB Documents, including liability related to Compensation Events and Compensation Amounts, exceed the amount of compensation that would be payable to DB Team pursuant to a Termination for Convenience under Article 19.1 (Termination for Convenience).

5.4.2 The payment of any moneys owed by GDOT under the DB Documents, including without limitation amounts payable in connection with a termination, upon the occurrence of a GDOT Event of Default, or in any suit for monetary damages alleging breach of this Agreement by GDOT, shall be limited to funds available to GDOT for such payments.

5.4.3 Reserved

5.4.4 Reserved

Article 6 PROJECT PLANNING AND ACCEPTANCES; PROJECT ADMINISTRATION, REVIEW AND OVERSIGHT; PUBLIC INFORMATION

6.1 Preliminary Planning and Engineering Activities; Site Conditions

6.1.1 DB Team shall perform or cause to be performed all architectural and engineering activities appropriate for design and construction of the Project in accordance with Good Industry Practice and the DB Documents, which may include, subject to the scope of Work set forth in the DB Documents or as required by GDOT by Supplemental Agreement or Directive Letter:

(a) Utility Adjustments;
(b) technical studies and analyses;
(c) geotechnical investigations;
(d) right of way mapping, surveying and appraisals;
(e) Subsurface Utility Engineering (SUE) investigations and mapping;
(f) Hazardous Materials investigations; and
(g) design and construction surveys.

6.1.2 Except to the extent that DB Team is entitled to a Relief Event and/or a Compensation Event under this Agreement, DB Team 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 architectural and engineering activities conducted by DB Team, GDOT, or any other Person. DB Team acknowledges and agrees that GDOT makes no warranties or representations as to any surveys, data, reports or other information provided by GDOT or other Persons concerning surface conditions and subsurface conditions, including the presence of Utilities, Hazardous Materials, contaminated groundwater, archeological, paleontological and cultural resources, and Threatened or Endangered Species, affecting the Site, the Existing Improvements, or surrounding locations. DB Team acknowledges that such information is for DB Team’s reference only and has not been verified.

6.1.3 Except to the extent that DB Team is entitled to a Relief Event and/or a Compensation Event under this Agreement, DB Team shall bear the risk of all conditions occurring on, under or at the Site and the Existing Improvements, including (a) physical conditions of an unusual nature, differing materially from those ordinarily encountered in the area, (b) changes in surface topography, (c) variations in subsurface moisture content, (d) Utility facilities, (e) the discovery at, near or on the Property of any archeological, paleontological or cultural resources, and (f) the discovery at, near or on the Property of any Threatened or Endangered Species.

6.2 Governmental Approvals and Third-Party Agreements

6.2.1 GDOT retains responsibility for obtaining all Provided Approvals based on the design schematic contained in the NEPA Approvals. GDOT shall deliver to DB Team true and complete copies of all Provided Approvals. DB Team shall obtain all other Governmental Approvals and, except to the extent the DB Documents expressly provide GDOT is responsible therefor, all third-party approvals and agreements required in connection with the Project or the Work, including any modifications, renewals and extensions of the Provided Approvals (including those required in connection with a Compensation Event). DB Team shall deliver to GDOT true and complete copies of all new or amended Governmental Approvals and third-party approvals and agreements. In no event shall GDOT be responsible or liable for any delays in obtaining Provided Approvals to the extent such delays are caused by differences between the schematic contained in the NEPA Approvals and DB Team’s Final Design, unless such differences are due to a GDOT 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), DB Team shall submit the same, together with any supporting environmental studies and analyses, to GDOT (a) for acceptance or (b) for review and comment, as specified in Table 4-2 (GDOT-Led Environmental Preparation and Approval).

6.2.3 Except as expressly set forth in this Agreement to the contrary, in the event DB Team’s design differs from the schematic contained in the approved Environmental Documents upon which the Provided Approvals were based, as among GDOT and DB Team, DB Team shall support necessary actions, and shall bear all risk of delay, resulting from or arising out of any associated change in the Project location and design, including (a) conducting all necessary environmental studies and preparing all necessary Environmental Documents in
compliance with applicable Environmental Laws, and (b) obtaining and complying with all necessary new Governmental Approvals (including any modifications, renewals and extensions of the Provided Approvals, and other existing Governmental Approvals). GDOT will independently evaluate all environmental studies and documents and fulfill the other responsibilities assigned to them by 23 CFR Part 771.

6.2.4 Subject to clauses of Article 14.2 (Compensation Events) and clauses of Article 14.1 (Relief Events) and except to the extent required under the Technical Provisions, in the event DB Team is unable to obtain necessary Governmental Approvals for any design that differs from the schematics contained in the approved Environmental Documents upon which Provided Approvals were based, DB Team shall be obligated to design and construct the Project according in compliance with the requirements of the Provided Approvals, and no such circumstance shall constitute a Relief Event or Compensation Event.

6.2.5 At DB Team’s request, GDOT shall reasonably assist and cooperate with DB Team 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 DB Team under the DB Documents.

6.2.5.1 GDOT and DB Team 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 DB Team 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 subpart (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 any DB Team Release(s) of Hazardous Material.

6.2.6 DB Team 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 DB Documents or Governmental Approvals and including payment of mitigation credits and any other fees required for Governmental Approvals, except to the extent that responsibility for performance of such measures and payment is expressly assigned to GDOT in the DB Documents.

6.2.7 In the event that any Governmental Approvals required to be obtained by DB Team must formally be issued in GDOT’s name, DB Team shall undertake necessary efforts to obtain such approvals subject to GDOT’s reasonable cooperation with DB Team, as the case may be, at DB Team’s expense (except in connection with a Compensation Event), in accordance with Article 6.2.5, including execution and delivery of appropriate applications and other documentation in form accepted by GDOT. Refer to Volume 2, Section 4.2
(Administrative Requirements) for more specific provisions on applications in GDOT’s name for Environmental Approvals.

6.2.8 In the event that GDOT must act as the lead agency and directly coordinate with a Governmental Entity in connection with obtaining Governmental Approvals which are the responsibility of DB Team, DB Team shall provide all necessary support to facilitate the approval, mitigation or compliance process. Such support may include conducting necessary field investigations, surveys, and preparation of any required reports, documents and applications.

6.2.9 DB Team shall be responsible for compliance with all applicable Laws in relation to Project Specific Locations and Additional Properties for obtaining any Environmental Approval or other Governmental Approval required in connection with Project Specific Locations.

6.2.10 DB Team 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 accepts in writing in its sole discretion. DB Team has no power or authority to enter into any such agreement with a third party in the name or on behalf of GDOT.

6.3 Review and Oversight

6.3.1 Submittal, Review and Acceptance Terms and Procedures

6.3.1.1 This Article 6.3 (Review and Oversight) sets forth uniform terms and procedures that shall govern all Submittals pursuant to the DB Documents and component plans thereunder. In the event of any irreconcilable conflict between the provisions of this Article 6.3 and any other provisions of the DB Documents and component plans thereunder concerning submission, review and acceptance, rejection, or approval procedures, this Article 6.3 shall exclusively govern and control, except to the extent that the conflicting provision expressly states that it supersedes this Article 6.3.

6.3.2 Time Periods

6.3.2.1 Except as expressly set forth elsewhere in the DB Documents or as provided below, whenever GDOT is entitled to review and comment, or accept a Submittal, GDOT shall promptly respond within 30 days from the date it receives an accurate and complete Submittal, accuracy and completeness shall be at GDOT’s sole discretion, together with a completed transmittal form, in form to be mutually agreed upon, and all necessary information and documentation concerning the subject matter included. Any period of review by GDOT more than 30 days, or as specifically set forth elsewhere in the DB Documents.
providing for a different time period, may be deemed a GDOT Caused-Delay and give rise to Relief Event, subject to the provisions and satisfying all DB Document requirements for Relief Events. The time periods set forth in the DB Documents for GDOT’s review and acceptance or approval of Submittals, as and to the extent required shall apply to and restart with all re-submittals or if additional information or documentation is required to complete a Submittal which DB Team may be required to provide.

6.3.2.2 The time periods set forth herein with respect to GDOT’s review and acceptance, rejection, or approval, or comment on Submittals shall be subject to adjustment as provided in Volume 2, Section 3 (Design and Submittals) for multiple concurrent Submittals.

6.3.2.3 All time periods for GDOT to act upon Submittals shall be extended by the period of any delay caused by any Relief Event impacting same, including as set forth in clauses of Article 14.1 (Relief Event) or otherwise as and to the extent of any delay of DB Team or any DB Team-Related Entity.

6.3.2.4 During any time that GDOT is entitled under Article 17.3.8 (Increased Oversight, Testing, and Inspection) to increase the level of its auditing, monitoring, inspection, sampling, measuring, testing and oversight of the Project, the Utility Adjustments and DB Team’s compliance with its obligations under the DB Documents, the applicable period for GDOT to act on any Submittals received during such time and not related to curing the DB Team Default(s) that instigated the Article 17.3.8 action shall automatically be extended by 14 days.

6.3.2.5 GDOT shall endeavor to reasonably accommodate a written request from DB Team for expedited action on a specific Submittal, within the practical limitations on availability of personnel appropriate for acting on the types of Submittal in question; provided DB Team sets forth in its request specific, abnormal circumstances demonstrating the need for expedited action. This provision shall not apply, however, during any time described in Articles 6.3.2.3 and 6.3.2.4.

6.3.3 GDOT Discretionary Acceptances

If the Submittal is one where the DB Documents indicate approval or acceptance is required from GDOT in its sole discretion or good faith discretion, then GDOT’s lack of approval, acceptance, determination, decision, or other action within the applicable time period under Article 6.3.2 (Time Periods) shall be deemed non-acceptance. If the approval is subject to good faith discretion of GDOT, then its decision shall be binding unless it is finally determined by clear and convincing evidence that such decision is determined to be arbitrary and capricious and causes delay; when so determined, it will then constitute and be treated as a GDOT-Caused Delay.
6.3.4 Other GDOT Acceptances

6.3.4.1 Whenever the DB Documents indicate that a Submittal or other matter is subject to GDOT’s approval or acceptance, and no particular standard therefor is stated, then the standard shall be reasonableness.

6.3.4.2 If the reasonableness standard applies to GDOT’s right of approval or acceptance of a Submittal, and GDOT delivers no approval or acceptance within the applicable time period under Article 6.3.2 (Time Periods), then DB Team may deliver to GDOT a written notice stating the date within which GDOT was to have decided or acted. If GDOT does not respond or act within seven days after receipt of the notice, then a delay may constitute GDOT-Caused Delay under Article 14 (Relief Events; Compensation Events), subject to the provisions and satisfying all DB Document requirements for Relief Events and Compensation Events. Regardless of the actual days of delay, the start of any GDOT-Caused Delay shall be measured from 14 days from the end of the last review period for that Submittal. DB Team hereby agrees to plan for and account for such notice periods within the Project Schedule.

6.3.4.3 If GDOT requires an approval of a Submittal, such approval is a formal conditional determination in writing by GDOT that a particular matter, Submittal, or item is good or satisfactory for the Project. Such determination may be based on requirements or commitments beyond those set forth in the DB Documents and may reflect preferences of GDOT.

6.3.5 GDOT Review and Comment

6.3.5.1 Whenever the DB Documents indicate that a Submittal or other matter is subject to GDOT’s review, comment, review and comment, disapproval or similar action not entailing a prior approval or acceptance and GDOT delivers no comments, exceptions, objections, rejections or disapprovals within the applicable time period under Article 6.3.2 (Time Periods), then DB Team may proceed thereafter at its election and risk, without prejudice to GDOT’s rights to later object, reject, or disapprove.

6.3.5.2 No such failure or delay by GDOT in delivering comments, exceptions, objections, rejections or disapprovals within the applicable time period under Article 6.3.2 (Time Periods) shall constitute a GDOT-Caused Delay, GDOT Change, Relief Event or Compensation Event.

6.3.5.3 When used in the DB Documents, the phrase “completion of the review and comment process” or similar terminology means either (a) GDOT has reviewed, provided comments, exceptions, objections, rejections or disapprovals, and all the same have been resolved, or (b) the applicable time period has passed without GDOT providing any comments, exceptions, objections, rejections or disapprovals.

6.3.6 Submittals Not Subject to Prior Review, Comment or Acceptance

Whenever the DB Documents indicate that DB Team is to deliver a Submittal to GDOT but express no requirement for GDOT review, comment, disapproval, prior acceptance or
other GDOT action, then DB Team is under no obligation to provide GDOT any period of time to review the Submittal or obtain acceptance of it before proceeding with further Work, and GDOT shall have the right, but is not obligated, to at any time review, comment on, take exception to, object to, reject or disapprove the Submittal. No failure or delay by GDOT in delivering comments, exceptions, objections, rejections or disapprovals with respect to any Submittal as set forth in this Article 6.3 (Review and Oversight) shall constitute a Relief Event or Compensation Event.

6.3.7 Resolution of GDOT Comments and Objections

6.3.7.1 If the Submittal is one not governed by Article 6.3.3 (GDOT Discretionary Acceptances) or Article 6.3.6 (Submittals Not Subject to Prior Review, Comment or Acceptance), GDOT’s exception, objection, rejection or disapproval shall be deemed reasonable, valid and binding if based on any of the following grounds:

(a) The Submittal or subject provision thereof fails to comply with any applicable covenant, condition, requirement, commitment, term, or provision of the DB Documents or Management Plans thereunder;

(b) The Submittal or subject provision thereof is not to a standard equal to or better than the requirements of Good Industry Practice;

(c) DB Team has not provided all content or information required in respect of the Submittal or subject provisions thereof, provided that GDOT assumes no duty, obligation or liability regarding completeness or correctness of any Submittal, including a Submittal that is to be delivered to a Governmental Entity as a proposed Governmental Approval, or in order to obtain, modify, amend, supplement, renew, extend, waive or carry out a Governmental Approval;

(d) Adoption of the Submittal or subject provision thereof, or of any proposed course of action thereunder, would result in a conflict with or violation of any Law or Governmental Approval; or

(e) In the case of a Submittal that is to be delivered to a Governmental Entity as a proposed Governmental Approval, or in order to obtain, modify, amend, supplement, renew, extend, waive or carry out a Governmental Approval, it proposes commitments, requirements, actions, terms or conditions that are not arrangements that GDOT offers or accepts for addressing similar circumstances affecting its own projects.

6.3.7.2 DB Team shall timely and promptly respond to all of GDOT’s comments and objections to a Submittal and, except as provided below, make modifications to the Submittal as necessary to fully reflect and resolve all such comments and objections, in accordance with the review processes set forth in this Article 6.3 (Review and Oversight). DB Team acknowledges that GDOT may provide comments and objections which reflect concerns regarding interpretation or preferences of the commenter or which otherwise do not directly relate to grounds set forth in Article 6.3.7.1. DB Team agrees to undertake reasonable
efforts to accommodate or otherwise resolve any such comments or objections through the review processes described in this Article 6.3.

6.3.7.3 If DB Team fails to notify GDOT within such time period, GDOT may deliver to DB Team a written notice stating the date by which DB Team was to have responded to GDOT’s comments and that if DB Team does not respond to those comments within five Business Days after receipt of this notice, then that failure shall constitute DB Team’s agreement to make all changes necessary to accommodate and resolve the comment or objection and full acceptance of all responsibility for such changes without right to a Relief Event or Compensation Event.

6.3.7.4 The foregoing shall in no way be deemed to obligate DB Team to incorporate any comments or resolve objections that would render the Submittal erroneous, defective or less than Good Industry Practice, except pursuant to a GDOT Change.

6.3.7.5 After GDOT receives DB Team’s explanation as to why the modifications are not required as provided in Article 6.3.7.2, Article 6.3.7.3 and Article 6.3.7.4, the Parties shall attempt in good faith to resolve the Dispute. If they are unable to resolve the Dispute, it shall be resolved according to Article 17.7 (Dispute Resolution Procedures) except (a) as provided otherwise in Article 6.3.3 (GDOT Discretionary Acceptances), and (b) if GDOT elects to issue a Directive Letter pursuant to Article 13.1 (Directive Letters) with respect to the disputed matter, the DB Team shall proceed in accordance with GDOT’s directive while retaining any claim as to the disputed matter.

Article 7 DEVELOPMENT OF THE PROJECT

7.1 General Obligations of DB Team

DB Team, in addition to performing all other requirements of the DB Documents, shall:

7.1.1 Furnish all design, engineering and other services, provide construction management and all work, including all materials, equipment, labor, and installations, and undertake all efforts necessary or appropriate (excluding only those materials, services and efforts which the DB Documents expressly specify will be undertaken by GDOT or other Persons) to construct the Project and maintain it during construction, so as to achieve Substantial Completion and Final Acceptance by the applicable Milestone Deadlines;

7.1.2 At all times provide a Project Manager approved by GDOT who:

(a) will have full responsibility for the prosecution of the Work, including Design Work and Construction Work,

(b) will act as agent and be a single point of contact in all matters on behalf of DB Team,
(c) will be present (or his/her designee approved by GDOT will be present) at the Site at all times that Design Work or Construction Work is performed, and

(d) will be available to respond to GDOT;

7.1.3 Comply with, and require that all Contractors comply with, all requirements of all applicable Laws;

7.1.4 Cooperate with GDOT and Governmental Entities with jurisdiction in all matters relating to the applicable portions of the Work, including Design Work and Construction Work for the Project, including their review, inspection and oversight of the design and construction; and

7.1.5 Use commercially reasonable efforts to mitigate delay to design and construction of the Project and mitigate damages due to delay in all circumstances, to the extent possible, including by re-sequencing, reallocating, or redeploying DB Team’s and its Contractors’ forces to other work.

7.2 Performance, Design and Construction Standards

7.2.1 DB Team shall furnish all aspects of the Design Work and all Design Documents, and shall construct the Project and perform the Construction Work as designed, free from Defects, and in accordance with (a) Good Industry Practice, (b) the requirements, terms and conditions set forth in the DB Documents, (c) the Project Schedule, (d) all Laws, (e) the requirements, terms and conditions set forth in all Governmental Approvals, and (f) the requirements of the accepted Quality Management Plan (QMP) or to be prepared thereunder, in each case taking into account the Existing Right of Way, Required Right of Way, and any Additional Property limits and other constraints affecting the Project and the Property.

7.2.2 Reserved

7.2.3 DB Team acknowledges that prior to the Effective Date it had the opportunity to identify any provisions of the Technical Provisions or Technical Documents 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 DB Team believed were the minimum necessary to render it correct and safe. If it is reasonable or necessary to adopt changes to the Technical Provisions or Technical Documents after the Effective Date to make the provisions correct and safe, such changes shall not be grounds for a Relief Event or Compensation Event unless (a) DB Team neither knew nor had reason to know prior to the Effective Date that the provision was erroneous or created a potentially unsafe condition or (b) DB Team 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 DB Team 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, DB Team shall bear any additional
costs associated with redoing the Work already performed. Inconsistent or conflicting provisions of the DB Documents shall not be treated as erroneous provisions under this Article 7.2.3, but instead shall be governed by Article 1.2 (DB Documents; Order of Precedence).

7.2.4 References in the Technical Provisions or Technical Documents 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 at the date of the RFP advertisement, unless expressly provided otherwise. Any changes to the Technical Provisions and Technical Documents, including Safety Standards, 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 Article 13 (GDOT Changes; DB Team Changes; Directive Letters). Safety Compliance changes shall be in accordance with Article 12.1 (Safety Compliance).

7.2.5 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, including Safety Standards, relating to Design Work and Construction Work. GDOT shall have the right to add such changed, added or replacement standards, criteria, requirements, conditions, procedures, specifications and other provisions, including Safety Standards, to Volume 2 by notice to DB Team, whereupon they shall constitute amendments, and become part, of the Technical Documents. If such changed, added or replacement Technical Documents or Safety Standards encompass matters that are addressed in the Technical Provisions or Technical Documents as of the Effective Date, they may, upon inclusion in Volume 2, replace and supersede inconsistent provisions of the Technical Provisions and Technical Documents to the extent designated by GDOT in its sole discretion. GDOT will identify the superseded provisions in its notice to DB Team. Notwithstanding the foregoing, in the absence of a GDOT Change and except as provided otherwise in Article 7.5.3 (Requirements) with respect to Adjustment Standards, if GDOT adopts the changed, added or replacement standards, criteria, requirements, conditions, procedures, specifications and other provisions, including changed, added or replacement Safety Standards, prior to the Final Acceptance Date, DB Team shall not be obligated to (but may) incorporate the same into its design and construction of the Project prior to the Final Acceptance Date.

7.3 Design Implementation and Submittals

7.3.1 DB Team, through the appropriately qualified and licensed design professionals identified in DB Team’s Key Personnel as identified in Exhibit 2 and in accordance with Volume 2, Section 2 (Project Management), shall prepare designs, Plans and specifications in accordance with the DB Documents. DB Team shall cause the Engineer of Record for the Project to sign and seal all Released for Construction Documents, any revisions to the Released for Construction Documents, all design changes; and for conformance, the Record Drawings (As-Builts).
DB Team shall deliver to GDOT accurate and complete duplicates of all Interim Design, and Preliminary and Final Plans and Construction Documents within the time and in the form required by the Technical Provisions.

The Engineer of Record shall initiate or sign-off on all requests for information prior to the requests being submitted to GDOT.

Reserved

Utility Adjustments

DB Team’s Responsibility

DB Team is responsible for causing, in accordance with the Project Schedule, all Utility Adjustments necessary to accommodate construction, operation, maintenance and/or use of the Project. DB Team shall coordinate, monitor, and otherwise undertake the necessary efforts to cause Utility Owners performing Utility Adjustment Work to perform such work timely, in coordination with the Work, and in compliance with the standards of design and construction and other applicable requirements specified in the DB Documents.

In addition to GDOT’s Project administration, GDOT shall independently have the right at all times to approve Utility Adjustments as provided herein. DB Team shall coordinate and be required to procure GDOT approval as required.

Regardless of the arrangements made with the Utility Owners, the DB Team shall continue to be the responsible party to GDOT for timely performance of all Utility Adjustment Work so that upon completion of the Work, all Utilities that might impact the Project or be impacted by it (whether located within or outside the Construction Maintenance Limits) are compatible with the Project. GDOT will provide to DB Team the benefit of any provisions in recorded utility or other easements affecting the Project.

Standard Utility Agreements

The DB Team will be responsible for completion of all required Standard Utility Agreements. The DB Team working with the Utility Owner will provide the cost estimate and supporting documents to the District Utilities Manager for review and acceptance. Upon the acceptance by the District, the approved cost estimate and supporting documents shall be forwarded to the State Utilities Preconstruction Manager for processing, final acceptance, and preparation of the Standard Utility Agreement. As described in the GDOT Utility Accommodation Policy and Standards Manual (“UAM”), Chapter 4.2.F Agreements cover all requirements for Standard Utility Agreements.

Requirements

Each Utility Adjustment (whether performed by DB Team, Subcontractor or by the Utility Owner) shall comply with the Adjustment Standards in effect at the date of the RFP advertisement, unless expressly provided otherwise, together with any subsequent amendments and additions to those standards that (a) are necessary to conform to
applicable Law, or (b) are adopted by the Utility Owner and affect the Utility Adjustment pursuant to the applicable Standard Utility Agreement(s). In addition, all Utility Adjustment Work shall comply with all applicable Laws, the applicable Standard Utility Agreement(s), and all other requirements specified in Volume 2, Section 6 (Utility Adjustments).

7.5.4 Failure of Utility Owners to Cooperate/Escalation

DB Team shall use diligent efforts to obtain the cooperation of each Utility Owner as necessary for Utility Adjustments. It shall be the DB Team’s responsibility to coordinate and track each Utility Owner’s progress in relation to the Utility Work Plan or Revised Utility Work Plan previously accepted by GDOT. Once the DB Team has determined that the Utilities work progress is at least 20% behind the accepted Utility Work Plan; the DB Team will notify the Utility Owner, and GDOT of such apparent delay through written correspondence. Such written correspondence shall detail the delay in question and request the Utility to submit a proposal on how the Utility Owner plans to rectify such delay and maintain the project’s schedule prescribed by the previously accepted Utility Work Plan. The Utility will respond to this letter within 10 Business Days. The response shall include a proposal to cure the delay identified by the DB Team. In some cases, the complexity of the project may require that a utility coordination meeting be held to address the issues identified by the DB Team. If the Utility determines that this is the case, then the Utilities response letter shall include a request to hold a utility coordination meeting with the DB Team, the Office of Innovative Delivery Utility Liaison, the District Utility Manager and the Construction Manager for utility delay resolution. If the utility delay cannot be resolved through the coordination efforts described above after 20 Business Days from the date provided in the DB Team’s original written correspondence; the said Dispute shall escalate to the State Construction Engineer for further consideration. If additional escalation is required, DB Team shall follow escalation procedures as outlined in the UAM, Chapter 672-19 of the Rules, and O.C.G.A. § 32-6-171.

7.5.5 Utility Permits (GUUPS)

7.5.5.1 It is anticipated that during the design and construction phases of the Work, from time to time Utility Owners will apply for utility permits to install new Utilities that would cross or longitudinally occupy the Property, or to modify, upgrade, repair, relocate or expand existing Utilities within the Property for reasons other than accommodation of the Project.

7.5.5.2 As specified in Article 7.5.5.1, for all such utility permit applications pending as of or submitted after the Effective Date, DB Team shall furnish the most recent Project design information and/or as-built Plans, as applicable, to the applicants, and shall assist each applicant with information regarding the location of other proposed and existing Utilities.

7.5.6 Unexpected Utility Adjustments

Within 120 days after the NTP 1, DB Team shall conduct an investigation for any unidentified Utility. If DB Team finds an unidentified Utility during the 120 day time frame, DB Team may be entitled to a Compensation Event or a Relief Event. If DB Team finds an unidentified Utility after the 120 day time frame, DB Team shall not be entitled to a
Compensation Event or a Relief Event. If a Utility is shown on the SUE Plans and not to be impacted by DB Team’s Final Design, but is later identified by DB Team as needing to be relocated, DB Team shall not be entitled to a Compensation Event or a Relief Event. Notwithstanding the foregoing, DB Team shall not be entitled to a Compensation Event or a Relief Event for any Utility whose location, size and dimensions were reasonably accurate and shown on the SUE Plans.

7.5.7 Reserved

7.6 Conditions to Commencement of Construction Work

7.6.1 Construction Work Generally

Except to the extent expressly permitted in writing by GDOT, DB Team shall not commence or permit or suffer commencement of construction of the Project, or applicable portion thereof, until GDOT issues NTP 3 and all of the conditions of Article 3.3.1.3 have been met.

7.6.2 Utility Adjustments

DB Team shall not commence or permit or suffer commencement of construction of a Utility Adjustment included in the Construction Work until GDOT issues NTP 3, and the requirements of Article 7.5 (Utility Adjustments) have been met.

7.7 Substantial Completion, Punch List, Final Acceptance; Early Opening of Portions of the Project

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 which shall be subject to the terms and conditions of this Article 7.7.1 (Substantial Completion).

7.7.1.2 Substantial Completion shall occur upon satisfactory completion of the requirements of GDOT Standard Specification 108.07.G.

7.7.1.3 All comments from EPD on the Post-Construction Stormwater Report have been addressed by the DB Team, and the EPD’s 90-day Post-Construction Stormwater Report disapproval period has expired.

7.7.1.4 DB Team shall provide GDOT with not less than 20 days prior written notification of the date DB Team determines it will achieve Substantial Completion. A written request for Substantial Completion will not be taken into consideration unless the requirements of the DB Documents have been met, and the request has been approved in writing by GDOT confirming Substantial Completion requirements of Article 7.7 (Substantial Completion, Punch List, Final Acceptance; Early Opening of Portions of the Project) are met. During such notice period, DB Team and GDOT shall meet and confer and exchange information on a regular cooperative basis with the goal being GDOT’s orderly, timely inspection and review of the Project per the applicable Final Plans and
Construction Documents, and GDOT’s issuance of a written certificate of Substantial Completion.

7.7.1.5 During the period specified in Article 7.7.1.4, GDOT shall conduct an inspection of the Project and its components, a review of the applicable Final Plans and Construction Documents and such other investigation as may be necessary to evaluate whether Substantial Completion is achieved. GDOT shall deliver a Punch List to the DB Team following such inspection, review and investigation within five Business Days. GDOT shall then either (a) issue the written certificate of Substantial Completion or (b) notify DB Team in writing setting forth, as applicable, why the Project has not reached Substantial Completion. If GDOT and DB Team cannot agree that the Substantial Completion has been completed by the Substantial Completion Date defined in Exhibit 9, such Dispute shall be resolved according to Article 17 (Default; Remedies; Claim for Adjustments and Disputes).

7.7.2 Punch List

7.7.2.1 GDOT will prepare and maintain the final Punch List. Each participant shall have the right to add items to the Punch List and none shall remove any item added by any other without such other’s express permission. If DB Team 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 Article 17 (Default; Remedies; Claim for Adjustments and Disputes).

7.7.2.2 DB Team shall immediately commence work on the Punch List items and diligently prosecute such work to completion, consistent with the DB Documents, prior to issuance of Final Acceptance.

7.7.3 Final Acceptance

7.7.3.1 Promptly after achieving Substantial Completion, DB Team shall perform all remaining Work for the Project, including completion of all Punch List items, all landscaping other than vegetative ground cover, and aesthetic features. DB Team shall prepare and adhere to a timetable for planting and establishing the vegetative ground cover landscaping, taking into account weather conditions necessary for successful planting and growth, which timetable shall in any event provide for vegetative ground cover landscaping to be planted and established by 12 months after Substantial Completion.

7.7.3.2 GDOT will issue a 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 satisfied;

(b) All Punch List items have been completed and delivered to the reasonable satisfaction of GDOT;
(c) GDOT has received a complete set of the Record Drawings in form and content required by Volume 2, Section 2.7.1.2 (Record Drawings);

(d) All Utility Adjustment Work and other work that DB Team is obligated to perform for or on behalf of third parties has been accepted by such third parties, and DB Team has paid for all work by third parties that DB Team is obligated to pay for, other than disputed amounts;

(e) DB Team has paid in full all Liquidated Damages that are due to GDOT pursuant to this Agreement and are not in Dispute, and has provided to GDOT reasonable security for the full amount of Liquidated Damages that may then be the subject of an unresolved Dispute;

(f) There exist no uncured DB Team 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 DB Team Default for which Final Acceptance will affect its cure);

(g) DB Team has received, and paid all associated fees for, all applicable Governmental Approvals and other applicable third-party approvals required pursuant to the DB Documents, and there exists no uncured material violation of the terms and conditions of any such Governmental Approval or other third-party approvals;

(h) DB Team has delivered to GDOT all warranties, manuals and other Deliverables as required pursuant to the Technical Provisions; and

(i) DB Team has delivered to GDOT verification of all required post construction period, including completed operations, Insurance Policies required under the DB Documents.

7.7.3.3 DB Team shall provide GDOT with written notification when DB Team determines it has achieved Final Acceptance. During the 15 Business Day period following receipt of such notification, DB Team and GDOT shall meet and confer and exchange information on a regular cooperative basis with the goal being GDOT’s orderly, timely inspection and review of the Project and the Record Drawings, and GDOT’s issuance of a written certificate of Final Acceptance.

7.7.3.4 During such 15 Business Day period, GDOT shall conduct an inspection of the Punch List items, a review of the Record Drawings and such other investigation as may be necessary to evaluate whether the conditions to Final Acceptance are satisfied. GDOT shall deliver a written report of findings and recommendations to DB Team following such inspection, review and investigation and in any case by the end of such 15 Business Day period.
7.7.3.5 Within five Business Days after expiration of such 15 Business Day period GDOT shall either (a) issue a certificate of Final Acceptance or (b) notify DB Team in writing setting forth, as applicable, why Final Acceptance has not been achieved. If GDOT and DB Team cannot agree as to the date of Final Acceptance, such Dispute shall be resolved according to Article 17 (Default; Remedies; Claim for Adjustments and Disputes).

7.7.4 Reserved

7.8 Hazardous Materials Management

DB Team shall comply with all requirements set forth in GDOT Standard Specification 107.22 and Exhibit 11.

7.9 Environmental Compliance

Throughout the course of the Design Work and Construction Work, DB Team’s Work shall take into account, be coordinated to allow for, and be performed in accordance with all environmental mitigation measures required under the Environmental Document approvals, including but not limited to the NEPA/GEPA Approval and any other Governmental Approvals for the Project or under the DB Documents, and shall comply with all other conditions and requirements of the Environmental Approvals in accordance with Volume 2, Section 4 (Environmental), provided that the foregoing shall not require nor imply any requirement for DB Team to perform any remediation or disposal of Pre-existing Hazardous Materials or GDOT Release(s) of Hazardous Materials.

7.10 Meetings

7.10.1 DB Team shall conduct regular progress meetings with GDOT during the course of Design Work and Construction Work. These meetings shall be attended by the DB Team’s Lead Contractor’s project manager and the Engineer of Record or Authorized Representatives of each and any other Key Personnel and other personnel as needed for productive use of the meetings.

7.10.2 In addition, GDOT and DB Team, through their respective Authorized Representatives, shall meet from time to time at the other Party’s request to discuss and resolve matters relating to the Work or the Project.

7.10.3 DB Team shall schedule all meetings with GDOT at a date, time, and place reasonably convenient to both Parties and, except in the case of urgency, shall provide GDOT with written notice and a meeting agenda at least one Business Day in advance of each meeting, in the absence of any timeframe specified in the Technical Provisions.

7.10.4 DB Team shall be responsible to document and maintain the full subject matter of all meetings and shall distribute copies of meeting minutes to GDOT not later than the timeframes specified in the Technical Provisions, and in the absence of any specified timeframe, within five days following such meetings.
7.11 Contractor Warranties and Correction of Non-Conforming and Defective Work

7.11.1 DB Team 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 DB Team 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 DB Team’s negligence in incorporating material or equipment into the Work, DB Team shall be responsible for correcting such defect.

7.11.2 Contractor warranties (if any) are in addition to all rights and remedies available under the DB Documents or applicable Law or in equity, and shall not limit DB Team’s liability or responsibility imposed by the DB Documents or applicable Law or in equity with respect to the Work, including liability for design defects, latent construction defects, strict liability, breach, negligence, willful misconduct or fraud.

7.11.3 When any act, omission, or other action of DB Team occurs that violates the requirements, conditions, or terms of the DB Documents, or affects the health, safety, or welfare of the public or natural resources, GDOT shall have the right, but not the obligation, to require and direct DB Team to take prompt action to replace, repair, or restore such damage, injury or condition within a time frame established by GDOT, at DB Team’s sole cost and expenses and without entitlement to a Relief Event or Compensation Event.

7.12 Maintenance During Construction Work

7.12.1 GDOT shall be responsible for the operation and maintenance of the Existing Right of Way and any acquired right or interest in any Required Right of Way until the Construction Commencement Date. Upon NTP 3, DB Team shall assume full responsibility for maintenance of all Elements within the Construction Maintenance Limits in accordance with the Maintenance Management Limits Plan and the requirements of the DB Documents.

7.12.2 Upon Final Acceptance, GDOT will assume responsibility for the operation and maintenance of the entire Project, provided that where GDOT has opened any portion of the Project to the public prior to Final Acceptance, GDOT shall then assume responsibility for the operations and maintenance of such portions of the Project at such earlier time, provided, however that in all cases, DB Team shall remain responsible for all Work until Final Acceptance and nothing contained herein shall otherwise limit any warranty obligations of DB Team with respect to any Defect or non-conforming Work.
Article 8 SECURITY AND INCIDENT RESPONSE

8.1 Security and Incident Response

8.1.1 DB Team is responsible for the safety and security of the applicable portion of the Project that is under the control of any DB Team-Related Entity and the workers and public thereon during the performance of the Work.

8.1.2 DB Team shall comply with all rules, directives and guidance of the U.S. Department of Homeland Security and comparable State agency, and shall coordinate and cooperate with all Governmental Entities providing security, first responder and other public emergency response services, including, without limiting the foregoing, whenever the National Terrorism Advisory System (NTAS) or successor system issues an “Imminent” or “Elevated” Threat Alert or comparable level of threat or alert for any region in which the Project is located or which the Project serves. Unless directed otherwise by GDOT, DB Team, at its expense, shall assign management personnel with decision-making authority to be personally present at the relevant emergency operations center serving the region, including during a disaster affecting the Project proclaimed by the Governor of Georgia, the President of the United States, or their respective designees. DB Team shall provide such service 24 hours a day, seven days a week, until such level or threat or alert has expired, or until the lead agency at the operations center determines such staffing level is no longer necessary.

8.1.3 DB Team shall perform and comply with the provisions of the Technical Provisions concerning Incident Response, safety and security.

Article 9 MANAGEMENT SYSTEMS AND OVERSIGHT

9.1 Project Management

9.1.1 DB Team is responsible for all activities necessary to manage the Work, including the Utility Adjustment Work. DB Team shall undertake all required aspects of for the Project and Work in accordance with the DB Documents and Good Industry Practice.

9.1.2 DB Team shall develop the necessary plans and documentation in accordance with the Proposal, this Agreement, and Volume 2, Section 2 (Project Management) and Volume 2, Section 3 (Design and Submittals) of the Technical Provisions, and Good Industry Practice.

9.1.3 DB Team shall submit to GDOT for acceptance in its good faith discretion in accordance with the procedures described in Article 6.3 (Review and Oversight) of this Agreement and the Technical Provisions each component part, plan and any proposed changes or additions to or revisions of any such component part, plan or other documentation identified in the DB Documents. Each component part, plan and other documentation of the Management Plans or any submittal identified in this Agreement, Volume 2, Section 3 (Design and Submittals), including in Table 3-1 (Master Submittal List), and the DB Documents, and each proposed change or addition to or revision of any such
component part, plan or other documentation shall constitute a separate Submittal for purposes of Article 6.3 (Review and Oversight). GDOT may propose any change required to comply with Good Industry Practice or to reflect a change in working practice to be implemented by DB Team.

9.1.4 DB Team shall not commence or permit the commencement of any aspect of the design or construction before the relevant component parts, plans and other documentation of the Management Plans applicable to such Work have been submitted to and accepted by GDOT.

9.1.5 Reserved

9.1.6 DB Team shall carry out internal audits of the Management Plans at the times prescribed in the Management Plans.

9.1.7 DB Team shall cause each of its Contractors at every level to comply with the applicable requirements of the DB Documents.

9.1.8 The DB Team shall designate a Quality Assurance Manager who shall, irrespective of their other responsibilities, have defined authority for ensuring the establishment and maintenance of the Management Plans and reporting to GDOT on the performance of the Management Plans.

9.2 Traffic Management

9.2.1 Upon GDOT issuance of NTP 3 and until Final Acceptance of the Project, DB Team shall be responsible for the general management of traffic on the applicable portion of the Project under the control of any DB Team-Related Entity. DB Team shall manage traffic 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 level of service on the Related Transportation Facilities. DB Team shall conduct and carry out traffic management in accordance with all applicable Technical Provisions, Technical Documents, Laws and Governmental Approvals, as well as any directives as may be required pursuant to Article 8.1.2.

9.2.2 Reserved

9.2.3 GDOT shall have at all times, without obligation or liability to DB Team, the right to:

9.2.3.1 Issue a Directive Letter to DB Team regarding traffic management and control (with which DB Team 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 aforementioned respective designees, including reversing the direction of traffic flow during such period,
(b) GDOT designates the Project or a portion of the Project for immediate 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 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

9.2.3.2 Provide on the Project, via message signs or other means consistent with Good Industry Practice, non-discriminatory 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 Reserved

10.2 Responsibility for Work, Contractors and Employees

10.2.1 DB Team shall retain or cause to be retained only Contractors that are qualified, experienced and capable in the performance of the portion of the Work assigned. DB Team shall assure 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. DB Team shall require all Contractors to adhere to the requirements herein with respect to Subcontractors.

10.2.2 The retention of Contractors by DB Team will not relieve DB Team of its responsibilities hereunder 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 DB Documents, and shall include those terms that are specifically required by the DB Documents to be included therein, including, to the extent applicable, those set forth in Exhibit 8 (Federal Requirements) and any other applicable Federal Requirements.

10.2.4 Nothing in the DB Documents will create any contractual relationship between GDOT and any Subcontractor. No Contract entered into by or under DB Team shall impose any obligation or liability upon GDOT to any Subcontractor, or any of their respective employees.

10.2.5 DB Team shall supervise and be fully responsible for the actions, omissions, negligence, willful misconduct, or breach of applicable Law or contract by any Contractor or DB Team-Related Entity, or their respective members, officers, directors, partners, and employees, as though DB Team directly employed all such individuals.
10.3 Reserved

10.4 Key Personnel

10.4.1 DB Team shall retain, employ and utilize the individuals specifically listed in Exhibit 2 (Key Personnel and Other Proposal Commitments) to fill the corresponding Key Personnel positions listed therein. DB Team 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 accepted by GDOT pursuant to Article 10.4.2. In such circumstances, DB Team shall promptly propose a replacement with comparable experience for such position.

10.4.2 DB Team shall notify GDOT in writing of any proposed replacement for any Key Personnel position. Any proposed replacement for a Key Personnel position must be equal or better than the original Key Personnel. GDOT shall 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 accept or disapprove use of such individual in such position prior to the commencement of any Work by such individual. If DB Team fails to provide a proposed replacement that is sufficiently qualified, in GDOT’s sole discretion, within 30 days after notifying GDOT of a proposed replacement for any Key Personnel position, then such failure may, at GDOT’s sole discretion, constitute a DB Team Default pursuant to Article 17.1.1.

10.4.3 DB Team 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.

10.4.4 DB Team shall provide to GDOT the phone numbers and e-mail addresses for all Key Personnel. GDOT requires the ability to contact Key Personnel 24 hours per day, seven days per week.

10.5 Reserved

10.6 Labor Standards

10.6.1 In the performance of its obligations under the DB Documents, DB Team 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 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 DB Team or any Contractor is not performing the Work in a proper, safe and skillful manner, then DB Team 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 DB Team 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 DB Team written notice of such suspension. Such suspension shall in no way relieve DB Team of any obligation contained in the DB Documents or entitle DB Team to any additional compensation or time extension hereunder.

10.6.4 DB Team and its Contractors shall comply with the Georgia Immigration & Compliance Act ("Immigration Act"), O.C.G.A. § 13-10-90, et seq. DB Team must certify compliance with the Immigration Act using the form attached as Exhibit 19. The required certificates and affidavits must be filed with GDOT and copies maintained by DB Team and each Contractor as of the Effective Date, recertified as of July 15 of each year, and again recertified upon final completion of the Work under the applicable Contract. State officials, including officials of the Georgia Department of Labor and GDOT, retain the right to inspect and audit the Project and employment records of DB Team 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 Reserved

10.8 Reserved

10.9 Small, Veteran, and Disadvantaged Business Enterprise

10.9.1 General Description

10.9.1.1 Subcontract a portion of the work to firms designated by the GDOT as Small, Veteran, or Disadvantaged Business Enterprise. A Small, Veteran, and Disadvantaged Business Enterprise (SVDBE) Goal is specified in certain contracts funded through the Georgia Transportation Act of 2015. A portion of the project goal, not greater than 50% of the specified Goal, may be achieved through the use of Small and/or Veteran owned businesses. The entire goal may be met through the use of GDOT approved DBEs.

10.9.1.2 Questions concerning DBE Certification/Criteria or other small or veteran owned business issues should be directed to the GDOT’s EEO Office at (404) 631-1972 or dbework@dot.ga.gov.

10.9.2 SVDBE Directories

10.9.2.1 Small Business entities are those firms identified as such in the Georgia Procurement Registry at the time of the submission of Proposals.

10.9.2.2 Veteran Owned firms are those firms identified by the U.S. Department of Veteran Affairs at the time of the submission of Proposals.

10.9.2.3 DBE firms are those identified by the Georgia Department of Transportation’s Unified Certification Program at the time of the submission of Proposals.
Proposal Submittals

GDOT reserves the right to reject and disqualify any Proposal if the Apparent Successful Proposer fails to provide a list of bona fide SVDBE participants within 10 calendar days after the selection of the Apparent Successful Proposer. The submission shall provide a list of participants that at a minimum meets the established goal.

GDOT may consider for award a proposal with less participation than the established goal if both:

(a) The Apparent Successful Proposer can adequately demonstrate that no greater participation could be obtained and;

(b) The participation proposed by the Apparent Successful Proposer is not substantially less than the participation proposed by the other Proposers.

The DB Team shall demonstrate good business judgment in negotiating with SVDBEs including consideration of a firm’s price and capabilities as well as the overall contract goals of the Project. The fact there may be some additional costs involved in finding and using SVDBEs is not in itself sufficient reason for a DB Team’s failure to meet the contract SVDBE goal, so long as such costs are reasonable.

The DB Team is not required to accept higher quotes from a SVDBE if the price difference is excessive or unreasonable as compared to the general market. The ability or desire of a DB Team to perform the work with its own organization does not relieve the DB Team of the responsibility to make good faith effort to secure and retain SVDBE firms to reach the SVDBE goal.

Issuance of the Notice to Proceed does not constitute an acceptance of an individual SVDBE firms. GDOT reserves the right to accept or not accept a SVDBE firm after review of the SVDBE firm and contract agreements. SVDBE firms must be Registered or Prequalified with the Georgia Department of Transportation to perform work on projects.

Participation Requirements

Submit a “SVDBE Participation Report” monthly to the GDOT. The report shall include the following:

(a) Name of each firm.

(b) Designation of the participating firm/s as DBE, Small Business or Veteran Owned firm.

(c) Description of the work that has been performed, materials, supplies, and/or services provided by each SVDBE.
(d) Description of the work to be performed, materials, supplies, and/or services provided by each SVDBE.

(e) Whether each SVDBE is a supplier, subcontractor, owner/operator, or other.

(f) Total dollar value of each SVDBE subcontract or supply agreement.

(g) Actual payment to date to each SVDBE subcontractor or supplier.

(h) Percentage of the overall goal obtained by each SVDBE subcontractor or supplier.

(i) Percentage of overall goal obtained and percentage of overall goal remaining.

10.9.5 SVDBE Participation Goals

10.9.5.1 The SVDBE Project goal is seven percent of the overall Project cost (including design, construction, professional services, management and administration, and inspection). DB Team’s SVDBE commitments list is attached as Exhibit 14.

10.10 Reserved

10.11 Reserved

10.12 Prompt Payment to Contractors and Pay When Paid Provisions

DB Team shall comply with the Georgia Prompt Payment Act, Code Section 13-11-1 et seq. Further, neither DB Team, the Design-Build Contractor or Contractor, nor any Subcontractor shall impose retainage upon any consultant, laborer, subcontractor, vendor, materialman, or supplier with whom any of them have contracted.

Prime contractors, who sublet a portion of their work, shall pay their subcontractors for satisfactory performance of their contracts no later than 10 calendar days from receipt of each payment made to them. Any delay or postponement of payment among the parties may take place only for good cause with prior written approval from the Department. If the contractor is found to be in noncompliance with these provisions, it shall constitute a breach of contract and further payments for any work performed may be withheld until corrective action is taken. If corrective action is not taken, it may result in termination of the contract.

Prime contractors must maintain records and documents of payments to subcontractors, including SVDBEs, for a minimum of three (3) years after Contract Final Acceptance. These records shall be made available for inspection upon request by any authorized representative of the Georgia Department of Transportation or USDOT.

All subcontract agreements shall contain this requirement.
10.13 Suspension and Debarment

DB Team shall deliver to GDOT, not later than January 31 of each year through Final Acceptance, and upon Final Acceptance, signed certifications regarding suspension, debarment, ineligibility, voluntary exclusion, convictions and civil judgments from DB Team, from each affiliate of DB Team (as “affiliate” is defined in 29 CFR 98.905 or successor regulation of similar import), and from each Contractor whose Contract amount equals or exceeds $100,000. The annual certification shall be substantially in the form of paragraphs 1.a through 1.d of Attachment 7 (Debarment and Suspension Certification) to Exhibit 8 (Federal Requirements).

10.14 DB Team Identification

Any uniforms, badges, logos and other identification worn by personnel of DB Team-Related Entities or on DB Team Vehicles used to access the Project Site shall bear contrasting colors, lettering, design or other features, clearly visible from a distance.

Article 11 RELATED AND OTHER FACILITIES

11.1 Integration with Related Transportation Facilities

11.1.1 DB Team 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 Volume 2, Section 1 (General) and Volume 2, Section 11 (Roadways). 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 provisions of the Technical Provisions and Management Plans 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, DB Team shall cooperate and coordinate with GDOT and any third party that owns, constructs, manages, operates or maintains a Related Transportation Facility 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 DB Team, GDOT shall provide to DB Team 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. DB Team, at its expense, shall have the right to make copies of the same. DB Team, 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 Volume 2, Section 11 (Roadways).
11.1.4 GDOT shall provide reasonable assistance to DB Team, 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 DB Team 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 shall have at all times, without obligation or liability to DB Team, 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.

Article 12 SAFETY COMPLIANCE

12.1 Safety Compliance

12.1.1 DB Team shall take all reasonable precautions and be solely responsible for the safety of, and shall provide protection to prevent damage, injury, or loss to, all persons on the Site or who would reasonably be expected to be affected by the Work, including individuals performing Work, employees of GDOT and its consultants, visitors to the Site and members of the traveling public who may be affected by the Work. DB Team shall at all times comply with all health and safety requirements contained in the DB Documents and DB Team’s Safety Plan and all such requirements under applicable Law.

12.1.2 Safety Compliance Orders

12.1.2.1 GDOT shall use good faith efforts to inform DB Team at the earliest practicable time of any circumstance or information relating to the Project which in GDOT’s reasonable judgment is likely to result in unsafe conditions for the public, which may result in the issuance of a Safety Compliance Order. Except in the case of Emergency, GDOT shall consult with DB Team prior to issuing a Safety Compliance Order concerning the risk to public safety, alternative compliance measures, cost impacts, and the availability of DB Team resources to fund the Safety Compliance work.

12.1.2.2 GDOT may monitor and inspect for the purpose of determining whether any circumstances exist that warrant issuance of a Safety Compliance Order with respect to the Design Work and the Construction Work, and giving reports and recommendations to DB Team with respect thereto.

12.1.2.3 Subject to conducting such prior consultation, GDOT may issue Safety Compliance Orders to DB Team at any time from and after the Effective Date.
12.1.3 Duty to Comply

12.1.3.1 Subject to Article 12.1.1 (Duty to Comply), DB Team shall implement all Safety Compliance as expeditiously as reasonably possible following issuance of the Safety Compliance Order. DB Team shall diligently prosecute the work necessary to achieve such Safety Compliance until completion, subject to any remedies allowed from the occurrence of a Relief Event.

12.1.3.2 DB Team shall perform all work required to implement Safety Compliance at DB Team’s sole cost and expense. Without limiting the foregoing and for the avoidance of doubt, in no event shall DB Team be entitled to (a) issue a Change Request, or (b) except as provided in Article 12.1.3, claim that a Compensation Event or Relief Event has occurred or resulted from the existence of a Safety Compliance Order.

12.1.4 Contesting Safety Compliance Orders

DB Team may contest a Safety Compliance Order by delivering to GDOT written notice setting forth (a) DB Team’s claim that no Safety Compliance conditions exist to justify the Safety Compliance Order, (b) DB Team’s explanation of its claim in reasonable detail and (c) DB Team’s estimate of impacts on costs and schedule attributable to the contested Safety Compliance Order. If GDOT does not receive such written notice prior to issuance of a Safety Compliance Order, or within 15 days after GDOT issues an emergency Safety Compliance Order, then DB Team thereafter shall have no right to contest. If DB Team timely contests a Safety Compliance Order, DB Team nevertheless shall implement the Safety Compliance Order, but if it is finally determined under the Dispute Resolution Procedures that Safety Compliance conditions did not exist, then the Safety Compliance Order shall be treated as a Directive Letter for a GDOT Change.

Article 13 GDOT CHANGES; DB TEAM CHANGES; DIRECTIVE LETTERS

This Article 13 and Article 14 set forth the requirements for obtaining all Supplemental Agreements under this Agreement. DB Team 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 Article 14 (Relief Events; Compensation Events) and this Article 13.

DB Team unconditionally and irrevocably waives the right to any monetary compensation or other relief in addition to that specifically provided under the terms of this Agreement, except in accordance with Article 14 and this Article 13. 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 or Technical Documents shall have the intent or effect or shall be construed to create any right of DB Team to any Supplemental Agreement or additional monetary compensation or other relief, any provision in the Technical Provisions or Technical Documents to the contrary notwithstanding.
13.1 Directive Letters

13.1.1 GDOT may at any time issue a Directive Letter to DB Team regarding any matter for which a Supplemental Agreement can be issued or in the event of any Dispute regarding the interpretation of requirements, scope of the Work, or whether DB Team has performed in accordance with the requirements of the DB Documents. The Directive Letter will state that it is issued under this Article 13.1, will describe the Dispute or Work in question, articulate GDOT’s position, provide direction, and will state the basis for determining compensation, if any. If applicable and subject to Article 13.2.5, DB Team shall proceed immediately as directed in the letter, pending the execution of a formal Supplemental Agreement (or, if the letter states that the Work is within DB Team’s original scope of Work or is necessary to comply with the requirements of the DB Documents, DB Team shall proceed with the Work as directed but shall have the right to assert that a GDOT Change has occurred).

13.1.2 The fact that a Directive Letter was issued by GDOT shall not be considered evidence that in fact that 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 DB Documents and a determination as to whether the Directive Letter in fact constituted a change in those requirements.

13.1.3 In the event that a Directive Letter is issued, which results in a Force Account, the procedures of Article 14.7 (Force Account Compensation) will be followed.

13.2 GDOT Changes

GDOT may, at any time and without notice to any Surety, authorize, cause and/or require, pursuant to a Request for Change Proposal or Directive Letter, changes in the Work, including additions or deletions, or in terms and conditions of the Technical Provisions or Technical Documents (including changes in the standards applicable to the Work).

13.2.1 GDOT’s Request for Change Proposal

13.2.1.1 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.

13.2.1.2 Within seven days after DB Team receives a Request for Change Proposal, or such longer period to which the Parties may mutually agree, GDOT and DB Team shall consult to define the proposed scope of the change. Within seven days after the initial consultation, or such longer period to which the Parties may mutually agree, GDOT and DB Team shall consult concerning the estimated financial and schedule impacts.

13.2.2 Within 30 days following GDOT’s delivery to DB Team of the Request for Change Proposal, DB Team shall provide GDOT with a written response as to whether, in DB Team’s opinion, the proposed change constitutes a GDOT
Change, will impact DB Team's costs and/or will cause a delay to a Completion Deadline, and if so, a detailed assessment of the cost and schedule impact of the proposed GDOT Change, including the following:

13.2.2.1 DB Team's detailed estimate of the impacts on costs of carrying out the proposed GDOT Change;

13.2.2.2 The effect of the proposed GDOT Change on the Project Schedule, including achievement of the Milestone Deadlines, taking into consideration DB Team's duty to mitigate any delay to the extent reasonably practicable; and

13.2.2.3 Any other relevant information related to carrying out the proposed GDOT Change.

13.2.3 GDOT shall 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 DB Team's estimate of the cost impacts and projected impact on the Project Schedule and Milestone Deadlines. GDOT shall pay for the work of any such consultant.

13.2.4 GDOT and DB Team, giving due consideration to any such report and study as may be commissioned by GDOT, shall exercise good faith efforts to negotiate a mutually acceptable Supplemental Agreement, including adjustment of the Project Schedule and Completion Deadlines, any Compensation Amount to which DB Team is entitled, and the timing and method for payment of any Compensation Amount, in accordance with Article 14 (Relief Events; Compensation Events).

13.2.5 If GDOT and DB Team are unable to reach agreement on a Supplemental Agreement, GDOT may, in its sole discretion, deliver to DB Team a Directive Letter pursuant to Article 13.1 (Directive Letters) directing DB Team to proceed with the performance of the Work in question notwithstanding such disagreement under Force Account provisions. Upon receipt of such Directive Letter, (a) DB Team shall implement and perform the Work in question as directed by GDOT and (b) GDOT will make interim payment(s) to DB Team on a monthly basis for the costs of the Work in question subject to Article 5 (Contract Sum, Payments, and Public Funds), to the extent the payment(s) satisfy Force Account provisions.

13.2.6 GDOT shall be responsible for payment of the Compensation Amount agreed upon, or as determined under Force Account provisions, or determined through the Dispute Resolution Procedures, through one of the payment mechanisms set forth in Article 14.2 (Relief Event and Compensation Event Determinations) and the Project Schedule and Milestone Deadlines shall be adjusted as agreed upon or as determined through the Dispute Resolution Procedures, and in accordance with this Article 13 to reflect the effects of the Supplemental Agreement.
13.3 DB Team Changes

13.3.1 DB Team’s Change Requests

13.3.1.1 DB Team may request GDOT to accept modifications to the Technical Provisions or Technical Documents by submittal of a written Change Request using a form approved by GDOT. The Change Request shall set forth DB Team’s detailed estimate of impacts on costs and schedule attributable to the requested change.

13.3.1.2 GDOT, in its sole discretion, may accept or reject any Change Request proposed by DB Team, provided that GDOT will accept a Change Request necessary to bring the Technical Provisions or Technical Documents into compliance due to an applicable Change in Law per clause (a) of the definition of a Compensation Event. GDOT may condition its acceptance on new or a modification of compensation for GDOT under this Agreement in order to benefit equally in the estimated net cost savings and revenue benefit, if any, attributable to the proposed change. If GDOT accepts such change, DB Team shall execute a Supplemental Agreement and shall implement such change in accordance with the Supplemental Agreement, applicable Technical Provisions, Technical Documents, the Management Plans, Good Industry Practice, and all applicable Laws.

13.3.1.3 DB Team shall be solely responsible for payment of any increased costs and for any Project Schedule delays or other impacts resulting from a DB Team proposed Change Request. If the Change Request results in a decrease in the costs of designing, constructing or operating the Project, the savings in costs shall be allocated between DB Team and GDOT as set forth in the Supplemental Agreement.

13.3.1.4 DB Team 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 or Technical Documents, but such changes are subject to GDOT’s acceptance as part of a Utility Work Plan as provided in Volume 2, Section 6.3.8.5.

13.3.1.5 No Change Request shall be required to implement any change to the Work that is not specifically regulated or addressed by the DB Documents or applicable Law.

13.3.1.6 Certain minor changes without significant cost savings or revenue benefits may be accepted in writing by GDOT, and in such event, shall not require a Supplemental Agreement. Any other change in the requirements of the DB Documents shall require a Supplemental Agreement.
Article 14  RELIEF EVENTS; COMPENSATION EVENTS

14.1  Notices

14.1.1  DB Team’s Notice of Compensation Event and/or Relief Event

14.1.1.1  Except as otherwise expressly provided in this Agreement, if at any time DB Team determines that a change to the work has occurred or is imminent, and that change creates a Compensation Event or Relief Event, DB Team shall submit a written notice of Compensation Event and/or Relief Event to GDOT per this Article 14 stating that a Compensation Event or Relief Event has occurred or will occur. The first Compensation Event notice shall be labeled “Notice of Compensation Event No. 1” and subsequent compensation event notices shall be numbered sequentially. The first relief event notice shall be labeled “Notice of Relief Event No. 1” and subsequent relief event notices shall be numbered sequentially.

14.1.1.2  Time is of the essence in DB Team’s delivery of its written notice of Compensation Event or written notice of a Relief Event. Accordingly, if for any reason DB Team fails to deliver a notice of Compensation Event and/or Relief Event in strict accordance with Article 14.1.2 (Relief Event Notice) or 14.1.3 (Compensation Event Notice), DB Team shall be deemed to have irrevocably and forever waived the right to assert a Compensation Event and/or Relief Event.

14.1.1.3  If any notice of Compensation or Relief Event concerns any hazardous condition or material described in Article 7.8 (Hazardous Materials Management), the DB Team 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.

14.1.2  Relief Event Notice

14.1.2.1  If at any time DB Team determines that a Relief Event has occurred or is imminent, DB Team shall promptly submit a written Notice of Relief Event as provided for in Article 14.1.1.2 to GDOT as follows:

Notices of Relief Events shall include:

(a) a statement of the Relief Event upon which the delay or inability to perform is based, including its nature, the reasons why the DB Team believes additional time will or may be due, and the date of its occurrence and its actual or, if it has not concluded, its anticipated duration;

(b) the effect of the Relief Event on DB Team’s ability to perform any of its obligations under the DB Documents, including details of the relevant obligations;
(c) an explanation of the measures that DB Team proposes to undertake to mitigate the delay and other consequences of the Relief Event; and

(d) provide an estimate of the time within which a response to the notice is required to minimize cost or delay of performance.

14.1.2.2 Failure to file a Notice of Relief Event within 20 days following the date (herein the “starting date”) on which DB Team first became aware (or should have been aware, using all reasonable due diligence) of the Relief Event, DB Team shall be deemed to have irrevocably and forever waived and released the right to relief for the Relief Event accruing after such 20 day deadline.

14.1.2.3 If, following submittal of a Notice of Relief Event, but prior to its conclusion, DB Team receives or becomes aware of any further information relating to the Relief Event and/or any delay in performance or failure to perform, it shall submit such further information to GDOT not later than seven days after DB Team’s receipt or knowledge of the additional information. GDOT may request from DB Team any further information that GDOT may reasonably require, and DB Team shall supply the same within a reasonable period but not later than seven days after such GDOT request. Within seven days of the conclusion of an asserted Relief Event, DB Team shall update its Notice of Relief Event with the date of its actual or estimated conclusion.

14.1.3 Compensation Event Notice

14.1.3.1 If at any time DB Team determines that a Compensation Event has occurred or is imminent, DB Team shall promptly, submit a written Notice of Compensation Event as provided for in Article 14.1.1.2 to GDOT as follows:

Notices for Compensation Events shall include:

(a) a description of the Compensation Event and its date of occurrence in reasonable detail;

(b) the reasons why the DB Team believes additional compensation will or may be due;

(c) a detailed statement of the basis that the work is not included by the Agreement;

(d) identify particular elements of performance for which additional compensation may be sought;

(e) DB Team’s current estimate of the anticipated adverse and beneficial effects of the Compensation Event on the Project and on DB Team’s ability to perform any of its obligations under the DB Documents; and

(f) provide an estimate of the time within which a response to the notice is required to minimize cost or delay of performance.
14.1.3.2 Failure to file a Notice of Compensation Event within 20 day following the date (herein the “starting date”) on which DB Team first became aware (or should have been aware, using all reasonable due diligence) of the Compensation Event, DB Team shall be deemed to have irrevocably and forever waived and released the right to damages for the Compensation Event accruing after such 20 day deadline.

14.1.3.3 If, following submittal of a Notice of Compensation Event, DB Team receives or becomes aware of any further information relating to the Compensation Event, it shall submit such further information to GDOT not later than seven days of DB Team’s receipt or knowledge of the additional information. GDOT may request from DB Team any further information that GDOT may reasonably require, and DB Team shall supply the same within a reasonable period but not later than seven days after such GDOT request. Within seven days of the conclusion of an asserted Compensation Event, DB Team shall update its notice of a Compensation Event with the date of its actual or estimated conclusion.

14.1.4 Compensation and/or Relief Event Package

14.1.4.1 The DB Team shall deliver to GDOT as soon as practicable and in any event within 30 days (or longer time period if acceptable to GDOT) after delivery of the Notice of Compensation Event and/or Notice of Relief Event, a Compensation and/or Relief Event Package labelled with the Compensation Event number or Relief Event number from the corresponding Notice of Compensation or Relief Event, and containing every item specified in Article 14.1.4.2.

14.1.4.2 Each Compensation and/or Relief Event Package shall at a minimum include:

(a) A scope of work describing in detail satisfactory to the GDOT all activities associated with the asserted Compensation or Relief Event.

(b) A cost estimate that sets out the estimated costs in such a way and in sufficient detail that a fair evaluation can be made. It shall be in a form approved by GDOT and shall include both a separate breakdown of costs that impact design and those that impact construction activities and as separate items: labor, materials, equipment, overhead (which includes all indirect costs) and profit, as and to the extent allowed under Article 13 (GDOT Changes; DB Team Changes; Directive Letters) and this Article 14. If the work is to be performed by Subcontractors and if the work is sufficiently defined to obtain Subcontractor quotes, DB Team shall obtain quotes (with breakdowns showing cost of labor, materials, equipment, overhead and profit) on the Subcontractor’s stationery and shall include such quotes as back-up for the DB Team estimate. Note that compensation costs are determined in accordance with Article 14.5.1.
(c) If the DB Team claims that a Relief Event has occurred affecting the Critical Path, the DB Team shall provide an impact delay analysis with activity durations, predecessor and successor activities and resources; and showing Float available pursuant to Article 3.2.5, the likely duration of that effect and identify any potential impact to the Critical Path affecting a Completion Deadline, it shall provide a Time Impact Analysis indicating all activities represented or affected by the asserted change in accordance with this Article 14 and Volume 2, Section 2.5 (Project Schedule Requirements). The impacted delay analysis shall only modify the Activities that have been impacted by the event that justifies the extension.

(d) A narrative justification detailing all causes of the asserted change, making specific reference and citing to the applicable provisions of the Agreement and DB Documents, and describing the data and documents that establish the necessity of such asserted change; and

(e) A sworn certification in a form acceptable to GDOT by the DB Team (and Subcontractor(s), for any Subcontractor involved in the Work or event) that the claim is made is good faith and in accordance with the terms of the DB Documents, the amount of time and/or compensation requested accurately reflects the appropriate adjustments and includes all known and anticipated impacts or amounts whatsoever that may be incurred as a result of the event or matter giving rise to such proposed change and that the DB Team (and Subcontractor(s), as applicable) has no reason to believe and does not believe that the factual basis for the claim is falsely represented.

### 14.2 Relief Event and Compensation Event Determinations

**14.2.1** If DB Team complies with the notice and information requirements in Article 14, then within 60 days after receiving the Relief Event Package or such longer period of time to which the Parties may mutually agree, (and, if applicable, any required updates thereto) GDOT shall issue a Relief Event Determination. GDOT shall specify in the Relief Event Determination (a) the relevant obligations for which relief is given, (b) the period of time that Milestone Deadlines or periods set forth in the Project Schedule will be extended based on the number of days of delay affecting a Critical Path, after consumption of Float available pursuant to Article 3.2.5, that is directly attributable to the Relief Event and that cannot be avoided through reasonable mitigation measures and (c) if applicable, the period of time, if any, that the Contract Time will be extended. DB Team shall be relieved from the performance of obligations to the extent specified in the Relief Event Determination.

**14.2.2** If DB Team complies with the notice and information requirements of Article 14, then within 60 days after receiving the Compensation Event Package or such longer period of time to which the Parties may mutually agree, (and, if applicable, any required updates thereto) GDOT shall issue a Compensation
Event Determination. GDOT shall specify in the Compensation Event Determination (a) the relevant obligations for which relief is given and (b) the modification of the Contract Sum.

14.2.3 Any final Relief Event Determination and/or final Compensation Event Determination that has been mutually accepted by GDOT and DB Team shall be set forth in a Supplemental Agreement in accordance with Article 14.1.4 (Compensation and/or Relief Event Package). Such Supplemental Agreement shall provide for modification of the Contract Time and the Project Schedule, including to the extent so established by such Relief Event Determination, the Milestone Deadlines, and modification of the Contract Sum pursuant to any such Compensation Event Determination, as the case may be. All Supplemental Agreements shall be all-inclusive, comprehensive, and complete, and shall not include any conditions with respect to pricing or schedule or any other matters. The DB Team is not entitled to any additional costs or time whether deriving from or related to a Supplemental Agreement.

14.2.4 The Package submitted by DB Team will address any and all costs and delays, and after negotiation and upon agreement of the terms and verification that all applicable requirements of Article 13 and this Article 14 are met, the GDOT shall draft the Supplemental Agreement based on the agreed upon terms and the DB Team and GDOT shall execute the Supplemental Agreement.

14.3 Reserved

14.4 Relief Events; Compensation Event Process

14.4.1 Extensions of Time for Relief Events

14.4.1.1 DB Team shall not be excused from compliance with applicable Laws, Technical Provisions or Technical Documents due to the occurrence of a Relief Event, except temporary inability to comply as a direct result of a Relief Event.

14.4.1.2 If GDOT is obligated to but does not provide a Relief Event Determination within such 60 day period or such longer period of time to which the Parties may mutually agree or if DB Team disagrees with the length of the extension of the Contract Time or other relief set forth in the Relief Event Determination, DB Team shall have the right to assert a claim against GDOT for the relevant Relief Event and have such claim determined according to the Dispute Resolution Procedures. Any Dispute regarding the occurrence of a Relief Event, the terms of the Relief Event Determination or waiver of DB Team’s right to relief shall be resolved according to the Dispute Resolution Procedures.

14.4.1.3 Without limiting DB Team’s rights with respect to monetary relief for Compensation Events as set forth in this Agreement, the extensions of time as provided, if any, pursuant to this Article 14.4 are DB Team’s sole remedy for a Relief Event.
14.4.2 Limitations on Time Extensions

14.4.2.1 The DB Team shall be required to demonstrate to GDOT’s satisfaction that the change in the Work or other event or situation which is being asserted as a Relief Event will result in or has caused an identifiable and measurable delay of the Work which will impact or has impacted the Critical Path affecting a Completion Deadline.

14.4.2.2 Any extension of a Completion Deadline allowed hereunder shall exclude any delay to the extent that it did not impact the Critical Path affecting a Completion Deadline or was a concurrent delay with any other delay for which the DB Team is not entitled to an extension.

14.5 Compensation Events

14.5.1 Determining Compensable Amounts

The Compensation Amount, if any, for design or construction shall be determined by applying the following provisions.

14.5.1.1 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 CFR 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);

(b) Exclude amounts paid or to be paid to Affiliates in excess of the pricing DB Team could reasonably obtain in an arms' length, competitive transaction with an unaffiliated Contractor;

(c) Exclude those costs incurred in asserting, pursuing, or enforcing any Compensation Event, Relief Event or Dispute;

(d) Be reduced by any savings in costs resulting from the Compensation Event;

(e) Be subject to DB Team’s obligation to mitigate cost increases and augment cost decreases in accordance with this Article 14.5 (Compensation Events).
(f) Exclude costs caused by the breach of contract or fault or negligence, or act or failure to act of any DB Team-Related Entity.

(g) Exclude costs, which could reasonably, and in accordance with Good Industry Practice, have been avoided by the DB Team, including by resequencing, reallocating, or redeploying its forces to other portions of the Work (including any additional costs reasonably incurred in connection with such reallocation or redeployment) or to other activities unrelated to the Work.

(h) Exclude costs for any rejected Work that failed to meet the requirements of the DB Documents and any necessary remedial Work.

(i) Exclude damages or expenses barred under Section 105.13 of the latest edition of GDOT Standard Specifications: Construction of Transportation Systems.

14.5.1.2 In all cases the Compensation Amount shall be net of all insurance available to DB Team including deductibles or deemed to be self-insured by DB Team under Article 16 (Insurance; Performance Security; Indemnity), with respect to cost or revenue impacts of the Compensation Event.

14.5.1.3 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 DB Team or any Contractors on account of charges or expenses due to (a) the business organization existence or maintenance of its business of any DB Team-Related Entity or (b) labor or employment matters as a result of any Change in Law.

14.5.1.4 If the Compensation Event is under clause (g) the definition of a 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.

14.5.1.5 DB Team shall share with GDOT all data, documents, and information pertaining to bids for any work that is the subject of a Compensation Amount, and all of the aforementioned shall be on an Open Book Basis.

14.5.1.6 Any Dispute between GDOT and the DB Team regarding occurrence of a Compensation Event, determination of the Compensation Amount or waiver of DB Team’s right to compensation shall be resolved by mutual agreement or if mutual agreement cannot be achieved then according to the Dispute Resolution Procedures. The dispute resolution body(ies) shall apply the provisions of this Article 14.5 (Compensation Events) in determining the Compensation Amount.

14.5.1.7 Following a determination of the Compensation Amount by mutual agreement or the Dispute Resolution Procedures, GDOT shall pay such Compensation Amount (a) through periodic payments of the Compensation
Amount in accordance with the scheduling and payment provisions in Volume 2, Section 2 (Project Management), (b) in a lump sum, payable as determined by mutual agreement or through the Dispute Resolution Procedures, or (c) in such other manner as agreed upon by the Parties. GDOT, in its sole discretion, shall be entitled to select one or any combination of the foregoing methods of compensation.

14.5.1.8 Without limiting DB Team’s rights with respect to non-monetary relief for Relief Events as set forth in this Agreement, the Compensation Amount shall represent the sole right to compensation and damages for the adverse financial effects of a Compensation Event. As a condition precedent to GDOT’s obligation to pay any portion of the Compensation Amount, DB Team shall execute a full, unconditional, irrevocable release, in form reasonably acceptable to GDOT, of any claims, Losses or other rights to compensation or other monetary relief associated with such Compensation Event, except for the right to the subject Compensation Amount, DB Team’s right to non-monetary relief for a Relief Event, and the right to terminate this Agreement in accordance with Article 19.4 (Termination for GDOT Default, Suspension of Work, Force Majeure Event, or Materially Delayed Notice to Proceed) and to receive any applicable Termination Compensation.

14.5.2 Limitations on Acceleration Costs

14.5.2.1 Acceleration costs shall be compensable hereunder only with express written direction by GDOT to the DB Team to accelerate its efforts and evidenced by Supplemental Agreements issued by GDOT.

14.5.2.2 Acceleration costs are those fully documented increased costs reasonably incurred by the DB Team (i.e., costs over and above what the DB Team would otherwise have incurred) which 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 do not include any costs for disruption damages as described below in Article 14.5.3 (No Disruption Damages).

14.5.3 No Disruption Damages

14.5.3.1 Disruption damages, whether from a single event or continual, multiple or repetitive events, are not allowed or recoverable under the Agreement. Disruption damages include costs of (i) rearranging the DB Team’s Work plan not associated with an extension of a Completion Deadline, and (ii) loss of efficiency, momentum or productivity.

14.5.4 Limitations on Delay Damages

14.5.4.1 Delay damages are compensable and are limited to the provisions of GDOT Standard Specifications 105.13.B.
14.5.4.2 Before the DB Team may obtain any increase in the Contract Sum to compensate for any delay damages or acceleration costs, the DB Team shall have demonstrated to GDOT’s satisfaction that:

(a) The Project Schedule in fact sets forth a reasonable method for completion of the Work;

(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 Exhibit 9 (Milestone Deadlines);

(c) The delay damage was not due to any breach of contract or fault or negligence, or act or failure to act of any DB Team-Related Entity, and could not reasonably have been avoided by the DB Team, 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;

(d) The delay for which compensation is sought is not concurrent with any other delay for which the DB Team is not entitled to delay damages; and

(e) The DB Team 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.

14.5.4.3 Delay damages shall only be available for delays to the Completion Deadline for Substantial Completion. For delays to any other Completion Deadline the only relief available is suspension of Liquidated Damages for the duration of the proven delay.

14.6 Lump Sum Compensation

14.6.1 The preferred approach by both parties is that Supplemental Agreements will be paid on a lump sum basis, if the parties can agree on a lump sum amount. Lump sum prices shall be based on the original allocations of the Contract Sum to comparable activities. If reference to price allocations is inappropriate, or when requested by GDOT or the DB Team, negotiation for lump sum Supplemental Agreements shall be on an Open Book Basis and may be based as well on Subcontractors’ bid prices.

14.6.2 If the parties cannot agree on a lump sum amount for Supplemental Agreements, the Supplemental Agreements will be paid as Force Account Supplemental Agreements described in Article 14.7 (Force Account Compensation).
14.6.3 Each lump sum and force account claim shall meet all applicable requirements of Article 13 (GDOT Changes; DB Team Changes; Directive Letters) and this Article 14.

14.7 Force Account Compensation

14.7.1 GDOT may at its discretion issue a Directive Letter or Force Account Supplemental Agreement whenever the Parties cannot agree to a lump sum Supplemental Agreement or GDOT determines that a Force Account Supplemental Agreement is advisable.

14.7.2 The Force Account shall instruct the DB Team to perform the Work, indicating expressly the intention to treat the items as changes in the Work, and setting forth the kind, character, and limits of the Work as far as they can be ascertained, the terms under which changes to the Contract Sum will be determined, and the estimated total change in the Contract Sum anticipated thereunder.

14.7.3 Force Account work is subject to the provisions of 109.05.B of the latest edition of GDOT Standard Specifications: Construction of Transportation Systems. No other direct or indirect compensation will be allowed, including for other miscellaneous costs for which no specific allowance is provided.

14.7.4 Upon final determination of the allowable costs, GDOT shall issue a modified Supplemental Agreement setting forth the final adjustment to the Contract Sum.

14.7.5 Force Account Records

14.7.5.1 Unless and until a lump sum Supplemental Agreement is issued, or in the case that a Directive Letter or Supplemental Agreement is issued directing work be performed under Force Account provisions, the DB Team shall maintain its records in such a manner as to provide a clear distinction between: (i) the direct cost of Work for which it is entitled (or for which it believes it is entitled) to an increase in the Contract Sum; and (ii) the costs of all other operations.

14.7.5.2 The DB Team shall contemporaneously collect, record in writing, segregate, and preserve: (a) all data necessary to determine the costs described in this Article 14.7 (Force Account Compensation) with respect to all Work which is the subject of a requested Supplemental Agreement, specifically including costs associated with Design Work (for which a negotiated Supplemental Agreement has not been issued); and (b) all data necessary to show the actual impact (if any) of any change on the Critical Path affecting a Completion Deadline with respect to all Work which is the subject of a Supplemental Agreement or a Proposed Supplemental Agreement, if the impact on the Critical Path affecting a Completion Deadline is in dispute.

14.7.5.3 Such data shall be provided on forms approved by GDOT. The cost of furnishing such reports is included in the DB Team’s predetermined overhead and profit.
14.7.5.4 The DB Team shall furnish daily, on forms approved by GDOT, reports of all Force Account Work. The cost of furnishing such reports shall be included in the DB Team’s overhead and profit percentages. The reports shall include:

(a) Name, classification, date, daily hours, total hours, rate, and extension for each laborer, equipment operator, and supervisor, excluding superintendents.

(b) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

(c) Quantities of materials, prices and extensions.

(d) Transportation costs of materials, machinery, and equipment.

(e) Invoices for materials used and for transportation charges.

(f) Cost of property damage, liability, and worker’s compensation insurance premiums, unemployment insurance contributions, and Social Security tax.

The reports shall also state the total costs to date for the Force Account Work.

14.7.5.5 Labor costs for Project management and administration, and construction field management above but not including the Superintendent, according to the DB Team’s organization and standard work practices, are included in the markup as provided in Standard Specification 109.05.B.1.

14.7.5.6 The cost of labor for non-construction-related Work, whether provided by the DB Team or a Subcontractor, will equal the sum of the following: (i) actual wages (i.e. the base wage paid to the employee exclusive of any fringe benefits); plus (ii) an overhead based on the audited Federal Acquisition Regulations (FAR) field rates. The DB Team will also be paid for profit on non-construction labor of five percent of labor costs plus overhead.

14.7.5.7 If materials used on the Force Account Supplemental Agreement Work are not specifically purchased for the Work but are taken from the DB Team’s stock, the DB Team shall furnish an affidavit certifying that such materials were taken from the DB Team’s stock, that the quantity claimed was actually used, and that the price and transportation costs claimed represent actual costs to the DB Team.

14.7.5.8 All Force Account Supplemental Agreement reports shall be signed by the Project Manager. GDOT will compare its records with the DB Team’s reports, make the necessary adjustments, and compile the costs of Force Account Supplemental Agreement Work. When such reports are agreed upon and signed by both parties, they will become the basis of payment and may be billed in the next Payment Request, but shall not preclude subsequent adjustment based on a later audit.
Article 15  REPRESENTATIONS AND COVENANTS

15.1  DB Team Representations and Covenants

DB Team hereby represents to and covenants with GDOT as follows:

15.1.1  During all periods necessary for the performance of the Work, DB Team and its Contractor(s) will maintain all required authority, license status, professional ability, skills and capacity to perform the Work.

15.1.2  As of the Effective Date, DB Team has evaluated the constraints affecting design and construction of the Project, including the Property, the Existing Right of Way and Required Right of Way limits as well as the conditions of the Environmental Documents, and has reasonable grounds for believing and does believe that the Project can be designed and built within such constraints.

15.1.3  Except as to parcels that GDOT lacked title or access to prior to the Effective Date, DB Team, in accordance with Good Industry Practice and the requirements of the DB Documents, shall have examined the Site and surrounding locations, performed appropriate field studies and geotechnical investigations of the Site, investigated and reviewed available public and private records, and undertook other activities sufficient to familiarize itself with surface conditions and subsurface conditions, including the presence of Utilities, Hazardous Materials, contaminated groundwater, archeological, paleontological and cultural resources, and Threatened or Endangered Species, affecting the Site or surrounding locations; and as a result of such review, inspection, examination and other activities DB Team is familiar with and accepts the physical requirements of the Work, subject to GDOT’s obligations regarding Hazardous Materials under Article 7.8 (Hazardous Materials Management) and Exhibit 11 (Hazardous Materials Risk Allocation Terms) and DB Team’s rights to seek relief under Article 14 (Relief Events).

15.1.4  DB Team has familiarized itself with the requirements of any and all applicable Laws, including with limitation O.C.G.A. §48-13-30, et. seq., and the conditions of any required Governmental Approvals prior to entering into this Agreement. Except as specifically permitted under Article 13 (GDOT Changes; DB Team Changes; Directive Letters) or Article 14 (Relief Events; Compensation Events), DB Team shall be responsible for complying 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 DB Documents. As of the Effective Date, DB Team has no reason to believe that any Governmental Approval required to be obtained by DB Team will not be granted in due course and thereafter remain in effect so as to enable the Work to proceed in accordance with the DB Documents.

15.1.5  All Work furnished by DB Team 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 DB 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.

15.1.6 As of the Effective Date, DB Team is a corporation duly organized and validly existing under the laws of Georgia, 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 DB Documents, Principal Project Documents as and to the extent applicable, and to perform each and all of the obligations of DB Team provided for herein and therein. DB Team is duly qualified to do business, and is in good standing, in the State as of the Effective Date, and will remain duly qualified and in good standing throughout the term of this Agreement and for as long thereafter as any obligations remain outstanding under the DB Documents.

15.1.7 The execution, delivery and performance of the DB Documents, and all other Principal Project Documents to which DB Team is (or will be) a party have been (or will be) duly authorized by all necessary corporate action of DB Team; each Person executing the DB Documents and all other such Project related documents, on behalf of DB Team has been (or at the time of execution will be) duly authorized to execute and deliver each such document on behalf of DB Team; and the DB Documents, and all such other Project related documents have been (or will be) duly executed and delivered by DB Team.

15.1.8 Neither the execution and delivery by DB Team of the DB Documents and the Principal Project Documents to which DB Team is (or will be) a party, 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 DB Team.

15.1.9 As of the Effective Date, each of the DB Documents, the Principal Project Documents to which DB Team is (or will be) a party constitutes (or at the time of execution and delivery will constitute) the legal, valid and binding obligation of DB Team, enforceable against DB Team and, if applicable, each member of DB Team, 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.

15.1.10 As of the Effective Date, there is no action, suit, proceeding, investigation or litigation pending and served on DB Team which challenges DB Team’s authority to execute, deliver or perform, or the validity or enforceability of, the DB Documents, and all other Project related documents to which DB Team is a party, or which challenges the authority of DB Team official executing the DB Documents, or the Principal Project Documents. DB Team 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 DB Team is aware.

15.1.11 As of the Proposal Due Date, DB Team disclosed to GDOT in writing all organizational conflicts of interest of DB Team and its Contractors of which DB Team was actually aware; and between the Proposal Due Date and the Effective
Date, DB Team has not obtained knowledge of any additional organizational conflict of interest, and there have been no organizational changes to DB Team or its Contractors identified in its Proposal, which have not been accepted in writing by GDOT. For this purpose, organizational conflict of interest has the meaning set forth in Section 1.6 of the ITP.

15.1.12 To the extent the Design-Build Contractor is not the DB Team, DB Team represents and warrants, as of the effective date of the Design-Build Contract, as follows: (a) the Design-Build Contractor is duly organized, validly existing and in good standing under the laws of the state of its organization; (b) with respect to Persons that individually hold more than ten percent (10%) of the capital stock of the Design-Build Contractor (including options, warrants and other rights to acquire capital stock), such stock is owned by the Persons whom DB Team has set forth in a written certification delivered to GDOT prior to the Effective Date; (c) the Design-Build Contractor has the power and authority to do all acts and things and execute and deliver all other documents as are required to be done, observed or performed by it in connection with its engagement by DB Team; (d) the Design-Build Contractor has all necessary expertise, qualifications, experience, competence, skills and know-how to perform the design and construction of the Project in accordance with the DB Documents; and (e) the Design-Build Contractor is not in breach of any applicable Law that would have a material adverse effect on the design and construction of the Project.

15.1.13 The execution and delivery by DB Team of this Agreement and all other Project related documents to which DB Team is a party will not 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.

15.1.14 The execution and delivery by DB Team of the DB Documents and performance by DB Team of its obligations thereunder will not conflict with any Laws applicable to DB Team that are valid and in effect on the Effective Date.

15.1.15 The Design-Build Contractor shall comply in full with 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”.

15.1.16 No event which, with the passage of time or the giving of notice, would constitute a DB Team Default has occurred and has not yet been cured.

15.1.17 Reserved

15.1.18 DB Team certifies, by entering into this Agreement, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from entering into this Agreement by any federal agency or by any department, agency or political subdivision of the State, including GDOT. For purposes of this Article 15.1.18, 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 DB Team.
15.1.19 DB Team represents, warrants and certifies by entering into this 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.

15.1.20 DB Team acknowledges and agrees, that as a requirement to enter into the DB Documents, the Proposal documents delivered pursuant to the RFP constitute all the information used in the preparation of the Proposal, and that no other Proposal preparation information will be considered in the resolution of Disputes. The DB Team also agrees that nothing in the Proposal documents delivered pursuant to the RFP shall change or modify the terms or conditions of the DB Documents.

15.2 GDOT Representations and Covenants

GDOT hereby represents to and covenants with DB Team as follows:

15.2.1 As of the Effective Date, GDOT has full power, right and authority to execute, deliver and perform the DB Documents and the Principal Project Documents to which GDOT is a party and to perform each and all of the obligations of GDOT provided for herein and therein.

15.2.2 As of the Effective Date, each of the DB Documents and the Principal Project Documents to which GDOT is (or will be) a party constitutes (or at the time of execution and delivery will constitute) the legal, valid and binding obligation of GDOT, enforceable against GDOT 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.

15.2.3 The execution and delivery by GDOT of this Agreement and the Principal Project Documents to which GDOT is a party will not 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.

15.2.4 The execution and delivery by GDOT of the DB Documents and performance by GDOT of its obligations thereunder will not conflict with any Laws applicable to GDOT that are valid and in effect on the Effective Date.

15.2.5 Reserved

15.2.6 As of the Effective Date, there is no action, suit, proceeding, investigation or litigation pending and properly served on GDOT, or, to GDOT’s knowledge, without obligation to investigate, threatened, which challenges GDOT’s authority to execute, deliver or perform, or the validity or enforceability of, the DB Documents, and all other Project related documents to which GDOT is a party.
15.3 Survival of Representations and Covenants

The representations and covenants of DB Team and GDOT contained herein shall survive expiration or earlier termination of this Agreement.

15.4 Special Remedies for Mutual Breach of Representations and Covenants

Notwithstanding any other provision of this Agreement, if there exists or occurs any circumstance or event that constitutes or results in a concurrent breach of any of the representations or covenants set forth in this Article 15 (DB Team Representations and Covenants) by both DB Team and GDOT but does not also constitute or result in any other breach or default by either Party, then such breaches shall not form the basis for a Compensation Event by the DB Team or damage claim by GDOT against DB Team. Instead, the only remedies shall be for the Parties to take action to rectify or mitigate the effects of such circumstance or event, to pursue severance and reformation of the DB Documents and Principal Project Documents as set forth in Article 24.13 (Severability), or Termination by Court Ruling as set forth in Article 19.11 and Exhibit 20 (Terms for Termination Compensation).

Article 16 INSURANCE; PERFORMANCE SECURITY; INDEMNITY

16.1 Insurance Policies and Coverage

16.1.1 Insurance Certificates and Additional Insured Endorsements Requirements

16.1.1.1 Certificates of Insurance. The DB Team shall procure the insurance coverages identified below at the DB Team’s expense and shall furnish GDOT an insurance certificate listing GDOT as the certificate holder, and as an additional insured where required. Certificates of insurance shall be on a form approved for use in the State of Georgia by the Commissioner of Insurance that provides the following:

(a) Name and address of authorized insurance agent
(b) Name and address of insured
(c) Name of insurance company(ies)
(d) Description of policies
(e) Policy number(s)
(f) Policy Period(s)
(g) Limits of liability
(h) Name and address of GDOT as certificate holder
(i) Project Name and Number
(j) Signature of authorized insurance agent
(k) Telephone number and e-mail address of authorized insurance agent

(l) Mandatory 30 Day notice of cancellation or non-renewal (except 10 Days for non-payment) specifically to GDOT.

16.1.2 Insurer Qualifications, Insurance Requirements. Each of the insurance coverages required below (i) shall be issued by a company licensed or authorized by the Insurance Commissioner to transact the business of insurance in the State of Georgia for the applicable line of insurance, and (ii) shall be an insurer (or, for qualified self-insureds or group self-insureds that hold a certificate of self-insurance with the appropriate agencies within the State of Georgia, a specific excess insurer providing statutory limits) with a Best Policyholders Rating of “A-” or better and with a financial size rating of Class V or larger. Each such policy shall contain the following provisions:

16.1.2.1 The insurance company agrees that the policy shall not be canceled, reduced, or allowed to expire until 30 days, except 10 days for non-payment of premium, after GDOT has received written notice thereof, as evidenced by return receipt of certified mail or statutory mail, or until such time as other insurance coverage providing protection equal to protection called for in this Contract shall have been received, accepted and acknowledged by GDOT. Such notice shall be valid only as to the Project as shall have been designated by Project Number and Name in said notice.

16.1.2.2 The policy shall not be subject to invalidation as to any insured by reason of any act or omission of another insured or any of its officers, employees, agents or other representatives (“Separation of Insureds”), except Professional Liability (Errors and Omissions).

16.1.2.3 Each Insurer is hereby notified that the statutory requirement that the Attorney General shall represent and defend the Indemnified Parties remains in full force and effect and is not waived by issuance of any policy of insurance. In the event of litigation, any settlement on behalf of the Indemnified Parties must be expressly approved by the Attorney General. The DB Team and its insurance carrier may retain, but are not obligated to retain, counsel to assist with the defense of the Indemnified Parties, in which case there will be mutual cooperation between the Attorney General and such counsel. See O.C.G.A. §45-15-15-12.

16.1.2.4 All deductibles shall be paid for by the DB Team.

16.1.2.5 The maximum deductible, except for Worker’s Compensation qualified self-insurers or group self-insurers, in any policy shall not exceed $250,000.00 per claim, provided, however, that the maximum deductible requirement shall not apply to self-insurers or group self-insurers that hold a certificate of self-insurance with the appropriate agencies within the State of Georgia.

16.1.3 Required Insurance Coverages. The DB Team also agrees to purchase insurance and have the authorized agent state on the insurance certificate that
the DB Team has purchased the following types of insurance coverages, consistent with the policies and requirements of O.C.G.A. §50-21-37. The minimum required coverages and liability limits are as follows:

16.1.3.1  **Workers’ Compensation Insurance.** The DB Team agrees to provide at a minimum Workers’ Compensation coverage in accordance with the statutory limits as established by the General Assembly of the State of Georgia. A group insurer must submit a certificate of authority from the Insurance Commissioner approving the group insurance plan. A self-insurer must submit a certificate from the Georgia Board of Workers’ Compensation stating the DB Team qualifies to pay its own workers’ compensation claims. The DB Team shall require all Subcontractors performing work under this Agreement to obtain an insurance certificate showing proof of Workers’ Compensation Coverage and shall submit a certificate on the letterhead of the DB Team in the following language:

>This is to certify that all subcontractors performing work on this Project are covered by their own workers’ compensation insurance or are covered by the DB Team’s workers’ compensation insurance. DB Team further certifies that additional subcontractors performing work on the Project will be covered by their own workers’ compensation insurance or will be covered by the DB Team’s workers’ compensation insurance.

16.1.3.2  **Employers’ Liability Insurance.** The DB Team shall also maintain Employer’s Liability Insurance Coverage with limits of at least:

(a) Bodily Injury by Accident - $1,000,000 each accident; and

(b) Bodily Injury by Disease - $1,000,000 each employee.

The DB Team shall require all Subcontractors performing work under this Contract to obtain an insurance certificate showing proof of Employers Liability Insurance Coverage and shall submit a certificate on the letterhead of the DB Team in the following language:

>This is to certify that all subcontractors performing work on this Project are covered by their own Employers Liability Insurance Coverage or are covered by the DB Team’s Employers Liability Insurance Coverage. DB Team further certifies that additional subcontractors performing work on this Project will be covered by their own Employers Liability Insurance Coverage or will be covered by the DB Team’s Employers Liability Insurance Coverage.

16.1.3.3  **Commercial General Liability (CGL) Insurance.** The DB Team shall provide Commercial General Liability Insurance (2004 ISO Occurrence Form or equivalent) that shall include, but need not be limited to, coverage for bodily injury and property damage arising from premises and operations liability, products and completed operations liability, blasting and explosion, collapse of structures, underground damage, personal injury liability and contractual liability. The CGL policy must include separate aggregate limits per Project and shall provide at a minimum the following limits:
16.1.3.4 Commercial Business Automobile Liability Insurance. The DB Team shall provide Commercial Business Automobile Liability Insurance that shall include coverage for bodily injury and property damage arising from the operation of any owned, non-owned, or hired automobile. The Commercial Business Automobile Liability Insurance Policy shall provide not less than $1,000,000 Combined Single Limits for each occurrence.

16.1.3.5 Commercial Umbrella Liability Insurance. The DB Team shall provide a Commercial Umbrella Liability Insurance to provide excess coverage above the Commercial General Liability and Commercial Business Automobile Liability to satisfy the minimum limits set forth herein. The umbrella coverage shall follow form with the Umbrella limits required as follows:

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16.1.3.6 Additional Requirements for Commercial Policies in Article 16.1.3.3 (Commercial General Liability (CGL) Insurance) through Article 16.1.3.5 (Commercial Umbrella Liability Insurance):

(a) The DB Team shall cause its insurer to issue an Additional Insured Endorsement naming the officers, members, and employees of GDOT as additional Insureds.

(b) Each policy must be written on an “occurrence” basis.

16.1.3.7 Professional Liability (Errors and Omissions) Insurance. Limits shall not be less than the following:

(a) Reserved

(b) Professional Liability (Errors and Omissions): Insurance in an amount not less than one million dollars ($1,000,000.00) per claim or annual aggregate must be maintained or caused to be maintained during the agreement term with a retroactive date no later than the date that design services commenced, and must be maintained for a period of at least five years following Substantial Completion. Such policy or policies shall cover all the DB Team’s professional liabilities, whether occasioned by the DB Team, its employees, subconsultants, subcontractors or other agents arising
out of design and engineering services performed under or in accordance with this Agreement.

16.1.3.8 Reserved.

16.1.3.9 Disposition of Insurance Documents. Original certificate(s) of insurance with all required endorsements must be provided to GDOT evidencing the minimum insurance required. Renewal certificates for all required insurance must be provided to GDOT 30 days prior to the expiration/renewal date. If requested, copies of required insurance policies must be provided to GDOT within 10 business days.

16.1.4 Termination of Obligation to Insure. Unless otherwise expressly provided to the contrary, the obligation to insure as provided herein shall not terminate until GDOT shall have executed the certificate of Final Acceptance.

16.1.5 Failure of Insurers. The DB Team is responsible for any delay resulting from the failure of its insurance carriers to furnish proof of proper coverage in the prescribed form.

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 Agreement or approved variances therefrom are adequate to protect the DB Team or its Contractors against its undertakings under this Agreement to GDOT, or its liabilities to any third party. It is the responsibility of the DB Team 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 DB Documents, or otherwise at Law.

16.2 Performance and Payment Security

DB Team shall furnish Performance & Payment Bonds ("P&P Bonds") meeting the requirements of this Article 16.2 as performance and payment security for the Work.

16.2.1 P&P Bonds

16.2.1.1 The DB Team shall furnish, or cause the furnishing of, P&P Bonds. DB Team shall obtain and deliver P&P Bonds in such amount as required pursuant to the terms set forth in the Standard Specification Section 103.05, identifying DB Team as the P&P Obligor, securing DB Team’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 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, and be on the list of companies approved by the State for at least three of the last five years from the date of the
proposed bond issuance. If P&P Bonds are issued by more than one surety, such P&P Bonds shall be executed on a joint and several basis.

16.3 Prosecution of Claims

16.3.1 Unless otherwise directed by GDOT in writing with respect to GDOT’s insurance claims and subject to the requirements of Article 16.5 (Indemnity by DB Team) and Article 16.6 (Defense and Indemnification Procedures) below, DB Team shall be responsible for reporting and processing all potential claims by GDOT or DB Team against the Insurance Policies required hereunder. DB Team agrees to report timely to the insurer(s) under such Insurance Policies any and all matters which may give rise to an insurance claim by DB Team 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. DB Team 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 DB Team shall be deemed to have satisfied this obligation if a judgment is not collectible through the exercise of lawful and diligent means.

16.3.2 GDOT agrees to promptly notify DB Team of GDOT’s incidents, potential claims against GDOT, and matters which 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 DB Team as necessary for DB Team to fulfill its duties hereunder.

16.3.3 If in any instance DB Team has not performed its obligations respecting insurance coverage set forth in the DB 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 DB Team’s liability and the limits thereon or determining reductions in compensation due from GDOT to DB Team on account of available insurance, DB Team shall be treated as if it has elected to self-insure up to the full amount of insurance coverage which would have been available had DB Team performed such obligations and not committed such failure. Nothing in this Article 16.3.3 or elsewhere in this Article 16.3 (Prosecution of Claims) shall be construed to treat DB Team as electing to self-insure where DB Team is unable to collect due to the bankruptcy or insolvency of any insurer which at the time the Insurance Policy is written meets the rating qualifications set forth in this Article 16.3.

16.3.4 DB Team shall not settle or accept any settlement of any insurance claim which is in excess of $100,000 or which 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 DB Team shall not be required to obtain GDOT approval for workers compensation claims.

16.3.5 If in any instance DB Team 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 DB Team 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 DB Team, within 10 days after so notifying DB Team, written proof that DB Team has reported the claim directly to the insurer. GDOT or the other Indemnified Party may dispense with such notice to DB Team if GDOT or the other Indemnified Party has a good faith belief that more rapid reporting is needed to preserve the claim.

16.4 Reserved

16.5 Indemnity by DB Team

16.5.1 Subject to Article 16.5.2, DB Team shall release, protect, defend, indemnify and hold harmless the Indemnified Parties from and against any and all Third-Party Claims and Third-Party Losses arising out of, relating to or resulting from:

16.5.1.1 The breach or alleged breach of the DB Documents by DB Team;

16.5.1.2 The failure or alleged failure by any DB Team-Related Entity to comply with the Governmental Approvals, any applicable Environmental Laws or other Laws (including Laws regarding Hazardous Materials Management);

16.5.1.3 Any alleged patent or copyright infringement or other allegedly improper appropriation or use by any DB Team-Related Entity of trade secrets, patents, proprietary information, know-how, copyright rights or inventions 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 DB 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 DB Team;

16.5.1.4 The actual or alleged culpable act or omission, culpable error or misconduct of any DB Team-Related Entity in or associated with performance of the Work;

16.5.1.5 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 any DB Team-Related Entity with respect to any payment for the Work made to or earned by any DB Team-Related Entity;

16.5.1.6 Any and all stop notices, liens and claims filed in connection with the Work, including all 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 DB Team with respect to such Work;
16.5.1.7 Any actual or threatened DB Team Release of Hazardous Materials;

16.5.1.8 The claim or assertion by any other developer or contractor that any DB Team-Related Entity interfered with or hindered the progress or completion of work being performed by the other contractor or developer, or failed to cooperate reasonably with the other developer or contractor, so as to cause inconvenience, disruption, delay or loss, except where the DB Team-Related Entity was not in any manner engaged in the management, prosecution, protection or performance of the Work;

16.5.1.9 Any dispute or claim by a Utility Owner related to any DB Team-Related Entity's performance of, or failure to perform, the obligations under any Standard Utility Agreement;

16.5.1.10 (a) Any DB Team breach of or failure to perform an obligation that GDOT owes to a third Person, including, but not limited to, Governmental Entities, under Law or under any agreement between GDOT and a third Person, where GDOT has delegated performance of the obligation to DB Team pursuant to the terms of the DB Documents, or (b) the negligent or willful acts or omissions of any DB Team-Related Entities which render GDOT unable to perform or abide by an obligation that GDOT owes to a third Person, including, but not limited to, Governmental Entities, under any agreement between GDOT and a third Person, where the agreement is previously disclosed or known to DB Team;

16.5.1.11 The fraud, bad faith, arbitrary or capricious acts, willful misconduct, negligence or violation of Law or contract by DB Team or Design-Build Contractor or any Affiliate of either in connection with DB Team’s performance of real property acquisition services under the DB Documents;

16.5.1.12 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 any DB Team-Related Entity to comply with Good Industry Practice, requirements of the DB Documents, Management Plans or Governmental Approvals, (b) the intentional misconduct or negligence of any DB Team-Related Entity, or (c) the entry onto or encroachment upon another’s property by any DB Team-Related Entity;

16.5.1.13 If applicable, any violation of any federal or state securities or similar law by any DB Team-Related Entity;

16.5.1.14 Errors, inconsistencies or other defects in the design or construction of the Project and/or of Utility Adjustments, or the Work, included in the Design Work and/or Construction Work; or

16.5.1.15 Any claim asserted or alleged against GDOT in contradiction of Article 4.8.1.

16.5.2 Subject to the releases and disclaimers herein, including all the provisions set forth in Article 4.4 (Limitations on DB Team’s Right to Rely), DB
Team’s indemnity obligation shall not extend to any Third-Party Claims and Third-Party Losses to the extent caused or contributed to by:

16.5.2.1 The sole negligence, recklessness or willful misconduct, bad faith or fraud of the Indemnified Party;

16.5.2.2 GDOT’s breach of any of obligations under the DB Documents; or

16.5.2.3 An Indemnified Party’s violation of any Laws or Governmental Approvals;

16.5.2.4 Any material defect inherent in a prescriptive design, or construction specification included in the DB Documents that was not drafted or provided by DB Team under this Agreement, but only where prior to occurrence of the Third-Party Loss DB Team complied with such specification and did not actually know, or would not reasonably have known, while exercising reasonable diligence, that it was deficient or, if DB Team actually knew of the deficiency, unsuccessfully sought GDOT’s waiver or acceptance of a Change Request from such specification; or

16.5.2.5 Any Compensation Event or Relief Event.

16.5.3 In claims by an employee of DB Team, a Contractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Article 16.5 (Indemnity by DB Team) shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for DB Team or a Contractor under workers’ compensation, disability benefit or other employee benefits laws.

16.5.4 For purposes of this Article 16.5 (Indemnity by DB Team), “Third-Party Claim” includes a claim, dispute, disagreement, cause of action, demand, suit, action, judgment, investigation, or legal or administrative proceeding which (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 worker’s compensation program. For purposes of this Article 16.5, “Third-Party Loss” includes any actual or alleged Loss sustained or incurred by such employee, agent or contractor.

16.6 Defense and Indemnification Procedures

16.6.1 If any of the Indemnified Parties receives notice of a claim that it believes is within the scope of the indemnities under Article 16.5 (Indemnity by DB Team), GDOT shall by writing as soon as practicable after receipt of the claim, (a) inform DB Team of the claim, (b) send to DB Team a copy of all written materials GDOT has received asserting such claim and (c) notify DB Team that should no insurer accept defense of the claim, the Indemnified Party will conduct its own defense unless DB Team accepts the tender of the claim in accordance with Article 16.6.3. As soon as practicable after DB Team 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.

16.6.2 Subject to Article 16.6.4, if the insurer under any applicable Insurance Policy accepts the tender of defense, GDOT and DB Team shall cooperate in the defense as required by the Insurance Policy. If no insurer under potentially applicable Insurance Policies provides defense, then Article 16.6.3 shall apply.

16.6.3 If the defense is tendered to DB Team, 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 written notice stating that DB Team:

16.6.3.1 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;

16.6.3.2 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

16.6.3.3 Rejects the tender of defense based on a determination that it is not required to indemnify against the claim under the terms of this Agreement, with a detailed statement as to the reasons for the denial.

16.6.4 If DB Team accepts the tender of defense under Article 16.6.3.1, DB Team acknowledges and agrees (and has caused the insurer to be so notified of the statutory requirements) that the Attorney General 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, without limiting the authority of the Attorney General, consider attorneys recommended by DB Team for appointment as Special Assistant Attorney General to represent and defend the referenced Indemnified Parties. DB Team 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. The foregoing shall not relieve DB Team’s obligation to bear the fees and costs of defending and settling such claim. During such defense:

16.6.4.1 DB Team shall fully and regularly inform the Indemnified Party and the Attorney General of the progress of the defense and of any settlement discussions; and

16.6.4.2 Each Indemnified Party shall fully cooperate in said defense, provide to DB Team 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 DB Team concerning such defense.
16.6.5 If DB Team responds to the tender of defense as specified in Article 16.6.3.2 or Article 16.6.3.3, such Indemnified Parties shall also be represented by the Attorney General who shall otherwise control the defense of such claim, including settlement. The foregoing shall not relieve DB Team from its obligations to bear the fees and costs of defending and settling such claim.

16.6.6 Even if the Attorney General has appointed counsel selected by DB Team to represent any of the Indemnified Parties, the Attorney General may assume the defense of the applicable Indemnified Parties by delivering to DB Team written notice of such election and the reasons therefor, if the Indemnified Parties, at the time it gives notice of the claim or at any time thereafter, reasonably determines that:

16.6.6.1 A conflict exists between it and DB Team which prevents or potentially prevents DB Team from presenting a full and effective defense;

16.6.6.2 DB Team is otherwise not providing an effective defense in connection with the claim; or

16.6.6.3 DB Team lacks the financial capacity to satisfy potential liability or to provide an effective defense.

16.6.7 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, DB Team shall reimburse on a current basis all reasonable costs and expenses any such Indemnified Parties incurs in investigating and defending, including, but not limited to, attorney’s fees. In the event the Indemnified Parties are entitled to and elect to conduct their own defense, then:

16.6.7.1 In the case of a defense conducted under Article 16.6.3.1, it shall have the right to settle or compromise the claim with DB Team’s prior written consent, which shall not be unreasonably withheld or delayed;

16.6.7.2 In the case of a defense conducted under Article 16.6.3.2, it shall have the right to settle or compromise the claim with DB Team’s prior written consent, which shall not be unreasonably withheld or delayed, or with approval of the court following reasonable notice to DB Team and opportunity to be heard and without prejudice to the Indemnified Party’s rights to be indemnified by DB Team; and

16.6.7.3 In the case of a defense conducted under Article 16.6.3.3, it shall have the right to settle or compromise the claim without DB Team’s prior written consent and without prejudice to its rights to be indemnified by DB Team.

16.6.8 A refusal of, or failure to accept, a tender of defense, as well as any Dispute over whether an Indemnified Party which has assumed control of defense is entitled to do so under Article 16.6.6, shall be submitted in accordance with the Dispute Resolution Procedures. DB Team 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.
16.6.9 In determining responsibilities and obligations for defending suits pursuant to this Article 16.6 (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.

16.6.10 Notwithstanding anything to the contrary set forth in Article 16.5 (Indemnity by DB Team) or this Article 16.6 (Defense and Indemnification Procedures), the Attorney General 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 DB Team in the defense of any action, suit or proceeding pursuant to Article 16.5 above or in the event that state or local law requires the use of specific counsel, (i) such Indemnified Party may elect in its sole and absolute 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, DB Team shall retain its own separate counsel, each at DB Team’s sole cost and expense. The Attorney General will consider counsel recommended by DB Team for appointment as a Special Assistant Attorney General.

16.6.11 If a suit or proceeding based on a claimed infringement of a patent or copyright is brought against any of the Indemnified Parties, DB Team shall, at its own expense, defend or settle any such suit or proceeding if authorized to do so in writing by the Attorney General subject to the obligations of indemnification as set forth in Article 16.5 (Indemnity by DB Team).

16.6.12 DB Team, subject to this Article 16.6 (Defense and Indemnification Procedures), 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 DB Team 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 shall be the only counsel authorized to represent such parties with respect to any such settlement).
Article 17  DEFAULT; REMEDIES; CLAIM FOR ADJUSTMENTS AND DISPUTES

17.1  Default by DB Team; Cure Periods

17.1.1  DB Team Default

Subject to relief from its performance obligations pursuant to Article 14.1.2.1 and Article 13.3.2.4, DB Team shall be in breach under this Agreement upon the occurrence of any one or more of the following events or conditions (each a “DB Team Default”):

17.1.1.1  DB Team (a) fails to begin the applicable Work within 30 days following issuance of NTP 1; (b) fails to satisfy all conditions to issuance of NTP 3 under Article 3.3.1 by the NTP 3 Conditions Deadline; or (c) fails to satisfy all conditions to commencement of the applicable Construction Work, and fails to commence such Construction Work with diligence and continuity, as the same may be extended pursuant to this Agreement;

17.1.1.2  An Abandonment;

17.1.1.3  DB Team fails to achieve Substantial Completion by the Substantial Completion Deadline, as the same may be extended pursuant to this Agreement;

17.1.1.4  DB Team fails to achieve Final Acceptance by the Final Acceptance Deadline, or fails to achieve such required Elements of the Work by any applicable Milestone Deadline, as any such dates may be extended pursuant to this Agreement;

17.1.1.5  Any representation or covenant in the DB Documents made by DB Team, or any certificate, schedule, report, instrument or other document delivered by or on behalf of DB Team to GDOT pursuant to the DB Documents is materially false, materially misleading or materially inaccurate when made or omits material information when made;

17.1.1.6  DB Team fails to obtain, provide and maintain any insurance, bonds, or other performance security as and when required under this Agreement for the benefit of relevant parties, or fails to comply with any requirement of this Agreement pertaining to the amount, terms or coverage of the same;

17.1.1.7  DB Team makes or attempts to make or suffers a voluntary or involuntary assignment or transfer of all or any portion of this Agreement, the Project or DB Team’s Interest, or there occurs a Change of Control, in violation of Article 21;

17.1.1.8  DB Team 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 DB Team under the DB Documents (including material failure to perform the Design Work, Construction Work, or any material portion thereof in accordance with the DB Documents); provided that this Article 17.1.1.8 shall not apply to DB Team...
Defaults specifically addressed by other provisions of Article 17.1.1 (DB Team Default);

17.1.1.9 After exhaustion of all rights of appeal, there occurs any 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 department or agency of (a) DB Team, (b) any member of DB Team with a material financial obligation owing to DB Team for equity or shareholder loan contributions, (c) any Affiliate of DB Team for whom transfer of ownership would constitute a Change of Control, or (d) any Key Contractor whose work is not completed;

17.1.1.10 DB Team fails to (a) deliver to GDOT any remedial plan as may be required pursuant to Article 17.3.5 (Remedial Action Plan Delivery and Implementation) or (b) otherwise fails to fully comply with the schedule or specific elements of, or actions required under, any such accepted remedial plan;

17.1.1.11 DB Team (a) 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, (b) seeks the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its assets; (c) becomes insolvent, or generally does not pay its debts as they become due; (d) admits in writing its inability to pay its debts; (e) makes an assignment for the benefit of creditors; or (f) takes any action to authorize any of the foregoing; or

17.1.1.12 An involuntary case is commenced against DB Team (a) seeking liquidation, reorganization, dissolution, winding up, a composition or arrangement with creditors, a readjustment of debts or other relief with respect to DB Team or DB Team’s debts under any U.S. or foreign bankruptcy, insolvency or other similar Law now or hereafter in effect; (b) seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of DB Team or any substantial part of DB Team’s assets; (c) seeking the issuance of a writ of attachment, execution, or similar process; or (d) seeking like relief; and such involuntary case shall not be contested by DB Team in good faith or shall remain undismissed and unstayed for a period of 60 days.

17.1.2 Forbearance and Cure Periods

For the purpose of GDOT’s exercise of other remedies, subject to Article 17.2.2 (Effect of Warning Notice on DB Team Cure Period) and subject to remedies that this Article 17 expressly states may be exercised before lapse of a cure period, DB Team shall have the following cure periods with respect to the following DB Team Defaults:

17.1.2.1 Respecting a DB Team Default under Article 17.1.1.10, a period of five days after GDOT delivers to DB Team written notice of the DB Team Default;

17.1.2.2 Respecting a DB Team Default under Article 17.1.1.6 or Article 17.1.1.7, a period of 15 days after GDOT delivers to DB Team written notice of the DB Team Default; provided that GDOT shall have the right, but not the
obligation, to effect cure, at DB Team’s expense, if a DB Team Default under Article 17.1.1.6 continues beyond five days after such notice is delivered;

17.1.2.3 Respecting a DB Team Default under Article 17.1.1.1 or Article 17.1.1.2, a period of 30 days after GDOT delivers to DB Team written notice of the DB Team Default; provided that as to a DB Team Default under Article 17.1.1.1, such cure period shall not preclude or delay GDOT’s immediate exercise, without notice or demand, of its right, but not the obligation, to effect cure, at DB Team’s expense;

17.1.2.4 Respecting a DB Team Default under Article 17.1.1.5, Article 17.1.1.8 or Article 17.1.1.9, a period of 30 days after GDOT delivers to DB Team written notice of the DB Team Default; provided that (a) if the DB Team Default is of such a nature that the cure cannot with diligence be completed within such time period and DB Team has commenced meaningful steps to cure immediately after receiving the default notice, DB Team shall have such additional period of time, up to a maximum cure period of 180 days, as is reasonably necessary to diligently effect cure, (b) as to Article 17.1.1.5, cure will be regarded as complete when the adverse effects of the breach are cured, and (c) as to Article 17.1.1.9, if the debarred or suspended Person is a managing member, general partner or controlling investor of DB Team, cure will be regarded as complete when DB Team proves it has removed such Person from any position or ability to manage, direct or control the decisions of DB Team or to perform Work;

17.1.2.5 Respecting a DB Team Default under Article 17.1.1.11 or Article 17.1.1.12, no cure period, and there shall be no right to notice of a DB Team Default under Article 17.1.1.11 or Article 17.1.1.12; and

17.1.2.6 Respecting a DB Team Default arising from DB Team’s failure to achieve any Milestone Deadline other than the Substantial Completion Deadline or Final Acceptance Deadline, a forbearance period of 30 days from the date of such DB Team Default shall apply, provided that DB Team shall, as a condition to such forbearance period, be required to (a) deliver to GDOT a remedial action plan within 10 days after written notice of such DB Team Default, pursuant to Article 17.3.5 (Remedial Action Plan Delivery and Implementation) (without further demand or notice by GDOT), and (b) with the delivery of such remedial action plan, acknowledge any associated Liquidated Damages that are accruing. Where such remedial action plan has been accepted by GDOT in writing, then such forbearance period as provided herein shall be extended or abbreviated as required by such remedial action plan, subject to DB Team’s diligent prosecution of the Work in accordance therewith. Any such DB Team Default shall be deemed cured upon satisfaction of the conditions set forth in such accepted remedial action plan and any Liquidated Damages shall cease to accrue upon the date of such satisfaction. Notwithstanding anything to the contrary herein, Liquidated Damages accruing during such forbearance period, as may be extended, shall not be waived by this Article 17.1.2.6 and shall be payable pursuant to the terms of this Agreement.
17.1.3 Certain Curative Actions; Status Report

17.1.3.1 If the DB Team Default consists of failure to give GDOT a required prior notice and opportunity to complete an applicable review and comment or acceptance procedure under Article 6.3 before action is taken by DB Team, such DB Team Default shall be curable only by reversing or suspending the action until the notice and review and comment or acceptance procedures are followed and completed, unless DB Team finished the action before receiving the notice of DB Team Default or unless waived by GDOT.

17.1.3.2 If the DB Team Default consists of any DB Team activity or failure to act which constitutes a change from DB Team’s activities immediately prior to the DB Team Default, such DB Team Default shall be curable only by reinstating the activity as it was being performed immediately prior to the DB Team Default.

17.1.3.3 For any DB Team Default for which a Warning Notice has been delivered by GDOT to DB Team, DB Team may request from GDOT a status report as to DB Team’s progress in effecting a cure, by delivering to GDOT a written request accompanied by DB Team’s own report as to its progress in effecting a cure. GDOT shall provide its response within 10 Business Days after receipt of DB Team’s written request and report. The response shall be provided solely for purposes of informing DB Team as to GDOT’s view of the progress in effecting a cure for the DB Team 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 Agreement in accordance with Article 19.3 should cure not be affected 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 written notice (a “Warning Notice”) to DB Team, stating explicitly that it is a “Warning Notice” and stating in reasonable detail the matter or matters giving rise to the notice and, if applicable, amounts due from DB Team, and reminding DB Team of the implications of such notice, whenever there occurs any of the following:

17.2.1.1 Any DB Team Default under Article 17.1.1.1, 17.1.1.2, 17.1.1.7, 17.1.1.8, or 17.1.1.10;

17.2.1.2 Delay or failure to achieve any Milestone Deadline; or

17.2.1.3 Any other material DB Team Default.

17.2.2 Effect of Warning Notice on DB Team Cure Period

17.2.2.1 Any notice of a DB Team Default issued under Article 17.1 (Default by DB Team; Cure Periods) may, if it concerns a matter under
Article 17.2.1 (Warning Notices Events), also be issued as a Warning Notice. In such case, the cure period available to DB Team, if any, shall be as set forth in Article 17.1.2 (Forbearance and Cure Periods).

17.2.2 If GDOT issues a Warning Notice under Article 17.2.1 (Warning Notices Events) for any DB Team Default after it issues a notice of such DB Team Default, then the cure period available to DB Team, if any, for such DB Team Default before GDOT may seek to appoint a receiver for DB Team, remove DB Team or terminate this Agreement on account of such DB Team Default shall be extended by the time period between the date the notice of such DB Team 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 DB Team 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 Article 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 Article 19.3 (Termination for DB Team Default).

17.3 Remedies for DB Team Default

17.3.1 Termination

In the event of any DB Team Default that is or becomes a Default Termination Event set forth in Article 19.3.1, GDOT may terminate this Agreement and GDOT thereupon may take control of the Work, which termination shall, among other things, automatically terminate all of DB Team’s rights under Article 2 (Grant of Authority and Right of Way), whereupon DB Team shall take all action required to be taken by DB Team under Article 19.5 (Termination Procedures and Duties).

17.3.2 Remedies for Failure to Meet Safety Standards or Perform Safety Compliance

17.3.2.1 Subject to Article 17.3.2.4 (DB Team Defaults Triggering GDOT Termination Rights), if at any time DB Team fails to meet any Safety Standard or timely perform Safety Compliance or GDOT and DB Team cannot reach an agreement regarding the interpretation or application of a Safety Standard or the valid issuance of a Safety Compliance Order within a period of time acceptable to GDOT, acting reasonably, GDOT shall have the absolute right and entitlement to undertake or direct DB Team to undertake any work required to ensure implementation of and compliance with Safety Standards as interpreted or applied by GDOT or with the Safety Compliance Order.

17.3.2.2 To the extent that any work done pursuant to Article 17.3.2.1 is undertaken by GDOT and is reasonably necessary to comply with Safety Standards or perform validly issued Safety Compliance Orders, DB Team shall pay to GDOT on demand GDOT Recoverable Costs in connection with such
work, and GDOT (whether it undertakes the work or has directed DB Team to undertake the work) shall have no obligation or liability to compensate DB Team for any Losses DB Team suffers or incurs as a result thereof.

17.3.2.3 To the extent that any work done pursuant to Article 17.3.2.1 is undertaken by GDOT and is not reasonably necessary to comply with Safety Standards or perform validly issued Safety Compliance Orders, GDOT shall compensate DB Team only for Losses DB Team suffers or incurs as a direct result thereof.

17.3.2.4 To the extent that any Safety Compliance Order work pursuant to Article 17.3.2.1 is undertaken by DB Team under written protest delivered prior to starting the work and it is finally determined that the Safety Compliance work was not necessary, the unnecessary work under the Safety Compliance Order shall be treated as a GDOT Change.

17.3.2.5 Notwithstanding anything to the contrary contained in the DB Documents, if in the good faith judgment of GDOT, DB Team has failed to meet any Safety Standards or perform Safety Compliance and the failure results in an Emergency or danger to persons or property, and if DB Team is not then diligently taking all necessary steps to rectify or deal with such Emergency or danger, GDOT may, without notice and without awaiting lapse of the period to cure any breach, and in addition and without prejudice to its other remedies, (but is not obligated to) (a) immediately take such action as may be reasonably necessary to rectify the Emergency or danger, in which event DB Team shall pay to GDOT on demand the cost of such action, including GDOT Recoverable Costs, or (b) suspend Construction Work and/or close or cause to be closed any and all portions of the Project affected by the Emergency or danger. So long as GDOT undertakes such action in good faith, even if under a mistaken belief in the occurrence of such failure or existence of an Emergency or danger as a result thereof, such action shall not be deemed unlawful or a breach of this Agreement, shall not expose GDOT to any liability to DB Team and shall not entitle DB Team to any other remedy, it being acknowledged that GDOT has a high priority, paramount public interest in protecting public and worker safety at the Project and adjacent and connecting areas. GDOT’s good faith determination of the existence of such a failure, Emergency or danger shall be deemed conclusive in the absence of clear and convincing evidence to the contrary. Immediately following rectification of such Emergency or danger, as determined by GDOT, acting reasonably, GDOT shall allow the Construction Work to continue or such portions of the Project to reopen, as the case may be. The foregoing shall not, however, protect GDOT from DB Team’s lawful claims to indemnity or contribution for third-party bodily injury or property damage arising out of any such GDOT action, if and to the extent (i) GDOT was mistaken in believing such a DB Team Default occurred, (ii) the third-party liability is not insured and not required to be insured under the DB Documents, and (iii) such injury or property damage was caused by GDOT’s negligence, recklessness or intentional misconduct.
17.3.3 Step-in Rights

Upon the occurrence of a DB Team Default and expiration, without full and complete cure, of the cure period, if any, available to DB Team, without necessity for a Warning Notice, and without waiving or releasing DB Team from any obligations, GDOT shall have the right, but not the obligation, for so long as such DB Team Default remains uncured by GDOT or DB Team, to pay and perform all or any portion of DB Team’s obligations and the Work that are the subject of such DB Team Defaults, as well as any other then-existing breaches or failures to perform for which DB Team received prior written notice from GDOT but has not commenced diligent efforts to cure provided, that (i) except with respect to DB Team’s lawful claims for third-party bodily injury or property damage arising out of such GDOT action, GDOT will not incur any liability to DB Team for any act or omission of GDOT or any other Person in the course of remedying or attempting to remedy any DB Team Default and (ii) GDOT’s cure of any DB Team Default will not waive or affect GDOT’s rights against DB Team by reason of the DB Team Default.

17.3.3.1 In connection with such action, GDOT may, to the extent and only to the extent reasonably required for or incident to curing the DB Team Default or such other breaches or failures to perform for which DB Team received prior written notice from GDOT but has not commenced and continued diligent efforts to cure:

(a) Employ security guards and other safeguards to protect the Project;

(b) Spend such sums as 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 DB Team or any Contractors for loss of opportunity to perform the same Work or supply the same materials and equipment;

(c) Draw on and use proceeds from payment and performance bonds and other performance security to the extent available under the terms thereof to pay such sums;

(d) Execute all applications, certificates and other documents as may be required;

(e) Make decisions respecting, assume control over and continue Work as may be reasonably required;

(f) 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 DB Team irrevocably appoints GDOT as its attorney-in-fact with full power and authority to act for and bind DB Team in its place and stead;
Take any and all other actions as may be reasonably required or incident to curing; and

(h) Prosecute and defend any action or proceeding incident to the Work undertaken.

17.3.3.2 DB Team shall reimburse GDOT on demand, GDOT Recoverable Costs in connection with the performance of any act or Work authorized by this Article 17.3.3 (Step-in Rights).

17.3.3.3 GDOT and any of their Authorized Representatives, contractors, subcontractors, vendors and employees shall not be liable to DB Team in any manner for any inconvenience or disturbance arising out of its entry onto the Project or Project Specific Locations in order to perform under this Article 17.3.3 (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 Article 17.3.3 (Step-in Rights), it nevertheless shall have no liability to DB Team 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.

17.3.3.4 The rights under this Article 17.3.3 (Step-in Rights) are subject to the right of any Surety under payment and performance bonds to assume performance and completion of all bonded work.

17.3.3.5 In the event GDOT takes action described in this Article 17.3.3 (Step-in Rights) and it is later finally determined that GDOT lacked the right to do so because there did not occur a DB Team Default and expiration, without full and complete cure, of the cure period, if any, available to DB Team, then GDOT’s action shall be treated as a Directive Letter for a GDOT Change.

17.3.4 Damages; Offset

17.3.4.1 Subject to Article 17.3.10 (Cumulative, Non-Exclusive Remedies) and Article 17.3.11 (Limitation on Consequential Damages) and the provisions on Liquidated Damages set forth in Article 17.4 (Liquidated Damages and Nonrefundable Deductions), GDOT shall 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 DB Team Default, including, to the extent available at Law, (a) loss of any compensation due GDOT under the DB Documents proximately caused by the DB Team Default, (b) actual and projected costs to remedy any defective part of the Work, (c) actual and projected costs to rectify any breach or failure to perform by DB Team and/or to bring the condition of the Project to the standard it would have been in if DB Team had complied with its obligations to carry out and complete the Work in accordance with the DB Documents, (d) actual and projected costs to GDOT to terminate, take over the Project, re-procure and replace DB Team, 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. DB
Team shall owe any such damages that accrue after the occurrence of the DB Team Default and the delivery of notice thereof, if any, required by this Agreement regardless of whether the DB Team Default is subsequently cured.

17.3.4.2 GDOT may deduct and offset any claim amount owing to GDOT, provided such claim amount has been liquidated through Dispute Resolution Procedures or otherwise, from and against any amounts GDOT may owe to DB Team or any Affiliate pursuant to this Agreement; provided that GDOT shall first draw on all amounts held in respect of the claim in the GDOT Claims Account.

17.3.4.3 If the claim amount is not liquidated, GDOT may elect to exercise its right to direct a payment from DB Team up to the disputed portion of the claim which payment shall be deposited into the GDOT Claims Account. Upon liquidation, the disputed portion of the claim shall be satisfied first from the amounts held in the GDOT Claims Account, and then through GDOT’s right of offset with respect to the liquidated claim amounts.

17.3.5 Remedial Action Plan Delivery and Implementation

17.3.5.1 Upon the occurrence of a DB Team Default, GDOT shall have the right, but is not obligated, to demand that DB Team shall, within 10 days after written notice of such DB Team Default, be required to prepare and submit a remedial action plan for GDOT approval.

17.3.5.2 The remedial action plan shall set forth a schedule and specific actions to be taken by DB Team to improve its performance and cure the DB Team Default. Such actions may include improvements to DB Team’s quality management 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 important personnel, replacement of Contractors, corrective measures necessary to expedite the progress of construction and to demonstrate ability to achieve any Milestone Deadline including, without limitation, (i) working additional shifts or overtime and/or (ii) supplying additional manpower, equipment and facilities, and delivery of security to GDOT.

17.3.5.3 DB Team’s failure to diligently prosecute the Work in accordance with any such approved remedial action plan shall be deemed a further DB Team Default.

17.3.6 Performance Security

17.3.6.1 Upon the occurrence of a DB Team Default and expiration, without full and complete cure, of the applicable cure period, if any, under Article 17.1.2 (Forbearance and Cure Periods), without necessity for a Warning Notice, and without waiving or releasing DB Team from any obligations, and subject to Article 16 (Insurance; Performance Security; Indemnity) as applicable, GDOT shall be entitled to make demand upon and enforce any bond, and make demand upon, draw on and enforce and collect any guaranty or other payment or performance security available to GDOT under this Agreement with respect to the DB Team Default in question in any order in GDOT’s sole discretion. Where
access to a bond or other payment or performance security is to satisfy damages owing, GDOT shall be entitled to make demand, draw, enforce and collect regardless of whether the DB Team Default is cured subsequent to such draw. GDOT will apply the proceeds of any such action to the satisfaction of DB Team’s obligations under the DB 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 bond, and make demand upon, draw on and enforce and collect any guaranty or other payment or performance security, immediately after GDOT are entitled to do so under the bond, guaranty or other payment or performance security.

17.3.7 Suspension of Work

17.3.7.1 Upon GDOT’s delivery of notice of DB Team Default for any of the following breaches or failures to perform and DB Team’s failure to fully cure and correct, within the applicable cure period, if any, available to DB Team under Article 17.1.2 (Forbearance and Cure Periods), GDOT shall have the right and authority to suspend any affected portion of the Work by written order to DB Team:

(a) Performance of Nonconforming Work;

(b) Failure to comply with any Law or Governmental Approval (including failure to handle, preserve and protect archeological, paleontological or historic resources, or failure to handle Hazardous Materials, in accordance with applicable Laws and Governmental Approvals);

(c) Certain failures to remove and replace personnel as set forth in Article 10.6.3;

(d) Failure to provide proof of required insurance coverage as set forth in Article 16.1.1.1 (Certificates of Insurance);

(e) Failure to carry out and comply with Directive Letters;

(f) Failure to satisfy any condition to commencement of construction set forth in Article 7.6 (Conditions to Commencement of Construction Work); and

(g) Failure to maintain, extend or replace performance and payment security required under the Agreement, including any P&P Bonds, unless a drawing has been made under same in the amount of the required coverage provided for in Article 16.2 (Performance and Payment Security) and the proceeds of such drawing are held by GDOT.

GDOT will lift the suspension order promptly after DB Team fully cures and corrects the applicable breach or failure to perform.
17.3.7.2 In addition, GDOT shall have the right and authority to suspend any affected portion of the Work by written notice to DB Team for the following reasons:

(a) To comply with any court order or judgment (although it may qualify as a Compensation Event under Article 14.2.1(g) or a Relief Event under Article 14.1.1(l));

(b) GDOT’s performance of data recovery respecting archeological, paleontological or cultural resources (although it may qualify as a Relief Event under Article 14.1.1(i));

(c) The existence of conditions unsafe for workers, other Project personnel or the general public, including certain failures to comply with Safety Standards or perform Safety Compliance as set forth in Article 17.3.2.5; or

(d) DB Team has failed to (i) pay in full when due sums owing any Contractor for services, materials or equipment, except only for amounts in dispute, or (ii) deliver any certificate, release, certified payroll or affidavit of wages paid required with any Payment Request or required under this Agreement.

17.3.7.3 DB Team shall promptly comply with any such written suspension order, even if DB Team disputes the grounds for suspension. DB Team shall promptly recommence the Work upon receipt of written notice from GDOT directing DB Team to resume Work.

17.3.7.4 In addition to the protections from liability under Article 17.3.2.5, neither GDOT shall not have any liability to DB Team, and DB Team shall have no right to a Relief Event or Compensation Event, in connection with any suspension properly founded on any of the other grounds set forth in this Article 17.3.7 (Suspension of Work) (except potential Relief Events or Compensation Events in the case of suspensions under Articles 17.3.7.2(a) and 17.3.7.2(b)). If GDOT orders suspension of Work on one of the foregoing grounds but it is finally determined under the process set forth under 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, except as provided in Article 17.3.2.5.

17.3.8 Increased Oversight, Testing, and Inspection

17.3.8.1 Upon GDOT’s delivery of notice of DB Team Default for any of the following breaches or failures to perform and DB Team’s failure to fully cure and correct, within the applicable cure period, if any, available to DB Team under Article 17.1.2 (Forbearance and Cure Periods), GDOT shall have the right and authority to suspend any affected portion of the Work by written order to DB Team.

17.3.8.2 If GDOT cannot confirm that a portion of the Design Work or the Construction Work is in accordance with the requirements of the DB
Documents, GDOT shall have the right but not the obligation to provide increased monitoring, inspection, sampling, measuring, testing and oversight. If the increased monitoring, inspection, sampling, measuring, testing and oversight reveal: (i) a failure to perform such Work in accordance with the Quality Management Plan, (ii) that the Quality Management Plan does not comply with the DB Documents, or (iii) that such Work is not in accordance with the DB Documents, DB Team shall be responsible for the costs of such increased monitoring, inspection, sampling, measuring, testing and oversight as described in this Article 17.3.8 (Increased Oversight, Testing, and Inspection). DB Team shall correct such deficiencies and the increased monitoring, inspection, sampling, measuring, testing and oversight will continue until those deficiencies have been corrected. If such Work was performed in accordance with the DB Documents, the costs of the increased monitoring, inspection, sampling, measuring, testing and oversight shall be borne by GDOT.

17.3.8.3 If GDOT increases the level of monitoring, inspection, sampling, measuring, testing, auditing and oversight under Article 17.3.8.2 and Liquidated Damages are not provided for under this Agreement in connection with such action, then DB Team 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 action, including GDOT Recoverable Costs.

17.3.8.4 The foregoing does not preclude GDOT, at its sole discretion and expense, from increasing its level of monitoring, inspection, sampling, measuring, testing, auditing and oversight at other times.

17.3.9 Other Rights and Remedies

Subject to Article 17.3.11 (Limitation on Consequential Damages), Article 17.4.5.2 and Article 19.9 (Exclusive Termination Rights), GDOT shall also be entitled to exercise any other rights and remedies available under this Agreement or any other DB Documents, or available at law or in equity.

17.3.10 Cumulative, Non-Exclusive Remedies

Subject to Articles 17.3.11 (Limitation on Consequential Damages), 17.4.5.2 and 19.9 (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 DB Documents and except as set forth in Article 17.3.11.2, to the extent permitted by applicable Law, DB Team shall not be liable for punitive damages or special, indirect or incidental, or consequential damages, whether arising out of breach of this Agreement, tort (including negligence) or any other theory of liability, and GDOT
releases DB Team from any such liability, other than for Liquidated Damages for delay, as provided pursuant to this Agreement or otherwise to the extent recoverable from insurance.

17.3.11.2 The foregoing limitation on DB Team’s liability for consequential damages shall not apply to or limit any right of recovery GDOT may have respecting the following:

(a) Losses (including defense costs) to the extent (i) covered by the proceeds of insurance required to be carried pursuant to Article 16.1 (Insurance Policies and Coverage), (ii) covered by the proceeds of insurance actually carried by or insuring DB Team under policies solely with respect to the Project and the Work, regardless of whether required to be carried pursuant to Article 16.1, or (iii) DB Team is deemed to have self-insured the Loss pursuant to Article 16.3.3;

(b) Losses arising out of fraud, criminal conduct, intentional misconduct (which does not include any intentional DB Team Default), recklessness, bad faith or gross negligence on the part of DB Team or Contractor or any Affiliate of either;

(c) DB Team’s obligation to pay Liquidated Damages in accordance with Article 17.4 (Liquidated Damages and Nonrefundable Deductions) or any other provision of the DB Documents;

(d) Losses arising out of DB Team Releases of Hazardous Materials;

(e) Reserved;

(f) Amounts DB Team may be obligated to reimburse to GDOT or that are otherwise due from DB Team to GDOT under the express provisions of the DB Documents, including GDOT Recoverable Costs;

(g) Interest, late charges, fees, transaction fees and charges, penalties and similar charges that the DB Documents expressly state are due from DB Team to GDOT; and

(h) Any credits, deductions or offsets that the DB Documents expressly provide to GDOT against amounts owing DB Team.

17.4 Liquidated Damages and Nonrefundable Deductions

17.4.1 Liquidated Damages for Substantial Completion Deadline, or Final Acceptance; Incident Based Liquidated Damages

17.4.1.1 DB Team 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
Agreement, or for any other breach of the requirements of the DB Documents as set forth pursuant to Section 1.1 of Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions). Such liability shall apply even though (a) a cure period remains available to DB Team under Article 17.1.2 (Forbearance and Cure Periods) or (b) cure occurs. The amounts of such Liquidated Damages are set forth in Exhibit 18. Such Liquidated Damages shall commence on the Substantial Completion Deadline or the Final Acceptance Deadline, as applicable, or upon the date of breach for each such incident based default pursuant to Section 1.2 of Exhibit 18, as the same may be extended pursuant to this Agreement, and shall continue to accrue until the date of Substantial Completion, the date of Final Acceptance, the cure of any such incident based breach, all as applicable, or until termination of this Agreement.

17.4.1.2 Reserved

17.4.2 Incident Based Nonrefundable Deductions

17.4.2.1 DB Team shall be liable for and pay to GDOT Nonrefundable Deductions with respect to the occurrence of the incidents listed or other breach of the requirements of the DB Documents as set forth pursuant to Section 1.3 of Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions). Unless otherwise stated in this Article 17.4 (Liquidated Damages and Nonrefundable Deductions) nonrefundable deductions shall be applied at the time of the incident. The amounts of such Incident Based Nonrefundable Deductions are set forth in Exhibit 18.

17.4.2.2 Within 10 Business Days prior to GDOT issuing any nonrefundable deductions as set forth pursuant to Section 1.3 and excluding Section 1.3.1 of Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions), GDOT shall execute the following:

(a) Issuance of a warning via e-mail to the DB Team to correct the incident within seven days of receipt of the e-mail; and

(b) Issuance of a formal written warning to the DB Team to correct the incident within three days after the issuance of the warning in subsection (a). If the DB Team has failed to comply with subsection (a) and (b) to correct the incident at the end of the third day then DB Team shall be liable for and shall pay GDOT the Nonrefundable Deduction.

17.4.3 Acknowledgements Regarding Liquidated Damages

DB Team further agrees and acknowledges that:

17.4.3.1 In the event that DB Team fails to achieve Substantial Completion by the Substantial Completion Deadline or Final Acceptance by the Final Acceptance Deadline, GDOT will incur substantial damages;

17.4.3.2 In the event that DB Team causes occurrence of the incidents listed pursuant to Sections 1.2 and 1.3 of Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions), GDOT will incur substantial damages;
17.4.3.3 Such damages are incapable of accurate measurement and difficult to prove for the reasons stated in this Article 17.4 (Liquidated Damages and Nonrefundable Deductions);

17.4.3.4 As of the Effective Date, the amounts of Liquidated Damages under this Article 17.4 (Liquidated Damages and Nonrefundable Deductions) represent good faith estimates and evaluations by the Parties as to the actual potential damages that GDOT would incur as a result of late Substantial Completion or late Final Acceptance or should the incidents listed occur, and do not constitute a penalty or to otherwise operate as a deterrent for the breach of any obligations of DB Team under this Agreement;

17.4.3.5 The Parties have agreed to such Liquidated Damages in order to fix and limit DB Team’s costs and to avoid later Disputes over what amounts of damages are properly chargeable to DB Team;

17.4.3.6 Such sums are reasonable in light of the anticipated or actual harm caused by delayed Substantial Completion or delayed Final Acceptance or should the incidents listed occur, the difficulties of the proof of loss, and the inconvenience or infeasibility of otherwise obtaining an adequate remedy;

17.4.3.7 DB Team acknowledges that such Liquidated Damages are reasonable, as determined as of the Effective Date, in light of the respective injuries and damages that may be caused by DB Team’s breach and given that such injuries and damages, which include but shall not be limited to, public inconvenience, increased administration and oversight by GDOT (and any other related agencies), and other damages to the general public, GDOT (and other related agencies); and

17.4.3.8 Such Liquidated Damages are not intended to, and do not, liquidate DB Team’s liability under the indemnification provisions of Article 16.5 (Indemnity by DB Team), even though Third-Party Claims against Indemnified Parties may arise out of the same event, breach or failure that gives rise to such Liquidated Damages.

17.4.4 Payment; Satisfaction; Waiver

17.4.4.1 GDOT shall withhold Liquidated Damages owing under this Article 17.4 (Liquidated Damages and Nonrefundable Deductions) from the subsequent DB Team pay application. Liquidated damages shall be withheld by GDOT without right of offset, deduction, reduction or other charge, except as provided in Article 17.6.3 (Offset Rights).

17.4.4.2 GDOT shall have the right to deduct and offset Liquidated Damages from any amounts owing DB Team to the extent provided in Article 17.3.4 (Damages; Offset). GDOT also shall have the right to draw on any bond, certificate of deposit, or other security provided by DB Team pursuant to this Agreement, to satisfy Liquidated Damages not paid when due.

17.4.4.3 Permitting or requiring DB Team to continue and finish the Work or any part thereof after the Substantial Completion Deadline or Final
Acceptance Deadline shall not act as a waiver of GDOT’s right to receive Liquidated Damages hereunder or any rights or remedies otherwise available to GDOT.

17.4.5 Non-Exclusive Remedy

17.4.5.1 Each item of Liquidated Damages provided under this Article 17.4 (Liquidated Damages and Nonrefundable Deductions) is in addition to, and not in substitution for, any other item of Liquidated Damages assessed under this Article 17.4.

17.4.5.2 GDOT’s right to, and imposition of, Liquidated Damages are in addition, and without prejudice, to any other rights and remedies available to GDOT under the DB Documents, at law or in equity respecting the breach, failure to perform or DB Team Default that is the basis for the Liquidated Damages or any other breach, failure to perform or DB Team Default, except for recovery of the monetary damage for delay that the Liquidated Damages are intended to compensate and for which Liquidated Damaged shall be the only amount recoverable on account of delay damages.

17.5 Default by GDOT; Cure Periods

17.5.1 GDOT Default

GDOT shall, subject to any applicable cure period as set forth in Article 17.5.2 (Cure Periods) below, be in breach under this Agreement upon the occurrence of any one or more of the following events or conditions (each a “GDOT Default”):

17.5.1.1 GDOT fails to make any payment due DB Team under this Agreement within 30 days of the date that any such payment shall be due;

17.5.1.2 Any representation or covenant made by GDOT in this Agreement is false or materially misleading or materially inaccurate when made or omits material information when made;

17.5.1.3 GDOT fails to observe or perform any covenant, agreement, term or condition required to be observed or performed by GDOT under the DB Documents;

17.5.1.4 GDOT makes an assignment other than as permitted pursuant to Article 21.3; or

17.5.1.5 GDOT or other State Governmental Entity confiscates or appropriates the Project or any other material part of DB Team’s Interest, excluding a Termination for Convenience or any other exercise of a right of termination set forth in this Agreement.

17.5.2 Cure Periods

GDOT shall have the following cure periods with respect to the any of the conditions set forth in Article 17.5.1 (GDOT Default) above:
17.5.2.1 Respecting a GDOT Default under Article 17.5.1.1, a period of 30 days after DB Team delivers to GDOT written notice of the GDOT Default;

17.5.2.2 Respecting a GDOT Default under Article 17.5.1.2 or Article 17.5.1.3, a period of 60 days after DB Team delivers to GDOT written notice of the GDOT Default; provided that (a) if the 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 immediately after receiving the default notice, GDOT shall have such additional period of time, up to a maximum cure period of 180 days, as is reasonably necessary to diligently effect cure, and (b) as to Article 17.5.1.2, cure will be regarded as complete when the adverse effects of the breach are cured;

17.5.2.3 Respecting a GDOT Default under Article 17.5.1.4, a period of 45 days after DB Team delivers to GDOT written notice of the GDOT Default; and

17.5.2.4 Respecting a GDOT Default under Article 17.5.1.5, a period of 30 days after DB Team delivers to GDOT written notice of the GDOT Default; provided that if the 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 immediately after receiving the default notice, GDOT shall have such additional period of time, up to a maximum cure period of 120 days, as is reasonably necessary to diligently effect cure.

17.6 DB Team Remedies for GDOT Default

17.6.1 Termination and Suspension

17.6.1.1 Subject to Article 19.9 (Exclusive Termination Rights), DB Team 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 Article 17.5.2 (Cure Periods).

17.6.1.2 Further, DB Team may upon written 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 Agreement and recover termination damages as more particularly set forth in, and subject to the terms and conditions of, Article 19.4 (Termination for GDOT Default, Suspension of Work, Force Majeure Event, or Materially Delayed Notice to Proceed).

17.6.2 Damages and Other Remedies

DB Team 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 DB Team does not terminate this Agreement, then, subject to Article 17.6.4 (Limitations on Remedies), DB Team may treat the GDOT Default as a Compensation Event on the terms and conditions set forth in Article 14.2 (Compensation Events) and GDOT shall pay the full Compensation
Amount and interest in accordance with Articles 14.2.7 and 14.2.8 (Limitations on Acceleration Costs);

17.6.2.2 If the 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 DB Team written notice thereof, DB Team shall be entitled to suspend the Work under the Supplemental Agreement until the default is cured; and

17.6.2.3 Subject to Article 17.6.4 (Limitations on Remedies) and Article 19.9 (Exclusive Termination Rights), DB Team also shall be entitled to exercise any other remedies available under this Agreement or at Law or in equity, including offset rights to the extent and only to the extent available under Article 17.6.3 (Offset Rights). Subject to Article 17.6.4 (Limitations on Remedies) and Article 19.9 (Exclusive Termination Rights), each right and remedy of DB Team 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 DB Team of any one or more of any of such rights or remedies shall not preclude the simultaneous or later exercise by DB Team of any or all other such rights or remedies.

17.6.3 Offset Rights

DB Team may deduct and offset any claim amount owing to it, provided such claim amount has been liquidated through the Dispute Resolution Procedures, as provided in Article 17.7 (Dispute Resolution Procedures) or otherwise, from and against any amounts DB Team may owe to GDOT pursuant hereto.

17.6.4 Limitations on Remedies

17.6.4.1 Notwithstanding any other provision of the DB Documents and except as forth in Article 17.6.4.2, 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 Agreement or any DB Documents, tort (including negligence) or any other theory of liability, and DB Team releases GDOT from any such liability.

17.6.4.2 The foregoing limitation on GDOT’s liability for consequential damages shall not apply to or limit any right of recovery DB Team may have respecting the following:

(a) Losses arising out of fraud, criminal conduct, intentional misconduct (which does not include any intentional GDOT Default), recklessness, bad faith or gross negligence 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 owe or be obligated to reimburse under the express provisions of this Agreement for Compensation Events or events of termination;

(d) Any other specified amounts GDOT may owe or be obligated to reimburse to DB Team under the express provisions of the DB Documents;

(e) Interest and charges that the DB Documents expressly state are due from GDOT to DB Team; and

(f) Any credits, deductions or offsets that the DB Documents expressly provide to DB Team against amounts owing GDOT.

17.6.4.3 The measure of compensation available to DB Team as set forth in this Agreement for a Compensation Event or an event of termination shall constitute the sole and exclusive monetary relief and damages available to DB Team from the State or GDOT arising out of or relating to such event; and DB Team irrevocably waives and releases any right to any other or additional damages or compensation from the State or GDOT. No award of compensation or damages shall be duplicative.

17.6.4.4 Without limiting the effect of Article 17.6.4.3, in the event GDOT wrongfully withholds an acceptance or consent required under this Agreement, or wrongfully issues an objection to or disapproval of a Submittal or other matter under this Agreement, DB Team’s sole remedies against GDOT shall be extensions of time to the extent provided in Article 14.1 for a Relief Event and damages to the extent provided in Article 14.2 for a Compensation Event.

17.6.5 Procedure for Payment of Judgments

Promptly after any final, non-appealable order or judgment awarding compensation or damages to DB Team, GDOT shall institute payment procedures as set forth in applicable Law.

17.7 Dispute Resolution Procedures

17.7.1 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 written notification of such Dispute, or such longer time as is mutually agreed, the dispute shall next be submitted in accordance with Article 17.7.2.

17.7.2 If, despite good faith negotiations between the Parties, any Disputes are not resolved within 30 days after written notification of such Dispute, then the Dispute shall be submitted administratively to mediation as set forth below.

17.7.2.1 The Parties shall mutually select a private mediator to formally mediate the Disputes. If the Parties cannot mutually select a private mediator, GDOT shall select a mediator. Mediation shall normally be scheduled within 45 Calendar Days of notification of the decision by either party to submit the Dispute
to mediation. GDOT and DB Team shall each pay one-half of the fees and administrative costs charged by the selected mediator.

17.7.2.2 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.

17.7.2.3 If the Dispute has not been settled within 45 Calendar Days following written notification of the Dispute to 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 Article 17.7.4.

17.7.3 No litigation may be filed by either Party concerning any Dispute prior to using the procedure described in Article 17.7.2. This procedure is a condition precedent for any Party to commence a civil action for resolution of a Dispute.

17.7.4 All litigation between the Parties arising out of or pertaining to this 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 Agreement, and no Party shall seek or accept an award of attorney’s fees or costs.

Article 18 RESERVED

Article 19 TERMINATION

19.1 Termination for Convenience

19.1.1 GDOT may terminate this Agreement, if GDOT determines, in its sole discretion, that a termination is in GDOT’s best interest (a “Termination for Convenience”). Termination of this Agreement shall not relieve GDOT, DB Team or any Guarantor or Surety of its obligation for any claims arising prior to termination.

19.1.2 GDOT may exercise Termination for Convenience by delivering to DB Team a written notice of termination for Convenience specifying the election to terminate. Termination for Convenience shall be effective as and when provided in Exhibit 20 (Terms for Termination Compensation).

19.1.3 In the event of a Termination for Convenience, DB Team will be entitled to compensation determined in accordance with Exhibit 20. Payment will be due and payable as and when provided in Exhibit 20.

19.1.4 If GDOT terminates this Agreement on grounds or in circumstances beyond GDOT’s termination rights specifically set forth in this Agreement, such termination shall be deemed a Termination for Convenience for the purpose of determining the Termination Compensation due.
19.3 Termination for DB Team Default

19.3.1 DB Team Defaults Triggering GDOT Termination Rights

The following DB Team Defaults (each a “Default Termination Event”), and no other DB Team Defaults, shall entitle GDOT, at its sole election, to terminate this Agreement, effective immediately upon delivery of written notice of termination to DB Team. DB Team agrees and acknowledges and stipulates that any of the following DB Team Defaults would result in material and substantial harm to GDOT’s rights and interests under this Agreement and therefore constitute a material DB Team Default justifying termination if not cured within the applicable cure period, if any.

19.3.1.1 The DB Team fails to achieve Substantial Completion by the Substantial Completion Deadline, as the same may be extended pursuant to this Agreement;

19.3.1.2 There occurs any other DB Team Default for which GDOT issues a Warning Notice under Article 17.2 (Warning Notice) or Article 17.3 (Other Effects of Warning Notice), and such DB Team Default is not fully and completely cured within the applicable cure period, if any, set forth in Article 17.2.2.1 or 17.3;

19.3.1.3 There occurs any DB Team Default under Article 17.1.1.11 or 17.1.1.12; or

19.3.1.4 The DB Team fails to diligently prosecute and adhere to the requirements of any remedial action plan as provided and accepted by GDOT pursuant to Article 17.3.5 (Remedial Action Plan Delivery and Implementation).

19.3.2 Compensation to DB Team

If GDOT issues notice of termination of this Agreement due to a Default Termination Event, or if DB Team terminates this Agreement on grounds or in circumstances beyond DB Team’s termination rights specifically set forth in this Agreement, DB Team will be entitled to compensation to the extent, and only to the extent, provided in Exhibit 20 (Terms for Termination Compensation). Payment shall be due and payable as and when provided in Exhibit 20.

19.3.3 Finality

If GDOT issues notice of termination of this Agreement due to a Default Termination Event, termination shall be effective and final immediately upon delivery of written notice as provided in Article 19.3.1 (DB Team Defaults Triggering GDOT Termination Rights) regardless of whether GDOT is correct in determining that GDOT has the right to terminate for DB Team 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 Article 19.1.4 for the purpose of determining the Termination Compensation due.
19.4 Termination for GDOT Default, Suspension of Work, Force Majeure Event, or Materially Delayed Notice to Proceed

19.4.1 In the event of a material GDOT Default under Article 17.5.1.1 (failure to pay money due) that remains unexpired following notice and expiration of the applicable cure period under Article 17.5.2 (Cure Periods), DB Team may deliver to GDOT a further written notice setting forth such GDOT Default and warning GDOT that DB Team may elect to terminate this 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 Article 17.5.1.1. GDOT may avoid termination by effecting cure within such 60-day period. Failing such cure, DB Team shall have the right to terminate this Agreement, effective immediately upon delivery of written notice of termination to GDOT. In the event of such termination, DB Team will be entitled to compensation determined in accordance with Exhibit 20. Payment shall be due and payable as and when provided in Exhibit 20. Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

19.4.2 In the event (i) GDOT orders DB Team to suspend Work on all or any material portion of the Project for a reason other than those set forth in Article 17.3.7.1, or (ii) as a result of a Force Majeure Event, and such suspension of Work continues for a period of 180 consecutive days or more, DB Team shall have the right to terminate this Agreement, effective immediately upon delivery of written notice of termination to GDOT. In the event of such termination, DB Team will be entitled to compensation determined in accordance with Exhibit 20 (Terms for Termination Compensation). Payment shall be due and payable as and when provided in Exhibit 20. Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

19.4.3 In the event GDOT, due to no fault of a DB Team-Related Entity or other than because the NEPA Finality Date has not occurred, does not issue NTP 1, NTP 2, or NTP 3 within 365 days after the anticipated issuance date set forth in Article 3.3 (Contract Time, Date of Commencement, and Notice to Proceed), DB Team shall have the right to terminate this Agreement, effective immediately upon delivery of written notice of termination to GDOT. In the event of such termination, DB Team will be entitled to compensation determined in accordance with Exhibit 20. Payment shall be due and payable as and when provided in Exhibit 20. Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

19.4.4 If DB Team issues notice of termination of this Agreement due to a material GDOT Default under Article 17.5.1.1, termination shall be effective and final immediately upon delivery as provided in Article 19.4.1 regardless of whether DB Team is correct in determining that it has the right to terminate for such GDOT Default. In the event it is determined that DB Team lacked such right, then such termination shall be treated as a termination due to material DB Team Default and Article 19.3.2 (Compensation to DB Team) shall govern the measure of the Termination Compensation.
19.5 Termination Procedures and Duties

19.5.1 Upon expiration of the Term or any earlier termination of this Agreement for any reason, including due to GDOT Default, the provisions of this Article 19.5 shall apply. DB Team shall timely comply with such provisions independently of, and without regard to, the timing for determining, adjusting, settling and paying any amounts due DB Team or GDOT on account of termination.

19.5.2 In any case where notice of termination precedes the effective Early Termination Date:

19.5.2.1 DB Team shall continue performing the Work in accordance with, and without excuse from, all the standards, requirements and provisions of the DB Documents, and without curtailment of services, quality and performance;

19.5.2.2 Reserved

19.5.2.3 At GDOT’s option, GDOT may increase the level of its monitoring, inspection, sampling, measuring, testing, auditing and oversight of the Project and DB Team’s compliance with the obligations under the DB Documents, to such level as GDOT reasonably sees fit to protect against curtailment of services, quality and performance; and

19.5.2.4 Within three days after receipt of a notice of termination, DB Team 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 DB Team 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 be in form and substance acceptable to GDOT in its good faith discretion and shall include and be consistent with the other provisions and procedures set forth in this Article 19.5 (Termination Procedures and Duties), all of which procedures DB Team shall immediately follow, regardless of any delay in preparation or acceptance of the transition plan.

19.5.3 On the Termination Date, or as soon thereafter as is possible, DB Team shall relinquish and surrender full control and possession of the Project to GDOT, and shall cause all persons and entities claiming under or through DB Team to do likewise, in at least the condition required by the Termination turnover requirements.

19.5.4 On the later of the Termination Date or the date DB Team relinquishes full control and possession, GDOT shall assume responsibility, at its expense, for the Project, subject to any rights to damages that GDOT has against DB Team where the termination is due to a Default Termination Event.

19.5.5 Reserved

19.5.6 Reserved
19.5.7 Within 30 days after notice of termination is delivered, DB Team 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 DB Team or any Person or entity on behalf of or for the account of DB Team) 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, DB Team shall transfer title and deliver to GDOT or 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.

19.5.8 DB Team 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, equipment, parts, supplies and other property.

19.5.9 On or about the Termination Date, DB Team 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, assigning and transferring to GDOT all of DB Team’s right, title and interest in and to the following:

19.5.9.1 All completed or partially completed drawings (including plans, elevations, sections, details and diagrams), specifications, designs, Design Documents, Record Drawings, surveys, and other documents and information pertaining to the design or construction of the Project or the Utility Adjustments;

19.5.9.2 All samples, borings, boring logs, geotechnical data and similar data and information relating to the Project;

19.5.9.3 All books, records, reports, test reports, studies and other documents of a similar nature relating to the Work, the Project;

19.5.9.4 All 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 Article 22.4 (Intellectual Property); and

19.5.9.5 All other work product and Intellectual Property used or owned by DB Team or any Affiliate relating to the Work, the Project, provided that the transfer of any Intellectual Property shall be subject to Article 22.4 (Intellectual Property).

19.5.10 Reserved

19.5.11 On or about the Termination Date, DB Team shall execute and deliver to GDOT a written assignment, in form and substance acceptable to GDOT, acting reasonably, of all DB Team’s right, title and interest in and to all warranties, claims and causes of action held by DB Team against third parties in connection with the Project or the Work.
19.5.12 DB Team 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.

19.6 Reserved

19.7 Contracts and Agreements

19.7.1 Regardless of GDOT's prior actual or constructive knowledge thereof, no contract or agreement to which DB Team 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 DB Team's relinquishment to GDOT of possession and control of the Project, or to any claim, legal or equitable, against GDOT.

19.8 Liability After Termination; Final Release

19.8.1 No termination of this Agreement shall excuse either Party from any liability arising out of any default as provided in this Agreement that occurred prior to termination. Notwithstanding the foregoing, any termination of this Agreement shall automatically extinguish any claim of DB Team 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.

19.8.2 If this Agreement is terminated under Article 19.1 (Termination for Convenience), 19.3.1 (DB Team Defaults Triggering GDOT Termination Rights), 19.4 (Termination for GDOT Default, Suspension of Work, Force Majeure Event, or Materially Delayed Notice to Proceed), or 19.11 (Termination by Court Ruling), then GDOT’s payment to DB Team of the amounts required thereunder (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 DB Team may have against GDOT arising out of or relating to this Agreement or termination thereof, or the Project, are unresolved at the time of such payment and are not related to termination or Termination Compensation. Upon such payment, DB Team 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.

19.9 Exclusive Termination Rights

This Article 19 (Termination), together with the express provisions on termination set forth in Articles 17.3.1 (Termination) and 17.6.1 (Termination & Suspension), contain the entire and exclusive provisions and rights of GDOT and DB Team regarding termination of this Agreement, and any and all other rights to terminate at law or in equity are hereby waived to the maximum extent permitted by Law.
19.10 Access to Information

DB Team 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.

19.11 Termination by Court Ruling

19.11.1 Except in the circumstances described in Exhibit 20 (Terms for Termination Compensation), Termination by Court Ruling means, and becomes effective upon, (a) issuance of a final order by a court of competent jurisdiction to the effect that this 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 DB Team or GDOT of a Change in Law that causes impossibility of performance of a fundamental obligation by DB Team or GDOT under the DB Documents or impossibility of exercising a fundamental right of DB Team or GDOT under the DB Documents, (c) occurrence of the circumstances described in Article 24.13.2, or (d) issuance of a final order by a court of competent jurisdiction to the effect that a material provision under the DB Documents is void and/or unenforceable so as to deprive DB Team of its ability to exercise a fundamental right granted to DB Team under the DB 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.

19.11.2 Once Termination by Court Ruling becomes effective, GDOT and DB Team shall cooperate to implement Articles 19.5 (Termination Procedures and Duties), 19.8 (Liability After Termination; Final Release), and 19.10 (Access to Information).

19.11.3 Notwithstanding Article 19.11.2, if a Termination by Court Ruling occurs, DB Team shall be entitled to compensation to the extent, and only to the extent, provided in Exhibit 20 (Terms for Termination Compensation). Payment shall be due and payable as and when provided in Exhibit 20. Any Dispute arising out of the determination of such compensation shall be resolved according to the Dispute Resolution Procedures.

Article 20 RESERVED

Article 21 ASSIGNMENT AND TRANSFER

21.1 Restrictions on Assignment, Subletting and Other Transfers

21.1.1 DB Team shall not voluntarily or involuntarily sell, assign, convey transfer, pledge, mortgage or otherwise encumber the DB Team’s Interest or any portion thereof without GDOT’s prior written acceptance (including under any Direct Agreement), except:
21.1.1 To any entity that is under the same ultimate management control as DB Team.

21.1.2 DB Team shall not grant any other special occupancy or use of the Project to any other Person that is not in the ordinary course of DB Team performing the Work, without GDOT’s prior written acceptance.

21.1.3 Any sale, assignment, conveyance, transfer, pledge, mortgage, encumbrance, or grant of other special occupancy or use 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 DB Team Default.

21.2 Standards and Procedures for GDOT Acceptance

21.2.1 Where GDOT’s prior acceptance 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 acceptance in its sole discretion. Any such decision of GDOT to withhold consent shall be final, binding and not subject to the Dispute Resolution Procedures.

21.2.2 Thereafter, GDOT shall not unreasonably withhold its acceptance thereto. Among other reasonable factors and considerations, it shall be reasonable for GDOT to withhold its acceptance if:

21.2.2.1 DB Team fails to demonstrate to GDOT’s reasonable satisfaction that the proposed assignee, sublessee, grantee or transferee, or the proposed transferee of rights and/or equity interests that would amount to a Change of Control (for purposes of these Articles 21.2 (Standards and Procedures for GDOT Acceptance) through 21.5 (Change of Organization or Name), collectively the “Transferee”), and its proposed contractors (a) have the financial resources, qualifications and experience to timely perform DB Team’s obligations under the DB Documents and Principal Project Documents and (b) are in compliance with GDOT’s rules, regulations and adopted written policies regarding organizational conflicts of interest;

21.2.2.2 Less than all of DB Team’s Interest is proposed to be assigned, conveyed, transferred, pledged, mortgaged, encumbered, or granted; or

21.2.2.3 At the time of the proposed sale, assignment, conveyance, transfer, pledge, mortgage, encumbrance, sublease or grant of other special occupancy or use requiring GDOT’s prior acceptance, or of any proposed Change of Control, there exists any uncured DB Team Default or any event or circumstance that with the lapse of time, the giving of notice or both would constitute a DB Team Default, unless GDOT receives from the proposed Transferee assurances of cure and performance acceptable to GDOT in its good faith discretion.

21.2.3 GDOT will accept or disapprove within 30 days after it receives from DB Team a Submittal consisting of a request for acceptance 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.

21.2.4 If for any reason GDOT does not act within such 30-day period, or any extension thereof by mutual agreement of the Parties, then the provisions of Article 6.3.4.2 shall apply.

21.3 Assignment by GDOT

GDOT may assign all or any portion of its rights, title and interests in and to the DB Documents, payment and performance bond(s), guarantees, and other security for payment or performance, (a) without DB Team’s consent, to any other Person that succeeds to the governmental powers and authority of GDOT, and (b) to others with the prior written consent of DB Team.

21.4 Notice and Assumption

21.4.1 Assignments and transfers of the DB Team’s Interest permitted under this Article 21 (Assignment and Transfer) (other than pursuant to Article 21.1.1.1) or otherwise accepted in writing by GDOT shall be effective only upon GDOT’s receipt of written 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 DB Team’s obligations, duties and liabilities under the DB Documents and agrees to perform and observe all provisions thereof applicable to DB Team.

21.4.2 Each Transferee, including any Person who acquires the DB Team’s Interest pursuant to foreclosure, transfer in lieu of foreclosure or similar proceeding, shall take the DB Team’s Interest subject to, and shall be bound by, the Management Plans, the Key Contracts, the Standard Utility Agreements, all agreements between the transferor and railroads, 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 accepted by GDOT in writing in its good faith discretion.

21.4.3 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 written notice of the assignment not less than 30 days prior to the effective date thereof.
21.5 Change of Organization or Name

21.5.1 DB Team shall not change the legal form of its organization in a manner that adversely affects GDOT’s rights, protections and remedies under the DB Documents without the prior written acceptance of GDOT, which consent may be granted or withheld in GDOT’s sole discretion.

21.5.2 In the event either Party changes its name, such Party agrees to promptly furnish the other Party with written notice of change of name and appropriate supporting documentation.

Article 22 RECORDS AND AUDITS; INTELLECTUAL PROPERTY

22.1 Maintenance and Inspection of Records

22.1.1 DB Team shall keep and maintain at a single location as approved by GDOT all books, records and documents relating to the Project, Utility Adjustments or Work, including copies of all original documents delivered to GDOT. DB Team shall keep and maintain such books, records and documents in accordance with applicable provisions of the DB Documents, Volume 2, Section 2 (Project Management), and of the Management Plans, and in accordance with Good Industry Practice. DB Team shall notify GDOT where such records and documents are kept.

22.1.2 DB Team shall make all its books, records and documents available for inspection by GDOT, its representatives and legal counsel at DB Team’s principal offices in Georgia, at all times during normal business hours, without charge. GDOT may conduct any such inspection upon 48 hours’ prior written 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 Article 22.1.2 are subject to the following:

22.1.2.1 DB Team 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; and

22.1.2.2 Unless otherwise lawfully required by federal Law or the Open Government Laws, DB Team may make available copies of books, records and documents containing trade secrets and confidential proprietary information with such information redacted. Unless otherwise lawfully required by federal Law or the Open Government Laws, GDOT shall have no right to make extracts of such trade secrets and confidential proprietary information except in connection with resolution of Disputes.

22.1.2.3 DB Team shall retain records and documents for a minimum of five years after the date the record or document is generated; provided that if the DB Documents or applicable Law specify any longer time period for retention of particular records, such time period shall control. With respect to records and documents generated prior to Final Acceptance, the time period for retention shall commence upon Final Acceptance. Notwithstanding the foregoing, all
records which relate to any actions brought forth under the Dispute Resolution Procedures shall be retained and made available until any later date that such actions are finally resolved.

22.2 Audits

22.2.1 GDOT shall have such rights to review and audit DB Team, its Contractors and their respective books and records as and when GDOT deems necessary for purposes of verifying compliance with the DB Documents and applicable Law. Without limiting the foregoing, GDOT shall have the right to audit DB Team’s Management Plans and compliance therewith, including the right to inspect Work and/or activities and to verify the accuracy and adequacy of the Management Plans and its component parts, plans and other documentation. GDOT may conduct any such audit of books and records upon 48 hours’ prior written notice, or unannounced and without prior notice where there is good faith suspicion of fraud.

22.2.2 All claims filed against GDOT shall be subject to audit at any time following the filing of the claim. 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 Agreement. Thereafter, GDOT shall provide 20 days’ notice to DB Team, any Contractors or their respective agents before commencing an audit. DB Team, Contractors or their agents shall provide adequate facilities, acceptable to GDOT, for the audit during normal business hours. DB Team, Contractors or their agents shall cooperate with the auditors. Failure of DB Team, Contractors or their agents to maintain and retain sufficient books and records to allow the auditors to verify all or a portion of the claim or to permit the auditor access to such books and records shall constitute a waiver of the claim and shall bar any recovery thereunder. At a minimum, the auditors shall have available to them the following documents relating to the claim:

(a) Daily time sheets and supervisor’s daily reports;
(b) Union agreements;
(c) Insurance, welfare, and benefits records;
(d) Payroll registers;
(e) Earnings records;
(f) Payroll tax forms;
(g) Material invoices and requisitions;
(h) Material cost distribution work sheet;
(i) Equipment records (list of company equipment, rates, etc.);
(j) Contractors’ (including Suppliers’) invoices;
(k) Contractors’ and agents’ payment certificates;

(l) Canceled checks (payroll and Suppliers);

(m) Job cost report;

(n) Job payroll ledger;

(o) General ledger;

(p) Cash disbursements journal;

(q) All documents that relate to each and every claim together with all documents that support the amount of damages as to each claim; and

(r) Work sheets used to prepare the claim establishing (a) the cost components of the claim, 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 of the claim.

22.2.3 Full compliance by DB Team with the provisions of this Article 22.2 (Audits) is a contractual condition precedent to DB Team’s right to seek relief on a Dispute under Article 17.7 (Dispute Resolution Procedures).

22.2.4 Reserved

22.2.5 GDOT’s right of audit include the right to observe the business operations of DB Team and its Contractors to confirm the accuracy of books and records.

22.2.6 DB Team 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.

22.2.7 Nothing in the DB 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. DB Team 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 Agreement or indirectly through a Contract, (b) acceptance of funds directly under this 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.
22.3 Open Government Laws and Freedom of Information Act

22.3.1 DB Team acknowledges and agrees that all Submittals, records, documents, drawings, Plans, specifications and other materials in GDOT’s possession, including materials submitted by DB Team to GDOT (whether directly or indirectly), are subject to the provisions of the Open Government Laws, subject only to certain exceptions and exemptions contained therein. DB Team also acknowledges that, pursuant to O.C.G.A. § 50-18-70(a), “records received or maintained by a private person, firm, corporation, or other private entity in the performance of a service or function for or on behalf of an agency, a public agency, or a public office shall be subject to disclosure to the same extent that such records would be subject to disclosure if received or maintained by such agency, public agency, or public office.” If DB Team believes information or materials submitted or otherwise made available to GDOT constitute trade secrets, proprietary information or other information that is not subject to the Open Government Laws or is excepted from disclosure under the Open Government Laws, DB Team shall be solely responsible for specifically and conspicuously designating that information by placing “CONFIDENTIAL” 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 a concise statement of reasons supporting the claim. Nothing contained in this Article 22.3.1 shall modify or amend requirements and obligations imposed on GDOT by the Open Government Laws or other applicable Law, and the provisions of the Open Government Laws or other Laws shall control in the event of a conflict between the procedures described above and the applicable Law. DB Team is advised to contact legal counsel concerning such Law and its application to DB Team.

22.3.2 If GDOT receives a request for public disclosure of materials marked “CONFIDENTIAL,” GDOT (as the case may be) will endeavor to notify DB Team of the request. DB Team may seek a protective order or other appropriate remedy. If GDOT determines in good faith that the materials identified as “CONFIDENTIAL” are not exempt from the Open Government Laws, GDOT will release the requested information within the applicable statutory time period, unless otherwise directed by an order of a court of competent jurisdiction. GDOT shall make the final determination regarding whether the requested information is to be disclosed or withheld.

22.3.3 In the event of any proceeding or litigation concerning the disclosure of any material submitted by DB Team to GDOT, DB Team 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 shall represent GDOT, which will participate in the litigation in such manner as they each may deem necessary or desirable. Except in the case of GDOT’s voluntary intervention in litigation, DB Team 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.
22.3.4 DB Team 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. DB Team’s rights and obligations with respect to such disclosure shall be in accordance with such federal Law.

22.4 Intellectual Property

22.4.1 All Proprietary Intellectual Property, including with respect to Technology Enhancements, Source Code and Source Code Documentation, shall remain exclusively the property of DB Team or its Affiliates or Contractors that supply the same, notwithstanding any delivery of copies thereof to GDOT.

22.4.2 GDOT shall have and is hereby granted a nonexclusive, transferable, irrevocable, 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 DB Team, including with respect to Technology Enhancements, Source Code and Source Code Documentation, solely in connection with the Project and any Highway, tolled or not tolled, owned and operated by GDOT or a State or regional Governmental Entity.

22.4.3 Subject to the license and rights granted to GDOT pursuant to Article 22.4.2, GDOT shall not at any time sell any Proprietary Intellectual Property of DB Team 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 Article 22.4.2 above.

22.4.4 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.

22.4.5 The right to sublicense is limited to State or regional Governmental Entities that own or operate a Highway or other road, tolled or not tolled, 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, tolled or untolled. All such sublicenses shall be subject to Article 22.4.6.

22.4.6 Subject to Article 22.3 (Open Government Laws and Freedom of Information Act), GDOT shall:

22.4.6.1 Not disclose any Proprietary Intellectual Property of DB Team to any Person other than authorized transferees and sublicensees who agree to be bound by any confidentiality obligations of GDOT relating thereto;

22.4.6.2 Enter into a commercially reasonable confidentiality agreement if requested by DB Team with respect to the licensed Proprietary Intellectual Property; and
22.4.6.3 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 DB Team 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.

22.4.7 Notwithstanding any contrary provision of the DB Documents, in no event shall GDOT or any of their respective directors, officers, employees, consultants or agents be liable to DB Team, any Affiliate or any Contractor for any damages, including loss of profit, arising out of breach of the duty of confidentiality set forth in Article 22.4.6 if such breach is not the result of gross negligence or intentional misconduct or is required under the provisions of the Open Government Laws or a court order or other legal requirement.

22.4.8 DB Team 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.

22.4.9 With respect to any Proprietary Intellectual Property, including with respect to Technology Enhancements, Source Code and Source Code Documentation, owned by a Person other than DB Team, including any Affiliate, and other than GDOT or a Governmental Entity acting as a Contractor, DB Team 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 DB Team and GDOT, 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, tolled or not tolled, 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 Article 22.4.1. The foregoing requirement shall not apply, however, to mass-marketed software products (sometimes referred to as “shrink wrap software”) owned by such a Person where such a license cannot be extended to GDOT using commercially reasonable efforts. The limitations on sale, transfer, sublicensing and disclosure by GDOT set forth in Articles 22.4.3 through 22.4.6 shall also apply to GDOT’s licenses in such Proprietary Intellectual Property.

22.5 Reserved

Article 23 FEDERAL REQUIREMENTS

23.1 Compliance with Federal Requirements

DB Team shall comply and require its Contractors to comply with all Federal Requirements set forth in Exhibit 8 (Federal Requirements). In the event of any conflict between any applicable Federal Requirements and the other requirements of the DB Documents, the Federal
Requirements shall prevail, take precedence and be in force over and against any such conflicting provisions.

23.2 Reserved

Article 24 MISCELLANEOUS

24.1 Taxes

DB Team shall pay, prior to delinquency, all applicable Taxes. DB Team shall have no right to a Compensation Event or a Relief Event due to its misinterpretation of Laws respecting Taxes or incorrect assumptions regarding applicability of Taxes.

24.2 Amendments

The DB Documents may be amended only by a written instrument duly executed by the Parties or their respective successors or assigns, except to the extent expressly provided otherwise in this Agreement.

24.3 Waiver

24.3.1 No waiver of any term, covenant or condition of this Agreement or the other DB Documents shall be valid unless in writing and signed by the obligee Party.

24.3.2 The exercise by a Party of any right or remedy provided under this Agreement or the other DB Documents shall not waive or preclude any other or further exercise thereof or the exercise of any other right or remedy. No waiver by any Party of any right or remedy under this Agreement or the other DB Documents shall be deemed to be a waiver of any other or subsequent right or remedy under this Agreement or the other DB 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.

24.3.3 Except as provided otherwise in the DB 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 Agreement or the other DB Documents.

24.3.4 Either Party’s waiver of any breach or failure to enforce any of the terms, covenants, conditions or other provisions of the DB 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, if the Parties make and implement any interpretation of the DB 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.

**24.3.5** Subject to Article 14.2.7, 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 Agreement or the other DB 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 Disputes or final judgment; (b) any time within which the other Party is required to perform any obligation; or (c) any other notice or demand.

**24.4 Independent Contractor**

**24.4.1** DB Team is an independent contractor, and nothing contained in the DB Documents shall be construed as constituting any relationship with GDOT other than that of an independent contractor under this Agreement.

**24.4.2** Nothing in the DB Documents is intended or shall be construed to create any partnership, joint venture or similar relationship between GDOT and DB Team; 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. While the term “public-private partnership” may be used on occasion to refer to contractual relationships of the type hereby created, 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 DB Team’s financial decisions or discretionary actions concerning the Project and Work.

**24.4.3** In no event shall the relationship between GDOT and DB Team be construed as creating any relationship whatsoever between GDOT and DB Team’s employees. Neither DB Team nor any of its employees is or shall be deemed to be an employee of GDOT. Except as otherwise specified in the DB Documents, DB Team 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 DB Team or any Contractor hires to perform or assist in performing the Work.

**24.5 Successors and Assigns**

The DB Documents shall be binding upon and inure to the benefit of GDOT and DB Team and their permitted successors, assigns and legal representatives.

**24.6 Designation of Representatives; Cooperation with Representatives**

**24.6.1** GDOT and DB Team shall each designate an individual or individuals who shall be authorized to make decisions and bind the Parties on matters relating to the DB Documents (“Authorized Representative”). In addition, for purposes of Project administration and oversight to be performed by GDOT as
provided in this Agreement, GDOT shall designate an individual or individuals who shall be authorized to make decisions and bind GDOT and upon such person(s) direction DB Team may rely. Exhibit 22 provides the initial Authorized Representative designations. A Party may change such designations by a subsequent writing delivered to the other Party in accordance with Article 24.11 (Notices and Communications). For purposes of this Agreement, the Parties, except where expressly stated to the contrary, all communications and deliveries, including submittals, shall be through the respective Authorized Representative for each party.

24.6.2 DB Team shall cooperate with GDOT and all representatives of GDOT designated as described above.

24.7 Survival

DB Team’s and GDOT’s representations, covenants, warranties, the dispute resolution provisions contained in Article 17.7 (Dispute Resolution Procedures), the express obligations of the Parties following termination, and all other provisions which by their inherent character should survive expiration or earlier termination of this Agreement and/or completion of the Work shall survive the expiration or earlier termination of this Agreement and/or the completion of the Work. The provisions of Article 17.7 shall continue to apply after expiration or earlier termination of this Agreement to all Disputes between the parties arising out of the DB Documents.

24.8 Limitation on Third-Party Beneficiaries

24.8.1 It is not intended by any of the provisions of the DB 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 to the extent provided in Article 24.9.2 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 Article 24.8, the duties, obligations and responsibilities of the Parties to the DB Documents with respect to third parties shall remain as imposed by Law. The DB Documents shall not be construed to create a contractual relationship of any kind between GDOT and a Contractor or any Person other than DB Team.

24.8.2 GDOT shall be a third-party beneficiary, and entitled to the benefits, with respect to the rights under the DB Documents related to the following:

24.8.2.1 Oversight, review, inspection, testing, monitoring, acceptance, and enforcement of DB Team’s obligations to perform the design and construction of the Project in accordance with the DB Documents and applicable Law.

24.8.2.2 Review, audit, inspection and copying of data, information, documents, books and records of DB Team and any other DB Team-Related Entity.

24.8.2.3 Step in rights upon the occurrence of a DB Team Default.
24.9 No Personal Liability of GDOT Employees; No Tort Liability

24.9.1 GDOT’s officers, employees, representatives 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 this Agreement and the DB Documents. They shall not be liable either personally or as employees of GDOT for actions in their ordinary course of employment.

24.9.2 The Parties agree to provide to each other with written notice of any claim which such Party may receive from any third party relating in any way to the matters addressed in this Agreement, and shall otherwise provide notice in such form and within such period as is required by Law.

24.10 Governing Law

The DB Documents shall be governed by and construed in accordance with the laws of the State of Georgia.

24.11 Notices and Communications

24.11.1 Notices under the DB 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 facsimile or e-mail 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):

24.11.2 All notices, correspondence and other communications to DB Team shall be delivered to the following address or as otherwise directed by DB Team’s Authorized Representative:

Brooks Berry Haynie & Associates, Inc.
Jason Owen, President
600 Discovery Place
Mableton, GA 30126
Telephone: (770) 874-1162
Facsimile: (770) 874-1171
E-mail: jason@bbhelectric.com

24.11.3 All notices, correspondence, submittals, transmittals and any other communications shall be directed to GDOT’s Authorized Representative. All notices, correspondence, submittals, transmittals, and other communications to GDOT shall be marked as regarding the “Statewide ITS DMS Deployment Design-Build Project” and shall be delivered to the following addresses or as otherwise directed by GDOT’s Authorized Representative:

Darryl D. VanMeter, P.E.
Georgia Department of Transportation
Office of Innovative Delivery
600 West Peachtree Street, Floor 19
In addition, copies of all notices regarding Disputes, and termination and default notices shall be delivered to the following person:

Georgia Department of Transportation
Office of General Counsel
600 West Peachtree Street, Suite 2300
Atlanta, Georgia 30308
E-mail: mcline@dot.ga.gov

24.11.4 Notices 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 carrier or other Person making the delivery. Notwithstanding the foregoing, notices sent by facsimile after 12:00 p.m. Eastern Standard or Daylight Time (as applicable) and all other notices received after 12:00 p.m. shall be deemed received on the first Business Day following delivery (that is, in order for a fax to be deemed received on the same day, at least the first page of the fax must have been received before 12:00 p.m.). Any technical or other communications pertaining to the Work shall be conducted by DB Team’s Authorized Representative and technical representatives designated by GDOT.

24.12 Integration of DB Documents

GDOT and DB Team agree and expressly intend that, subject to Article 24.13 (Severability) and other DB Documents constitute a single, non-severable, integrated agreement whose terms are interdependent and non-divisible.

24.13 Severability

24.13.1 If any clause, provision, section or part of this Agreement or the other DB Documents or any other Principal Project Document 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, which 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) which 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 DB Documents or such other Principal Project Documents, which shall be construed and enforced as if the DB Documents or such other Principal Project Documents did not contain such invalid or unenforceable clause, provision, section, or part.

24.13.2 If after the efforts required by Article 24.13.1, the Parties mutually agree that without the section or part of the DB Documents or such other Principal Project Documents that the court ruled to be invalid, there is no interpretation or reformation of the DB Documents or such other Principal Project Documents that
can reasonably be adopted which 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 Article 19.11 (Termination by Court Ruling).

24.14 Usury Savings

The DB 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 which 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 DB 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 DB 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.

24.15 Boycott of Israel

Pursuant to O.C.G.A. Sec. 50-5-85, DB Team 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.

24.16 Entire Agreement

This Agreement and the other DB 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.
24.17 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.

<table>
<thead>
<tr>
<th>CONTRACT IDENTIFICATION NUMBER</th>
<th>DATE CONTRACT EXECUTED</th>
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<td>2/8/2021</td>
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<td>P.I. 0017389</td>
<td>Cobb, Cherokee, Chatham Counties</td>
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<tr>
<th>CONTRACTOR</th>
<th>DESCRIPTION OF IMPROVEMENTS AND FACILITY</th>
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<td>Brooks Berry Haynie &amp; Associates, Inc.</td>
<td>Statewide ITS DMS Deployment Design-Build Project</td>
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<tr>
<th>CONTRACT SUM</th>
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<td>$ 1,526,173.00</td>
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</table>

[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 Agreement, including the requirements of the DB Documents, as of the date first above written.

BROOKS BERRY HAYNIE & ASSOCIATES, INC.

By: ________________________________
Name: Jason Owen
Title: President

GEORGIA DEPARTMENT OF TRANSPORTATION

By: ________________________________
Name: Russell R. McMurry, P.E.
Title: Commissioner

Attested By: __________________________
Name: Angela O. Whitworth
Title: Treasurer
Form O-1  Resident Contractor Payment and Performance Bond Form

DEPARTMENT OF TRANSPORTATION
PERFORMANCE AND PAYMENT BONDS
(GEORGIA RESIDENT CONTRACTOR)

KNOW ALL MEN BY THESE PRESENTS, That we,
BROOKS BERRY HAYNIE & ASSOCIATES, INC.
GA

as Principal, and the Corporation or Corporations hereinafter designated as Surety A or Surety A to Surety inclusive, as Surety or Sureties, are held and firmly bound, both “jointly and severally” as well as “severally” only, unto the Department of Transportation in the penal sum of 120 percent of the Original Contract Amount of:

One Million Five Hundred Twenty-Six Thousand One Hundred Seventy-Three Dollars and Zero Cents
$1,526,173.00

for the use of the Obligee herein named and of all persons doing work or furnishing skill, tools, machinery, or materials under or for the purpose of this contract hereinafter described; Provided, that it is mutually understood and agreed between the Principal and Surety and/or Sureties and the Obligee herein named that this bond is to be construed as being in compliance with and subject to the provisions of Sections 13-10-1 and 36-82-101 of the Official Code of Georgia Annotated, as well as the other applicable provisions, and that in compliance with the aforesaid sections this instrument is intended and is to be construed as two separate bonds, namely, as a “performance bond” in the full penal sum heretofore set forth, and as a “payment bond”, in an amount equal to 110 percent of the full penal sum heretofore named and that both bonds shall be construed to be in full force and effect at the same time, as the case may be, and that the obligations shall be several, in the full amount of said penal sum, as to each type of bond; and for the payment of which sums well and truly to be made we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents; Provided, that the Sureties bind themselves in such sums “jointly and severally”, as well as “severally” only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, and with each other, for 210 percent of the penal sum herein provided for, the total liability of all Sureties shall not exceed the total penal sum heretofore provided for as to each of the respective obligations herein provided for.

1/26/2021

Signed and sealed this day of ____________________________.

Surety Name and State of incorporation
A

Name and Address of Bonding Agent
Agent Name: David Eades

B

Pentarisk Associates 1870 The Exchange SE Ste 100 Atlanta, GA

C

30339  404-809-2530

D

*PLEASE PRINT ALL INFORMATION*

Bond # 9360607

Note: The Surety Company for Performance and Payment Bonds shall be a company acceptable as Surety on Federal Bonds and listed in the current Federal Register and licensed in the State of Georgia.
THE CONDITIONS OF THE FOREGOING OBLIGATIONS is such that whereas the above named Principal has entered into a contract with said Department of Transportation bearing even date herewith for the Construction of:

Statewide ITS DMS Deployment Design-Build Project PI No. 0017389 in Cobb, Cherokee, and Chatham Counties.

The surety hereby binds itself to provide performance bond and payment bond for work added by Supplemental Agreement(s) and/or Extension Agreement(s), whereby the original Contract amount or the total Project length may be increased by as much as 20 percent without the written assent of the Surety.

Now, therefore, the condition of these obligations is such that if the above named bound Principal shall in all respects comply with the terms and conditions of said contract, including all modifications or extensions thereof, and his obligations thereunder, including the notice to contractors, the plans, general conditions, specifications, special provisions and proposals, therein referred to and made a part thereof, and shall complete the said contract in accordance with its terms and shall save Obligee free from all cost and charge that may accrue on account of the doing of the work specified, then this bond, construed as a “performance bond” shall be void, otherwise of full force and effect.

Provided further, that upon the failure of the said Principal to promptly and efficiently prosecute said work, in any respect, in accordance with the contract, the above bound Surety or Sureties shall take charge of said work and complete the contracts at its own expense, pursuant to its terms, receiving, however, any balance of funds in the hands of said Department of Transportation under said contract.

And, further, the condition of these obligations is such that if the above bound Principal shall make prompt payment to all subcontractors and all other persons supplying labor, materials, machinery and equipment furnished for the performance of the work provided for in said contract, as well as all duly authorized modifications thereof which may hereafter be made, including any extension of time to complete the same, then this bond, as a “payment bond”, shall be void, otherwise of full force and effect.

It is agreed that, in the event that this bond is executed by more than one surety company, the term “Surety” as used in this bond shall be construed to mean any one or all of such surety companies executing this bond. It is further agreed that such surety companies herein named and executing this bond as surety for the Principal, by mutual agreement between themselves, and with the Principal, and with the Obligee herein named, do hereby designate and authorize:

Fidelity and Deposit Company of Maryland

as the “controlling surety”

It is further agreed that the term, “controlling surety”, shall be defined as that one of such sureties herein designated and authorized by all of such sureties, upon whom any notice or other demand may be made by the Obligee herein named, or other person having a claim against the Principal under the provisions of this bond, or with whom such Obligee, or other such person, may negotiate or deal as to any matter pertaining to the obligations of this bond, and against whom any right of action growing out of this bond may be enforced, as provided for by Sections 36-82-102 through 36-82-105 of the Official Code of Georgia Annotated as fully and effectually as though the same were had or done with each of such named sureties individually, and with the right upon the part of such “controlling surety” to vouch such co-sureties into court to defend any action against it or them arising out of the obligations of this bond, as provided by Section 9-10-13 of the Official Code of Georgia Annotated, or to call upon such co-sureties, in accordance with the terms of any notice, demand, suit, suit at law, or other action, commenced or brought against it by the Obligee named herein, or any other person having a claim against the Principal under the conditions and provisions of this bond, or in accordance with any private contract between the sureties executing this bond on behalf of said Principal, it being the purpose and intent of this contract that the Obligee named in this bond, or such other person
having a claim under the provisions of this bond, may enforce any right that it or they may have growing out of this bond by notice, demand, negotiation, suit, or other appropriate action against the controlling surety only, and such action shall be deemed to be binding upon all the sureties named herein; Provided however, the foregoing notwithstanding, the Obligee, or such other person having a claim under this bond, at its or their option, may take such action against any or all of said surety companies.

It is agreed by the parties hereto that in the event the Department of Transportation in making the contract with the Principal herein shall be acting as Agent for the United States Government, or for the Cobb, Cherokee, and Chatham Counties.

or for both, as well as for itself, then the said Department of Transportation shall have the right in the event of a breach of the contract resulting in loss to the said County or to the United States Government; or to itself, to maintain a suit hereon for the use of itself, or the United States Government, or said County as well as for itself; or said County and said United States Government shall have the right in their own names to maintain a suit herein in the same manner and to the same extent as the Department of Transportation has by virtue of Sections 36-82-104 and 36-82-105 of the Official Code of Georgia Annotated.

IN WITNESS WHEREOF, the said “Authorized Signer” and the said “Surety” have duly executed this bond under seal this date 1/26/2021.

Signed, Sealed, and Delivered in the presence of us.

IN WITNESS WHEREOF THE PARTIES HAVE SET THEIR HANDS AND AFFIXED THEIR SEALS

BROOKS BERRY HAYNIE & ASSOCIATES, INC.

Fidelity and Deposit Company of Maryland

Signature of Contractor (SEAL)  
Signature of Attorney-In-Fact (SEAL)

Jason Owen  
David Eades

Printed Name of Signee:  
Printed Name of Signee:
EXHIBIT 1

ACRONYMS AND DEFINITIONS

Unless otherwise specified, wherever the following abbreviations or terms are used in this Agreement and the Technical Provisions, they have the meanings set forth below:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
</tr>
<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
</tr>
<tr>
<td>AGC</td>
<td>Associated General Contractors of America</td>
</tr>
<tr>
<td>AMRL</td>
<td>AASHTO Materials Reference Laboratory</td>
</tr>
<tr>
<td>ANSI</td>
<td>American National Standards Institute</td>
</tr>
<tr>
<td>APE</td>
<td>Area of Potential Effects</td>
</tr>
<tr>
<td>ARC</td>
<td>Atlanta Regional Commission</td>
</tr>
<tr>
<td>AREMA</td>
<td>American Railway Engineering and Maintenance of Way Association</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society of Testing and Materials</td>
</tr>
<tr>
<td>ATC</td>
<td>Alternative Technical Concept</td>
</tr>
<tr>
<td>BFI</td>
<td>Bridge Foundation Investigation</td>
</tr>
<tr>
<td>AWS</td>
<td>American Welders Society</td>
</tr>
<tr>
<td>BMP</td>
<td>Best Management Practice</td>
</tr>
<tr>
<td>CAD</td>
<td>Computer Aided Design</td>
</tr>
<tr>
<td>CAPWAP</td>
<td>Case Pile Wave Analysis program</td>
</tr>
<tr>
<td>CCTV</td>
<td>Closed Circuit Television</td>
</tr>
<tr>
<td>CE</td>
<td>Categorical Exclusion</td>
</tr>
<tr>
<td>CEI</td>
<td>Construction Engineering and Inspection</td>
</tr>
<tr>
<td>CEPP</td>
<td>Comprehensive Environmental Protection Plan</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CIA</td>
<td>Contract Item Agreement</td>
</tr>
<tr>
<td>CMS</td>
<td>Changeable Message Sign</td>
</tr>
<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
</tr>
<tr>
<td>CQAM</td>
<td>Construction Quality Assurance Manager</td>
</tr>
<tr>
<td>CQMP</td>
<td>Construction Quality Management Plan</td>
</tr>
<tr>
<td>CSJ</td>
<td>Control Section Job</td>
</tr>
<tr>
<td>CWA</td>
<td>Clean Water Act</td>
</tr>
<tr>
<td>DB</td>
<td>Design-Build</td>
</tr>
<tr>
<td>DBA</td>
<td>Design-Build Agreement</td>
</tr>
<tr>
<td>DBE</td>
<td>Disadvantaged Business Enterprise, as set forth in 49 CFR Part 26</td>
</tr>
<tr>
<td>DEIS</td>
<td>Draft Environmental Impact Statement</td>
</tr>
<tr>
<td>DMS</td>
<td>Dynamic Message Signs</td>
</tr>
<tr>
<td>DNR</td>
<td>Georgia Department of Natural Resources</td>
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<tr>
<td>DQAM</td>
<td>Design Quality Assurance Manager</td>
</tr>
<tr>
<td>DQMP</td>
<td>Design Quality Management Plan</td>
</tr>
</tbody>
</table>
RFQ  Request for Qualifications
RFP  Request for Proposals
RLM  Residual Life Methodology
ROD  Record of Decision
ROW  Right of Way
ROW AM  Right of Way Acquisition Manager
ROWIS  Right of Way Information System
RTF  Related Transportation Facilities
SDPP  Special Deposit and Possession Procedure
SDEIS  Supplemental Draft Environmental Impact Statement
SH  State Highway
SHPO  State Historic Preservation Officer
SME  Subject Matter Expert
SOQ  Statement of Qualifications
SOV  Schedule of Values
SSTR  Single Slope Traffic Railing
STA  State Transportation Agency
SUA  Standard Utility Agreement
SUE  Subsurface Utility Engineering
SVDBE  Small, Veteran, and Disadvantaged Business Enterprise
TCLP  Toxicity Characteristic Leaching Procedure
TIR  Traffic Interruption Request
TMC  Traffic Management Center
TMP  Transportation Management Plan
UAM  Utility Accommodation Manual
UAT  Utility Adjustment Team
UCS  User Classification Subsystem
UDC  Utility Design Coordinator
UJUA  Utility Joint Use Acknowledgment or Utility Joint Use Agreement
UM  Utility Manager
US  United States
USACE  United States Army Corps of Engineers
U.S. DOT  United States Department of Transportation
USFWS  United States Fish and Wildlife Service
U.S. GAAP  U.S. Generally Accepted Accounting Principles
USPAP  Uniform Standard of Professional Appraisal Practices
UST  Underground Storage Tank
UTM  Universal Transverse Mercator
VDS  Video Detection System
VES  Video Exception Sub-system
WBS  Work Breakdown Structure
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFI</td>
<td>Wall Foundation Investigation</td>
</tr>
<tr>
<td>WECS</td>
<td>Worksite Erosion Control Supervisor</td>
</tr>
<tr>
<td>WTCS</td>
<td>Worksite Traffic Control Supervisor</td>
</tr>
<tr>
<td>WUCS</td>
<td>Worksite Utility Coordination Supervisor</td>
</tr>
</tbody>
</table>
**Abandonment** means that Design-Build Team abandons all or a material part of the Project, which abandonment shall have occurred if (a) Design-Build Team demonstrates through acts or omissions an intent not to continue, for any reason other than a Relief Event that materially interferes with ability to continue, to construct or operate all or a material part of the Project and (b) 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 45 days.

**Addenda/Addendum/Amendment** means supplemental additions, deletions, and modifications to the provisions of the RFP after the release of the draft RFP.

**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 DB Documents to a Utility Owner’s “applicable Adjustment Standards” refer to those that are applicable pursuant to Article 7.5.3 (Requirements).

**Administrative Information Submittals** means those submittals Proposers are required to submit with their respective Proposal.

**Affiliate** means:

(a) any shareholder, member, partner or joint venture member of Design-Build Team,

(b) any Person which directly or indirectly through one or more intermediaries’ controls, or is controlled by, or is under common control with, Design-Build Team or any of its shareholders, members, partners or joint venture members; and

(c) any Person for which ten percent (10%) or more of the equity interest in such Person is held directly or indirectly, beneficially or of record by (i) Design-Build Team, (ii) any of Design-Build Team’s shareholders, members, partners or joint venture members or (iii) any Affiliate of Design-Build Team under clause (b) of this definition.

For purposes of this definition the term “control” means the possession, directly or indirectly, of the power to cause the direction of the management of a Person, whether through voting securities, by contract, family relationship or otherwise.

**Age** means the elapsed time since an Element was first constructed or installed or, if applicable, last reconstructed, rehabilitated, restored, renewed or replaced.

**Agreement, DBA, Design-Build Agreement, or DB Agreement** means this certain Design-Build Agreement executed by GDOT and Design-Build Team, including any and all exhibits, attachments, riders, and amendments thereto.
Allowable Design Exceptions means design exceptions identified in Volume 2, Section 11.3.2 (Design Criteria Order of Precedence) that are allowed to be implemented on the Project.

Alternative Technical Concept (ATC) means a Proposer’s suggested change or variance to the requirements of the RFP that results in performance and quality of the end product that is equal to or better than the performance and quality of the Project on an overall basis with the proposed change or variance. GDOT’s determination of any Proposer’s ATC is conclusive as to the acceptability of an ATC for inclusion in the Proposal.

Apparent Successful Proposer means the Proposer with the apparent Successful Proposal, taking into consideration the evaluation criteria and procedures.

Area of Potential Effects (APE) means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of Historic Properties, if such properties exist.

Attorney General means the Attorney General of the State of Georgia.

Authorized Representative has the meaning set forth in Article 24.6.1 and shall be applicable person(s) and/or party(ies) authorized to act on behalf of GDOT and the Design-Build Team respectively, as initially set forth pursuant to Exhibit 22 (Initial Designation of Authorized Representative). All notices, deliveries, responses, approvals, and other communications among GDOT and/or the Design-Build Team shall be directed to the respective Authorized Representative for each of the aforementioned, unless expressly provided to the contrary in this Agreement.

Baseline Project Schedule shall have the meaning set forth in Volume 2, Section 2.5 (Project Schedule Requirements).


Best Value Proposal means the Proposal meeting the standards set by the RFP that GDOT determines, through the evaluation process and evaluation criteria described in this ITP, to present the best value and to be in the best interest of GDOT and the State.

Betterment has, with respect to a given Utility being Adjusted, the meaning (if any) set forth in the Utility Agreement(s) applicable to the Utility; in all other cases, “Betterment” means any upgrading of the Utility in the course of such Utility Adjustment that is not attributable to the construction of the Project and is made solely for the benefit of and at the election of the Utility Owner, including an increase in the capacity, capability, efficiency or function of an Adjusted Utility over that which was provided by the existing Utility. Notwithstanding the foregoing, the following are not considered Betterments unless otherwise provided in the applicable Utility Agreement(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); and  

(f) any upgrading required by the Utility Owner’s applicable Adjustment Standards.  

With respect to any Replacement Utility Property Interest, “Betterment” has the meaning (if any) set forth in the applicable Utility Agreement(s). In all other cases, a Replacement Utility Property Interest shall be considered a Betterment, except to the extent that reinstallation of a Utility in the Replacement Utility Property Interest (i) is necessary in order to meet the requirements of the DB Documents, or (ii) is called for by Design-Build Team in the interest of overall economy for the Project.  

**Business Day, work day, or working day** means any Calendar Day less Saturday, Sunday and State of Georgia holidays.  

**Calendar Day** means any day shown on the calendar, beginning and ending at midnight.  

**Change in Law** means (a) the adoption of any Law after the date that is 90 days prior to the Proposal Due Date, or (b) any change, amendment to, repeal or revocation of any Law or in the interpretation or application thereof by any Governmental Entity after the date that is 90 days prior to the Proposal Due Date, in each case that is materially inconsistent with Laws in effect 90 days prior to the Proposal Due Date; excluding, however, any such Change in or new Law that also constitutes or causes a change in or new Adjustment Standards, as well as any change in or new Law passed or adopted but not yet effective as of the date that is 90 days prior to the Proposal Due Date.  

**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-Build Team 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 shareholder, member, partner or joint venture member of Design-Build Team may constitute a Change of Control of Design-Build Team if such shareholder, member, partner or joint venture member possesses the power to direct or control or cause the direction or control of the management of Design-Build Team. 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-Build Team or a material aspect of its business due solely to a bona fide open market transaction(s) 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-Build Team or a material aspect of its business due solely to a bona fide transaction
involving beneficial interests in the ultimate parent organization of a shareholder, member, partner or joint venture member of Design-Build Team, (but not if the shareholder, member, partner or joint venture 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-Build Team 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-Build Team;

(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-Build Team;

(e) The exercise of minority veto or voting rights (whether provided by applicable Law, by Design-Build Team’s organizational documents or by related member or shareholder agreements or similar agreements) over major business decisions of Design-Build Team, provided that if such minority veto or voting rights are provided by shareholder or similar agreements, GDOT has received copies of such agreements; or

**Change Order** means a written approval by GDOT, counter-signed by Design-Build Team, with respect to a GDOT Change or Change Request, which shall set forth any adjustments to the Contract Sum and/or the Contract Time, including on account of a Relief Event or Compensation Event, as provided in the Agreement.

**Change Request** means a written request from Design-Build Team seeking to change the character, quantity, quality, description, scope or location of any part of the Work, to modify the DB Documents.

**Claimant** means any Person that would be entitled to protection of payment bond under Code Section 13-10-63, including any P&P Bonds.

**Code** means the Official Code of Georgia Annotated.

**Commissioner** means the Commissioner of GDOT appointed by the State Transportation Board and any successor thereto having substantially similar powers and authority.

**Communications Support Plan** has the meaning set forth in Volume 2, Section 2.2.3 (Communications Support).

**Compensation Amount** means the amount of compensation to be paid to Design-Build Team for a Compensation Event as set forth and subject to the limitations of the Agreement, including Article 14.2 (Compensation Events) therein.

**Compensation Event** means the written notice submitted by Design-Build Team in accordance with Article 14.2.
Compensation Event Notice means the written notice submitted by Design-Build Team in accordance with Article 13.3.2 (DB Team’s Notice of Compensation Event and/or Relief Event).

Completion Date means the date the Design-Build Team has satisfied all conditions and requirements of and for a Completion Deadline the Substantial Completion Deadline, and Final Acceptance, as may be adjusted pursuant to any Supplemental Agreement, including on account of any Relief Events.

Completion Deadline means the critical milestones for commencement or completion of the Work as set forth in Exhibit 9 (Milestone Deadlines), including without limitation Interim Completion Deadlines, the Substantial Completion Deadline, and Final Acceptance Deadline, as may be adjusted upon approval of the Baseline Project Schedule as set forth in Article 3.2 (Project Schedule), and as further adjusted pursuant to any Supplemental Agreement, including on account of any Relief Events.

Conceptual Layout Plan means the schematic layout which provides alignment and lane configuration information necessary to verify lane continuity and general scope compliance for the entire Project.

Construction Commencement Date means for the date on which Design-Build Team first commences construction of the Project or such relative phase thereof.

Construction Documents means all shop drawings, working drawings, fabrication plans, material and hardware descriptions, specifications, construction quality control reports, construction quality assurance reports and samples necessary or desirable for construction of the Project and/or the Utility Adjustments included in the Construction Work, in accordance with the DB Documents.

Construction Maintenance Limits means the physical boundaries of Design-Build Team’s maintenance responsibilities for the Construction Work.

Construction Phase has the meaning set forth in Volume 2, Section 2.2.4 (Construction Phasing and Staging Plan).

Construction Phasing and Staging Plan has the meaning set forth in Section 2.2.4 of the Technical Provisions.

Construction Work means all portions of the Work necessary to build or construct, make, form, manufacture, furnish, install, supply, deliver or equip the Project and/or the Utility Adjustments. Construction Work includes landscaping.

Contract means any agreement, and any supplement or amendment thereto, by either (a) Design-Build Team 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 Utility Agreements and any agreement with GDOT.
Contract Item Agreement (CIA) means an Agreement used for including Utility work in the Department’s project and performed by the Department's Contractor awarded by competitive bid.

Contract Sum means the total contract sum to be paid to Design-Build Team on account of the fully and properly performed Work as set forth in the Agreement (preceding signatures under Article 24 (Miscellaneous)), as adjusted pursuant to Supplemental Agreements (including to reflect adjustments for Compensation Events or Change Orders as provided in the Agreement), including without limitation all of Design-Build Team’s profit, fees, financing costs and interest expense for Design-Build Team Debt, all costs of work and services, materials, equipment, supplies, general conditions costs, overhead and administrative expenses, professional fees and subconsultant costs, acquisition and other costs associated with acquisition of any Approved Properties, insurance and bond premiums, sales taxes, assessments, tariffs, permit, license and registration fees, and all other related costs and expenses.

Contract Time means the time period provided for Design-Build Team’s completion of the Work as provided in Article 3.3.1.

Contractor means any Person, including any Subcontractor with whom Design-Build Team has entered into any Contract to perform any part of the Work or provide any materials, equipment or supplies for the Project and/or the Utility Adjustments included in the Construction Work, on behalf of Design-Build Team. The term “Contractor” excludes GDOT.

Cost to Cure means an appraisal method applied to estimate a proper adjustment for damages to a property that can be physically and economically corrected, as described in further detail in the GDOT ROW Manual.

Critical Path means the sequence of activities that must be completed on schedule for the entire Project to be completed in accordance with the Milestone Deadlines. This is the longest duration path through the work plan, in terms of time, of logically connected activities on the Baseline Project Schedule ending with the relative Milestone Deadline in respect thereof.

Customer Groups means groups, Persons and entities having a perceived stake or interest in the Project, including: the media, elected officials, Governmental Entities, general public residing or working within the general vicinity of the Project or traveling within or across the limits of the Project, business owners within or adjacent to the Project corridor, Utility Owners, railroads, transportation authorities and providers, community groups, local groups (neighborhood associations, business groups, chambers of commerce, convention and visitors bureaus, contractors, etc.) and other Persons or entities affected by the Project.

Day or day means calendar day unless otherwise expressly specified.

Decent, Safe and Sanitary (DSS) means the condition of a dwelling such that it meets applicable housing and occupancy codes.

Default Interest Rate means the statutory interest rate applicable to GDOT for contract payment defaults.

Default Termination Event means each of the Design-Build Team Defaults listed in Article 19.3.1 (DB Team Defaults Triggering GDOT Termination Rights).
**Defect** means any Work that does not otherwise conform with the DB Documents, or otherwise is a defect, whether by design, construction, installation, affecting the condition, use, functionality or operation of any portion of the Work which, ordinary wear and tear excepted, 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 Element or any other part of the Project;

(c) damage to a third party’s property or equipment;

(d) damage to the Environment;

(e) failure of the affected Element or any other part of the Project to meet a Performance Requirement; or

(f) failure of an Element to meet the Target for a measurement record as set forth in the columns headed “Target” and “Measurement Record” in the Performance and Measurement Table Baseline.

**Demobilization** means Work performed to remove offices, plants, and facilities; and to move personnel, equipment, and supplies from the Project site to complete Construction Work.

**Design-Build Agreement, DB Agreement, DBA** - see definition for Agreement.

**Design-Build Documents** or **DB Documents** means those documents as set forth in Article 1.2 (DB Documents; Order of Precedence) and all such other agreements entered into by GDOT and Design-Build Team or any Design-Build Team-Related Entity, or otherwise executed by Design-Build Team or a Design-Build Team-Related Entity and delivered to GDOT, with respect to or in connection with this Agreement, including without limitation Supplemental Agreements.

**Design-Build Period** means the period commencing with NTP 1 and ending when Design-Build Team achieves Final Acceptance.

**Design-Build Team** or **DB Team** means the party identified as such in the opening paragraph of this Agreement, together with its permitted successors and assigns.

**Design-Build Team Default** or **DB Team Default** has the meaning set forth in Article 17.1.1 (DB Team Default).

**Design-Build Team’s Interest** or **DB Team’s Interest** means all right, title, and interest of Design-Build Team in, to, under or derived from the Agreement and the other DB Documents.

**Design-Build Team-Related Entities** or **DB Team Team-Related Entities** means (a) Design-Build Team, (b) Design-Build Team’s shareholders, partners, joint venture members and/or members, (c) the Contractor and all other Subcontractors (including Suppliers), (d) any other Persons performing any of the Work, (e) any other Persons for whom Design-Build Team may be legally or contractually responsible, and (f) the employees, agents, officers, directors,
shareholders, representatives, consultants, successors and assign of any of the foregoing; provided, however, that GDOT shall not be considered Design-Build Team-Related Entities.

**Design-Build Team Release(s) of Hazardous Material** or **DB Team Release(s) of Hazardous Material** means (a) Release(s) of Hazardous Material, or the exacerbation of any such release(s), attributable to the culpable actions, culpable omissions, negligence, willful misconduct, or breach of applicable Law or contract by any Design-Build Team-Related Entity; (b) Release(s) of Hazardous Materials arranged to be brought onto the Site or elsewhere by any Design-Build Team-Related Entity; regardless of cause, or (c) use, containment, storage, management, handling, transport and disposal of any Hazardous Materials by any Design-Build Team-Related Entity in violation of the requirements of the DB Documents or any applicable Law or Governmental Approval.

**Design-Build Team Vehicle** or **DB Team Vehicle** means any vehicle authorized by Design-Build Team performing construction, maintenance or operation of the Project, or other related activity.

**Design Deviation** means any deviation from criteria defined in the GDOT Design Policy Manual as a "guideline". Failure to adhere to the "10 Controlling Criteria" mandated by FHWA and/or the GDOT Standard Design Criteria mandated by GDOT does not qualify as a Design Deviation.

**Design Documents** means all drawings (including plans, profiles, cross-sections, notes, elevations, typical sections, details and diagrams), specifications, reports, studies, calculations, electronic files, records and submittals necessary for, or related to, the design of the Project and/or the Utility Adjustments included in the Design Work and/or the Construction Work.

**Design Speed** means the speed used to determine the various geometric design features of the roadway.

**Design Work** means all Work of design, engineering or architecture for the Project or Utility Adjustments.

**Deviation** means any proposed or actual change, deviation, modification, alteration or exception from this Agreement, the Technical Provisions, Technical Documents or Governmental Approvals.


**Disadvantaged Business Enterprise** or **DBE** has the meaning set forth 49 CFR 23.

**Discipline Groups** has the meaning set forth in Volume 2, Section 3.3.7.10 (GDOT Design Review Process).

**Discriminatory** or **Discriminatory Action** means (a) materially more onerous application to Design-Build Team or the Project of changes or additions to Technical Provisions or Technical Documents than the application thereof to other Comparable Limited Access Highways, or (b) selective application of changes or additions to Technical Provisions or Technical Documents to Design-Build Team or the Project and not to other Comparable Limited Access Highways. Notwithstanding the foregoing, the following actions are not Discriminatory or Discriminatory Actions: (i) any such application in response to any act or omission by or on
behalf of Design-Build Team in violation of Law or the DB Documents; (ii) Safety Compliance; (iii) any such application in response to a directive by the U.S. Department of Homeland Security or comparable State agency, unless such directive is directed solely at or solely affects the Project and such application requires specific changes in Design-Build Team's normal design, construction, operation or maintenance procedures in order to comply; and (iv) any other actions necessary to address potential safety concerns arising from a specific condition or feature peculiar to the Project.

**Dispute** means any claim, dispute, disagreement or controversy between GDOT and Design-Build Team concerning their respective rights and obligations under the DB Documents, including concerning any alleged breach or failure to perform and remedies.

**Dispute Resolution Procedures** means the procedures for resolving Disputes set forth in Article 17.7 (Dispute Resolution Procedures).

**Early Termination Date** means the effective date of termination of the Agreement for any reason prior to the stated expiration Final Acceptance Deadline, as specified in the relevant provisions of Article 19 (Termination).

**Effective Date** means the date of the Agreement or such other date as shall be mutually agreed upon in writing by GDOT and Design-Build Team.

**Element** means an individual component, system or subsystem of the Work.

**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; or (c) is recognized by the Georgia Department of Public Safety as an emergency.

**Engineer of Record** means a Professional Engineer as defined in this Exhibit 1 (Acronyms and Definitions) on the Design-Build Team who is responsible and liable for the adequacy and safety of the design. This individual will sign and seal the Released for Construction plans, as well as revisions on construction and shop drawings.

**Environment** means air, soils, surface waters, groundwater, land, stream sediments, surface or subsurface strata, biological resources, including endangered, threatened and sensitive species, natural systems, including ecosystems, and historic, archeological and paleontological resources.

**Environmental Approvals (also Environmental Document Approvals)** means all Governmental Approvals arising from or required by any Environmental Law in connection with development of the Project, including approvals and permits required under NEPA/GEPA.

**Environmental Commitment (also Environmental Permits, Issues and Commitments)** means an environmental requirement that must be fulfilled before, during or after construction. Environmental Commitments include commitments to avoid impacts in specified areas, complete environmental investigations before construction impacts, or to perform specified actions after completion of construction.
Environmental Documents means all required documents and submittals pertaining to either federal or state laws and permits which are necessary to complete the Project. This may include but not be limited to NEPA, GEPA, and/or other state and federal environmental laws.

Environmental Law means any Law applicable to the Project or the Work regulating or imposing liability or standards of conduct that pertains to the Environment, Hazardous Materials, contamination of any type whatsoever, or environmental health and safety matters, and any lawful requirements and standards that pertain to the Environment, Hazardous Materials, contamination of any type whatsoever, or environmental health and safety matters, set forth in any permits, licenses, approvals, plans, rules, regulations or ordinances adopted, or other criteria and guidelines promulgated, pursuant to Laws 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) Releases of Hazardous Materials;

(d) Protection of wildlife, Threatened or Endangered Species, sensitive species, wetlands, water courses and water bodies, historical, archeological, and paleontological resources, vegetative buffers, and natural resources;

(e) The operation and closure of underground storage tanks;

(f) and 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 (Section 12-16-1, et seq. of the Official Code of Georgia Annotated), as amended;

(iii) State species laws, including Georgia Endangered Wildlife Act and/or, Georgia Wildflower Preservation Act;


(v) The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 U.S.C. §§ 6901 et seq.);

(vii) The Clean Air Act (42 U.S.C. §§ 7401 et seq.), as amended;
(viii) The Federal Water Pollution Control Act, as amended by the Clean Water Act (33 U.S.C. §§ 1251 et seq.);
(xii) The Oil Pollution Act (33 U.S.C. §§ 2701, et seq.), as amended;
(xv) The Federal Radon and Indoor Air Quality Research Act (42 U.S.C. §§ 7401 et seq.), as amended;
(xvi) The Occupational Safety and Health Act (29 U.S.C. §§ 651 et seq.);
(xviii) The Fish and Wildlife Coordination Act (16 U.S.C. §§ 661 et seq.), as amended;
(xx) The Coastal Zone Management Act (33 U.S.C. §§ 1451 et seq.), as amended;
(xxi) Georgia Water Quality Act (O.C.G.A. § 12-5-20);
(xxii) Georgia Erosion and Sedimentation Act (O.C.G.A. § 12-7-1), as amended;
(xxiii) Best Management Practices (O.C.G.A. § 12-7-6(b)(15)); and
(xxiv) Georgia Underground Storage Act (O.C.G.A. § 12-13-1)).

**Evaluation Score** means the numerical score resulting from the adjectival evaluation and numerical conversion of a particular portion of the Proposals.

**Exhibits** means all exhibits, riders, and other attachments to the DB Documents, including without limitation Volume 1 and Volume 2, as well as, any of the aforementioned, which are incorporated into any DB Documents by reference, and all amendments, modifications, and supplements thereto.

**Existing Improvements** means the existing highway, bridge, and related improvements as of the date that are in effect at the date of the RFP advertisement within the Construction Maintenance Limits.
Existing Right of Way or Existing ROW means any real property (which term is inclusive of all estates and interests in real property), improvements and fixtures (i) as provided in Article 2.2 (Right of Way; Construction Easement; Ownership) and more specifically described and identified as “Existing ROW” in which GDOT has a leasehold estate and interest pursuant to the Estate for Years or other property right or interest. The term specifically includes all air space, surface rights and subsurface rights within the limits of the Existing Right of Way.

Existing Utility Property 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.

Federal Requirements means the provisions required to be part of federal-aid construction contracts, including the provisions set forth in Exhibit 8 (Federal Requirements).

Final Acceptance means the occurrence of all the events and satisfaction of all the conditions set forth in Article 7.7.2 (Punch List), as and when confirmed by GDOT’s issuance of a certificate in accordance with the procedures and within the timeframe established in Article 7.7.2.

Final Acceptance Date means the date upon which Design-Build Team has satisfied all conditions of and for Final Acceptance and GDOT has certified same.

Final Acceptance Deadline means the deadline for achieving Final Acceptance, as set forth in Exhibit 9 (Milestone Deadlines) as such deadline may be extended for any Relief Event or Change Order as and to extend provided in the Agreement.

Final Design shall have the meaning set forth in Article 3.3.1.2.

Final Plans means the Design Documents which provide the complete and final documents necessary for the construction, operations, and maintenance of the Project or any portion thereof including any Utility Adjustments required by the Project.

Final ROW Lines means the final location of all Right of Way within the project limits.

Fiscal Year means the 12 month fiscal year used by GDOT for budgeting purposes.

Float means the amount of time that any given activity or logically connected sequence of activities shown on the Project Schedule, as the case may be, may be delayed before it will affect completion of any Work as required to achieve any Milestone Deadlines, including the Substantial Completion Deadline and Final Acceptance Deadline.

Force Majeure Event means the occurrence of any of the following events that materially and adversely affects performance of Design-Build Team’s obligations, provided that such events (or the effects of such events) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Design-Build Team: (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, in each case occurring within the State; (d) riot and civil commotion on or in the immediate vicinity of the Project; (e) fire, explosion, flood, earthquake,
hurricane, or tornado, in each case that causes direct physical damage to the Project; or (f) national or statewide (i.e., State of Georgia) strike that has a direct adverse impact on Design-Build Team’s ability to obtain materials, equipment or labor for the Project.

**Formal Consultation** means during Section 7 Consultation (Endangered Species Act) that a Federal agency determines, through a biological assessment or other review, that its action is likely to adversely affect a listed species.

**GDOT** means the Georgia Department of Transportation, as set forth in the recitals of the Agreement, and any entity succeeding to the powers, authorities and responsibilities of GDOT invoked by or under the DB Documents.

**GDOT-Caused Delay** means any of the following events, to the extent they result in a material delay or interruption in performance of any material obligation under the Agreement, and provided such events are beyond Design-Build Team’s control and are not due to any act, omission, negligence, recklessness, willful misconduct, breach of contract or Law of any of the Design-Build Team-Related Entities, solely to the extent not concurrent or overlapping with any delay attributable to Design-Build Team, and further provided that such events (or the effects of such events) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Design-Build Team, and with respect to any Compensation Event, solely to the extent that the cumulative effect of any such delays as set forth below have or shall result in delays, after taking into account any available Float, in excess of 90 days:

(a) Failure of GDOT to issue NTP 1 as provided pursuant to Article 3.3.1.1 and/or failure to issue NTP 2 or NTP 3 as provided pursuant to Article 3.3.1.2 and Article 3.3.1.3;

(b) GDOT Changes;

(c) Failure of GDOT to provide the GDOT-Provided Approvals within the time periods set forth in Volume 2, Section 4.3.2 (GDOT Review and Approval of Environmental Documents and Permits), subject to Article 6.2.1; or

(d) Failure of GDOT to provide responses to proposed schedules, plans, Design Documents, condemnation and acquisition packages, and other Submittals and matters submitted to GDOT after the Effective Date for which response is required under the DB Documents as an express prerequisite to Design-Build Team’s right to proceed or act, within the time periods (if any) indicated in the DB Documents, or if no time period is indicated, within a reasonable time, taking into consideration the nature, importance and complexity of the submittal or matter, following delivery of written notice from Design-Build Team requesting such action in accordance with the terms and requirements of the DB Documents;

(e) Failure of GDOT to provide Design-Build Team with access to the Right of Way as required; or


Any proper suspension of Work pursuant to Article 17.3.7 (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 or Technical Documents (including changes in the standards applicable to the Work) that GDOT has directed Design-Build Team to perform through a Supplemental Agreement as described in Article 13 (GDOT Changes; DB Team Changes; Directive Letters) or a Directive Letter pursuant to Article 13.1; and

(b) Any other event that the DB Documents expressly state shall be treated as a GDOT Change.

**GDOT Claims Account** means the designated account for the benefit of GDOT and Design-Build Team to be administered and maintained by GDOT for payments on account of claims as required by GDOT pursuant to Article 17.3.4 (Damages; Offset).

**GDOT Default** has the meaning set forth in Article 17.5.1 (GDOT Default).

**GDOT Recoverable Costs** means:

(a) The costs of any assistance, action, activity or Work undertaken by GDOT which Design-Build Team is liable for or is to reimburse under the terms of the DB Documents, including the charges of third-party contractors, and reasonably allocated wages, salaries, compensation and overhead of GDOT staff and employees, performing such action, activity or Work (exclusive of ordinary and customary administration and review activities by GDOT employees or consultants, except for such consultant fees and expenses as expressly reserved in the Agreement); plus

(b) Third-party costs GDOT incurs to publicly procure any such third-party 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 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-Build Team pursuant to the express terms of the Agreement; plus

(e) Interest on all the foregoing sums at the Default Interest Rate from the date due under the applicable terms of the DB Documents and continuing until paid.

**GDOT Re-evaluation Period (Re-evaluation Period)** means the specified amount of time set forth as a condition in an approved ATC for GDOT to obtain the applicable Governmental Approval required for a re-evaluation of the NEPA/GEPA Approval, prior to Design-Build Team being entitled to a Relief Event or Compensation Event; provided, however, that such time shall commence upon the date that GDOT has received a full and complete document package from Design-Build Team required for GDOT to process such re-evaluation.

**GDOT Release(s) of Hazardous Materials** means, except as provided below, the introduction in, on or under the Construction Maintenance Limits or Operation and Maintenance Limits of Hazardous Material directly by GDOT, and their respective agents and contractors...
(excluding Design-Build Team). GDOT Release(s) of Hazardous Material excludes, however, (i) any Hazardous Materials so introduced that are in or part of construction materials and equipment incorporated into the Project and (ii) any Hazardous Materials identified in the phase 1 investigation and report described in clause (i) of the definition of Pre-Existing Hazardous Materials.

**GDOT Standard Specifications** means the Georgia Department of Transportation Standard Specifications, Construction of Transportation Systems.

**General Purpose Lanes** means Limited Access Highway lanes within the Existing Right of Way other than the Managed Lanes.

**Geotechnical Engineering Reports** means the reports which meet the requirements described in Volume 2, Section 8.3 (Design Requirements).

**GEPA** means the Georgia Environmental Policy Act, as amended and as it may be amended from time to time.

**GEPA Approval** means the (a) GEPA document as approved by GDOT including any studies, reports, Environmental Commitments, and all other procedural requirements and documents required for the Project or a portion of the Project, as (b) may be modified pursuant to all Georgia EPD, USACE, USFWS approvals, and approved supplements and re-evaluations pertaining to the Project.

**Good Faith Effort** has the meaning set forth in Volume 2, Section 2.6.10.1 (SVDBE Measurement and Payment).

**Good Industry Practice** means the exercise of the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from time to time from a skilled and experienced designer, engineer, or constructor, seeking in good faith to comply with its contractual obligations, complying with the DB Documents, all applicable Laws and Governmental Approvals, and engaged in the same type of undertaking in the United States under similar circumstances and conditions.

**Governmental Approval** means any permit, license, consent, concession, grant, franchise, authorization, waiver, variance or other approval, guidance, protocol, mitigation agreement, special provision, or memoranda of agreement/understanding, and any amendment or modification of any of them provided by Governmental Entities including State, local, or federal regulatory agencies, agents, or employees, which authorize or pertain to the Project or the Work.

**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.

**Guarantor** means any Person that is the obligor under any guaranty in favor of GDOT required under the Agreement, including any Design-Build Guaranty.

**Hazardous Materials** means any element, chemical, compound, material or substance, whether solid, liquid or gaseous, 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 (including mold and other mycotoxins or fungi) which may create any unsafe or hazardous condition or pose any threat to human health and safety. “Hazardous Materials” includes the following:

(a) Hazardous wastes, hazardous material, hazardous substances, hazardous constituents, and toxic substances or related materials, whether solid, liquid, or gas, including substances defined as or included in the definition of “hazardous substance”, “hazardous waste”, “hazardous material”, “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 or classify substances by reason of properties harmful to health, safety or the indoor or outdoor environment (including harmful properties such as ignitability, corrosivity, reactivity, carcinogenicity, toxicity, reproductive toxicity, “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;

(e) Any radioactive materials;

(f) Any asbestos or asbestos-containing materials;

(g) Any lead and lead-based paint;

(h) Any radon or radon gas;

(i) Any methane gas or similar gaseous materials;

(j) Any urea formaldehyde foam insulation;

(k) Electrical equipment which contains any oil or dielectric fluid containing regulated levels of polychlorinated biphenyls;

(l) Pesticides;

(m) 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; and

(n) Soil, or surface water or ground water, contaminated with Hazardous Materials as defined above.
Hazardous Materials Management means procedures, practices and activities to address and comply with Environmental Laws and Environmental Approvals with respect to Hazardous Materials encountered, impacted, 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, stock-piling, storage, backfilling in place, asphalt batching, recycling, treatment, clean-up, remediation, transportation and/or off-site disposal of Hazardous Materials, whichever approach is effective, most cost-efficient and authorized under applicable Law.


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, communications systems and irrigation systems serving street or highway purposes (including ITS and Intelligent Vehicle Highway System facilities).

Historic Property means any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in, either the National Register of Historic Places or the Georgia Register of Historic Places.

Immigration Act means the Georgia Immigration & Compliance Act, O.C.G.A. § 13-10-90, et seq. as set forth in Article 10.6.4.

Incident means any unplanned event during the course of construction.

Incident Management Plan means Design-Build Team’s plan for detection and response to Incidents or Emergencies, as part of the PMP.

Indemnified Parties means GDOT, the State, the State Transportation Board, and their respective successors, assigns, officeholders, officers, directors, commissioners, agents, representatives, consultants and employees. Indemnified Party shall mean any of the aforementioned.

Informal Consultation means during Section 7 Consultation (Endangered Species Act) that a Federal agency determines that its action may affect a listed species.

Instructions to Proposers (ITP) means the document that provides instructions to be followed by Proposers in their responses to the RFP.

Insurance Policies means all of the insurance policies Design-Build Team is required to carry pursuant to Article 16.1 (Insurance Policies and Coverage).

Intellectual Property means all current and future legal and/or equitable rights and interests in know-how, patents (including applications), copyrights (including moral rights), trademarks (registered and unregistered), service marks, trade secrets, designs (registered and unregistered), utility models, circuit layouts, plant varieties, business and domain names, inventions, solutions embodied in technology, and other intellectual activity, and applications of
or for any of the foregoing, subsisting in or relating to the Project, Project design data or Project traffic data. Intellectual Property includes toll-setting and traffic management algorithms, and software used in connection with the Project (including but not limited to software used for management of traffic on the Project), and Source Code. Intellectual Property also includes the trade secret information contained in proprietary pricing information. Intellectual Property is distinguished from physical construction and equipment itself and from drawings, plans, specifications, layouts, depictions, manuals and other documentation that disclose Intellectual Property.

**Intelligent Transportation System (ITS)** has the meaning set forth in Volume 2, Section 17.

**Intelligent Vehicle Highway System (IVHS)** means smart vehicle and smart highway technologies to improve the safety, efficiency and environmental impact of highway facilities.

**Interim Design** means any submittal of Design Documents after the Preliminary Plans have been accepted but prior to submittal of Final Plans for the entire Project or any approved Project segment. Interim Designs are intended to resolve conflicts and unresolved comments from the Preliminary Plans submittal.

**ITS Burn In** means the 30-day (minimum) test of operational performance of ITS devices, per GDOT Specifications under Section 942 – ITS General Requirements.

**Joint Project Inspection** has the meaning set forth in Volume 2, Section 19.3.2.

**Key Contract** means any one of the following Contracts for Work that Design-Build Team or Design-Build Team’s Contractor’s causes to be performed:

(a) All prime construction Contracts;

(b) All project or program management services, architectural design, or engineering Contracts; and

(c) All other Contracts with a single Contractor or Subcontractor which individually or in the aggregate total in excess of $25 million.

**Key Contractor** means any Contractor or Subcontractor, as the case may be, under any Key Contract.

**Key Personnel** or **Key Team Members** means those individuals appointed by Design-Build Team and approved by GDOT from time to time to fill the “Key Personnel” positions. The specific individuals appointed by Design-Build Team and approved by GDOT to initially fill certain of the Key Personnel positions are identified in Exhibit 2 (Key Personnel and Other Proposal Commitments) to the Agreement.

**Landscape Enhancement Plan** has the meaning set forth in Volume 2, Section 15.3.1 (Landscape and Hardscape Enhancement Principles and Strategies).

**Law** or **Laws** means (a) any statute, law, code, regulation, ordinance, rule or common law, (b) any binding judgment (other than regarding a Dispute), (c) any binding judicial or administrative order or decree (other than regarding a Dispute), (d) any written directive,
guideline, policy requirement 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 DB Documents or in the normal course of its adoption of new or revised technical standards pursuant to Article 7.2.5) or (e) any similar form of decision of or determination by, or any written interpretation or administration of any of the foregoing by, any Governmental Entity, in each case which is applicable to or has an impact on the Project or the Work, whether taking effect before or after the Effective Date, including Environmental Laws. “Laws”, however, excludes Governmental Approvals.

**Lead Contractor** shall mean the entity designated as a Proposer’s “Lead Contractor” in its Proposal. There may only be one Lead Contractor per Proposer team.

**Lead Engineering Firm** shall mean the entity designated as a Proposer’s “Lead Engineering Firm” in its Proposal. There may only be one Lead Engineering Firm per Proposer team.

**Line** or **line** means, in the context of Utilities or Highway Service Systems, a line, pipeline, conduit or cable used for utility purposes, including underground, surface or overhead facilities.

**Liquidated Damages** means such liquidated damages as may accrue and be due and payable by Design-Build Team to GDOT as set forth under Article 17.4 (Liquidated Damages and Nonrefundable Deductions) and as set forth under Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions) thereto.

**Loss** or **Losses** means 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 of the Agreement)), fee, charge, judgment, penalty or fine. Losses include injury to or death of persons, damage or loss of property, and harm or damage to natural resources.

**Maintenance Acceptance** means the point at which the DB Team has determined a portion of the Project has met all of the conditions of Substantial Completion for that portion of the Project and has made a written request for GDOT consideration, and GDOT has issued a written determination of Maintenance Acceptance, subject to the following:

(a) all work for that portion of the Project shall meet the standards for completion listed in Articles 7.7.1.3 through 7.7.1.5 and Article 7.7.2.1;

(b) upon satisfactory completion of all Punch List items for that portion of the Project, GDOT will issue a determination of Maintenance Acceptance for only that portion of the Project; and

(c) Maintenance Acceptance does not constitute Substantial Completion or Final Acceptance of the Work and is for the limited purpose of relieving the DB Team of responsibility for damage to that portion of the Project other than that attributable to the DB Team’s actions or inadequate construction.

**Maintenance Management Plan** has the meaning set forth in Volume 2, Section 19.3.3 (Maintenance Management Plan).
Major Culvert means a culvert that provides an opening of more than 35 square feet in a single or multiple installations. A Major Culvert may consist of a single round pipe, pipe arch, open or closed-bottom box, bottomless arch, or multiple installations of these structures placed adjacent or contiguous as a unit. Certain Major Culverts are classified as bridges when they provide an opening of more than 20 feet, measured parallel to the roadway; such culverts may be included in the bridge inventory.

Major Non-Participating Member means a Proposer's Lead Contractor and Lead Engineering Firm. If any of these entities qualify as a Participating Member, then that entity shall not be treated as a Major Non-Participating Member. Major Non-Participating Members are not considered Contractors to Proposer regardless of their role in the performance of Project-related services.

Major River Crossing means a crossing with a 100-year storm event flow in excess of 10,000 cubic feet per second (cfs).

Management Plans means all of the management plans identified in Volume 2, Section 2.

Memorandum of Understanding (MOU) means a formal agreement between GDOT and one or more agencies, organizations or providers.

Milestone Deadline shall have the same meaning as Completion Deadline.

Minor Culvert means any culvert not classified as a Major Culvert.

Mobilization means Work performed to establish offices, plants, and facilities; and to move personnel, equipment, and supplies to the Project site to begin Construction Work.

NaviGAtor Contractor means that certain Separate Contractor engaged by GDOT to provide the NaviGAtor System to be included and integrated into the ITS to be incorporated into the Project, if such system is identified in Volume 2, Section 17 (Intelligent Transportation Systems) to be incorporated into the Project.

NaviGAtor System means the “NaviGAtor” advanced transportation management system to be included as a part of the ITS as set forth pursuant to Volume 2, Section 17.2.4 (Transportation Management Center (TMC) Improvements).

NaviGAtor Work means the work to be provided by the NaviGAtor Contractor, coordinated with the Work, for completion of the NaviGAtor System for the Project.

NEPA means the National Environmental Policy Act, 42 U.S.C. § 4321 et seq., as amended and as it may be amended from time to time.

NEPA Approval means the (a) NEPA document as approved by FHWA including any studies, reports, Environmental Commitments, and all other procedural requirements and documents required for FHWA approval for the Project or a portion of the Project, as (b) may be modified pursuant to all approved supplements and re-evaluations pertaining to the Project.
**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.

**Nonconforming Work** means Work that does not conform to the requirements of the DB Documents, the Governmental Approvals, applicable Law or the Design Documents.

**Nonrefundable Deductions** means such nonrefundable deductions as may accrue and be due and payable by Design-Build Team to GDOT as set forth under Article 17.4 (Construction Requirements) and as set forth under Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions) thereto.

**Notice of Award** means formal acceptance of the Apparent Successful Proposer.

**Notice of Termination for Convenience** means written notice issued by GDOT to Design-Build Team terminating the Agreement in whole or in part for convenience.

**NTP** means a written notice issued by GDOT to Design-Build Team authorizing Design-Build Team to proceed with the portion or phase of the Work as being designated as subject to such notice to proceed in the Proposal Schedule, Project Schedule, or otherwise in the Agreement Documents, including without limitation NTP 1, NTP 2, and NTP 3.

**NTP 1** means a written notice issued by GDOT to Design-Build Team authorizing Design-Build Team to proceed with the portion of the Work described in Article 3.3.1.1.

**NTP 1 Conditions Deadline** means the outside date set forth in the Milestone Deadlines (or the Baseline Project Schedule as to the extent such outside date is adjusted thereby) by which Design-Build Team is obligated under the Agreement to satisfy all conditions to issuance of NTP 1, as such deadline may be extended for Relief Events from time to time pursuant to the Agreement.

**NTP 2** means a written notice issued by GDOT to Design-Build Team authorizing Design-Build Team to proceed with the portion of the Work described in Article 3.3.1.2 of the Agreement.

**NTP 2 Conditions Deadline** means the outside date set forth in the Milestone Deadlines (or the Baseline Project Schedule as to the extent such outside date is adjusted thereby) by which Design-Build Team is obligated under the Agreement to satisfy all conditions to issuance of NTP 2, as such deadline may be extended for Relief Events from time to time pursuant to the Agreement.

**NTP 3** means a written notice issued by GDOT to Design-Build Team pursuant to Article 3.3.1.3 authorizing Design-Build Team to proceed with the remaining Work and other activities pertaining to the Project.

**NTP 3 Conditions Deadline** means the outside date set forth in the Milestone Deadlines (or the Baseline Project Schedule as to the extent such outside date is adjusted thereby) by which Design-Build Team is obligated under the Agreement to satisfy all conditions to issuance of NTP 3, as such deadline may be extended for Relief Events from time to time pursuant to the Agreement.
Open Book Basis means allowing the relevant Party to review all underlying assumptions and data associated with the issue in question, including, but not limited to, assumptions as to costs of the Work, schedule, composition of equipment spreads, equipment rates, labor rates, productivity, estimating factors, design and productivity allowance, contingency and indirect costs, risk pricing, discount rates, interest rates, inflation and deflation rates, and other items reasonably required by the relevant Party.


Optical Character Recognition (OCR) means the process of converting an image to text.

P&P Bonds or Performance and Payment Bonds means the bonds meeting the requirements of Article 16.2.1.

P&P Obligor means the Person identified as the obligor or account party in the P&P Bonds, as applicable.

Participating Agency means a public, quasi-public, or private agency that has agreed to cooperate with and assist Design-Build Team during an Emergency.

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.

Party means Design-Build Team or GDOT, as the context may require, and “Parties” means Design-Build Team and GDOT, collectively.

Payment Activity shall have the meaning set forth in Volume 2, Section 2.6.

Payment Request means the request for payment on account of the Work all in accordance with Volume 2, Section 2.6 (Payment Requests and Payment), and with the terms and conditions set forth in GDOT Standard Specification 109.03.

Permanent Works are permanent structures and parts thereof required of the completed DB Documents.

Person means any individual, corporation, joint venture, limited liability company, company, voluntary association, partnership, trust, unincorporated organization, Governmental Entity, or GDOT.

Phase 1 Hazardous Materials Investigation means an environmental assessment conducted in accordance with the DB Documents and ASTM E-1527-05, or any future revision or replacement thereof, to identify Recognized Environmental Conditions and potential Recognized Environmental Conditions.

Plans means (only where capitalized) 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.
Pre-existing Hazardous Materials means Hazardous Materials that meet all the following criteria:

(a) The Hazardous Materials are in, on or under the Right of Way as of the date GDOT makes available to Design-Build Team the affected parcel; or

(b) The Hazardous Materials are not located in, on or under any Project Specific Locations or Additional Properties, except Additional Properties required due to GDOT Changes (including GDOT Changes regarding the initial construction).

For purposes of determining whether Hazardous Materials were in, on or under the Right of Way or any Additional Properties required by GDOT to be included in the Property as a result of GDOT Changes, as of the date on which GDOT makes available to Design-Build Team the affected parcel, Design-Build Team shall have the burden of proof to demonstrate it was not a Design-Build Team Release of Hazardous Materials:

(i) As to any Hazardous Materials not identified as being present as of such date in the Phase 1 investigations of the Project conducted by GDOT prior to the Effective Date or any Phase 1 Hazardous Materials Investigation or Phase 2 Hazardous Materials Investigation supplementing the foregoing report prepared prior to the Effective Date; and

(ii) As to any Additional Properties required by GDOT to be included in the Property as a result of GDOT Changes, any Phase 1 Hazardous Materials Investigation thereof prepared and delivered prior to the Effective Date.

For the purpose of this definition, “makes available” means:

(i) The Effective Date, except for parcels not yet acquired as of the Effective Date; and

(ii) As to parcels not yet acquired as of the Effective Date and as to Additional Properties required by GDOT to be included in the Property as a result of GDOT Changes, the date Design-Build Team 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 DB Documents, including commencement of construction, as the result of 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.

Preliminary Plans means the Design Documents which provide the preliminary design necessary for the related to construction, operations, and maintenance of the entire Project including any Utility Adjustments required by the Project.

Presidential Disaster Declaration means a declaration of a major disaster by the President of the United States triggering assistance from FEMA pursuant to the Disaster Relief Act of 1974 (Pub.L. No. 93-288, as amended).

Price Proposal means the price component of the Proposal evaluation as described in the ITP.

Principal Project Documents means the Security Instruments and the Design-Build Contract.
**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 registered by the Georgia State Board of Registration for Professional Engineers and Land Surveyors to practice the profession of land, boundary, or property surveying or other similar professional practices.

**Project** means the Project as defined in the RFP, that is the subject of this Agreement, and which shall include the transportation facilities and all related structures, and improvements, including integration of the ITS, and communications systems used in connection with operation of such transportation facilities, to be designed and constructed pursuant to the terms of the DB Documents.

**Project Extension** means a linear addition to the original Project by Design-Build Team, including any at either terminus of the original Project and any linear improvement that interconnects with the original Project.

**Project Manager** means the individual designated by Design-Build Team and approved in writing by GDOT in the position to take full responsibility for the prosecution of the Work and will act as a single point of contact on all matters on behalf of Design-Build Team.

**Project Schedule** shall have the meaning set forth in Section 2.5 (Project Schedule Requirements).

**Project Schedule Narrative** shall have the meaning set forth in Volume 2, Section 2.5 (Project Schedule Requirements).

**Project Specific Locations** means any additional temporary property interests or rights, other than ROW or Additional Properties, which are not contiguous to the Property, that Design-Build Team 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, staging areas, storage areas, and earthwork material borrow sites.

**Project Schedule Update** shall have the meaning set forth in Volume 2, Section 2.5 (Project Schedule Requirements).

**Property** has the meaning set forth in Article 2.2.1 and shall include only such property as identified in the Environmental Document Approval.

**Proposal** means the complete response to the RFP which may include the Proposer’s Administrative Information Submittals, Technical Proposal for the Project, and Price Proposal for the Project.

**Proposal Bond** means the security that Proposers submit to GDOT with their Proposals.

**Proposal Commitments** means statements, offers, terms, concepts, or designs in DB Team’s Proposal that are to a standard higher than required by the Agreement or Technical Provisions, or include terms advantageous to GDOT.
Proposal Due Date means the deadline for submission of the Proposal to GDOT as defined in the ITP Section 1.4 (Procurement Schedule).

Proposal Revisions has the meaning set forth in Section 5.4 (Request for Proposal Revisions) of the ITP.

Proposal Schedule means the high level, logic based, critical path schedule representing Design-Build Team’s plan to complete performance of the Work beginning on the date of NTP 1 to Final Acceptance of the Work, submitted with the Proposal.

Proposed Supplemental Agreement has the meaning set forth in Article 13 (GDOT Changes; DB Team Changes; Directive Letters).

Proposer or Proposers has the meaning set forth in Section 1.1 (Introduction) in the ITP.

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 law.

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 Approvals means the Governmental Approvals for the Project obtained or to be obtained by GDOT, as specifically listed in Volume 2, Section 4.3 (Environmental Approvals) (including any such approvals as may be required from GDOT independent of GDOT’s Project administration pursuant to Article 6.2 (Governmental Approvals and Third-Party Agreements)).

Punch List means an itemized list of Construction Work that remains to be completed following Substantial Completion but as a condition to Final Acceptance, provided that the nature of any such incomplete Work, and the correction and completion of same, will have no material or adverse effect on the normal and safe use and operation of the Project.

Punch List Period means the time provided for Design-Build Team’s completion of Punch List Work, which shall be the time between Substantial Completion and Final Acceptance as provided in the Project Schedule.

QA means quality assurance.

QA/QC means quality assurance and quality control.

Quality Management Plan (QMP) means the set of GDOT-approved plans for quality management and control of the Project and Work, as set forth in Volume 2, Section 2.3 (Quality Management Requirements).
Quality Assurance Manager (QAM) means the individual retained by Design-Build Team as the Key Personnel with the authority and responsibility for ensuring establishment and maintenance of, and compliance with, the Quality Management Plan. The Quality Assurance Manager shall be a Professional Engineer as defined in this Exhibit 1.

Railroad means, depending on the context, either the right of way, tracks, and systems used for rail traffic in the vicinity of the Project, or the owners and/or operators of such rail systems.

Recognized Environmental Condition has the meaning set forth in ASTM E-1527-00.

Record Drawings (also known as As-Builts, as-builts, or as-built drawings) means construction drawings and related documentation revised to show as-built changes to the Project at Final Acceptance. Interim marked-in-the-field or red-lined drawings to be provided during the progress of the Work as required pursuant to the Technical Provisions shall not constitute the final Record Drawings.

Reference Information Documents (RIDs) means the collection of information, data, documents and other materials that GDOT has provided to Design-Build Team for general or reference information only.

Related Transportation Facility(ies) means all existing and future highways, streets and roads, including upgrades and expansions thereof, that is/are or will be adjacent to, connecting with or crossing under or over the Project, as specifically identified in the Technical Provisions.

Release for Construction or RFC means the written authorization by GDOT to proceed with any designated phase of the Construction Work based on the approved Final Plans.

Release of Hazardous Materials means any spill, leak, emission, release, discharge, injection, escape, leaching, dumping or disposal of Hazardous Materials into the soil, air, water, groundwater or environment, including any exacerbation of an existing release or condition of Hazardous Materials contamination.

Relief Event has the meaning set forth in Article 14.1.1.

Relief Event Determination has the meaning set forth in Article 14.1.1.

Relief Event Notice means the written notice required to be provided by Design-Build Team under Article 13.3.2 (DB Team’s Notice of Compensation Event and/or Relief Event).

Replacement Housing Calculation means the opportunity to provide the displaced person with the financial assistance to purchase or rent and occupy a comparable replacement dwelling without involuntarily incurring additional financial means due to the displacement.

Replacement Utility Property Interest means any permanent right, title or interest in real property outside of the Property (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.
**Request for Change Proposal** means a written notice issued by GDOT to Design-Build Team setting forth a proposed GDOT Change and requesting Design-Build Team’s assessment of cost, and Project Schedule impacts thereof, as set forth in Article 13.2.1 (GDOT’s Request for Change Proposal).

**Request for Information (RFI)** means a written request by the Design-Build Team to GDOT requesting clarification of the DB Document requirements.

**Request for Proposals (RFP)** means all documents, whether attached or incorporated by reference, utilized for soliciting proposals. The RFP is the only solicitation utilized by the Department in the One Phase Low Bid selection method.

**Reserved** means a section of the DB Documents (Design-Build Agreement, Technical Provisions, or Programmatic Provisions) that is not being utilized for this contract. Sections marked Reserved have no requirements and references to sections marked Reserved shall mean that there are no additional requirements beyond the reference point.

**Revised Baseline Project Schedule** shall have the meaning set forth in Volume 2, Section 2.5 (Project Schedule Requirements).

**Right of Way (ROW)** means the Existing Right of Way.

**Rules** means Chapter 672-18 of the Rules of the State Department of Transportation, Governing the Design-Build Procedures.

**Safety Compliance** means any and all improvements, repair, reconstruction, rehabilitation, restoration, renewal, replacement and changes in configuration or procedures respecting the Project to correct a specific safety condition or risk of the Project that GDOT has reasonably determined to exist by investigation or analysis and that is in violation of the requirements of the DB Documents.

**Safety Compliance Order** means a written order or directive from GDOT to Design-Build Team to implement Safety Compliance measures.

**Safety Plan** has the meaning set forth in Volume 2, Section 2.4.1 (Safety Plan).

**Safety Standards** means those provisions of the Technical Provisions or Technical Documents that GDOT, FHWA, OSHA, or AASHTO considers to be important measures to protect public safety or worker safety. As a matter of clarification, provisions of Technical Provisions or Technical Documents primarily directed at durability of materials or equipment, where the durability is primarily a matter of life cycle cost rather than protecting public or worker safety, are not Safety Standards.

**Schedule of Values (SOV)** shall have the meaning set forth in Volume 2, Section 2.6 (Payment Requests and Payment).

**Schematic Plan of Project** means Design-Build Team’s Schematic Plan specific to the preliminary roadway plans showing the concept and technical solutions in accordance with the provisions of Exhibit C (Technical Proposal Submittal Requirements) of the ITP. A Schematic Plan may include but is not limited to standard design plan sheets, roll plots, and conceptual drawings.
**Security Document** means any mortgage, deed of trust, pledge, lien, indenture, trust agreement, hypothecation, assignment, collateral assignment, financing statement under the Uniform Commercial Code of any jurisdiction, security instrument or other charge or encumbrance of any kind, including any lease in the nature of a security instrument, given to any Person as security for Design-Build Team Debt or Design-Build Team’s obligations pertaining to Design-Build Team Debt and encumbering the Design-Build Team’s Interest.

**Separate Contractor(s)** means each and any separate contractor or vendor engaged by GDOT or any other governmental authority or agency of the State to perform, provide, and/or supply work, services, labor or materials for the Project that is expressly excluded from Design-Build Team’s Work pursuant to the DB Documents.

**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. Such line, including its actual connection to the Utility facility, shall instead be considered to be part of the applicable Highway Service System.

**Site** means the Property and any temporary rights or interests that Design-Build Team may acquire in connection with the Project or the Utility Adjustments included in the Construction Work, including Project Specific Locations.

**Small, Veteran, and Disadvantaged Business Enterprise** or **SVDBE** has the meaning set forth in Article 10.9.

**Source Code** and **Source Code Documentation** mean software written in programming languages 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, additions, substitutions, updates, upgrades and corrections made to the foregoing items.

**Staged Design Submittals** shall have the meaning set forth in Volume 2, Section 3.3.7.1 (Staged Design Submittals).

**Standard Utility Agreement (SUA)** means an Agreement providing for relocation or adjustment work to be performed by the Utility and/or its consultant or contractor and modification of easement limited provisions, if applicable. To the extent practical, reimbursement by the Department will be made based upon the Department’s specifications, agreements and forms or consultant and construction contract work. The payment method may be actual cost, unit price, or lump sum as appropriate.

**State** means the State of Georgia.
**State and Local Government Series (SLGS) Index** means the State and Local Government Series (SLGS) Index published and maintained by the United States Department of the Treasury.

**State Highway** means a highway designated as part of the state highway system under Code 32-4-21.

**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.

**Submittal** means any document, work product or other written or electronic end product or item required under the DB Documents to be delivered or submitted to GDOT, as applicable.

**Substantial Completion** means satisfaction of the criteria for completion of Construction Work as set forth in Article 7.7 (Substantial Completion, Punch List, Final Acceptance; Early Opening of Portions of the Project), as and when confirmed by GDOT’s issuance of a certificate in accordance with the procedures and within the time frame established in Article 7.7.1 (Substantial Completion).

**Substantial Completion Date** means the date upon which Design-Build Team has satisfied all conditions of and for Substantial Completion.

**Substantial Completion Deadline** means the deadline and required date for Substantial Completion of the Project as set forth in Exhibit 9 (Milestone Deadlines), as such deadline may be extended for Relief Events from time to time pursuant to the Agreement, time being of the essence.

**Subsurface Utility Engineering (SUE)** means an engineering process for accurately identifying the quality of overhead/underground 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 at the FHWA website [http://www.fhwa.dot.gov/programadmin/sueindex.cfm](http://www.fhwa.dot.gov/programadmin/sueindex.cfm).

**Supplemental Agreement** means a mutual agreement between GDOT and Design-Build Team for changes in the Work under Article 13 (GDOT Changes; DB Team Changes; Directive Letters), including on account of any Relief Event Determination and/or Compensation Event Determination as set forth under Article 13.4 (Final Relief Event and Compensation Event Determinations).

**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-Build Team 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 properly licensed surety company, insurance company or other Person approved by GDOT, which has issued any of the P&P Bonds.

**SVDBE Commitments List** means Design-Build Team’s commitment for meeting the Small, Veteran, and Disadvantaged Business Enterprises (SVDBE) participation goals set forth...
in Article 10.9 (SVDBE Participation Goals) and Exhibit 14 (Design-Build Team's SVDBE Commitments List).

**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 of 1986, as amended), 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-Build Team, including any interest, penalty or addition thereto, and including utility rates or rents, in all cases whether disputed or undisputed.

**Technical Documents** means all the standards, criteria, requirements, conditions, procedures, specifications and other provisions set forth in the manuals and documents identified in the DB Documents, as such provisions may (a) have been generally revised from time to time up to the RFP advertisement date, or (b) be changed, added to or replaced pursuant to the Agreement.

**Technical Proposal** means the technical component of the Proposal evaluation as described ITP.

**Technical Provisions** means Volume 2 as such documents may (a) have been generally revised from time to time that are in effect at the date of the RFP advertisement, or (b) be changed, added to or replaced pursuant to the Agreement.

**Temporary Works** is any temporary construction work necessary for the construction of the Permanent Works. This includes falsework, formwork, scaffolding, shoring, temporary earthworks, sheeting, cofferdams, special erection equipment, etc.

**Term** has the meaning set forth in Article 3.1 (Term of Agreement).

**Termination by Court Ruling** has the meaning set forth in Article 19.11.

**Termination Compensation** means each of the measure of compensation owing from GDOT to Design-Build Team upon termination of the Agreement prior to the stated expiration of the Term, pursuant to Article 19 (Termination), and as set forth in Exhibit 20 (Terms for Termination Compensation).

**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 Article 19.1.1.

**Third-Party Claim** means, subject to Article 16.5.4, 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-Build Team with respect to any Third-Party Loss.
**Third-Party Loss** means, subject to Article 16.5.4, any actual or alleged Loss sustained or incurred by a Person that is not an Indemnified Party or Design-Build Team.

**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.

**Traffic Management Center** is a center for the management and distribution of information to Users on a regional or statewide basis.

**Transferee** means any party as defined pursuant to Article 21.2.2.1, solely for purposes of Articles 21.2 Standards and Procedures for GDOT Acceptance) through 21.5 (Change of Organization or Name).

**Travel Lane** means the portion of roadway for the movement of vehicles, exclusive of shoulders.

**Two-Week Detail Schedule** shall have the meaning set forth in Volume 2, Section 2.5 (Project Schedule Requirements).

**Uniform Act** means the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, P.L. 91-646, as amended.

**Uninsurable Risk** means a risk, or any component of a risk, against which Design-Build Team or a Contractor is required to insure pursuant to the Agreement and for which, at any time after the Effective Date, either:

(a) the insurance coverage required under the Agreement is not available in relation to that risk from insurers that meet the qualifications set forth in Article 16.1.2; or

(b) the terms and conditions for insuring that risk are such that the risk is not generally being insured against in the insurance market under commercially reasonable terms from insurers that meet the qualifications set forth in Article 16.1.2.

**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 cable television, electric power, telephone, telegraph, water, gas, oil, petroleum products, steam, chemicals, hydrocarbons, telecommunications, sewage, and similar commodities, that directly or indirectly serves the public;

(b) a line, facility or system which (i) carries or transmits a commodity referenced in clause (a) above but does not directly or indirectly serve the public, and (ii) is designated in Volume 1 or Volume 2 to be treated, for purposes of the DB Documents only, in the same manner as a line, facility or system that qualifies as a Utility under clause (a) above; and

(c) a radio tower or transmission tower (including cellular) that directly or indirectly serve the public.

Notwithstanding the foregoing, the term “Utility” or “utility” excludes:
(a) all storm water lines, facilities, and systems that are part of the drainage system for the Property or connect to that system; and

(b) GDOT’s or a Governmental Entity’s Highway Service Systems.

The necessary appurtenances to each Utility facility shall be considered part of such Utility. Any Service Line connecting directly to a Utility shall be considered an appurtenance to that Utility, regardless of the ownership of such Service Line.

**Utility Accommodation Manual (UAM)** means the Utility Accommodation Manual issued by GDOT, as the same may be amended, supplemented or replaced by GDOT from time to time.

**Utility Adjustment Field Modification** means any horizontal or vertical design change to a Utility Adjustment required by Design-Build Team or proposed by a Utility Owner due either to roadway design or to conditions not accurately reflected in the corresponding Utility Work Plan for which the review and comment/approval process has been completed, that alters the design included in the approved Utility Work Plan. An example would be shifting the alignment of an 8” water line to miss a roadway drainage structure. A minor change (e.g., an additional water valve, an added Utility marker at ROW line, a change in vertical bend, etc.) will not be considered a Utility Adjustment Field Modification, but shall be shown in the Record Drawings.

**Utility Adjustment** means each relocation (temporary or permanent), abandonment, Protection in Place, removal (of previously abandoned Utilities as well as of newly abandoned Utilities), replacement, reinstallation, and/or modification of existing Utilities necessary to accommodate construction, operation, maintenance and/or use of the Project; provided, however, that the term “Utility Adjustment” shall not refer to any of the work associated with facilities owned by any railroad. For any Utility crossing the Property, the Utility Adjustment Work for each crossing of the Property by that Utility shall be considered a separate Utility Adjustment. For any Utility installed longitudinally within the Property, the Utility Adjustment Work for each continuous segment of that Utility located within the Property shall be considered a separate Utility Adjustment.

**Utility Adjustment Work** means all efforts and costs necessary to accomplish the required Utility Adjustments, including all coordination, design, design review, permitting, construction, inspection, maintenance of records, relinquishment of Existing Utility Property Interests, preparation of Utility Joint Use Acknowledgements, and acquisition of Replacement Utility Property Interests, whether provided by Design-Build Team or by the Utility Owners. The term also includes any reimbursement of Utility Owners which is Design-Build Team’s responsibility pursuant to Article 7.5 (Utility Adjustments). Any Utility Adjustment Work furnished or performed by Design-Build Team is part of the Work; any Utility Adjustment Work furnished or performed by a Utility Owner is not part of the Work.

**Utility Joint Use Acknowledgment** or **Utility Joint Use Agreement** means an agreement between GDOT and a Utility Owner that establishes the rights and obligations of GDOT and the Utility Owner with respect to occupancy of the Property by such Utility Owner’s Utility.

**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 Owner Project** means the design and construction by or at the direction of a Utility Owner (or by Design-Build Team) of a new Utility installation other than (a) as part of a Utility Adjustment or (b) to provide service to the Project. Betterments are not Utility Owner Projects. Utility Owner Projects are entirely the financial obligation of the Utility Owner.

**Utility Work Plan Retention Request** means the collection of plans and other information and materials which Design-Build Team is required to submit to GDOT in connection with each Utility proposed to remain at its original location within the Existing Right of Way or Property; a single Utility Work Plan Retention Request may address more than one such Utility.

**Volume 1** means the Design-Build Agreement or the Agreement.

**Volume 2** means the project-specific and programmatic GDOT technical provisions entitled “Technical Provisions - Volume 2”.

**Warning Notice** means a written notice that GDOT delivers to Design-Build Team pursuant to Article 17.2 (Warning Notices).

**Work** means all of the work required to be furnished and provided by Design-Build Team under the DB Documents for the Project, including without limitation, all administrative, management, design, engineering, other professional services, construction, Utility Adjustment, utility accommodation, support services, ETCS and software integration, and coordination, except for those efforts which such DB Documents expressly specify will be performed by Persons other than Design-Build Team-Related Entities.

**Work Breakdown Structure (WBS)** means a deliverable-oriented hierarchical structure that breaks the 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 total Project scope. The WBS will contain all elements of the Work.

**Work Code** means a code assigned to a contract line item. Example: 400 is asphalt paving, 653 is highway traffic striping. The Work Codes were established and predefined by a GDOT Committee comprised of the Office of EEO, Construction, Bidding Administration, and Prequalification, in 2012. Not every item has a work code, only those items that are predominantly used on Highway construction projects. Contractors and Subcontractors in the GDOT directories are assigned work codes based upon their work description. Work codes are the most refined data available.

**Work Product** means any design files, concepts, ideas, technology, techniques, methods, processes, drawings, reports, plans and specifications used in the development of the Proposal including the proposal and any ATCs being acquired by GDOT from unsuccessful responsive Proposers.
EXHIBIT 2

KEY PERSONNEL AND OTHER PROPOSAL COMMITMENTS

[Proposer's organization chart, Form G – Form of Participating Members et al, and Form L – Debarment and Suspension Certification to be provided with execution version]

- Proposal organization chart
- Form G – Form of Participating Members, Major Non-Participating Members, Contractors and Key Personnel Commitment of the Proposal
- Form L – Debarment and Suspension Certification

Proposal Commitments as set forth in the Proposal as defined in the Agreement and hereby incorporated by reference, subject to the provisions of Article 1.2.2
C.1.2(d) Organizational Chart

- Key Personnel

Subconsultants
1 - Platinum Geomatics, LLC (DBE)
2 - MC Squared, Inc. (DBE)
B.2.1.6 Form G (Participating Members, Major Non-Participating Members, Contractors, and Key Personnel Commitment)

FORM G

Form of Participating Members, Major Non-Participating Members, Contractors, and Key Personnel Commitment

Proposer’s Name: Brooks-Berry-Haynie and Associates (the “Proposer”)

The Proposer hereby commits that, if awarded the Statewide ITS DMS Deployment Design-Build Project (the “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.

Lead Contractor: Brooks-Berry-Haynie and Associates

Participating Member: 

Lead Design Consultant: Atkins North America, Inc

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

Lead Contractor Project Manager: Bill Gunter

Lead Design Consultant Project Manager (GA P.E. required): Ashlyn Morgan, PE, PTOE

Engineer of Record (GA P.E. required): Ashlyn Morgan, PE, PTOE

Contractor Superintendent: Mike Valego

Construction Quality Assurance Manager: Matt Lopp

Signed: 

Printed Name: Jason Owen

Title: President

Date: 12/10/2020
B.2.1.10 Form L (Debarment and Suspension Certification)

FORM L

Debarment and Suspension Certification

The undersigned Proposer certifies on behalf of itself, and all Participating Members, Major Non-Participating Members, and Contractors identified by such Proposer as of the date hereof, as follows:

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 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;

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 b. of this certification; and

d. 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.

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: 12/10/2020

Proposer: Brooks-Berry-Haynie and Associates

Signature:

Title: President
EXHIBIT 3

RESERVED
EXHIBIT 4

RESERVED
EXHIBIT 5

PROPOSAL SOV
FORM F

Design-Build Price Proposal

Proposer’s Name: Brooks Berry Haynie and Associates (the “Proposer”)

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, such Contract Sum shall include all Design-Build Team cost and expenses.

A. Proposal Schedule of Values (SOV)

All items below 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.
<table>
<thead>
<tr>
<th>Payment Activity Description</th>
<th>Scheduled Value</th>
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<tbody>
<tr>
<td><strong>DESIGN COMPLETE</strong></td>
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<tr>
<td>1. Design Complete</td>
<td>$399,892.00</td>
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<tr>
<td><strong>CONSTRUCTION</strong></td>
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</tr>
<tr>
<td>1. Work Zone Law Enforcement</td>
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<tr>
<td>2. Traffic Control</td>
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<tr>
<td>3. Erosion Control</td>
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<td>4. Grading</td>
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<td>5. Drainage</td>
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<td>6. Barrier and Guardrail</td>
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<td>7. Aggregate Base Course</td>
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<tr>
<td>8. Asphalt Paving*</td>
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<tr>
<td>9. Concrete Paving</td>
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</tr>
<tr>
<td>10. Signing, Striping, and Signals</td>
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<td>11. ITS</td>
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<td>1. General Conditions and Administration**</td>
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<td>2. Mobilization (not including demobilization) (Not to exceed 2.5% of DESIGN + Construction)</td>
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<tr>
<td>3. Record Drawings, Punch List, Demobilization, and Final Close-out (No less than 1.0% of Design Complete + Construction)</td>
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<td><strong>Subtotal MISCELLANEOUS ACTIVITIES</strong></td>
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<td><strong>Subtotal CONSTRUCTION COMPLETE</strong></td>
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<td><strong>CONTRACT SUM</strong></td>
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<tr>
<td><strong>CONTRACT SUM</strong></td>
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* GDOT Special Provision 109.11 Price Adjustments does not apply to this Project; Asphalt Cement Price Adjustments will not be considered nor made.

** Includes all management, management plans, payment and performance bond, insurance, project management and coordination, home office overhead and support, and quality management.
BY SIGNATURE BELOW AND SUBMITTAL OF THIS FORM F WITH THE PROPOSAL SCHEDULE, THE PROPOSER HEREBY CERTIFIES IT HAS REVIEWED ITS PROPOSAL SCHEDULE AND PROPOSAL ESTIMATES FOR THE PROJECT AND THAT ALL WORK CAN BE COMPLETED WITHIN THE MILESTONE DEADLINES, INCLUDING ANY INTERIM COMPLETION DEADLINES, SUBSTANTIAL COMPLETION DEADLINE AND FINAL ACCEPTANCE DEADLINE.

Date: 12/10/2020
Signature: [Signature]
Design-Build Team: Brooks Berry Haynie and Associates / Atkins
EXHIBIT 6

RESERVED
EXHIBIT 7

RESERVED
**EXHIBIT 8**

**FEDERAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>Exhibit Description</th>
<th>No. of Pages</th>
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<td>Attachment 1 – Reserved</td>
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<td>Attachment 6 – Reserved</td>
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<td>Attachment 7 – Debarment and Suspension Certification</td>
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ATTACHMENT 1 TO EXHIBIT 8

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ATTACHMENT 2 TO EXHIBIT 8

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ATTACHMENT 3 TO EXHIBIT 8

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ATTACHMENT 4 TO EXHIBIT 8

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ATTACHMENT 5 TO EXHIBIT 8

RESERVED
ATACHMENT 6 TO EXHIBIT 8

RESERVED
DEBARMENT AND SUSPENSION CERTIFICATION

1. By signing and submitting its proposal or bid, and by executing the Agreement or and Contract, each prospective Design-Build Team member (at all tiers) shall be deemed to have signed and delivered the following certification:

   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 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;

   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.

2. Where the prospective Design-Build Team member 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 Agreement or Contract, stating that it is unable to provide the certification and explaining the reasons for such inability.
ATTACHMENT 8 TO EXHIBIT 8

RESERVED
ATTACHMENT 9 TO EXHIBIT 8

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ATTACHMENT 10 TO EXHIBIT 8

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ATTACHMENT 11 TO EXHIBIT 8

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ATTACHMENT 12 TO EXHIBIT 8

RESERVED
EXHIBIT 9

MILESTONE DEADLINES

<table>
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<tr>
<th>Milestone Deadlines</th>
<th>Duration</th>
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<tbody>
<tr>
<td>*Substantial Completion Deadline</td>
<td>No later than 395 Days after NTP 1</td>
</tr>
<tr>
<td>*Final Acceptance Deadline</td>
<td>No later than 90 Days after Substantial Completion</td>
</tr>
</tbody>
</table>

DocuSign Envelope ID: FC7DC4FB-BABC-497A-ABB4-E4459473E1C2
EXHIBIT 10

RESERVED
HAZARDOUS MATERIALS RISK ALLOCATION TERMS

1. Design-Build Team shall be solely responsible for Hazardous Materials Management, including all required remediation and disposal of Hazardous Materials that constitute Design-Build Team Releases of Hazardous Materials or which are otherwise with respect to any Additional Properties or Project Specific Locations. Design-Build Team shall be responsible for all Hazardous Materials Management for Design-Build Team Release(s) of Hazardous Materials or with respect to Additional Properties, even if the required Hazardous Materials Management extends beyond the end of the Term or Final Acceptance of the Work.

2. Other than a Design-Build Team Releases of Hazardous Materials or with respect to any Project Specific Locations, GDOT shall, at its own expense shall manage, treat, handle, store, remediate, remove, transport (where applicable), investigate, oversee and dispose of such Hazardous Materials in accordance with applicable Law and Governmental Approvals or otherwise enter into a Supplement Agreement with the Design-Build Team, or order such Work pursuant to Directive Letter (provided that GDOT may not require any long term monitoring of Hazardous Materials under any such Directive Letter), with respect to same.

3. Notwithstanding the aforementioned or anything to the contrary in the Agreement, none of the following costs and expenses shall be chargeable to or reimbursed by GDOT:

   (a) Costs and expenses to the extent attributable to Design-Build Team Releases of Hazardous Materials;

   (b) Delay and disruption costs and expenses, except to the extent expressly set forth under the Agreement;

   (c) Costs and expenses that could be avoided by the exercise of commercially reasonable efforts to mitigate and reduce cost; and

   (d) Attorney’s fees or other expenses incurred by Design-Build Team in demonstrating or determining the proportionate responsibility between the parties as to Design-Build Team Releases of Hazardous Materials, GDOT Releases of Hazardous Materials, Pre-existing Hazardous Materials, and/or Hazardous Materials due to any third party.

4. Nothing contained herein shall be interpreted to limit Design-Build Team’s obligations with respect to Article 7.8 (Hazardous Materials Management) or Article 7.9 (Environmental Compliance).
EXHIBIT 13

RESERVED
EXHIBIT 14

DESIGN-BUILD TEAM’S SVDBE COMMITMENTS LIST
FORM I

SVDBE Certification

SMALL, VETERAN, AND DISADVANTAGED BUSINESS ENTERPRISES
SPECIAL PROVISION (SVDBE) REQUIREMENTS

The following Project goal for participation by SVDBEs is established for professional services and construction work:

SVDBE GOAL

7% of the overall Project design and construction costs, with respect to the SVDBE participation by the Design-Build Team.

SVDBE Certification

By signing below, the Proposer certifies that (1) the Design-Build Team will provide a good faith effort to meet the goal; and (2) the Design-Build Team will direct its efforts toward the utilization of SVDBE firms in both design and construction components of the Project; (3) the Design-Build Team will submit monthly and annual summary reports of the SVDBE goal attainment on the Project, identifying the components of the Project on which SVDBE firms are/have been utilized. See the following page of this form for the Commitments List requirements.

Failure to submit the SVDBE Commitments List will be considered a breach of the requirements of the RFP. As a result, the Proposal Bond provided by the Proposer will become property of GDOT and the Proposer will be precluded from participating in any re-procurement of the DBA for the Project.

______________________________
Jason Owen
Name

______________________________
President
Title
The SVDBE firms to be utilized as counting toward the proposed goal must be listed on this form, along with their addresses, type of work and the amount to be paid to each of the certified SVDBE firms. The amount entered will not necessarily be the contract amount, but must be the actual amount that will be paid to the SVDBE firm. Attach the SVDBE Commitment list to Form I; an example of this is shown in Table I-1:

Table I-1: Example Commitments Chart

<table>
<thead>
<tr>
<th>Vender Number</th>
<th>Company Name and Address (City and State)</th>
<th>Type of Work</th>
<th>Work Code*</th>
<th>Race Neutral</th>
<th>Race Conscious</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ABC Oil Company</td>
<td>Diesel Fuel Supplier</td>
<td></td>
<td></td>
<td></td>
<td>$80,000.00 (60% = $48,000.00)</td>
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TOTAL

The Contractor shall indicate for each SVDBE and Type of Work whether the SVDBE Participant is Race Neutral or Race Conscious by placing a checkmark in the appropriate column.

<table>
<thead>
<tr>
<th>Vendor Number</th>
<th>Company Name and Address (City and State)</th>
<th>Type of Work</th>
<th>Work Code*</th>
<th>Race Neutral</th>
<th>Race Conscious</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2MC945</td>
<td>MC Squared, Inc. 1275 Shiloh Road, Kennesaw, GA 30144</td>
<td>Geotechnical</td>
<td>X</td>
<td></td>
<td></td>
<td>$68,728 X (100% = $68,728)</td>
</tr>
<tr>
<td>2JJ022</td>
<td>JJ Dal Supply Company, LLC PO BOX 393, Tucker Georgia 30085</td>
<td>ITS/Electrical</td>
<td>X</td>
<td></td>
<td></td>
<td>$122,817 X (60% = $73,690.20)</td>
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</table>

Total $142,418.20
EXHIBIT 15

CERTIFICATION OF COMPLIANCE WITH THE STATE OF GEORGIA'S SEXUAL HARASSMENT PREVENTION POLICY
B.2.1.14 Form U (Certification of Compliance with the State of Georgia’s Sexual Harassment Prevention Policy)

Georgia Department of Transportation
P.I. No. 0017389 - Statewide ITS OMS Deployment Design-Build Project

**FORM U**

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](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](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/NjVtODDnc2s?rel=0](https://www.youtube.com/embed/NjVtODDnc2s?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/NjVtODDnc2s?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: 12/10/2020

Proposer: Brooks-Berry-Haynie and Associates

Signature: ____________________________

Title: President
EXHIBIT 16

RESERVED
EXHIBIT 17

RESERVED
EXHIBIT 18

MEASURES OF LIQUIDATED DAMAGES and NONREFUNDABLE DEDUCTIONS

1.1 For Late Substantial Completion and Late Final Acceptance

(a) Reserved

(b) Liquidated Damages for late Substantial Completion for the Project shall equal $300 per day for each day that the Substantial Completion Date is later than the Substantial Completion Deadline, as the Substantial Completion Deadline may be extended pursuant to this Agreement.

(c) Liquidated Damages for late Final Acceptance shall equal $300 per day for each day that the date of Final Acceptance is later than the Final Acceptance Deadline, as the Final Acceptance Date may be extended pursuant to this Agreement.

(d) Liquidated Damages on account of any failure to achieve Final Acceptance by the Final Acceptance Date shall not be cumulative and in addition to Liquidated Damages under subpart (b) above where Substantial Completion is not achieved by the Substantial Completion Deadline, provided that where any such Liquidated Damages under subpart (b) cease to then accrue as a result of achieving Substantial Completion, and the Final Acceptance Date, as may thereafter be revised is not met, subpart (c) shall then apply.

1.2 Incident Based Liquidated Damages

Liquidated Damages 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 applicable incident based Liquidated Damages relative to such occurrence shall apply.

1. Failure to reopen lanes on Cobb Parkway as specified in Volume 2, Section 18 $2,500 per hour
2. Failure to reopen lanes on Augusta Road as specified in Volume 2, Section 18 $2,500 per hour
3. Failure to reopen lanes on Jimmy Deloach Connector as specified in Volume 2, Section 18 $2,500 per hour
4. Failure to reopen lanes on I-575 Sixes Road Southbound On-Ramp as specified in Volume 2, Section 18 $2,500 per hour
5. Failure to adhere to holiday traffic restrictions as required under Volume 2, Table 18-1 $2,500 per hour
6. Failure to respond to GDOT direction regarding changeable message signs (CMS) as specified in Volume 2, Section 18.3.2 $1,300 per hour

*In addition to Liquidated Damages, DB Team shall be liable for any fines assessed against GDOT as a result of any noncompliance event as provided herein.
1.3 Incident Based 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 applicable incident based Liquidated Damages relative to such occurrence shall apply.

1. Replacement of an individual in a Key Personnel position after submission of the Proposal for any reason, except as allowed under Article 10.4.1 $10,000 per occurrence

2. Unreasonable failure to comply with any of its responsibilities per the requirements of Volume 2, Section 2 (Project Management) including Project Management, Quality Management, Schedule, etc. $5,000 per occurrence

3. Causing environmental damage in contravention of Volume 2, Section 4 (Environmental) of the Technical Provisions and the latest approved Environmental Documents $7,000 per occurrence

4. Failure to follow the approved procedures outlined in the Utility Emergency Response Procedures Plan as required in Volume 2, Section 6 (Utility Adjustments) of Technical Provisions $8,500 per occurrence

5. Damage caused by the DB Team to GDOT/Governmental Entity ITS device (camera, radar, VSLS, etc.) or enclosure. Or damage caused or loss of use to an existing ITS device. $2,500 per occurrence

6. Failure to bring the GDOT/Governmental Entity ITS system (fiber optic trunk, electrical power, ITS device (camera, radar, VSLS, etc.)) back on line within 24 hours after damage or failure caused by the DB Team $13,700 per occurrence

*In addition to Nonrefundable Deductions, the DB Team shall be liable for any fines assessed against GDOT.

**In addition to Nonrefundable Deductions, the DB Team shall be liable for all costs of repairs of ITS equipment.
EXHIBIT 19

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT
B.2.1.12 Form R (GA Security and Immigration Compliance)

FORM R

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

Contract No. and Name:  
Design-Build Agreement for the Statewide ITS DMS Deployment Design-Build Project  
(the ‘Project’)

Name of Contracting Entity: Brooks-Berry-Hayne and Associates

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

BY Authorized Officer or Agent  
(Name of Person or Entity)

61995

Date of Authorization

10/17/07

December 10, 2020

Date

President

Title of Authorized Officer or Agent

Jason Owen  
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN TO BEFORE ME THIS 10th DAY OF December, 2020

My commission expires: 2/15/23

Notary Public

\(^1\) or any subsequent replacement operated by the United States Department of Homeland Security of 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  
EXHIBIT 20

TERMS FOR TERMINATION COMPENSATION

A. Compensation on Termination for Convenience, for GDOT Default, or for GDOT Suspension of Work

1. In the event of termination of the Agreement under Article 19.1 (Termination for Convenience) or Article 19.4 (Termination for GDOT Default or Suspension of Work), the Termination Compensation shall equal:

   (i) That portion of the Contract Sum on account of (a) Work performed that has not already been paid; plus

   (ii) The amount necessary to reimburse reasonable and documented out-of-pocket costs of third party and Affiliate Contractors to demobilize and terminate under Contracts between Design-Build Team and third parties or Affiliates for performance of Work, excluding Design-Build Team’s non-contractual liabilities and indemnity liabilities (contractual or non-contractual) to third parties or Affiliates; plus

   (iii) If termination occurs prior to Substantial Completion, Design-Build Team’s own reasonable and documented out-of-pocket costs to demobilize (without duplication) and carry out termination obligations as may be directed by GDOT or required pursuant to the Agreement; minus

   (iv) The sum of (i) the greater of (A) the proceeds received from insurance (including casualty insurance and business interruption insurance) that is required to be carried pursuant to Article 16.1 (Insurance Policies and Coverage) and provides coverage to pay, reimburse or provide for any of the costs and losses attributable to any Force Majeure Event, and (B) the proceeds received from insurance that is actually carried by or insuring Design-Build Team under policies solely with respect to the Project and the Work, regardless of whether required to be carried pursuant to Article 16.1 (Insurance Policies and Coverage), and that provides coverage to pay, reimburse or provide for any of the costs and losses attributable to any Force Majeure Event (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-Build Team is deemed to have self-insured pursuant to Article 16.3.3; minus

   (v) The portion of any Compensation Amounts previously paid to (or charged against) Design-Build Team that compensated Design-Build Team for Work attributable to the period after the Early Termination Date.

2. In the event of termination of the Agreement under Article 19.1 (Termination for Convenience) or Article 19.4 (Termination for GDOT Default or Suspension of Work), any such Termination Compensation shall be payable by GDOT as follows:

   (i) For Termination for Convenience

      (a) 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 (3) months after the date the notice is delivered.
(b) GDOT shall deliver to Design-Build Team, in immediately available funds, within sixty (60) days after the Early Termination Date, the Termination Compensation due, less a holdback amount equal to GDOT’s reasonable estimate of the costs Design-Build Team will thereafter incur to perform and complete its post-termination obligations under Article 19.5 (Termination Procedures and Duties), subject to Sections (ii)(b) - (d) below.

(ii) For Termination for GDOT Default or Suspension of Work

(a) If the Agreement is terminated due to Design-Build Team’s exercise of its right to terminate under Article 19.4 (Termination for GDOT Default, Suspension of Work, Force Majeure Event, or Materially Delayed Notice to Proceed), termination shall be valid and effective on the date notice of termination is delivered; and, subject to Articles 19.3.2 (Compensation to DB Team) and 19.4.4, GDOT shall deliver to Design-Build Team, in immediately available funds, within sixty (60) days after the Early Termination Date, the Termination Compensation due, less a holdback amount equal to GDOT’s reasonable estimate of the costs Design-Build Team will thereafter incur to perform and complete its post-termination obligations under Article 19.5. In the event that the Termination Compensation is negative, then the Design-Build Team shall deliver the Compensation Payment due to GDOT within sixty (60) days after the Early Termination Date.

(b) GDOT shall pay the holdback amount to Design-Build Team within ten (10) days after Design-Build Team completes all its post-termination obligations under Article 19.5.

(c) If as of the date GDOT tenders payment under clause (a) above the Parties have not agreed upon the amount of Termination Compensation due, then:

(i) GDOT shall proceed with such payment to Design-Build Team;

(ii) Within thirty (30) days after receiving such payment Design-Build Team shall deliver to GDOT written notice of the additional amount of Termination Compensation that Design-Build Team in good faith determines is still owing (the “disputed portion”);

(iii) GDOT shall pay the disputed portion of the Termination Compensation to Design-Build Team in immediately available funds within thirty (30) days after the disputed portion is determined by settlement, final order or final judgment, and also shall pay interest thereon, at the Default Interest Rate from the Early Termination Date until paid; and

(iv) A failure by GDOT to effect payment by such date shall not entitle Design-Build Team to reinstatement of the Design-Build Team’s Interest or to rescission of the termination.

(d) From and after the Early Termination Date until the Termination Compensation is finally determined and paid, the provisions of Article 19.10 (Access to Information) shall apply.
(e) 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 thirty (30) days after the date of settlement or final judgment Design-Build Team shall reimburse the excess payment, together with interest thereon at the Default Interest Rate from the date of overpayment until the date of reimbursement.

(f) Any amounts to be paid by GDOT pursuant hereto shall be subject to Default Interest Rate from the date that such payment shall be due until paid.

B. Compensation on Termination for Design-Build Team Default

1. Design-Build Team shall not be entitled to receive any compensation where the Agreement is terminated by GDOT pursuant to Article 19.3 as a result of a Design-Build Team Default if it has been determined by GDOT that the damages incurred by GDOT and costs to complete the Work as a result of the Design-Build Team Default exceed the unpaid balance of the Contract Sum. In no event shall Design-Build Team be entitled to any direct costs, including demobilization, associated with a termination by GDOT pursuant to Article 19.3 (Termination for DB Team Default). In the event that the Termination Compensation is negative, then the Design-Build Team shall deliver the Compensation Payment due to GDOT within sixty (60) days after the Early Termination Date.

C. Claims

1. Notwithstanding anything to the contrary herein, Termination Compensation shall include and be adjusted on account of any outstanding Compensation Event that is independent of the event of termination and which is not otherwise resolved as of the effective date of such termination. The Parties shall adjust the Termination Compensation by the amount of the unpaid award, if any, on the Compensation Event.

2. At GDOT’s sole election, it may hold back from payment of the Termination Compensation for deposit into the GDOT Claims Account the amount of any claim of GDOT against Design-Build Team not resolved prior to payment. GDOT shall provide written notice to Design-Build Team of any such election, the subject claim and the amount deposited or to be deposited, prior to or concurrently with tendering payment of the Termination Compensation.

3. If as of the date GDOT tenders payment under clause (a) above the Parties have not agreed upon the amount of Termination Compensation due, then:

   (i) GDOT shall proceed with such payment to Design-Build Team;

   (ii) Within thirty (30) days after receiving such payment Design-Build Team shall deliver to GDOT written notice of the additional amount of Termination Compensation that Design-Build Team in good faith determines is still owing (the “disputed portion”);

   (iii) GDOT shall pay the disputed portion of the Termination Compensation to Design-Build Team in immediately available funds within thirty (30) days after the disputed portion is determined by settlement, final order or final judgment, together with interest thereon at the Default Interest Rate from the later of the two dates set forth in clause (a) above until paid; and
(iv) Failure by GDOT to effect payment by such date shall not entitle Design-Build Team to reinstatement of the Design-Build Team’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 thirty (30) days after the date of settlement or final judgment Design-Build Team 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 21

Non-Collusion Affidavit
B.2.1.3 Form B (Non-Collusion Affidavit)

FORM B

Non-Collusion Affidavit*

STATE OF ________________ )
    GEORGIA

   SS.

COUNTY OF ________________ )

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

A. Jason Owen is the President of Brooks-Berry-Haynie and Associates and Michael Moseley, Jr. PE is the Sector Manager of Atkins North America, Inc, which entity(ies) are the ______ 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]
Georgia Department of Transportation
P.I. No. 0017389 – Statewide ITS DMS Deployment Design-Build Project

Instructions to Proposers
Amendment 1 – November 18, 2020

(Signature)

Jason Owen
(Name Printed)
(President)
(Title)

(Signature)

Michael Moseley, Jr
(Name Printed)
(Sector Manager)
(Title)

(Signature)

(Name Printed)
(Title)

(Signature)

(Name Printed)
(Title)

Subscribed and sworn to before me this 10th day of Dec., 2020

[Seal]

My commission expires: 2/15/23

Notary Public in and for said County and State

[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 on behalf of all partners, members, joint
venture members, Participating Members, and Major Non-Participating Members.]
INITIAL DESIGNATION OF AUTHORIZED REPRESENTATIVES

GDOT’s Authorized Representative:

GDOT hereby designates the persons from time to time serving as the Commissioner of GDOT as its Authorized Representatives and such other persons as the Commissioner may from time to time designate by delivering written notice thereof to Design-Build Team. Any such designations by the Commissioner may be limited in scope and duration and may be revoked at any time by delivery of written notice thereof to Design-Build Team pursuant to Article 24.11 (Notices and Communications).

Design-Build Team’s Authorized Representative:

Design-Build Team hereby designates the persons from time to time serving as the Chief Executive Officer of Design-Build Team as its Authorized Representatives and such other persons as the Chief Executive Officer may from time to time designate by delivering written notice thereof to GDOT. Any such designations by the Chief Executive Officer may be limited in scope and duration and may be revoked at any time by delivery of written notice thereof to GDOT pursuant to Article 24.11 (Notices and Communications).
EXHIBIT 23

Drug Free Workplace
B.2.1.13 Form T (Drug Free Workplace)

FORM T

Drug Free Workplace

STATE OF GEORGIA

COUNTY OF COBB

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

Jason Owen is the President of Brooks-Berry-Haynie and Associates 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) and (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 will not engage in the unlawful manufacture, sale distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

[signature page follows]
Instructions to Proposers

[Signature]

Jason Owen
(Name Printed)

President
(Title)

Subscribed and sworn to before me this 7th day of Dec., 2020.

[Signature]

Notary Public in and for said County and State

My commission expires: 2/15/23

[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 on behalf of all partners, members, joint venture members, Participating Members and Major Non-Participating Members.]
FORM T

Drug Free Workplace

STATE OF _______ GEORGIA _______ }
COUNTY OF _______ FULTON _______ }

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

Michael Moseley, Jr is the Vice President/Sector Manager of Atkins North America, Inc and is the ______ of ______, which entity(ies) are the ______, 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 names) and Atkins North America, Inc 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 will not engage in the unlawful manufacture, sale distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

[signature page follows]
Michael Moseley, Jr. PE  
Vice President/Sector Manager  

Subscribed and sworn to before me this 8th day of December, 2020.

Forsyth County, GA  
Notary Public in and for said County and State

My commission expires: March 25, 2022

[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 on behalf of all partners, members, joint venture members, Participating Members and Major Non-Participating Members.]
EXHIBIT 24

RESERVED
Georgia Department of Transportation

VOLUME 2

Technical Provisions
For
Design-Build Agreement
P.I. No. 0017389

Statewide ITS DMS Deployment Design-Build
Project
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1 GENERAL

1.1 General Overview
This Section 1 provides a general description of the Project and certain requirements. Comply with all requirements set forth in the DB Documents. Ensure the Design Documents for the Project are consistent with the following:

1. Environmental Documents Approvals
2. Approved Concept Report

1.2 Administrative Requirements

1.2.1 Errata to the Technical Provisions
Interpret the Technical Provisions and GDOT standards, policies, and specifications in accordance with Volume 1, Article 1.6 (Errata to the GDOT Standard Specifications).

1.2.2 Prequalification
All Design Work must be performed by entities prequalified by GDOT in the respective discipline at the time the Design Work is performed or at any time that Design Work is needed during the construction phase because of conditions in the field.

1.3 Design Requirements

1.3.1 General Design Requirements
Adhere to the requirements of the Agreement and the Technical Provisions for the general administration and management of the Project, specifically including those provisions in Section 2 (Project Management) and Section 3 (Design and Submittals).

Coordinate with GDOT, adjacent Governmental Entities, and other third parties as appropriate to determine the design criteria, standards, and specifications of those components of Work that are constructed by the DB Team but maintained by others. For components of Work that impact or may impact the infrastructure of any Governmental Entity or third-party entity, conform to the design requirements of such entity.

1.3.2 Project Scope
Design and construct the Project as required by the DB Documents, including design, design-related activities, permitting, Utility Adjustments, construction, and related Work.

Do not rely on the physical description contained herein to identify all Project components. Determine the full scope of the Project through thorough examination of the DB Documents and the Project or as may be reasonably inferred from such examination.

The Work includes the installation of five Dynamic Messaging Sign (DMS) sites in Cobb, Cherokee, and Chatham Counties. Install the DMS sites as specified in Section 17 (Intelligent
Transportation Systems) within the Right of Way and in the areas identified in Attachment 1-1 (DMS Locations).

1.3.3 Transitions to Adjacent Infrastructure, Roadways and Facilities

Design and construct Project transitions and interconnections with adjacent infrastructure, roadway, facilities, and related appurtenances for compatibility and uniformity with all interfaces. Coordinate with Persons, including other contractors performing Work at or adjacent to the Site, to provide seamless transitions from the Project to any Work proposed, being developed, or existing. Remove any temporary transitions that are not intended to accommodate permanent traffic operations connecting the proposed improvements to existing roadways, and restore all areas within the Work or impacted by the Work. Minimize disruption to traffic operations and adjacent property access throughout the performance of the Work.

1.3.4 Cooperation Between Contractors

GDOT reserves the right at any time to contract for and perform other or additional work on or near the Work covered by the DB Agreement. The I-575 SB at CS 779/Sixes Road – Ramp Meters project (PI No. 0017435) is in development.

When separate contracts are let within the limits of any one Project, each contractor shall conduct its work so as not to interfere with or hinder the progress or completion of the Work being performed by other contractors. Contractors working within the same Project limits shall cooperate with each other.

Each contractor involved shall assume all liability, financial or otherwise, in connection with its contract and shall protect and save harmless GDOT from any and all damages or claims that may arise because of inconvenience, delay or loss experienced because of the presence and operations of other contractors working within the limits of the same Project.

The DB Team shall arrange its Work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors within the limits of the same Project. The DB Team shall adjoin its Work with that of the others in an acceptable manner and shall perform the Work in a sequence as coordinated with the adjacent contractor.

This Section 1.3.4 applies to all the Work.
2 PROJECT MANAGEMENT

2.1 General Requirements

2.1.1 Management Organization
Establish and maintain an organization that effectively manages all Elements of the Work. Operate an organization that communicates with GDOT to efficiently and effectively identify and resolve project delivery issues.

2.1.1.1 Project Meetings
Include all appropriate staff necessary at each meeting to make decisions regarding the subject matter to progress the Project and maintain the Project Schedule. 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. Hold additional meetings and cause additional staff to attend all meetings if requested by GDOT or its representatives. In addition, at a minimum, hold, participate in, and prepare minutes for the following regular meetings with GDOT.

2.1.1.1.1 Weekly Meeting Requirements
No requirements.

2.1.1.1.2 Twice Monthly (every Two Weeks) Meeting Requirements
Design and construction meetings to address such items as design coordination, submittals review, ITS communications, and traffic interruption reports.

2.1.1.1.3 Monthly Meeting Requirements
1. Project Schedule Review Meeting (held the first week of each month)
2. Payment Request/Progress Status Team Meeting (held the first week of each month)
As the Project progresses, hold work sessions with GDOT on Project technical design elements; these may include roadways, structures, Utility relocations, drainage and MS4, and other disciplines as needed to facilitate timely input from GDOT.

2.1.2 Requirements for GDOT Office and Equipment
No requirements.

2.1.3 Partnering
No requirements.

2.1.4 Project Management Controls System (PMCS)
Use the Project Management Controls System (PMCS), provided by GDOT, throughout the Term of the Agreement for document management and transmittal, including workflows, file storage, communication, and correspondence.

This PMCS provides the following:
1. Centralized data that acts as a ‘single source of truth’
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

Use this system for all submittals and official Project documentation, including:

1. Correspondence
2. Payment Requests
3. Relief Event notices and Compensation Event notices
4. Draft and executed Supplemental Agreements
5. Project Management Plans in accordance with Section 2.2 (Management Plans)
6. Meetings/Meeting Minutes/Action Items
7. Requests for Information (RFIs)
8. Submittals, including those listed in Section 3 (Design and Submittals)
9. Project Schedule submittals, including those listed in Section 2.5 (Project Schedule Requirements)
10. Audits and nonconformance reporting (NCRs)
11. Punch Lists
12. Project Reporting
14. Construction Drawing Management (including management markups, versions, and revisions)

Use the PMCS to perform Project responsibilities.

Additional requirements/guidelines of the system:

1. Use the PMCS to track and manage the Project and as an official record of all Project communication. Upload all Project-related information to the PMCS.
2. Designate no more than two PMCS coordinators (an internal point of contact) and provide their name, phone, and e-mail to GDOT no later than seven Days after NTP 1. DB Team must submit written notification to GDOT to replace any PMCS coordinator.
3. Users of this PMCS must complete training prior to having access to the system provided by GDOT.
4. Provide high-speed internet connectivity (actual means to be agreed-on by GDOT) for GDOT to access the PMCS.
5. Provide printing capabilities (actual means to be agreed-on by GDOT) for GDOT.
6. Upload, submit, track, and review submittals via the PMCS. Where physical samples are required, review and track the submittal via the system, and transmit the sample itself to the reviewer via traditional means.
7. Use the file naming convention provided in Section 2.1.4.1 (File Naming Convention).

Upload all submittals to the PMCS. Ensure that Design Documents comply with the naming convention requirements of GDOT’s Electronic Data Guidelines (EDG). Ensure that Project
documents transmitted via the system that are not specified in the EDG comply with the following electronic formats:

1. Submit documents generated in Computer Aided Design (CAD) applications (MicroStation V8 or InRoads) in Portable Document Format (PDF) generated by a PDF writer from the CAD application.
2. Scan documents that are marked up or unavailable in electronic format (drawings, sketches, correspondence, etc. generated by hand drafting methods) to Tagged Image Format version 6 [TIFF 6 (.TIF)] or latest update, Bitonal [or Black and White (or Line Art), on some scanners] (.tif) or PDF (.pdf), black and white with a resolution of 200 dpi using CCITT Group 4 (2d Fax) compression.
3. Submit documents that have been generated using PDF printer drivers (not scanned) via the system.
4. Submit electronic photographs in Joint Photographic Experts Group (JPEG) (.jpg) file format, sized at a minimum resolution of 1024 by 768 pixels.
5. Save grayscale or color photo images that are scanned in JPEG (.jpg) file format with medium to low quality compression at a resolution of 200 dpi.
6. Submit product data that is available for download from the manufacturer’s website that has been generated using PDF printer drivers (not scanned) via the system.
7. Submit all design drawings in compliance with GDOT EDG, latest revision, and all policies and guidelines on GDOT’s Design Manuals and Guides website:


Use GDOT’s PMCS for contract administration processes, including requests for information, Supplemental Agreements, Payment Requests, and DB Team official correspondence. Attend a training session(s) at GDOT’s office or other mutually agreeable location within 30 Days of the execution of the Agreement or such time as agreed to by GDOT. Contact GDOT’s project manager to schedule the training session(s).

Limited licenses will be provided by GDOT to the DB Team. Inquire with GDOT immediately after NTP 1 for the number of licenses assigned to the DB Team.

2.1.4.1 File Naming Convention

Use the file naming conventions shown in Table 2-1.
Table 2-1: File Naming Conventions

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>Project Number (i.e., [insert project number]- (7 digit))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking No</td>
<td>PMCS-assigned process number, or user-defined tracking number</td>
</tr>
<tr>
<td>DocType</td>
<td>The 3-digit document type (e.g., LTR = Letter, TRN = Transmittal, RPT = Report)</td>
</tr>
<tr>
<td>Descr</td>
<td>Document title (short description, think Google key words, include sender/recipient acronyms if appropriate)</td>
</tr>
<tr>
<td>Date</td>
<td>YYYY-MM-DD. (ex: July 4, 1776 would be represented as 1776-07-04)</td>
</tr>
<tr>
<td>Rev</td>
<td>The 2-digit revision or version number (if applicable)</td>
</tr>
</tbody>
</table>

Use the following file naming convention on all correspondence created or issued by the Project and for filing any document:

**PI#_Tracking-###__Type_Description_Date*_Rev-##**

Clearly identify all FINAL versions of documents and save them in the Final Deliverables folder (where applicable) as follows:

**PI_Tracking Number_DocType_Desc_Date_File_Name_Final**

The following are file naming guidelines:

1. Correspondence Files: Include the name of the correspondent, an indication of the subject, the date of the correspondence, and whether it is incoming or outgoing correspondence in the file name.
2. Dates: Present dates ‘back to front’, with the year first (always given as a four-digit number), followed by the month (always given as a two-digit number), and the day (always given as a two-digit number).
3. Keep file names short but meaningful: Some words add length to a file name but do not contribute towards the meaning, for example words like “the”, “a”, and “and.”
4. No spaces in file names: Use an underscore “_”, a dash “-”, heading fields, and words for ease in sorting. Use caps to distinguish words (i.e., Document_Management_Plan).
5. Numbers in file names: Include the zero for numbers 0-9 to maintain the numeric order when file names include numbers. This helps to retrieve the latest record number (i.e., 01, 02 … 99), unless it is a year or another number with more than two digits.
6. Special Characters: Do not use special characters such as @ # $ % ^ & *.,? in file names, as they can cause problems with uploading, viewing, and downloading documents over the internet.

Refer to the most current version of the Work Instruction Document GDOT-WID-001 Document Control-Document Types and Abbreviations for the master categories and documents types list of DocType referenced above in Table 2-1: File Naming Conventions.
2.1.5 Document Management
Maintain an electronic and/or hardcopy document control system to manage, store, catalog, and retrieve all Project-related documents as needed to document the DB Team work and respond to inquiries or audits for the purpose of claims. Ensure record retention complies with the requirements included in the Retention Schedules for State Government Paper and Electronic Records, State Agency Specific Schedules for GDOT, and any other applicable local, State, and federal guidelines unless otherwise directed by GDOT. Provide all documentation and content to GDOT at the time of the expiration or termination of the Agreement.

2.1.5.1 Backup of Electronic Files and Protection of Hardcopy Files
For documents retained by the DB Team, 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, provide off-Site backup.

2.2 Management Plans
Management plans are an essential part of effectively delivering the Project on time, on budget, and with high quality. Provide the required plans as set forth in this Section 2 and elsewhere in the DB Documents.

2.2.1 Management Plan Requirements
Submit the following management plans for GDOT review and acceptance, or as otherwise indicated:

1. Project Management Plan (PMP), pursuant to Section 2.2.2 (Project Management Plan)
2. Quality Management Plan (QMP), pursuant to Section 2.3.2 (Quality Management Plan)
3. Safety Plan (for limited acceptance only), pursuant to Section 2.4.1 (Safety Plan)
4. Construction Phasing and Staging Plan, pursuant to Section 2.2.4 (Construction Phasing and Staging Plan)

2.2.2 Project Management Plan
Submit the Project Management Plan (PMP) that describes the organization, staffing, directing, and controlling the day-to-day operations necessary for effective decision-making and Project performance.

Include in the PMP the procedures and processes that ensure the dissemination of timely information to GDOT and the DB Team members to effectively manage the scope, costs, schedules, quality of, and the requirements applicable to the Project.

Also include in the PMP a Key Personnel organization chart, roles and responsibilities, approach to managing the design and construction phases, communications protocol, change/risk management process, and schedule development and updates.

2.2.3 Communications Support
The DB Team Project Manager shall be the point of contact to GDOT on behalf of the DB Team for public information and involvement activities throughout the Term of the Agreement.
2.2.4 Construction Phasing and Staging Plan

Prepare a Construction Phasing and Staging Plan that represents the DB Team’s approach to perform the Work. A Construction Phase is a portion of the overall Project that provides logical termini for each proposed Phase of the Work which may be comprised of multiple Stages. The Construction Phasing and Staging Plan shall align and be consistent with the DB Team’s Project Schedule including those Completion Deadlines shown in Exhibit 9 (Milestone Deadlines). Construction Phasing and Staging Plan submittals shall be provided and reviewed in accordance with timing requirements and durations specified in Table 3-1 (Master Submittal List). Include the following in the Construction Phasing and Staging Plan:

1. Narrative that describes the major Project components to be constructed in each Construction Phase and Stage. Discuss how and in what order each Construction Phase and Stage will be accomplished to complete the Work as specified by the DB Documents and pertinent to the DB Team’s approach, means and methods.

2. Overall sequencing including the approach to, and linkages with, the Transportation Management Plan and Traffic Control Plans.

3. Construction Phasing and Staging layout (scale: 1 inch = 200 feet) including lane configuration and traffic management of the Project during the different Phases and Stages of Construction.

4. Narrative and supporting drawings regarding work areas, sequencing of work, and locations of lay down areas. Using drawings, identify yard size and locations for lay down areas and their sequencing.

5. Additional supporting documentation as requested by GDOT.

2.3 Quality Management Requirements

2.3.1 Design-Build Team Responsibilities

Assume full responsibility for the quality of the Work. Ensure that the Work is delivered in accordance with DB Documents, including but not limited to the environmental and permit commitments, Released-for-Construction (RFC) plans, shop drawings, working drawings, and specifications.

Develop, implement, and update the QMP for the Term of the Agreement such that it describes the quality control system, policies, and procedures that ensure the Work meets the requirements of the DB Documents and provides documented evidence of same.

2.3.2 Quality Management Plan

2.3.2.1 Quality Management Plan Requirements

Submit for GDOT review and acceptance as follows.

The QMP shall consist of three sections:

1. The Administration portion of the QMP shall include the following:
a. A quality policy statement that contains a complete description of the quality control and assurance policies and objectives that the DB Team will implement throughout its organization and demonstrates the DB Team senior management’s commitment to implement and continually improve the quality management system for the Work.

b. Organizational requirements with contact information of the DB Team’s Organization as defined

c. Roles and responsibilities of the quality control and assurance personnel, their relationship to the production personnel, and the quality-specific responsibilities of production personnel

d. A plan and written procedures for quality control and assurance checks and reviews

e. Document control and quality records management processes and procedures

f. DB Team’s internal compliance auditing processes, procedures and documentation

g. Quality training plan of relevant staff

2. The Design Quality Management Plan (DQMP) shall comply with the requirements set forth in the *GDOT Design-Build Manual*. The plan must also include the role of the Engineer of Record (EOR) in the DQMP and a process for independent analytical checks and written procedures for bridges and structures set forth in Section 1.3 of the *GDOT Bridge and Structures Design Manual*.

3. The Construction Quality Management Plan (CQMP) shall comply with the requirements set forth in the *GDOT Design-Build Manual* including the *GDOT Design-Build Construction Management SOP*, and the *GDOT Construction Manual*. In addition:

a. Describe how the DB Team will develop and use forms and checklists to facilitate and document quality efforts, including pre-work activity checklists that depict all items required to perform the particular design, construction, and operational efforts, such as means and methods, Subcontractor involvement, materials, and inspection or testing requirements.

b. Document approach to coordinate and maintain records for all required inspections and tests that will be performed by GDOT in accordance with *GDOT Design-Build Construction Management SOP* and the *GDOT Construction Manual*.

c. Describe the methods, processes, and procedures to provide for the effective implementation and documentation of the environmental protection, training, compliance, and monitoring program.

d. Describe approach to accommodate and coordinate with GDOT provided construction engineering acceptance inspection and testing.

e. Describe approach to accommodate and coordinate with GDOT provided plant inspection(s), 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.

f. Describe approach to accommodate and coordinate with GDOT in the Final Acceptance and project closeout process.
2.3.2.2 Quality Management Plan Updates

The DB Team or GDOT may initiate changes to the QMP (including clarifications, modifications, additions, and deletions) after it has been approved. Changes initiated by GDOT are made under GDOT’s approval authority. Any revisions to the QMP initiated by the DB Team or CQAM require prior GDOT approval.

Maintain and update the QMP to ensure it is accurate and up-to-date, including the following information:

1. The organizational chart identifying all quality management personnel, their roles, authorities, and line reporting relationships.
2. Names and descriptions of the roles and responsibilities of all quality management personnel and including which personnel have the authority to stop Work.

Revise the QMP within 14 days of GDOT or DB Team detection of a substantial or systemic problem related to the Work as a result of audits, or as directed by GDOT. Include with submissions and all updates to the QMP both a clean copy and a copy tracking all changes since the previous approval.

2.3.3 Nonconforming Work and Corrective Action

A Nonconformance Report (NCR) process shall be required to document, report and track work that fails to conform to the requirements of the DB Documents. NCRs shall be issued as a result of such non-conformances. Examples of nonconformance’s include physical defects, test failures, incorrect or inadequate documentation or changes from the design processes, inspection or test procedures described in the Project QMP.

GDOT will implement a web-based management system that will have the capability for documenting and implementing the NCRs that includes the description of the NCR, corrective action, action to prevent, the defined roles, dispositions, tracking log, and work flow states.

The DB Team, CQAM, or GDOT can initiate an NCR. Only the initiating party may close an NCR they initiated. The Originator closes the NCR document once all requirements have been met. An NCR cannot be closed until all requirements have been met and the disposition approved by GDOT.

Provide a full description of the NCR’s nature, date, location, and any other pertinent facts, and also indicate the root cause, corrective action(s), and other action(s) to prevent its recurrence. The responsible organization shall submit a proposed disposition to GDOT of the Nonconforming Work that has been reviewed and approved by the DB Team’s Quality Assurance Manager (QAM) and EOR. If the disposition is not accepted by GDOT, the NCR will remain opened until the disposition is accepted by GDOT.

Comply with the NCR requirements set forth in the GDOT Design-Build Manual including the GDOT Design-Build Construction Management SOP. In addition, the QAM shall maintain a log of all NCRs and submit a report upon request to GDOT providing the current status.
2.3.4 Quality Terminology
Quality terminology, unless defined or modified elsewhere in the DB Documents, has the meaning defined in ISO 9001.

2.3.5 Responsibility and Authority of DB Team Quality Personnel
Comply with the requirements set forth in GDOT Standard Specifications, and GDOT Design-Build Manual including the GDOT Design-Build Construction Management SOP.

The DB Team’s Quality Assurance Manager (QAM), Design Quality Assurance Manager (DQAM) and Construction Quality Assurance Manager (CQAM) shall have the authority to suspend all or a portion of the Work because of quality-related issues.

2.3.5.1 Quality Assurance Manager
Designate a QAM whose responsibilities include developing and updating the QMP, ensuring that all Elements of Work are performed in accordance with the DB Documents, and ensuring adequate staffing and expertise is being utilized for the DB Team’s quality efforts.

The QAM shall have defined authority for ensuring the establishment and maintenance of the Management Plans and reporting to GDOT on the performance of the Management Plans.

The QAM reports directly to the person or group with overall Project management responsibilities, such as the Project Manager, an off-Site principal with binding authority for the DB Team, or an executive oversight committee established for the Project. The QAM can be an employee of the DB Team, the DQAM, or the CQAM, but cannot be both the DQAM and CQAM.

Ensure the QAM has recent experience in the management of a quality management program of similar size and complexity as the Project.

2.3.5.2 Design Quality Assurance Manager
Designate a Design Quality Assurance Manager (DQAM) who has overall responsibility for the development, administration, and updating of the DQMP. The DQAM is responsible for verifying and validating that the procedures required by the QMP are being administered. The DQAM reports to the QAM. The DQAM can also be the EOR and the QAM but cannot be the CQAM.

In accordance with this Section 2.3.5.2 and the QMP, the DQAM certifies that all Design Documents have been subjected to all required QC checking procedures; all documentation has been completed and filed in an acceptable manner; and all design packages have been subjected to all required QC and QA prior to submittal to GDOT or prior to release.

The DQAM shall monitor to ensure the DQMP results in Design Work that is:

1. Accurate
2. Conforming to professional standards of practice
3. Compliant with all legal requirements and standards mandated by the DB Documents
4. Fit for purpose and function as specified or implied in the DB Documents

Ensure the DQAM is a Licensed Professional Engineer in the State of Georgia and has recent experience in the design of highway or bridge projects of similar size and complexity as the
Project. Generally, the DQAM must have equal or greater qualifications and experience as the EOR.

2.3.5.3 Construction Quality Assurance Manager

Employ a CQAM, who has overall responsibility for development, administration, and updating of the CQMP. The CQAM is responsible for implementing, monitoring, and adjusting the processes to ensure acceptable quality. The CQAM reports directly to the QAM. The CQAM can also be the QAM but cannot be the DQAM.

The CQAM or a designated assistant to the CQAM shall be on the Project at all times Construction Work is being performed. The CQAM shall be on the Project Site within two hours of being notified of a problem regarding the quality of any Work being performed by the DB Team, any of its Subcontractors, or agents. The CQAM or a designated assistant to the CQAM shall be on the Project Site when control points inspections by GDOT occur.

Ensure the CQAM has recent experience in construction quality management for highway or bridge projects of similar size and complexity as the Project.

2.3.5.4 Control Point Inspections

A control point is a point in time when construction has proceeded to a stage where the start of the next operation may cover or conceal a feature. At this point, notify GDOT a minimum of 24 hours in advance of all required inspections.

At a minimum, notify GDOT 24 hours in advance of the actual inspection for the following activities: pre-pour conferences; pre-pour checks for footing rebar, cap rebar, column rebar, deck rebar, approach slab rebar, and barrier wall rebar; driving piles; setting beams; subgrade compaction; sub-base compaction; and compaction under the approach slabs.

The CQMP shall specify processes for monitoring the progression of Work through the tracking of control points. The process shall be designed to aid in progressing Work, verifying payments, and avoiding duplicate inspection, testing, and reporting. Provide this information on the Two-Week Detail Schedules required by Section 2.5.9 (Two-Week Detail Schedule Requirements) for all upcoming Work to be inspected.

GDOT or the DB Team may identify additional control points, subject to acceptance by GDOT, to be included at any time throughout the Project. Such additions, individually or in aggregate, shall not constitute a Compensation Event or Relief Event. GDOT will coordinate to define the procedures and criteria for additional control points.

2.3.6 Final Inspection

At the completion of constructed elements of the Work, the CQAM will jointly conduct a final inspection with GDOT and the DB Team.

During the inspection, GDOT, the CQAM, and the DB Team will jointly review Punch List items and an agreed date of correction of the items.
2.3.7 Quality Documentation
Maintain design and construction quality records in an auditable format according to the QMP procedures. GDOT has the right to audit the quality records for compliance with the QMP and the Design-Build Documents requirements at any time. Upon completion of the Project, the design and construction quality records shall be turned over to GDOT.

At GDOT’s discretion, GDOT may perform periodic audits of the DB Team’s quality management process and related documentation.

2.4 Safety and Security
Assume sole responsibility for the safety of personnel and of the general public affected by the Project. See Section 2.4.1 (Safety Plan) regarding basic Safety Plan requirements.

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 DB Team. Safety shall never be sacrificed for production, but shall be considered an integral part of an efficient and quality Project.

2.4.1 Safety Plan
Submit to GDOT for acceptance a comprehensive Safety Plan that is consistent with and expands upon any preliminary safety plan submitted with the Proposal. GDOT acceptance is limited to verifying the Safety Plan appears to be specific to the Project. In the Safety Plan, fully describe the DB Team policies, plans, training programs, Work Site controls, and Incident response plans to ensure the health and safety of personnel involved in the Project and the general public affected by the Project during the Term of the Agreement.

Include in the Safety Plan procedures for immediately notifying GDOT of all Incidents arising out of or in connection with the performance of the Work, whether on the Site or not.

Provide access to the Safety Plan and safety training to GDOT and their representatives prior to entry to the Project Site.

2.5 Project Schedule Requirements
Prepare the Project Schedule as a computer-generated graphic diagram that includes and illustrates all significant Work activities that occur throughout the duration of the Agreement in sufficient detail to monitor and evaluate design and construction progress and to denote changes that occur from commencement of the Work to Final Acceptance of the Work. Indicate the duration of each activity, the order of activities, and the sequence for accomplishing the Work. Define the timeframe for completion of the Project and achievement of all Completion Deadlines and durations specified in Volume 1, Exhibit 9 (Milestone Deadlines). Align the Project Schedule and Construction Phasing and Staging Plan to accurately reflect the latest approach and planning for the prosecution of the Work. Ensure that all Work sequences are logical and that the Project Schedule indicates the coordinated plan for performing the Work. GDOT and Customer Groups will rely on the Project Schedule for timing of Owner-performed
Work, reviews, and oversight activities; and for coordinating with, monitoring, and evaluating the DB Team’s progress.

Project Schedule refers to any of the following: Baseline Project Schedule, Revised Baseline Project Schedule, or Project Schedule Updates, as further defined in this Section 2.5 and as appropriate for the context in which they are used.

2.5.1 Baseline Project Schedule Requirements

The Baseline Project Schedule is the initial Project Schedule submittal representing the DB Team’s plan to complete performance of the Work beginning on the date of NTP 1 to Final Acceptance of the Work. In the Baseline Project Schedule, show the plan to complete the Project within the Milestone Deadlines and durations specified in Exhibit 9 (Milestone Deadlines). Do not show any Work activities with progress (no actual dates) in the Baseline Project Schedule. Comply with the following Baseline Project Schedule requirements:

1. Start the Project Schedule on or before the date of NTP 1.
2. Use standard and consistent activity identification numbers.
3. Ensure each activity is uniquely named and consists of a verb, noun, and location in the activity description (aka activity name).
4. Fully detail all Work and activities necessary to complete the Work as specified by the DB Documents and pertinent to the DB Team’s approach, means, and methods. Break the Work into discrete activities associated with only one operation and into sufficient detail to readily identify, evaluate, and measure progress. Include activity sets for all pre-construction, design, construction, and post-construction Work, including:
   a. NTP 1, NTP 2, NTP 3, and each Completion Deadline specified in Exhibit 9. Depict each as a milestone activity.
   b. Design-phase Work and submittals shown in Table 3-1. Include distinct activities for the development, submittal, review, and approval of each submittal. Ensure the Staged Design Submittals, Construction Phasing and Staging Plan, and Project Schedule are aligned and consistent.
   c. Environmental Document and Permit Acquisition Work including Work shown in Table 4-2 and Table 4-3. Include distinct activities for the development, submittal, review, and approval/issuance of each.
   d. Right of Way (whether State Proposed/State Acquired or DB Team Proposed/DB Team Acquired), Right of Entry, and easements Work. Include distinct activities for the appraisals, negotiations, settlements or agreements, and acquisitions of each specific parcel.
   e. Utilities and Utility Adjustment Work, as applicable and in accordance with the DB Documents. Include distinct activities for each adjustment and relocation.
   f. Owner or other third-party scopes of Work and for interfaces with other projects, localities, municipalities, and other Governmental Entities.
   g. Shop drawings and long-lead material and equipment items. Include distinct activities for preparation, submittal, review, and approval of all shop drawings and separate activities for fabrication and delivery.
   h. Procurement of all major Subcontractors and trade packaging.
i. Project start-up, site setup and mobilization.

j. Permanent Construction Work, demolition of existing/selective demo, and major temporary work activities. Sufficient detail for Construction Work may be achieved as follows:

k. For bridge structures Work, indicate each element of individual bents (piles, footings, columns, caps, with separate activities for formwork, rebar, concrete placements, and cure time); each element of Work in individual spans (girders, strip seal joints, decks with separate activities for formwork, rebar, concrete placements, and cure time); individual approach slabs, railings, and miscellaneous other bridge Work.

   i. For cast-in-place retaining wall structure Work, indicate each broken-out by excavation, formwork, rebar, concrete placements, cure and back-fill; and for mechanically-stabilized earth (MSE) walls, indicate each broken-out by excavation, leveling pad, lifts, settlement periods, wall caps, and related Work.

   ii. For sound wall structures Work, indicate each broken-out by excavation, post piles/foundations, panel foundations, posts, panels, and related Work.

   iii. For road Work, indicate individual runs of pipe and drainage structures; individual box culverts; individual detour roads; clearing and grubbing, embankment, excavation, base, paving layers, signing, striping, guardrail, water, sewer, roadway electrical and lighting; and other miscellaneous elements within definable geometric limits such as location/alignment and station-to-station sectioning.

   iv. For ITS and tolling, include structure foundations, structure supports, conduits, cabinets, power conductors, fiber optic, ITS equipment, cable splicing, testing, and start-up, and other related Work. Include activities for replacement Video Detection System (VDS) and new traffic detection installation, as applicable and in accordance with the DB Documents.

l. Submittal and execution of all Punchlist and Project Closeout Work.

5. Use durations in whole Calendar Days with a maximum duration of 20 Working Days, and not less than one day, except for long-lead procurement activities or as otherwise stipulated in the DB Documents or unless approved prior by GDOT. Ensure activity durations represent the anticipated work effort to complete the task, reflect planned production rates, and do not conflict with any time requirement in the DB Documents.

6. 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 DB Documents. Clearly identify such starts or completions imposed on the Project Schedule and include a detailed description of each in the Project Schedule Narrative.

If the DB Team choses to utilize a CPM schedule, the following requirements apply:

1. Set the data date on or before the date of NTP 1 using a beginning of day convention.
2. Utilize a Work Breakdown Structure (WBS) and activity codes to plan, analyze, monitor, and organize all Work activities shown in the Project Schedule. Coordinate with GDOT prior to submittal of the Baseline Project Schedule to ensure an adequate WBS and activity codes have been developed and assigned to each activity to the satisfaction of GDOT. GDOT reserves the right to request additional WBS levels and activity codes be added and assigned throughout the duration of the Agreement. Comply with the following Project Schedule organization requirements:

a. Ensure activities are mapped to, organized by, and rolled-up to a deliverable-based, hierarchal WBS. Utilize the first level of the WBS as the Project itself. Include discrete nodes at the second level of the WBS for the following: Project Management, Environmental and Permitting, Design, Right of Way, Utilities, Procurement, Construction, and Close-out. Reflect the DB Team’s overall approach to the planning, scheduling, and execution of the Work in the organization and breakdown of the WBS. Include WBS levels for all Project-specific locations/alignments, Work Elements/Work packages, phasing, staging, sequencing, design, and deliverable requirements. Identify each design package required for construction phasing and sequencing and identify each stage of the design in the design phase WBS. Align the construction phase WBS with the DB Team’s Construction Phasing and Staging Plan. Remain consistent with the order and hierarchy number of each specific level of the WBS utilized. The DB Team may further develop and detail the WBS; however, any modifications cannot alter or interfere with these WBS requirements or the ability to summarize to the required WBS levels.

b. Include the following activity codes assigned to each activity: Work Element (each individual bridge, retaining wall, noise wall, drainage run, etc.), location/alignment (each mainline, connector-distributor, ramp, and crossing street and may be further defined by geometric limits such as sections for station-to-station, inside/outside, etc.), Work type (environmental, roadway, drainage, structures (bridges, retaining walls, noise walls), landscaping, etc.), responsibility (party responsible for each activity with individual Subcontractors identified), and construction phase/stage as specified by the DB Documents and pertinent to the DB Team’s Construction Phasing and Staging Plan, approach, means and methods. Use only Project-level (not global) activity codes. Include the PI number in the description of all activity code definitions (i.e. PI######_Work Type; PI#####_Responsibility; etc.).

3. Use standard and consistent activity identification numbers and activity textual descriptions (aka activity names) in a manner acceptable to GDOT. Comply with the following:

a. Use a coding structure for activity identification numbers with no spaces, hyphens, symbols, or special characters. Do not modify, reassign, or reuse activity identification numbers once assigned to an activity.

b. Ensure each activity is uniquely named and consists of a verb, noun, and location in the activity description (aka activity name) and is consistent with its WBS and activity code assignments. Include identifiable physical locations within definable geometric
limits and Work features in each activity description such as location/alignment, station-to-station sectioning, and specific retaining wall or bridge, bent and span numbers, and drainage structure numbers. For design and preconstruction activities, include identifiable feature of Work, such as specific design package, submittal, ROW parcel, permit type, or procurement item in the activity description.

4. Fully detail all Work and activities necessary to complete the Work as specified by the DB Documents and pertinent to the DB Team’s approach, means, and methods. Break the Work into discrete activities associated with only one operation and into sufficient detail to readily identify, evaluate, and measure progress. Include activity sets for all preconstruction, design, construction, and post-construction Work, including:

a. NTP 1, NTP 2, NTP 3 start milestones and a Completion Date finish milestone for each Milestone Deadline specified in Exhibit 9 (Milestone Deadlines). If any durations are specified in Exhibit 9, include summary/level of effort activities for each with appropriate logic ties to the detailed Work activities.

b. Design-phase Work and submittals shown in Table 3-1 (Master Submittal List). Include distinct activities for the development, submittal, review, and approval of each submittal. Ensure the Staged Design Submittals, Construction Phasing and Staging Plan, and Project Schedule are aligned and consistent.

c. Environmental Document and Permit Acquisition Work including Work shown in Table 4-2 (GDOT-Led Environmental Preparation and Approval) and Table 4-3 (DB Team-Led Environmental Permit Approval). Include distinct activities for the development, submittal, review, and approval/issuance of each.

d. Right of Way (whether State Proposed/State Acquired or DB Team Proposed/DB Team Acquired), Right of Entry, and easements Work. Include distinct activities for the appraisals, negotiations, settlements or agreements, and acquisitions of each specific parcel.

e. Utilities and Utility Adjustment Work, as applicable and in accordance with the DB Documents. Include distinct activities for each adjustment and relocation.

f. Owner or other third-party scopes of Work and for interfaces with other projects, localities, municipalities, and other Governmental Entities.

g. Shop drawings and long-lead material and equipment items. Include distinct activities for preparation, submittal, review, and approval of all shop drawings and separate activities for fabrication and delivery.

h. Procurement of all major Subcontractors and trade packaging.

i. Project start-up, site setup and mobilization.

j. Permanent Construction Work, demolition of existing/selective demo, and major temporary work activities. Sufficient detail for Construction Work may be achieved as follows:

   i. For bridge structures Work, indicate each element of individual bents (piles, footings, columns, caps, with separate activities for formwork, rebar, concrete placements, strip and cure times); each element of Work in individual spans (girders, strip seal joints, decks with separate activities for formwork, rebar, concrete placements, strip
and cure times); individual approach slabs, railings, and miscellaneous other bridge Work.

ii. For cast-in-place retaining wall structure Work, indicate each broken-out by excavation, formwork, rebar, concrete placements, strip and cure times, and back-fill; and for mechanically-stabilized earth (MSE) walls, indicate each broken-out by excavation, leveling pad, lifts, settlement periods, wall caps, and related Work.

iii. For sound wall structures Work, indicate each broken-out by excavation, post piles/ foundations, panel foundations, posts, panels, and related Work.

iv. For road Work, indicate individual runs of pipe and drainage structures; individual box culverts; individual detour roads; clearing and grubbing, embankment, excavation, base, paving layers, signing, striping, guardrail, water, sewer, roadway electrical and lighting; and other miscellaneous elements within definable geometric limits such as location/alignment and station-to-station sectioning.

v. For ITS and tolling, include structure foundations, structure supports, conduits, cabinets, power conductors, fiber optic, ITS equipment, cable splicing, testing, and start-up, and other related Work. Include activities for replacement Video Detection System (VDS) and new traffic detection installation, as applicable and in accordance with the DB Documents.

k. Submittal and execution of all Punchlist and Project Closeout Work.

5. Use durations in whole day increments with a maximum duration of 20 Working Days or 30 Calendar Days, and not less than one day, except for long-lead procurement activities or as otherwise stipulated in the DB Documents or unless approved prior by GDOT. Ensure activity durations represent the anticipated work effort to complete the task, reflect planned production rates, and do not conflict with any time requirement in the DB Documents.

6. Include appropriate logic ties necessary to complete the Work as specified by the DB Documents and pertinent to the DB Team’s approach, means and methods. This includes sufficient hard logic (aka construction logic) and sufficient preferential logic (aka trade flow or soft logic). Include preferential logic ties that 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, production rates, and resource constraints that can be met. Explicitly identify resource constraints using activity relationships and a detailed description in the Project Schedule Narrative. Comply with the following Project Schedule logic requirements:

a. Ensure all activities, except for NTP 1 start milestone and each Milestone Deadline 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 leads or 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. Identify any lag proposed and provide an explanation in the Project Schedule Narrative for the purpose of the lag. All lags will be reviewed for approval by GDOT as part of the Baseline Project Schedule review. Use of lags with a negative value are not allowed. Do not use relationship lags when the creation of an activity will perform the same function, including:

   i. SS lags where lag is greater than predecessor’s original duration.
   ii. FF lags where lag is greater than successor’s original duration.
   iii. FS lags greater than zero days.

7. Constrain start milestone activity for NTP 1 with a “Start On or After” primary constraint date to reflect executed NTP 1 date using beginning of day convention.

8. Show Project Schedule float calculations based on each Milestone Deadline specified in Exhibit 9 (Milestone Deadlines) utilizing the following convention:

   a. Include a finish milestone with activity name “Substantial Completion Date”. This activity shall have as predecessors all the activities that must be completed prior to the Substantial Completion Milestone Deadline. Assign any suitable successors to the Substantial Completion Milestone Deadline to this activity. Constrain this activity with an activity-level “Finish On or Before” primary constraint date reflecting the Substantial Completion Milestone Deadline shown as a Calendar Day using end of day convention. Do not utilize a secondary constraint on this activity. Utilize this same convention for all other Interim Milestone Deadlines specified in Exhibit 9 (Milestone Deadlines).

   b. Include a finish milestone with activity name “Final Acceptance Completion Date”. This activity shall have as predecessors all the activities that must be completed prior to the Final Acceptance Milestone Deadline. Do not utilize a primary constraint or secondary constraint on this activity. Utilize the Project-level “Must Finish By” date to reflect the Final Acceptance Milestone Deadline shown as a Calendar Day using end of day convention.

   c. Do not otherwise sequester float calculations. Date constraints, other than those required by the DB Documents, will not be allowed unless approved in writing by GDOT. Identify any proposed constraints and provide an explanation for their purpose. Do not use “As late as possible” and “Mandatory” constraint types for any proposed constraints. Do not use or reference External Dates.

9. Utilize 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 “Inherit holidays and exceptions from Global Calendar” option.

   b. Identify work days and non-work days and include identifiable PI# in the description of each calendar (i.e. “PI######_5-day work week”). Maintain the same hourly work/non-work times and same hours/day in each calendar utilized.
c. Satisfactorily account for anticipated adverse weather. Use calendar non-work days clearly defined for anticipated adverse weather or other equally effective means as approved by GDOT. With submittal of the Baseline Project Schedule, provide in writing the planned methodology to account for anticipated adverse weather.

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 DB Documents. The DB Team may constrain Work scheduling in these periods by using special calendars or other equally effective means. Clearly identify such starts or completions imposed on the Project Schedule and include a detailed description of each in the Project Schedule Narrative.

e. Unless otherwise approved in writing by GDOT and for the purposes of the Project Schedule and conversion of hours into days by the scheduling software, a standard working day consists of eight work hours per day from 8:00 AM to 5:00 PM with a 1-hour non-work lunch at 12:00 PM - 1:00 PM. Remain consistent with these start and finish times in each calendar (5 day work week, 6-day work week, 7-day work week, etc.).

2.5.2 Reserved

2.5.3 Revised Baseline Project Schedule Requirements

Major changes to the Project Schedule must be submitted for GDOT review and approval as part of a Revised Baseline Project Schedule submittal. Comply with all applicable requirements specified for a Baseline Project Schedule and a Project Schedule Update. Once approved by GDOT, use the Revised Baseline Project Schedule as the basis for subsequent Project Schedule Updates.

From time to time, GDOT may direct or the DB Team may request submittal of a Revised Baseline Project Schedule, subject to GDOT approval. GDOT direction or approval of the submittal of a Revised Baseline Project Schedule does not constitute a Relief Event or Compensation Event. GDOT may direct the DB Team to develop and submit a Revised Baseline Project Schedule when any of the following occur:

1. Project scope has changed substantially due to Supplemental Agreement(s) or accepted Relief Events by GDOT, whether individual or in aggregate.
2. Within 30 days of completing Final Design or once 30-percent completion of the Construction Work is achieved, whichever occurs sooner.
3. The overall approach to Work, sequencing, and timing are fundamentally changed. This includes revisions to the Construction Phasing and Staging Plan, wholesale resequencing of the Work, and substantial changes to the DB Team’s means, methods, crew planning and staffing, field conditions, resource constraints, production rates, durations, or calendar work/non-work periods (work days or work hours/day).
4. The Project Schedule forecasts a Completion Date that is more than 30 days later than the Milestone Deadline.
5. If GDOT, in its sole discretion, determines that the current plan, as communicated by the Project Schedule, is insufficient or unreasonable, or that the DB Team’s execution of the current plan is deemed to be insufficient and unlikely to achieve the successful completion of the Project within the Milestone Deadlines.

2.5.4 Reserved

2.5.5 Project Schedule Narrative Requirements

With each Project Schedule submittal, include a separate Project Schedule Narrative meeting the requirements specified throughout this Section 2.5 (Project Schedule Requirements) and Section 2.6 (Payment Requests and Payment) and as further detailed below. Update and correlate the Project Schedule Narrative with each Project Schedule submittal.

For Baseline Project Schedule and Revised Baseline Project Schedule submittals, include the following, separated into sections:

1. An explanation of the overall plan to complete the Project, including where the Work will begin and how the Work and crews will progress through the Project. Identify all resource constraints including list of crews/crew types and equipment.
2. If Project Schedule recovery efforts are required as part of a Revised Baseline Project Schedule or at the sole discretion of GDOT, the DB Team shall identify the composition of, and production rate for, each crew type.
3. An explanation of the use and application of the workdays per week, number of shifts per day, number of hours per shift, holidays observed and how the Project Schedule accommodates anticipated weather days for each month.
4. A description of the Work to be completed each season (for multi-year projects).
5. A description of the critical path(s) and near-critical path(s).
6. A description of risks to the project.
7. Clearly identify any non-work periods, starts or completions imposed on the Project Schedule.
8. A statement describing the status of any required permits.
9. Reference the Construction Phasing and Staging Plan with which the Project Schedule submittal aligns. Clearly describe any discrepancies or deviations between the Project Schedule and the Construction Phasing and Staging Plan and state the reasons and justification for each (if none; so state).
10. Include a detailed description of how the Project Schedule incorporates Work authorized by Supplemental Agreement, accepted Relief Events. A discussion of delays in the Project Schedule Narrative does not constitute notice in accordance with Volume 1, Articles 13 (GDOT Changes; DB Team Changes; Directive Letters) and 14 (Relief Events; Compensation Events).

A Project Schedule Update submittal shall be submitted upon GDOT Request, and shall include the following, separated into sections:

1. A description of the work performed since the last approved or accepted Project Schedule. If the Work performed does not match the Work scheduled to be performed,
include a detailed description of why there is a discrepancy between the activities that should have been completed or progressed as indicated in the latest approved or accepted Project Schedule submittal.

2. A description of the status of the forecasted Completion Dates relative to each required Milestone Deadline. Address any changes since the latest approved or accepted Project Schedule submittal and provide an explanation if any forecasted Completion Dates are projected to occur after the required Milestone Deadlines.

3. A description of any problems encountered or anticipated since the latest approved or accepted Project Schedule submittal, inclusive of any unusual labor, shift, equipment or material conditions or restrictions encountered.

4. A description stating the dates which the DB Team could not work on activities identified on the critical path due to weather. If there were no weather delays experienced during the previous month the Project Schedule Narrative should state as such. Any such statements regarding weather delays does not constitute notice in accordance with Volume 1, Articles 13 (GDOT Changes; DB Team Changes; Directive Letters) and 14 (Relief Events; Compensation Events).

5. A detailed description of all proposed changes to the latest approved or accepted Project Schedule with justification for changes to any of the following: critical path, activity sets (added, deleted, or modified), original durations, software settings, or 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.

6. A description of the critical path(s) and near-critical path(s).

7. A statement describing the status of any required permits.

8. A description of any risks or issues that may potentially impact the Project Schedule. Identification does not constitute nor satisfy the notice requirements of Relief Events under the DBA.

9. A statement that identifies any delays. The statement should include identification of the delayed activity, the type of delay, the cause of the delay, the effect of the delay on other activities and Completion Dates and identification of actions required to mitigate the delay. A discussion of delays in the Project Schedule Narrative does not constitute notice in accordance with Volume 1, Articles 13 (GDOT Changes; DB Team Changes; Directive Letters) and 14 (Relief Events; Compensation Events).

2.5.6 Project Schedule Submittal Requirements

Project Schedule submittals shall be provided and reviewed in accordance with timing requirements and durations specified in Table 3-1 (Master Submittal List). Include the following with all Project Schedule submittals:

1. A full schedule plot (PDF format) in a layout acceptable to GDOT.

2. A Project Schedule Narrative (PDF or MS Word file format) meeting the requirements of this Section 2.5 (Project Schedule Requirements).

GDOT shall review Baseline Project Schedule submittals and Revised Baseline Project Schedule submittals and return them as approved, approved with comments, or returned to be
revised and resubmitted. Project Schedule Updates will be accepted, accepted with comments, or returned to be revised and resubmitted.

GDOT’s approval or acceptance is for conformance to the requirements of the DB Documents and Good Industry Practice and represents that the submittal appears to meet the requirements of the DB Documents and appears to provide a valid Work plan for the Project, but in no way constitutes GDOT’s approval or acceptance of the sufficiency of DB Team’s planning, sequencing, means and methods and does not relieve the DB Team of sole responsibility for meeting DB Document requirements and Milestone Deadlines.

Approval or acceptance does not expressly or by implication warrant, acknowledge, or admit the reasonableness of the logic, durations, resourcing, or any other element. If the DB Team fails to define any element of Work, activity, or logic and GDOT’s review does not detect this omission or error, the DB Team remains responsible for correcting the error or omission without qualification. GDOT approval does not waive any DB Document requirement unless such approval includes specific, written statement of waiver of a requirement by GDOT subsequent to a written request for such waiver by the DB Team.

If the DB Team fails to submit a Project Schedule or if GDOT deems that any Project Schedule fails to meet the requirements of this Section 2.5 (Project Schedule Requirements) or the DB Documents, GDOT may withhold a Payment Request until the Project Schedule containing the required information is submitted and approved or accepted by GDOT, as applicable.

Unapproved or unaccepted Project Schedules and associated data shall not be considered relevant or applicable for any purposes during or after completion of the Project and shall not be binding on GDOT.

### 2.5.7 Project Schedule Software Requirements

Provide Project Schedules in a computer-generated graphic in tabular format (e.g. MS Excel, Adobe, etc.).

### 2.5.8 Reserved

### 2.5.9 Two-Week Detail Schedule Requirements

Two-Week Detail Schedule submittals shall be provided and reviewed in accordance with timing requirements and durations specified in Table 3-1. Ensure Two-Week Detail Schedules:

1. Include a rolling period of at least two weeks ahead for planned activities and one week back (recording actual dates and durations for Work performed).
2. Are based on the current Project Schedule Update 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. Align accurately with and are derived from the current Project Schedule with any deviations clearly noted and explained.
4. Reference the applicable Project Schedule activity identification numbers and define subsequent specific daily operations for all Work activities scheduled to be performed during the look-ahead period.
2.6 Payment Requests and Payment

2.6.1 Schedule of Values (SOV)

Schedule of Values (SOV) means a detailed price breakdown structure of all Elements of the Work listed as discrete Payment Activities organized in a logical and hierarchal manner. The SOV shall be used as the mechanism for determining progress payments on a percent-complete basis with associated dollar amounts identified for each Payment Activity to justify monthly Payment Requests. Include a separate SOV narrative in PDF format that describes the DB Team’s rational basis and include sufficient detail that addresses each of the following:

1. the proposed structure and organization of the SOV;
2. the intended scope of each Payment Activity shown on the SOV; and
3. the scheduled value (budgeted amount) assigned to each Payment Activity.

Update the SOV narrative with each SOV update to include the DB Team’s rational basis for partial payment sought for Work performed during the period, which shall be based on the completed portion of each Payment Activity’s scheduled value shown on the SOV. Unless otherwise described in this Section 2.6 (Payment Requests and Payment), no payments will be made until the SOV is approved. Supplemental Agreements that include changes to the Contract Sum will be incorporated into the SOV.

Prepare the SOV and apportion the Contract Sum across Payment Activities such that the sum of the prices of all Payment Activities equals the Contract Sum. Payment Activities shall meet requirements described in Section 2.6.1.1 (Payment Activities).

Include for each Payment Activity shown on the SOV the following populated fields:

1. Unique and consistently labeled Payment Activity identification number
2. Unique and consistently labeled Payment Activity description
3. Scheduled Value (aka budgeted amount on price basis; include quantity, unit of measure, and unit price if applicable)
4. Previous amount paid to date (on price and percent-complete basis of Scheduled Value)
5. Amount requested for current period (on price and percent-complete basis of Scheduled Value)
6. Cumulative Total Completed to Date (on price and percent-complete basis of Scheduled Value)
7. Balance to Finish (aka Remaining amount on price and percent-complete basis of Scheduled Value)

SOV refers to any of the following: SOV or SOV Updates, as further defined in this Section 2.6 and as appropriate for the context in which they are used.

2.6.1.1 Payment Activities

Payment Activities are Elements of the Work for which payment on account of the Contract Sum shall be due, subject to the terms of this Agreement. Include subtotals for logical groupings of Payment Activities. Unless otherwise approved in writing by GDOT, structure the SOV to roll-up
to those Payment Activities and associated Scheduled Values included in Volume 1, Exhibit 5 (Proposal SOV).

Further subdivide the Work into sufficiently detailed Payment Activities to the satisfaction of GDOT. Payment Activities shown on the SOV must be reasonably associated with and supported by the activities represented by the Project Schedule. Upon GDOT request, provide further detail to accurately represent the value of the Work for the Payment Activities comprising the SOV prior to submittal of the first Payment Request or when directed by GDOT. Payment Activities shown on the SOV shall meet the following criteria:

1. Payment Activities cannot be front-loaded.
2. Once approved, Payment Activities cannot be modified in identification number, description or Scheduled Value without prior GDOT approval. GDOT intends for such modifications to occur rarely.
3. The Scheduled Value for each Payment Activity shall accurately represent the value of the Element of the Work identified.
4. Include separate Payment Activities for each of the following:
   a. Mobilization, which shall not exceed 2.5 percent of the sum of the Construction and Design Complete amount identified in the SOV.
   b. CQAF services contract (if required by DB Documents).
   c. Record Drawings (As-Built) Submittal, which shall be no less than 0.1 percent of the sum of the Construction and Design Complete amount identified in the SOV.
   d. Completion of punch list items, which shall be no less than 0.5 percent of the sum of the Construction and Design Complete amount identified in the SOV.
   e. Final Close-out, which shall be no less than 0.2 percent of the sum of the Construction and Design Complete amount identified in the SOV.
   f. Demobilization, which shall be no less than 0.2 percent of sum of the Construction and Design Complete amount identified in the SOV.
   g. Each site listed in Attachment 1-1 (DMS Locations)

2.6.1.2 SOV Submittal Requirements

The Proposal SOV (Volume 1, Exhibit 5) will be used to pay for Work performed during the first 90 days following NTP 1. Payment Requests based on the Proposal SOV are subject to Sections 2.6.1 (Payment Activities) through 2.6.10 (Payment to Contractors and Subcontractors). After 90 days, no further payment will be made until the SOV is approved by GDOT and is progressed for the period in which the DB Team intends to be paid. The SOV shall be submitted by the DB Team and reviewed by GDOT for approval in accordance with timing requirements and durations specified in Table 3-1.

An SOV Update shall be submitted with and shall justify the DB Team’s monthly Payment Requests. Provide SOV Updates in accordance with Section 2.6.4 (Payment Request Approval and Processing) and Section 2.6.5 (Documents Required to be Provided with the Payment Request). The DB Team and GDOT will agree upon the progress percent complete and the associated dollar amount for Work in place related to each Payment Activity shown on the SOV. Progress shown on Payment Activities must be reasonably associated with and supported by
the activity status information as represented by the corresponding Project Schedule Update submittal.

2.6.2 Draft Payment Request
Submit a draft Payment Request to GDOT containing the amount asserted to be payable for each Payment Activity shown on the SOV and other amounts due under approved Supplemental Agreements. The draft Payment Request, lien release, and certification shall be submitted on forms provided or approved by GDOT, which approval shall be secured prior to the Payment Request Review Meeting.

Upon receipt of a draft Payment Request, GDOT will review the submitted Payment Request and provide comments to the DB Team listing any discrepancies and amounts intended to be withheld or deducted.

2.6.3 Payment Request Review Meeting
Schedule and hold a Payment Request review and progress status meeting with GDOT, if requested by GDOT, after submitting a draft Payment Request and prior to submitting a final Payment Request each month. The Payment Request review meeting is to obtain GDOT's comments or the changes necessary to the draft Payment Request to allow a final Payment Request to be submitted by the DB Team. The meeting shall address and finalize the status of the following:

1. Excepting allowable Payment Requests based on the Proposal SOV, for each Payment Activity with progress provide supporting activity status information as represented by the current Project Schedule submittal.
2. Incorporation of and summary list of all Supplemental Agreements.
3. Each Payment Activity which includes Nonconforming Work.
4. Any other payment requested, such as for mobilization, demobilization, insurance and bonding, or unincorporated materials.

2.6.4 Payment Request Approval and Processing
Submit a final Payment Request to GDOT by the fifth day of each month, containing the amount asserted to be payable for each Payment Activity and amounts due under approved Supplemental Agreements. The final Payment Request will address all comments provided by GDOT to the DB Team at the Payment Request review meeting.

Payment Request shall be submitted electronically using forms provided by GDOT and shall include supporting documentation for the amount claimed payable when requested by GDOT.

GDOT will review the Payment Request within five Business Days of receipt from the DB Team. If GDOT disagrees with the amounts requested or unresolved items remain, submit a revised Payment Request to address any outstanding issues identified by GDOT. If the DB Team includes items for payment that remain unresolved, GDOT will either: i) notify the DB Team that unresolved items in the Payment Request remain and request a resubmittal of a revised Payment Request; or ii) deduct those amounts GDOT asserts are not eligible for payment and
process the Payment Request. In such case, GDOT shall notify the DB Team of any such deductions.

2.6.5 Documents Required to be Provided with the Payment Request

The following documents shall be submitted with each final Payment Request application. No Payment Request will be processed without such documents properly completed, signed, and dated:

1. SOV Update meeting the requirements of this Section 2.6 (Payment Requests and Payment) progressed through the month for which payment is being requested.
2. All required insurance certificates.
3. Any other document or submittal required by the DB Documents to be provided.

2.6.6 Limitations on Progress Payments

GDOT will not pay for Work unless the following conditions are met with respect to such Work:

1. Accepted Released for Construction Documents and any supporting design documentation are on Site for the Work being performed and for which payment is being requested.
2. Nonconforming Work Items are corrected and/or resolved to the satisfaction of GDOT for Payment Activities that are asserted as complete.
3. Payment will be made based upon the approved Scheduled Value multiplied by the total percentage of the Work completed for that reporting period. Payment Activities shall not be fully paid (100 percent of the Scheduled Value) until that portion of the Work is completed and all applicable required documentation is received and accepted by GDOT.
4. The amount payable to the DB Team for insurance and bond premiums will be their actual cost, which will be paid (reimbursed) upon proof of payment by the DB Team. Where an activity requires submittal of a bond, the activity is complete when the bond has been provided in the amount and under the terms required in the Agreement.
5. For Mobilization Payment Activity:
   a. The first Payment Request after NTP 3 may include up to 50 percent of the amount for Mobilization set forth in the approved SOV.
   b. After 5 percent of the Construction total set forth in the approved SOV is incurred, the next Payment Request may include up to 100 percent of the amount of Mobilization set forth in the approved SOV, minus any previous payments.

2.6.7 Price Reductions for Nonconforming Work

On any Payment Request, GDOT may suspend or deduct amounts otherwise due to the DB Team for that period’s apportionment for any continuing activity for any of the items identified in Volume 1, Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions).

If the DB Team fails to completely prosecute Work or correct Nonconforming Work or incorrectly progressed Work for which that Payment Activity was paid in full, GDOT may deduct amounts
from the next successive month for that Work until the Nonconforming Work is resolved to the satisfaction of GDOT.

Nonconforming Work, if accepted by GDOT, will result in reductions of the Contract Sum as specified herein. The DB Team shall be provided the opportunity to either accept a reduction offered by GDOT or to remove and replace the Nonconforming Work at no additional cost to GDOT.

Where provided for in the GDOT Standard Specifications, unit prices for deductions may be applied by GDOT, including pay factors, daily deductions, and rejection values. Amounts for reductions of Nonconforming Work allowed to remain in place by GDOT that are not covered by GDOT Standard Specifications shall be determined by GDOT.

Girder defects will be assessed for price reductions based on long-term durability and maintenance concerns.

2.6.8 Other Deductions
GDOT may deduct from any amounts otherwise owing to the DB Team, including for each monthly progress payment and the final payment, the following:

1. Any anticipated or accrued losses, liability, liquidated damages, fees, or other damages for which the DB Team is responsible.
2. The estimated or actual cost, as determined by GDOT, of remedying any Nonconforming Work or otherwise remedying any breach of contract by the DB Team.
3. The disputed amount of any outstanding claim relating to the Work.
4. The estimated amount, as determined by GDOT, or the amount identified in the SOV, whichever is greater, for Work that the DB Team is obligated to perform that the DB Team has failed to perform.
5. Any other sums which GDOT is entitled to withhold, deduct, or recover from the DB Team under the terms of the Contract.
6. With regard to final payment, in addition to the above, the amount GDOT deems advisable to retain to cover any existing or threatened Disputes, Claims, Liens, and stop notices relating to the Project, and the cost of any uncompleted Work (including uncompleted Warranty Work).

GDOT’s failure to deduct from a progress payment or final payment any amount that GDOT is entitled to recover from the DB Team under the Contract shall not constitute a waiver of GDOT’s right to such amounts.

2.6.9 Processing and Payment
Once GDOT reviews and approves a final or revised Payment Request acceptable to GDOT and in accordance with Sections 2.6.4 (Payment Request Approval and Processing) and 2.6.5 (Documents Required to be Provided with the Payment Request), GDOT will sign and date and return a copy of the Payment Request cover sheet with any corrections noted and proceed with processing the Payment Request.
2.6.10 Payment to Contractors and Subcontractors

Upon receipt of payment, promptly pay all Contractors out of the amount paid to the DB Team on account of the respective Work performed by such Contractors as and to the extent that such Contractors are entitled to same under the respective Contracts and applicable law. Require Contractors by appropriate agreement with the Subcontractors to require all such Subcontractors to make payments to all downstream sub-subcontractors and suppliers in a similar manner. 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 the DB Team and jointly payable to any such parties where the DB Team has failed to remit payments properly due and as required.

In no event shall the DB Team include in any Payment Request amount any request for payment on account of Work performed by any Contractor or Subcontractor that shall not be remitted to such parties in accordance with the terms of the DB Documents and applicable Law.

In no event shall either the DB Team or any Contractor or Subcontractor withhold or impose retainage on any Subcontractor or Supplier, or any downstream sub-subcontractors or suppliers of any tier. With each Payment Request, provide GDOT with details regarding the withholding or deduction of any payments to Contractors or Subcontractors, including specificity as to amounts and the basis for such withholding or deductions and if any such Contractors or Subcontractors are included within the DB Team’s SVDBE Commitments List.

2.6.10.1 SVDBE Measurement and Payment

Transmit a copy of the SVDBE Report to GDOT within 30 days of the end of the month. If the report is not submitted within the above timeframe, GDOT may withhold a Payment Request. To substitute a SVDBE listed in the SVDBE plan, take all reasonable efforts to replace a SVDBE Subcontractor with another SVDBE. Send all removal and replacement requests to GDOT for acceptance prior to the substituted firm beginning Work. Actively demonstrate Good Faith Efforts in meeting the SVDBE Goal throughout the Contract term. Good Faith Efforts may be actions taken to assist interested SVDBEs in obtaining bonding, lines of credit, or insurance as required by the contractor, actions taken to assist interested SVDBEs in obtaining necessary equipment, supplies, materials, or related assistance or services, and/or using the services available from minority/women centered community organizations; Contractors’ groups; local, state, and Office of EEO Supportive Services Staff; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of SVDBEs.

Issuance of the Contract Award and/or Notice to Proceed does not accept the individual SVDBE firms. A Payment Request may be withheld until final acceptance of the listed SVDBE is granted by GDOT.

2.6.11 Application for Final Payment

Final payment will be made in accordance with Section 2.6.12 (Final Payment).

On or about the date of delivery of GDOT’s issuance of the certificate of Final Acceptance, prepare and submit an application for final payment ("Final Payment") to GDOT showing the
proposed total amount due the DB Team. In addition to meeting all other requirements for invoices hereunder, the application for Final Payment shall include (i) the executed release and affidavit described below; (ii) a list of any asserted, outstanding, or pending Relief Events or Compensation Events and all existing or asserted claims, liens, and stop notices by Subcontractors, laborers, Utility Owners, or other third parties relating to the Project, including any notices filed or to be filed with the Affidavit of Final Completion, stating the amount at issue associated with each such notice; (iii) the written consent by the Surety to such payment; and (iv) such other documentation as GDOT may reasonably require.

GDOT will review the DB Team’s proposed application for Final Payment, and changes or corrections will be forwarded to the DB Team for correction. If no changes or corrections are required, GDOT will approve the Application for Final Payment.

2.6.12 Final Payment

As a condition to its obligation to make payment to the DB Team based on the application for Final Payment, GDOT shall have received an executed release from the DB Team, releasing and waiving any claims against the Indemnified Parties, excluding only those matters identified in any asserted, outstanding, or pending Relief Event or Compensation Event Notices listed as outstanding in the application for Final Payment, and otherwise satisfactory in form and content to GDOT.

The executed release shall be accompanied by an affidavit from the DB Team certifying the following:

1. All Work has been performed in strict accordance with the requirements of the DB Documents.
2. The DB Team has resolved any claims made by Subcontractors, Suppliers, Utility Owners, laborers, and others against the DB Team, GDOT, or the Project, except for those claims identified in the Application for Final Payment or those claims for which the Subcontractor has executed a release against GDOT, the Project, and the Payment Bond.
3. The DB Team has followed GDOT’s procedures for Final Acceptance and has provided complete lien releases from all Subcontractors and Suppliers, except for those with claims listed above, in a form and with language provided by GDOT.
4. The DB Team has no reason to believe that any Person has a valid claim against the DB Team, GDOT, or the Project that has not been communicated in writing by the DB Team to GDOT as of the date of the certificate.

All prior partial estimates and payments shall be subject to correction in the Final Payment.

The executed release and the affidavit shall survive Final Payment. The payment amount will be reduced by any amounts deductible under these DB Documents.

The DB Team’s acceptance of Final Payment shall constitute a waiver of affirmative claims by the DB Team, except such claims previously made in writing and identified in writing as outstanding and unsettled at the time of the application for Final Payment.
2.6.13 No Waiver

No payments shall be construed as an acceptance of any defective work or improper materials nor shall any such payments be conclusive evidence of the performance of this Agreement.

2.7 Project Closeout

2.7.1 Record Drawings and Project Closeout

The EOR shall perform a Site visit following NTP 3 and prior to Substantial Completion. The purpose of the Site visits is for the EOR to visually inspect the progression of the Work for compliance to the RFC Documents. The EOR shall prepare and stamp a Site observation compliance report to document elements of the Work that are compliant and non-compliant with the RFC Documents. If elements of the Work are not compliant with the RFC Documents, the EOR shall coordinate with the DB Team to determine corrective action and describe the corrective action in the Site observation compliance report. The Site observation compliance report shall be submitted within seven days of the Site visit and the EOR shall schedule a subsequent quarterly as-built review meeting.

2.7.1.1 Engineer of Record Final Inspection

The EOR and CQAM shall participate in any final inspection and prepare a final Site observation compliance report to document elements of the Work that are compliant and non-compliant with the RFC Documents. If elements of the Work are not compliant with the RFC Documents, the EOR shall coordinate with the DB Team to determine corrective action and describe the corrective action in the final Site observation compliance report. This process shall be repeated until no non-compliance items remain. The final Site observation compliance report(s) shall be submitted within seven days of the Site visit, and the last one submitted, once all non-compliance items are corrected and meet the DB Requirements. Final Acceptance cannot be achieved until this process is complete and the final Site observation compliance report, stamped by the EOR and certified by the CQAM as accurate and complete, is received by GDOT.

2.7.1.2 Record Drawings

Submit to GDOT a complete set of Final Design documents and Record Drawings for all the Construction Phases of the Project within 30 days of Substantial Completion and upon completion of the Construction Work, organized by Construction Phase, as a condition to Final Acceptance. Ensure the Record Drawings and documentation are an organized, complete record of Work performed and supporting calculations and details that accurately represent what the DB Team constructed. Ensure that the Record Drawings reflect the actual condition of the constructed Work.

Submit prior to any portion of the Project being opened to traffic Record Drawings for that portion of the Project in hardcopy and electronic format with a signed statement by the EOR and CQAM that the Record Drawings reflect the actual condition of the constructed Work.

Provide, in accordance with Section 3 (Design and Submittals), via the PMCS including:
1. All electronic design files, electronic calculations, etc.
2. Full-size 24-by-36-inch .pdf of each plan sheet and the entire plan set

Provide the following in hardcopy format:

1. Full-size 24-by-36-inch set of bound prints, or smaller size as may be agreed to by GDOT

Provide these Record Drawings not as field sketches or redlines, but as CAD generated drawings that compile all field changes, redlines, plan revisions, and all 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 Work.

Ensure all files conform to the criteria for the design platform (InRoads, MicroStation, CAD) found in GDOT’s Electronic Data Guidelines (EDG).

The DB Team is responsible for all production and delivery of materials needed for GDOT review.

Final Acceptance cannot be achieved until a complete set of Record Drawings is received and accepted by GDOT.

2.8 Deliverables
As indicated in this Section 2 and in Section 3 (Design and Submittals).
3 DESIGN AND SUBMITTALS

3.1 General
Provide Project Submittals in both electronic and hardcopy format.

3.2 Administrative Requirements

3.2.1 Software
Proprietary structural design software may be used in lieu of GDOT specific computer software products. All alternative software products are subject to prior GDOT approval, 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.

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. Provide the input, formulas (with code references shown), and output for hand calculations developed using software so that it can be verified. Ensure that proprietary software output is not a black box type output, and all code checks are visible to be verified by an independent checker. GDOT may require further verification of results of any design software using GDOT bridge design programs, hand calculations, or structural analysis software. Seek GDOT determination of any such reviews, and account for any additional GDOT review time in the Project Schedule, which additional time shall not constitute a Relief Event.

Use of any software does not relieve the designer of their responsibility to perform required QA/QC of designs performed using this software. Errors or deficiencies that exist in any proprietary or commercial software that produce errors in the design or construction will be the responsibility of the DB Team.

InRoads output and Microsoft Excel spreadsheets may be subject to verification of results using GDOT’s bridge geometry program.
3.2.2  GDOT Standards and Manuals

Ensure that all Work complies with all applicable Manuals and Guidelines developed for and including AASHTO, FHWA, GDOT, and additional requirements stated in Attachment 3-1 (Manuals) and reasonably inferred therefrom.

Reference Section 1 (General) regarding applicability of GDOT standards and specifications and manuals.

3.2.3  Detailed Estimate of Quantities

Provide a detailed estimate with the RFC Plans that identifies GDOT Pay Items, pay item descriptions, units, and estimated quantities for the Project. Provide quantities in the Final Bridge Plans in accordance with the GDOT Bridge and Structures Design Manual.

3.3  Design Requirements

3.3.1  Design Workshop

The DB Team’s Engineer of Record (EOR) shall organize and facilitate the design review kick-off workshop with GDOT, no later than 30 days from NTP 1, to discuss the DB Team’s approach to design the Project, any phasing, design packages, and related design Submittals. Ensure that the Designer’s personnel, GDOT, and the Utility Adjustment Team (UAT) are in attendance. The purpose is to familiarize involved personnel with the design concepts, issues, status, and review procedures. Jointly develop the workshop agenda with GDOT and agree upon how it will be organized (such as by GDOT department and engineering discipline). During the design workshop, discuss with GDOT any application of Interim Design reviews to reach resolution for Project Elements that pose complex constraints or entail additional review effort. The workshop will also discuss the extent of GDOT and UAT reviews. The primary goal of the workshop is to make the design review process more effective and efficient for all parties. Agreements made regarding design review times are aspirational only and do not override the durations stipulated in the DB Documents.

3.3.2  Design Coordination Meetings

The EOR shall schedule and facilitate design coordination meetings. Ensure that the DQAM, the DB Team’s independent design reviewer(s), and any design professionals having significant input into the design under review are present. Notify and invite GDOT and the UAT to participate in all design reviews. Schedule design coordination review meetings no less frequently than monthly, or to the frequency determined by GDOT, until all Submittals have been accepted and Final Design is completed.

GDOT may also invite additional stakeholders to attend. GDOT’s participation in design coordination meetings does not relieve the DB Team of its responsibility for the satisfactory completion of the Work in accordance with all requirements of the DB Documents.

The EOR or designated design leads shall provide the meeting agendas at least three Business Days in advance of the meetings. Include in each agenda a detailed summary status of all submittals provided to GDOT that are the subject of the meeting. In addition, prepare and distribute minutes from the review meetings within three Business Days of the meeting.
Maintain design quality records in an auditable format according to the QMP procedures. GDOT has the right to audit the quality records for compliance with the QMP and DB Document requirements. Turn over all quality records to GDOT upon completion of the Project.

GDOT will facilitate a field plan review. At a minimum, the DB Team’s Engineer of Record (EOR) or design project manager and a representative of the DB Team’s contractor will attend.

### 3.3.3 Changes Subsequent to Design Review

Re-check and re-certify the design as an additional design review if the design is amended subsequent to design review and acceptance by GDOT. Substantive changes to plans and specifications initiated by the DB Team, and already checked by the EOR and certified by the DQAM, are subject to the design review process as an entirely new design.

### 3.3.4 Other Agency Approvals

#### 3.3.4.1 Federal Aviation Administration

Unless otherwise specified in the DB Documents, the DB Team is responsible for all costs for ascertaining and obtaining all required approvals, permits, and agreements for performance of the Work with the Federal Aviation Administration (FAA). The DB Team is responsible for all costs of the Work, whether incurred by the DB Team or by the FAA.

Ensure that design and permanent and temporary construction complies with requirements of the Federal Aviation Administration (FAA) aeronautical study.

### 3.3.5 Design Data Book

No requirements.

### 3.3.6 Design Submittals and Progress of Design Work

Documents received after 12:00 p.m. (noon) Eastern Standard or Daylight Savings Time (as applicable), including all notices, correspondence, communications (including e-mail and facsimile), or other Submittals received after 12:00 p.m. (noon), are deemed received on the first Business Day following delivery (for example, in order for a fax to be deemed received on the same day, at least the first page of the fax must have been received before 12:00 p.m.).

Deliver each required Submittal to GDOT in conformance of the review times provided in Volume 1, Article 6.3.2 (Time Periods) and in Table 3-1 (Master Submittal List). The times provided in Table 3-1 are specifically for the review period required for GDOT to comment and GDOT to subsequently accept. Accuracy, completeness, and time spent to address GDOT comments and resubmit for re-review are the responsibility of the DB Team.

No fabrication, casting, or construction will occur until all related design review and shop drawing review comments are resolved and the corresponding drawings and specifications have been accepted by GDOT and stamped Released for Construction.

Ensure all design Submittals are complete along with all the supporting information necessary for review. The Submittal and supporting information must represent logical Work activities and must show impacts on subsequent Work on this Project. Any modification to the component
construction due to subsequent design changes or as a result of design development is solely at the DB Team’s risk, regardless of GDOT acceptance.

Provide Project Submittals included in Table 3-1 (Master Submittal List). Table 3-1 may not be all-inclusive or exhaustive. It is the DB Team’s responsibility to determine and submit all items required by the DB Documents. Deliver each required Submittal to GDOT in compliance with the review times provided. The times provided are specifically for the review period required for GDOT to comment and subsequently accept (if all requirements of the DB Documents are met) or approve, as applicable. Not all Submittals listed in Table 3-1 may be required for the Project, and some Submittals may be combined into a single Submittal, such as the Project Management Plans; coordinate with GDOT prior to combining any Submittals and receive GDOT approval prior to omitting any listed Submittals.

**Abbreviations for Table**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC</td>
<td>Point File for Survey Data</td>
</tr>
<tr>
<td>AR</td>
<td>As Required</td>
</tr>
<tr>
<td>DTM</td>
<td>Digital Terrain Model</td>
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<tr>
<td>FS</td>
<td>Full-size paper – meets GDOT Plan Presentation Guide</td>
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<tr>
<td>HC</td>
<td>Hardcopy – 8 ½ x 11 inches unless otherwise noted</td>
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<tr>
<td>HS</td>
<td>Half-size paper – meets GDOT Plan Presentation Guide</td>
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<td>MP</td>
<td>Microsoft Project</td>
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<tr>
<td>MS</td>
<td>MicroStation File – Electronic</td>
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<td>Not Applicable</td>
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<td>Notice to Proceed</td>
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<td>P6</td>
<td>Primavera P6</td>
</tr>
<tr>
<td>PAS</td>
<td>Per Approved Schedule</td>
</tr>
<tr>
<td>PDF</td>
<td>Adobe PDF – One complete file and individual plan sheet files that meet GDOT Electronic Plans Process requirements</td>
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(Rest of page intentionally left blank)
## Table 3-1: Master Submittal List

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<thead>
<tr>
<th>Section</th>
<th>Submittal Item</th>
<th>Format</th>
<th>Quantity</th>
<th>Delivery Date</th>
<th>Review Period* (Days)</th>
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<tbody>
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<td>Vol. 1; Attach. 3-1</td>
<td>Subcontracts</td>
<td>PDF</td>
<td>1</td>
<td>As requested; In accordance with the Construction Manual</td>
<td>14</td>
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<td>2</td>
<td>Monthly Status Reports (includes cost, schedule, quality, status, etc.)</td>
<td>PDF</td>
<td>1</td>
<td>5th of each Month</td>
<td>NA</td>
</tr>
<tr>
<td>2; 3</td>
<td>Design and Construction Quality Records</td>
<td>AR</td>
<td>1</td>
<td>Always auditable; Submit at project completion</td>
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<td>1</td>
<td>Within 3 days of each meeting</td>
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<td>2.2.1</td>
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<td>As needed</td>
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</tr>
<tr>
<td>2.2.3</td>
<td>Construction Phasing and Staging Plan</td>
<td>PDF</td>
<td>1</td>
<td>Within 60 days from NTP 1 and within 14 days of being directed</td>
<td>30</td>
</tr>
<tr>
<td>2.3.3</td>
<td>DB Team Non-Conformance Reports</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>NA</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Quality Management Plan (QMP) including Administrative portion and the DQMP</td>
<td>PDF</td>
<td>1</td>
<td>Within 30 days from NTP 1 prior to the start of design</td>
<td>14</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Construction Quality Management Plan</td>
<td>PDF</td>
<td>1</td>
<td>See Section 2</td>
<td>14</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Safety Plan</td>
<td>PDF</td>
<td>1</td>
<td>See Section 2</td>
<td>14</td>
</tr>
<tr>
<td>2.5.1</td>
<td>Baseline Project Schedule</td>
<td>PDF, AR</td>
<td>1, 1</td>
<td>Within 60 days from NTP 1</td>
<td>30</td>
</tr>
<tr>
<td>2.5.1; 2.5.3</td>
<td>Baseline and Revised Baseline Project Schedule resubmittals</td>
<td>PDF, AR</td>
<td>1, 1</td>
<td>Within 14 days of being directed</td>
<td>14</td>
</tr>
<tr>
<td>2.5.3</td>
<td>Revised Baseline Project Schedule</td>
<td>PDF, AR</td>
<td>1, 1</td>
<td>Within 14 days of being directed, or as required</td>
<td>30</td>
</tr>
<tr>
<td>2.5.9</td>
<td>Two-Week Detail Schedule</td>
<td>PDF, AR</td>
<td>1</td>
<td>Same day every week in which Construction Work occurs</td>
<td>7</td>
</tr>
<tr>
<td>2.6.1</td>
<td>Schedule of Values (SOV)</td>
<td>PDF</td>
<td>1</td>
<td>Within 60 days from NTP 1</td>
<td>14</td>
</tr>
<tr>
<td>2.6.1</td>
<td>SOV resubmittals</td>
<td>PDF</td>
<td>1</td>
<td>Within 14 days of being directed</td>
<td>7</td>
</tr>
<tr>
<td>2.7.1</td>
<td>EOR site observation compliance report</td>
<td>PDF</td>
<td>1</td>
<td>See Section 2</td>
<td>14</td>
</tr>
<tr>
<td>2.7.1.2</td>
<td>Record Drawings (As-Built Plans)</td>
<td>FS, HS, PDF</td>
<td>**</td>
<td>See Sec. 2.7.1.2</td>
<td>14</td>
</tr>
<tr>
<td>Section</td>
<td>Submittal Item</td>
<td>Format</td>
<td>Quantity</td>
<td>Delivery Date</td>
<td>Review Period* (Days)</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>---------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>3</td>
<td>Final Design Specifications, Reports, Whitepapers, etc.</td>
<td>AR, PDF</td>
<td>1</td>
<td>**</td>
<td>14</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Interim Design &amp; Field Plan Review Plans</td>
<td>FS, HS, PDF</td>
<td>1, 10, 1</td>
<td>**</td>
<td>30</td>
</tr>
<tr>
<td>3.3.7.2;3.3.8.6.5</td>
<td>Plan Revisions During Construction</td>
<td>AR, PDF</td>
<td>1</td>
<td>**</td>
<td>14</td>
</tr>
<tr>
<td>3.3.8</td>
<td>Shop Drawings</td>
<td>PDF</td>
<td>1</td>
<td>**</td>
<td>14</td>
</tr>
<tr>
<td>3.3.8</td>
<td>Temporary Works - where public safety may be affected</td>
<td>PDF</td>
<td>1</td>
<td>**</td>
<td>14</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Information to support GDOT - Led Governmental Approvals</td>
<td>PDF, AR</td>
<td>1</td>
<td>As needed</td>
<td>Table 4-1</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Restoration/Mitigation Plan(s)</td>
<td>AR, PDF</td>
<td>1</td>
<td>As needed</td>
<td>14</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Section 404, permit(s)</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>Table 4-3</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Water Quality Certification (concurrently with the USACE Permit)</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>Table 4-3</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Applications to Regulatory Agencies, Application revisions, supplements</td>
<td>AR, PDF</td>
<td>1</td>
<td>As needed</td>
<td>***</td>
</tr>
<tr>
<td>4.3.4</td>
<td>UST and Hazardous Waste Site Investigation Report</td>
<td>AR, PDF</td>
<td>1</td>
<td>Within 180 days from NTP 1 and 30 days Prior to NTP 3</td>
<td>30</td>
</tr>
<tr>
<td>4.3.4</td>
<td>Hazardous Materials Management Plan (HMMP)</td>
<td>AR, PDF</td>
<td>1</td>
<td>As needed. Within 60 days from NTP 1</td>
<td>14</td>
</tr>
<tr>
<td>6.2.2.1</td>
<td>All Utility Meeting Minutes</td>
<td>PDF</td>
<td>1</td>
<td>Within 7 days of Utility Meeting</td>
<td>3</td>
</tr>
<tr>
<td>6.4.2</td>
<td>Utility Emergency Response Plan</td>
<td>PDF</td>
<td>1</td>
<td>30 days Prior to NTP 3</td>
<td>14</td>
</tr>
<tr>
<td>8.3.4</td>
<td>Soil Survey Reports</td>
<td>PDF</td>
<td>1</td>
<td>See Section 8</td>
<td>30</td>
</tr>
<tr>
<td>8.3.6</td>
<td>WFI (Wall Foundation Investigation)</td>
<td>PDF</td>
<td>1</td>
<td>**</td>
<td>30</td>
</tr>
<tr>
<td>9.2.3</td>
<td>Property Owner Notification Letters</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>7</td>
</tr>
<tr>
<td>9.3.2</td>
<td>Survey Control Package</td>
<td>ASC, PDF</td>
<td>1</td>
<td>Prior to Project Completion</td>
<td>N/A</td>
</tr>
<tr>
<td>9.3.6</td>
<td>Bound Field Notes</td>
<td>PDF</td>
<td>1</td>
<td>Prior to Project Completion or upon GDOT request</td>
<td>N/A</td>
</tr>
<tr>
<td>9.3.6</td>
<td>Topographic Mapping</td>
<td>DTM, PDF</td>
<td>1, 1</td>
<td>Prior to Project Completion</td>
<td>N/A</td>
</tr>
<tr>
<td>10.3.2</td>
<td>Demolition and Abandonment Plan</td>
<td>PDF</td>
<td>1</td>
<td>Within 90 days from NTP 1</td>
<td>14</td>
</tr>
<tr>
<td>Section</td>
<td>Submittal Item</td>
<td>Format</td>
<td>Quantity</td>
<td>Delivery Date</td>
<td>Review Period* (Days)</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>-------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>12.3.2</td>
<td>Stormwater System Report(s)</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>14</td>
</tr>
<tr>
<td>12.5.2</td>
<td>Hydraulic &amp; Hydrology Report</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>30</td>
</tr>
<tr>
<td>12.5.3</td>
<td>Drainage Design Report (Phased)</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>30</td>
</tr>
<tr>
<td>13.5.2</td>
<td>Preliminary Wall Layouts</td>
<td>FS, HS, PDF</td>
<td>2, 6, 1</td>
<td>**</td>
<td>30</td>
</tr>
<tr>
<td>13.5.3</td>
<td>Final Wall Plans</td>
<td>FS, HS, PDF</td>
<td>2, 6, 1</td>
<td>**</td>
<td>30</td>
</tr>
<tr>
<td>15.2.2</td>
<td>Landscaping Plans</td>
<td>AR, FS, HS, PDF</td>
<td>2, 6, 1</td>
<td>**</td>
<td>14</td>
</tr>
<tr>
<td>15.3.4</td>
<td>Documentation from supplier of Georgia Grown source for all vine, shrub and tree plants</td>
<td>AR</td>
<td>AR</td>
<td>Prior to installation</td>
<td>3</td>
</tr>
<tr>
<td>16.3.2</td>
<td>Overhead Sign Support Structures Concept Plans</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>14</td>
</tr>
<tr>
<td>16.3.2</td>
<td>Overhead Sign Support Structures Final Plans</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>14</td>
</tr>
<tr>
<td>16.3.4.2</td>
<td>Traffic Signal Timing Plans</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>14</td>
</tr>
<tr>
<td>16.3.4.3</td>
<td>Traffic Signal Permit/Engineering Study</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>30</td>
</tr>
<tr>
<td>17</td>
<td>ITS Related Submittals</td>
<td>AR</td>
<td>AR</td>
<td>Refer to Section 17</td>
<td>21</td>
</tr>
<tr>
<td>18.3.2</td>
<td>Traffic Control Plans (each Phase)</td>
<td>PDF</td>
<td>1</td>
<td>As needed</td>
<td>14</td>
</tr>
<tr>
<td>19.3.4</td>
<td>Maintenance Management Plan</td>
<td>PDF</td>
<td>1</td>
<td>Within 150 days from NTP 1</td>
<td>21</td>
</tr>
<tr>
<td>19.3.2; 19.3.3</td>
<td>Construction Maintenance Limits Plan including Joint Project Inspection submittal</td>
<td>FS, HS, PDF</td>
<td>2, 6, 1</td>
<td>Within 150 days from NTP 1</td>
<td>21</td>
</tr>
<tr>
<td>Various</td>
<td>Final Plans (100%)</td>
<td>FS, HS, PDF</td>
<td>2, 10, 1</td>
<td>**</td>
<td>30</td>
</tr>
<tr>
<td>Various</td>
<td>Released for Construction (RFC) Plans</td>
<td>HS, FS, PDF</td>
<td>3, 10, 1</td>
<td>**</td>
<td>NA</td>
</tr>
</tbody>
</table>

*R Review period is the period required for the generation of comments or the review time to determine the state or status of the document. Plan for multiple review periods that may be required for any submittal to secure Accepted or Approved status from GDOT.

*If a submittal is not listed, the review time shall be 30 days per Volume 1, Article 6.3.2 (Time Periods).

** Based upon the approved Baseline Project Schedule

*** Time of review will be based upon actual impact to Project

**** See Technical Provisions
3.3.7 Additional Submittal Requirements

Obtain any Government Approvals or other approvals required to allow for implementation and construction of the Construction Phasing and Staging Plan.

3.3.7.1 Staged Design Submittals

The DB Team may submit Staged Design Submittals (components) for the Project. A Staged Design Submittal is a submittal that consists of a portion or portions of the Work within the limits of an accepted Construction Phase. For example, a Staged Design Submittal for a bridge might be categorized as foundations, substructures, abutments, or complete continuous units of superstructure. Staged Design Submittals for other components of the Project might include grading, drainage, signing and pavement marking, and erosion control. Ensure the Staged Design Submittals, Construction Phasing and Staging Plan, and Project Schedule are aligned and consistent. Ensure that Staged Design Submittals also includes all reports, specifications, studies, calculations, and supporting documents and information.

For each Construction Phase shown in the Construction Phasing and Staging Plan, either submit a complete set of drawings or make a series of Staged Design Submittals (components). The timing and content of Staged Design Submittals must 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.).

3.3.7.2 Changes to Accepted and Released for Construction Submittals

After a design package has been Released for Construction (RFC), any subsequent design changes must be submitted to GDOT with documentation from the EOR sufficient to justify the reasoning behind the change request. The DB Team must obtain written acceptance prior to its implementation as a plan revision, and prior to any related subsequent construction activity. Minor field adjustments or redline revisions do not require EOR approval or prior written acceptance.

3.3.7.3 Plan Presentation Requirements

Provide all plan submittals as required by and in accordance with the GDOT Plan Development Process (PDP), Electronic Data Guidelines (EDG) and the Plan Presentation Guide (PPG).

Ensure the Plans are fully dimensioned in English units and all elevations necessary for construction are shown similar to GDOT’s normal practice. Prepare all plans on the scales according to GDOT’s PPG.

Include details for all civil elements and calculations within proximity of the Site, for each location, so that these locations can be reviewed holistically and connections with communication and electrical networks are clearly understood.

3.3.7.4 Construction Plans Organization and Sheet Index

Assemble construction plans according to GDOT’s PPG.
3.3.7.5 Computations
Record all design computations and computer printouts neatly on 8.5- by 11-inch sheets, fully titled, numbered, indexed, dated, and signed by the designer/Project manager and checker. Submit the computer files and one copy of the computations fully checked and appropriately bound to GDOT with the plans.

Submit a complete tabulation of the drainage analysis along with the calculations used to determine the size of drainage structures to GDOT.

3.3.7.6 Submittal Formats
Ensure each design submittal, in addition to electronic delivery in .pdf format on the PMCS, consists of scalable 11-by-17-inch or 12-by-18-inch drawings, full size 24-by-36-inch design drawings, and calculations.

Ensure documents for all Final Plan submittals (plans, calculations, specifications, reports, etc.) is sealed by a qualified Professional Engineer. In addition to written design review comments (if any), design drawings may be returned to the DB Team with any remarks indicated.

3.3.7.7 Additional Specifications
Prepare and submit specifications for Construction Work included in the plans which are not covered by GDOT’s Standard Specifications, the Supplemental Specifications, and/or the Special Provisions as required in Attachment 3-1 (Manuals) in addition to the design drawings that include Georgia standards and details.

3.3.7.8 Submittals Process
Review of the Design Documents by GDOT may be limited to the basic requirements of the DB Documents, relating to design compliance and material types and may not include detailed review or checking of design of components and related details or the accuracy with which such designs are depicted on the design drawings.

Review or acceptance by GDOT or other Persons of any Design Documents does not relieve the DB Team of responsibility under the Contract, including the overall correctness of Design Documents, such as engineering mathematical computations. Submit all Design Documents, including plans, specifications, reports, calculations, shop drawings (where public safety is affected), and Permit documents to GDOT.

Provide all copies for distribution. GDOT will be responsible for distributing the submittals to all required parties of the contract.

Include in all Submittals the DB Team’s QA certification statement (in addition to the design consultant’s QA certification statement for all design-related submittals) including a certification statement that the submittal complies with all terms and conditions of the Agreement, signed by the EOR. GDOT will reject any submittal if the QA certification statement is not included.
3.3.7.9 Required Participants of the Process

The QAM and DQAM, except as otherwise required in the DB Documents, will be primarily responsible for verifying that the accepted Design Quality Management Plan process as required in Section 2.3 (Quality Management Requirements) has been followed, verifying that the submittal meets all DB Document requirements, ensuring that all necessary Governmental Approvals have been obtained by the DB Team, and performing any review(s) as provided for in this Section 3.

Provide all required Submittals in compliance with the DB Documents.

3.3.7.10 GDOT Design Review Process

Provide the submittal to GDOT via the PMCS and the required copies in accordance with the DB Documents. Categorize submittals into Discipline Groups as follows:

1. Right of Way, Railroad, and Utilities (RRU Group)
2. Roadway, Drainage, and Maintenance of Traffic (RDMOT Group)
3. Bridge, Structures, Retaining Walls, and Aesthetics (BSRA Group)
4. ITS, Traffic (includes signing, pavement marking, signals, and lighting) (ITSTT)
5. All types (ALL Group)
6. Other (OTH)

GDOT will log in the submittal and distribute to the required review participants.

The review period begins the following Business Day after any submittal is received for the period prescribed in Volume 1, Article 6.3.2 (Time Periods) and Table 3-1 (Master Submittal List), except where there is a maximum number of concurrent submittals of a particular type specifically noted in this Section 3. In cases where the maximum is exceeded, the review period will begin when prior submittal reviews are completed so that the maximum number in concurrent review is not exceeded. For the general case where there is not a maximum number of concurrent submittals specifically noted in this Section 3, an additional seven days will be added to the prescribed review period whenever there are more than five concurrent submittals in review in the subject document’s particular Discipline Group. Further, an additional seven days will be added for each additional increment of five concurrent submittals in review in a Discipline Group. For example, if there are six to 10 submittals in concurrent review in a Discipline Group, then an additional seven days are added; and if there are 11 to 15 submittals in concurrent review in a Discipline Group, then an additional 14 days are added, etc. For purposes of calculating the number of submittals, the accepted Project Schedule will generally be used as a guide, except that complementary documents, for example bridge plans and bridge calculations, will be considered a single Submittal. Documents that fully integrate multiple disciplines in the presentation, for example roadway and drainage plans, together with the respective calculations would be counted as one submittal. For documents or packages that include multiple bridges, each individual bridge will be counted as a separate submittal. For documents or packages that include multiple retaining walls, noise barriers, BFIs, or WFIs, GDOT will determine the number of Submittals to be counted.

Once a review is complete, the drawings or Submittal will be designated by GDOT as either:
1. Accepted
2. Accepted with Comments
3. Rejected

The terms Accepted and Accepted with Comments mean that the design process may proceed, and is not a notice that construction may begin.

**If Accepted or Accepted with Comments:** The GDOT representative will deliver the comments and, if necessary, return the drawings or Submittal via PMCS to the DB Team.

**If Rejected:** The GDOT representative will deliver the rejected drawings or Submittal via PMCS to the DB Team. Address the specific comments and resubmit. The resubmittal is a new Submittal and follows the same time period as provided in Volume 1, Article 6.3.2 (Time Periods) and Table 3-1 (Master Submittal List). Drawings or Submittals may be rejected without review if the submission is incomplete.

### 3.3.8 Shop Drawings and Temporary Works Submittals

#### 3.3.8.1 General

Shop drawings include all working, shop, and erection drawings, associated trade literature, calculations, schedules, manuals, and similar documents submitted by the DB Team to define some portion of the Project work. The type of work includes both permanent and temporary works as appropriate to the Project. Permanent works include all the permanent structures and parts thereof required of the completed DB Documents. Temporary works include any temporary construction work necessary for the construction of the permanent works. This includes falsework, formwork, scaffolding, shoring, temporary earthworks, sheeting, cofferdams, special erection equipment, and the like. Falsework includes any temporary Construction Work used to support the permanent structure until it becomes self-supporting. Falsework includes steel or timber beams, girders, columns, piles and foundations, and any proprietary equipment including modular shoring frames, post shores, and adjustable horizontal shoring. 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. Formwork may be either permanent formwork requiring a shop drawing submittal such as stay-in-place metal or concrete forms or may be temporary formwork that requires certification by the Professional Engineer designing the specialized components (the Specialty Engineer) for construction affecting public safety and for major and unusual structures. Scaffolding is an elevated work platform used to support workmen, materials and equipment, but not intended to support the structure. Shoring is a component of falsework such as horizontal, vertical, or inclined support members. This term is interchangeable with falsework.

Construction affecting public safety is defined as 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. It does not apply to those areas of
the Site under the DB Team’s control and outside the limits of, or influence of, normal public access.

For the purpose of shop drawing review and processing as described in this Section 3.3.8, the term Shop Drawing Engineer means a Professional Engineer as defined in Volume 1, Exhibit 1 (Acronyms and Definitions) and applies to the initiator or producer of shop drawings regardless of whether or not that party is normally the lead Professional Engineer for the design or the EOR; and the term Shop Drawing Checking Engineer means a Professional Engineer as defined in Exhibit 1 of Volume 1 and applies to the shop drawing checker and certifier regardless of whether or not that party is normally the EOR, the Shop Drawing Engineer, or the lead Professional Engineer for the design.

### 3.3.8.2 Work Items Requiring Shop Drawings

In general, GDOT requires shop drawings for items of work not fully detailed in the plans which require additional drawings and coordination prior to constructing the item, including:

1. Bridge components not fully detailed in the plans (i.e., segments, steel girder details, post-tensioning details, handrails, etc.)
2. Retaining wall systems
3. Precast box culverts
4. Non-standard drainage structures, attenuators, and other nonstructural items
5. Building structures
6. Drainage structures, attenuators, and other nonstructural items
7. Design and structural details furnished by the DB Team in compliance with the DB Documents
8. Temporary Works affecting public safety

### 3.3.8.3 Schedule of Submittals

Include shop drawings in the required Project Schedule. For each planned shop drawing submittal, define the type and approximate number of drawings or other documents that are included and the planned submittal date, considering the processing requirements herein. Coordinate subsequent submittals with Project Schedule to allow sufficient time for review and re-submittal as necessary.

### 3.3.8.4 Style, Numbering, and Material of Submittals

#### 3.3.8.4.1 Drawings

Submit the shop drawings electronically in PDF format on the PMCS. Furnish four sets of shop drawings to GDOT for review in addition to the electronic delivery. Consecutively number each sheet in the submittal series, and indicate the total number in the series (i.e., 1 of 12, 2 of 12, 12 of 12), and include on each sheet the following items as a minimum requirement:

1. Bridge Numbers
2. Drawing title and number
3. A title block showing the names of the fabricator or producer and the DB Team 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 items within the Project
7. The DB Team’s approval stamp with date and initials
8. The signature and seal of the Specialty Engineer when applicable

A re-submittal will be requested when any of the required information is not included.

3.3.8.4.2 Other Documents

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 in addition to electronic delivery in PDF format on the PMCS.

Clearly label and number each sheet in the submittal to indicate the total number of sheets in the series (i.e., 1 of 12, 2 of 12, . . . 12 of 12), and 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.

Bind and submit all documents with a table of contents cover sheet, and list on the cover sheet the total number of pages and appendices. Include a title referencing the submittal items, the name of the firm and persons responsible for the preparation of the document, the DB Team’s approval stamp with date and initials, and, when applicable, the signature and seal of the Specialty Engineer.

Submit appropriately prepared and checked calculations and manuals that clearly outline the design criteria, and include on the internal sheets the initials of the persons responsible for preparing and checking the document.

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.

3.3.8.4.3 Qualified Products List

Shop drawings are not required for Qualified Products accepted by GDOT and included on the Qualified Product Lists as specified in Attachment 3-1 (Manuals). Submit shop drawings to GDOT after the Shop Drawing Checking Engineer has reviewed and accepted for conformance with the DB Documents and compliance to the design intent for non-Qualified Products. Upon completion of GDOT’s review, GDOT’s red ink review stamp will signify an officially reviewed shop drawing and will state either Released for Construction or Released for Construction as Noted.
3.3.8.4.4 DB Team-Originated Design
Submit shop drawings and applicable calculations to the Shop Drawing Checking Engineer for review, and ensure that each sheet of the shop drawings and the cover sheet of the calculations are signed and sealed by the Shop Drawing Engineer.

3.3.8.4.5 Temporary Works
For construction affecting public safety, submit shop drawings and the applicable calculations for the design of special erection equipment, false-work, scaffolding, etc. to the Shop Drawing Checking Engineer, and ensure that each sheet of the shop drawings and the cover sheet of the applicable calculations is signed and sealed by the Shop Drawing Engineer.

3.3.8.4.6 Formwork and Scaffolding
The DB Team is solely responsible for the safe installation and use of all formwork and scaffolding. GDOT does not require any formwork or scaffolding submittals unless such work would be classified as construction affecting public safety.

3.3.8.4.7 Other Miscellaneous Design and Structural Details
Submit shop drawings and the applicable calculations to the Shop Drawing Checking Engineer, and ensure that each sheet of the shop drawings and the cover sheet of the applicable calculations is signed and sealed by the Shop Drawing Engineer.

3.3.8.5 Processing of Shop Drawings
3.3.8.5.1 Responsibility for Accuracy and Coordination of Shop Drawings
Coordinate, schedule, and control all submittals, with a regard for the required priority, including those of the various subcontractors, suppliers, and GDOT, to provide for an orderly and balanced distribution of the work. Also coordinate, review, date, stamp, accept, and sign all shop drawings prepared by the DB Team, Contractors, or DB Team-Related Entities (subcontractor, fabricator, supplier, etc.) 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 similar data. Indicate on each series of drawings the specification section and page or drawing number of the RFC plans to which the submission applies, indicate on the shop drawings all changes from the RFC drawings, and itemize all changes in the letter of transmittal. Likewise, whenever a submittal conforms to the RFC plans, clearly state so in the transmittal letter. Schedule the submission of shop drawings to allow a GDOT review period as specified in the DB Documents. The review period commences upon GDOT’s receipt of the valid submittal or re-submittal and terminates upon the transmittal of the submittal back to the DB Team. The DB Team is discouraged from transmitting voluminous submittals of shop drawings at one time. For submittals transmitted in this manner, allow for additional review time. Only shop drawings distributed by GDOT with the red ink stamps are valid and all Work that the DB Team performs in advance of GDOT’s release of shop drawings will be at the DB Team’s risk.
3.3.8.5.2 Scope of Review by the Shop Drawing Checking Engineer

The Shop Drawing Checking Engineer’s review of the shop drawings is for conformity to the requirements of the DB Documents and to the intent of the design. The Shop Drawing Checking Engineer’s review of shop drawings, which includes means, methods, techniques, sequences, and construction procedures, is limited to the effects on the permanent works. The Shop Drawing Checking Engineer’s review of submittals, which includes means, methods, techniques, sequences, and construction procedures, does not include an in-depth check for the ability to perform the Work in a safe or efficient manner.

3.3.8.5.3 Special Review by the Shop Drawing Checking Engineer

For construction affecting public safety, the Shop Drawing Checking Engineer will make an independent design review of all relevant shop drawings and similar documents. Do not proceed with construction of the permanent works until receiving the Shop Drawing Checking Engineer’s approval. Send a copy of the approval letter to GDOT. The review of these shop drawings is for overall structural adequacy of the item to support the imposed loads and does not include a check for economy, efficiency, or ease of construction.

3.3.8.6 Other Requirements for Shop Drawings for Bridges

3.3.8.6.1 Shop Drawings for Structural Steel and Miscellaneous Metals

Furnish shop drawings for structural steel and miscellaneous metals. Ensure shop drawings 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.

3.3.8.6.2 Shop Drawings for Concrete Structures

Furnish shop drawings for concrete components that are not cast-in-place and are not otherwise exempted from submittal requirements, also furnish shop drawings for all details that are required for the effective prosecution of the concrete work and are not included in the DB Documents such as special erection equipment, masonry layout diagrams, and diagrams for bending reinforcing steel, in addition to any details required for concrete components for the permanent work.

3.3.8.6.3 Special Construction Submittals

No requirements.

3.3.8.6.4 Shop Drawings Requiring Railroad Coordination

No requirements.

3.3.8.6.5 Modifications on Construction

Where GDOT allows the DB Team to make modifications to the permanent works for the purposes of expediting the DB Team’s chosen construction methods, submit proposals to the
EOR for review and approval prior to modifying the works. Submit proposals for minor modifications under the shop drawing process. Indicate on all drawings the changes from the DB Documents and itemize all Change Requests in the letter of transmittal. GDOT will require additional submittals for major modifications. Minor modifications are those items that, in GDOT’s sole discretion, do not significantly affect the quantity of measured Work, or the integrity or maintainability of the structure or its components (for example, adjusting concrete dimensions, substituting steel plate sizes, changing reinforcing bar size and spacing, etc., all within the acceptable limits of the design). Major modifications are any modifications that, in the sole opinion of GDOT, significantly affect the quantity of measured Work, or the integrity or maintainability of the structure or its components; for example, substituting alternative beam sizes and spacings, changing material strength or type, and the like. Provide signed and sealed revised sheets to GDOT for any required revisions to the Released for Construction plans prior to submitting shop drawings. GDOT’s decision on the delineation between a minor and a major modification and the disposition of a proposal is final.

3.3.9 Release for Construction Documents

Provide sufficient review and revision time in the schedule and account for possible multiple resubmittals to secure a final Release for Construction prior to starting construction on any particular Element of the Work. Construction cannot proceed on any of the Work until the design Submittal has been reviewed, accepted, and Released for Construction.

For final Submittals, after updating the documents to resolve all comments (as applicable) the EOR shall submit a full set including any necessary GDOT Standard Details and/or Construction Details. Upon receipt, GDOT will provide written notice that the drawings or Submittal are Released for Construction, Stamp the accepted set Released for Construction and distribute copies to GDOT within three Business Days.
4 ENVIRONMENTAL

4.1 General
Comply with all Environmental Law and policies set forth by the federal, state, and local agencies with jurisdiction over the construction activities associated with the Project and as described in the approved Environmental Document. Follow all pertinent policies and procedures as described in the 23 CFR 771, O.C.G.A. 12-16-1, and the most recent version of the GDOT Environmental Procedures Manual.

4.2 Administrative Requirements

4.2.1 Standards
Conduct activities in this Section 4 in accordance with Environmental Law, GDOT’s Environmental Procedures Manual, other Attachment 3-1 (Manuals), and other provisions of the DB Documents.

4.2.2 Personnel Requirements

4.2.2.1 Environmental Compliance Manager
Designate an Environmental Compliance Manager (ECM) who will work through an environmental team (ET), as detailed in this Section 4.2.2, to prevent, minimize, and/or correct any violation of or noncompliance with Environmental Approvals. The ET may include the following persons (some persons may serve multiple roles, provided the required qualifications are met):

- GEPA Specialist
- Archeologist
- Natural Resource Biologist
- Water Quality Specialist
- Hazardous Materials Manager
- Worksite Erosion Control Supervisor (WECS)

The ECM reports and coordinates all issues directly with GDOT and the DB Team’s Project Manager. In the event the ECM, in consultation with the DB Team’s Project Manager and GDOT, is unable to reach satisfactory resolution of environmental issues, the ECM will provide written notification to the DB Team and GDOT outlining the concerns, actions taken in attempt to correct the concerns, and recommend a course of action.

The ECM reports immediately to GDOT and DB Team any violation or non-compliance and includes with any such report the appropriate recommendations for corrective action including stoppage of Work.

The ECM coordinates with GDOT, the DB Team, and appropriate Governmental Entities. The ECM also submits all necessary environmental documentation and monitoring reports to the appropriate Governmental Entities and when applicable, through GDOT, to the extent necessary to maintain compliance with applicable Environmental Approvals.
The ECM will be an employee or subcontractor of the DB Team. The DB Team will not have the ability to relieve the ECM of his or her duty without the written approval of GDOT. Should the DB Team desire to replace the ECM, submit the résumé of a replacement candidate. The replacement candidate will be available to the Project within 30 days after delivery of GDOT’s written acceptance. In the absence of the ECM, the DB Team's Hazardous Materials Manager may act as an interim ECM with GDOT approval.

Qualifications: The ECM candidate must have at least five years of experience successfully managing environmental compliance of a similar type of project as the Project. This person or firm must be prequalified by GDOT. Ensure all costs associated with the ECM are included in the Proposal. The qualifying experience required of an ECM candidate must include the following:

1. Has developed and managed a storm water pollution prevention plan
2. Has developed and managed a hazardous substance and petroleum products management plan
3. Has implemented Environmental Mitigation Plans
4. Has provided environmental and personal protection training
5. Has monitored compliance with Section 404 Permit conditions

The ECM’s qualifying experience must demonstrate familiarity with the following:

1. The scope and terminology of ASTM E 1527-05, Standard Practice for Environmental Site Assessment Process
2. Provisions of the NPDES Construction General Permit (GAR1000002)
3. Requirements of Section 404 and permit provisions

4.2.2.2 Reserved

4.2.2.3 Reserved

4.2.2.4 GEPA Specialist
The ECM designates a GEPA Specialist to provide expertise in GEPA laws, regulations, and policies during the course of the Work. The GEPA Specialist will be able to address environmental justice (EJ) issues related to the Project, if applicable.

The ECM designates personnel if a need arises for renewed activities to comply with environmental laws.

Qualifications: The GEPA Specialist meets the certification requirement of GDOT Transportation Planning Prequalification Category 1.06(a) NEPA Documentation.

4.2.2.5 Cultural Resource Management Personnel
The ECM designates an Archeologist to provide expertise in monitoring impacts to cultural resources during the course of the Work.

The ECM designates personnel if a need arises for renewed activities to comply with cultural resources laws.

4.2.2.6 Natural Resource Biologist

The ECM designates a Natural Resource Biologist to provide expertise in monitoring impacts on wildlife and the natural environment during the course of the Work. The ECM designates personnel if a need arises for renewed activities to comply with natural resources laws.

Qualifications: The Natural Resource Biologist must meet the certification requirement of GDOT Transportation Planning Prequalification Categories 1.06(e).

4.2.2.7 Water Quality Specialist

The ECM designates a Water Quality Specialist to 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 during the course of the Work.

Qualifications: The Water Quality Specialist must have verifiable experience implementing Water Quality Certification Plans and be able to demonstrate a working knowledge of the National Pollutant Discharge Elimination System and MS4 permit requirements applicable to the Project. The Water Quality Specialist must meet the certification requirements of GDOT Transportation Planning Prequalification Category 1.06(e).

4.2.2.8 Reserved

4.2.2.9 Reserved

4.2.2.10 Hazardous Materials Manager

The ECM designates a Hazardous Materials Manager to provide expertise in the safe handling of Hazardous Materials required to perform the Work and those that may be discovered/impacted during the term of the Agreement. The Hazardous Materials Manager conducts appropriate activities such as the following:

1. Schedule and/or conduct training for the DB Team's employees
2. Verify all employee certifications prior to and required for any handling of Hazardous Materials
3. Maintain records of all incidents involving Hazardous Materials and notify the ECM, GDOT, and appropriate authorities in writing of any such incidents

Qualifications: The Hazardous Materials Manager must meet the certification requirements of GDOT Soils, Foundation and Material Testing, Hazardous Waste Site Assessment Studies 6.05, and be a qualified professional with 40 hours of HAZWOPER certification. In addition, the
Hazardous Material Manager must have at least five years of experience on similar projects in the following areas:

1. 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
2. Investigation and remediation of Hazardous Materials following GDOT Environmental Procedures Manual guidelines

4.2.2.11 Worksite Erosion Control Supervisor (WECS)

Before beginning Work, designate a qualified Worksite Erosion Control Supervisor (WECS) to initiate, install, maintain, inspect, and report the condition of all erosion control devices as described in GDOT Standard Specifications Sections 160 through 171 or in the DBA and erosion, sedimentation, and pollution control plan (ESPCP) documents. The designee must submit their qualifications on the GDOT provided resume form for consideration and approval. The DB Team may utilize additional persons having WECS qualifications to facilitate compliance, however, only one WECS will be designated at a time.

The WECS and alternates must:

1. have at least one year of experience in erosion and sediment control, including the installation, inspection, maintenance and reporting of BMPs;
2. successfully completed the Georgia Soil and Water Conservation Commission Certification Course Level IA and GDOT’s WECS Certification Course; and
3. provide phone numbers where the WECS can be located 24 hours per day, seven days per week.

The WECS’ duties include the following:

1. Be available or have an approved representative available 24-hours a day and have access to the equipment, personnel, and materials needed to maintain erosion control and flooding control.
2. Inform GDOT in writing whenever the alternate WECS assumes project responsibilities.
3. Ensure that erosion control deficiencies are corrected within 72 hours or immediately during emergencies. Deficiencies that interfere with traffic flow, safety, or downstream turbidity are to be corrected immediately.
4. During heavy rain, have the construction area patrolled day and night, any day of the week to quickly detect and correct erosion or flooding problems before they interfere with traffic flow, safety, or downstream turbidity.
5. Be on the site within three hours after receiving notification of an emergency prepared to positively respond to the conditions encountered. GDOT may handle emergencies without prior notice to the DB Team. GDOT will recover costs for emergency maintenance work according to GDOT Standard Specifications Subsection 105.15, Failure to Maintain Roadway or Structures.
6. Maintain and submit for the Project records, as-built Erosion and Sedimentation Control Plans that supplement and graphically depict EC-1 reported additions and deletions of BMPs. The as-built plans are to be accessed and retained at a GDOT facility at all times.

7. The WECS must maintain a current certification card for the duration of the Project. Recertification of the WECS is required prior to the expiration date shown on the Certification card in order to maintain certification and the WECS position for the Project.

8. Ensure that both the WECS and the alternate meet the criteria of this Section 4.2.2.11.

Failure of the WECS or alternate to perform the duties specified in the Contract, or whose performance has resulted in a citation being received from a State or Federal Regulatory Agency (e.g., the Georgia Environmental Protection Division) will result in one or more of the following:

1. Suspension of the WECS’ certification for a period of not less than 30 days
2. Removal of the Contractor’s Project superintendent in accordance with GDOT specification subsections 105.05 and 108.05 for a period not less than 14 days
3. GDOT-wide revocation of the WECS certification for a period of 12 months
4. Removal of the Contractor’s Project superintendent in accordance with GDOT Standard Specifications subsections 105.05 and 108.05

4.3 Environmental Approvals

4.3.1 Responsibilities Regarding Environmental Documents

The DB Team is responsible for coordination with GDOT and other required approval agencies to ensure that commitments made during the environmental review are being met. The DB Team is responsible to reassess Project impacts and for additional associated costs incurred due to any changes in the Project impacts as described in the approved Environmental Document. This may require a submittal of environmental studies for approval by applicable agencies.

GDOT is responsible for completing and resubmitting environmental documentation. The DB Team is not allowed to complete the environmental documentation or revision of the Environmental Document.

Limits of the Existing Right of Way is described in the approved Environmental Document.

Ensure Work complies with approved Environmental Documents, permits, and compliance requirements for any additional actions throughout the Term of the DB Documents. Monitor and document Work activities so that documents providing evidence for compliance are available to Governmental Entities (as applicable) and GDOT for inspection at any time. Evidence of compliance activities may include photo documentation and other appropriate methods to demonstrate compliance.

Consider the use of environmentally sustainable practices and/or materials in the development of the Project.
Environmental Documents were prepared and approved by GDOT prior to the Effective Date. During the Term, such approvals may require re-evaluation, amendment, or supplement as the Work progresses or in order to accommodate actions not identified in the approved Environmental Document or not covered specifically by existing resource agency coordination and permits. The DB Team is responsible to validate and provide design information to support additional environmental studies (cultural resources, ecology, aquatics, traffic, noise, and/or air) conducted by GDOT or on behalf of GDOT by others. Comply with the Environmental Document within the final limits of the Project and subsequent approved Environmental Documents as updated to incorporate the DB Team’s Conceptual Layout Plan of Project or Design Documents or due to regulatory or policy changes. Follow GDOT policies and procedures when conducting these activities for the Project.

The DB Team is responsible to prepare and pay for supporting documentation for any design changes proposed by the DB Team that differ from the GEPA Approval at the time of the Proposal Due Date. Any changes to the Project as described in the GEPA Approval shall require the DB Team to reassess impacts and submit information to GDOT for incorporation into reevaluation reports and studies. Follow all pertinent policies and procedures as described in the 23 CFR 772, the Georgia Environmental Policy Act, and the GDOT Environmental Procedures Manual. GDOT will provide the costs to prepare and finalize the GEPA Evaluation documents.

If the DB Team’s Conceptual Layout Plan of the Project or Design Documents deviate from the plan set incorporated into the approved Environmental Documents, then GDOT and/or Governmental Entities will need to conduct an assessment to determine whether the approved Environmental Documents remain valid. Provide information to support evaluation of the deviations from the plan set incorporated into the approved Environmental Documents. Facilitate a meeting with GDOT within 45 days of NTP 1 to discuss potential deviations from the approved Environmental Document. The following terms define GDOT required documentation needed to assess impacts to the approved Environmental Document:

1. **No Change Memo**: No design or regulatory changes have occurred since the last approved Environmental Document. As applicable, GDOT will utilize document procedures following the Memorandum of Agreement with FHWA dated July 19, 2016.

2. **Change Memo (design modifications)**: The Conceptual Layout Plan for the Project or Design Documents contain modifications to the design in the plan set incorporated into the approved Environmental Documents; the Project corridor in the area of the changes (or as applicable) must be considered for additional or reduced environmental impacts. There may be a need for additional agency coordination as a result of the design modifications. As applicable, GDOT will utilize document procedures following the Memorandum of Agreement with FHWA dated July 19, 2016.

3. **Change Memo (regulatory/policy changes)**: Changes in Law or regulatory practice may require additional survey or technical analysis, environmental condition changes over time, and associated agency coordination. The additional analysis may be required regardless of design changes, construction staging, etc. (There may be no action taken by the design team that would trigger the additional technical analysis).
Ensure compliance with the conditions and schedules set forth in amendments to any approved Environmental Documents due to deviations in the plan set incorporated into the approved Environmental Documents in the Conceptual Layout Plan for the Project and/or the Design Documents.

Assume all risk arising out of or related to deviations from the plan set incorporated into the approved Environmental Documents. The DB Team is encouraged to minimize deviations from the plan set incorporated into the approved Environmental Documents. The DB Team is responsible to provide all information reasonably required to support evaluation of deviations from the plan set incorporated into the approved Environmental Documents and to comply with all policies and procedures of GDOT and Governmental Entities having jurisdiction over the Project. GDOT is responsible for all coordination of environmental studies with appropriate Governmental Entities. The DB Team is responsible to provide GDOT with the information reasonably required for coordination with Governmental Entities.

The DB Team is responsible for the purchase of all required mitigation credits. This supporting information is listed in Table 4-1:

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment 4-1</td>
<td>Environmental Screening Memo</td>
</tr>
</tbody>
</table>

**4.3.2 GDOT Review and Approval of EnvironmentalDocuments and Permits**

The approval time frames for Environmental Documents are listed in Table 4-2 (GDOT-Led Environmental Preparation and Approval) and Table 4-3 (DB Team-Led Environmental Permit Approval). GDOT will be responsible for developing the technical report addenda and GEPA Approval reevaluations as provided in Table 4-2 and Table 4-3. GDOT will coordinate and provide approved documentation to the appropriate Governmental Entities. The review and issuance time periods listed in Table 4-2 and Table 4-3 are per agency and may not occur concurrently. GDOT reserves the right to request revisions to the tables as needed to meet Governmental Entity approval. The timeframe for the development of the technical studies and GEPA document reevaluation are subject to the extent of change proposed by the DB Team; therefore, GDOT reserves the right to modify schedule durations as appropriate after receipt of the DB Team’s Preliminary Plans.

<table>
<thead>
<tr>
<th>Document*</th>
<th>Governmental Entity Approval Time Frame</th>
<th>Reviewing Governmental Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Document Reevaluation Approval</td>
<td>Prepare Document: 30 days (from approval of Technical Report Addenda)</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>Revise Document: 7 days</td>
<td>GDOT</td>
</tr>
<tr>
<td>Document*</td>
<td>Governmental Entity Approval Time Frame</td>
<td>Reviewing Governmental Entity</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td></td>
<td>Review period 1: 30 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>Review period 2: 14 days</td>
<td>GDOT</td>
</tr>
<tr>
<td>Ecology Report and Addendum</td>
<td>Prepare Survey and Report: 30 days (from receipt of DB team’s preliminary design plans, change description, and calculated impacts to resources)</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>Revise Report: 7 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>Review period 1: 30 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>Review period 2: 14 days</td>
<td>GDOT</td>
</tr>
<tr>
<td>Section 106 AOE</td>
<td>Prepare AOE 21 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>30 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>Revise AOE 7 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>14 days</td>
<td>GDOT</td>
</tr>
<tr>
<td></td>
<td>30 days</td>
<td>State Historic Preservation Officer (SHPO)</td>
</tr>
</tbody>
</table>

Assume responsibility for preparing required permits and permit modifications as stated in Table 4-3 (DB Team-Led Environmental Permit Approval) and will pay all fees required. Provide to GDOT copies of receipts of delivery of the applications and paid fees to the permitting agencies. For Notices of Termination (NOT), provide a copy of the acknowledgement of receipt of the NOT by EPD.

Assume responsibility to obtain all other permits not included in Table 4-3 to meet the requirements of the DB Documents. GDOT is responsible for reviewing the permits and permit modifications, and submitting to the appropriate Governmental Entities, unless the applicant is listed as the DB Team. Documentation not meeting current submission standards or requirements of Governmental Entities will be returned to GDOT and revised by a qualified independent consultant approved by GDOT at DB Team's cost. GDOT reserves the right to review, comment on, require revisions to, and reject for resubmission documentation submitted to GDOT by the independent consultant or the DB Team for environmental compliance or approval. The agency review time frame for permits is specified in Table 4-3. The review and issuance time periods listed in Table 4-3 for DB Team-led approvals do not apply to any revisions of the new permit applications proposed by the DB Team's Conceptual Layout Plan of Project.

Obtain photogrammetric and/or geographic information system (GIS) data for the Project that depict any impaired waters as listed by EPD. Conduct surveys for information not available from other sources.
Table 4-3: DB Team-Led Environmental Permit Approval

<table>
<thead>
<tr>
<th>Permit Required</th>
<th>Agency Review and Issuance Time Period (Calendar Days)</th>
<th>Listed Applicant</th>
<th>Preparer of Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Army Corps of Engineers (USACE) Section 404</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 404 General Permit(^1)</td>
<td>90</td>
<td>GDOT</td>
<td>DB Team</td>
</tr>
<tr>
<td>Section 404 Individual Permit(^2)</td>
<td>240</td>
<td>GDOT</td>
<td>DB Team</td>
</tr>
<tr>
<td>Subsurface testing of all Underground Storage Tanks and Hazardous Materials</td>
<td>150</td>
<td>GDOT</td>
<td>DB Team</td>
</tr>
<tr>
<td>National Pollutant Discharge Elimination System (NPDES) Construction General Permit (GAR100002), Notice of Intent (NOI)(^3)</td>
<td>14</td>
<td>DB Team</td>
<td>DB Team</td>
</tr>
<tr>
<td>Notice of Intent (NOI)(^3) for Georgia Work</td>
<td>14</td>
<td>DB Team</td>
<td>DB Team</td>
</tr>
<tr>
<td>Georgia Stream Buffer Variance</td>
<td>150</td>
<td>GDOT</td>
<td>DB Team</td>
</tr>
</tbody>
</table>

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 Information on the permit including Notice of Intent (NOI) and Notice of Termination (NOT) and changes that went into effect on August 1, 2018 can be found at [https://epd.georgia.gov/npdes-construction-storm-water-general-permits](https://epd.georgia.gov/npdes-construction-storm-water-general-permits). A Fact Sheet on the permits can be found at [https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/Factsheet - NPDES Construction General Permits - May 2018.pdf](https://epd.georgia.gov/sites/epd.georgia.gov/files/related_files/site_page/Factsheet - NPDES Construction General Permits - May 2018.pdf)

4 The review and issuance time periods will commence once a completed permit package that complies with the requirements of the DB Documents is accepted by GDOT and submitted to the issuing agency and end once the permit is issued by the appropriate Governmental Entity. Therefore, schedule several review periods prior to agency submittal to ensure proper planning to accomplish the entire process for each required permit. Each initial GDOT review period is 30 days. Should the Submittal not be complete or rejected as provided in Section 3 (Design and Submittals), each subsequent review period will be 15 days and is excluded from the timeframe in Table 4-3 above.

The above permits and review times do not contemplate offsite plant or other offsite activity that the DB Team may propose for use in construction or other non-permanent construction.

Assume responsibility for payment of any fees to obtain any necessary permits or approvals, of any fines incurred as a result from failure to obtain any necessary permits or approvals, and/or for any fines levied as a result of inadequate or improper installations.
4.4 Construction Requirements
No additional requirements.

4.5 Deliverables
As indicated in this Section 4 and in Section 3 (Design and Submittals).
5 RESERVED
6 UTILITY ADJUSTMENTS

6.1 General
By Georgia Statutes, Utilities, whether publicly or privately owned, aerial or underground, are permitted by GDOT to be accommodated within the ROW. To this end, make every effort to avoid Utilities. Design/construction techniques that minimize or avoid Utility conflicts may involve increased upfront costs; however, those costs may be offset by savings during construction, in addition to the total cost savings for the Project, GDOT, and the respective Utility Owners. This Section 6 establishes procedures and requirements for Utility Adjustments including such processes as coordination with Utility Owners, administration of engineering, construction, other activities necessary for Utility Adjustments and required documentation.

6.2 Administrative Requirements

6.2.1 Standards

6.2.2 Communications

6.2.2.1 Communication with Utility Owners: Meetings and Correspondence
Hold meetings and otherwise communicate with each Utility Owner as necessary in compliance with the DB Documents. GDOT may participate in these meetings if requested by the Utility Owner or the DB Team or otherwise as GDOT deems appropriate.

Provide a notice and an agenda for the meeting separately to GDOT and the appropriate Utility Owner at least seven days in advance of each scheduled meeting. Prepare and distribute minutes of all meetings within seven days of the meeting with Utility Owners and keep copies of all correspondence with any Utility Owner.

6.3 Design Requirements
See Attachment 6-2 (SP 105.06 – Control of Work – White Lining All Case) and Attachment 6-3 (Locate Request Form) for requirements related to coordination for all Utility owners within the Project Limits.

6.4 Construction Requirements

6.4.1 Standard of Care Regarding Utilities
Carefully and skillfully carry out all Work impacting Utilities and mark, support, secure, exercise care, and otherwise act to avoid damage to Utilities in accordance with O.C.G.A. 25-9 (The
Georgia Department of Transportation

P.I. No. 0017389 – Statewide ITS DMS Deployment Design-Build Project

Georgia Utility Facility Protection Act). At the completion of the Work, ensure the condition of all Utilities is at least as safe and permanent as before.

6.4.2 Emergency Procedures

Prepare and submit to GDOT an Emergency Utility Response Plan (EURP) at least 30 days prior to NTP 3. The EURP shall indicate the Project location (which includes street address and or major intersections / major highway route, if possible with a land mark) that would be reported in case of an emergency, Emergency Utility Coordinator (EUC), Utility company name, Utility company emergency contact information to include emergency phone number, response time for emergency, working condition of devices needed to facilitate prompt shut off, and primary point of contact name and phone number for the Project.

The Emergency Utility Coordinator (EUC) must be an employee of the DB Team and is responsible for notifying the appropriate Utility company and/or Utility subcontractors in case of an emergency. EURP must include the contact details of the EUC.

The plan will also include a means of reporting emergencies and the Utility Emergency Response Information for each company. Post the EURP in an area readily accessible to GDOT and Project personnel. Distribute the copies of EURP by e-mail and hard copy to GDOT, DB Team’s Project Manager, superintendent, and all approved Subcontractors whose work can be in conflict with Utility facilities, and personnel of each facility/owner/operator who has facilities within the Project limits. Keep a copy in close proximity to active construction.

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, promptly notify the appropriate emergency officials, the Georgia Utilities Protection Center, and the appropriate Utility facility company or operator, if known. Do not engage in excavating or blasting activities that may cause further damage to the Utility facility until the damage has been repaired.

Include an item in the agenda of Utility Coordination meeting about the updates/changes in the EURP plan to ensure the contact information provided in the EURP (name and phone numbers) is kept up-to-date.

The Emergency Utility Response Plan and Emergency Utility Response Information template can be found at the State of Georgia, Office of Utilities Webpage.

6.4.3 Switch Over to New Facilities

After a newly adjusted, relocated or installed Utility has been accepted by the Utility Owner and is otherwise ready to be placed in service, coordinate with the Utility Owner regarding the procedure and timing for placing the newly adjusted Utility into service and terminating service at the Utility being replaced.

6.5 Deliverables

As indicated in this Section 6 and in Section 3 (Design and Submittals).
7 RESERVED
8 GEOTECHNICAL

8.1 General
Perform all geotechnical investigations, testing, research, and analysis necessary to effectively determine and understand the existing surface and subsurface geotechnical conditions. Ensure the geotechnical investigations and analyses are both thorough and complete, so as to provide accurate information for the design of roadways, pavements, foundations, structures, and other facilities that result in a Project that is safe and meets operational standards.

All geotechnical reports, provisions, and recommendations developed by the DB Team and accepted and/or concurred by GDOT will be part of the Project's design and endorsed by the EOR.

8.2 Administrative Requirements

8.2.1 Standards
Construct and maintain roadway pavements in conformance to GDOT's Pavement Design Manual and GDOT policies and procedures.

Perform all other geotechnical Work in general conformance with GDOT's Geotechnical Engineering Manual and guidelines, AASHTO guidelines, and Attachment 3-1 (Manuals), and other provisions of the DB Documents.

8.3 Design Requirements

8.3.1 Subsurface Geotechnical Investigation by the DB Team
Determine the specific locations, frequency, and scope of all subsurface geotechnical investigations, testing, research, and any analysis the DB Team considers necessary to provide a safe and reliable roadway, pavement, foundation, structure, and other facilities for the Project.

Prepare and amend, as needed, Geotechnical Engineering Reports as described later in this Section 8 documenting the assumptions, conditions, and results of the geotechnical investigation and analysis, including the following:

1. The geology of the Project area, including soil and/or rock types, and drainage characteristics.

2. Field investigations and laboratory test results used to characterize engineering and physical properties of soil and rock, including moisture content, plasticity index, gradations for each major soil strata change, levels of shrink/swell potential soil compressibility, and short-term and long-term settlement/consolidation, strength tests and engineering properties; recording rock recovery and rock quality designation in the field in addition to laboratory tests to determine compressive and split tensile strength tests of rock cores.

3. A discussion of conditions and results with reference to specific locations on the Project, including a dewatering plan and impacts on near-by structures.
4. Design and construction parameters resulting from the geotechnical investigation and analysis, including parameters for the design of pavements, pipes, foundations, structures, slopes, and embankments.

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 taking into consideration down-drag on piles and soil squeeze in high embankments.

6. Include the slope stability analysis for embankment and excavation slopes including both short-term (undrained) and long-term (drained) conditions, and discussion of design measures undertaken to ensure stability and safety of all slopes. Ensure the analysis considers the potential for long-term surficial slide failures common to high plasticity clays in Georgia, and specific recommendations are provided to minimize their occurrence. Internal and external stability analysis shall be considered for walls supporting fill/cut within the Project.

Submit each Geotechnical Engineering Report upon completion, along with back-up of calculations and input and output of GDOT recognized computer software to GDOT for review and comment as a Submittal.

If environmentally-sensitive conditions such as undocumented contaminated soil or archaeological sites are encountered during the subsurface exploration activities, notify GDOT immediately. For hazardous materials, also follow the requirements in Volume 1, Article 7.8 (Hazardous Materials Management) and in GDOT Standard Specification 107.22.

### 8.3.2 Bridge Foundation Investigation (BFI)

No requirements.

### 8.3.3 Dynamic Pile Testing

Perform dynamic pile testing using the Pile Driving Analyzer (PDA) to monitor the driving of piles with accelerometer and strain gauges attached to the piles. Perform a minimum of two PDAs (one for the abutment and one for the intermediate bents), but no less than 2 percent of the production piles, and additional PDAs will be required for a change in bent type, change in abutment, change in geotechnical material, or as determined by the EOR. Perform the dynamic pile testing in accordance with ASTM D4945-08 and Special Provision 523 per the approved Bridge Foundation Investigation recommendations.

Upon completion of a PDA test, provide a complete report consisting of but not limited to PDA field monitoring data, results of Case Pile Wave Analysis Program (CAPWAP) computer analyses, and the driving criteria recommendation from the geotechnical engineer who developed the BFI. The recommendation must be endorsed by the EOR. Submit the report electronically in PDF format and the electronic data files of the PDA analysis and CAPWAP to GDOT and allow seven days for review and acceptance before proceeding with driving production piles.

### 8.3.4 Soil Survey (SS)

Perform a Soil Survey (SS) for all Projects that include the design of roadway foundations, embankments, and the treatments for geotechnical and related problems on the Project in...
conformance with the GDOT Geotechnical Engineering Manual and Attachment 3-1 (Manuals). The EOR shall review and endorse the SS report and all recommendations.

### 8.3.5 Pavement Design

#### 8.3.5.1 Pavement Cutting
Obtain prior approval from GDOT for any 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. Repair in kind any pavement that is open cut as described in this paragraph prior to the Travel Lane being opened to traffic per GDOT Construction Standard 1401.

#### 8.3.6 Wall Foundation Investigation (WFI)
Perform a WFI for each wall in the Project that includes wall structures in conformance with the GDOT Geotechnical Engineering Manual, AASHTO guidelines, and Attachment 3-1 (Manuals) for all new walls and wall extensions. The EOR shall endorse the WFI report and all recommendations.

#### 8.3.7 High-Mast Lighting Foundation
No requirements.

#### 8.3.8 Other Structure Foundation Investigation
Perform investigations for other Project specific structures such as box culverts, three-sided culverts, buildings, etc. Be consistent with the LRFD requirements for foundation and geotechnical design and in accordance with the GDOT Geotechnical Design Policy and Guides. See Section 16.3.2 (Sign Support Structures) for additional requirements.

##### 8.3.8.1 Drilled Caisson
1. Design and construct the drilled caissons in accordance with Special Provision 524 per the approved Bridge Foundation Investigation recommendations.
2. When sound rock is encountered, drilled caissons must be embedded a minimum of 10 feet into sound rock as defined by Special Provision 524.3.

##### 8.3.8.2 Spread Footings
1. Top of footing must be a minimum of 2 feet below the top of final grade.
2. Spread Footings should bear below the scour line, if applicable.

### 8.4 Construction
Ensure that materials used to construct the Project meet the minimum requirement as specified in GDOT specifications, policies and procedures, guidelines, and Attachment 3-1 (Manuals). 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. Personnel possessing the requisite GDOT materials certifications will perform testing of materials.
Assume responsibility for obtaining and complying with all Governmental Approvals for construction of the Project.

Submit to GDOT for review and acceptance any blasting plan(s). Perform blasting in accordance with State Law, and in accordance with GDOT’s specifications, policies and procedures.

### 8.5 Deliverables

As indicated in this Section 8 and in Section 3 (Design and Submittals).
9 SURVEYING AND MAPPING

9.1 General
Provide accurate and consistent land surveying and mapping necessary to support design, and construction of the Project. The DB Team is responsible for all surveying responsibilities.

The DB Team is responsible for the final precision, accuracy, and comprehensiveness of all survey and mapping.

9.2 Administrative Requirements

9.2.1 Standards
Provide surveying and mapping activities in accordance with the GDOT Automated Survey Manual and Attachment 3-1 (Manuals), and other provisions of the DB Documents.

9.2.2 Ownership
The documents produced by the DB Team surveyor or the surveyor’s subcontractors are the property of GDOT and release of any such document must be approved by GDOT.

9.2.3 Property Owner Notification
Prepare for GDOT review and acceptance a property owner notification letter in accordance with the GDOT Automated Survey Manual prior to entering any private property outside the Existing ROW.

9.3 Design Requirements

9.3.1 Units
Perform all survey Work in U.S survey feet. Ensure the Work conforms to state plane coordinates.

Ensure the combined sea level and scale factor for the Project conforms to the GDOT Automated Survey Manual.

9.3.2 Survey Control Requirements
Ensure that all surveying conforms the Georgia Professional Land Surveying Practices Act, follows the General Rules of Procedures and Practices of the Georgia Board of Professional Engineers and Land Surveying, and otherwise conforms to all applicable Law. Ensure that any person in charge of the survey is proficient in the technical aspects of surveying and is a Professional Land Surveyor (Surveyor).

Establish all horizontal and vertical primary Project control. Meet the guidelines as defined in the GDOT Automated Survey Manual if using GPS methods.

Establish and maintain additional survey control as needed throughout the duration of the Project.
Tie any additional horizontal and vertical control for the Project to the established primary Project control network.

Set and/or verify by a Professional Land Surveyor all survey control points.

Establish and maintain a permanent horizontal and vertical primary survey control network. Ensure the control network consists of, at minimum, horizontal deltas coordinated and elevated set in intervisible pairs. Install control monuments per the GDOT Automated Survey Manual. The main control horizontal traverse shall have no more than 12 angles before tying to a main control pair.

Provide to NOAA, in coordination with GDOT, notification of planned activities that will disturb or destroy any geodetic control monuments at least 90 days prior to construction. This provides time to plan for and execute relocation of geodetic monuments.

Replace all existing horizontal and vertical primary survey control points disturbed or destroyed. 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.

Deliver to GDOT a survey control package in accordance with the criteria in the GDOT Automated Survey Manual, as well as a revised survey control package when survey monuments or control points are disturbed, destroyed or found to be in error.

9.3.3 Conventional Method (Horizontal & Vertical)

Meet the accuracy of the appropriate level of survey as defined in the GDOT Automated Survey Manual if using conventional methods to establish additional horizontal control.

9.3.3.1 Horizontal Accuracy Requirements for Conventional Surveys

Horizontal control is to be established on the Georgia State Plane Coordinate System of 1985 NAD83, at a minimum.

Upon request, GDOT will compile and provide to the DB Team 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

Establish vertical control on the North American Vertical Datum of 1988 (NAVD 1988) as shown in Table 9-1:
Table 9-1: North American Vertical Datum of 1988

<table>
<thead>
<tr>
<th></th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Order</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Order</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; Order</th>
<th>Remarks and Formulae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error of Closure</td>
<td>0.013 feet √M</td>
<td>0.026 feet √M</td>
<td>0.049 feet √M</td>
<td>Loop or between control monuments</td>
</tr>
<tr>
<td>Maximum Length of Sight</td>
<td>250 feet</td>
<td>300 feet</td>
<td></td>
<td>With good atmospheric conditions</td>
</tr>
<tr>
<td>Difference in Foresight and Backsight Distances</td>
<td>±10 feet</td>
<td>±20 feet</td>
<td>±30 feet</td>
<td>Per instrument set up</td>
</tr>
<tr>
<td>Total Difference in Foresight and Backsight Distances</td>
<td>±20 feet per second</td>
<td>±50 feet per second</td>
<td>±70 feet per second</td>
<td>Per total section or loop</td>
</tr>
<tr>
<td>Recommended Length of Section or Loop</td>
<td>2.0 miles</td>
<td>3.0 miles</td>
<td>4.0 miles</td>
<td>Maximum distance before closing or in loop</td>
</tr>
<tr>
<td>Maximum Recommended Distance Between Benchmarks</td>
<td>2000 feet</td>
<td>2500 feet</td>
<td>3000 feet</td>
<td>Permanent or temporary benchmarks set or observed along the route</td>
</tr>
<tr>
<td>Level Rod Reading</td>
<td>± 0.001 foot</td>
<td>± 0.001 foot</td>
<td>± 0.001 foot</td>
<td></td>
</tr>
<tr>
<td>Recommended Instruments and Leveling Rods</td>
<td>Automatic or tilting w/ parallel plate micrometer precise rods</td>
<td>Automatic or tilting w/ optical micrometer precise rods</td>
<td>Automatic or quality spirit standard, quality rod</td>
<td>When two or more level rods are used, they should be identically matched</td>
</tr>
<tr>
<td>Principal Uses</td>
<td>Broad area control, subsidence or motion studies jig and tool settings</td>
<td>Broad area control, engineering projects basis for subsequent level work</td>
<td>Small area control, drainage studies, some construction and engineering</td>
<td></td>
</tr>
</tbody>
</table>

9.3.4 Reserved

9.3.5 Right of Way Surveys

Base all surveys on the primary horizontal and vertical control network established for the Project.
9.3.5.1 Accuracy Standard

Ensure the accuracy standards of the appropriate level of survey as defined in the following table are met when performing ROW surveys consisting of boundary locations.

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
<th>Remarks and Formulae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error of Closure</td>
<td>1:20,000</td>
<td>1:25,000</td>
<td>Loop or between Control Monuments</td>
</tr>
<tr>
<td>Adjusted Mathematical Closure</td>
<td>1:50,000</td>
<td>1:50,000</td>
<td></td>
</tr>
<tr>
<td>of Survey (No Less Than)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*GDOT policy requires all bearings or angles be based on the following source: Grid bearing of the Georgia Coordinate System of 1985, with the proper zone and epoch specified.

9.3.6 Survey Records and Reports

Use electronic field books to collect and store raw data if necessary. Preserve original raw data and document any changes or corrections made to field data such as station name, height of instrument, or target, as well as raw and corrected field data in hardcopy output forms in a similar manner to conventional field books for preservation.

Record field survey data and sketches that cannot be efficiently recorded in the electronic field volume in a field note volume and store with copies of the electronic data.

Record all field notes in permanently bound books (loose leaf field notes are allowed). Deliver copies of any or all field note volumes to GDOT upon request.

The documents produced by the Surveyor, or the Surveyor's subcontractors, are the property of GDOT, and release of any such document must be approved by GDOT prior to release.

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 delivery.

9.4 Construction Requirements

9.4.1 Construction Surveys

Comply with the requirements in Section 9.3 (Design Requirements).

9.4.2 ROW Monuments

No requirements.

9.5 Deliverables

As indicated in this Section 9 and in Section 3 (Design and Submittals).
10 GRADING

10.1 General
Conduct all Work necessary to meet the requirements of grading, including clearing and grubbing; excavation and embankment; removal of existing buildings, pavement, and miscellaneous structures; subgrade preparation and stabilization; dust control; aggregate surfacing; and earth shouldering.

10.2 Administrative Requirements

10.2.1 Standards
Provide grading activities in accordance with Attachment 3-1 (Manuals) and other provisions of the DB Documents.

10.3 Design Requirements
Ensure that all borrow, stockpile, and waste sites for this Project are environmentally approved prior to construction activities occurring in them. Place all common fill or excess material disposed of outside Project Right of Way in either a permitted solid waste facility, a permitted inert waste landfill, or in an engineered fill. See GDOT Standard Specifications Construction of Transportation Systems, Special Provisions, and Supplemental Specifications for additional information.

Notify GDOT of any non-permitted encroachment in the existing right of way. Do not take any action to remove the encroachment without GDOT approval.

10.3.1 Removal and Disposal of Material
There is no known suitable place to bury existing construction debris within the Project Site. Provide an environmentally approved site as shown in Standard Specification 201 to dispose the existing bridge and/or construction debris at no additional cost to GDOT. The material from structures designated for demolition is the DB Team’s property. Properly dispose of all material removed outside the limits of the Project.

10.3.2 Demolition and Abandonment Plan
Develop, implement, and maintain, for the Term, a Demolition and Abandonment Plan for all existing structures, features, and Utilities including types and sizes, as described in Section 10.4 that will be removed, abandoned or partially abandoned during the Term. Ensure the plan provides that said structures are structurally sound after the abandonment procedure and shows with sufficient detail for the Abandonment the locations of all existing features as listed in Section 10.4 (Construction Requirements).

GDOT reserves the right to require the DB Team, at any time, to salvage equipment and/or material in an undamaged condition and to deliver to a location designated by GDOT within the GDOT District in which the Project is located. GDOT has first right of refusal to retain any salvage material or equipment. Take possession of, but do not reuse for the project, any
material or equipment GDOT decides not to salvage. Ensure all material incorporated into the Project is new.

10.3.3 Detours

No requirements.

10.3.4 Slopes and Topsoil

Comply with Attachment 3-1 (Manuals) regarding design limitations and roadside safety guidelines associated with the design of slopes along roadways. Adjust grading to avoid and minimize disturbance to the identified waters of the U.S. Ensure the grading plan is in accordance with the approved Environmental Documents. Secure all associated Governmental Approvals to meet the Released for Construction (RFC) plans.

Perform finished grading and place topsoil in all areas suitable for vegetative slope stabilization (and areas outside the limits of grading that are disturbed during the Work) that are not paved.

Clear the entirety of cut slopes within the available Right of Way and remove debris.

10.4 Construction Requirements

Remove any 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, underground tanks, fences, bridges, buildings, and other incidental structures to the following depths):

1. **Abandoned pavements**: Obliterate, grade to drain, and grass existing pavement inside the Project that is no longer being used.
2. **Abandoned pipes**: Ensure abandoned pipes that are left in place are grout filled or filled with flowable fill.
3. **Under pavements**: Remove to a depth of at least 3 feet below the finished subgrade elevation.
4. **Underneath other structures**: Remove to at least 3 feet below the foundations of any proposed structure, including installations such as guard rail posts and utility poles.
5. **Elsewhere within the ROW and easement areas, remove as follows**: Remove to at least 3 feet below the finished surface of slopes and shoulders and 1 foot below natural ground outside construction lines.

Thoroughly crack or break abandoned structures that may impound water. These structures include, but are not limited to, concrete floors, basements, catch basins, and other structures within 10 feet of finished grade.

Break floors so that no section greater than 10 square feet remains intact.

10.5 Deliverables

As indicated in this Section 10 and in Section 3 (Design and Submittals).
11 ROADWAYS

11.1 General
Coordinate roadway design, construction, maintenance, and operation with all other Work planned or under construction by GDOT and/or Governmental Entity.

11.2 Administrative Requirements

11.2.1 Standards
Provide activities in this section in accordance with GDOT Standard Specifications, Construction of Transportation Systems, other Attachment 3-1 (Manuals), and other provisions of the DB Documents.

11.3 Design Requirements

11.3.1 Overview
Coordinate roadway design with the design of all other components of the Project. Design the Project roadways to integrate with streets and roadways that are adjacent or connecting to the Project.

Design the Project roadways to incorporate roadway appurtenances, including fences, noise attenuators, barriers, and hazard protection as necessary to promote safety and to mitigate visual and noise impacts on neighboring properties. Fence type shall be replaced in accordance with GDOT’s Construction Standards and Details. Should the existing type of fence not match the type provided in GDOT’s Construction Standards and Details, the type of proposed fence shall be submitted to GDOT for approval prior to construction.

Design and construct any and all proposed intersection reconstruction or rehabilitation to meet the requirements of the Environmental Document Approvals and Attachment 3-1 (Manuals).

11.3.2 Design Criteria Order of Precedence
Adhere to the following requirements for the design of the Project. The plans provided in the Reference Information Documents are provided for reference only and may contain or conform to some but not all of the design requirements herein. In the event of any conflict, ambiguity, or inconsistency among the following design criteria, the order of precedence, from highest to lowest, one being higher than two, is as follows:

1. Allowable Design Exceptions, Design Variances, and Design Deviations as set forth in Section 11.3.4 (Allowable Design Exceptions, Design Variances, and Design Deviations)
2. Attachments (Technical Provisions)
3. Other Volume 2 provisions
4. Technical Manuals (Attachment 3-1)
11.3.3 Typical Sections and Pavement Design

11.3.3.1 Roadside Safety
Ensure that all roadside safety devices used on the Project meet or exceed current GDOT requirements for crash test and other safety requirements.

11.3.3.2 Concrete Usage
Only use stamped concrete where the DB Team acquires written agreement, in a manner acceptable to GDOT, from local communities to maintain it, and where it meets the requirements in GDOT specifications, policies, procedures, and Attachment 3-1 (Manuals).

Use concrete paving in hard to reach mowing areas or under structures, sign posts, bent columns, next to retaining walls, freeway ramp gores, paved ditches, flumes, ditch inlets, etc.) to improve roadway appearance.

11.3.3.3 Barriers
Remove and upgrade all existing guardrail within the Project limits that is not otherwise being removed or replaced.

Install new end terminals as required to ensure cable barrier remains in operation at all times when construction impacts existing cable barrier that will remain in place. Install temporary concrete barrier in the same general location as the existing cable barrier for the full length impacted, including approaches, if existing cable barrier cannot remain in operation during construction.

11.3.4 Allowable Design Exceptions, Design Variances, and Design Deviations
There are no Design Exceptions and Design Variations allowable on the Project.

No additional Design Exceptions or Design Variances proposed by the DB Team are allowed.

Design Deviations that are present within the existing conditions may be retained. Present any existing Design Deviations that are identified within the Project limits and that are intended to be retained in the Project to GDOT.

11.3.5 Permanent Lighting
Submit all third-party requests for lighting within the Project Site to GDOT for approval.

Design the lighting of the Project in accordance with Attachment 3-1 (Manuals) and published guidelines, manuals, policies, etc. by reference in the manuals listed in Attachment 3-1, the DB Documents, and at a minimum to match the existing lighting. Make all necessary enhancements or changes to the existing lighting system to maintain the existing illumination if diminished by the Project.

Design and construct the lighting system in a manner that will reduce and/or discourage vandalism.
Install mechanical copper wire theft deterrent devices in all Project electrical conduits supplying power to the Project. The theft deterrent devices typically consist of a rubber stopper mechanical device that compress against the electrical wiring and prevents the wires from being easily pulled through the conduits. Install electrical pull box lids that contain locking mechanisms that work with the use of cams to prevent unauthorized access.

If designing a lighting system, prepare photometric studies to show luminance, illuminance, veiling luminance, and uniformity as appropriate for the roadways, interchanges, and special areas including roadway intersections. Provide vertical illuminance calculations as appropriate in sidewalk or multi-use areas as appropriate, as well as within crosswalk areas.


Design the lighting system to minimize or eliminate illumination of areas outside the Existing ROW. Ensure that Luminaires meet GDOT specifications, and that all luminaires are LED, unless removing and replacing an existing lighting system. Neither mercury vapor nor metal halide is allowed. All alternative energy efficient lighting technology can be considered, pending GDOT acceptance.

Design luminaire poles and breakaway bases in accordance with AASHTO’s Standard Specifications for Structural Supports for Highway Signs, Luminaire, and Traffic Signals. Install breakaway wiring connectors when using breakaway bases. Ensure the design incorporates breakaway devices that are pre-qualified by GDOT for all poles located within the clear zone of the roadways. Use appropriate safety measures if luminaire poles and breakaway bases are not used. Do not use breakaway bases when mounted on side barriers, median barriers or bridge structures.

Place all understructure lighting in a configuration that minimizes the need for lane closures during maintenance. Ensure no part of any light structure, mounting hardware, or conduit under structures protrudes below the bridge beams or other structure under any circumstance.

Determine and design appropriate foundation types and lengths for permanent lighting structures. GDOT requires consistent footing designs and has minimum footing size criteria for caisson type footings as follows:
Table 11-2: Minimum Footing Size Criteria

<table>
<thead>
<tr>
<th>Height of Pole</th>
<th>Diameter by Depth of Footing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than or equal to 40'</td>
<td>2' by 6'</td>
</tr>
<tr>
<td>40' to 50'</td>
<td>3' by 7'</td>
</tr>
<tr>
<td>50' to 60'</td>
<td>3' by 9'</td>
</tr>
<tr>
<td>High Mast</td>
<td>See Section 8 (Geotechnical)</td>
</tr>
</tbody>
</table>

**NOTE:** Poles for barrier mounted have a minimum of 2-ft by 4-ft base

Do 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.

Minimize the potential hazards of lighting poles through the careful consideration of mounting options and pole placements, including the following options:

1. Placing mast arms on traffic signal poles
2. Placing pole bases on existing or proposed concrete traffic barrier
3. Placing poles behind existing or proposed concrete traffic barrier, guardrail or cable barrier
4. Placing high mast lighting outside the clear zone, especially in roadway horizontal curves

Ensure that lighting structures comply with Federal Aviation Administration (FAA) height restrictions within five miles of airport facilities. Coordinate with the FAA and GDOT to permit or relocate proposed or existing luminaries, mast arms, or poles that infringe into an airport’s or heliport’s base surface. Find alternative ways of providing the required level of lighting at no additional cost to GDOT if FAA restrictions prohibit lighting structures from being placed in certain areas near an airport Project.

Coordinate with the Utility Owner(s) and ensure power service is initiated and maintained for permanent lighting systems. Maintain the existing lighting as temporary lighting during construction and restore or replace prior to Substantial Completion where the Work impacts existing lighting.

Place all bore pits safely away from traffic, provide positive barrier protection, and provide necessary signs to warn of the construction area.

Contact Utility Owners regarding their specific required working clearance requirements as depicted in Section 6 (Utility Adjustments).

Affix an identification decal on each luminaire, ground box, and electrical service for inventory purposes and submit inventory information to GDOT in a GDOT-compatible format. Ensure this identification denotes that these are property of GDOT and provides a contact phone number and address in the event of emergency.

Remove lighting structures impacted by construction and replace them with new fixtures in the same perpendicular location to the centerline. Match lighting bases, poles, and fixtures to
existing, similar in appearance and dimensions, and utilizing similar materials. Ensure the replacement lighting is interconnected with the existing lighting.

**11.3.6 Replacement Fencing**

Replace fence type in accordance with GDOT’s Construction Standards and Details. Submit to GDOT for approval prior to construction if the type of proposed fence does not match the type provided in GDOT’s Construction Standards and Details.

**11.3.7 Related Transportation Facilities**

No requirements.

**11.3.8 Design Requests from Adjacent Property Owners**

If the DB Team receives any design requests from adjacent property owners, produce a report to GDOT within 30 days of receipt of each design request that identifies the following:

1. The nature of the request
2. Any financial consequences to GDOT of compliance
3. The DB Team’s assessment of the feasibility of compliance
4. Any Change Requests from the Technical Provisions that would be required
5. Any potential risks to GDOT that may arise from implementation of the design request such as environmental and permitting risks

Proceed with the implementation of the design request at its option only if no financial consequences to GDOT, time impacts to the project, or Change Requests from the Technical Provisions exist, and if GDOT raises no objection within 30 days of the design request report. Advise GDOT in writing of the decision.

**11.3.9 Additional Roadway Design Requirements**

**11.4 Construction Requirements**

**11.4.1 Vibration Control**

No requirements.

**11.4.2 Blasting**

No blasting will be allowed.

**11.4.3 Control of Access**

Maintain all existing property accesses, including those not shown on the schematic, and do not revise control of access without GDOT review and the written agreement of the affected property owner. Ensure access control is in conformance with the GDOT Regulations for Driveway and Encroachment Control.
11.4.4 Reserved

11.4.5 Stockpiling

The stockpiling of materials may be permitted on a case by case basis provided that participation is based on the appropriate value of approved specification materials delivered by the DB Team to the Project Site, or other designated location in the vicinity of the Project and the terms and conditions below. Stockpiled materials that may qualify for material allowances include materials that are not readily available, can be easily identified and secured for this Project, and can be stockpiled for long periods without detriment. Use the procedure identified in GDOT Supplement Specification 109.07.B to process a Material Allowance Request. Other provisions include:

1. Construct stockpiles in conformity with the provisions in the current GDOT Standard Specifications Construction of Transportation Systems. Place and maintain appropriate erosion control measures and restore the site to its original condition.

2. Store the stockpiled material in such a manner that security and inventory can be maintained. The DB Team is responsible for storage of said materials at no additional cost to GDOT.

3. Furnish the paid invoice or receipt for delivery within a reasonable time after receiving payment.

4. The material conforms with the requirements of the plans and specifications.

5. Assume risk for any damage to material due to the delay in incorporation of the material into the Final Plans.

6. Ensure the quantity of material does not exceed the quantity required by the Project, nor does the value exceed the appropriate portion of the contract item in which the material is to be incorporated.

7. Adhere to proper erosion control measures if the stockpiled material is embankment or other erodible material.

11.5 Deliverables

As indicated in this Section 11 and in Section 3 (Design and Submittals).
12 DRAINAGE

12.1 General
This Section 12 governs the Design-Build Team’s design and construction of the Drainage System. Effective performance of the drainage design and construction implemented for the Project (the Drainage System) is an integral part of the success of the Project. All stormwater runoff that flows through the Project, whether originating within or outside the Project, must be accounted for in the design of the Drainage System. All existing and proposed stormwater conveyances (open-channel and closed-conduit), inlets, stormwater management, soil erosion measures, pavement and subgrade drainage, and any other stormwater drainage components described in GDOT’s Manual on Drainage Design for Highways (Drainage Manual) are included as part of the Drainage System.

12.2 Administrative Requirements

12.2.1 Standards
Provide activities in this section in accordance with GDOT’s Manual on Drainage Design for Highways (Drainage Manual), Attachment 3-1 (Manuals), and other provisions of the DB Documents.

12.2.2 Data Collection
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 Attachment 12-1 (Requirements for Drainage Design Report).

Refer to Section 19 (Maintenance During the Design-Build Period).

Take data collected into account in the Final Plans of the drainage facilities. This data will be made available to GDOT upon request.

12.2.3 Coordination with Other Agencies
Coordinate all stormwater runoff issues with GDOT, affected interested parties, and regulatory agencies, including EPD, USACE, and USFWS.

12.3 Design Requirements
Ensure the Drainage System meets the following requirements:

1. The analysis, design, and construction of all components of the Drainage System address the interim conditions during construction of the Project and the conditions depicted in the RFC Plans.

2. The Drainage System has adequate capacity to convey all stormwater through the Project without any adverse impacts to upstream and/or downstream adjacent properties.

Upgrade within the Construction Maintenance Limits all substandard drainage facilities where the design and construction of the Project propose to utilize or impact those facilities. A
drainage facility utilized on the Project is any drainage facility receiving Project stormwater runoff and/or any drainage facility conveying stormwater through the Project. A substandard drainage facility is any stormwater drainage system component where the existing structural condition, per Section 13 (Structures), and/or hydraulic capacity, per this Section 12, is inadequate to carry additional stormwater generated by the Project. Include in the design of the Drainage System reconfiguration of the existing drainage systems within the Project limits and design of new storm drainage systems as required per the performance requirements defined in this Section 12.

Immediately repair damage to existing infrastructure due to the DB Team’s operation to maintain existing system capacity at all times. This permanent repair is DB Team’s expense.

Provide facilities compatible with the existing drainage system and all applicable municipal drainage plans or systems in adjacent properties. Preserve existing drainage patterns.

Use the existing drainage facilities, provided the overall drainage requirements for the Project are achieved. Do not modify existing systems or install new drainage systems to create in-line/buried/subsurface/underground detention or stormwater runoff storage. Do not use blind junctions and/or non-accessible structures unless otherwise approved in writing by GDOT. Do not install and/or utilize longitudinal storm sewer pipe under travel lanes unless approved in writing by GDOT. Maintain the existing GDOT stormwater system, at a minimum, if no modification or upgrading is required. Include in this maintenance silt removal from any pipe, ditch, or structure and removal of any debris prior to the use of any existing GDOT stormwater system. This maintenance is the DB Team’s expense.

Base Final Plans on design computations and risk assessments for all aspects of Project drainage.

Ensure flood damage potential for the completed Project does not exceed pre-Project conditions.

12.3.1 Surface Hydrology

12.3.1.1 Design Frequencies


Use the design storm frequency as required for the corresponding facility in the Final Plans if a design storm frequency is not specified for a given component of the temporary Drainage System.

12.3.1.2 Hydrologic Analysis

Design the Drainage System to accommodate the Project drainage areas. These areas may extend outside of the Project limits.

Perform hydrologic analyses for the design of drainage features during the staging of construction and for the Final Plans for the Project according to the Drainage Manual.
12.3.2 Storm Sewer Systems
Design enclosed storm sewer systems to collect and convey runoff to appropriate discharge points where precluded from handling runoff with open channels or ditches.

12.3.3 Drainage Design Report
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. The Drainage Design Report shall include the components set forth in Attachment 12-1 (Requirements for Drainage Design Report).

Refer to GDOT Guidelines for Geotechnical Studies, Section 4.5.26-Pipe Culvert Material Alternates for allowable pipe and culvert material. The EOR must demonstrate to GDOT the structural and hydraulic sufficiency of existing drainage structures, including pipes/culverts and inlets, and their functionality, impacted by construction for them to remain in place. Include in the demonstration hydraulic site inspections, calculations, bridge inventory reports, and other methods as needed. Rehabilitation of pipes and box culverts will be allowed as long as hydraulic capacity, structural integrity, and functionality are achieved.

12.3.3.1 Pipes
Design storm drains with design flow velocities greater than or equal to 3 feet per second (fps) or slopes greater than or equal to 0.0100 ft/ft to prevent sedimentation in the pipe.

Ensure minimum pipe inside diameter is 18 inches. GDOT acceptance is required for all existing pipes to be utilized with a diameter less than 18 inches.

Existing pipe systems not meeting GDOT’s maximum structure spacing requirement that are not being impacted by the construction of the Project may remain. Upgrade all existing system impacted by the construction of the Project within the Construction Maintenance Limits as defined in the Maintenance Management Plan to meet the requirements of this Section 12.

Design the Drainage System such that there is no pressurized flow in the 10-year event or more frequent storms.

12.3.3.2 Gutter Spread/Ponding
Design pavement drainage systems, in both staging of construction and the Project, to limit ponding to the maximum gutter spread listed in Table 6.3 in the GDOT Drainage Manual. Limit ponding for all bridge decks according to GDOT Drainage Manual, Section 13.2.2, Design Spread and Frequency.

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. Only allow sheet flow to flow across travel lanes.

Do not place inlets within the travel lane.
12.4 Construction Requirements
Design the Drainage System to accommodate construction staging. Ensure the design includes temporary erosion control, sediment basins and other BMPs needed to satisfy the NPDES and other regulatory requirements. Include all environmental approval commitments related to drainage design and erosion control as notes on the plans for each stage of construction.

Obtain GDOT acceptance during the Term to utilize any existing stormwater system (all pipe, structure, ditch, detention/retention system or any other component necessary for the conveyance of stormwater) outside the Project limits. Note that maintenance responsibility and costs will be as follows during the Term:

1. Costs to reconstruct or upgrade the substandard drainage facilities outside the Project limits are the sole cost of the DB Team. Rehabilitation of substandard drainage facilities may be considered upon request from the DB Team. The rehabilitation will meet the useful life as if the substandard drainage system structure was replaced as new.

2. Maintain at the DB Team's expense any stormwater system accepted by GDOT and constructed for the sole purpose of the Project outside of the Project limits.

3. Maintain and restore at the DB Team’s expense the existing system to its original intended purpose for any accepted existing stormwater system whether used jointly by the DB Team and GDOT or for the DB Team’s sole use.

Maintenance work includes silt removal from any pipe, ditch, or structure, and removal of debris prior to the use of any existing GDOT stormwater system.

12.5 Deliverables
As indicated in this Section 12 and in Section 3 (Design and Submittals).
13 STRUCTURES

13.1 General

No requirements.

13.2 Administrative Requirements

13.2.1 Design Specifications

Conduct all Work governed by this Section 13 in accordance with GDOT Bridge Design Manual, AASHTO LRFD Bridge Design Specifications, 8th Edition, AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminares, and Traffic Signals, 1st Edition, including 2017, 2018, 2019, and 2020 interims, Attachment 3-1 (Manuals), which identifies manuals as well as published guidelines, manuals, policies, etc. by reference. The GDOT Bridge and Structures Design Manual requirements take precedence where AASHTO LRFD Specifications and GDOT Bridge and Structures Design Manual requirements contradict or conflict with one another.

Reference Section 1 (General) regarding applicability of GDOT standards and specifications and manuals.

Unless otherwise noted, use LRFD methodology for design and detailing of all structural elements to be constructed or rehabilitated and incorporated within the Project.

13.2.2 Structure and Wall Construction Plans Meeting

Arrange a meeting with GDOT to specifically discuss how the plans will be prepared prior to beginning plan preparation on the Project. After the preliminary structure and wall layouts have been accepted by GDOT, prepare final plans.

13.3 Design Requirements

13.3.1 Design Parameters

Design and construct all new structures to accommodate any planned expansions or updates of each facility by its respective Governmental Entity or GDOT as designated in their respective current transportation master plans. The current transportation master plans (if any) can be found in Section 11 (Roadways).

The DB Team may use GDOT Construction Standards and Details on the Project without updating to meet LRFD requirements. Update the design to meet LRFD requirements if the DB Team modifies any of the standards and details.

13.3.1.1 Vertical Clearances

Provide a minimum vertical clearance of 17.5 feet for new structures.
13.3.2 Reserved

13.3.3 Retaining Wall Foundations
Perform LRFD wall foundation investigations for all proposed walls to be constructed on this Project. Base the foundation design on the recommendations of the accepted Wall Foundation Investigation report and the requirements of Section 8 (Geotechnical). Except as provided in Section 8, any previously accepted reports provided by GDOT are for informational purposes only and GDOT does not certify or warranty the information contained in these reports.

If Geosynthetic Reinforced Soils (GRS) Integrated Bridge System (IBS) technology is used, ensure the foundation is at or below the scour line as determined in the hydraulics and hydrological report. Ensure the GRS-IBS abutment is not overtopped during the 100-year flood. Design and provide scour countermeasures. Provide a minimum of 24-inch Type I rip rap on the endroll and apron.

13.3.4 Retaining Walls
To the extent possible, design and construct to provide embankments without the use of retaining walls. Where earthen embankments are not feasible, the DB Team may use retaining walls.

Do not use metal walls (including bin walls and sheet pile walls), recycled material walls, or timber walls.

If pipe culverts are to extend through cast-in-place retaining walls, install the pipe so that no wall expansion joints are located within two pipe diameters from centerline of the pipe.

If pipe culverts are under a cast-in-place retaining wall footing, provide a minimum of 1 foot of cover.

Locate weep holes through cast-in-place retaining walls no higher than 3 inches above proposed grade.

Do not use modular walls employing interlocking blocks (not including GRS-IBS) where surcharge loads from vehicular traffic are present or as part of bridge abutments.

Do not use Mechanically Stabilized Earth (MSE) walls on the Project.

Design the top of wall to present a smooth profile with no sharp breaks, peaks, or valleys. For walls directly in front of bridge abutments, set the top of wall elevation 1 foot above the bottom of the adjacent abutment.

Final Wall Plan acceptance is contingent on EOR response to GDOT review of the WFI.

13.3.5 Aesthetics
Design retaining walls to be similar in color, texture, and style to other Elements present in the entire Project, such as structures, landscaping, and other highway components.

Coordinate all embellishments for structural Elements with the DB Team’s structural design team to facilitate constructability and maintain safety requirements. Ensure that structural
element surfaces exposed to public view meet the requirements of the GDOT Standard Specifications, Construction of Transportation Systems.

Do not allow exposed conduits, other than those required for lighting systems, on bents, columns, bridge beams, overhangs, or any other exposed surfaces. Lighting conduits may be attached to exterior surfaces of bent columns and caps to minimize exposure to the public. Minimize drain pipe exposure to public view.

Ensure concrete finishes comply with Section 15 (Landscape and Hardscape Enhancements) and other requirements of the DB Documents.

13.3.6 Sign, Illumination, and Traffic Signal Supports
The DB Team is responsible for the design of overhead sign supports to accommodate a full load of signs. Use sign bridge (Type I), butterfly (Type III), or combination (Type IV) in accordance with Attachment 3-1 (Manuals). Do not use Type II sign (cantilever type) structures.

Do not mount support columns for Type I, III, and IV overhead sign structures or traffic signal mast arms to any portion of the new or existing bridge superstructure. Where an overhead sign structure or mast arm is required to be placed on a bridge, mount it either on the bridge substructure directly, such as the concrete pier cap, or on a pier and foundation separate from the bridge entirely. For a sign structure that is mounted to the pier cap, design the bridge pier for the additional loads and forces the sign structure will induce on the bridge substructure, including dead load, ice load, wind load, and vibration. Develop loads in accordance with the LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 1st Edition, including 2017, 2018, 2019, and 2020 interims. For a sign structure or mast arm mounted to a foundation that is independent from the bridge, design the sign foundation in accordance with the LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 1st Edition, including 2017, 2018, 2019, and 2020 interims.

13.4 Construction Requirements

13.4.1 General Construction Requirements
Refer to Section 18 (Traffic Control) for Traffic Control requirements related to bridge construction.

Ensure all welding is performed by certified welders that have in their possession a current welding certification card issued by the Office of Materials and Testing. Only use E70XX (excluding E7014 and E7024) low hydrogen electrodes for manual shielded metal arc welding.

Ensure welding is in accordance with the requirements of the American National Standards Institute (ANSI)/AASHTO/ American Welders Association (AWS) D1.5M/D1.5:2010 Bridge Welding Code.

Verify all existing dimensions and elevations in the field prior to ordering materials and building forms.
13.5 Deliverables

As indicated in this Section 13 and in Section 3 (Design and Submittals).

13.5.1 Preliminary Wall Plans

Prepare Preliminary Wall Plans in accordance with the GDOT Bridge Detailing Manual guidelines.

Any construction sequence requirements that will affect the construction of the walls need to be accounted for in the preparation of retaining wall plans.

13.5.2 Wall Construction Plans

Provide Submittals as required in the following:

1. Section 3 (Design and Submittals)
2. Attachment 3-1 (Manuals)
3. DB Documents
4. Hardscape Enhancement Plan for bridges, retaining walls, noise barriers, sign structures, and other structure components as required in Section 15 (Landscape and Hardscape Enhancements)
14 RESERVED
15 LANDSCAPE AND HARDSCAPE ENHANCEMENTS

15.1 General
Repair any damage to existing landscaping elements. Design and construct aesthetic treatment enhancements for the roadway and landscaping Elements of the Project as defined in this Section 15 and to harmonize with the indigenous landscape and architecture.

15.2 Administrative Requirements
The intent of this Section 15 is to provide guidelines on enhancement value for both the users and the onlookers of the corridor, and to provide a roadway corridor with continuity and attractiveness using comprehensive aesthetic treatments. This Section 15 presents minimum landscape and hardscape design requirements for the Project.

15.3 Design Requirements

15.3.1 Landscape and Hardscape Enhancement Principles and Strategies
Follow the guidelines listed for preparation of any required landscaping designs and plans for GDOT review:

1. Minimize the impact of the Project on the existing natural environment to the extent possible.
2. Ensure the Project is complimentary to the indigenous landscape to the fullest extent possible.
3. Use simple geometric shapes for structures to the extent possible for continuity along the entire length of the Project.
4. Detail all structures carefully to achieve the greatest level of quality and fit within the regional context.
5. Use color, texture, and form consistently for all structures.
6. Use colored mix concrete or staining application with prior approval by GDOT where color is used for concrete features. Do not use painted concrete features.
7. Ensure consistent graphics, signage, and lighting along the entire length of the Project.
8. Preserve unmanaged woods, existing trees, and rock outcroppings to the greatest extent possible.
9. Fully integrate Embellishment Elements with the overall landscape design.
10. Ensure Landscape Enhancement Plans conform to GDOT’s specifications, policies, and procedures.
11. Ensure consistent visual quality of the landscape along the entire length of the Project.
12. Ensure Embellishment Elements are easy to maintain and provide protection from vandalism and graffiti.
13. Ensure aesthetics do not interfere with safety, constructability, and maintenance.
15.3.2 Walls
Apply ashlar treatments to the vertical surfaces, where publicly visible, of retaining walls (including cast in place walls and MSE walls).

Pay special attention to themed design embellishments and use high-quality finishes and materials at interchanges.

Achieve ashlar finish with a concrete form liner approved by GDOT. Ensure the ashlar pattern stone sizes vary from 6 inches to 32 inches wide and 3 inches to 12 inches high with 0.75-inch-deep by 0.75-inch wide joints, and that the ashlar finish is light gull gray in color. Use light gull gray Federal Standard (FS) 595C color number FS36440 and/or as approved by GDOT.

Use graffiti-proof coating that meets the requirements of GDOT Standard Specification Construction of Transportation Systems Section 838 on all visible walls.

15.3.3 Other Structures
Coordinate all embellishments for structural Elements with the DB Team’s structural design team to facilitate constructability and maintain safety requirements.

15.3.4 Trees, Shrubs, and Other Plant Materials
Ensure that all plants supplied for this Project are grown in Georgia. Provide documentation from supplier indicating source of plants.

15.3.5 Lighting
No requirements.

15.3.6 Control Buildings
No requirements.

15.3.7 Intersection Hardscape
No requirements.

15.3.8 Miscellaneous Concrete Paving
Ensure all concrete islands are in accordance with GDOT Standard 9032B and have colored stamped concrete, matching Federal color code FS30152.

15.4 Construction Requirements
Provide GDOT samples, mock ups, or catalog cuts for review and approval prior to start of production of any embellishment element.

Provide GDOT sample panels of textured concrete surfaces a minimum of 60 days in advance of starting construction for review and approval.

15.5 Deliverables
As indicated in this Section 15 and in Section 3 (Design and Submittals).
16 SIGNING, PAVEMENT MARKING, SIGNALIZATION

16.1 General
Design and construct all signing, delineation, pavement markings, and signalization for the Project.

16.2 Administrative Requirements

16.2.1 Standards
Provide activities in this Section 16 in accordance with Attachment 3-1 (Manuals), Government Approvals, and other provisions of the DB Documents.

16.2.2 Meetings
Arrange and coordinate all meetings with local agencies that assume responsibility for maintaining and operating traffic control devices including traffic signals. Provide GDOT with notification of such meetings a minimum of ten Business Days prior to the start of the meeting. GDOT, in its discretion, may attend such meetings.

Arrange and coordinate all meetings with requesting agencies or individuals regarding special signs.

16.3 Design Requirements

16.3.1 Permanent Signing and Delineation
Include all new signs required for the Project and replace existing signs and structures impacted by the Project with new signs and structures that meet all applicable Attachment 3-1 (Manuals) requirements. Include in the design 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, delineation placement, guide sign and special sign details, clearance diagrams, and structural and foundation requirements. Locate signs in a manner that avoids conflicts with other signs, vegetation, CMS/VMS, lighting, and structures. Ensure that signs are clearly visible, provide clear direction and information for users, and comply with all applicable Attachment 3-1 requirements. Ensure that placement, construction, and installation activities of signage avoid impacts to all environmentally sensitive resources.

Ensure that all sign placements meet appropriate sight line requirements and standards. Design and locate all sign structures and overhead signs to ensure that they and any existing GDOT overhead signs have sight distance of at least 1,000 feet and meet any other MUTCD and GDOT Signing and Marking Design Guidelines and allowable sign spacing requirements.

Review with GDOT all requests for new signs, including traffic generators, or modifications of existing sign legend. Such requests are subject to GDOT’s acceptance.

Replace any existing signs and sign structures impacted by the Project or in conflict with proposed signs with new signs and structures that comply with Attachment 3-1 (Manuals), or as otherwise approved by GDOT.
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.

All overhead sign structures on mainline 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 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, replace with new signs and structures in order to meet requirements.

16.3.2 Sign Support Structures
Determine foundation types and design sign foundations based upon geotechnical surveys/tests. Design sign support structures in accordance with Attachment 3-1 (Manuals). Provide the design of the structural support for overhead signs to GDOT and provide for the maximum allowable sign area that can be placed onto the structure support as defined in GDOT Signing and Marking Design Guidelines. Design Type III structures to accommodate at least 550 square feet of sign area. 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. Ensure that any existing overhead sign structure that has a change in design sign area and/or load due to new or revised signs meets all structural requirements in Attachment 3-1 (Manuals).

16.3.3 Permanent Pavement Marking
Ensure that the design and installation of all pavement markings including Raised Pavement Markings (RPM) comply with the Attachment 3-1 (Manuals). Install RPMs where new pavement marking is provided.
Contrast pavement markings are required on all concrete surfaces.

16.3.4 Permanent Signalization
Coordinate with the Utility Owners and ensure necessary power service is initiated and maintained for permanent signal systems.

After implementing accepted timing plans, provide GDOT and Governmental Entities (maintaining agencies) responsible for operation and maintenance of the traffic signal system legible written documentation of all intersection characteristics, timing plan parameters, and installation information necessary for GDOT or the Governmental Entity to incorporate the completed signal installation into the central intersection management software.
16.3.4.1 Traffic Signal Requirements

Modify, as appropriate, any existing traffic signals impacted by the Project. Coordinate with GDOT and the applicable local Governmental Entities to define appropriate traffic signal design requirements, local agency oversight of the Work, and final acceptance of traffic signals. Coordinate with local Governmental Entities for synchronization of traffic signal networks.

Provide interconnection systems between new or modified signals and any other signal system within the Project Site as required by GDOT or the applicable local Governmental Entity. Coordinate connection of the completed system to the Governmental Entity’s communications network with the Governmental Entity. Ensure continuous communication with the traffic signal system within the Project Site, and provide all communication hardware/equipment for GDOT or the applicable local Governmental Entity to communicate with the signal systems within the Project Site.

Coordinate with the GDOT TMC and the GDOT District Traffic Operations to ensure that all signalized locations are permitted prior to submission of Final Plans.

Maintain all existing traffic signals until Final Acceptance, which includes:

1. Control system adjustments
2. Temporary support pole locations required by the Project during the interim period through the installation of the permanent traffic signal locations
3. Vertical clearance requirements
4. Maintenance and repairs

Do not cause any part of the signals to be inoperative. The permanent traffic signal locations are to be checked and accepted by the District Traffic Signal Engineer and the County Traffic Engineer prior to Final Acceptance.

16.3.4.2 Traffic Signal Timing Plans

Traffic signal timing should be developed and implemented by a prequalified Contractor/Consultant. As a minimum, this work will include:

1. Coordination with local GDOT District and/or local government(s) to gather agency preferred timing parameters and expectations, and to facilitate a smooth transition from existing signal timing plans to new signal timing plans.
2. Evaluation of existing traffic operations, system equipment functionality, and inventory of assets.
3. Collection of two-hour turning movement counts (TMC’s) for the AM, mid-day, and PM peak periods at each Intersection. For contractor timing projects (if approved by the Engineer AND the signals reside in a rural area), one-hour TMC’s may be collected in lieu of two-hour TMC’s.
4. Collection of directional (tube) counts (seven-day/24-hour) per control section, as appropriate or as recommended by the Engineer. A minimum of one directional count is required, and additional directional counts are needed if the number of intersections exceeds seven or if there are significant changes in traffic volumes along the corridor.
5. Development, implementation, and fine-tuning a minimum of four signal timing plans per control section, unless otherwise specified by the Engineer. In most cases, more than the minimum required will be needed to successfully complete the project.

6. Development of additional timing plans as needed, including holiday, seasonal, weekend, and other special plans as requested by the Engineer. The number of additional plans shall be discussed as part of the kickoff meeting. For contractor timing projects, the Consultant will need to address this item prior to providing a fee to the contractors.

7. Before/after studies and preparation of project performance measures to detail signal timing improvements.

16.3.4.3 Traffic Signal Permit
As part of the design process, obtain the necessary traffic signal permit or permit revisions by following applicable GDOT and/or local Governmental Entities’ signal permit processes prior to any new signal installation or existing signal modification.

16.3.4.4 Traffic Signal Support Structures
As part of the design process, coordinate with GDOT and the local Governmental Entities to determine the type of acceptable traffic signal support structures. Obtain the maintaining agency’s acceptance of traffic signal support structures to be used on new signal installations.

16.3.4.5 Traffic Signal Interconnect
Provide interconnection systems between new or modified signals and any other signal system within the Project Site. Coordinate connection of the completed system to GDOT’s or the Governmental Entity’s communications network with GDOT or the Governmental Entity. Ensure continuous communication with the traffic signal system within the Project Site and provide all communication hardware/equipment for GDOT or the applicable local Governmental Entity to communicate with the signal systems within the Project Site.

Design the communication infrastructure and network in accordance with the GDOT ITS Design Manual. Conduct a communication network design kick-off meeting with GDOT and the Governmental Entity prior to beginning design efforts. Use the kick-off meeting to confirm GDOT\the Governmental Entity communication network requirements.

All fibers installed under this Project shall be terminated at communication hubs or termination points as designated for GDOT\the Governmental Entity. This shall include terminating each fiber to a rack mounted fiber distribution center. Provide patch cords for each connection between fibers at a termination fiber distribution center. Determine the link loss budget analysis for all fiber-optic links.

When conduit or duct banks are installed under roadways or shoulders for lateral crossings, install the conduit and duct banks by directional boring as shown in GDOT ITS detail drawings.

The signals shall be served by physically and logically separate communication networks. All conduit, conduit access (e.g., electrical communication boxes (ECBs) and pull boxes), fiber and communication cabling, cabinets, patch panels, network switches, and terminal servers shall be
solely dedicated to the applicable Governmental Entity. Dedicated conduit shall be within the same conduit duct bank. Every conduit in each duct bank shall have a unique color and/or striping pattern. The coloring shall be consistent through the Project corridor. Do not install fiber-optic, other data communication, or composite cable in the same conduit as an electrical power service cable.

### 16.4 Construction Requirements

#### 16.4.1 Permanent Pavement Marking

Install full pattern pavement markings on all pavement courses before any roadway is opened to traffic. Place and maintain RPMs when the roadway is open to traffic.

Before placing any permanent pavement markings, provide GDOT a layout indicating the proposed location of such items.

#### 16.4.2 Permanent Signing and Delineation

Use established industry and utility safety practices when erecting or removing signs located near any overhead or underground utilities, and consult with the appropriate Utility Owners prior to beginning such work.

Maintain all applicable advance guide signs and exit direction signs in place at all times and ensure the view of these signs is not obstructed. Replace any other removed signs before the end of the work day.

Ensure signing reflectivity conforms to the Attachment 3-1 (Manuals).

Before placing any permanent signs, delineation, third-party signs, or non-standard sign structures, provide GDOT a layout as part of the Final Plans indicating the proposed location of such items. Submit overhead sign structures and locations for review and acceptance.

#### 16.4.3 Project Signs – Outside the Existing ROW

For signs located outside the Existing ROW and Additional Properties, but within a public ROW, install the signs in existing rights of way controlled by local or other Governmental Entities. Coordinate with applicable Governmental Entities for the design, approval, and installation of such signs, including any trailblazing signing required for the Project.

#### 16.4.4 Specific Service Signs

No requirements.

### 16.5 Deliverables

As indicated in this Section 16 and in Section 3 (Manuals).

#### 16.5.1 Intersection Design Studies

As needed to support recommendations for intersection layouts and including signing, signalization, and pavement markings.
17 INTELLIGENT TRANSPORTATION SYSTEMS

17.1 General Requirements

This Section 17 governs the DB Team’s responsibilities for design and construction of the Intelligent Transportation System (GDOT ITS) including requirements for traffic surveillance, detection, traveler information dissemination, and communication.

17.2 Administrative Requirements

17.2.1 Required Personnel

17.2.1.1 ITS Design Manager

Designate an ITS Design Manager whose responsibilities include oversight of ITS infrastructure design activities. Ensure the ITS Design Manager has a minimum of 10 years of relevant experience in ITS design.

17.2.1.2 ITS Construction Manager

Designate an ITS Construction Manager whose responsibilities include oversight of ITS infrastructure design activities. Ensure the ITS Construction Manager has a minimum of 10 years of relevant experience in ITS design.

17.2.2 General Purpose Lanes ITS

The GDOT ITS equipment includes DMS, video detection systems (VDS), closed-circuit television (CCTV), automatic incident detection (AID), communications network including network equipment, and communication network hub buildings with heating, ventilating, and air conditioning (HVAC) systems. Design, construct, test, and integrate the GDOT ITS equipment, support structures, power supplies, associated communications network, duct banks, and fiber backbone.

17.2.3 Transportation Management Center (TMC) Improvements

Any required improvements to the Transportation Management Center (TMC) that are necessary in connection with the Project will be managed by GDOT. The TMC Improvements include Advanced Transportation Management System (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 DB Team-provided GDOT ITS. Coordinate with the TMC SI 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 Control Point Event dates and ITS Batch Acceptance dates.

17.3 Design and Construction Requirements

Install DMS sites per the requirements in Section 1 (General) and Attachment 1-1 (DMS Location) by either connecting with existing fiber or using a wireless connection, as specified below:
1. SR 21 Alt / Jimmy DeLoach Connector Southbound (wireless)
2. SR 21 / Augusta Road Southbound (wireless)
3. SR 3 / Cobb Parkway Northbound approaching Cumberland Blvd SE (connected to existing fiber)
4. SR 3 / Cobb Parkway Southbound approaching Akers Mill Rd SE (connected to existing fiber)
5. I-575 Southbound on-ramp at Sixes Road (connected to existing fiber)

For GDOT ITS, determine the number and specific locations of all GDOT ITS equipment and components required to meet GDOT requirements herein. Provide with each Design Submittal the proposed locations of ITS equipment and components for GDOT review and acceptance.

DB Team Submittals for Work related to ITS infrastructure shall follow a five-tiered process:

1. Baseline Condition Report
2. Preliminary
3. Final
4. RFC
5. As-built Record Design Documents

Schedule and facilitate a Communication network design kickoff meeting prior to the beginning of preliminary design to confirm GDOT and Local Agencies communication network requirement.

Prepare and submit preliminary and final ITS design Plans, including placement of all GDOT ITS components, network communication schematic diagrams, and specifications. These Submittals shall show how the GDOT ITS implementation will be planned to ensure continuous operation of systems throughout the Construction Work, and demonstrate GDOT ITS components’ consistency and compatibilities with adjacent GDOT ITS. The Plans, at a minimum, shall provide horizontal and vertical plan location, proposed equipment and components, proposed structures, and types of materials for the entire ITS.

Conduct all Work necessary to design, procure, furnish, install, integrate (as defined in this Section 17 and associated specifications), and maintain GDOT ITS, including gantries, electrical power, fiber-optic communications, ITS cabinets, maintenance access, junction boxes and conduits in accordance with the DB Documents. All GDOT ITS equipment provided by the DB Team shall support, at a minimum, National Transportation Communications for ITS Protocol (NTCIP) compliant interface protocols ensuring efficient integration of each device/controller with the ATMS.

Survey and locate the existing GDOT ITS infrastructure, including all fiber trunk lines, conduit and duct banks, communication network hub buildings, drop fiber, electrical lines, equipment, and components prior to NTP 3. The results of this location and survey shall be submitted as part of the Survey Control Package in Section 9 (Surveying and Mapping). If the Project impacts a continuous count station (CCS) that collects traffic data for GDOT, notify the administrator at the GDOT Office of Transportation Data at 404-347-0701 at least two weeks prior to beginning
construction activities. GDOT will coordinate with the owner of the equipment who will be responsible for salvaging.

Prepare mark-up plans, which capture daily field changes, and include in the As-Built Record Design Documents.

17.3.1 Closed Circuit Television (CCTV) Subsystem

17.3.1.1 CCTV General Requirements
Design CCTV in accordance with the GDOT ITS Design Manual.
Furnish, install, integrate, and test CCTV in accordance with GDOT Standard Specifications and Special Provisions.

17.3.1.2 CCTV Applications
GDOT ITS CCTV cameras will be used by GDOT to monitor real-time traffic conditions along the roadway and provide real-time information to support:

1. Incident verification and management
2. Highway Emergency Response Operator (HERO) dispatching
3. Traffic surveillance and traffic control, including any traffic signals and ramp meter management
4. Monitoring of GDOT General Purpose Lane and DMS, (i.e., to verify overhead DMS messages and to monitor DMS LED performance to support maintenance management).

17.3.1.3 CCTV Camera Design Requirements
Design GDOT ITS CCTV cameras to be Type 1P CCTV systems as specified in Special Provision Section 936 - Closed Circuit Television (CCTV).

Design the GDOT ITS CCTV system to provide overlapping, continuous coverage between adjacent cameras of the General Purpose Lanes, interchange ramps, and ramp intersections with each side street.

Early in the development of the Preliminary Design Documents, provide evidence that the GDOT ITS CCTV system design provides coverage as described above. The evidence shall be a 3-dimensional (3D) view of the General Purpose Lanes as viewed from the DB Team proposed camera mounting heights above the roadway. The 3D views shall cover the entire Project Site, including General Purpose Lanes and the DMS, and include all possible sight obstructions, including vegetation, existing signs, proposed signs, relocated signs, bridges and overpasses, and vertical and horizontal alignments. All new CCTV poles shall be of sufficient height to mount CCTV cameras at a minimum height of 50 feet above the roadway surface. Design new poles to meet the CCTV camera’s mounting height of 50 feet above the roadway. CCTV cameras may be installed on existing strain poles where other ITS equipment resides a minimum height of 20 feet above the roadway surface. Where CCTV cameras are installed on existing strain poles, the DB Team shall verify the existing strain pole is structurally sound and can carry the additional load, including CCTV camera, pole-mounted cabinet, etc. CCTV cameras shall not be mounted in excess of 54 feet above the base of the pole or the area where a bucket truck can park for maintenance of the CCTV camera. At no times shall the distance between the bucket truck parking location and the CCTV camera require a bucket truck arm.
length of greater than 70 feet. If CCTV cameras are connected to overhead gantries, the maximum 15-foot tubular extension shall be connected to the sign structure upright and not to any truss portion of the structure. Tubular extensions shall meet the minimum vibration requirements per GDOT Standards and Specifications.

Design any pole or upright with a CCTV camera mounted to it to be rigid with minimum vibration due to wind. Total deflection at the CCTV camera mounting height shall meet the requirements set for strain poles for ATMS applications per GDOT Standard Specifications Section 639 - Strain Poles for Overhead Sign and Signal Assemblies. Include deflection design calculations in the required structure design Submittals.

**17.3.1.4 CCTV Implementation Requirements**

For CCTV subsystems that are replacements for removed/relocated GDOT CCTV sites, furnish, install, integrate, test, and make available for GDOT’s use prior to deactivation and removal of the existing CCTV. All replacement CCTV equipment shall be new. No relocation of existing equipment is permitted as a part of this Project. Replaced and removed equipment and components shall be provided to GDOT.

Coordinate return of salvageable equipment with the GDOT State ITS Engineer at (404) 635-2849.

Place all salvaged equipment on pallets and provide a list of materials with the description of each item, its condition, and equipment serial numbers. Deliver salvaged equipment to the GDOT Transportation Management Center located at 935 United Avenue SE, Atlanta, GA 30316-2531.

Install camera system assemblies on new concrete strain poles unless installed on existing or other sign structures.

Include milestones for replacement GDOT CCTV cameras and new traffic monitoring GDOT CCTV camera installation in the Project Baseline Schedule.

Prepare, submit, and implement a CCTV Test Plan meeting the requirements of GDOT Standard Specifications Section 942 - ITS General Requirements.

Regardless of the line of sight verification during design, construct a GDOT CCTV camera system meeting the coverage requirements described in Section 17.3.1.3 (CCTV Camera Design Requirements) throughout the Term. If any roadway segment does not meet the coverage requirements, at any time before or after Substantial Completion as a result of misplacement or misalignment during the Construction Work, modify the CCTV placement as necessary to meet the coverage requirements. Modifications for which the DB Team shall be responsible include raising or lowering camera mounting heights, providing additional CCTV installations, or other solutions presented by the DB Team and submitted to GDOT prior to implementation.

**17.3.2 Dynamic Message Sign (DMS) Subsystems**

**17.3.2.1 General DMS Requirements**

Design all DMS to meet the following requirements:
1. In accordance with the GDOT ITS Design Manual.

2. Furnish, install, integrate, and test DMS in accordance with GDOT Standard Specifications.

### 17.3.2.2 DMS Applications

Include DMS applications as described below:

1. Type III DMS are used to provide Users with information on travel speeds (including comparative travel speeds for the General Purpose Lanes, traffic incidents, road conditions, weather conditions, and emergency alerts such as AMBER Alerts. Connect these DMS to GDOT ITS network and controlled from the GDOT TMC. Connect these DMS to GDOT network fiber, controlled from the GDOT TMC, and connected to the GDOT ITS network. Provide static in support of the point of entry DMS in accordance with the requirements in Section 16 (Signing, Pavement Marking, Signalization).

### 17.3.2.3 DMS Design Requirements

Provide DMS (both for GDOT general traveler information DMS and comparative travel speed DMS) in accordance with GDOT Supplemental Specification Section 631 – Permanent Dynamic Message Signs.

Each DMS shall require a new structure to be designed and constructed.

### 17.3.2.4 DMS Implementation Requirements

Place all salvaged equipment on pallets, containing a list of materials with the description of each item, their condition, and equipment serial numbers. Deliver salvaged equipment to the GDOT Transportation Management Center located at 935 United Avenue SE, Atlanta, GA 30316-2531.

Prepare and implement a GDOT DMS integration plan for GDOT’s approval. The integration plan shall meet the requirements of GDOT Standard Specifications Section 942 – ITS General Requirements.

No DMS installation shall be allowed prior to the availability of power. Each DMS shall be fully functional under local control within 72 hours of sign mounting. Complete integration and testing as scheduled according to the accepted DMS integration plan and DMS testing plan.

Prepare, implement and submit a DMS testing plan. The testing plan shall meet the requirements of GDOT Standard Specifications Section 631 – Permanent Dynamic Message Signs and Section 942 – ITS General Requirements.

### 17.3.2.5 Communication / Network General Requirements

Design, furnish, install, integrate, and test fiber-optic backbone and laterals. All GDOT backbone shall be single-mode, fiber optic cable. Match the size of the new backbone to the size of the existing backbone. The long haul and distribution networks shall be Internet protocol (IP) over Ethernet. Communication drops to local GDOT ITS cabinets shall also be single-mode fiber optic cable and IP over Ethernet. Design, furnish, and install communication between the ITS cabinets and the local equipment and components attached to the cabinet based on the requirements of the equipment and components. GDOT requires separate pull boxes for the drop fiber and conduit from main fiber splicing trunk pull box for maintenance access.
The communication and network layout focuses on the existing and proposed communication network hub buildings that will aggregate distribution layer Ethernet network for transmission to GDOT. All communication and network infrastructure shall be new. Install new ITS and communication infrastructure. Existing ITS equipment, poles, sign structures, cabinets, cables, and conduits cannot be relocated or reused. Replace any ITS infrastructure affected due to Project construction activity with new.

Do not install any duct banks under paved surfaces, except when crossing ramps or other travel lanes. Do not install conduit duct banks behind noise barriers. The designated order for installation of new conduit duct banks shall be:

1. Behind the guardrail
2. 10 feet from the paved shoulder
3. Under the paved shoulder, providing justification for this location
4. 10 feet from the noise barrier, providing justification for this location

Design all required conduit and cable crossings of travel lanes to connect from the fiber trunk lines to the GDOT ITS equipment.

17.3.2.6 Communication Network Design Requirements

Design the communication infrastructure and network in accordance with the GDOT ITS Design Manual.

All conduit, conduit access (such as ECBs and pull boxes), fiber and communication cabling, cabinets, patch panels, network switches, and terminal servers shall be solely dedicated to the GDOT ITS network. Dedicated conduit shall be within the same conduit duct bank. For each new communication duct bank, four 2-inch conduits shall be dedicated for GDOT ITS network. Every conduit in each duct bank shall have a unique color and/or stripping pattern. The coloring shall be consistent throughout the Project. No fiber optic, other data communication, or composite cable shall be installed in the same conduit as an electrical power service cable.

When conduit or duct banks are installed under roadways or shoulders for lateral crossings, install the conduit and duct banks by directional boring as shown in GDOT Construction Standards and Details (ITS-07).

Design the communication network for the GDOT ITS to be end-to-end; from the field equipment to the ATMS TMC including the GDOT ITS cabinets and existing communication network hub buildings.

Design appropriate cabinet dimensions, communication shelf slots, network bandwidth capacity, conduit capacity, backbone fiber availability, and electrical circuit capacity. Design all cabinet foundations and slabs as well as grounding and electrical service.

Aggregate all GDOT ITS data to 40 Gb (gigabit) backbone network at designated communication network hub buildings at the locations in Table 17-2 (Location Communications Network Hubs) and within the new communication network hub buildings.
Table 17-2: Location Communication Network Hubs

<table>
<thead>
<tr>
<th>Owner</th>
<th>Location</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hub A</td>
<td>GDOT</td>
<td>I-75 Southbound at I-285, Cobb County</td>
</tr>
<tr>
<td>Hub Z</td>
<td>GDOT</td>
<td>I-575 Southbound at SR 92, Cherokee County</td>
</tr>
</tbody>
</table>

Terminate all fibers installed under this Project at communication network hubs or termination points as designated for the GDOT ITS network. This shall include terminating each fiber to a rack mounted fiber distribution center. Provide patch cords for each connection between fibers at a termination fiber distribution center.

Design a backbone communication system with fiber-optic cables installed within the Site. Use lateral drop cabling to reach GDOT ITS sites.

Adapt the communication network design to accommodate communication network details provided at any time prior to the Final Design package by GDOT (for the GDOT ITS).

17.3.2.6.1 GDOT ITS Communication Network Design Requirements

General design requirements for GDOT ITS network are as follows:

1. Provide an IP Ethernet based system with a fully redundant architecture allowing automatic, self-healing, and cutover of data flow to a secondary path or segment in the case of a primary equipment failure or fiber break. The ITS communication system backbone shall be rated for a 40-Gbps (gigabit per second) transfer rate, minimum.

2. Provide a connection to the existing Layer 3 Gig-E at the existing communication network hub location(s).

3. Provide ITS field switches rated for a 1-Gb uplink transfer rate, minimum. Downlink ports at the field switches shall be 10/100/1000BaseT in each ITS cabinet to support connectivity of the ITS equipment connected to the cabinet. Each Layer 2 switch shall be designed with adequate ports to support communication with all equipment connected in the cabinet. A minimum of four spare ports shall be provided.

4. Each field network switch along the Project shall have a primary and secondary physical path fiber path from the field cabinet to the communication network hub. Primary and secondary paths shall not be a collapsed ring.

5. Design ITS fiber network based on GDOT provided logical network assignments, fiber allocation information, and splicing details. Coordinate with GDOT to obtain fiber allocation diagrams and other required details to implement the network design.

6. The fiber layout for GDOT ITS shall provide a daisy-chain. The daisy-chain shall be confirmed with GDOT prior to commencement of Final Design activities; the maximum number of Layer 2 field network switches forming a network path between an end equipment or components (GDOT ITS) and a communication network hub based data aggregating Layer 3 network switch shall not exceed eight per fiber pair. The calculated data throughput assigned to any sub-network path shall not exceed one-third of the path’s throughput capacity.
7. Provide an integrated broadband cellular wireless router that comply with IEEE 802.3 standards for 10/100/1000 Mbps Ethernet, and has a 4G LTE or greater throughput. The router will provide capability for network traffic to be accessible via a public or private IP connection, via VPN tunnel with SSL, IPsec, and IP pass-through. Provide a wireless systems with a minimum of one 10/100/1000 Base-T/TX, shielded Ethernet-port, outdoor-rated RJ-45 connector or another Ethernet-compatible weatherlight connector, and visual status indicators that include Power, Signal, Ethernet Link, and Activity. Include an external ruggedized antenna for broadband wireless.

8. All drop fiber shall be per GDOT Standards and Specifications.

17.3.2.7 Communication Network Implementation Requirements

Furnish, install, integrate, and test the communication network in accordance with the Attachment 3-1 (Manuals).

All fiber optics used in this Project shall be outside plant (OSP) single-mode fiber. Provide fiber-optic cables for trunk lines and drop lines, 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 mini-hub, and ITS elements to the backbone communication system.

Use either field terminated or pre-terminated drop cable assemblies for all drop fibers from the fiber optic trunk line to the ITS cabinet or equipment.

Furnish and install underground splice enclosures at all trunk line splices and at all locations where drop fibers are installed.

Furnish and install rack-mounted FDUs in all field cabinets and communication network hub buildings. FDUs shall be fitted with LC-connectors. Do not use pre-terminated FDUs.

Furnish and install all equipment, cabinets, cabling, and electronic devices needed to connect the backbone fiber 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.

17.3.3 ITS Electrical Service (Power) Requirements

17.3.3.1 ITS Electrical General Requirements

Coordinate with the electrical power companies and provide electrical power for all GDOT ITS in the Project. Pay all costs for providing electrical power service. In addition, pay all electric service recurring costs, for the ITS until Substantial Completion. Complete and submit the GDOT Utility Service Request Form with supporting documentation when transferring Utility service to GDOT.

17.3.3.2 Electrical Design Requirements

17.3.3.2.1 General Electrical Design Requirements

Ensure electrical power is 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.
Design electrical loads for all ITS cabinets, communication network hub buildings, GDOT ITS devices, and Toll equipment. At each location, accommodate electrical load for GDOT ITS

Starting with the Preliminary Design Documents, provide electrical power calculations to GDOT. Power calculations shall include power loading, transformers, and conductor sizes based on National Electrical Code (NEC) standards. In no case shall electrical service provided at a location be less than 120 volts, 20 amps alternating current (AC). Electrical load at each ITS cabinet shall be based on a factor of two times the calculated load based on the equipment being provided for that cabinet to allow for future expansion and use of maintenance tools.

In addition to other requirements referenced herein, electric pull boxes shall be spaced not more than 500 feet apart. No fiber optic or other data communication or composite cable shall be installed in the same conduit as an electrical power service cable.

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. The theft deterrent devices typically consist of a rubber stopper mechanical device that compress against the electrical wiring and prevents the wires from being easily pulled through the conduits. 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. These calculations shall include sizing and ratings of all circuit breakers, transformers, fused switches, and transfer switches planned for installation. Submit these calculations with the Preliminary Design Documents and Final Design Documents and with each subsequent submittal with all data appropriately updated. Include an allowance of 9.0 amps at the end of the circuit for a convenience outlet. Where transformers are used, provide ± 2.5-percent and ± 5-percent voltage taps. These taps shall not be used to fulfill the voltage drop and wire size requirements of these minimum technical requirements.

Where circuits run in different directions from the service panel, provide separate circuits, each with its individual circuit breaker. Provide a main disconnect circuit breaker at each power service point.

17.3.3.2.2 **Lightning Protection Design Requirements**

Design all ITS equipment, poles, and structures to include lightning protection systems per the requirements of Attachment 17-1 (Surge Protection Systems and Devices) and as described herein. The top of the lightning rod shall be at least 2 feet above the highest point or top of any and all ITS equipment attached near the top of the pole.

Each ITS cabinet, ITS pole, and communication network hub building shall have an exterior earth-ground ring consisting of a system of ground rods connected to a ring of #2 AWG, stranded bare copper ground wire. For ITS cabinets and ITS poles, the earth ring shall consist of a minimum of two ground rods. Ground rods shall be placed at least 40 feet from adjacent ground rods. When ground rods adjacent installations are within 100 feet of each other, the rings shall be connected with #2 AWG stranded bare copper ground wire. Each site shall include lightning protection which shall also be connected to the Site’s earth-ground ring. The ground system shall be measured and documented with a resistance of 5 ohms or less.
Where new GDOT ITS equipment is placed on an existing structure, update the structure’s lightning protection system to the lightning protection requirements for new structures.

17.3.3.2.3 **Grounding Design Requirements**

To facilitate testing and periodic retesting of the grounding array at each ITS pole, ITS cabinet, communications network hub building, and structure, design the grounding system so that the top of all grounding rods are installed in an Electrical Service Type 2 Pull Box. Design -tThe grounding conductor to be exothermically connected to the ground rod at an elevation of 12 inches below 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. Design grounding arrays to be interconnected with cabinets, poles, and lightning systems that are within 40 feet of each other. Accurately show the actual locations of buried connections and ground rods in the Release for Construction Documents.

When new GDOT equipment is placed on an existing structure, update the grounding system to the requirements set forth in this Section 17.3.3.

Grounding shall meet the minimum requirements of NEC.

17.3.3.3 **Electrical Implementation Requirements**

Furnish, install, and test the electrical systems as required to meet the power and UPS demand of each, communication network hub location, and GDOT ITS cabinet location. Furnish, install, and test the electrical services as required by the DB Documents and this Section 17.3.3.

At locations (except communication network hub buildings) where electrical power service is provided to GDOT ITS cabinets and equipment, ensure that the electrical power company installs electrical usage meters, breakers, and service panels. At each new communication network hub building, ensure that the electrical power company installs one electrical usage meter for the communication network hub building.

Ensure all voltage being provided to the cabinet is in accordance with the DB Team’s approved electrical design calculations. Test the power from the electrical service disconnect, to the transformer, to the meter(s), and into the cabinets.

Furnish and install all components of the electrical power systems to ensure a complete and functioning system. Furnished and install the electrical systems to include all required device power supplies, grounding, lightning protection, and surge suppression. Surge suppression shall be furnished and installed on both ends of any underground electrical cable or composite cable carrying electrical power to a device to protect against surges induced from a lightning strike on the ground.

Electrical service shall be installed and ready for connection before ITS cabinets are installed. Electrical services shall be connected and activated for all ITS cabinets and communication network hub buildings.

17.3.4 **General Maintenance Areas Design Requirements**

Install all cabinets, foundations, concrete pads, and junction boxes at elevations and locations that facilitate maintenance and provide safe access. Do not install cabinets behind noise barriers. Install handrails for protection at locations with fall hazards. Provide stairs and/or platforms for performing maintenance activities as specified. Provide ITS maintenance areas per the requirements for maintenance areas in Attachment 17-3 (ITS Maintenance Area...
Requirements). Submit similar detail for GDOT approval at each site to accommodate slope condition, distance from ground elevation, and other ITS infrastructure during preliminary design.

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.

Cabinet workspace – a minimum 8-foot by 12-foot flat work area shall be provided at each cabinet(s) location for maintenance personnel to stand when accessing all ITS cabinets. Provide stairs to reach the maintenance area with fall protection, consisting of galvanized metal handrails for all cabinet workspaces with more than 4 feet difference from the shoulder elevation.

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, provide a minimum 3-foot by 6-foot flat area immediately adjacent to the downslope side of the junction box to accommodate maintenance personnel workspace and placement of the junction box lid when removed.

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 difference from the shoulder, provide stairs accessing the junction box or cabinet from the shoulder to enable access to the workspace as described above. The stairs shall have a handrail on at least one side.

17.4 Site Acceptance and Turnover

The communication network configuration, GDOT ATMS integration, ITS Site Acceptance, ITS Batch Acceptance, burn-in and turnover of all Transferred Assets (ITS) shall be completed in accordance with GDOT Standard Specifications Section 942 – ITS General Requirements.

17.4.1 Site Acceptance Checklist

To verify that each ITS site is ready to be turned over to GDOT, submit as part of the ITS Infrastructure Implementation Plan a Site Acceptance Checklist that builds upon and is consistent with the requirements of Attachment 17-2 (Site Acceptance Checklist). Provide 14 days' notice to GDOT of readiness to conduct a joint on-site turnover inspection which shall be conducted by the DB Team using the accepted checklist as a basis. Correct any deficiencies found during on-site turnover inspection before each ITS site is deemed acceptable for turnover to GDOT. If the ITS site is not fully configured, functional, and ready for testing when GDOT attends, reschedule the test date with the notification periods starting over.

17.4.1.1 Testing and Acceptance

Include testing and acceptance plans in the Site Acceptance Checklist. Conduct testing of specific ITS technologies, electrical components, communication network and infrastructure, communication network hubs, and equipment cabinets in accordance with the test requirements in the following Standards:

1. Section 631 – Permanent Dynamic Message Signs
2. Section 647 – Traffic Signal Installation
3. Section 682 – Electrical Wire, Cable, and Conduit (Multi-cell and Continuous Flexible Conduit System)
4. Section 925 – Traffic Signal Equipment
5. Section 926 – Wireless Communications Equipment
6. Section 935 – Fiber Optic System
7. Special Provision Section 936 – Closed Circuit Television (CCTV)
8. Section 937 – Detection Systems
9. Section 939 – Communication and Electronic Equipment;
10. Section 942 – ITS General Requirements

GDOT ITS, communication network hub, and fiber backbone testing and Final Acceptance processes are to be conducted according to the applicable Standards and as described herein.

ITS Construction Manager shall schedule and facilitate an ITS Operational Review Meeting Prior to Substantial Completion per the requirements of this Section 17.4.1.1.

### 17.5 Warranty

Provide all warranties as set forth in the Agreement and specified in Attachment 3-1 (Manuals) and contained herein. Any additional costs incurred by the DB Team to meet the warranty requirements shall be the sole responsibility of the DB Team.

### 17.6 Deliverables

As indicated in this Section 17 and in Section 3 (Design and Submittals).
18 TRAFFIC CONTROL

18.1 General
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.

18.2 Administrative Requirements

18.2.1 Standards
Provide activities in this section 18 in accordance with Attachment 18-1 (Special Provision 150 – Traffic Control), Attachment 3-1 (Manuals), Government Approvals, and other provisions of the DB Agreement.

18.2.2 Worksite Traffic Control Supervisor (WTCS)
Provide a qualified individual as the WTCS to be approved by GDOT. The qualifications of the WTCS are as follows:

- Current certification by either the American Traffic Safety Services Association (ATSSA) Work Site Traffic Supervisor Certification program or the National Safety Council Certification program. On-line classes will not be accepted.
- Trained in safe traffic control practices in accordance with Part 6 of the MUTCD.
- Provide phone number(s) where WTCS can be reached 24 hours per day, seven days per week.

The WTCS is responsible for selecting, installing, and maintaining all traffic control devices in accordance with the plans, specifications, special provisions, and the MUTCD. The WTCS shall review modifications to traffic control plans/devices as required by sequence of operations or staged construction. The WTCS supervises the initial installation of traffic control devices. Prior to the beginning of construction activities within the limits of the traffic control area, GDOT will review the initial installation.

Ensure the WTCS is available on a 24-hour basis to perform duties. If the Work requires traffic control activities to be performed during the daylight and nighttime hours, provide an additional WTCS to cover each additional shift. Ensure any alternate WTCS meets the same requirements and qualifications as the primary WTCS and is accepted by GDOT prior to beginning any traffic control duties. The WTCS’s traffic control responsibilities have priority over all other assigned duties.

The WTCS has full authority to act on behalf of the DB Team in administering the Traffic Control Plan.

Ensure the WTCS has a copy of Part 6 of the MUTCD and the Contract on the Site. Copies of the current MUTCD may be obtained from the FHWA web page at http://mutcd.fhwa.dot.gov.

Ensure that any Work performed on interstate Highway or limited access Highway right-of-way that requires traffic control is supervised by a submitted/approved certified WTCS. Perform no
Work requiring traffic control unless the certified WTCS is on the Site. Failure to maintain a Certified WTCS on the Site will be considered non-performance under Volume 1, Exhibit 18 (Measures of Liquidated Damages and Nonrefundable Deductions).

Ensure the WTCS is available to maintain traffic control devices with access to all personnel, materials, and equipment necessary to respond effectively to an emergency within forty-five minutes of notification of the Emergency.

Ensure the WTCS performs inspections, at a minimum, once a month to maintain traffic control, and weekly traffic control inspections for all interstate and limited access Highways. The inspections will start with the installation of the advance warning signs and continue until a Maintenance Acceptance is issued or when the Punch List is completed.

Ensure the WTCS includes both daytime and nighttime reviews in an inspection. Report the inspection to GDOT on a Traffic Control Inspection Report (TC-1). Correct routine deficiencies within a 24-hour period unless modified by special conditions or by GDOT. Failure to comply with these provisions are grounds for dismissal from the duties of WTCS and/or removal of the WTCS from the Project. Failure of the WTCS to execute their duties will be considered as non-performance. GDOT will periodically review the Work for compliance with the requirements of the Traffic Control Plan.

GDOT may allow the DB Team’s Project superintendent, foreman, Subcontractor, or other designated personnel to serve as the WTCS on projects where traffic control duties do not require full time WCTS supervision, as long as the individual meets the requirements and performs the duties of a WTCS and satisfactory results are obtained.

18.3 Design Requirements

18.3.1 Reserved

18.3.2 Traffic Control Plans

Use the guidelines of the MUTCD, AASHTO’s Roadside Design Guide, and comply with Attachment 18-1 (Special Provision 150 – Traffic Control), Traffic Control, to develop detailed traffic control plans which provide for all Construction Phases and construction stages, as well as all required traffic shifts procedures.

Produce a traffic control plan for every Construction Phase that impacts traffic. Submit each traffic control plan to GDOT for review a minimum of 14 days prior to implementation. Include in the traffic control plan details for all detours, traffic control devices, striping, and signage applicable to each Construction Phase. Ensure information included in the traffic control plans is of sufficient detail to allow verification of design criteria and safety requirements, including typical sections, alignment, striping layout, drop off conditions, and temporary drainage. Clearly designate in the traffic control plans all temporary reductions in speed limits. Changes to posted speed limits are not allowed unless specific prior acceptance is granted by GDOT.
Separate opposing traffic on a divided roadway with appropriate traffic control devices in accordance with the MUTCD based on the roadway Design Speed and Attachment 3-1 (Manuals).

Maintain signing continuity on all active roadways within or intersecting the Project at all times.

Provide a minimum of two CMS for use as needed. Place and maintain messages on all CMS 24 hours a day, seven days a week, as directed by GDOT. Ensure the CMS meet all requirements of Standard Specification Section 632, Changeable Message Sign, Portable Type 3. Failure to respond to the direction of GDOT within 45 minutes will result in the assessment of non-refundable deductions.

18.3.2.1 Roadway Guidelines

Produce traffic control plans for periods of construction in accordance with Attachment 3-1 (Manuals), Attachment 18-1 (Special Provision 150 – Traffic Control), and the DB Documents.

18.3.2.1.1 Design Parameters for Traffic Control

Design Vehicle: Accommodate a design vehicle via turning movements specified by the GDOT Design Policy Manual for specific road classifications. Turning movements on all other local streets and driveways will, at a minimum, provide similar characteristics as existing Geometry.

Work Zone Speed Limits: Ensure the Work zone speed limits on Interstate and State Highways are in conformance with GDOT Special Provision Section 150. Maintain AASHTO stopping sight distance during construction.

Number of Lanes: Ensure the minimum number of lanes to be maintained is the number of lanes currently available on each controlled access facility except as allowed by this Section 18. Lane closures on other roadways may be considered as long as all traffic patterns and accesses are not reduced and are maintained.

Lane Widths: During construction, the minimum lane width for main lanes, frontage roads, and major crossing streets is 11 feet. For minor crossing streets, GDOT may, in its sole discretion, allow 10-foot lanes in limited circumstances during construction for short distances after reviewing the DB Team’s traffic control plan. See Section 18.3.2 (Traffic Control Plans) for additional information.

18.3.2.1.2 Allowable Shoulder/Lane/Roadway Closures and Traffic Stage Changes

Provide GDOT and appropriate Customer Groups a minimum of two weeks advance notice in writing for lane/shoulder closures and/or traffic stage changes planned to be in effect longer than 24 hours. Provide a minimum of 24 hours advance notice for lane closures that are planned to be in effect less than 24 hours. Coordinate the closure restrictions with GDOT on all lane/shoulder closures (or an event that results in lane closures) into GDOT’s ITS web-based information tool.
Coordinate closures with adjacent projects to ensure the safe and convenient passage of the traveling public. During construction of the Project, GDOT will facilitate coordination with all local entities for traffic control.

18.3.2.1.3 Lane and Shoulder Closure During Design-Build Period

**Lane Closures**

See Volume 1, Exhibit 18 regarding liquidated damages and nonrefundable deductions.

1. Jimmy DeLoach Connector
   a. Single Lane Closure (Closure of a lane in either direction is considered a single lane closure)
      i. Single lane closures are allowed daily between the hours of 9:00 pm to 5:00 am, Sunday through Friday.
      ii. Single lane closures are allowed between the hours of 9:00 pm Friday to 7:00 am Saturday.
      iii. Single lane closures are allowed between the hours of 9:00 pm Saturday to 9:00 am Sunday.

2. Augusta Road
   a. Single Lane Closure (Closure of a lane in either direction is considered a single lane closure)
      i. Single lane closures are allowed daily between the hours of 9:00 pm to 5:00 am, Sunday through Friday.
      ii. Single lane closures are allowed between the hours of 9:00 pm Friday to 7:00 am Saturday.
      iii. Single lane closures are allowed between the hours of 9:00 pm Saturday to 9:00 am Sunday.

3. Cobb Parkway
   a. Single Lane Closure (Closure of a lane in either direction is considered a single lane closure)
      i. Single lane closures are allowed daily between the hours of 9:00 pm to 5:00 am, Sunday through Friday.
      ii. Single lane closures are allowed between the hours of 9:00 pm Friday to 7:00 am Saturday.
      iii. Single lane closures are allowed between the hours of 9:00 pm Saturday to 9:00 am Sunday.

4. I-575 Sixes Road Southbound On-Ramp
   a. Single Lane Closure (Closure of a lane in either direction is considered a single lane closure)
      i. Single lane closures are allowed daily between the hours of 9:00 pm to 5:00 am, Sunday through Friday.
      ii. Single lane closures are allowed between the hours of 9:00 pm Friday to 7:00 am Saturday.
      iii. Single lane closures are allowed between the hours of 9:00 pm Saturday to 9:00 am Sunday.
Full Roadway Closure

Do not close any full roadway (all lanes and shoulders) unless the closure is accepted by GDOT and Governmental Entities having jurisdiction of roadways affected by the closure.

GDOT has the right to lengthen, shorten, or otherwise modify the foregoing restrictions as actual traffic conditions may warrant. Limit any detour route for full roadway closures to usage of the on-ramps and off-ramps at the mainline interchange locations. Utilize Work zone law enforcement for all detours.

Submit a Traffic Control Plan for any complete roadway closure for acceptance by GDOT and Governmental Entities having jurisdiction of roadways affected by the closure. Consider availability of frontage roads, ramp locations and detour distances in the design.

Holiday Restrictions

No Work that restricts or interferes with traffic will be allowed during the periods specified in Table 18-1 (Holiday and Event Restrictions Schedule). GDOT has the right to lengthen, shorten, or otherwise modify these restrictions as actual or projected traffic conditions may warrant.

<table>
<thead>
<tr>
<th>Table 18-1: Holiday and Event Restrictions Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Restriction Begins</strong></td>
</tr>
<tr>
<td>1. Easter (Thursday through Monday)</td>
</tr>
<tr>
<td>2. Memorial Day Weekend (Friday through Monday)</td>
</tr>
<tr>
<td>3. Independence Day</td>
</tr>
<tr>
<td>4. Labor Day Weekend (Friday through Monday)</td>
</tr>
<tr>
<td>5. Thanksgiving Holiday (Wednesday through Monday)</td>
</tr>
<tr>
<td>6. Christmas/New Year Holiday</td>
</tr>
<tr>
<td>7. Georgia Tax Free Weekend/Sales Tax Holiday (typically Saturday and Sunday, late July and late September)</td>
</tr>
<tr>
<td>8. Spring Break (traditionally the 2nd or 3rd week of March, but may vary) (Friday before, Saturday through, Sunday)</td>
</tr>
<tr>
<td>9. Atlanta Braves Baseball Games (Cobb Pkwy locations only)</td>
</tr>
</tbody>
</table>

18.4 Construction Requirements

Ensure traffic control is in accordance with applicable provisions of the MUTCD and Attachment 18-1 (Special Provision 150 – Traffic Control).
18.4.1 DB Team Responsibility

If at any time GDOT determines the DB Team’s traffic control operations do not meet the intent of the specific traffic control plan, immediately revise or discontinue such operations to correct the deficient conditions.

Utilize work zone law enforcement equipped with a marked patrol vehicle and blue flashing lights to enforce traffic laws in construction work zones and administer this service. Deploy work zone law enforcement during lane closures, traffic pacing, and at all other times necessary for the safety of everyone within the Project limits. Coordinate and schedule the utilization of the work zone law enforcement.

Provide a daily Work record compiled on a form provided by GDOT, signed by the work zone law enforcement, and the WTCS attesting that the work zone law enforcement was utilized during the time recorded. No separate payment will be made for work zone law enforcement. Coordinate, schedule, and administer work zone law enforcement.

Ensure a smooth asphalt surface layer is placed on all milled surfaces within 48 hours after milling.

Payment for work zone law enforcement to be included as required in Section 2.6.1 (Schedule of Values).

18.4.2 Access

Maintain existing bicycle and pedestrian access and mobility across all cross streets.

18.4.3 Detours

No requirements.

18.5 Deliverables

As indicated in this Section 18 and in Section 3 (Design and Submittals).
19 MAINTENANCE DURING THE DESIGN-BUILD PERIOD

19.1 General
Assume full responsibility for maintaining the Project from NTP 3 through the remainder of the Design-Build Period in a manner that provides a safe and reliable transportation system.

19.2 Administrative Requirements

19.2.1 Standards
Provide activities in this section in accordance with GDOT Standard Specifications 104.05, 105.14, 105.15, Attachment 3-1 (Manuals), Government Approvals, and other provisions of the DB Documents.

19.3 Design Requirements

19.3.1 GDOT Obligation to Repair
GDOT or the appropriate local Governmental Entity will, between the effective date and NTP 3, reasonably perform the type of routine maintenance of each Element Category of the existing improvement that normally occurs in GDOT’s highway maintenance and repair program. Neither GDOT nor the appropriate local Governmental Entity is obligated to extend the residual life of any Element through reconstruction, rehabilitation, restoration, renewal, or replacement.

19.3.2 Joint Project Inspection
Conduct a Joint Project Inspection of the Project area within the Construction Maintenance Limits and obtain GDOT approval no later than 150 days after NTP 1. Perform the physical in-field Joint Project Inspection with a GDOT-authorized representative and/or GDOT in attendance. The purpose of the Joint Project Inspection is to create a physical baseline of the existing real estate and permanent fixtures and assets of GDOT prior to the start of construction. The area encompasses the entire Project area including areas containing required elements outside of the limits of the Project.

Clean all impacted conveyances of the existing drainage system sufficiently enough to allow for the proper detailed inspection of the system during the joint inspection within the Construction Maintenance Limits and as required in this Section 19. Impacted conveyances of the existing drainage system shall be in conformance with Section 12.3 (Design Requirements).

Include the following in the Joint Project Inspection submittal report:

1. Preliminary Plan or Construction Maintenance Limits plan providing marked-up notes of deficiencies and location reference for cross-referencing any photographs or additional information denoting the existing condition of the infrastructure within the proposed Construction Maintenance Limits plan area.
2. Pre-construction digital photographs and high-resolution digital video of the Project Area including all existing facilities, structures, and environmentally sensitive areas that can readily depict the exact conditions of the existing Elements of the Work. Provide a
sample report of a section of the Project to determine the level of expected accuracy and increments of the photo documentation.

3. Intermittent photographs along the pavement and shoulders to clearly depict the existing condition of the pavement and shoulders that will be utilized during construction. Maintain the existing pavement and shoulders to a condition equal to or better than existing conditions at all times during the Design-Build Period.

4. Pre-construction digital photographs and high-resolution digital video of existing bench marks, temporary bench marks, existing utilities, and trees and plants to remain.

5. Video recording storm sewers and drainage systems and structures prior to the beginning of construction within the Construction Maintenance Limits or to the nearest structure outside the Construction Maintenance Limits, whichever is greater.

19.3.3 Maintenance Management Plan

Provide a Maintenance Management Plan that provides the DB Team’s Construction Maintenance Limits, outlines the frequency of inspection and repair and/or maintenance of those items under the DB Team’s responsibility. Include in the plan, at a minimum, the following:

1. Drawing or set of drawings that highlight the exact area of the proposed construction and maintenance responsibilities within the ROW, as well as the limits of any Additional Properties to be acquired for the Project

2. Pavement maintenance, including pothole patching, concrete patching, striping, etc.

3. Existing ITS system and Drainage System continuity

4. Landscaping repair

5. Utility Adjustments

6. Existing lighting system

7. Pavement inspection and repair during construction

8. Debris removal on the traveled way during construction

9. Guardrail inspection and safety protections in place where guardrail has been damaged within 48 hours, and repair of damage within seven days

10. Temporary striping/restriping at no longer than 60-day intervals, or more frequently if required

Use this plan as the boundary for construction Work and as the exact limits to maintain any element required to construct the Project beginning at NTP 3 and through Final Acceptance. Perform all maintenance activities within Plan limits in accordance with the GDOT Standard Specifications, Construction of Transportation Systems.

Nonwithstanding GDOT’s approval of the Maintenance Management Plan, the DB Team shall be responsible for any and all maintenance for any area(s) encroached on by the DB Team during the performance of the Construction Work.
Provide the final Maintenance Management Plan no later than 150 days after NTP 1. If the Project is broken into separate construction phases, provide and obtain approval of the final Maintenance Management Plan prior to the start of construction of that phase. Ensure the Plan shows hash marks or a method to clearly depict the area of the Construction Maintenance Limits. Depict in the Maintenance Management Plan, and obtain prior GDOT approval for, all proposed staging and lay-down areas.

Perform all maintenance for any area(s) encroached on by the performance of the construction Work, notwithstanding GDOT’s approval of the Construction Maintenance Limits. See Section 2 (Project Management) for additional requirements.

Maintain pavement markings including striping.

Maintenance constitutes continuous and effective work prosecuted day by day or at the direction of GDOT.

Restore the Existing ROW within the Construction Maintenance Limits to a condition equal to or better than existing conditions by Substantial Completion.

Maintain and repair any element affected by use of part of the facility outside of the specified maintenance limits by any means, such as lane/shoulder closures, staging, or any other activity as required above. Revise the Construction Maintenance Limits to incorporate the new maintenance limits.

19.4 **Deliverables**

As indicated in this Section 19 and in Section 3 (Design and Submittals).
20 BICYCLE AND PEDESTRIAN FACILITIES

20.1 General
Design and construct all pedestrian facilities for the Project, if required, according to the requirements included in this section. Ensure the bicycle and pedestrian facilities of this Coordinate the Elements of this Project with the existing and planned trails and other facilities of local and county administrations for pedestrians and cyclists. Design all pedestrian facilities according to the documents located in Attachment 3-1 (Manuals).

20.2 Administrative Requirements

20.2.1 Standards
Provide activities in this section in accordance with Attachment 3-1, Government Approvals, and other provisions of the DB Documents.

20.3 Design Requirements

20.3.1 Pedestrian Facilities
Design, construct, and maintain sidewalks where sidewalks currently exist and where required by State or Federal regulations. Ensure sidewalks comply with the Title II provisions of the Americans with Disabilities Act (ADA) Accessibility Standards. Design all pedestrian facilities to incorporate the ambulatory, visibility, and auditory needs of all users.

20.3.2 Final Plans
Incorporate the following elements relating to pedestrian facilities consistent with the requirements of the DB Documents and intent of pertinent RIDs into the Preliminary and Final Plans:

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 multi-use trail, sidewalk, or bike lane on an adjacent 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 Construction Requirements
No additional requirements.

20.5 Deliverables
As indicated in this Section 20 and in Section 3.
21  RESERVED
22 RESERVED
23 RESERVED
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

Attachment 1-1

DMS LOCATIONS
NOTES:
1. ALL CONSTRUCTION AND STAGING NECESSARY FOR THE INSTALLATION OF DMS AND SUPPORTING INFRASTRUCTURE SHALL BE LOCATED INSIDE EXISTING RIGHT-OF-WAY.
2. NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN AREAS CONTAINING HABITAT FOR PROTECTED SPECIES PRIOR TO COMPLETING AGENCY CONSULTATION.
3. FINAL LOCATION OF THE DMS SHALL AVOID DIRECT IMPACTS TO PROTECTED SPECIES.
4. NO CONSTRUCTION IN A WETLAND WOULD OCCUR PRIOR TO PERMIT(S) APPROVAL AND MITIGATION IS COMPLETE (IF REQUIRED).
5. DB TEAM IS RESPONSIBLE FOR COMPLETING A WETLAND DELINEATION AND PREPARING THE APPLICABLE PERMIT(S) IF IMPACTS CANNOT BE AVOIDED.
NOTES:
1. All construction and staging necessary for the installation of DMS and supporting infrastructure shall be located inside existing right-of-way.
2. No construction activities shall occur within areas containing habitat for protected species prior to completing agency consultation.
3. Final location of the DMS shall avoid direct impacts to protected species.
4. No construction in a wetland would occur prior to permit(s) approval and mitigation is complete (if required).
5. DB Team is responsible for completing a wetland delineation and preparing the applicable permit(s) if impacts cannot be avoided.

ENVIRONMENTALLY SCREENED AREA
DMS PREFERRED LOCATION
UNDESIRABLE AREAS OF CONSTRUCTION
POTENTIAL POWER SERVICE DISCONNECT LOCATION

SCALE IN FEET
NOTES:
1. ALL CONSTRUCTION AND STAGING NECESSARY FOR THE INSTALLATION OF DMS AND SUPPORTING INFRASTRUCTURE SHALL BE LOCATED INSIDE EXISTING RIGHT-OF-WAY.
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NOTES:

1. All construction and staging necessary for the installation of DMS and support infrastructure shall be located outside existing right-of-way.
2. No construction activities shall occur within areas containing habitat for protected species prior to completing agency consultation.
3. Final location of the DMS shall avoid direct impacts to protected species.
4. No construction in a wetland would occur prior to permit(s) approval and mitigation is complete (if required).
5. DB Team is responsible for completing a wetland delineation and preparing the applicable permit(s) if impacts cannot be avoided.
ITS PLANS

1. ALL CONSTRUCTION AND STAGING NEEDED FOR THE INSTALLATION OF DMS AND SUPPORTING INFRASTRUCTURE SHALL BE LOCATED INSIDE EXISTING RIGHT-OF-WAY.
2. NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN AREAS CONTAINING HABITAT FOR PROTECTED SPECIES PRIOR TO COMPLETING AGENCY CONSULTATION.
3. FINAL LOCATION OF THE DMS SHALL AVOID DIRECT IMPACTS TO PROTECTED SPECIES.
4. NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN AREAS CONTAINING HABITAT AND SUPPORTING INFRASTRUCTURE SHALL BE LOCATED INSIDE EXISTING RIGHT-OF-WAY.
5. DB TEAM IS RESPONSIBLE FOR COMPLETING A WETLAND DELINEATION AND PREPARING MITIGATION IS COMPLETE (IF REQUIRED).
6. NO CONSTRUCTION IN A WETLAND WOULD OCCUR PRIOR TO PERMIT(S) APPROVAL.
7. THE APPLICABLE PERMIT(S) IF IMPACTS CANNOT BE AVOIDED.

NOTES:
1. ENVIRONMENTALLY SCREENED AREA
2. UNDESIRABLE AREAS OF CONSTRUCTION
3. SERVICE DISCONNECT LOCATION
4. POTENTIAL POWER
Georgia Department of Transportation

Technical Provisions
For
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Attachment 3-1
MANUALS
Manuals

All Work shall conform with all applicable Manuals and Guidelines developed for and including AASHTO, FHWA, GDOT, and additional requirements stated in this document and reasonably inferred therefrom. It is the Design-Build Team’s responsibility to verify order of the precedence of any State or Federal manual requirement where any potential conflict may exist. The Design-Build Team shall coordinate with the appropriate State and/or Federal agency to confirm the policy and regulations to avoid any conflict of the following manuals prior to design and/or construction. Following is a list of manuals and guidelines that shall be used in the performance of the Work provided that the Work shall not be governed solely by such manuals and guidelines listed herein, and provided further that it is the Design-Build Team’s responsibility to locate and utilize the most current edition in effect at the date identified in Article 7.2.4 of Volume 1, including updates, of all such referenced materials for the Work required.

1. AASHTO – A Policy on Geometric Design of Highways and Streets  
2. AASHTO – Guide for High-Occupancy Vehicle Facilities  
   https://bookstore.transportation.org/Item_details.aspx?id=114
   https://store.transportation.org/Item/CollectionDetail?ID=144
4. AASHTO – Roadside Design Guide  
5. AASHTO – Roadway Lighting Design Guide  
   https://bookstore.transportation.org/Item_details.aspx?id=51
10. AASHTO – AWS D1.1/ANSI Structural Welding Code – Steel  
    http://www.techstreet.com/cgi-bin/detail?doc_no=AWS%7CD1_1_D1_1M_2008&product_id=1519645
11. AASHTO – D1.5/AWS D1.5 Bridge Welding Code  
    http://www.techstreet.com/cgi-bin/detail?product_id=957255
   https://bookstore.transportation.org/Item_details.aspx?id=2707


15. AISC Manual of Steel Construction, referred to as “AISC Specifications”


17. America Disabilities Act Accessibility Guidelines (ADAAG)
   http://www.ada.gov/stdspdf.htm

18. FHWA - Manual on Uniform Traffic Control Devices (MUTCD)
   http://mutcd.fhwa.dot.gov/

19. GDOT – Signing and Marking Design Guidelines

    http://www.dot.ga.gov/PS/Utilities

21. GDOT - Guidelines for Geotechnical Studies (listed on website as the Geotechnical Engineering Manual)
    http://www.dot.ga.gov/PS/Materials

22. GDOT – STI (Sampling, Testing and Inspection) Quick Guide and Documents
    http://www.dot.ga.gov/PS/Materials

23. GDOT – Qualified Products List (QPL)
    http://www.dot.ga.gov/PS/Materials/QPL

24. GDOT – Pavement Design Manual
    http://www.dot.ga.gov/PS/Materials

25. GDOT – Pavement Type Selection Manual
    http://www.dot.ga.gov/PartnerSmart/DesignManuals/Pavement/Pavement%20Type%20Selection%20Manual.pdf#search=Pavement%20Type%20Selection

26. GDOT – Drainage Design for Highways

27. GDOT – Automated Survey Manual

28. GDOT – Regulations for Driveway and Encroachment Control

29. GDOT – Electronic Data Guidelines
    http://www.dot.ga.gov/PS/DesignManuals
30. GDOT – Plan Development Process

31. GDOT – Plan Presentation Guide
http://www.dot.ga.gov/PS/DesignManuals

32. GDOT – Preliminary Field Plan Review Checklist
http://www.dot.ga.gov/PS/DesignManuals/DesignResources

33. GDOT – Final Field Plan Review Checklist
http://www.dot.ga.gov/PS/DesignManuals/DesignResources

34. GDOT – Design Policy Manual

35. GDOT – ITS Design Manual

36. NPDES Construction Storm Water General Permits - GAR100002 Infrastructure Construction General Permit

37. GDOT – MS4 Special Design Post-Construction Details
http://www.dot.ga.gov/PartnerSmart/DesignManuals/NPDES/MS4 Special Design Details.zip

38. GDOT – Bridge and Structures Design Manual

39. GDOT – Environmental Procedures Manual
http://www.dot.ga.gov/PS/DesignManuals/EnvironmentalProcedures

40. GDOT – Standard Specifications, Construction of Transportation Systems
http://www.dot.ga.gov/PS/Business/Source

41. GDOT – Special Provisions and Supplemental Specifications
http://www.dot.ga.gov/PS/Business/Source

42. GDOT – Construction Standards and Details
http://mydocs.dot.ga.gov/info/gdotpubs/ConstructionStandardsAndDetails/Forms/AllItems.aspx
43. GDOT – Right of Way Manual

44. GDOT – Acquisition Guide for Local Public Agencies
   http://www.dot.ga.gov/PartnerSmart/DesignManuals/ROW/ROW-AcquisitionGuideforLocalPublicAgenciesSponsors.pdf

45. GDOT – Statewide MS4 Permit

46. GDOT – Design of Post-Construction BMPs

47. Georgia Soil and Water Conservation Commission - Manual for Erosion and Sediment Control in Georgia
   http://gaswcc.georgia.gov/manuals

48. GDOT – Facilities Stormwater Pollution Prevention Plan

49. GDOT – Stormwater System Inspection and Maintenance Manual


51. FHWA Diverging Diamond Interchange Informational Guide

52. FHWA Traffic Detector Handbook

53. FHWA Mitigation Strategies for Design Exceptions

54. FHWA Traffic Monitoring Guide

55. Occupational Safety and Health Administration Standards (OSHA)


57. U. S. Environmental Protection Agency Regulations
    http://www.epa.gov/lawsregs/

58. GDOT – Public Information Policy Manual
    http://www.dot.ga.gov/PartnerSmart/DesignManuals/Environmental/Public%20Involvement%20Plan/PublicInvolvementPlan.pdf

59. American Railway Engineering and Maintenance-of-Way Association (AREMA)
    https://www.arema.org/
60. GDOT – Work Zone Safety and Mobility Policy

61. GDOT – Quality Control and Quality Assurance Manual
   http://www.dot.ga.gov/PS/DesignManuals/DesignResources

62. Federal Railroad Administration Regulations
   http://www.fra.dot.gov

63. Public Project Information for Construction and Improvement Projects That May Involve the Railroad (CSX)

64. MUTCD – Standards Highway Signs and Markings

   http://www.georgiastormwater.com/

66. Georgia EPD – Coastal Stormwater Supplement to the Stormwater management Manual

67. GDOT – ITS Strategic Deployment Plan (Posted on SharePoint)

68. ITE/AASHTO Traffic Management Data Dictionary (TMDD), Standards for Traffic Management Center to Center Communications Version 2.1

69. AASHTO – A Policy on Design Standards Interstate System

70. Georgia Traffic Incident Management Guidelines

71. GDOT – Construction Manual and Form Documents
   http://www.dot.ga.gov/PartnerSmart/Business/Source/Pages/ConstructionSpecs.aspx

72. GDOT – Pedestrian and Streetscape Guide
73. GDOT – Design-Build Manual  

74. GDOT Signal Design Guidelines  

75. Roundabouts: An Informational Guide (NCHRP 672)  

76. FHWA Work Zone Safety and Mobility Rule  
https://ops.fhwa.dot.gov/wz/resources/final_rule.htm

77. AASHTO A Guide for Accommodating Utilities within Highway ROW  

78. TRB Policies for Accommodation of Utilities on Highway Rights-of-Way  
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_34.pdf

79. GDOT Bridge Detailing Manual  

80. AASHTO Guide Specification for Bridge Temporary Works  
https://store.transportation.org/Item/PublicationDetail/3734

81. Hydraulic Engineering Circular (HEC) 23 "Bridge Scour and Stream Instability Countermeasures"  
https://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=23&id=142&CFID=120676914&CFTOKEN=3f2ac89d8f8bf7ab7-03118215-AEA7-6689-782BB9E822064D1B

82. Hydraulic Engineering Circular (HEC) 18 "Evaluating Scour at Bridges"  
https://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17&id=151

83. Hydraulic Engineering Circular (HEC) 14 "Hydraulic Design of Energy Dissipators for Culverts and Channels"  
https://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=13&id=129

84. GDOT On-The-Job Training Program Manual  

85. GDOT DBE Program  

86. Other manuals, documents, procedures and standards as referenced in the DB Documents
Georgia Department of Transportation

Technical Provisions
For
Design-Build Agreement
P.I. No. 0017389

Attachment 4-1
ENVIRONMENTAL SCREENING MEMO
Memo

Doug Chamblin  
Environmental Program Manager  
Office of Environmental Services  
Georgia Department of Transportation (GDOT)  
One Georgia Center  
600 West Peachtree Street NW  
16th Floor  
Atlanta, GA 30308

CC: Roderick Ware, PM Traffic Ops via email

Subject: Environmental Screening Memo  
Statewide ITS Dynamic Message Sign (DMS) Deployment  
P.I. No. 0017389  
Cobb, Cherokee, and Chatham Counties, Georgia

DMS ENVIRONMENTAL AND ECOLOGICAL SCREENING

Purpose of the Screening

The study team conducted an environmental screening (July 16, July 17, and July 20, 2020) of five locations for the placement of dynamic message signs (DMS), pull boxes for power, and closed caption television (CCTV) camera poles.

- Two sites on Cobb Parkway/US 41 in Cobb County
- One site at the south facing on-ramp to Interstate 575 (I-575) at Sixes Road in Cherokee County
- One site at Augusta Road in Chatham County
- One site on the Jimmy DeLoach Parkway in Chatham County

This environmental screening study identifies environmentally sensitive resources and is intended to assist the Georgia Department of Transportation (GDOT) in evaluating the potential for environmental impacts resulting from the construction of the DMS systems at these five locations. The project would be awarded through a Design-Build Contract.

Purpose of DMS

Dynamic Message Signs are used to disseminate travel time information to roadway users. In Cobb and Cherokee Counties, the DMS will also provide information about cost and travel speeds of the Northwest Express Lanes, allowing motorists to make an informed decision in using general purpose lanes vs. express lanes to reach their destinations. In Chatham County, the DMS will assist motorists and freight vehicles about conditions on I-16 and I-95.
**Typical Section/Footprint of Potential DMS**

This photograph is intended to provide visualization of a DMS, its size, mounting, and typical location in relation to a roadway.

Footings for the DMS are typically 2.5 feet deep with a 10 foot x 18-foot wide (typical size) concrete pad. The message sign itself is approximately 8 feet tall x 20 feet wide. Footings may also be a drilled shaft which is typically 5 feet diameter and may go up to 20-30 feet into the ground. Final configuration and construction method will be determined by a future Design-Build Contractor.

This photograph to the right represents a typical power box/pull box used to provide electricity for the DMS or to a pole mounted camera. Cable to or from the box to the DMS or camera is typically bored or trenches with minimal disturbance. Sizing of the pull box has not been determined.

Typical power pole with camera and guardrail. Typical poles are no taller than 65 feet high with 10 feet of pole in the ground. The top of the pole is approximately 8 inches in diameter and the base if the pole is approximately 20 inches in diameter.

**Methodology and Findings**

Each DMS site has an environmental screening boundary, which was provided by the GDOT Traffic Management Center (TMC) Office as a Google Earth KMZ. The boundary includes all probable locations for the construction of
particular DMS system. Any area needed for fiber optics, camera poles or electrical connectivity was incorporated into the screening boundary. The screening boundary is restricted to the existing right-of-way.

In July 2020, Arcadis conducted on-site reconnaissance for each site. Field staff took photographs and notes on potential environmentally sensitive resources. On-Site data collection along with findings from a desktop review to locate additional environmental resources, issues, or areas of potential concern are summarized in this screening document. Photos from the site visit are included in Appendix A.

Background research of relevant published and online information sources was conducted prior to field surveys to identify potential ecological resources within the study area. Sources included US Geologic Survey (USGS) topography, and National Wetland Inventory (NWI). Prior to visiting the proposed project site, ecologists reviewed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, USFWS Georgia Ecological Services Field Office – Southeast Region HUC 10 Watershed Reports, National Oceanic and Atmospheric Administration (NOAA) Fisheries website, and the Georgia Natural Archaeological Historical Resources GIS (GNAHRGIS) Ecology Review and Surveys Module to identify protected species that could potentially occur within the HUC 10 watershed(s) and counties.

It is assumed that all work would be contained to the existing right-of-way and no additional right-of-way would be needed for DMS implementation.
DMS Cobb Parkway/US 41 Southbound

This site is located on Cobb Parkway between its intersection with Professional Parkway and Akers Mill Road SE in Atlanta, Cobb County, GA. Based on the screening, the following environmental resources, issues, or areas of potential concern were observed in the screening area for the Cobb Parkway Southbound DMS site. The location of this site and any environmentally sensitive resources identified are shown on Figure 1.

Cultural Environment

- **Historic Resources**
  
  No NRHP-eligible or NRHP-listed resources were identified within the screening boundary.

- **Archaeological Resources**
  
  According to GNAHRGIS, no archaeological sites have been previously identified within the screening boundary. Based on the disturbed nature of the shoulders and median along Cobb Parkway from roadway construction, sidewalk construction, utility construction and ornamental landscaping, there is no potential for archaeological sites within the right-of-way.

Natural Environment

- **Protected Species**
  
  Habitats within the screening boundary consisted of mowed-maintained roadway shoulders and median with planted ornamental grasses, shrubs, and small trees between existing infrastructure (roads, bridges, sidewalks, retaining walls, buildings). No state- or federal-protected species have potential to be present within the screening boundary. No designated Critical Habitat is present within Cobb County.

- **Waters of the U.S. and State**
  
  Within the screening boundary, the NWI data identifies no streams, wetlands, or open waters. There are no unnamed or named streams on the USGS topography within the screening boundary. No waters of the State or U.S. were observed during the site visit.

- **Floodplains**
  
  The following Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel was reviewed to identify flood hazard zones within the screening boundary: 13067C0139H (3/4/2013). The screening boundary is located within flood Zone X, an area of minimal flood hazard. Based on this review, the study area does not contain regulatory floodways.

Physical Environment

- **Hazardous Materials/Waste Sites**
  
  There is one conditionally exempt small quantity generator located adjacent to the screening boundary: Express Cleaners & Alterations located at 3051 Akers Mill Road STE 100, Atlanta, GA. This resource is classified under North American Industry Classification System (NAICS) code 81232: dry cleaning and laundry services. This resource is outside the environmental screening boundary and no right-of-way would be needed from this site. There are no additional hazardous materials/waste site within or adjacent to the screening boundary.

- **Noise Barriers**
  
  Within the screening boundary, there are no noise barriers on either side of Cobb Parkway. Installation of a DMS would not have any effect on existing or future noise volumes.
• **Underground Storage Tanks (USTs)**
  There is one underground storage tank (UST) adjacent to the screening boundary, the Costco fuel station located at 2900 Cumberland Mall SE. This UST is outside the screening boundary and the proposed project and no right-of-way would be needed from this site.

• **Transmission Lines**
  There are no overhead electrical transmission lines that cross the screening boundary. There are also no electrical transmission lines adjacent to the screening boundary.

• **Pipelines**
  There are no hazardous liquid pipelines, gas transmission pipelines, breakout tanks, or liquid natural gas plants within the screening boundary.

• **Railroads**
  There are no railroads within the screening boundary.

Social Environment

• **Post-Secondary Education Facilities, Schools, and Childcare Facilities**
  There are no post-secondary education facilities, schools, or childcare facilities within the screening boundary.

• **Government Facilities**
  There are no government facilities within the screening boundary.

• **Places of Worship**
  There are no places of worship within the screening boundary.

• **Law Enforcement**
  There are no law enforcement facilities or correctional institutions within the screening boundary.

• **Greenspace/Parks/Conservation Land**
  There are no greenspaces, parks, or conservation land within the screening boundary.

• **Cemeteries**
  There are no cemeteries within the screening boundary.

• **Cities/Communities**
  The screening boundary is located within Cumberland, an unincorporated area between the corporate limits of Smyrna and Atlanta. Additionally, the Cumberland Community Improvement District (CID) overlaps the screening boundary.

GDOT will coordinate with the CCID for final location of the DMS within the landscaped environments maintained by the CCID.
• **Major Employment Centers**

According to the Atlanta Regional Commission (ARC), there is one major employment center within the screening boundary: Cumberland Regional Center. ARC defines employment centers as having on average 10,000 jobs or more within a 3.25 square mile area\(^1\).

• **Environmental Justice Populations**

U.S. Census data (from the 2014-2018 American Community Survey 5-Year Estimates) was analyzed to gain insight into the demographics within the environmental screening boundary, and in particular, to identify potential Environmental Justice (minority or low-income) populations. The entire screening boundary is located within Cobb County; therefore, the population within the screening area has been compared to that of Cobb County, as well as to the State of Georgia as a whole. Demographic information for the screening area is based on the population statistics for the census block groups that compose the screening area. General population statistics are shown in Table 1. Implementation of DMS signs would have no effect to Environmental Justice Populations.

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<tr>
<th></th>
<th>State of Georgia</th>
<th>Cobb County</th>
<th>Environmental Screening Area</th>
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</thead>
<tbody>
<tr>
<td>Total Population</td>
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<td>733,722</td>
<td>3,771</td>
</tr>
<tr>
<td>Minority Population</td>
<td>4,821,043</td>
<td>353,969</td>
<td>1,755</td>
</tr>
<tr>
<td>% Minority Population</td>
<td>46.8%</td>
<td>47.5%</td>
<td>46.5%</td>
</tr>
<tr>
<td>% Population with Income in the Past 12 Months Below Poverty Level</td>
<td>16.0%</td>
<td>10.0%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

**DMS Location Cobb Parkway/US 41 Northbound**

This site is located on Cobb Parkway south of its intersection with Cumberland Boulevard in Atlanta, Cobb County, GA. The screening boundary extends south from the Cobb Parkway/Cumberland Boulevard intersection to the first traffic signal on Cobb Parkway, a distance of approximately 980 feet. Based on the screening, the following environmental resources, issues, or areas of potential concern were observed in the screening area for the Cobb Parkway Northbound DMS site. The location of this site and any environmentally sensitive resources identified are shown on Figure 1.

---

Cultural Environment

- **Historic Resources**
  No NRHP-eligible or NRHP-listed resources were identified within the screening boundary.

- **Archaeological Resources**
  According to GNAHRGIS, no archaeological sites have been previously identified within the screening boundary. Based on the disturbed nature of the shoulders and median along Cobb Parkway from roadway construction, sidewalk construction, utility construction and ornamental landscaping, there is no potential for archaeological sites within the right-of-way.

Natural Environment

- **Protected Species**
  Habitats within the screening boundary consisted of mowed-maintained roadway shoulders and median with planted ornamental grasses, shrubs, and small trees, between existing infrastructure (roads, sidewalks, retaining walls, buildings). No state- or federal-protected species have potential to be present within the screening boundary. Undeveloped forested areas were identified adjacent to the screening boundary; however, these areas were not investigated, as they are outside the area of potential impact. No designated Critical Habitat is present within Cobb County.

  Should the DB Contractor select a location that requires clearing of the undeveloped forested area, the DB Contractor would be responsible for completing a protected species survey and completing consultation with the appropriate state and federal agencies. No construction activities would occur within areas containing habitat for protected prior to completing agency consultation.

- **Waters of the U.S. and State**
  Within the screening boundary, the NWI data identifies no streams, wetlands, or open waters. There are no unnamed or named streams on the USGS topography within the screening boundary. No waters of the State or U.S. were observed during the site visit.

- **Floodplains**
  The following FEMA FIRM Panel was reviewed to identify flood hazard zones within the screening boundary: 13067C0139H (3/4/2013). The screening boundary is located within flood Zone X, an area of minimal flood hazard. Based on this review, the study area does not contain regulatory floodways.

Physical Environment

- **Hazardous Materials/Waste Sites**
  There are no hazardous materials/waste site within or adjacent to the screening boundary.

- **Noise Barriers**
  Within the screening boundary, there are no noise barriers on either side of Cobb Parkway. Installation of a DMS would not have any effect on existing or future noise volumes.
• **Underground Storage Tanks (USTs)**
  There is one UST south of the screening boundary, BP fuel station located at 3340 Cobb Parkway SE. This UST is outside the screening boundary and the proposed project would require no right-of-way from this site.

• **Transmission Lines**
  There are no overhead electrical transmission lines that cross the screening boundary. There are also no electrical transmission lines adjacent to the screening boundary.

• **Pipelines**
  There are no hazardous liquid pipelines, gas transmission pipelines, breakout tanks, or liquid natural gas plants within the screening boundary.

• **Railroads**
  There are no railroads within the screening boundary.

**Social Environment**

• **Post-Secondary Education Facilities, Schools, and Childcare Facilities**
  There are no post-secondary education facilities, schools, or childcare facilities within the screening boundary.

• **Government Facilities**
  There are no government facilities within the screening boundary.

• **Places of Worship**
  There are no places of worship within the screening boundary.

• **Law Enforcement**
  There are no law enforcement facilities or correctional institutions within the screening boundary.

• **Greenspace/Parks/Conservation Land**
  The multi-use path, Mountain to River Trail is adjacent to the environmental screening boundary. This multi-use path is located west of the southbound lane on Cobb Parkway SE and outside of the environmental screening boundary. The proposed project would not impact this multi-use path.

• **Cemeteries**
  There are no cemeteries within the screening boundary.

• **Cities/Communities**
  The screening boundary is located within Cumberland, an unincorporated area between the corporate limits of Smyrna and Atlanta. Additionally, the Cumberland Community Improvement District (CCID) overlaps the screening boundary.

  GDOT will coordinate with the CCID for final location of the DMS within the landscaped environments maintained by the CCID.
Major Employment Centers

According to ARC, there is one major employment center within the screening boundary: Cumberland Regional Center. ARC defines employment centers as having on average 10,000 jobs or more within a 3.25 square mile area.²

Environmental Justice Populations

U.S. Census data (from the 2014-2018 American Community Survey 5-Year Estimates) was analyzed to gain insight into the demographics within the environmental screening boundary, and in particular, to identify potential Environmental Justice (minority or low-income) populations. The entire screening boundary is located within Cobb County; therefore, the population within the screening area has been compared to that of Cobb County, as well as to the State of Georgia as a whole. Demographic information for the screening area is based on the population statistics for the census block groups that compose the screening area. General population statistics are shown in Table 2. Implementation of DMS signs would have no effect to Environmental Justice Populations.

Table 2: Population Statistics for Cobb Parkway Northbound

<table>
<thead>
<tr>
<th></th>
<th>State of Georgia</th>
<th>Cobb County</th>
<th>Environmental Screening Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>10,024,689</td>
<td>733,722</td>
<td>3,771</td>
</tr>
<tr>
<td>Minority Population</td>
<td>4,821,043</td>
<td>353,969</td>
<td>1,755</td>
</tr>
<tr>
<td>% Minority Population</td>
<td>46.8%</td>
<td>47.5%</td>
<td>46.5%</td>
</tr>
<tr>
<td>% Population with Income in the Past 12 Months Below Poverty Level</td>
<td>16.0%</td>
<td>10.0%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

DMS Location Sixes Road at Interstate 575

This site is located at the Sixes Road/Interstate 575 interchange in Holly Springs, Cherokee County, GA. Based on the screening, the following environmental resources, issues, or areas of potential concern were observed in the screening area for the Sixes Road at I-575 DMS site. The location of this site and any environmentally sensitive resources identified are shown on Figure 2.

Cultural Environment

Historic Resources

There is one NRHP-eligible resource approximately 1,300 feet east of the environmental screening boundary. This resource is the Lebanon Methodist Church located at 4512 Holly Springs Parkway. According to the GNAHRGIS database, this resource was constructed in 1900. The proposed project would have no

effect on this resource. There were no other NRHP-eligible or NRHP-listed resources identified within the screening boundary.

- **Archaeological Resources**

According to GNAHRGIS, no archaeological sites have been previously identified within the screening boundary. According to GNAHRGIS, no archaeological sites have been previously identified within the screening boundary. Based on the disturbed nature of the ramp shoulders and gore area at the Sixes Road from the construction of the I-75/Sixes Road interchange, there is no potential for archaeological sites within the right-of-way.

**Natural Environment**

- **Protected Species**

Habitats within the screening boundary consisted of mowed-maintained roadway shoulders and median between existing infrastructure (interstate on-ramp). No state- or federal-protected species have potential to be present within the screening boundary. Undeveloped forested areas were identified adjacent to the screening boundary; however, these areas were not investigated. No designated Critical Habitat is present within Cherokee County.

Should the DB Contractor select a location that requires clearing of the undeveloped forested area, the DB Contractor would be responsible for completing a protected species survey and completing consultation with the appropriate state and federal agencies. No construction activities would occur within areas containing habitat for protected species prior to completing agency consultation.

- **Waters of the U.S. and State**

Within the screening boundary, the NWI data identifies no streams, wetlands, or open waters. One unnamed tributary to Toonigh Creek was identified on the USGS topography map north of the screening boundary. The topography map shows Toonigh Creek crossing under the interstate via a bridge on the I-575 southbound off-ramp. This bridge was not investigated because it is outside of the screening boundary. Roadside drainages (concrete-lined and unlined) were observed during the site visit. It is assumed they direct storm flows downgradient to existing pipes/drains within the screening boundary; however, this was not investigated. It is assumed that the final location of the DMS would avoid any existing roadside drainages and pipes. No waters of the State or U.S. were observed in the upgradient screening boundary during the visual habitat assessment.

- **Floodplains**

The following FEMA FIRM Panel was reviewed to identify flood hazard zones within the screening boundary: 13057C0244E (6/7/2019). The screening boundary is located within flood Zone X, an area of minimal flood hazard. Based on this review, the study area does not contain regulatory floodways.

**Physical Environment**

- **Hazardous Materials/Waste Sites**

There are no hazardous materials/waste site within or adjacent to the screening boundary.
- **Noise Barriers**
  Within the screening boundary, there are no noise barriers on either side of Sixes Road. Installation of a DMS would not have any effect on existing or future noise volumes.

- **Underground Storage Tanks (USTs)**
  There are no active gas stations within the screening boundary identified through the desktop and windshield survey.

- **Transmission Lines**
  There are no overhead electrical transmission lines that cross the screening boundary. There are also no electrical transmission lines adjacent to the screening boundary.

- **Pipelines**
  There are no hazardous liquid pipelines, gas transmission pipelines, breakout tanks, or liquid natural gas plants within the screening boundary.

- **Railroads**
  There are no railroads within the screening boundary.

**Social Environment**

- **Post-Secondary Education Facilities, Schools, and Childcare Facilities**
  There are no post-secondary education facilities, schools, or childcare facilities within the screening boundary.

- **Government Facilities**
  There are no government facilities within the screening boundary.

- **Places of Worship**
  There is one place of worship approximately 1,300 feet east of the environmental screening boundary. This resource is the Lebanon Methodist Church located at 4512 Holly Springs Parkway. The proposed project would have no effect on this resource.

- **Law Enforcement**
  There are no law enforcement facilities or correctional institutions within the screening boundary.

- **Greenspace/Parks/Conservation Land**
  There are no greenspaces, parks, or conservation land within the screening boundary. However, north of Sixes Road, within the median between the I-575 northbound on-ramp and the mainline, there is a plot of wildflowers, this area is assumed to be part of the GDOT wildflower program. Construction activities are not anticipated in this area; therefore, the proposed project would have no effect on this resource.

- **Cemeteries**
  There is one cemetery at the Lebanon Methodist Church located at 4512 Holly Springs Parkway. This resource is outside the screening boundary and the proposed project will have no effect on this cemetery.
• Cities/Communities
The screening boundary is located within Holly Springs, GA. The proposed project would have no effect on cities or communities within or adjacent to the screening boundary.

• Major Employment Centers
There are no major employment centers within the screening boundary.

• Environmental Justice Populations
U.S. Census data (from the 2014-2018 American Community Survey 5-Year Estimates) was analyzed to gain insight into the demographics within the environmental screening boundary, and in particular, to identify potential Environmental Justice (minority or low-income) populations. The entire screening boundary is located within Cherokee County; therefore, the population within the screening area has been compared to that of Cherokee County, as well as to the State of Georgia as a whole. Demographic information for the screening area is based on the population statistics for the census block groups that compose the screening area. General population statistics are shown in Table 3. Implementation of DMS signs would have no effect to Environmental Justice Populations.

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<th>State of Georgia</th>
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<td>239,920</td>
<td>7,939</td>
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<td>Minority Population</td>
<td>4,821,043</td>
<td>49,777</td>
<td>1,704</td>
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<td>% Minority Population</td>
<td>46.8%</td>
<td>20.6%</td>
<td>21.5%</td>
</tr>
<tr>
<td>% Population with Income in the Past 12 Months Below Poverty Level</td>
<td>16.0%</td>
<td>8.1%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

DMS Location Augusta Road
This site is located on Augusta Road between Pinder Point Road and International Trade Parkway in Savannah GA. Based on the screening, the following environmental resources, issues, or areas of potential concern were observed in the screening area for the Augusta Road DMS site. The location of this site and any environmentally sensitive resources identified are shown on Figure 3.

Cultural Environment

• Historic Resources
There is one potentially NRHP-eligible resource approximately 200 feet west of the environmental screening boundary. This resource is a pony/steel truss bridge over the St. Augustine Creek. This bridge is no longer in service and is located within an overgrown wooded area outside of the screening boundary. According to the GNAHRGIS database, this resource was constructed in 1920. The proposed project would have no effect on this resource. There were no other NRHP-eligible or NRHP-listed resources identified within the screening boundary.
• **Archaeological Resources**

  According to GNAHRGIS, no archaeological sites have been previously identified within the screening boundary. Based on the disturbed nature of the shoulders and median along Augusta Road from roadway construction and utility construction, there is no potential for archaeological sites within the right-of-way.

**Natural Environment**

• **Protected Species**

  Habitats within the screening boundary consisted of mowed-maintained roadway shoulders and median between existing infrastructure (roads, bridges, retaining walls, buildings, etc.) along Augusta Road. The state-protected bluebarred pygmy sunfish (*Ellassoma okatie*) has potential to be present within St. Augustine Creek flowing beneath Augusta Road. The following federally protected species have potential to be present: shorthorn sturgeon (*Acipenser brevirostrum*) and Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*) within St. Augustine Creek flowing beneath Augusta Road; wood Stork (*Mycteria americana*) and Eastern Indigo Snake (*Drymarchon couperi*) within wetlands along Augusta Road adjacent to the screening boundary. Critical Habitat is designated within Chatham County, yet not within the screening boundary. Based on visual observation, it is assumed that no protected species habitats (wetlands) occur within the median or in the existing Augusta Road shoulder.

  Should the DB Contractor select a location outside of the areas observed, the DB Contractor would be responsible for completing a protected species survey and completing consultation with the appropriate state and federal agencies. No construction activities would occur within areas containing habitat for protected prior to completing agency consultation.

  However, it is assumed that the wetlands would be delineated by the Design-Build Team and that the final location of the DMS would avoid direct impacts to protected species.

• **Waters of the U.S.**

  The NWI data identified St. Augustine Creek flowing perpendicular underneath the screening boundary and wetlands as occurring along both sides of Augusta Road. No unnamed streams were identified, and St. Augustine Creek is the only named stream identified on the USGS topography within the screening boundary. This stream is assumed to have a 25-foot state protected stream buffer.

  The final location of the DMS would not be placed within St. Augustine Creek or its buffer. Based on visual observation, it is assumed that no wetlands occur within the median or in the existing Augusta Road shoulder.

  Should the DB Contractor select a location outside of the areas observed, the DB Contractor would be responsible for completing a wetland delineation and preparing the applicable permit(s) if impacts cannot be avoided. No construction in a wetland would occur prior to permit(s) approval.

• **Floodplains**

  The following FEMA FIRM Panel was reviewed to identify flood hazard zones within the screening boundary: 13051C0040H (8/16/2018). The screening boundary is located within flood zone AE. FEMA describes flood zone AE as areas subject to inundation by the 1-percent-annual-chance-flood event.

  The small footprint created by the DMS pole and its pad would not significantly increase impervious surface and would not be expected to influence flooding potential in the area.
Physical Environment

- **Hazardous Materials/Waste Sites**
  There are no hazardous materials/waste site within or adjacent to the screening boundary.

- **Noise Barriers**
  Within the screening boundary, there are no noise barriers on either side of Augusta Road. Installation of a DMS would not have any effect on existing or future noise volumes.

- **Underground Storage Tanks (USTs)**
  There are no active gas stations within the screening boundary identified through the desktop and windshield survey. Any UST sites not located through this screening would be identified in a Phase I Environmental Site Assessment prior to development of the DMS site.

- **Transmission Lines**
  There are three overhead AC transmission lines approximately 1,500 west of the screening boundary. No overhead electrical transmission lines cross the screening boundary. The proposed project would have no effect on this resource.

- **Pipelines**
  There is a gas transmission pipeline approximately 2,200 feet west of the screening boundary. There are no hazardous liquid pipelines, gas transmission pipelines, breakout tanks, or liquid natural gas plants within the screening boundary. The proposed project would have no effect on pipelines within the vicinity of the screening boundary. This pipeline is not shown on Figure 3 because it does not cross the screening boundary.

- **Railroads**
  There is one railroad line approximately 230 feet west of the screening boundary. However, there are no railroads within the screening boundary. The proposed project would have no effect to the railroad adjacent to the screening boundary.

Social Environment

- **Post-Secondary Education Facilities, Schools, and Childcare Facilities**
  There are no post-secondary education facilities, schools, or childcare facilities within the screening boundary.

- **Government Facilities**
  The Pent Wentworth Fire Station Number 2 is located at the northern terminus of the screening area at 6781 GA Highway 21. However, the proposed project will have no effect on this site. All proposed improvements will be installed within the existing right of way.

- **Places of Worship**
  There are no places of worship within the screening boundary.

- **Law Enforcement**
  There are no law enforcement facilities or correctional institutions within the screening boundary.
• **Greenspace/Parks/Conservation Land**
  The Port Wentworth Lion’s Club Recreation Park is located approximately 500 feet north of the screening boundary at 6781 GA Highway 21. This park shares a driveway with the Pent Wentworth Fire Station Number 2. The proposed project will have no effect on this park.

• **Cemeteries**
  There are no cemeteries within the screening boundary.

• **Cities/Communities**
  The screening boundary is located within the City of Port Wentworth, GA. The proposed project would have no effect on cities or communities within or adjacent to the screening boundary.

• **Major Employment Centers**
  The screening boundary is west of six to eight commercial distribution warehouses, which likely serve as major employment centers for the City of Port Wentworth. These warehouses are accessed via the northern terminus of the screening boundary, Industrial Trade Parkway. However, the proposed project would have no effect on these major employment centers.

• **Environmental Justice Populations**
  U.S. Census data (from the 2014-2018 American Community Survey 5-Year Estimates) was analyzed to gain insight into the demographics within the environmental screening boundary, and in particular, to identify potential Environmental Justice (minority or low-income) populations. The entire screening boundary is located within Chatham County; therefore, the population within the screening area has been compared to that of Chatham County, as well as to the State of Georgia as a whole. Demographic information for the screening area is based on the population statistics for the census block groups that compose the screening area. General population statistics are shown in Table 4. Implementation of DMS signs would have no effect to Environmental Justice Populations.

<table>
<thead>
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<th>State of Georgia</th>
<th>Chatham County</th>
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<td>10,024,689</td>
<td>287,049</td>
<td>23,676</td>
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<td>Minority Population</td>
<td>4,821,043</td>
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<td>% Minority Population</td>
<td>46.8%</td>
<td>51.1%</td>
<td>47.1%</td>
</tr>
<tr>
<td>% Population with Income in the Past 12 Months Below Poverty Level</td>
<td>16.0%</td>
<td>15.8%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

**DMS Location Jimmy Deloach Parkway**
This site is located on Jimmy Deloach Parkway in Port Wentworth, GA. The southern terminus for this screening boundary is located at the intersection of Jimmy Deloach Parkway and Crossgate Road. The northern terminus the Jimmy Deloach CSXT railroad overpass. Based on the screening, the following environmental resources, issues, or
areas of potential concern were observed in the screening area for the Jimmy Deloach Parkway DMS site. The location of this site and any environmentally sensitive resources identified are shown on Figure 4.

Cultural Environment

- **Historic Resources**
  There were no NRHP-eligible or NRHP-listed resources identified within the screening boundary.

- **Archaeological Resources**
  According to GNAHRGIS, no archaeological sites have been previously identified within the screening boundary. Based on the disturbed nature of the shoulders along the Jimmy Deloach Parkway from roadway and utility construction, there is no potential for archaeological sites within the right-of-way.

Natural Environment

- **Protected Species**
  Habitats within the screening boundary consisted of mowed-maintained roadway shoulders between existing infrastructure (roads, bridges, retaining walls, buildings, etc.) along Jimmy Deloach Parkway. No state-protected species have potential to be present within the screening boundary. The following federally protected species have potential to be present adjacent to the screening boundary: wood stork (*Mycteria americana*) and Eastern indigo snake (*Drymarchon couperi*) within wetlands along the roadway. Critical Habitat is designated within Chatham county, yet not within the screening boundary. It is assumed that the wetlands would be delineated by the Design-Build Team and that the final location of the DMS would avoid direct impacts to protected species.

  Should the DB Contractor select a location outside of the areas observed, the DB Contractor would be responsible for completing a protected species survey and completing consultation with the appropriate state and federal agencies. No construction activities would occur within areas containing habitat for protected prior to completing agency consultation.

- **Waters of the U.S.**
  Within the screening boundary, the NWI data identified wetlands along both sides of Jimmy Deloach Parkway, no streams or open waters were identified. An unnamed tributary to St. Augustine Creek was identified on the USGS topography within the screening boundary. This stream is assumed to have a 25-foot state protected stream buffer.

  The final location of the DMS would not be placed within St. Augustine Creek or its buffer. Should the DB Contractor select a location outside of the areas observed, the DB Contractor would be responsible for completing a wetland delineation and preparing the applicable permit(s) if impacts cannot be avoided. No construction in a wetland would occur prior to permit(s) approval.

- **Floodplains**
  The following FEMA FIRM Panel was reviewed to identify flood hazard zones within the screening boundary: 13051C0045G (8/16/2018). The northern half of the screening boundary is located within flood zone AE. FEMA describes flood zone AE as areas subject to inundation by the 1-percent-annual-chance-flood event. The southern half of the screening boundary is in flood zone X, an area of minimal flood hazard.

  The small footprint created by the DMS pole and its pad would not significantly increase impervious surface and would not be expected to influence flooding potential in the area.
Physical Environment

- **Hazardous Materials/Waste Sites**
  There are no hazardous materials/waste site within or adjacent to the screening boundary.

- **Noise Barriers**
  Within the screening boundary, there are no noise barriers on either side of Jimmy Deloach Parkway. Installation of a DMS would not have any effect on existing or future noise volumes.

- **Underground Storage Tanks (USTs)**
  There is one underground storage tank (UST) adjacent to the screening boundary, Parker’s fuel station located at 6000 Georgia Highway 21. This UST is located approximately 1,200 feet west of the southern terminus of the environmental screening boundary. The proposed project will have no effect on this site.

- **Transmission Lines**
  A transmission line crosses over the screening boundary just south of the railroad overpass (0.5 mile south of the Sonny Dixon Interchange). This transmission line is connected to an electricity substation located approximately 430 feet the east of the screening boundary (southeast of the railroad underpass). Another transmission line crosses over the screening boundary approximately 750 feet north of Crossgate Road. The proposed project will have no effect on this facility or the transmission lines.

- **Pipelines**
  There is one gas transmission pipeline approximately 1,200 feet east of the screening boundary. The proposed project would have no effect on pipelines within the vicinity of the screening boundary. This pipeline is not shown on Figure 4 because it does not cross the screening boundary.

- **Railroads**
  There is one CSXT railroad line that crosses under Jimmy Deloach Parkway approximately 0.5 mile south of the Sonny Dixon Interchange. However, the proposed project will have no effect on this railroad.

Social Environment

- **Post-Secondary Education Facilities, Schools, and Childcare Facilities**
  There are no post-secondary education facilities, schools, or childcare facilities within the screening boundary.

- **Government Facilities**
  The Port Wentworth Fire Station Number 1 is located within the vicinity of the screening boundary at 317 Cantyre Street which is approximately 2,500 feet east of Jimmy Deloach Parkway. The Savannah/Hilton Head International Airport is located approximately 1.5 miles southwest of the screening boundary. The proposed project will have no effect on these resources. The airport is not shown on Figure 4 as it is too far from the environmental screening boundary.
• **Places of Worship**

There is one place of worship approximately 300 feet east of the environmental screening boundary. This resource is the Bonnybridge Baptist Church located at 811 Bonnybridge Road. The proposed project would have no effect on this resource.

• **Law Enforcement**

The Port Wentworth Police Department is within the vicinity of the screening boundary. This department is located at 323 Cantyre Street, which is approximately 2,500 feet east of the environmental screening boundary. The proposed project will have no effect on this police department.

• **Greenspace/Parks/Conservation Land**

There are no greenspaces, parks, or conservation land within the screening boundary.

• **Cemeteries**

A desktop review shows the Cherokee Hill Cemetery approximately 0.5 mile west of the screening boundary and approximately 0.5 mile south of the Sonny Dixon Interchange. During the desktop review, the road leading to this cemetery or an address to confirm its location was not able to be identified. However, the proposed project will have no effect on this resource.

• **Cities/Communities**

The screening boundary is located within the City of Port Wentworth, GA. The proposed project would have no effect on cities or communities within or adjacent to the screening boundary.

• **Major Employment Centers**

The screening boundary is located adjacent to several industrial parks containing commercial warehouses and trucking/logistics distribution centers. Also, the Savannah/Hilton Head International Airport is approximately 1.5 mile southwest of the screening boundary. These warehouses and the airport are likely major employment centers for the City of Port Wentworth. The proposed project will have no effect on major employment centers.

• **Environmental Justice Populations**

U.S. Census data (from the 2014-2018 American Community Survey 5-Year Estimates) was analyzed to gain insight into the demographics within the environmental screening boundary, and in particular, to identify potential Environmental Justice (minority or low-income) populations. The entire screening boundary is located within Chatham County; therefore, the population within the screening area has been compared to that of Chatham County, as well as to the State of Georgia as a whole. Demographic information for the screening area is based on the population statistics for the census block groups that compose the screening area. General population statistics are shown in Table 5. Implementation of DMS signs would have no effect to Environmental Justice Populations.
<table>
<thead>
<tr>
<th></th>
<th>State of Georgia</th>
<th>Chatham County</th>
<th>Environmental Screening Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>10,024,689</td>
<td>287,049</td>
<td>239</td>
</tr>
<tr>
<td>Minority Population</td>
<td>4,821,043</td>
<td>146,806</td>
<td>55</td>
</tr>
<tr>
<td>% Minority Population</td>
<td>46.8%</td>
<td>51.1%</td>
<td>23.0%</td>
</tr>
<tr>
<td>% Population with Income in the Past 12 Months Below Poverty Level</td>
<td>16.0%</td>
<td>15.8%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Figure 1
Cobb Parkway SB and Cobb Parkway NB Environmental Screening

- Option 1 - DMS Site
- Option 2 - DMS Site
- UST
- Small Quantity Generator
- Approx. Multiuse Path
- Environmental Screening Boundary

Miles

0 0.125 0.25

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Figure 2
Sixes Road and I-575 Environmental Screening

- Option 1 - DMS Site
- Option 2 - DMS Site
- Cemetery
- Historic Resource
- Place of Worship
- Environmental Screening Boundary
Figure 3
Augusta Road
Enviromental Screening

- Option 1 - DMS Site
- Option 2 - DMS Site
- Park
- Historic Resource

Fire Stations
- Environmental Screening Boundary
- Railroad
- Electric Transmission Lines
- St. Augustine Creek
- Wetlands (Non-Delineated)
- Flood Zone AE

0 0.125 0.25 Miles
Figure 4
Jimmy Deloach Parkway
Environmental Screening

- Option 1 - DMS Site
- Option 2 - DMS Site
- Cemetery
- UST
- Substation
- Fire Stations
- Place of Worship
- Environmental Screening Boundary
- Electric Transmission Lines
- Railroad
- Wetlands (Non-Delineated)
- Flood Zone AE

0 0.25 0.5 Miles

N
APPENDIX A - PHOTOGRAPH LOG
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 1

Description:
View of brick retaining wall facing south on Cobb Parkway.

Location:
Cobb Parkway, Southbound

Date: 7/16/2020

Photograph: 2

Description:
Potential DMS location on the east side of Cobb Parkway. Ornamental vegetation shown in far view. View facing north east.

Location:
Cobb Parkway, Southbound

Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 3
Description: View of brick retaining wall facing south on Cobb Parkway.

Location: Cobb Parkway, Southbound
Date: 7/16/2020

Photograph: 4
Description: Potential DMS location on the east side of Cobb Parkway. Ornamental vegetation shown in far view. View facing north east.

Location: Cobb Parkway, Southbound
Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 5

Description:
Pedestrian bridge over Cobb Parkway. The center median is a potential location for the DMS.

Location:
Cobb Parkway, Southbound

Date: 7/16/2020

Photograph: 6

Description:
Median landscape between northbound and southbound lanes on Cobb Parkway. View facing southeast.

Location:
Cobb Parkway, Northbound

Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 7

Description:
Rocky hill behind the wall on the east side of Cobb Parkway.

Location:
Cobb Parkway, Northbound

Date: 7/16/2020

Photograph: 8

Description:
Potential DMS location behind the guardrail on the west side of Cobb Parkway.

Location:
Cobb Parkway, Northbound

Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 9
Description: Potential DMS location behind the guardrail on the west side of Cobb Parkway.
Location: Cobb Parkway, Northbound
Date: 7/16/2020

Photograph: 10
Description: Potential DMS location behind the guardrail on the west side of Cobb Parkway.
Location: Cobb Parkway, Northbound
Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 11
Description: Forest immediately adjacent to potential DMS location. Steep downhill shown, potential stream downgradient.
Location: Cobb Parkway, Northbound
Date: 7/16/2020

Photograph: 12
Description: Forest immediately adjacent to potential DMS location. Steep downhill shown, potential stream downgradient.
Location: Cobb Parkway, Northbound
Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 13
Description: Potential DMS location behind the guardrail on the west side of Cobb Parkway.
Location: Cobb Parkway, Northbound
Date: 7/16/2020

Photograph: 14
Description: Median landscape between northbound and southbound lanes on Cobb Parkway. View facing south.
Location: Cobb Parkway, Northbound
Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 15

Description:
Median landscape between northbound and southbound lanes on Cobb Parkway. View facing east.

Location:
Cobb Parkway, Northbound

Date: 7/16/2020

Photograph: 16

Description:
Wall and vegetation beyond the sidewalk on the east side of Cobb Parkway. View facing south.

Location:
Cobb Parkway, Northbound

Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 17
Description: Median landscape between northbound and southbound lanes on Cobb Parkway. View facing east.
Location: Cobb Parkway, Northbound
Date: 7/16/2020

Photograph: 18
Description: Median landscape between northbound and southbound lanes on Cobb Parkway. View facing east.
Location: Cobb Parkway, Northbound
Date: 7/16/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 19
Description:
View facing south from the Sixes Road/I-575 onramp.
Location:
Sixes Road at I-575
Date: 7/20/2020

Photograph: 20
Description:
Retaining wall on Sixes Road/I-575 onramp. View facing northwest.
Location:
Sixes Road at I-575
Date: 7/20/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 21

Description:
Retainer wall on Sixes Road/I-575 onramp. View facing northwest.

Location:
Sixes Road at I-575

Date: 7/20/2020

Photograph: 22

Description:
Median between the Sixes Road/I-575 onramp and I-575. View facing south.

Location:
Sixes Road at I-575

Date: 7/20/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 23

Description:
Potential wetlands in the median between Sixes Road/I-575 onramp and I-575. View facing east.

Location:
Sixes Road at I-575

Date: 7/20/2020

Photograph: 24

Description:
Potential wetlands in the median between Sixes Road/I-575 onramp and I-575. View facing north.

Location:
Sixes Road at I-575

Date: 7/20/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 25

Description:
Potential wetlands east of the Sixes Road/I-575 onramp and I-575. View facing southeast.

Location:
Sixes Road at I-575

Date: 7/20/2020

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Photograph: 26

Description:
Potential wetlands in the median of the Sixes Road/I-575 onramp and I-575. View facing east.

Location:
Sixes Road at I-575

Date: 7/20/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 27

Description:
Potential wetlands in the median of the Sixes Road/I-575 onramp and I-575. View facing north.

Location:
Sixes Road at I-575

Date: 7/20/2020

Photograph: 28

Description:
North terminus, Augusta Road/International Trade Parkway. View facing north.

Location:
Augusta Road/SR 30

Date: 7/21/2020
APPENDIX A - PHOTOGRAPH LOG

Photograph: 29

Description:
North terminus, Augusta Road/International Trade Parkway. View facing north.

Location:
Augusta Road/SR 30

Date: 7/21/2020

Photograph: 30

Description:
North terminus, Augusta Road/International Trade Parkway. View facing west.

Location:
Augusta Road

Date: 7/21/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
PI# 0017389

Photograph: 31
Description:
North terminus, Augusta Road/International Trade Parkway. View facing southwest.

Location:
Augusta Road/SR 30

Date: 7/21/2020

Photograph: 32
Description:
North terminus, Augusta Road/International Trade Parkway. View facing west.

Location:
Augusta Road/SR 30

Date: 7/21/2020
APPENDIX A - PHOTOGRAPH LOG

Georgia Department of Transportation
Statewide ITS DMS Deployment Environmental Screening
Pl# 0017389

Photograph: 33
Description:
North terminus,
Augusta Road/International Trade Parkway. View facing west.

Location:
Augusta Road/SR 30

Date: 7/21/2020

Photograph: 34
Description:
Gas pipeline marking north of CSXT railroad facing southwest.

Location:
Jimmy Deloach Parkway

Date: 7/21/2020
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

Attachment 6-1

LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

SS 107 Legal Regulations and Responsibility to the Public
DELETE SECTION 107 AND SUBSTITUTE THE FOLLOWING:

107.01 LAWS TO BE OBSERVED

The Contractor shall keep fully informed of all Federal and State laws, all local laws, ordinances, codes, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on The Work, or which in any way affect the conduct of The Work. The Contractor shall at all times observe and comply with all such laws, ordinances, codes, regulations, orders, decrees, and permits; and shall protect and indemnify the Department and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, code, regulation, order, decrees, and permits, whether by himself, his employees, subcontractors, or agents.

107.02 PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, pay all charges, taxes, and fees, and give all notices necessary and incidental to the due and lawful prosecution of The Work.

107.03 PATENTED DEVICES

If the Contractor employs any design, device, material, or process covered by letters of patent or copyright, he shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the Surety shall indemnify and save harmless the Department from any and all claims for infringement by reason of the use of any such patented design, device, material, or process, or any trademark or copyright, and shall indemnify the Department for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of The Work.

107.04 RESTORATION OF SURFACES OPENED BY PERMIT

The right to construct or reconstruct any utility service in the highway or street and to grant permits for the same at any time, is expressly reserved by the Department for the proper authorities of the municipality or county in which The Work is done and the Contractor shall not be entitled to any damages either for the digging up of the street or highway, or for any delay occasioned thereby.

Any individual, firm, or corporation wishing to make an opening in the street or highway must secure a permit from the Department. The Contractor shall allow parties bearing such permits, and only those parties, to make openings in the street or highway. When ordered by the Engineer, the Contractor shall make in an acceptable manner all necessary repairs due to such openings and such necessary work will be paid for as Extra Work, or as provided in the Specifications, and will be subject to the same conditions as original work performed.

107.05 FEDERAL-AID PROVISIONS

When the United States Government pays all or any part of the cost of a project, the Federal laws and the rules and regulations made pursuant to such laws must be observed by the Contractor, and The Work shall be subject to the inspection of the appropriate Federal agency. Such inspection shall in no sense make the Federal Government a party to this Contract and will in no way interfere with the rights of either party hereunder.

107.06 SANITARY PROVISIONS

The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements of the State Department of Health and other authorities having jurisdiction, and shall permit no public nuisance.
107.07 Public Convenience and Safety

The Contractor shall at all times so conduct The Work as to assure the least possible obstruction of traffic. The safety and convenience of the general public and the residents along the highway and the protection of persons and property shall be provided for by the Contractor as specified under Subsection 104.05, Subsection 107.09, Section 150, the Project Plans, and Special Provisions.

Traffic whose origin and destination is within the limits of the Project shall be provided ingress and egress at all times unless otherwise specified in the Plans or Special Provisions. The ingress and egress includes entrance and exit via driveways at the various properties, and access to the intersecting roads and streets. The Contractor shall maintain sufficient personnel and equipment on the project at all times, particularly during inclement weather, to ensure that ingress and egress are provided when and where needed.

Two-way traffic shall be maintained at all times unless otherwise specified or approved. The Contractor shall not stop traffic without permission granted by the Engineer.

All equipment used on The Work shall come equipped with factory-installed mufflers, or manufacturer’s recommended equivalent, in good condition. These mufflers shall be maintained in good condition throughout the construction period.

107.08 Railroad-Highway Provisions

All work to be performed by the Contractor on a railroad company’s right-of-way or property shall be done in a manner satisfactory to the chief engineer of the railroad company, or his authorized representative, and shall be performed at such times and in such manner as not to unnecessarily interfere with the movement of trains or traffic upon the track of the railroad company. The Contractor shall use all reasonable care and precaution in order to avoid accidents, damage, or unnecessary delay or interference with the railroad company’s trains or other property, or property of tenants of railroad company.

The Contractor shall notify the railroad company and obtain its approval before commencing work on the railroad company’s right-of-way or property.

The Contractor shall determine what measures are required by the railroad company to protect its operations and right-of-way or property during construction. Such protection may include the use of a flagger or flaggers provided by the railroad company. The Contractor shall be responsible for ensuring that the required protection is provided and shall pay the railroad company directly for any and all such services which may be required to accomplish the construction unless otherwise specified.

Any temporary grade crossings or other means needed during construction by the Contractor for transporting materials of any nature and/or equipment across the railroad tracks will be the responsibility of the Contractor to handle directly with the railroad company and bear all costs incidental to such crossings including flagging services provided by the railroad company.

A “Special Provisions for the Protection of Railroad Interests” may be included in the proposal to stipulate insurance and other requirements of the railroad company.

107.09 Barricades and Danger, Warning, and Detour Signs

The Contractor shall furnish, install, and maintain all necessary and required barricades, signs, and other traffic control devices in accordance with these Specifications, Project Plans, Special Provisions, and the MUTCD, and take all necessary precautions for the protection of the work and safety of the public.

Unless otherwise specified, all traffic control devices furnished by the Contractor shall remain the property of the Contractor.

107.10 Forest Protection

In carrying out work within or adjacent to State or National Forests, or any other forests, parks, or other public or private lands, the Contractor shall obtain necessary permits and comply with all of the regulations of the appropriate authorities having jurisdiction over such forest, park, or lands. The Contractor shall keep the areas in an orderly condition, dispose of all refuse, obtain permits for the construction and maintenance of all construction camps, stores, warehouses, residences, latrines, cesspools, septic tanks, and other structures in accordance with the requirements of the appropriate authority.

The Contractor shall take all reasonable precautions to prevent and suppress forest fires and shall require his employees and subcontractors, both independently and at the request of forest officials, to do all reasonably within their power to prevent and suppress and to assist in preventing and suppressing forest fires; to notify a forest official at the earliest possible moment of the location and extent of any fire seen by them; and to extinguish or aid in extinguishing nearby fires.
107.11 Construction Over or Adjacent to Navigable Waters
A. Navigation to Be Protected

Since navigable waterways are under the jurisdiction of the United States Coast Guard and/or the United States Army Corps of Engineers, all work done in, over, on or adjacent to such waters shall comply with their requirements. Free navigation shall not be impeded, and navigable depths shall be maintained.

The Contractor shall comply with permits issued by the United States Coast Guard and/or the United States Army Corps of Engineers, and the Contractor shall obtain and comply with other permits in accordance with the requirements of Subsection 107.02

Special Provisions for environmental protection may be included in the proposal to stipulate environmental commitments and other requirements.

B. Obstructions to be Removed

When the construction has progressed enough to permit removal, all falsework, piling and other obstructions shall be removed to the satisfaction of the Federal agency having jurisdiction. In all cases such clearing must be done thoroughly before The Work will be accepted by the Department.

107.12 Use of Explosives

When the use of explosives is necessary for the prosecution of The Work, the Contractor 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 Contractor 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 Contractor, the Contractor’s agents, or employees; and shall hold the Department harmless from all claims of damages resulting in any manner therefrom.

The Contractor shall notify each public utility owner having structures or other installations, above or below ground, near the site of The Work of his intention to use explosives. Such notice shall be given sufficiently in advance to enable the utility owners to take such steps as they may deem necessary to protect their property from injury. Such notice shall not relieve the Contractor of responsibility for all damages resulting from his blasting operations.

All explosives shall be stored securely in compliance with all laws and ordinances, and all such storage places shall be clearly marked DANGEROUS EXPLOSIVES. Explosives and detonators shall be stored in separate storage facilities in separate areas. Where no laws or ordinances apply, locked storage shall be provided satisfactory to the Engineer, never closer than 1,000 ft (300 m) 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 Contractor.

Whenever electric detonators are used, all radio transmitters shall be turned off within a radius of 500 ft (150 m). 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 will not be used within 500 ft (150 m) of a railroad.

Submit a blasting plan to the Engineer a minimum of five working days prior to use of explosives that provides details of the proposed blasting plan, including, but not limited to, the type and amount of explosives, the shot sequence, the description of and distance to the closest inhabitable structure, and other information as requested by the Engineer. Submission of blasting plan does not relieve the contractor of the responsibility for the adequate and safe performance of the blasting.

107.13 Protection and Restoration of Property and Landscape
A. General Provisions

The Contractor shall be responsible for the preservation of all public and private property, crops, fish ponds, trees, monuments, highway signs and markers, fences, grassed and sodded areas, etc. along and adjacent to the highway, and shall use every precaution necessary to prevent damage or injury thereto, unless the removal, alteration, or destruction of such property is provided for under the Contract. The Contractor shall use suitable precaution to prevent damage to all underground structures, whether shown on the Plans or not, and shall protect carefully from disturbance or damage, all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed. The Contractor shall not willfully or maliciously injure or destroy trees or shrubs, and he shall not remove or cut them without proper authority.

The Contractor shall be responsible for all sheet piling, shoring, underpinning, etc., as may be required for the protection of abutting property, nearby buildings, streets, and the like.
The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of The Work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing The Work, or at any time due to defective work or materials, and said responsibility will not be released until the Project shall have been completed and accepted.

When the Contractor’s excavating operations encounter remains of prehistoric people’s dwelling sites or artifacts of historical or archeological significance, the operations shall be temporarily discontinued. The Engineer will contact archeological authorities and the Office of Environmental Services to determine the disposition thereof. When directed by the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and shall remove them for delivery to the custody of the proper authorities. Such excavation will be considered and paid for as Extra Work.

When the Contractor’s normal operations are delayed by such stoppage or extra work, an appropriate time extension will be granted.

The Contractor shall plan, coordinate, and prosecute the work so that disruption to personal property and business is held to a practical minimum.

No resident or business shall be denied vehicular access to their property for any length of time other than as determined by the Engineer is absolutely necessary. Where two or more existing driveways are present for a business, only one existing driveway shall be closed at any time. All construction areas abutting lawns and yards of residential or commercial property shall be restored promptly. Backfilling of each drainage structure or section of curb and gutter, sidewalk, or driveway shall be accomplished as soon as adequate strength is obtained. Finishing, dressing, and grassing shall be accomplished immediately thereafter as a continuous operation within each area being constructed with emphasis placed on completing each individual yard or business frontage. Care shall be taken to provide positive drainage to avoid ponding or concentration of runoff.

Handwork, including raking and smoothing, shall be required to ensure that roots, sticks, rocks, and other debris are removed in order to provide a neat and pleasing appearance. Grassing, when in season, shall immediately follow in order to establish permanent cover at the earliest date. If grassing is not in season, proper erosion control shall be installed and maintained.

The work described above shall be in addition to that required by Subsection 104.07, “Final Cleaning Up” and Subsection 105.16, “Final Inspection and Acceptance”.

B. Erosion and Siltation Control

The Contractor shall take all necessary measures throughout the life of the Project to control erosion and silting of rivers, streams, and impoundments (lakes, reservoirs, etc.). Construction of drainage facilities as well as performance of other Contract work which will contribute to the control of erosion and siltation shall be carried out in conjunction with clearing and grubbing, and earthwork operations as stipulated in Section 161.

C. Pollution

The Contractor shall exercise every reasonable precaution throughout the life of the Contract to prevent pollution of rivers, streams or impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage and other harmful waste shall not be discharged into or alongside rivers, streams, and impoundments, or into natural or manmade channels leading thereto. The Contractor shall also comply with the applicable regulations of other State and Federal departments and to all governmental statues relating to the prevention and abatement of pollution.

D. Insect Control Regulations

The Plant Pest Control Division of the U.S. Department of Agriculture and the Georgia State Department of Agriculture restrict the movement of certain items from areas infested with Japanese Beetles or Imported Fire Ants so as to prevent the spread of these pests to non-infested areas. Where insect infested areas are shown on the Plans, Contractors will control their operations in such a manner as to comply fully with the requirements of Section 155.

E. Reclamation of Material Pits and Waste Disposal Areas

Whenever or wherever the Contractor obtains material from a source or wastes material on an area other than within the Right-of-Way, regardless of the fashion, manner or circumstances for which the source or area is obtained, it shall be reclaimed in accordance with the requirements of Section 160.

F. Mailboxes

The property owner shall have the responsibility for removing and relocating the mailbox to an area outside construction limits.

The Engineer will mark a point for the relocation of the box. The stake should be set so that the location of the box will be convenient to both the mail carrier and the patron, yet not interfering with the proposed work. It may be necessary for the Engineer to confer with the Post Office serving the area.
The Contractor shall notify each affected owner, in writing, that their mailbox is in conflict with the proposed construction, that they have ten days to relocate the box and that, after the expiration of the 10 days’ notice, if the owner has not relocated the box, it shall be removed by the Contractor and laid upon the owner’s property, clear of the Right-of-Way.

Any cost to the Contractor for removing the mailboxes as stated above shall be included in the price bid for other items.

G. Failure to Comply

Failure of the Contractor to comply with any of the above provisions or to install erosion prevention items included in the Contract at the time specified, will be evidence of omission and neglect, and the Contractor will be liable for damages as outlined in Subsection 107.13.H below. Furthermore, the Engineer shall withhold payment on all Contract Items until such time as the Contractor complies in full with all of the aforesaid provisions.

H. Payment for Damages

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the Work, or in consequence of the nonexecution thereof by the Contractor, the Contractor shall restore, at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding or otherwise restoring as may be directed, or shall make good such damage or injury in an acceptable manner.

I. Compensation

All costs pertaining to any requirement contained herein shall be included in the overall Bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.

107.14 Load Restrictions

It is hereby agreed between the Department and the Contractor that in the performance of The Work under the Contract, the following load restrictions and stipulations shall be in full force and effect during the life of the Contract:

A. Parties Affected

The load restrictions and stipulations contained herein shall be applicable to the equipment of the Contractor; each agent or subcontractor employed by the Contractor; and each person or persons, firm, partnership, corporation or any combination thereof, hauling materials, supplies or equipment to or on the Project, by or for the Contractor.

B. Within Project Limits

No hauling equipment which is loaded beyond those limits provided by State Law shall be permitted on any portion of the new or existing pavement structure except that such loads will be permitted on nonstabilized bases and subbases prior to placing roadway paving subject to the provisions of Subsection 107.17.

Axle loads and gross weight limits will be evaluated in accordance with current Georgia Law.

All damage caused by any equipment to any permanent installation or portion of The Work shall be promptly repaired by the Contractor at his expense. When it becomes necessary to cross existing pavement with excessive loads, the Contractor shall provide and remove, at his own expense, proper cushioning by means of earth blanket or otherwise as directed.

C. Outside Project Limits

All equipment users included in Subsection 107.14.A, above, operating equipment on roads outside the Project limits shall be governed by the following regulations:

1. No vehicle shall carry any load in excess of that specified by Georgia Law.

2. On County System roads the maximum total gross weight shall not exceed 56,000 lbs. (25,400 kg) unless a vehicle is making a pickup or delivery on such roads.

3. For a specific individual trip the above weight limitations may be exceeded provided a special permit is obtained from the Department for each such movement. A special permit will not relieve the Contractor of liability for damage that may result from such a movement. Refer to O.C.G.A §32-6-26 Weight of Vehicle and Load, SB54 (2011) for compliance with weight limitations and exceptions.

4. Authorized personnel of the Department of Public Safety shall be permitted to weigh each truck hauling material to the Project whenever the Department so desires. The owner of each truck shall instruct his operators to cooperate with and assist the truck weighers in every way possible.
5. A Certified Public Weigher operating under the provisions of Standard Operating Procedure 15 shall not dispatch any vehicle loaded with material to be incorporated into the Project when the gross vehicle weight exceeds the limit established by law.

6. Ready Mix Concrete trucks shall comply with load restrictions as specified in Laboratory Standard Operating Procedure 10, “Quality Assurance for Ready-Mixed Concrete Plants in Georgia.”

D. Responsibilities

It will be the responsibility of the Contractor to advise his personnel, and all equipment users included in Subsection 107.14.A, as to the load restrictions and stipulations contained herein.

E. Excess Loads and Violations

If multiple violations assignable to a given Certified Public Weigher are occurring, that Certified Public Weigher may be suspended from weighing materials dispatched to Department of Transportation projects.

107.15 Responsibility for Damage Claims

The Contractor shall indemnify and save harmless the Department, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the said Contractor; or on account of or in consequence of any neglect in safe-guarding The Work; or through use of unacceptable materials in constructing The Work; or because of any act of omission, neglect or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the Workmen’s Compensation Act, or any other law, ordinance, order, or decree; and so much of the money due the said Contractor under and by virtue of his Contract as may be considered necessary by the Department for such purpose may be withheld for the use of the State; or, in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Department; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he is adequately protected by public liability and property damage insurance.

107.16 Opening Sections of Project to Traffic

Whenever any bridge or section of roadway is in acceptable condition for travel, the Engineer may direct that it be opened to traffic, whether or not the opening was originally provided for, and such opening shall not be held to be in any way an acceptance of the bridge or roadway, or any part thereof, or as a waiver of any of the provisions of the Contract. Necessary repairs or renewals made on any section of the roadway or bridge thus opened to traffic under instructions from the Engineer, due to defective material or work, or to any cause other than ordinary wear and tear, pending completion and acceptance of the roadway, bridge, or other work, shall be done by the Contractor, without additional compensation. Also, the Contractor shall not receive additional compensation for completing the Work except as specified in Subsection 104.03.

If the Contractor is dilatory in completing shoulders, drainage structures, or other features of work, the Engineer may so notify him in writing and establish therein a reasonable period of time in which the Work should be completed. If the Contractor is dilatory, or fails to make a reasonable effort toward completion in this period of time, the Engineer may then order all or a portion of the Project opened to traffic. On such sections which are so ordered to be opened, the Contractor shall conduct the remainder of his construction operations so as to cause the least obstruction to traffic and shall not receive any added compensation due to the added cost of the Work by reason of opening such section to traffic.

On any section opened to traffic under any of the above conditions, whether stated in the Special Provisions or opened by necessity of Contractor’s operations, or unforeseen necessity, any damage to the highway not attributable to traffic which might occur on such section (except slides) shall be repaired by the Contractor at his expense. The removal of slides shall be done by the Contractor on a basis agreed to prior to the removal of such slides.

107.17 Contractor’s Responsibility for the Work

From the first day the Contractor begins work, or from the date Contract Time commences, whichever occurs first, until written final acceptance of the project by the Engineer, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of The Work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of The Work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except that the Department may, in its discretion, reimburse the Contractor for the repair of damage to The Work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, of the public enemy or of governmental authorities. The Contractor’s responsibility for damages and injuries is defined in Subsection 104.05.A.
In case of suspension of work from any cause whatsoever, the Contractor shall be responsible for the Project and shall take such precautions as may be necessary to prevent damage to the Project, provide for normal drainage and shall erect any necessary temporary structures, signs, or other facilities at his expense.

107.18 Acquisition of Right-of-Way
Rights of Way for the project will be obtained by the Department, in coordination with local governments and others. However, the Contractor’s access to the portions of the right-of-way may be restricted. Where such restrictions are known in advance to the Department they will be listed in the bid proposal. Delays to the progress of the Work may be encountered because of restricted access to portions of the right-of-way. When such delays occur, whether caused by restrictions listed in the bid proposal or restrictions that develop after the Contract is signed, the parties agree in executing the Contract that such delays do not constitute breach of the Contract. Delays in availability of right-of-way beyond those listed in the bid proposal, or that develop after the Contract has been signed, that impact the controlling Item or Items of the Work will not be charged against the Contract Time. Additional compensation for such delays shall not be paid, except as provided in Subsection 105.13, “Claims for Adjustments and Disputes,” or Subsection 109.09, “Termination Clause.” In the event the Department is unable to acquire right-of-way needed for the project, resulting in delay to or termination of the project, such situation will also be controlled by this Section, and will not constitute a breach of the Contract by the Department.

107.19 Personal Liability of Public Officials
In carrying out any of the provisions of the Contract or in exercising any power or authority granted to the Board, Commissioner, Chief Engineer, their agents and employees, by the Contract, there shall be no liability, either personally or as officials or representatives of the Department, it being understood that in all such matters they act solely as agents and representatives of the Department.

107.20 No Waiver of Legal Rights
Upon completion of The Work, the Department will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or estop the Department from correcting any measurement, estimate, or certificate made before or after completion of The Work, nor shall the Department be precluded or estopped from recovering from the Contractor or his Surety, or both, such over-payment as it may sustain, or by failure on the part of the Contractor to fulfill his obligations under the Contract. A waiver on the part of the Department of any breach of any part of the Contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the Department for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Department’s rights under any warranty or guaranty.

107.21 General Description
The Contractor shall designate, prior to beginning any work, a Worksite Utility Coordination Supervisor (WUCS) who shall be responsible for initiating and conducting utility coordination meetings and accurately recording and reporting the progress of utility relocations and adjustment work. Also, the WUCS shall prepare an Emergency Response Plan for the purpose of planning, training, and communicating among the agencies responding to the emergency. The WUCS shall be the primary point of contact between all of the Utility companies, the Contractor and the Department. The WUCS shall recommend the rate of reoccurrence for utility coordination meetings and the Engineer will have the final decision on the regularity for utility coordination meetings. In no case will utility coordination meetings occur less than monthly until controlling items of utility relocations and adjustment milestones are completed. The WUCS shall contact each of the utility companies for the purpose of obtaining information including, but not limited to, a Utility Adjustment Schedule for the controlling items of utility relocations and adjustments. The WUCS shall notify the appropriate utility company and/or utility subcontractors and the Department of the status of controlling items of relocations and adjustment milestones as they are completed. The WUCS shall furnish the Engineer, for approval, a Progress Schedule Chart, immediately following the receipt of the Notice to Proceed unless otherwise specified, which includes the utility companies controlling items of work and other information in accordance with Section 108.03 or elsewhere in the Contract documents.

A. Qualifications
The WUCS shall be an employee of the Prime Contractor, shall have at least one year experience directly related to highway and utility construction in a supervisory capacity and have a complete understanding of the Georgia Utilities Protection Center operations, and shall be knowledgeable of
the High-voltage Safety Act and shall be trained on the Georgia Utility Facility Protection Act (GUFPA). The Department does not provide any training on GUFPA but will maintain a list of the Georgia Public Service Commission certified training programs developed by other agencies. Currently the following companies offer approved GUFPA training programs:

- Associated Damage Consultants  
  Phone: 706.234.8218 or 706.853.1362  
- Georgia Utility Contractors Association  
  Phone: 404.362.9995

- Georgia Utilities Protection Center  
  Phone: 678.291.0631 or 404.375.6209  
- H B Training & Consulting  
  Phone: 706.619.1669 or 877.442.4282 (Toll Free)

The Prime Contractor is responsible for obtaining the GUFPA training for their employees. Questions concerning the Georgia Public Service Commission GUFPA training program should be directed to:

- Georgia Public Service Commission  
  244 Washington St. SW  
  Atlanta, GA 30334-5701  
  404.463.9784

**B. Ticket Status**

During the utility coordination meetings the WUCS shall collect and maintain the Ticket Status information to determine the status of all locate requests within the project limits. This information will be used to assure those planning to use mechanized equipment to excavate or work within the project limits are prepared to begin work when they have reported or estimated beginning work. At points where the Contractor’s or utility company’s operations are adjacent to or conflict with overhead or underground utility facilities, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not commence until all arrangements necessary for the protection thereof have been made.

**C. Notice**

The names of known utility companies and the location of known utility facilities will be shown on the Plans, or listed in the Subsurface Utility Engineering Investigation if performed or in the Special Provisions; and the WUCS shall give 24-hour notice to such utility companies before commencing work adjacent to said utility facilities which may result in damage thereto. The WUCS shall further notify utility companies of any changes in the Contractor’s work schedules affecting required action by the utility company to protect or adjust their facilities. Notice to the utility companies by the Department of the Award of Contract, under Subsection 105.06, shall not be deemed to satisfy the notice required by this paragraph. Furthermore, this 24-hour notice shall not satisfy or fulfill the requirements of the Contractor as stated in Chapter 9 of Title 25 of the Official Code of Georgia Annotated, known as the “Georgia Utility Facility Protection Act”.

**D. Agenda**

The WUCS shall cooperate with the companies of any underground or overhead utility facilities in their removal and relocations or adjustment work in order that these operations may progress in a reasonable manner, that duplication of their removal and relocations or adjustment work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted. To promote this effort the WUCS shall prepare an agenda for the utility coordination meetings and circulate same in advance of the meeting to encourage input and participation from all of the utility companies.
companies. The agenda will be prepared by an examination of the project site and may include photographs of potential/actual utility conflicts.

**E. Emergency Response Plan**
The WUCS shall prepare an Emergency Utility Response Plan (EURP) within 30 days following the receipt of the Notice to Proceed. The EURP shall indicate the project location (which includes street address and or major intersections / major highway route, if possible with a land mark) that would be reported in case of an emergency, WUCS, Emergency Utility Coordinator (EUC), utility company name, utility company emergency contact information to include but not limited to emergency phone number, response time for emergency, working condition of devices needed to facilitate prompt shut off, and primary point of contact name and phone number for the project.

Emergency Utility Coordinator (EUC) shall be an employee of the Prime Contractor and shall notify the appropriate utility company and/or utility subcontractors in case of an emergency. EURP must include the contact details of the EUC, if WUCS is not the primary emergency utility coordinator for this project.

The plan will also include a means of reporting emergencies and the Utility Emergency Response Information for each company. The WUCS/EUC shall post the EURP in an area readily accessible to the Department and project personnel. Also, WUCS shall distribute the copies of EURP by e-mail and hard copy to GA DOT Area Engineer, GA DOT Construction Project Engineer, Contractor’s project manager, superintendent, and all approved sub-contractors whose work can be in conflict with utilities facilities, personnel of the each facility/owner/ operator who has facilities within the project limits and keep a copy in close proximity to active construction.

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/EUC shall promptly notify the appropriate emergency officials, the Georgia Utilities Protection Center and the appropriate utility facility company or operator, if known. 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.

In order to keep up with the latest / most updated EURP contact information (name and phone numbers); WUCS shall include an item in the agenda of Utility Coordination meeting about the updates / changes in the EURP plan.

The Emergency Utility Response Plan and Emergency Utility Response Information template can be found at the State of Georgia, Office of Utilities Webpage.

**F. Submission**
Provisions for reporting all utility coordination meetings, the progress of utility relocation and adjustment work milestones and ticket status information will be reported on a form developed by the WUCS and will be distributed by the WUCS to all of the utility companies as milestones are met and shall be included as part of the project records. These reports shall be delivered to the Engineer for review, on a monthly basis. The WUCS shall immediately report to the Engineer any delay between the utility relocation and adjustment work, the existing Utility Adjustment Schedule, or the proposed Utility Adjustment Schedule so that these differences can be reconciled.
G. Delays
Delays and interruptions to the controlling Item or Items of The Work caused by the adjustment or repair of water, gas, or other utility appurtenances and property may be considered for an extension of Contract Time as provided in Subsection 108.07.E unless such delays are due to the negligence of the Contractor.

H. Facilities Supported on Bridges
If the utility facilities are to be supported on bridges, the following provisions shall apply:
1. The Plans will show the location of the facility and the auxiliary items necessary to support the facility.
2. The Contractor constructing the bridge shall install anchor bolts, thimbles, inserts, or other auxiliary items attached to the bridge as a part of the support for the utility facility. The Utility Company shall furnish these auxiliary items, unless the Contract indicates these items are to be furnished by the Contractor as a part of the bridge construction.
3. The Utility or its subcontractor constructing the utility facility shall install hanger rods, pipe rollers, and other attachments necessary for the support of the utility facility as indicated on the Plans. The Utility Company shall furnish these attachments at no cost to the Department or the prime contractor unless otherwise specified. This work shall also include:
   a. Caulking the openings around the utility where it passes through endwalls to prevent the passage of undesirable materials.
   b. Painting the exposed portions of utility supports unless such supports are corrosion resistant. Painting shall be done in accordance with the applicable portions of Section 535, unless otherwise specified.
4. The sequence of bridge construction work may be set forth in the Plans and/or the Special Provisions and will show at what stage of the Work a utility company will be allowed to make the utility installation. Further, all or any portion of The Work under Subsection 107.21.H.3 may be included in the bridge Contract by the Plans and/or the Special Provisions.
5. Any damage to the bridge structure caused by the utility installation shall be repaired to the satisfaction of the Engineer at the expense of the Utility or its subcontractor installing the utility facility.

I. Clearances
The Plans provide for at least minimum clearance of utilities as required by the National Electrical Safety Code, U.S. Department of Commerce, and National Bureau of Standards. Any additional clearance the Contractor may desire or require in performing The Work shall be arranged by the Contractor with the utility company. The Department will pay no extra compensation for such additional clearances.

J. Utility Relocation Progress Schedule
The purpose of the Utility Adjustment Schedule is to provide the Contractor with the pertinent information, including any utility staging required, dependent activities, or joint-use coordination that is required for the creation of a feasible progress schedule. A suitable Utility Adjustment Schedule form is available from the Department for the WUCS to circulate to utility companies for any proposed project construction staging or should a utility company not duly file a Utility Adjustment Schedule to the Department during the preconstruction phase of the project. The WUCS shall submit a Utility Relocation Progress Schedule showing together the Progress Schedule Chart referenced in Section 108.03 and the proposed Utility Adjustment Schedules from all utility companies to the Engineer for review and approval. Copies of existing Utility Adjustment Schedules with utility companies having facilities on this project will be made available at the Georgia Department of Transportation, Office of Construction Bidding Administration, located at One Georgia Center, 600 West Peachtree Street, NW, Atlanta, GA 30308, for examination by the Contractor. The Utility
K. Compensation
There will be no separate measurement or payment for this Work. The cost associated with this Work shall be included in the overall Bid submitted.

107.22 Hazardous and/or Toxic Waste
When the Contractor’s operations encounter or expose any abnormal condition which may indicate the presence of a hazardous and/or toxic waste, such operations shall be discontinued in the vicinity of the abnormal condition and the Engineer shall be notified immediately. The presence of barrels, discolored earth, metal, wood, or visible fumes, abnormal odors, excessively hot earth, smoke, or anything else which appears abnormal may be indicators of hazardous and/or toxic wastes and shall be treated with extraordinary caution as they are evidence of abnormal conditions.

The Contractor’s operations shall not resume until so directed by the Engineer.

Disposition of the hazardous and/or toxic waste will be made in accordance with the requirements and regulations of the Department of Human Resources and the Department of Natural Resources. Where the Contractor performs work necessary to dispose of hazardous and/or toxic waste, payment will be made at the unit prices for pay items included in the contract which are applicable to such work or, where the contract does not include such pay items, payment will be as provided in Subsection 109.05, “Extra Work.”

107.23 Environmental Considerations
A. Construction

Erosion control measures shall be installed, to the greatest practical extent, prior to clearing and grubbing. Particular care shall be exercised along stream buffers, wetlands, open waters and other sensitive areas to ensure that these areas are not adversely affected.

Construction equipment shall not cross streams, rivers, or other waterways except at temporary stream crossing structures shown on the plans or as allowed by permit.

Construction activities within wetland areas are prohibited except for those within the construction limits as shown on the Plans and as specified in Subsection 107.23.E.

All sediment control devices (except sediment basins) installed on a project shall, as a minimum, be cleaned of sediment when one half the capacity, by height, depth or volume, has been reached. Sediment basins shall be cleaned of sediment when one-third the capacity by volume has been reached.

B. Bridge Construction Over Waterways

Construction waste or debris, from bridge construction or demolition, shall be prevented from being allowed to fall or be placed into wetlands, streams, rivers or lakes.

Excavation, dewatering, and cleaning of cofferdams shall be performed in such a manner as to prevent siltation. Pumping from cofferdams to a settling basin or a containment unit will be required if deemed necessary by the Engineer.

Operations required within rivers or streams, i.e. jetting or spudding, shall be performed within silt containment areas, cofferdams, silt fence, sediment barriers or other devices to minimize migration of silt off the project.

C. Environmental Clearance of Local Material or Disposal Sites

Specific written environmental approval from the Engineer will be required for any local material or disposal sites not included in the Plans. No work shall be started at any potential local material or waste site not shown on the plans prior to receiving said environmental approval from the Engineer. Local material sites are defined as borrow

http://www.dot.ga.gov/doingbusiness/contractors/Pages/default.aspx

First Use: June 2016
Revised: February 27, 2020
pits, common borrow, base, embankment, sand clay base, topsoil base, soil cement base, granular embankment, asphalt sand, maintenance pits, or stockpiled borrow sources. Disposal sites, as defined in Standard Specification 201.3.05.E.3, may be defined as excess material, common fill, or inert waste.

The Contractor may obtain environmental approval on a site with one of two methods: 1) GDOT provided environmental surveys or 2) environmental surveys obtained by the Contractor at no cost to the Department. The Contractor must choose one method for review and approvals, which will apply to all sites required for a given project, and submit an Environmental Review Notification indicating their chosen method.

1. If the Contractor chooses to obtain their own environmental surveys, they shall be conducted by a consultant(s) prequalified to work with the Department in the following area classes: 1.06(b) – History; 1.06(e) – Ecology; and 1.06(f) – Archaeology. Background research and field methods shall be conducted in accordance with the Office of Environmental Services Environmental Procedures Manual, with documentation in an Environmental Survey Results Memorandum (template available from the Office of Environmental Services).

2. If the Contractor requests that GDOT conduct required environmental surveys, an Environmental Survey Request shall be submitted for each site (template available from the Office of Environmental Services).

Upon receipt of an Environmental Survey Request, the Office of Environmental Services shall provide environmental approval or denial within thirty (30) business days. Upon receipt of an Environmental Survey Results Memorandum, the Office of Environmental Services shall provide environmental approval or denial within ten (10) business days. The Department will not accept requests for review of sites before a Notice to Proceed is issued. Incomplete Survey Requests, surveys that are not conducted by a GDOT prequalified consultant, or surveys that do not meet the required level of field effort or documentation, will be denied by GDOT OES and may require resubmittal.

The Engineer will inform the Contractor in writing as to the approval or denial of environmental clearance. Approvals may be provided upon condition that an Environmentally Sensitive Area (ESA) be designated within or adjacent to the site prior to use. All ESA stipulations shall be adhered to in accordance with Standard Specification 107.23.F. If a site is denied, the Contractor may, at no expense to the Department, seek to obtain permits or pursue other remedies that might otherwise render the site(s) acceptable, if available. Any and all changes to proposed sites or their associated haul roads that are not included within the original Environmental Survey Request or Environmental Survey Results Memorandum, including expansion, utilization for purposes other than those indicated in the original submittal, etc. must be submitted for further environmental review and approval prior to use.

Sites included in the Plans have environmental clearance and shall be used only for the purpose(s) specified in the Plans or other contract documents. Should the Contractor wish to expand or utilize said sites for any purpose other than that provided for in the Plans or other contract documents, specific written environmental clearance as noted above shall be obtained.

D. Control of Pollutants

Pollutants or potentially hazardous materials, such as fuels, lubricants, lead paint, chemicals or batteries, shall be transported, stored, and used in a manner to prevent leakage or spillage into the environment. The Contractor shall also be responsible for proper and legal disposal of all such materials.

Equipment, especially concrete or asphalt trucks, shall not be washed or cleaned-out on the Project except in areas where unused product contaminants can be prevented from entering waterways.

E. Temporary Work in Wetlands Outside of the Construction Limits within the Right-of-Way and Easement Areas

Temporary work in wetlands (that are not delineated with orange barrier fence) will be subject to the following requirements:
1. Temporary work in wetlands shall be accomplished by using temporary structures, timber, concrete, soil with geotextile fabric, or other suitable matting. The area shall not be grubbed.

2. Soil matting shall be protected from erosion in accordance with the Specifications.

3. Whenever temporary work is required in Saltwater Marsh Wetlands, all temporary structures and/or matting shall be removed in their entirety prior to Final Acceptance of the Project. Matted and compressed soils shall be backfilled to their original ground elevation with material meeting the requirements of Section 212 – Granular Embankment.

4. Whenever temporary work is required in Freshwater Wetlands, all temporary structures and/or matting (exclusive of soil matting to be retained in the final roadway section) shall be removed in their entirety prior to Final Acceptance of the Project. Once the temporary materials have been removed, the area shall be covered by Excelsior or Straw blankets according to Section 713 of the Specifications. The grassing and ground preparation referenced in Subsection 713.3.03, “Preparation”, will not be applicable to this Work.

5. The Engineer shall be notified so that a field inspection may be conducted to certify that the temporary materials were properly removed and that the area was properly restored. The Contractor shall be responsible for any corrective action required to complete this Work.

6. There will be no separate measurement or payment for this Work. The cost associated with this work shall be included in the overall Bid submitted.

F. Environmentally Sensitive Areas

Some archaeological sites, historic sites, wetlands, streams, stream and pond buffers, open waters and protected animal and plant species habitat within the existing/required Right-of-Way and easement areas may be designated as ENVIRONMENTALLY SENSITIVE AREAS (ESAs). These areas are shown on the applicable Plan sheets and labeled “ESA” (e.g. ESA – Historical Boundary, ESA – Wetland Boundary). The Department may require that some ESAs or portions thereof be delineated with orange barrier fence. The Contractor shall install, maintain, and replace as necessary orange barrier fence at ESAs as delineated in the Plan sheets.

The Contractor shall not enter, disturb, or perform any construction related activities, other than those shown on the approved plan sheets within areas designated as ESAs including ESAs or portions thereof not delineated with orange barrier fence. This includes but is not limited to the following construction activities: clearing and grubbing; borrowing; wasting; grading; filling; staging/stockpiling; vehicular use and parking; sediment basin placement; trailer placement; and equipment cleaning and storage. Also, all archaeological sites, historic sites, wetlands, streams, stream and pond buffers, open waters, and protected animal and plant species habitat that extend beyond the limits of existing/required Right-of-Way and easement areas shall be considered ESAs and the Contractor shall not perform any construction related activities (such as those listed above) within these areas or make agreements with property owners to occupy these areas for construction related activities (such as those listed above). The Contractor shall make all construction employees aware of the location(s) of each ESA and the requirement to not enter or otherwise disturb these areas.

If the Contractor is found to have entered an ESA, either within or outside the project area, for any purpose not specifically shown on the approved plan sheets, the Department may, at its discretion, issue a stop work order for all activities on the project except erosion control and traffic control until such time as all equipment and other items are removed and the ESA is restored to its original condition.
However, should damage to an ESA occur as a result of the Contractor’s action in violation of this section, and notwithstanding any subsequent correction by the Contractor, the Contractor shall be liable for any cost arising from such action, including but not limited to, the cost of repair, remediation of any fines, or mitigation fees assessed against the Department by another government entity.

G. Protection of Migratory Birds and Bats

The following conditions apply to construction, demolition, and maintenance activities on bridges and box culverts. These conditions are intended as a minimum to protect nesting migratory birds and roosting bats.

All costs pertaining to any requirement contained herein shall be included in the overall bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.

1. General Information for Project Personnel

a. The Contractor shall notify project personnel about the potential presence and appearance of federally protected migratory birds, including without limitation the barn swallow (Hirundo rustica), cliff swallow (Petrochelidon pyrrhonota), and eastern phoebe (Sayornis phoebe), and that there are civil and criminal penalties for harassing, harming, pursuing, hunting, shooting, wounding, killing, capturing, or collecting these species in violation of the Migratory Bird Treaty Act of 1918. The law protects adults, fledglings, nestlings, eggs, and active nests. The Contractor shall notify project personnel about the potential presence and appearance of bats, all of which are protected under Georgia state law (Official Code of Georgia § 27-1-28).

b. Prior to the commencement of work, the Contractor shall post detail sheets with photographs and information about these species in a conspicuous location in the project field office. The detail sheets shall be posted until such time that construction has been completed and time charges have stopped. If there is no project field office, the detail sheets shall be distributed directly to project personnel.

2. Bridges

a. At least 30 calendar days prior to the start of construction activities, demolition activities, or maintenance activities on the underside of any bridges, the Contractor shall request the phone number and email address of the Animal and Plant Health Inspection Service (APHIS) Biologist from the GDOT Area Manager, and shall provide the APHIS Biologist with the following information via phone. Immediately following that phone call, the Contractor shall email this information to the APHIS Biologist and copy the GDOT Area Manager and GDOT State Environmental Liaison at birdreport@dot.ga.gov.

i. Date of call.
ii. GDOT Project Identification (PI) number.
iii. Number of bridges in project area that will be part of the Work.
iv. For each bridge:
1. Bridge serial number.
2. Expected start date of the activities.
3. Expected completion date of the activities.
4. If using a temporary detour and/or work bridge, expected start dates of construction and demolition.

b. The APHIS Biologist will develop an action plan in coordination with the GDOT Area Manager that will address nest prevention and removal. The Contractor shall comply with the action plan. Per the action plan, the APHIS Biologist may conduct routine surveys and perform timely removal of inactive nests. An inactive nest is a nest that does not contain any eggs or nestlings.

c. The Contractor shall afford the APHIS Biologist right-of-entry in order to access any bridge so that all nests can be inspected and inactive nests can be removed.

d. The Contractor shall not utilize exclusionary barriers on any bridge due to the risk of entanglement and entrapment of birds.

3. Box Culverts

a. The construction of box culvert extensions, or demolition or maintenance activities on any box culvert, shall take place outside of the breeding and nesting season of migratory birds, which begins April 1 and extends through August 31, unless exclusionary barriers are put in place to prevent birds from nesting. Exclusionary barriers consist of overlapping strips of flexible plastic (also called “PVC Strip Doors” or “Strip Curtains”). Due to the risk of entanglement, nets are not appropriate exclusionary barriers on a box culvert. Exclusionary barriers on any box culvert must be installed prior to March 15, but at no time between March 15 and August 31 unless the GDOT State Environmental Liaison provides written authorization.

b. Prior to the installation of any exclusionary barriers, the Contractor shall notify the GDOT Area Manager and the GDOT State Environmental Liaison at birdreport@dot.ga.gov of the decision to install exclusionary barriers. This email shall include the following information:

   i. GDOT Project Identification (PI) number.
   ii. Number of box culverts in project area that will be part of the Work.
   iii. Expected date of installation on each box culvert.
   iv. Location of each exclusionary barrier installed (station and offset).

c. For any box culvert being demolished, the Contractor shall install exclusionary barriers at both the inlet and outlet openings. For any box culvert being extended, demolished, or maintained, the Contractor shall install exclusionary barriers at the inlet or outlet opening where work will take place.

d. While installed, exclusionary barriers shall be inspected by the Contractor at least twice each week for gaps or other defects that could impair their ability to exclude migratory birds from nesting in a box culvert. If any gaps or defects are identified, they shall be repaired immediately unless active nests are present in the box culvert. The Contractor shall ensure no birds or bats are entrapped within a box culvert while exclusionary barriers are installed on both the inlet and outlet of a box culvert.

4. Reporting Requirements

a. In the instances listed below, the Contractor shall cease work (except for erosion control and traffic control) on the underside of the bridge or box culvert and notify the GDOT Area Manager as well as the GDOT State Environmental Liaison at 404-631-1817. Work shall not recommence until written authorization is received from the GDOT State Environmental Liaison if:
i. migratory birds establish an active nest on a bridge or box culvert,
ii. a migratory bird is harmed or injured,
iii. evidence of a significant bat colony is observed on a bridge or box culvert, such as a high number of bats (approximately 50 or more) or a large accumulation of guano (bat droppings), or
iv. a bat is harmed or injured.

b. If the Work is suspended, the Contractor may submit a request for additional contract time as allowed under Section 108. The Department will review the request and may grant additional contract time as justified by the impact to the Contractor’s schedule. Compensation for loss of productivity, rescheduling of crews, rental of equipment or delays to the Contractor’s schedule will not be considered for payment. Additional contract time will be the only consideration granted to the Contractor.

c. Within 30 calendar days of the completion of the Work and the stopping of time charges, the Contractor shall provide a report regarding exclusionary barriers to the GDOT State Environmental Liaison at birdreport@dot.ga.gov. The following information will be included in the report:

i. Contractor’s name and address.
ii. Name and title of report preparer.
iii. GDOT Project Identification (PI) number.
iv. County(ies) in which the Project is located.
v. Construction start and end dates.
vi. Date GDOT was notified of intent to install barriers per # 107.23G.3.b.
vii. Quantity and location of structures on which exclusionary barriers were installed.
viii. Type of exclusion material used on each structure.
ix. Start and end date of installation of exclusionary barriers on each structure.
x. Start and end date of removal of exclusionary barriers from each structure.
xii. Photographs of each structure before and after installation of exclusionary barriers.
xiii. Photographs of each structure after the removal of the exclusionary barriers.
xiv. Description of any incidents of harm or injury to migratory birds during the Work. This should include incidents that were reported as required under 107.23G.4.a.
xv. Description of any incidents of harm or injury to any bat during the Work. This should include incidents that were reported as required under 107.23G.4.a.
xvi. All other information that may be relevant regarding the protection of migratory birds and bats.

107.24 Closing of Roadways without On-Site Detours

When existing roadways are to be closed to through traffic and on-site detours are not provided, the Contractor shall submit a written notice to the Engineer for approval 14 days prior to the closure of the existing roadways.

After receiving approval from the Engineer for the closure, the Contractor shall install signs at each closure site, in accordance with the MUTCD, to inform the traveling public of the proposed closure, including the date of closure. The sign shall be placed 5 days prior to the closure, at the direction of the Engineer.

Prior to the closure, the Area Engineer will inform local government officials and agencies, local news media, and the DOT Public Information Office of the proposed closure of the roadways.
107.25 Disruption to Residential and Commercial Property

The Contractor shall plan, coordinate, and prosecute the work such that disruption to personal property and business is held to a practical minimum.

All construction areas abutting lawns and yards of residential or commercial property shall be restored promptly. Backfilling of each drainage structure or section of curb and gutter, sidewalk, or driveway shall be accomplished as soon as adequate strength is obtained. Finishing, dressing and grassing shall be accomplished immediately thereafter as a continuous operation within each area being constructed with emphasis placed on completing each individual yard or business frontage. Care shall be taken to provide positive drainage to avoid ponding or concentration of runoff.

Handwork, including raking and smoothing, shall be required to ensure that roots, sticks, rocks, and other debris is removed in order to provide a neat and pleasing appearance. Grassing, when in season, shall immediately follow in order to establish permanent cover at the earliest date. If grassing is not in season, proper erosion control shall be installed and maintained.

The work described herein shall be in addition to that required by Subsection 104.07 “Final Cleaning Up” and Subsection 105.16 “Final Inspection and Acceptance.”
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

Attachment 6-2

SP 105.06 - CONTROL OF WORK - WHITE LINING ALL CASES
Georgia Department of Transportation  
State of Georgia  
Special Provision  
Statewide ITS DMS Deployment Design-Build Project  
P.I. NO. 0017389  
County: Chatham, Cherokee, Cobb Counties

Section 105 - Control of Work

Add the following to Sub-Section 105.06:

105.06 Cooperation with Utilities

A. Practice Statement:

The Contractor will designate the route(s) and/or area(s) to be excavated using white pre-marking, White Lining, prior to the arrival of the locator. The definition of excavation shall be in accordance with O.C.G.A. 25-9-1.

B. Practice Description:

The route(s) and/or area(s) of the excavation shall be marked with white paint, flags, stakes, or a combination of these to outline the excavation site prior to notifying the One Call Center (811 Center), submittal of the GDOT Locate Request Form, and before the locator arrives on the job.

C. Uniform Color Code

The Contractor will mark excavation sites with the following uniform color code:

| White   | Proposed Excavation |
D. Tolerance Zone

The Contractor shall observe a tolerance zone which is comprised of the width of the facility plus 18” on either side of the outside edge of the underground facility on a horizontal plane. The following examples are of tolerance zones for a 1 inch and a 12 inch line.

![Tolerance Zone Diagram]

E. Guidelines for Excavation Delineation

Contractors shall mark their area of proposed excavation using Full Line, Radius or Arc, Four Corner, or Dash Line approach. The use of white marking products (e.g. paint, flags, stakes, whiskers or a combination of these) will be used to identify the excavation site.

1. Single Point Excavations Markings

![Single Point Excavations Markings Diagram]
Delineate in white paint the proposed area of excavation through the use of: a continuous line, dots marking the radius or arcs, dashes marking the four corners of the project or dashes outlining the excavation project. Limit the size of each dash to approximately 6” to 12” in length and 1” in width with interval spacing approximately 4’ to 50’ apart. The maximum separation of excavation marks is to be reduced to a length that can be reasonably seen by the operator’s locators when the terrain or excavation site conditions warrant it. Dots of approximately 1” diameter are typically used to define arcs or radii and may be placed at closer intervals in lieu of dashes.

2. Single Stake Marking Center Point of Excavation Site

When an excavation site is contained within a 50’ maximum radius, or less, it can be delineated with a single stake that is positioned at the proposed center of the excavation. If the Contractor chooses this type of delineation they must convey that they have delineated the excavation site with a single stake at the center of the excavation and include the radius of the site in the notification to the One Call Center. This single stake is to be white in color with the following information: Contractor’s company identifier (name, abbreviations, or initials) and the radius of the excavation site in black letters on the stake or with a notice attached to the stake.
3. **Trenching, Boring, or Other Continuous Type Excavations Continuous Excavation Marking**

Mark in white paint the proposed centerline of planned excavation 6” to 12” x 1” arrows, approximately 4’ to 50’ apart to show direction of excavation. The maximum separation of excavation marks is to be reduced to a length that can be reasonably seen by the operator’s locators when the terrain at an excavation site warrants it. Mark lateral excavations with occasional arrows showing excavation direction from centerline with marks at curb or property line if crossed. Dots may be used for curves and closer interval marking.

4. **Stakes, Flags or Whiskers Excavation Markers**

Delineate the proposed area of excavation through the use of: stakes, flags or whiskers to mark radius or arcs, the four corners of the project or outlining the excavation project instead of using spray paint. Limit the interval spacing to approximately 4’ to 50’. The maximum separation of excavation marks is to be reduced to a length that can be reasonably seen by the operator’s locators when the terrain at an excavation site warrants it. Stakes, flags or whiskers provided to illustrate arcs or radii may be placed at
closer intervals in order to define the arc or radius. Stakes, flags or whiskers are white in color with the Contractor’s company identifier (name, abbreviations, or initials) provided on the stake, flag or whisker.
Georgia Department of Transportation

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For

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P.I. No. 0017389

Attachment 6-3

LOCATE REQUEST FORM
Hello,

Welcome to ITSLocates, the GDOT locate service provided GDOT ITS/Statewide Traffic Operations.

Please find attached, the GDOT ITSLocates request form. When submitting the form, use the ITSLocates@dot.ga.gov email. Please note that we need the site white marked and staked, as well as the Geo-coordinates in Decimal form (for greater accuracy). Also note that I can only locate one direction at a time, e.g. I-75 northbound at MM 251 or I-75 southbound at MM 251, and I need the footages and direction from your white mark. Do not combine locates that are a long distance apart, just send them separately and if possible we will combine the sites. A Google KMZ showing the desired location will greatly help in the accuracy of your locate request as well.

We try to mimic the Georgia811 Utility Locates time frame but sometimes we do have a waiting list. If that becomes an issue, we will advise the requestor of the eta to complete the locates. Thank you for using the GDOT ITSLocates program.

Please contact me if you have any questions or concerns and have a Blessed day.

Jill E Reule
ITS Field Supervisor
Office of Statewide Traffic Operations
Atlanta Traffic Management Center
935 United Avenue
Atlanta, GA 30316
# GDOT RIGHT OF WAY

Locate Request Form

Completing and returning this request does not cover utility locates provided by 811 you are responsible to contact them directly.

<table>
<thead>
<tr>
<th>*Date</th>
<th>*GDOT Manager</th>
<th>*GDOT PI or Permit #</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>*Company Name</th>
<th>*Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Name</td>
<td>*Phone Number with Area Code</td>
</tr>
<tr>
<td>*Company Address</td>
<td>*City, State, Zip</td>
</tr>
<tr>
<td>*Onsite Contact Name</td>
<td>*Phone Number with Area Code</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>☐ Eastbound</th>
<th>☐ Westbound</th>
<th>☐ Northbound</th>
<th>☐ Southbound</th>
<th>*Mile Marker</th>
</tr>
</thead>
</table>

Acceptable formats: NAD83, WGS84, Decimal Degrees, Degrees Decimal Minutes and Degrees Minutes Decimal Seconds

<table>
<thead>
<tr>
<th>Nearest Cross Street/Road Regardless of Size (Indicate Street, Road, Etc.)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Additional Address or Directional Information to Job Site (I.E., Directions, Landmarks, Etc.)</th>
</tr>
</thead>
</table>

* It is requested the site be pre-marked in WHITE. Is this complete?  
☐ Yes  ☐ No

* Type of Work (Examples: trench for sewer, cable/telephone drops static sign installation, plant trees/shrubs, ditch work, etc.)

* Extent of Work (Examples: located at damaged guardrail, 3 feet off of road apron, spillway to curb, etc.)

<table>
<thead>
<tr>
<th>* Requested work date and time of excavation</th>
<th>Dig by Date (Provided by GDOT)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Expiration Date of Ticket (Provided by GDOT)</th>
<th>Maximo WO Number (Provided by GDOT)</th>
</tr>
</thead>
</table>

Confirmation will be sent via E-Mail when locate is cleared

Remarks (Notes About Excavation Site)

Submit
Georgia Department of Transportation

Technical Provisions
For
Design-Build Agreement
P.I. No. 0017389

Attachment 12-1
REQUIREMENTS FOR DRAINAGE DESIGN REPORT
1 General

Update and resubmit the Drainage Design Report:

1. Whenever the approach to the design of the Drainage System changes significantly
2. With the Final Plan Submittal
3. With the RFC Document Submittal
4. With the Record Drawings Submittal

2 Drainage Data

Gather, compile, and include all data as specified below as a section in the Drainage Design Report.

2.1 Historic Flows and Regulations

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 Site
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. Other data and regulations applicable to the design of the Drainage System
2.2 Management Plans
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. Survey data
7. Data for all culverts, drainage systems, and storm sewer systems
8. Other records applicable to drainage within the Site

2.3 Existing Drainage Facilities
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 Site that the DB Team proposes to remain in place to determine condition, size, material, location, and other pertinent information.
2. Include with the drainage data the information collected with respect to existing drainage in the BECR described in Section 19.3.2 (Joint Project Inspection).

3 Drainage Design Records
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. A correspondence file
6. A Post-Construction Stormwater Report with a Post-Construction BMP Infeasibility Report as applicable
7. Storm sewer drainage reports (if applicable) including Temporary and Final Drainage System layout with staged erosion control BMP location details

4 Storm Sewer System Analysis
Provide for Storm Sewer System analysis include:

1. Introduction that includes Project summary, Site observations, Site data feasibility
2. Supporting calculations for cross drains, longitudinal drains, culverts, and other components of the Drainage System
3. Supporting 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.

6. Specifications for the pipe bedding material and structural pipe backfill on all proposed pipes and pipe material alternates.

7. Storm drain profiles, including pipe size, length, type, height of fill, class/gauge, gradient, and design hydraulic grade line (HGL); and numbered drainage structures with station offsets from the roadway alignment and elevations.
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

Attachment 17-1

SURGE PROTECTION SYSTEM AND DEVICES
Attachment 17-1 - Surge Protection Systems and Devices

Section 17-1  Surge Protection Systems and Devices

17-1.1 General Description

This work consists of furnishing materials and installation of Surge Protection Devices for traffic signal, intelligent transportation system and tolling implementation.

It also includes all test periods, warranties and guarantees as designated in subsequent sections, and response to maintenance and operational issues as described in subsequent sections.

17-1.1.01 Definitions

General Provisions 101 through 150.

17-1.1.02 Related References

A. Standard Specifications

Section 106—Control of Materials
Section 500—Concrete Structures
Section 501—Steel Structures
Section 631—Dynamic Message Signs
Section 636 – Highway Signs
Section 639—Strain Poles for Overhead Sign and Signal Assemblies
Section 680—Highway Lighting
Section 681—Lighting Standards and Luminaires
Section 682—Electrical Wire, Cable, and Conduit
Section 915—Mast Arm Assemblies
Section 923—Electrical Conduit
Section 925—Traffic Signal Equipment
Section 935—Fiber Optic System
Section 936—Closed Circuit Television (CCTV) System
Section 937—Detection Systems
Section 939—Communications & Electronic Equipment
Section 942—ITS General Requirements

B. Referenced Documents

National Electrical Manufacturers Association (NEMA) Traffic Control Systems Standards No. TS 1
NEMA Traffic Control Systems Standards No. TS 2
AASHTO Roadside Design Guide
The Manual on Uniform Traffic Control Devices (MUTCD), current edition
National Electrical Code (NEC)
UL 467, Grounding and Bonding Equipment;
UL 497A, Standard for Secondary Protectors for Communications Circuits;
UL 497B, Standard for Protectors for Data Communications and Fire-Alarm Circuits;
UL 497C, Standard for Protectors for Coaxial Communications Circuits;
UL 752, Standard for Bullet-Resisting Equipment;
UL1008, Standard for Transfer Switch Equipment;
UL 1449, Standard for Surge Protective Devices; and the NEC.

Ensure that lightning protection systems conform to the requirements of NFPA 780, Standard for the Installation of Lightning Protection Systems.

GDT 7
GDT 24a
GDT 24b
GDT 67

17-1.1.03 Submittals

Submit to the Engineer, one electronic PDF of SPD material specifications information on all materials proposed for use on the project. The Engineer will forward the materials submissions to the GDOT State ITS Engineer and SRTA Designee, which will forward the information onto the Traffic Operations offices at the TMC building.

A. Review

For all submittals, the State Traffic Signal Engineer’s and SRTA Designee’s review of the material specifications should be completed within thirty (30) days from the date of receipt of the submission unless otherwise specified. The State Traffic Signal Engineer and SRTA will advise in writing, as to the acceptability of the material specifications submitted.

All material specification submittals for equipment and materials used on the project will be reviewed by the Department’s Traffic Operations offices and SRTA. The material specifications review should be completed within thirty (30) days from the date of receipt of the material submission unless otherwise specified. The State Traffic Engineer will advise in writing as to acceptability of materials to be used on the project.

The State Traffic Signal Engineer and SRTA Designee may determine that the item is approved, in which case no further action is required; or the item may be partially or totally rejected in which case, modify the submittal as required and resubmit within fifteen (15) days. At this time, the review and approval cycle described above begins again.

B. Submittal Costs

Include the costs of submittals within the price paid for individual bid items. No additional compensation will be made.

17-1.2 Materials

17-1.2.01 General

Furnish and install grounding and Surge Protective Devices (SPDs) for all ITS and tolling devices to protect the devices from lightning, transient voltage surges, and induced current. Use only new materials meeting the requirements of this section. Use equipment or materials that have been tested and approved for the specific use intended by a NRTL, recognized by the Occupational Safety and Health Administration, in accordance with 29 CFR 1910.7 and that also meet the following requirements.

Install SPDs on all power, data, video and any other conductive circuit. All SPDs shall have a separate direct path to grounding bus. Daisy chaining of ground connections are prohibited. Use only equipment and components that meet the minimum requirements of this specification. All SPD shall operate as specified during and after being subjected to the transients, temperature, voltage, humidity, vibration, and shock tests described in National Electrical Manufacturers Association (NEMA) TS2, 2.2.7, 2.2.8, and 2.2.9.
A. **Temperature and Humidity:**

Equipment shall operate as specified when the ambient temperature and humidity are within the following specified limits:

- The operating ambient temperature range shall be from -30° to 165°F (-34.4° to 73.8°C).
- The storage temperature range shall be from -50° to 185°F (-45.5° to 85°C).
- The relative humidity shall not exceed 95 percent, non-condensing

B. **Vibration:**

The equipment shall operate as specified and maintain its physical integrity when subjected to a vibration of 5 to 30 Hz up to 0.5 gravity applied in each of three mutually perpendicular planes.

C. **Shock:**

The equipment shall suffer neither permanent mechanical deformation nor any change that renders the unit inoperable when subjected to a shock of 10 gravities applied in each of three mutually perpendicular planes.

**17-1.2.01 Installation:**

Provide all ITS and tolling field installation sites with both primary and secondary surge protection on the AC power. Connect the primary surge protection at the service entrance or main disconnect. Connect the secondary surge protection on the power distribution to the equipment.

A. **SPD at Power Entry Point:**

Install a SPD at the closest termination/disconnection point where the supply circuit enters the ITS and tolling device cabinet. Locate the SPD on the load side of the main disconnect and ahead of any and all ITS and tolling electronic devices. Configure the SPD to operate at 120 volt single phase (i.e., line, neutral and ground) or 120/240 volt single phase (line 1, line 2, neutral and ground) as required to match the supply circuit configuration. Ensure that the SPD maximum surge current rating is 80kA per phase or greater. Verify that the SPD has been labeled to indicate that the unit is UL listed and meets the requirements of UL 1449, Third Edition.

Ensure that the SPD has a visual indication system that monitors the weakest link in each mode and shows normal operation or failure status and also provides one set of normally open (NO)/normally closed (NC) Form C contacts for remote alarm monitoring. The enclosure for a SPD shall have a NEMA 4 rating.

B. **SPD at Point of Use:**

Install a SPD at the point the ITS and tolling devices receive 120 volt power. Ensure that the units are rated at 15 or 20 amps load and a minimum of 20kA of surge current capacity and configured with receptacles.

Ensure that these units have internal fuse protection and provide common mode (L+N-G) protection.

C. **SPD for Low-Voltage Power, Control, Data and Signal Systems:**

Install a specialized SPD on all conductive circuits including, but not limited to, data communication cables, coaxial video cables, and low-voltage power cables. Ensure that these devices comply with the functional requirements shown in Table 785-1 for all available modes (i.e. power L-N, N-G; L-G, data and signal center pin-to-shield, L-L, L-G, and shield-G where appropriate).

<table>
<thead>
<tr>
<th>Circuit Description</th>
<th>Clamping Voltage</th>
<th>Data Rate</th>
<th>Surge Capacity</th>
<th>Maximum Let-Through Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 VDC</td>
<td>15-20 V</td>
<td>N/A</td>
<td>5kA per mode (8x20 μs)</td>
<td>&lt;150 Vpk</td>
</tr>
<tr>
<td>24 VAC</td>
<td>30-55 V</td>
<td>N/A</td>
<td>5kA per mode (8x20 μs)</td>
<td>&lt;175 Vpk</td>
</tr>
<tr>
<td>48 VDC</td>
<td>60-85 V</td>
<td>N/A</td>
<td>5kA per mode (8x20 μs)</td>
<td>&lt;200 Vpk</td>
</tr>
</tbody>
</table>
## SPD Minimum Requirements

<table>
<thead>
<tr>
<th>Circuit Description</th>
<th>Clamping Voltage</th>
<th>Data Rate</th>
<th>Surge Capacity</th>
<th>Maximum Let-Through Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 VAC at POU</td>
<td>150-200 V</td>
<td>N/A</td>
<td>20kA per mode (8x20 μs)</td>
<td>&lt;550 Vpk</td>
</tr>
<tr>
<td>Coaxial Composite Video</td>
<td>4-8 V</td>
<td>N/A</td>
<td>10kA per mode (8x20 μs)</td>
<td>&lt;30 Vpk</td>
</tr>
<tr>
<td>RS422/RS485</td>
<td>8-15 V</td>
<td>Up to 10 Mbps</td>
<td>10kA per mode (8x20 μs)</td>
<td>&lt;30 Vpk</td>
</tr>
<tr>
<td>T1</td>
<td>13-30 V</td>
<td>Up to 10 Mbps</td>
<td>10kA per mode (8x20 μs)</td>
<td>&lt;30 Vpk</td>
</tr>
<tr>
<td>Ethernet Data</td>
<td>7-12 V</td>
<td>Up to 1 Gbps</td>
<td>1kA per mode (10x1000 μs)</td>
<td>&lt;30 Vpk</td>
</tr>
</tbody>
</table>

**17-1.2.01 Warranty for Surge Protective Devices:**

Provide a SPD that is warranted by its manufacturer against any failures caused by electrical events, including direct lightning strikes, for a period of not less than 10 years or the SPD device manufacturer’s standard warranty period, whichever is greater.

The term “failure” for warranty replacement is defined as follows:

- Parallel-connected, power-rated SPD units are considered in failure mode when any of the visual indicators show failure mode when power is applied to the terminals at the unit’s rated voltage, or the properly functioning over-current protective device will not reset after tripping.
- Series-connected, low-voltage power, data, or signal units are considered in the failure mode when an open circuit condition is created and no data/signal will pass through the SPD device or a signal lead is permanently connected to ground.

In the event that the SPD, including any component of the unit, should fail during the warranty period, the entire SPD shall be replaced by the manufacturer at no cost to the Department. Costs relating to the removal of the SPD, shipping and handling, and the reinstallation of the SPD shall be paid by the Department.
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

Attachment 17-2

SITE ACCEPTANCE CHECKLIST
# SITE ACCEPTANCE CHECKLIST

## HUB CHECKLIST

**ALL items must be initialed and dated by authorized personnel prior to acceptance.**

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>FIBER OPTIC BACKBONE INFRASTRUCTURE</strong></td>
</tr>
<tr>
<td>1</td>
<td>Fiber Optic network duct banks on outside of the hub building installed with correct number of conduits.</td>
</tr>
<tr>
<td>2</td>
<td>Duct banks encased in concrete if applicable (Inspectors to visually witness placement of duct bank).</td>
</tr>
<tr>
<td>3</td>
<td>Duct bank pull boxes on outside of the hub building properly installed, labeled, and of correct size.</td>
</tr>
<tr>
<td></td>
<td><strong>WALL PENETRATION</strong></td>
</tr>
<tr>
<td>4</td>
<td>Conduit duct bank &quot;chase&quot; mounted on exterior building wall properly installed, secured to wall, and with correct number of conduits (if applicable).</td>
</tr>
<tr>
<td>5</td>
<td>Conduit chase wire trough termination properly done, sealed, with bushings, etc.</td>
</tr>
<tr>
<td>6</td>
<td>Conduit penetrations to building wall properly done (if applicable), including: 1. One penetration per duct bank conduit; 2. Penetration size same as duct bank conduits; 3. Penetration is sloped away; and 4. Penetration is properly enclosed and sealed.</td>
</tr>
<tr>
<td>7</td>
<td>Conduit penetration at correct height for transition into interior ceiling mounted cable trays (existing buildings only).</td>
</tr>
</tbody>
</table>
# Site Acceptance Checklist

## Hub Checklist

### All items must be initialed and dated by authorized personnel prior to acceptance.

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
<th>DB Team Completed (Initials/Date)</th>
<th>CEI Accepted (Initials/Date)</th>
<th>GDOT/PMC Concurrence (Initials/Date)</th>
<th>SRTA Accepted (Initials/Date)</th>
<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Hub Name:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Inspector Name(s):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Date(s) Visited</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUB HVAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>New interior and exterior HVAC units fully operational, installed, and tested. Failover capabilities demonstrated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Condensate drain wells installed and tested.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUILDING DESIGN (NEW BUILDING ONLY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Pre-fabricated building fully constructed, including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Foundation in place;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Building delivered and installed;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Building connected and secured to foundation;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Building/foundation connection properly secured;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Painting of walls/flooring.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Building door installed and with hardware, including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Interior push bar/electrified lever trim;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Door contact;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Deadlock;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Bar lock with padlock; and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Painting of door.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Confirm connections and connectors are properly installed, including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Bolt size, materials, and torque;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Banding size, materials, and tightness;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Mounting brackets, arm size, materials, and alignment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Fencing, guardrail, and any other associated civil work is completed. Verify fencing bonded to ground array. OHM reading:________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXTERIOR INFRASTRUCTURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Permanent back-up power generator installed, testing, and certified, if applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Generator natural gas line fully operational.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## SITE ACCEPTANCE CHECKLIST

### HUB CHECKLIST

**ALL items must be initialed and dated by authorized personnel prior to acceptance.**

**Hub Name:**

**Inspector Name(s):**

**Date(s) Visited:**

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<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Primary power is installed, tested, and certified.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Building/site lightning protection installed and tested (verified)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohm Reading:________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Grounding systems and arrays have been installed and tested. Ohmic readings for the site ground array meet requirements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohm Reading:________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>CCTV conduits installed and terminated, if applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>External disconnect installed and tested.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Manual transfer switch installed and tested, if applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### INTERIOR INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Item ID</th>
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<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
</table>
| 22      | Duct bank conduit stub-ups in building floor installed per accepted floor layout and properly terminated  
1. Bell ends/bushings installed on all conduits;  
2. Conduit clear of debris and water;  
3. Pull strings installed in conduit; and  
4. Conduit sealed to protect from debris and weather. |                                  |                              |                                      |                              |                              |                                |
| 23      | Building lighting installed and functional.                                     |                                  |                              |                                      |                              |                               |                                |
| 24      | Floor opening around conduits properly enclosed and sealed.                    |                                  |                              |                                      |                              |                               |                                |
| 25      | Cable trays installed, properly secured to ceiling, and placed correctly.       |                                  |                              |                                      |                              |                               |                                |
| 26      | Cable tray type is 24" wide for data and power cables.                         |                                  |                              |                                      |                              |                               |                                |
# SITE ACCEPTANCE CHECKLIST

## HUB CHECKLIST

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<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Flexible conduit drops from cable tray to racks installed, properly terminated in cable tray, and properly secured to cable track and racks.</td>
</tr>
<tr>
<td>28</td>
<td>CCTV conduits installed and terminated, if applicable.</td>
</tr>
<tr>
<td>29</td>
<td>Power panel and each individual breaker installed, tested, and wired for racks.</td>
</tr>
<tr>
<td>30</td>
<td>Electrical breakers are labeled per NEC code.</td>
</tr>
<tr>
<td>31</td>
<td>All surge suppressors installed.</td>
</tr>
<tr>
<td>32</td>
<td>New or certified fire extinguisher inside the hub building.</td>
</tr>
<tr>
<td>33</td>
<td>Access control/security system conduits installed and terminated.</td>
</tr>
<tr>
<td>34</td>
<td>Environment monitor installed (if applicable).</td>
</tr>
</tbody>
</table>

**BACKUP MOBILE / PORTABLE GENERATOR (IF APPLICABLE)**

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Backup mobile / portable generator and Manual Transfer Switch (MTS) of correct size, quantity, and type installed, tested, and certified.</td>
</tr>
<tr>
<td>36</td>
<td>MTS has a two-position switch that are labeled as &quot;Generator Power&quot; and &quot;Utility Power&quot;.</td>
</tr>
<tr>
<td>37</td>
<td>Utility on indicator is clearly visible.</td>
</tr>
<tr>
<td>38</td>
<td>Lock and key for the MTS connection panel provided.</td>
</tr>
</tbody>
</table>

**BACKUP PERMANENT GENERATOR (IF APPLICABLE)**

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Backup permanent generator and Automatic Transfer Switch (ATS) of correct size, quantity, and type installed, tested, and certified.</td>
</tr>
<tr>
<td>40</td>
<td>Generator natural gas fuel system fully operational.</td>
</tr>
</tbody>
</table>
## SITE ACCEPTANCE CHECKLIST

### HUB CHECKLIST

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<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Grounding installed and tested. Ohmic readings recorded and meet specifications. Ohm Reading: __________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Confirm generator is mounted on generator maintenance pad.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EQUIPMENT MANUALS AND WARRANTY INFORMATION

<table>
<thead>
<tr>
<th>Item ID</th>
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<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>For items that are accepted by GDOT for equipment installation and integration, all applicable manuals and warranty information shall be provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Address

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
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<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Address for the Hub was provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CABINET CHECKLIST

**ALL items must be initialed and dated by authorized personnel prior to acceptance.**

<table>
<thead>
<tr>
<th>Item ID</th>
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<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cabinet(s) is of the correct size, quantity, and type. Verify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. If pole mounted: Properly mounted at required height, clearance from ground to cabinet met;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. If ground mounted: Properly mounted on concrete base or pedestal base, cabinet base grouted and sealed, pad constructed per plans and specifications;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Cabinet door clearance requirements met and all doors can open to at least 90°;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Cabinet locks installed and keys delivered.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Duct bank conduit stub-ups in cabinet pad installed and properly terminated with bell ends or bushings, etc. Verify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Conduit is clear of debris and water;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Pull strings installed;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Conduits capped to protect from weather.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Conduit type is the proper quantity and size.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Duct bank conduit stub-up correctly positioned per conduit layouts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cabinet lighting installed and functional.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Door switch assembly installed and functional.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Receptacle(s) in the cabinet of correct type and quantity installed and tested.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power Reading:__________________________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CABINET CHECKLIST

**ALL** items must be initialed and dated by authorized personnel prior to acceptance.

### Cabinet Number:

### Station Number:

### Direction (NB/SB):

### Inspector Name(s):

### Date(s) Visited:

### Devices Associated with Cabinet:

<table>
<thead>
<tr>
<th>Item ID</th>
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<th>Observations and Issues Noted</th>
</tr>
</thead>
</table>
| 8       | Main electrical power distribution panel inside cabinet is installed and tested.  
1. Main Power Read: __________  
2. Backup permanent generator emergency power (if applicable) read: __________  
3. Mobile / Portable backup generator emergency power (if applicable) read: __________ | | | | | | | |
| 9       | Electrical breakers in the cabinet are labeled per NEC code. | | | | | | |
| 10      | All surge suppressors are installed. | | | | | | |
| 11      | GPS coordinate captured at cabinet. | | | | | | |
| 12      | HVAC of correct size, quantity and type and functional (if applicable). | | | | | | |
| **GDOT ONLY** | | | | | | | |
| 13      | Network field switch installed and of the correct size and type. | | | | | | |
| **SRTA ONLY** | | | | | | | |
| 14      | Cabinet ID label placed on outside of the cabinet. | | | | | | |
| 15      | Warning label placed on outside of the cabinet. | | | | | | |
| 16      | Conduit in cabinet is at a minimum cut 5” above the ground floor. | | | | | | |
| 17      | Sunshields installed (if applicable). | | | | | | |
## CABINET CHECKLIST

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<thead>
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<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>CIVIL SITE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18</td>
<td>Civil site built per plans to allow ingress/egress for maintenance vehicles and recoverable slope for maintenance technicians to reach cabinet.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>19</td>
<td>Confirm cabinet is not placed behind a sound wall.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>20</td>
<td>Maintenance platform installed per requirements (if applicable).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>21</td>
<td>Maintenance platform allows access to any pull boxes, handholes, and splice enclosures near the cabinet enclosure.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>22</td>
<td>Concrete pad of correct size (if applicable).</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td><strong>PULL BOXES</strong></td>
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<td></td>
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</tr>
<tr>
<td>23</td>
<td>Verify separate pull box for power and separate pull box for fiber (Communications).</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>24</td>
<td>Verify fiber (Communications) and electrical pull box type, size, and spacing is per plans.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>25</td>
<td>Pull box lid labeled properly (Communications/Electrical)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>26</td>
<td>Pull box lids meet load bearing specifications and standards.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>27</td>
<td>Pull box lids are properly bolted to box.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>28</td>
<td>Pull boxes are properly leveled to surrounding grade and aggregate and netting (mesh-wire) installed below pull box.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>29</td>
<td>Conduit properly stubbed into pull boxes.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>30</td>
<td>Empty conduit openings properly plugged and sealed.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
## CABINET CHECKLIST

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**Devices Associated with Cabinet:**

### Electrical

<table>
<thead>
<tr>
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<th>Inspection Item</th>
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<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Conduit openings around cables properly sealed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Electrical Service Point - Separate power meters for GDOT and SRTA.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1. Service Point Lat/Long: ____________________________________________</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>2. GDOT Power Meter # and Lat/Long: ____________</td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>3. SRTA Power Meter # and Lat/Long: ____________</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Exterior disconnects at the electrical service point installed and tested.</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>34</td>
<td>Lightning protection installed at electrical service point.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>35</td>
<td>Grounding installed and tested at electrical service point.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Ohm Reading: ____________</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Service panel installed and tested (if applicable).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Service panel is the correct type. Confirm SRTA and GDOT on separate service panels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Service panel contains correct quantity and type of breakers. Confirm SRTA and GDOT on separate breakers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>39</td>
<td>All breakers in the service panel properly labeled.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>40</td>
<td>Step up/step down transformer installed per plans (if applicable).</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Power Reading: ____________</td>
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</tr>
</tbody>
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### CABINET CHECKLIST

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</thead>
</table>
| 41      | At cabinet: Utility power and emergency power is installed and tested.  
1. Utility Power Reading:__________  
2. Permanent Emergency Power Reading (if applicable):__________  
3. Manual Transfer Switch Backup Emergency Power Reading (if applicable):__________ | | | | | | | |
| 42      | At cabinet: Lightning protection is installed. | | | | | | |
| 43      | Structure lightning protection is installed. | | | | | | |
| 44      | Grounding systems and arrays have been installed and tested for structure and cabinet. Ohmic readings for the site ground array meet NEC Specifications.  
Ohm Reading Cabinet:__________  
Ohm Reading Structure:__________ | | | | | | | |
| 45      | Correct electrical cable size and types. | | | | | | |
| 46      | Electrical cables properly terminated and securely connected. | | | | | | |
| 47      | Electrical cables connected to grounding buss bars or grounding systems. | | | | | | |
| 48      | Electrical cables installed in separate conduit from fiber and other communication cables. | | | | | | |
| 49      | DIN rail installed. | | | | | | |

**FIBER OPTIC COMMUNICATION INFRASTRUCTURE AND DEVICES**

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</thead>
<tbody>
<tr>
<td>50</td>
<td>Cabinet conduit number/size per plans and terminated both at cabinet and at pull box at base of pole (if applicable).</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Communications/equipment rack properly installed and secured.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
# SITE ACCEPTANCE CHECKLIST

## CABINET CHECKLIST

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<th>TSI Accepted (Initials/Date)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Fiber optic patch panel/FDC properly installed in communications/equipment rack.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Verify patch panel/FDC is labeled to match splicing diagrams for backbone terminations. (Note: A naming convention shall be agreed to by all parties prior to the start of installation activities.)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>55</td>
<td>Fiber optic cable connection from backbone to cabinet installed. Verify: 1. Fiber drop per plans; 2. Termination in patch panel complete;</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### EQUIPMENT MANUALS AND WARRANTY INFORMATION

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>For items that are accepted by GDOT for equipment installation and integration, all applicable manuals and warranty information shall be provided.</td>
</tr>
</tbody>
</table>
# Site Acceptance Checklist

## Closed-Circuit Television (CCTV) Checklist

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Pole or tubular extension of appropriate size, height, material, and location.</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>2</td>
<td>Confirm connections and connectors are properly installed. Verify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1. Mounting brackets/equipment support structure and arm size, materials, and alignment.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>3</td>
<td>Rigid conduits of correct size, quantity, and type installed. Conduit properly secured. Verify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1. Separate power and data conduit;</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>2. Bell ends / bushings installed on all conduit;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Conduit clear of debris and water;</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Pull strings installed in conduit;</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Conduit sealed capped to protect from debris and weather;</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>6. Weatherhead installed.</td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Note condition of any structure and infrastructure damage, including any signs of galling or any other hardware damage.</td>
<td></td>
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<tr>
<td>5</td>
<td>CGB fittings, couplings, reducers at conduit ends installed.</td>
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<tr>
<td>6</td>
<td>CCTV of correct type and quantity.</td>
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</tr>
<tr>
<td><strong>GDOT ONLY</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>CCTV power and data cables correct per specifications and manufacturer specifications, terminated to CCTV correctly, and run to network enclosure with coiled up 10' loop in cabinet. Verify shielded Cat6e cable is installed and properly terminated in cabinet with metal RJ45 connector. (Installation of these cables should be compact using cable manufacturers bending radii recommended.)</td>
<td></td>
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</tr>
</tbody>
</table>
# Site Acceptance Checklist

## Closed-Circuit Television (CCTV) Checklist

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<tbody>
<tr>
<td>8</td>
<td>CCTV camera operates properly. Confirm 1. Displays video; 2. PTZ control; 4. Focus; 5. Zoom; and 5. Presets.</td>
<td></td>
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<tr>
<td>9</td>
<td>Verify video stream via VLC.</td>
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</tr>
<tr>
<td>10</td>
<td>Confirmation that the latest firmware is installed.</td>
<td></td>
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</tr>
<tr>
<td>11</td>
<td>Firmware documentation provided to GDOT.</td>
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</tr>
</tbody>
</table>

### Electrical Infrastructure

12 Structure grounding and lightning installed and tested. Ground resistance readings per NEC should be 25 OHMs or less. If 25 ohms cannot be achieved, additional ground rod installed per NEC.

Ohm Reading:________________

13 Total distance from the cabinet to the device does not exceed 250 ft.

### Equipment Manuals and Warranty Information

14 For items that are accepted by GDOT for equipment installation and integration, all applicable manuals and warranty information shall be provided prior to final acceptance.
## DYNAMIC MESSAGE SIGN CHECKLIST

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<tbody>
<tr>
<td><strong>DMS</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>Sign structure of correct size, quantity, and type.</td>
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</tr>
<tr>
<td>2</td>
<td>DMS of correct size, quantity, and type installed.</td>
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</tr>
<tr>
<td>3</td>
<td>DMS controller installed and tested and is communicating with the sign. All testing results have been provided to GDOT.</td>
<td></td>
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<tr>
<td>4</td>
<td>DMS panels power on and illuminate test pattern properly.</td>
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</tr>
<tr>
<td>5</td>
<td>Verify shielded Cat6e cable is installed and properly terminated in cabinet with metal RJ45 connector.</td>
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<td></td>
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</tr>
<tr>
<td>6</td>
<td>Catwalk installed (if applicable).</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Grounding and lightning rods installed on the structure or DMS housing, whichever is the highest point.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>Confirmation that the latest firmware is installed for the sign.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>For items that are accepted by GDOT for equipment installation and integration, all applicable manuals and warranty information shall be provided prior to final acceptance.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>ELECTRICAL INFRASTRUCTURE</strong></td>
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</tr>
<tr>
<td>10</td>
<td>CGB fittings, couplings, and reducers installed at conduit ends.</td>
<td></td>
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<tbody>
<tr>
<td>11</td>
<td>Rigid conduits installed, of correct size and type, and properly secured. Verify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Separate power and data conduit;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Bell ends/bushings installed on all conduits;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Conduit clear of debris and water;</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>4. Pull strings installed in conduit;</td>
<td></td>
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<td></td>
<td>5. Conduit sealed to protect from debris and weather.</td>
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<td></td>
<td>6. Weatherhead installed</td>
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<td>12</td>
<td>Duct banks installed with separate pull boxes for data and power conduits.</td>
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<tr>
<td>13</td>
<td>Duct bank pull boxes properly installed, labeled, and of correct size.</td>
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<tr>
<td>14</td>
<td>Bolts installed to seal ground lids.</td>
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<tr>
<td>15</td>
<td>Structure grounding and lightning installed and tested.</td>
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<td></td>
<td>Ground resistance readings per NEC should be 5 OHMs or less. If 5 ohms cannot</td>
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<td>be achieved, additional ground rod installed per NEC.</td>
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<td>Ohm Reading: ______________</td>
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<tr>
<td>16</td>
<td>Total distance from the cabinet to the TRDMS device does not exceed 250 ft.</td>
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<td></td>
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</tbody>
</table>

**EQUIPMENT MANUALS AND WARRANTY INFORMATION**

<table>
<thead>
<tr>
<th>Item ID</th>
<th>Inspection Item</th>
<th>DB Team Completed (Initials/Date)</th>
<th>CEI Accepted (Initials/Date)</th>
<th>GDOT/PMC Concurrence (Initials/Date)</th>
<th>SRTA Accepted (Initials/Date)</th>
<th>TSI Accepted (Initials/Date)</th>
<th>Observations and Issues Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>For items that are accepted by GDOT for equipment installation and integration,</td>
<td></td>
<td></td>
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<td></td>
<td>all applicable manuals and warranty information shall be provided.</td>
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</tbody>
</table>
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

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)

TYPE 1A TERMINAL
TYPE 1 ANCHOR
LENGTH OF NEED
PER STD 4000W
MAINTENANCE PAD
8'x12'
OR PER GDOT

OPTION 2) ITS EQUIPMENT WITHIN A RUN OF GUARDRAIL
(GROUND MOUNTED OR POLE MOUNTED)

DIRECTION OF TRAVEL

MAINTENANCE PAD
8'x12'
OR PER GDOT

OPTION 3) ITS WITHIN A RUN OF BARRIER
(GROUND MOUNTED OR POLE MOUNTED)

R RUNOUT LENGTH PER 4000W
NO CRASH FIRST STRIKE ON BARRIER
LESS THAN 20:1 TAPER RATE

5' GAP

MAINTENANCE PAD
8'x12'
OR PER GDOT
5:1 TAPER RATE
VARIES
20:1 BARRIER
TAPER RATE
PER TABLE 5-9
OF ROADSIDE
DESIGN GUIDE
40' FOR 4' OR 12' SHOULDER
20' FOR 10' SHOULDER

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)
ITS MAINTENANCE ACCESS

ARTERIAL ITS EQUIPMENT

OPTION 1) ARTERIAL WITH SIDEWALK

3'x3' CONCRETE PAD ON EACH SIDE OF CABINET

CABINET

SIDEWALK

OPTION 2) ARTERIAL WITH CURB & GUTTER, BUT WITHOUT SIDEWALK

3'x3' CONCRETE PAD ON EACH SIDE OF CABINET

CABINET

MINIMUM 5' FROM BACK OF CURB TO FRONT FACE OF CABINET MUST BE 10:1 OR FLATTER

OPTION 3) ARTERIAL WITHOUT CURB & GUTTER

3'x3' CONCRETE PAD ON EACH SIDE OF CABINET

CABINET

MINIMUM 5' WIDTH OF EDGE OF TRAVEL LANE EDGE OF PAVED SHOULDER

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
   1) BEHIND GUARDRAIL (GDOT ITS OPTION 1 OR 2)
   11) BEHIND BARRIER WITH PEDESTRIAN ACCESS (GDOT ITS OPTION 3)

B) SRTA ITS
   1) BEHIND GUARDRAIL WITH PEDESTRIAN ACCESS (SRTA ITS OPTION 1 OR 2)
   11) BEHIND BARRIER WITH PEDESTRIAN ACCESS (GDOT ITS 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.
Georgia Department of Transportation

Technical Provisions

For

Design-Build Agreement

P.I. No. 0017389

Attachment 18-1

SPECIAL PROVISION 150—TRAFFIC CONTROL
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  

SPECIAL PROVISION  

Section 150—Traffic Control  

150.1 General Description  

This section, as supplemented by the Plans, Specifications, and Manual on Uniform Traffic Control Devices (MUTCD) shall be considered the Temporary Traffic Control (TTC) Plan in accordance with Work Zone Safety and Mobility Policy. Activities shall consist of furnishing, installing, maintaining, and removing necessary traffic signs, pedestrian signs, barricades, lights, signals, cones, pavement markings and other traffic control devices and shall include flagging and other means for guidance and protection of vehicular and pedestrian traffic through the Work Zone. This Work shall include both maintaining existing devices and installing additional devices as necessary in construction work zones.  

The contractor shall be responsible for the maintenance of traffic signals and Advanced Traffic Management system (ATMs) devices from the time that the system is modified until final acceptance. The maintenance of traffic signals and ATMs devices that are not a part of the work and that are not in conflict with any portion of the work shall not be the responsibility of the contractor. However, the contractor is still responsible for damages to all devices that he or his subcontractors cause, in accordance with Section 107 and other specifications.  

When any provisions of this Specification or the Plans do not meet the minimum requirements of the MUTCD, the MUTCD shall control. The 2009 Edition of the MUTCD shall be in effect for the duration of the project.  

All traffic control devices used during the construction of the project shall meet the standards utilized in the MUTCD, and shall comply with the requirements of these Specifications, Georgia Construction Standards and Details, Project Plans, Design Manuals, and Special Provisions.  

The needs and control of all road users (motorists, bicyclists and pedestrians within the highway right-of-way and easements, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) through a Temporary Traffic Control (TTC) zone shall be an essential part of highway construction, utility work, maintenance operations and management of traffic incidents.  

Utilities included in the contract are bounded by Special Provision 150 and shall follow its requirements. For utilities not included in the contract but working within the project limits, they shall, at a minimum follow the MUTCD. Moreover, in accordance with Utility Accommodation Policy and Standards Manual dated 2016, the Engineer reserves the right to require additional certified flaggers, signs, warning lights, channelization devices, and other safety devices as may be necessary to properly protect, warn, and safeguard the traveling public. In addition, the Department reserves the right to place time restrictions or moratoriums on all utility work covered under a permit when, in the opinion of the Department, the continuance of the Work would seriously hinder traffic flow, be needlessly disruptive, or would unnecessarily inconvenience the traveling public. In case of emergencies, Utilities shall be provided access in accordance with Utility Accommodation Policy and Standard Manual.  

150.1.01 Definitions  

For Special Provision 150, the definitions for “shall”, “should”, and “may” will be in accordance with MUTCD (1A.13).  

 Shall (Standard) - a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device.
Should (Guidance) - a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate.

May (Option) — a statement of practice that is a permissive condition and carries no requirement or recommendation.

150.1.02 Content

150.1 General Description

150.1.01 Definitions

150.1.02 Content

150.1.03 Related References

A. Standard Specification
B. Reference Documents

150.1.04 Submittals/Preconstruction

A. Worksite Traffic Control Supervisor
B. Sequence of Operations
C. Pedestrian Considerations

1. Pedestrian Signage
2. Temporary Pedestrian Facilities

150.2 Materials and Traffic Control Devices

150.2.01 Traffic Control Devices

A. NCHRP 350 and MASH
B. Approval
C. Quality Guidelines for All Temporary Traffic Devices

150.2.02 Reflectorization Requirements

A. Signs

B. Channelization Devices

150.2.03 Arrow Panels

150.2.04 Channelization Devices

A. General
B. Drums

1. Design
2. Application
3. Longitudinal Channelization
4. Removal

C. Vertical Panels

1. Design
2. Application

D. Cones

1. Design
2. Applications

E. Barricades

1. Design
2. Application

F. Warning Lights

1. Design
2. Application

150.2.05 Flashing Beacon

150.2.06 Guardrail

150.2.07 Interim Signs

A. Posts
B. Sign Blanks and Panels

150.2.08 Pavement Markings

A. All Traffic Striping for Forty-Five (45) Days or Less (≤45 Days)
B. All Temporary Striping Beyond Forty-Five (45) days (>45 Days)
C. All Temporary Traffic Striping on Final Surface

150.2.09 Portable Changeable Message Signs

150.2.10 Portable Impact Attenuators

150.2.11 Portable Temporary Traffic Control Signals

150.2.12 Raised Pavement Markers

150.2.13 Rumble Strips

150.2.14 Temporary Barriers

A. Design
B. Application

150.2.15 Temporary Guardrail Anchorage- Type 12

150.2.16 Temporary Traffic Signal

150.3 Construction Requirements

150.3.01 General

A. Implementation Requirements
B. Maintenance of Traffic Control Devices
C. Traffic Interruption Restrictions
D. Work Zone Restrictions
   1. Interstate
   2. Non-Interstate Divided Highways
   3. Non-Divided Highways

E. Work Zone Geometric Restrictions
F. Clear Zone
G. Milled Surface Restrictions
H. Construction Vehicle
I. Environmental Impacts
J. Existing Street Lights
K. Nighttime Work Lighting
L. Removal/Reinstallation of Miscellaneous Items

150.3.02 Personnel – Worker Safety Apparel

150.3.03 Signage – General

A. Signing Requirements of the Temporary Traffic Control (TTC) Plan
B. Conflicting or Non-Applicable Signs
C. Removal of Existing Signs and Supports
D. Interim Guide, Warning and Regulatory Signs
E. Existing Special Guide Signs
   1. Special Guide Signs
   2. Interim Special Guide Signs
   3. Interim Overhead Guide Sign Structures
   4. Permanent Special Guide Signs
F. Stop Sign Regulated Intersections
G. Low Shoulder Signage
   1. Low Shoulder for Construction/Reconstruction/Resurfacing Projects
   2. Shoulder Drop-Off for Construction/Reconstruction/Resurfacing Project
H. Bump Signage
I. Sign Visibility

150.3.04 Advance Warning Signs

A. Project Signs - All Type of Highways
   1. State Routes
   2. Interstate, Limited Access and Multilane Divided Highways
   3. Ramp Work on Limited Access Highways
B. Highway Work Zone
   1. No Reduction in the Existing Posted Speed Limit in Highway Work Zone
   2. Reducing the Speed Limit in a Highway Work Zone
   3. Variable Speed Limit Zones
C. Installation/Removal of Work Area Signage
150.3.05 Shoulder/Lane Closure

A. Approval/Restrictions
   1. Closure Length
   2. Duration

B. Shoulder Closure
C. Lane Closure
   1. Advance Warning Signs
   2. Transition Area – Taper
   3. Activity Area
   4. Termination Area

D. Removal of Lane Closures
E. Exit and Entrance Ramps

150.3.06 Traffic Pacing Method

A. Pacing Of Traffic
B. Methods of Signing For Traffic Pacing

150.3.07 Flagging Operation

A. Flaggers
B. Flagger Certification
C. Flagger Appearance and Equipment
D. Flagger Warning Signs
E. Pilot Vehicle Requirements
F. Automated Flagger Assistance Devices
G. Portable Temporary Traffic Control Signals

150.3.08 Traffic Signals

A. Responsibility/Cost
B. Law Enforcement Officer Requirement

150.3.09 Mobile Operations

150.3.10 Pavement Markings

A. General
   1. Resurfacing Projects
   2. Widening and Reconstruction Projects
   3. New Location Construction Projects

B. Installation and Removal of Pavement Markings
   1. Installation
   2. Removal
   3. Intermediate Surface
   4. Final Surface
   5. Pay Factor Reduction for Asphaltic Concrete Final Surfaces
   6. Preparation and Planning for Traffic Shifts
C. Raised Pavement Markers

1. Supplementing Lane Lines
2. Supplementing Ramp Gore Lines
3. Other Lines

D. Exceptions for Interim Markings

1. Two-Lane, Two-Way Roadway
2. Multi-Lane Highway – with No Paved Shoulder(s) or Paved Shoulder(s) Four Feet or Less (≤ 4’)
3. Limited Access Roadways and Roadways with Paved Shoulder Greater than Four Feet (>4’)
4. Ramps for Multi-land Divided Highways
5. Miscellaneous Pavement Markings

150.3.11 Differences in Elevation between Travel Lanes and Shoulders

A. Differences in Elevations

1. Difference of Two Inches (≤ 2”) or Less Between Adjacent Travel Lanes
2. Difference of Two Inches (≤ 2”) or Less Between Adjacent Travel Lane and Paved Shoulder Should
3. Difference of Greater Than Two Inches (>2”) is Permitted for Continuous Operations
4. Difference of Greater Than Two Inches (>2”) Between Travel Lanes and/or Shoulders for Non-Continuous Operations

B. Healed Section
C. Emergency Situations
D. Plating
E. Asphaltic Concrete Resurfacing Projects

1. Shoulder Construction Included as a Part of the Contract
2. Shoulder Construction Not Included as a Part of the Contract

150.3.12 Work Zone Law Enforcement

150.4 Measurement

150.4.01 Traffic Control Items

A. Traffic Control
B. Changeable Message Sign, Portable
C. Flashing Beacon Assembly
D. Pavement Markings
E. Portable Impact Attenuators
F. Signs

1. Interim Ground Mounted or Interim Overhead Special Guide Signs
2. Remove And Reset Existing Special Guide Signs, Ground Mount or Overhead
3. Modify Special Guide Signs, Ground Mount or Overhead

G. Temporary Audible Information Device
H. Temporary Barrier
I. Temporary Curb Cut Wheelchair Ramps
J. Temporary Guardrail Anchorage, Type 12
K. Temporary Walkways with Detectable Edging
L. Traffic Signal Installation - Temporary
M. Work Zone Law Enforcement

150.5 Payment

150.5.01 Enforcement and Adjustments

150.1.03 Related References

A. Standard Specifications

Section 104-Scope of Work
Section 105-Legal Regulations and Responsibility to the Public
Section 107-Legal Regulations and Responsibility to the Public
Section 108-Prosecution and Progress
Section 209-Subgrade Construction
Section 400-Hot Mix Asphaltic Concrete Construction
Section 441-Miscellaneous Concrete
Section 429-Rumble Strips
Section 620-Temporary Barrier
Section 632-Portable Changeable Message Signs
Section 641-Guardrail
Section 647-Traffic Signal Installation
Section 648-Traffic Impact Attenuator
Section 652-Painting Traffic Stripe
Section 653 – Thermoplastic Traffic Stripe
Section 654-Raised Pavement Markers
Section 656-Removal of Pavement Markings
Section 657 – Preformed Plastic Pavement Markings
Section 658 – Standard and Wet Weather Polyurea Traffic Stripe
Section 659 Hot Applied Preformed Plastic Pavement Markings
Section 911-Sign Posts
Section 912-Sign Blanks and Panels
Section 913 - Reflectorizing Materials
B. Referenced Documents

ASTM D4956-13 (Retro-reflectivity)

American Traffic Safety Services Association (ATSSA)

Construction Detail A-3 Curb Cut (Wheelchair) Ramps Concrete Sidewalk Details

Construction Detail A-4 Detectable Warning Surface Truncated Dome Size, Spacing and Alignment Requirements

Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail)

GDOT Signing and Marking Design Guidelines

Georgia Standard 4000W “Lengths of Advancement, Clear Zone Distances, Fill Height Embankment”

Georgia Standard 4960 “Temporary Barrier (End Treatment Options)”

Georgia Standard 9102 “Traffic Control Detail for Lane Closure on Two-Lane Highway”

Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”

Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”

Georgia Standard 9121 “Tapers, Signs, and Markings for Passing Lanes”

Manual for Assessing Safety Hardware (MASH)

Manual on Uniform Traffic Control Devices (MUTCD)

National Cooperative Highway Research Program (NCHRP) 350

National Safety Council

Quality Product List #29 (QPL-29) Reflective Sheeting

Quality Product List #34 (QPL-34) Work Zone Traffic Control Devices (Drums, Type III Barricades, Vertical Panels, and Portable Sign Systems)

Quality Product List #35 (QPL-35) Drive Type Galvanized Steel Sign Posts

Quality Product List #46 (QPL-46) Traffic Pavement Markings

Quality Product List #64 (QPL-64) Attenuator Units (Compression Crash Cushion) and Guardrail End Treatments

Quality Product List #76 (QPL-76) Raised Pavement Markers and Channel Markers

Quality Product List #79 (QPL -79) Portable Arrow Boards

Quality Product List #82 (QPL -82) “Portable Changeable Message Signs”

Utility Accommodation Policy and Standards Manual

Work Zone Safety and Mobility Policy

150.1.04 Submittals/Preconstruction
A. Worksite Traffic Control Supervisor

The Contractor shall designate a qualified individual as the Worksite Traffic Control Supervisor (WTCS). The WTCS shall be responsible for selecting, installing and maintaining all traffic control devices in accordance with the Plans, Specifications, Special Provisions and the MUTCD. The WTCS shall be currently certified by the American Traffic Safety Services Association (ATSSA) Work Site Traffic Supervisor Certification program or the National Safety Council Certification program. On-line classes will not be accepted.

The WTCS shall be available on a twenty-four (24) hour basis to perform his duties. If the work requires traffic control activities to be performed during the daylight and nighttime hours, it may be necessary for the Contractor to designate an alternate WTCS. An alternate WTCS must meet the same requirements and qualifications as the primary WTCS and be accepted by the Engineer prior to beginning any traffic control duties. The Worksite Traffic Control Supervisor’s traffic control responsibilities shall have priority over all other assigned duties.

As the representative of the Contractor, the WTCS shall have full authority to act on behalf of the Contractor in administering the TTC Plan. The WTCS shall have appropriate training in safe traffic control practices in accordance with Part 6 of the MUTCD. In addition to the WTCS, all other individuals making decisions regarding traffic control shall meet the training requirements of the Part 6 of the MUTCD.

The Worksite Traffic Control Supervisor (WTCS) shall have a copy of Part 6 of the MUTCD and the Contract on the job site. Copies of the current MUTCD may be obtained from the FHWA web page at http://mutcd.fhwa.dot.gov.

The WTCS shall supervise the initial installation of traffic control devices. The Engineer, prior to the beginning of construction, will review the initial installation. Modifications to traffic control devices as required by sequence of operations or staged construction shall be reviewed by the WTCS.

Any work performed on the interstate or limited access highway right-of-way that requires traffic control shall be supervised by a submitted/approved certified Worksite Traffic Control Supervisor. No work requiring traffic control shall be performed unless the certified WTCS is on the worksite. Failure to maintain a Certified Worksite Traffic Control Supervisor on the work will be considered as non-performance under Subsection 150.5.01.

The 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 forty-five (45) minutes of notification of the emergency.

The WTCS shall perform inspections, at a minimum once a month, to ensure that traffic control is maintained. For all interstate and limited access highways, the WTCS shall perform, as a minimum, weekly traffic control inspections. The inspections will start with the installation of the advance warning signs and will stop when a maintenance acceptance is issued or when the punch list is completed.

An inspection shall include both daytime and nighttime reviews. The inspection shall be reported to the Engineer on a Traffic Control Inspection Report, (TC-1). Unless modified by the special conditions or by the Engineer, routine deficiencies shall be corrected within a twenty-four (24) hour period. Failure to comply with these provisions shall be grounds for dismissal from the duties of WTCS and/or removal of the WTCS from the project. Failure of the WTCS to execute his duties shall be considered as non-performance under Subsection 150.5.01.
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.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DESCRIPTION</th>
<th>ACTION REQUIRED</th>
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<tbody>
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(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

<table>
<thead>
<tr>
<th>Category</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Non-applicable</th>
</tr>
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<tbody>
<tr>
<td><strong>Signs</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<tr>
<td>- Are the signs correctly installed?</td>
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<tr>
<td>- Signs are in place according to TTC plans. Signs are plumb and level. Signs are at the proper height.</td>
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<tr>
<td>- Are the signs visible and readable to the public both daytime and nighttime?</td>
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<td>- Is retroreflectivity good?</td>
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<tr>
<td>- Are signs not in use including PCMS properly stored?</td>
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<tr>
<td><strong>TTC Devices</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>- Are they MASH/NHCRP 350 approved? Do they meet MUTCD and Special Provision 150 requirements?</td>
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<tr>
<td>- Are they installed according to manufacture recommendation?</td>
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<tr>
<td>- Are they in acceptable/marginal condition? Are they stable? Is the retroreflectivity good?</td>
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<tr>
<td><strong>Clear Zone</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<tr>
<td>- Are all material and equipment stored beyond the clear zone?</td>
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<tr>
<td>- If stored in clear zone, are they protected by positive barrier?</td>
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<tr>
<td>- Are drop-off marked and healed according to Special Provision 150?</td>
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<tr>
<td><strong>Positive Barriers</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<tr>
<td>- Are the barriers in acceptable/marginal condition and FHWA approved?</td>
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<tr>
<td>- Are the barrier reflectors proper and in good condition?</td>
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<tr>
<td>- Do the barriers extend to the proper advancement length? Are the tapers according to GA Standards?</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attenuators and Guardrails</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<td>- Are the proper attenuators assemblies in use?</td>
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<td>- Gating Is the recovery area free of debris and provide the necessary recovery area?</td>
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<td>- Is the assembly in accordance with manufacture recommendation?</td>
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<td>- Are the guardrails properly anchor and/or attached to the barrier?</td>
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<td>- Are shoes and transition sections in accordance with Standards?</td>
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<td><strong>Pavement Markings</strong></td>
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<td>- Are the pavement making visible and legible?</td>
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<td>- Can they be seen during the daytime and nighttime?</td>
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<td>- Are there no conflicting pavement markings?</td>
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<td>- Are the pavement markings including RPM installed and maintained according to section 150?</td>
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Page 2 of 2 (TC-1)
The Engineer will periodically review the work for compliance with the requirements of the TTC plan.

On projects where traffic control duties will not require full time WCTS supervision, the Engineer may allow the Contractor’s Project superintendent, foreman, subcontractor, or other designated personnel to serve as the WTCS as long as satisfactory results are obtained. Nevertheless, the individual shall meet the requirements and perform the duties of a WTCS.

B. Sequence of Operations

Any Sequence of Operations provided in this Contract in conjunction with any staging details which may be shown in the plans, is a suggested sequence for performing the Work. It is intended as a general staging plan for the orderly execution of the work while minimizing the impact on pedestrian facilities, mainline, cross-streets and side streets. The Contractor shall develop detailed staging and temporary traffic control plans for performing specific areas of the Work including but not limited to all traffic shifts, detours, bridge widenings, paces, or other activities that disrupt traffic or pedestrian flow. The Engineer may require detailed staging and TTC plans for lane closures or disruption to pedestrian facilities. These plans shall be submitted for approval at least two (2) weeks prior to the scheduled date of the activity. Activities that have not been approved at least seven (7) days prior to the scheduled date shall be rescheduled.

Where traffic is permitted through the work area under stage construction, the Contractor may choose to construct, at no additional expense to the Department, temporary on-site bypasses or detours in order to expedite the work. Plans for such temporary bypasses or detours shall be submitted to the Engineer for review and approval thirty (30) calendar days prior to the proposed construction. Such bypasses or detours shall be removed promptly when in the opinion of the Engineer; they are no longer necessary for the satisfactory progress of the Work. Bypasses and detours shall meet the minimum requirements of Subsection 150.3.01.D.

As an option to the Sequence of Operations in the Contract, the Contractor may submit an alternative Sequence of Operations for review and approval. Alternate Sequence of Operations for pedestrian facilities shall be in compliance with the MUTCD and ADA. Pedestrian needs identified in the preconstruction phase shall be included in the proposed alternate plan.

The Department will not pay, or in any way, reimburse the Contractor for claims arising from the Contractor’s inability to perform the Work in accordance with the Sequence of Operations provided in the Contract or from an approved Contractor alternate.

The Contractor shall secure the Engineer’s approval of the Contractor’s proposed plan of operation, sequence of work and methods of providing for the safe passage of vehicular and pedestrian traffic before it is placed in operation. The proposed plan of operation shall supplement the approved traffic control plan. Any major changes to the approved TTC plan, proposed by the Contractor, shall be submitted to the Department for approval.

Some additional traffic control details will be required prior to any major shifts or changes in traffic. The traffic control details shall include, but not be limited to, the following:

1. A detailed drawing showing traffic locations and lanes for each step of the change.
2. The location, size, and message of all signs required by the MUTCD, Plan, Special Provisions, and other signs as required to fit conditions. Any portable changeable message signs used shall be included in the details.
3. The method to be used in, and the limits of, the obliteration of conflicting lines and markings.
4. Type, location, and extent of new lines and markings.
5. Horizontal and vertical alignment and superelevation rates for detours, including cross-section and profile grades along each edge of existing pavement.
6. Drainage details for temporary and permanent alignments.
7. Location, length, and/or spacing of channelization and protective devices (temporary barrier, guardrail, barricades, etc.)
8. Starting time, duration and date of planned change.

9. For each traffic shift, a paving plan, erection plan, or work site plan, as appropriate, detailing workforce, materials, and equipment necessary to accomplish the proposed work. This will be the minimum resource allocation required in order to start the work.

A minimum of three (3) copies of the above details shall be submitted to the Engineer for approval at least fourteen (14) days prior to the anticipated traffic shift. The Contractor shall have traffic control details for a traffic shift which has been approved by the Engineer prior to commencement of the physical shift. All preparatory work relative to the traffic shift, which does not interfere with traffic, shall be accomplished prior to the designated starting time. The Engineer and the Contractor’s representative will verify that all conditions have been met prior to the Contractor obtaining materials for the actual traffic shift.

C. Pedestrian Considerations

All existing pedestrian facilities, including access to transit stops, shall be maintained. Where pedestrian routes are closed, alternate routes shall be provided. Closures of existing, interim and final pedestrian facilities shall have the prior written approval of the Engineer. When existing pedestrian facilities are disrupted, closed or relocated in a TTC zone, the temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility. Pedestrian facilities are considered improvements and provisions made to accommodate or encourage walking. Whenever a sidewalk is to be closed, the Engineer shall notify the maintaining agency two (2) weeks prior to the closure. Prior to closure, detectable barriers (that are detectable by a person 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.

Temporary Traffic Control devices used to delineate a Temporary Traffic Control Zone Pedestrian Walkway shall be in compliance with Subsection 150.3.01.A. Appropriate signs as described in the MUTCD shall be maintained 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 should be placed at intersections rather than midblock locations so that pedestrians are not confronted with midblock work sites that will induce them to attempt skirting the work site or making a midblock crossing. Temporary Traffic Control 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 forty-eight inches (≥ 48”).

1. Pedestrian Signage

A pedestrian walkway shall not be severed or relocated for non-construction activities, such as 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 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 traffic barriers when temporary traffic barriers are required. Tape, rope or plastic chain strung between temporary traffic control 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 TTC for pedestrian traffic shall be included as part of the TC-1 report.

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 should meet the
applicable requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”.

a. 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.

Temporary walkways shall include detectable edging as defined in the MUTCD. When temporary traffic barrier is included as a pay item in the contract and where locations identified on the plans for positive protection will also allow them to serve as pedestrian detectable edging, payment will be made for the temporary traffic barrier in accordance with Section 620. No payment will be made for temporary walkways with Detectable Edging where existing pavements or existing edging (that meets the requirements of MUTCD) are utilized as temporary walkways. Payment for temporary detectable edging, including approved barriers and channelizing devices, installed on existing pavements shall be included in Traffic Control-Lump Sum.

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 construction project. If concrete or asphalt is used as the surface course for the walkway, it shall be a minimum of one and one-half inches (≥ 1-1/2") thick. Temporary walkways constructed across unimproved streets and drives shall be a minimum thickness of four inches (≥ 4") for concrete and three inches (≥ 3") for asphalt. Joints formed in concrete sidewalks shall be in accordance with Section 441. Concrete surfaces shall have a broom finish.

If plywood is used as a walkway, it must be a minimum of three quarters of an inch (≥ 3/4") thick, pressure treated and supported with pressure treated longitudinal joists spaced a maximum of sixteen inches (≤ 16") 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 the pedestrians. A slip resistant friction course shall be applied to any plywood surface that is used as a walkway. Any slip resistant material used shall have the prior written approval of the engineer.

The contractor may propose alternate types of Temporary Walkways provided that the contractor can document that the proposed walkway meets the requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. Alternate types of Temporary Walkways shall have the prior written approval of the engineer.

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 contractor shall construct and maintain the walkway to ensure that joints in the walkway have a vertical difference in elevation of no more than one quarter (≤ 1/4") of an inch and that the horizontal joints have gaps no greater than one half (≤ 1/2") of an inch. 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 (≤ 2%).

A width of sixty inches (60"), if practical, should be provided throughout the entire length of any temporary walkway. The temporary walkway shall be a minimum width of forty eight inches (48"). When it is not possible to maintain a minimum width of sixty inches (60") throughout the entire length of temporary walkway, a sixty inch (60") by sixty inch (60") passing space should be provided at least every two hundred feet (200 ft.), to allow individuals in wheelchairs to pass.

Temporary walkways shall be constructed on firm subgrade. Compact the subgrade according to Section 209. 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, remove any temporary materials and restore the area to the original conditions or as shown in the plans.

b. Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps shall be constructed in accordance with Section 441 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 contractor can provide documentation that the material to be used meets the requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. When a wheelchair ramp is no longer required, remove the temporary materials and restore the area to existing conditions or as shown in the plans. For the items required to restore the area to original conditions or as shown in the plans, measures for payment shall be covered by contract pay items. If pay items are not included in the contract, then payment for these items shall be included in Traffic Control-Lump Sum.

c. Temporary Audible Information Device

Temporary audible information devices, when shown in the plans, shall be installed in compliance with the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. The devices shall be installed in accordance with the manufacturer’s recommendations. Prior to installation, the contractor shall provide the engineer 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 contractor.

150.2 Materials and Traffic Control Devices

150.2.01 Traffic Control Devices

A. 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 this Special Provision. In addition, temporary work zone devices, including portable barriers, manufactured after December 31, 2019, must have been successfully tested under 2016 edition of MASH requirements. Such devices manufactured on or before this date, and successfully tested under either NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service lives.

B. Approval

All traffic control devices with applicable Qualified Products List (QPL) categories shall come from the appropriate QPL list. Products not on the QPL may be used with an approval letter from the Georgia Department of Transportation Office of Materials and Testing. If there are no applicable QPL, the Contractor 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.

C. Quality Guidelines for All Temporary Traffic Devices

All traffic control devices found to be unacceptable in accordance with the current ATSSA, “Quality Guidelines for Temporary Traffic Devices and Features” regardless of total numbers shall be replaced within twenty-four (24) hours unless stated otherwise in the specifications, in the contract, or as directed by the Engineer.

150.2.02 Retroreflectivity Requirements

A. Signs

Reflective sheeting should meet the requirements of Section 913 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 signs reflectorization shall be in accordance with the plans, contract, and “GDOT Signing and Marking Design Guidelines”.

B. Channelization Devices
Reflective sheeting should meet the requirements of Section 913 and QPL-29.

All channelization devices (white/fluorescent orange and white/red) shall meet the minimum retroreflectivity requirements of ASTM D4956 Type VI.

150.2.03 Arrow Panels

Arrow panel should meet the requirements for MUTCD (6F.61) and QPL-79.

Portable sequential arrow, sequential chevron, or flashing arrow panels shall be a minimum size of forty-eight inches (48") high by ninety-six inches (96") wide with not less than fifteen (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 one (1) mile. The minimum legibility distance is the distance at which the arrow panel can be comprehended by an observer on a sunny day, or 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 (6F.61). The sequential or flashing arrow panels shall not be used for lane closure 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 seven feet (7’) 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 panel(s) in operation. The Engineer shall determine when conditions and circumstances are considered to be emergencies. The Contractor shall notify the Engineer, in writing, when any non-specification arrow display panel(s) is being used in the work.

150.2.04 Channelization Devices

A. General

Channelization shall clearly delineate the travel way through the work zone and alert drivers and pedestrians to conditions created by work activities in or near the travel way. Channelization shall be accordance with the plans, specifications, MUTCD, QPL-34, and the following requirements.

B. Drums

1. Design

Drums shall meet the minimum requirement of the MUTCD (6F.67). For all projects let June 2018 and afterward, drums shall have six inch (6") wide stripes – white/fluorescent orange.

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 Subsection.

3. Longitudinal Channelization

Drums shall be spaced as listed below for various roadside work conditions except as modified by Subsection 150.3.11. Spacing shall be used for situations meeting any of the conditions listed as follows:

a. FORTY FOOT (40’) SPACING MAXIMUM
• For difference in elevation exceeding two inches (> 2”).
• For healed sections no steeper than 4:1 as shown in Subsection 150.3.11, Detail 150-H.

b. EIGHTY FOOT (80’) SPACING MAXIMUM
• For difference in elevation of two inches (≤ 2”) or less.
• Flush areas where equipment or workers are within ten feet (≤ 10’) of the travel lane.

c. 200 FOOT SPACING MAXIMUM: Where equipment or workers are more than ten feet (> 10’) from travel lane. Lateral offset clearance to be four feet (4’) from the travel lane.
• For paved areas, eight feet (> 8’) or greater in width that are paved flush with a standard width travel lane.
• For disturbed shoulder areas not completed to typical section that are flush to the travel lane and considered a usable shoulder.

4. Removal of Drums

Drums may be removed after shoulders are completed to typical section and grassed. Guardrail and other safety devices shall be installed and appropriate signs advising of conditions such as soft or low shoulder shall be posted before the drums are removed.

C. Vertical Panels

1. Design

All vertical panels shall meet the minimum requirements of the MUTCD (6F.66). All vertical panels shall have a minimum of 270 square inches of retroreflective area facing the traffic and be a minimum thirty-six inches (≥ 36”) high. For all projects let June 2018 and afterward, the vertical panel shall be in addition a minimum eight inches (≥ 8”) wide with a stripe width of six inches (6”) – white/fluorescent orange.

2. Application

Vertical panels with retroreflectivity less than type VI can only be used when traffic drums reduce the travel lane to less than ten feet (≤ 10’); vertical panels shall be used to restore the travel lane to ten feet (≥ 10’) or greater. No other application of vertical panels with retroreflectivity less than type VI will be permitted.

Vertical panels with a minimum type VI retroreflectivity and six inch (6”) stripe may be used for longitudinal channelization in the activity zone where work takes place for short-term stationary lane closures and intermediate-term stationary lane closures. They can be used for lane closures lasting three (3) days and with Engineer approval up to seven (7) days. They shall not be used in the transition zone including the tapers and the tangent lengths between tapers.

D. Cones

1. Design:

All cones shall be a minimum of twenty-eight inches (≥ 28”) in height regardless of application and shall meet the requirements of the MUTCD (6F.64).

Retroreflectivity may be be deleted from all cones.

2. Application

On interstate cones shall be prohibited. On all other routes 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 on the worksite during nighttime.

Cones may be used for daytime flagging operations including tapers at flagging stations.

E. Barricades

1. Design

Type 3 barricades shall meet the minimum requirements of the MUTCD (6F.68). The Contractor has the option of choosing Type 3 barricades from the QPL-34 or the Contractor may utilize generic barricades that are approved by the Federal Highway Administration (FHWA). When barricades have been specifically crash tested with signs attached, the contractor has the responsibility to 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.

2. Application

Type 3 barricades shall be placed as required by the plans, the Standards, and as directed by the Engineer.

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.

F. Warning Lights

1. Design

All warning lights shall meet the requirements of the MUTCD (6F.83).

2. Application:

a. Type A low-intensity flashing lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer.

b. Type C Steady-Burn lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer.

150.2.05 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.

150.2.06 Guardrail

Guardrail shall comply with Section 641. Guardrail and the guardrail standards.

When the removal and installation of guardrail is required, as a part of the work, the following time restrictions shall apply unless modified by the special conditions:

From the time that the existing guardrail or temporary positive barrier protection is removed, the Contractor has fourteen (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 twenty feet (20’). The guardrail blunt end is to be treated as a fix object and shall be projected. The maximum length of rail that can be removed at any time without being replaced with positive barrier protection is a total of 2000 linear feet of existing rail or the total length of one run of existing rail, whichever is less. Based on existing field conditions, the Engineer may review the work and require that the guardrail be installed earlier than the maximum time allowed.
The contractor shall install new guardrail, such that traffic exposure to fixed objects is minimized. Within the same workday, temporary attenuators, as defined in Subsection 150.2.10, should be installed on the approach to fixed objects that can’t be protected with guardrail. Truck mounted attenuators may be used to shield exposed fixed objects for periods not to exceed fourteen (14) days. No separate payment will be made for truck mounted attenuators, attenuators, or other methods unless provided for in the contract.

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 work require that the lap of the guardrail be changed, this work shall be completed before the roadway is opened to traffic. The work to change the lap of any guardrail shall be included in Traffic Control-Lump Sum.

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.

Failure to comply with the above time and quantity restrictions shall be considered as non-compliance under Subsection 150.5.01.

150.2.07 Interim Signs

A. Posts

Permanent mounting height to the bottom of sign shall be seven (7) feet – eight (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 interim signs should be square tubular post meeting the requirements of Section 911, QPL-35, and Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail). Ground mounted sign(s) greater than 48” wide shall be mounted on two posts. For barrier mounted sign, single post mount is allowed. The post(s) shall not extend beyond the top of the sign(s). The sign(s) shall be substantially plumbed and leveled.

Galvanized U-Channel post can be used in lieu of square tubular posts until December 31, 2019. The U-Channel post shall meet the requirements of Section 911. Ground mounted sign(s) greater than nine (9) square feet shall be mounted on two posts. All posts replaced or installed on or after January 01, 2020 shall be square tubular posts.

Unprotected interim 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 four 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.
**B. Sign Blanks and Panels**

All TTC sign blanks and panels should conform to Section 912 of the Specifications. 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 contract, specifications, plans, and/or directed by the Engineer, sign sizes are according to the following:

1. All construction signs sizes should follow the dimensions provide in MUTCD Table 6F-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.

3. Permanent signs used for staging shall be according to plans.

Plywood blanks or panels will not be permitted.

The use of flexible signs will not be permitted.

For utility work not included in the contract, the utility contractor may use flexible signs within the project limits.

**150.2.08 Pavement Markings**

All temporary traffic striping shall conform to the requirements of Section 652, Section 653, Section 657, Section 658, Section 659, and QPL-46.
A. **All Traffic Striping for 45 Days or Less (≤45 Days)**

   All traffic striping that will be in place for 45 days or less shall be 4 inches or greater in width.

B. **All Temporary Striping Beyond 45 days (>45 Days)**

   All traffic striping applied on intermediate surfaces shall be a minimum 5 inches in width or as shown on plans. On final surfaces when temporary striping will be overlaid or eradicated, the temporary striping shall be a minimum 5 inches in width.

C. **All Temporary Traffic Striping on Final Surface**

   All temporary traffic striping applied to final surfaces which will not be overlay or grinded may be 4 inches in width or as shown on the plans.

150.2.09 **Portable Changeable Message Signs**

   Unless specified as a paid item in the contract, the use of a portable changeable message sign will not be required. When specified, a portable changeable message sign (PCMS) shall meet the minimum requirements of Section 632, MUTCD (6F 60) 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. When used as an advanced device, the PCMS should 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 that meet the requirement of Subsection 150.2.04.B. The drum spacing shall not exceed a maximum of ten (10’) feet as shown in Detail 150-B. When the PCMS is within twenty (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.

**150.2.10 Portable Impact Attenuators**

This work consists of the furnishing (including spare parts), installation, maintenance, relocation, reuse as required, and removal of Portable Impact Attenuator Units/Arrays.

Portable Impact Attenuator Unit/Arrays installation shall conform to the requirements of Section 648, Manufacturer’s recommendations and Georgia Standard 4960 “Temporary Barrier (End Treatment Options)” and shall be installed at locations designated by the Engineer, and/or as shown on the plans. When gating attenuators are used, the contractor 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 can be used in appropriate locations.

The test level of protection provided shall equal or exceed the speed limit. Test level 3 shall be used for forty-five (45) mph or above.

**150.2.11 Portable Temporary Traffic Control Signals**

The use of Portable Temporary Traffic Control Signals shall meet the following minimum requirements:

Only two-lane, two-way roadways will be allowed to utilize Portable Temporary Traffic Control Signals.

All portable traffic control 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 twelve (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 seventeen (17’) feet above and not more than nineteen (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 eight (8’) feet but not more than (15’) feet above the pavement grade at the center of the highway.

Advance warning signage 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 Worksite Traffic Control Supervisor. 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 Worksite Traffic Control Supervisor (WTCS) shall continuously monitor the portable traffic control signal to insure 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 calendar days continuously.

The Contractor shall have an alternate temporary traffic control plan in the event of failure of the signal.

150.2.12 Raised Pavement Markers

Raised pavement markers (RPMs) shall meet the requirements of Section 654 and QPL-76.

150.2.13 Rumble Strips

Rumble strips incorporated into the work shall meet the requirements of Section 429 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:

Intermediate surfaces that will be in use for more than forty-five (45) calendar days shall have rumble strips reinstalled on the traveled way in the area of a stop condition. Non-refundable deductions in accordance with Subsection 150.5.01 will be assessed for any intermediate surface in place for greater than 45 days without rumble strips.

Rumble strips shall be installed on the final surface within fourteen (14) calendar days of the placement of the final surface in the area of the stop condition. Failure to install within fourteen (14) calendar days will result in assessment of non-refundable deductions in accordance with Subsection 150.5.01.

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” X 48” (W3-1) signs are in place. When the rumble strips have been reinstalled, these warning signs should be promptly removed and any existing signage placed back in service.

150.2.14 Temporary Barriers

A. Design:

Temporary barriers shall meet the requirements of Sections 620. The lengths of advancement should be in accordance with Georgia Standard 4000W “Lengths of Advancement, Clear Zone Distances, and Fill Height Embankment”. The
approach end of the taper should have 10:1 or flatter ground slope. Temporary barriers shall not be used as a channelization device. Their use is in accordance with MUTCD (6F.85).

B. Application:

Temporary barriers shall be placed as required by the plans, standards, and as directed by the Engineer. When Temporary barrier is located twenty feet (≤ 20’) or less from a travel lane, yellow reflectors shall be fixed to the top of the barrier at intervals not greater than forty feet (≤ 40’) in the longitudinal section and twenty feet (20’) in the taper section and shall be mounted approximately two inches (2”) above the barrier. If both lanes of a two-lane two-way roadway are within twenty feet (≤ 20’) or less of the barrier then the reflectors shall be installed for both directions of traffic.

The reflectors shall be hundred (100) square inches (ASTM Type VII or VIII/Type XI) reflective sheeting mounted on flat-sheet blanks. The reflectors shall be mounted approximately two inches above the top of the barrier. 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 forty feet (<40’), portable barrier should be used as a separator.

150.2.15 Temporary Guardrail Anchorage- Type 12

This work consists of the furnishing, installation, maintenance and removal of Temporary Guardrail Anchorage- Type 12 used for Portable Barrier or temporary guardrail end treatment. Materials used in the Temporary Guardrail Anchorage- Type 12 shall meet the requirements of Section 641 of the Specifications and current Georgia Standards and may be new or used. Materials salvaged from the Project, which meet the requirements of Standards, may be utilized if available. The use of any salvaged materials will require prior approval of the Engineer.

Installation of the Temporary Guardrail Anchorage- Type 12 shall conform to the requirements of the Plans, current Georgia Standards and Section 641 of the Specifications. Installation shall also include sufficient additional guardrail and appurtenances to effect the transition and connection to Temporary Concrete Barrier as required by the details in Georgia Standard 4960 “Temporary Barrier (End Treatment Options)”.

150.2.16 Temporary Traffic Signals

Temporary traffic signals shall meet the requirements of Section 647 and the MUTCD.

150.3 Construction Requirements

150.3.01 General

A. Implementation Requirements

No work shall be started on any project phase until the appropriate traffic control devices have been placed in accordance with the Project requirements. Changes to traffic flow shall not commence unless all labor, materials, and equipment necessary to make the changes are available on the Project.

When any shift or change is made to the location of traffic or to the flow patterns of traffic, including pedestrian traffic, the permanent safety features shall be installed and fully operational before making the change. If staging or site conditions prevent the installation of permanent features then the equivalent interim devices shall be utilized. This 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. The cost of performing this work shall be included in Traffic Control-Lump Sum.
Any section of the work that is on a new location shall have all permanent safety features installed and fully operational before the work is opened to traffic. Safety features shall include, but are not limited to the following items:

1) Guardrails including anchors and delineation with properly lapped panels
2) Impact attenuators
3) Traffic signals
4) Warning devices
5) Pavement markings including words, symbols, stop bars, and crosswalks
6) Roadway signs including regulatory, warning, and guide

Outdoor lighting shall be considered as a safety feature for welcome centers, rest areas, and weigh station projects. For typical roadway type projects, new street lighting is not considered a safety feature, unless specifically noted in the plans or in the special conditions.

B. Maintenance of Traffic Control Devices

Traffic control devices shall be in acceptable condition when first erected on the project and shall be maintained in accordance with Section 104 throughout the construction period. All unacceptable traffic control devices shall be replaced within twenty-four (24) hours. 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 within seven (7) calendar days after time charges are stopped or pay items are complete. If traffic control devices are left in place for more than ten (10) calendar days after completion of the Work, the Department shall have the right to remove such devices, claim possession thereof, and deduct the cost of such removal from any monies due, or which may become due, the Contractor.

C. Traffic Interruption Restrictions

The Department reserves the right to restrict construction operations when, in the opinion of the Engineer, the continuance of the Work would seriously hinder traffic flow, be needlessly disruptive or unnecessarily inconvenience the traveling public. The Contractor shall suspend and/or reschedule any work when the Engineer deems that conditions are unfavorable for continuing the Work.

Advanced notification requirements to the Contractor to suspend work will be according to the events and the time restrictions outlined below:

Incident management - No advanced notice required

Threatening/Inclement weather – twenty-four (24) hours

Holiday, sporting events, unfavorable conditions - Three (3) calendar days

If the work is suspended, the Contractor may submit a request for additional contract time as allowed under Section 108. The Department will review the request and may grant additional contract time as justified by the impact to the Contractor’s schedule. Compensation for loss of productivity, rescheduling of crews, rental of equipment or delays to the Contractor’s schedule will not be considered for payment. Additional contract time will be the only consideration granted to the Contractor.

D. Work Zone Restrictions

1. Interstate

The Contractor should not simultaneously perform work on both the inside shoulder and outside shoulder on either direction of traffic flow when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile of distance.

2. Non-Interstate Divided Highways
The Contractor should not simultaneously perform work on both the inside shoulder and outside shoulder on either direction of traffic flow when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile distance in rural areas or at least 500 feet of distance in urban areas.

3. Non-Divided Highways

   a. The Contractor should not simultaneously perform work on opposite sides of the roadway when the work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile of distance in rural areas or at least 500 feet of distance in urban areas.

   b. On two-lane projects where full width sections of the existing subgrade, base or surfacing are to be removed, and new base, subgrade, or surfacing are to be constructed, the Contractor should 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 workday or before opening all the roadway to traffic.

E. Work Zone Geometric Restrictions

There should be no reduction in the total number of available traffic lanes including turning lanes that existed prior to construction, except as specifically allowed by the Contract and as approved by the Engineer.

Travel lane Clearances: All portions of the work should maintain the following minimum requirements:

Horizontal: The combined dimensions of the paved shoulder and the roadway surface remaining outside the Work Zone should be no less than sixteen feet (≥ 16’) in width at any location.

Vertical: The overhead clearance should not be reduced to less than fifteen feet (≥ 15’) at any location.

The restrictions above apply to all shifts, lane closures, on-site detours and off-site detours whether shown in the contract or proposed by the Contractor. It shall be the responsibility of the Contractor to verify that these minimum requirements have been met before proceeding with any phase of the Work. Two-lane, two-way roadways may have temporary horizontal restrictions of less than sixteen feet (≥ 16’) during flagging operations. The minimum horizontal clearance should be restored before the flagging operation is removed.

F. Clear Zone

At the end of the workday, all equipment, materials, and TTC devices not in use should be moved out of the clear zone or behind positive protection. 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 six (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 five feet (≥ 5’) from the face of the guardrail and not in the recovery zone of the anchor.

The Worksite Traffic Control Supervisor (WTCS) shall monitor the 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.

G. Milled Surface Restrictions

Unless modified by the special conditions, a milled surface on any asphaltic concrete surface shall not be allowed to remain open to traffic for a period of time that exceeds thirty (> 30) calendar days.

H. Construction Vehicles

The Contractor’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 Contractor may submit a plan requesting that construction traffic be allowed to travel in the opposite direction of normal traffic when it would be desirable to modify traffic patterns to accommodate specific construction activities.
Prior approval of the Engineer shall be obtained before any construction traffic is allowed to travel in a reverse direction. If the Contractor’s submittal is approved, the construction traffic shall be separated from normal traffic by appropriate traffic control devices.

The parking of Contractor’s and/or workers’ personal vehicles within the work area or adjacent to traffic is prohibited. It shall be the responsibility of the Worksite Traffic Control Supervisor to ensure that any vehicle present at the worksite is necessary for the completion of the work.

I. Environmental Impacts

The Contractor shall ensure that dust, mud, and other debris from construction activities do not interfere with normal traffic operations or adjacent properties.

J. Existing Street Lights

Existing street lighting shall remain lighted as long as practical and until removal is approved by the Engineer.

K. Nighttime Work Lighting

Adequate temporary lighting shall be provided at all nighttime work sites where workers will be immediately adjacent to traffic.

L. Removal/Reinstallation of Miscellaneous Items

In the prosecution of the Work, if it becomes necessary to remove any existing signs, markers, guardrail, etc. not covered by specific pay item, they shall be removed, stored and reinstalled, when directed by the Engineer, to line and grade, and in the same condition as when removed.

150.3.02 Personnel – Worker Safety Apparel

In accordance with MUTCD (6D.03) all workers, within the right-of-way who are exposed either to traffic or to work vehicles and construction equipment within the TTC zone, shall wear high-visibility safety apparel that meets the Performance Class 2 or better.

150.3.03 Signage - General

A. Signing Requirements of the Temporary Traffic Control (TTC) Plan

When existing regulatory, warning or guide signs are required for proper traffic and pedestrian control, the Contractor shall maintain these signs in accordance with the temporary traffic control (TTC) plan. The Contractor shall review the status of all existing signs, interim signs added to the work, and permanent sign installations that are part of the work to eliminate any conflicting or non-applicable signage in the TTC Plan. The Contractor’s review of all signs in the TTC plan shall establish compliance with the requirements of the MUTCD and Section 150. Any conflicts shall be reported to the Engineer immediately and the WTCS shall take the necessary measures to eliminate the conflict.

The Contractor shall make every effort to eliminate the use of interim signs as soon as the Work allows for the installation of permanent signs.

All existing illuminated signs shall remain lighted and be maintained by the Contractor.

Existing street name signs shall be maintained at street intersections.

B. Conflicting or Non-Applicable Signs

Any sign(s) or portions of a sign(s) that are not applicable to the TTC plan 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 Work shall be removed, stored and reinstalled when the Work is completed.

Failure to promptly eliminate conflicting or non-applicable signs shall be considered as non-performance under Subsection 150.5.01.

C. Removal of Existing Signs and Supports

The Contractor shall not remove any existing signs and supports without prior approval from the Engineer. All existing signs and supports which are to be removed shall be stored and protected if this material will be required later in the work as part of the TTC plan. If the signs are not to be utilized in the work then the signs will become the property of the Contractor unless otherwise specified in the contract documents.

D. 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 Contractor in accordance with the MUTCD, the Plans, Special Provisions, Special Conditions, or as directed by the Engineer. These signs shall remain the property of the Contractor. When the signs are used for long-term stationary operations as defined MUTCD (6G.02), the bottom of all interim signs shall be mounted seven feet (7’) to eight feet (8’) above the level of the pavement edge or sidewalk. The signs offset should be six feet (6’) to twelve feet (12’) from the pavement edge or two feet (≥ 2’) minimum for sidewalks according to MUTCD (6F-1). Special Conditions under Subsection 150.6 may modify this requirement.

Portable signs may be used when the duration of the work is less than three (3) days or as allowed by the special conditions in Subsection 150.6. Portable signs shall be used for all punch list work. Portable interim signs shall be mounted a minimum of one foot (≤ 1’) above the level of the pavement edge for directional traffic of two (2) lanes or less and at seven feet (7’) for directional traffic of three (3) or more lanes according to MUTCD (6F-2). Signs shall be mounted at the height recommended by the manufacturer’s crashworthy testing requirements.

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. Utilities and their subcontractors working in the project limits, and not included in the project contract, may use non-rigid signs.

E. 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 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 Subsection 150.3.E.2. Differing legend designs shall not be mixed in the same sign.

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 work to be performed, the Contractor shall remove the conflicting sign and reset it in a new, non-conflicting location which has been approved by the Engineer.

2. Interim Special Guide Signs

When it is not possible to utilize existing signs, either in place or relocated, the Contractor shall furnish, erect, maintain, modify, relocate, and remove new interim special guide signs in accordance with the Plans or as directed by the Engineer. 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 Part 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.
3. Interim Overhead Guide Sign Structures

Interim overhead special guide sign structures are not required to be lighted unless specifically required by the Plans. 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. The Contractor shall notify the Power Company at least thirty (30) days prior to desire connection to the power source.

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 contract, shall be accomplished as soon as practical to minimize the use of interim special guide signs. If lighting is required by the Plans, all new permanent overhead special guide signs shall be lighted as soon as erected.

F. Stop Sign Regulated Intersections

For intersections that utilize stop sign(s) to control the flow of traffic and to restrict the movement of vehicles, the stop sign(s) 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 sign(s) is permitted. If the existing intersection is 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 plan has been implemented.

Whenever the staging of the work requires that the traveled way be relocated or realigned the Contractor shall reinstall all enhanced traffic control features noted above on the newly constructed sections of the work. The cost of relocating the stop lines, stop signs, advanced warning signs, the rumble strips and the flashing beacons shall be included in the price bid for Traffic Control - Lump Sum unless individual pay items are included in the contract for rumble strips and/or flashing beacons. When pay items are included in the contract for rumble strips or flashing beacons then these items will be paid per each.

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. 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 conditions occur, then the Engineer and/or the WTCS should consider additional measures to enhance the motorist’s awareness of the changes even though the staging plans 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 seven (7’) feet in height for a short duration in order to direct additional attention to a new or relocated stop sign(s). 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 light(s) attached to the stop sign(s) 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 may be considered. The use of new rumble strips, where none previously existed, shall have the prior approval of District Traffic Operations before being included as part of the temporary traffic control plan. The message(s) displayed on any PCMS shall have the prior approval of the Engineer and the message(s) shall be included as part of the TTC plan for the interim staging.

The placement of any additional interim ground mounted signs and posts or stop lines shall be considered as incidental to the price bid for Traffic Control - Lump Sum. The installation of rumble strips, flashing beacons or the use of Portable Changeable Message Signs (PCMS) shall be considered as Extra Work unless pay items are included in the contract.

G. Low Shoulder Signage

1. Low Shoulder for Construction/Reconstruction/Resurfacing Projects
“Low Shoulder” (W8-9) signs shall be erected when a difference in elevation less than four (< 4’) feet from the traveled way, exceeds one inch (> 1”) but does not exceed three inches (≤3”) between the travel lane and any type of shoulder. The spacing of the signs shall not exceed one (1) mile and the signs shall be placed immediately past each crossroad intersection. The “Low” 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 thirty (30) calendar days. These signs shall be furnished, installed, maintained and removed by the Contractor as part of Traffic Control-Lump Sum. These signs shall be fluorescent orange with black borders.

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 four feet (< 4’) from the traveled way, exceeds three inches (> 3”) and is not protected by positive barrier protection. These warning signs shall be placed in advance of the drop-off.

The spacing of the signs shall not exceed one (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 thirty (30) calendar days. These signs shall be furnished, installed, maintained, and removed by the Contractor as part of Traffic Control-Lump Sum. These signs shall be black borders on fluorescent orange background.

H. Bump Signage

A bump sign (W8-1) shall be utilized when a transverse joint in the pavement structure has a vertical difference in elevation of three quarters (≥ 3/4") of an inch 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.

The W8-1 sign shall be placed sufficiently in advance to warn the motorist of the condition.

I. 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 TTC plan. 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 limits of the project. 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 TTC plan.

150.3.04 Advance Warning Signs

A. Project Signs - All Type of Highways

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 FEET, 1000 FEET, AND 500 FEET).

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 signage.

1. State Routes

Advanced Warning Signs on State Routes shall be a minimum dimension of forty-eight inches by forty-eight inches (48” x 48”). When a State Route intersects a project 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 (1500 ft., 1000 ft., 500 ft.). The termination end of an intersecting State Route shall have END ROAD WORK signage.

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 work. If a project has multiple individual worksites within the overall limits of the project, each site should be signed individually if the advance warning signs for each site can be installed without overlapping an adjacent worksite. As soon as the work is completed at any individual site, the warning signs shall be removed from that site. Clean-up work and punch list work shall be performed with portable signage.

Project mileage indicated on the G20-1 sign shall be the actual project mileage rounded up to the nearest whole mile. Projects less than two (< 2) miles in length or individual worksites that are part of a multiple worksite project may delete this sign. The G20-1 sign shall be forty-eight inches by twenty-four inches (48” x 24”) and the G20-2 sign shall be forty-eight inches by twenty-four inches (48” x 24").

2. Interstate, Limited Access and Multilane Divided Highways

In addition to the W20-1 signs required at 500 ft., 1000 ft. and 1500 ft., multi-lane divided highways shall also have additional advanced warning signs installed with the legend “ROAD WORK (2 MILES, 1 MILE and 1/2 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 half (½) mile, one (1) mile and two (2) mile advanced warning signs cause an overlap with other work or do not benefit field conditions then the Engineer may review the use of these signs and eliminate their installation. When the posted speed limit is fifty (≤ 50) mph or less, the one-half (½) mile, one (1) mile and two (2) mile signs should be eliminated especially in urban areas.

The W20-1 advance warning signs for ROAD WORK 500 FEET; 1000 FEET; and 1500 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, 1000 and 1500 feet signs are temporarily covered.

When the temporary traffic control zone already has advanced warning (W20-1) signs installed the W20-1 signs required for lane closures under Standard 9106 should be eliminated.

3. 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 worksites, 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: 1500 ft./1000 ft./500 ft.) 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 forty-eight inches by forty-eight inches (48” x 48") “ROAD WORK AHEAD” (W20-1) with an “ON RAMP” plaque (W13-4p) sign 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 Subsection 150.3.11 prior to the removal of the portable (W20-1) advanced warning signs from the mainline.

B. Highway Work Zone

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. Condition 1 is when no reduction in the existing speed limit is required. 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:

1. No Reduction in the Existing Posted Speed Limit in Highway Work Zone
   a. Signage 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 1000 feet in advance of the Work Zone. If no speed reduction is required, it is recommended that the HWZ-2 be placed at 750 feet from the work area between the ROAD WORK 500 FT. and the ROAD WORK 1000 FT. signs. HWZ-2 signs shall be placed at intervals not to exceed one 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.
   b. The existing speed limit shall be posted at the beginning of the Work Zone. Existing Speed Limit signs (R2-1) shall be maintained.
   c. Intersecting state routes shall be signed in advance of each intersection with the Work Zone with a HWZ-2 sign to warn motorists that increased fines are in effect. All other intersecting roadways that enter into a designated Highway Work Zone may 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 signage may be removed.
   d. 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.
   e. When a designated Highway Work Zone is no longer necessary, all signs shall be removed immediately.

2. Reducing the Speed Limit in a Highway Work Zone
   Highway Work Zone signs shall be posted as required in Condition 1 above in accordance with Detail 150-C.
   A “Reduce Speed Limit Ahead” (W3-5) sign shall be posted 600 feet prior to the reduced speed limit.
   Then a “Speed Limit” signage (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:
   a. on non-interstate roads after every junction with a numbered (state or U.S.) route.
   b. on interstates entrance ramp 1,500 feet from the end of the entrance taper. Detail 150-D
   c. on non-interstate and interstate a maximum spacing of no greater than one (1) mile apart.
On 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.
For limited access (interstate) highways and controlled access multi-lane divided highways, the posted speed limit shall be reduced as required below.
When any one or more of the following conditions exist and the existing speed limit is sixty-five (65) mph or seventy (70) mph, the speed limit shall be reduced by ten (10) mph. If the existing speed limit is sixty (60) mph, the speed limit should be reduced by five (5) mph. If the existing speed limit is fifty-five (≤ 55) mph or less, the Contractor can
only reduce the speed limit with the prior approval of the Engineer. The reduction in the speed limit shall be no greater than ten (10) mph:

a) Lane closure(s) of any type and any duration.
b) The difference in elevation exceeds two inches (> 2”) adjacent to a travel lane as shown in Subsection 150.3.11, Detail 150-E, Detail 150-F.
c) Any areas where equipment or workers are within ten feet (10’) of a travel lane.
d) Temporary portable concrete barriers located less than two feet (2’) from the traveled way.
e) As directed by the Engineer for conditions distinctive to this project.

When the above conditions are not present, 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.

At a minimum, the following records shall be kept by the WTCS:

a) Identify the need for the reduction.
b) Record the time of the installation and removal of the temporary reduction.
c) Fully describe the location and limits of the reduced speed zone.
d) Document any accident that occurs during the time of the reduction.

A copy of the weekly records for reduced speed zones shall be submitted to the Engineer.

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 contractor may reduce the posted speed limit with the prior approval of the Engineer.

3. Variable Speed Limit Zones

Projects that are within or extends into variable speed limit zones shall be posted according to condition 1 with HWZ-1, HWZ-2, and HWZ-3 signs. No additional “speed limit” signs, (R2-1), shall be posted. Any reduction or increase in speed limits will be controlled by the normal operation of the variable speed limit system.

Upon request, a maximum speed limit of fifty-five (55) mph **may** be set for the project limits.
WORK ZONE
SPEEDING FINES INCREASED
MINIMUM FINE $100

COLORS
TOP PANEL
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - FLUORESCENT ORANGE

MIDDLE & BOTTOM PANELS
LEGEND & BORDER - BLACK
BACKGROUND - WHITE

NOTES:
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.
COLORS

TOP PANEL
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - FLUORESCENT ORANGE

BOTTOM PANEL
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE

NOTES:
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.
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
- 600 FT - 500 FT

HWZ - 2 Sign

SPEED LIMIT

48" X 48"

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.

Original Speed Limit

Detail 150 - C

Speed Limit Reduction for Highway Work Zone

At Entrance Ramp for Interstates

Signing Shall Be Double Indicated

1,500 FT

Traffic

Detail 150 - D
C. Installation/Removal of Work Area Signage

No payment will be made for Traffic Control-Lump Sum until the Work has actually started on the project. The installation of traffic control signage does not qualify as the start of work. Advanced warning signs shall not be installed until the actual beginning of work activities. Any permanent mount height signs installed as the work is preparing to start shall be covered until all signs are installed unless all signs are installed within seven (≤ 7) calendar days after beginning installation.

All temporary traffic control devices shall be removed as soon as practical when these devices are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate, shall be removed or covered.

All construction warning signs shall be removed within seven (≤ 7) calendar days after time charges are stopped or pay items are complete. If traffic control devices are left in place for more than ten (> 10) calendar days after completion of the Work, the Department shall have the right to remove such devices, claim possession thereof, and deduct the cost of such removal from any monies due, or which may become due, the Contractor.

PUNCH LIST WORK: 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 the Engineer to remain in place while the punch list work is in progress.

Failure to promptly remove the construction warning signs within the seven (7) calendar days after the completion of the Work or failure to remove or cover signs when work is suspended for short periods of time shall be considered as non-performance under Subsection 150.5.01.

150.3.05 Shoulder/Lane Closures

A. Approval/Restrictions

All shoulder closures and lane closures of any type or duration shall have the prior approval of the Engineer.

1. Closure Length

The length of a shoulder closure and a lane closure shall not exceed two (2) miles in length excluding the length of the tapers unless the prior approval of the Engineer has been obtained. The Engineer may extend the length of the closure based upon field conditions; however, the length of a work zone should be held to the minimum length required to accomplish the Work. Shoulder closure and Lane Closures shall not be spaced closer than one mile. The advanced warning signs for the project should not overlap with the advanced warning signs for lane shifts, lane closures, etc.

2. Duration

The first (7) calendar days in an Urban area and the first three (3) calendar days in a Rural area of any lane closure shall be signed and marked as per 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”. However, lane closures that exist for a duration longer than three (> 3) calendar days may be signed and marked as per the details in Georgia Standard 9121 “Tapers, Signs, and Markings for Passing Lanes”, provided the prior approval of the Engineer is obtained. The approved lane drop shall utilize a Portable Message Board (PCMS) and 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. Drums may be substituted for the Type I Crystal Delineators at the same spacing.

B. Shoulder Closures

In accordance with MUTCD 6G.07, when paved shoulders, having a width of eight feet (≥ 8’) or more are closed, at least one (1) advance warning sign shall be used. The sign(s) should read SHOULDER CLOSED (W21-5a). The signs are only posted on the side with the shoulder closure. Where the downstream end of the shoulder closure extends beyond the distance
that can be perceived by road 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 closure. For multi-shoulder closures, the Shoulder Closed sign shall be repeated after two (2) miles at 500 feet
prior to the next shoulder closure.

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 positive barriers are used to closed the shoulder, the taper and drums shall be in accordance with Standard 4960,
Temporary Barrier (End Treatment Options). The approach end of the barrier taper should be 10:1 or flatter slope.

C. Lane Closure

1. Advance Warning Signs

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 temporary traffic control zone already has advanced warning (W20-1) signs installed the W20-1 signs
required for lane closures under Standard 9106 and 9107 should be eliminated.

For Interstate, Limited Access and Multi-lane Divided Highways, an additional Portable Changeable Message Sign
(PCMS) shall be placed one (1) mile in advance of a lane closure with a message denoting the appropriate lane closure
one (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.

At the discretion of the Engineer, the Contractor may start placing advance warning signs a half-hour (1/2 hr.) prior
to the lane closure.

2. Transition Area – Taper

Drums shall be used on all transition tapers. If traffic drums with retroreflectivity of less than type VI are used for a
merge taper that exists into the night, all drums located in the taper shall have, for the length of the taper only, a six
inch (6”) fluorescent orange (ASTM Type VI, VII, VIII, IX or X) reflectorized top stripe on each drum. The top six
inch (6”) stripe may be temporarily attached to the drum while in use in a taper. The Engineer may allow the
fluorescent orange reflectorized six inch (6”) top stripe on each drum in a merging taper to remain in place during
daylight hours provided there is a lane closure(s) with a continuous operation that begins during one nighttime period
and ends during another nighttime period. All drums that have the six inch (6”) top stripe permanently attached shall
not be used for any other conditions.

In accordance with MUTCD (6C.08), the minimum length for a merging taper for a lane closure on the travel way
shall be as shown in Table 150-1:
### TABLE 150-1

<table>
<thead>
<tr>
<th>Posted Speed Limit, MPH</th>
<th>Lane Width 9 Feet</th>
<th>Lane Width 10 Feet</th>
<th>Lane Width 11 Feet</th>
<th>Lane Width 12 Feet</th>
<th>Maximum Drum Spacing in Tapers, (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Taper Length (L) in Feet</td>
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<td></td>
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<tr>
<td>20</td>
<td>60</td>
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<td>75</td>
<td>675</td>
<td>750</td>
<td>825</td>
<td>900</td>
<td>75</td>
</tr>
</tbody>
</table>

If site conditions require a longer taper, then the taper shall be lengthened to fit particular individual situations.

The length of shifting tapers should be at least one-half (1/2) L.

**Multiple Lane Closures:**

a. A maximum of one (1) lane at a time shall be closed with each merge taper.

b. A minimum tangent length of two (≥ 2) L shall be installed between each individual lane closure taper. The tangent length is part of the transition area. Therefore, only traffic drums can be used in the tangent.

3. **Activity Area**

The activity area consists of a buffer and the work space. *Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”* 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”

*Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”* requires a fifty feet (50’) buffer. The buffer shall be increased for horizontal or vertical curves due to sight distance considerations”

The channelization devices are spaced at a maximum of eighty feet (80’).

4. **Termination Area**

*Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”* requires a 150 feet buffer and a minimum 200 feet downstream taper.

*Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”* requires 150 feet downstream taper.

**D. Removal of Lane Closures**

To provide the greatest possible convenience to the public in accordance with Section 107, the Contractor shall remove all signs, lane closure markings, and devices immediately when lane closure work is completed or temporarily suspended for any length of time or as directed by the Engineer. All portable signs and portable sign mounting devices shall be removed from the roadway to an area which will not allow the sign 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.
E. **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 will 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, drums spacing shall be decreased to ten feet (10’) for 200 feet in advance of the temporary gore, and be decreased to ten feet (10’) for the first 100 feet of the temporary gore, and throughout the exit ramp. For on-ramps, drums should be used 200 feet prior to the ramp 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.

### 150.3.06 Traffic Pacing Method

**A. Pacing Of Traffic**

With prior approval from the Engineer, traffic may be paced allowing the Contractor up to twenty (20) minutes maximum to work in or above all lanes of traffic for the following purposes:

1. Placing bridge members or other bridge work.
2. Placing overhead sign structures.
3. Other work items requiring interruption of traffic.

The Contractor shall provide a uniformed law enforcement officer with patrol vehicle and blue flashing light for each direction of pacing. The law enforcement officer, Engineer, and flaggers at ramps shall be provided with a radio which will provide continuous contact with the Contractor.

When ready to start the work activity, the law enforcement vehicle will act as a pilot vehicle slowing the traffic, thereby providing a gap in traffic allowing the Contractor to perform the 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 should be opened after the law enforcement vehicle has passed.

Pilot vehicles shall travel at a safe pace speed. The Contractor shall provide a vehicle to proceed in front of the law enforcement vehicle and behind the other traffic in order to inform the Contractor’s work force when all vehicles have cleared the area.

Traffic should not be permitted to stop during pacing unless approved by the Engineer.

**B. 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 Contractor shall place a portable changeable message sign with the message “TRAFFIC SLOWED AHEAD EXPECT SHORT DELAY”.

### 150.3.07 Flagging Operations

**A. Flaggers**

Flaggers shall be provided as required to handle traffic, as specified in the Plans or Special Provisions, and as required by the Engineer.

**B. 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:

National Safety Council  
American Traffic Safety Services Association (ATSSA)
Failure to provide certified flaggers as required above shall be reason for the Engineer suspending work involving the flagger(s) until the Contractor provides the certified flagger(s). Flaggers shall have proof of certification and valid identification (photo I.D.) available any time they are performing flagger duties.

C. 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 (6F.82). They shall use a Stop/Slow paddle meeting the requirements of the MUTCD (6E.03) for controlling traffic. The Stop/Slow paddles shall have a shaft length of seven feet (≥ 7') 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 (6E.03). The flag shall, as a minimum, be twenty-four inches (≥ 24") square and red or red/orange in color.

D. 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.

E. Pilot Vehicle Requirements

Pilot vehicles should 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 (6C.13).

F. Automated Flagger Assistance Devices

The Contractor may request, in writing, the use of Automated Flagger Assistance Devices (AFAD). The equipment shall meet the requirements of MUTCD (6E.04). As a part of this request, the Contractor shall also submit an alternate temporary traffic control plan 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 Contractor shall obtain the approval of the Engineer before the use of any AFAD will be permitted.

G. Portable Temporary Traffic Control Signals

The Contractor 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, Section 647, and subsection 150.2.11. As a part of this request, the Contractor shall also submit an alternate temporary traffic control plan 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 Contractor shall obtain the approval of the Engineer before the use of any portable temporary traffic control signals will be permitted.

150.3.08 Traffic Signals

A. Responsibility/Cost

If the sequence of operations, staging, or the temporary traffic control plan requires the relocation or shifting of any components of an existing traffic signal system then any work on these traffic signals will be considered as part of Traffic Control – Lump Sum.

B. Law Enforcement Officer Requirement

In accordance with Georgia law § 40-6-20, law enforcement officers shall be used to regulate and maintain traffic control at functioning signalized intersections when lane closures or traffic shifts block or restrict movements causing interference with road user flows and will not allow the activated traffic signal to guide the traffic through the signal site.
150.3.09 Mobile Operations

A mobile operation is defined by a minimum speed of three (3) mph. When pavement markings (centerlines, lane lines, and edge lines) are applied in a continuous operation by moving vehicles and equipment, the following minimum equipment and warning devices shall be required. These devices and equipment are in addition to the minimum requirements of the MUTCD.

All vehicles shall be equipped with the official slow moving vehicle symbol sign. All vehicles shall have a minimum of two (2) 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 a minimum height of forty-eight inches (48”) above the pavement. All sign legends shall be covered or removed from view when work is not in progress.

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 should operate in the caution mode.

The work vehicle(s) applying markings shall have an arrow panel mounted on the rear. The arrow panel should typically operate in the caution mode. The work vehicle placing cones shall follow directly behind the work vehicle applying the markings.

A protection vehicle shall follow the last work vehicle at all times and shall be equipped with a truck mounted attenuator that shall be certified for impacts not less than sixty-two (62) mph in accordance with MASH/NCHRP350 Test Level Three (3).

150.3.10 Pavement Markings

A. 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 section. No passing zones shall be marked to conform to Subsection 150.3.10.D.1.b. During construction and maintenance activities on all highways open to traffic, both existing markings and markings applied under this Section shall be fully maintained until Final Acceptance. If the pavement markings are, or become, unsatisfactory in the judgment of the Engineer due to wear, weathering, or construction activities, they shall be restored immediately.

Markings on the final surface course, which must be removed, shall be a removable type. The Contractor will be permitted to use paint, thermoplastic, or tape on pavement which is to be overlaid as part of the project, unless otherwise directed by the Engineer. Partial (skip) reflectorization (i.e. reflectorizing only a portion of a stripe) will not be allowed.

1. Resurfacing Projects

Pavement markings shall be provided on all surfaces that are placed over existing markings. Interim and final markings shall conform in type and location to the markings that existed prior to resurfacing unless changes or additions are noted in the Contract. The replacement of parking spaces will not be required unless a specific item or note has been included in the Contract. Any work to make additions to the markings that existed prior to resurfacing is to be considered as extra work.

2. Widening And Reconstruction Projects

If the lane configuration is altered from the preconstruction layout then pavement markings will be as required by the plans or the Engineer.

3. New Location Construction Projects

Pavement marking plans will be provided.
B. Installation and Removal of Pavement Markings

1. Installation

All pavement markings, both interim and permanent, shall be applied to a clean surface. The Contractor shall furnish the layout and preline the roadway surface for the placement of pavement markings applied as part of the temporary traffic control plan. All interim marking tape and RPM’s on the final surface shall be removed prior to the placement of the final markings.

The Contractor shall sequence the work in such a manner as to allow the installation of markings in the final lane configuration at the earliest possible stage of the work.

2. Removal

Markings no longer applicable shall be removed in accordance with Section 656. The elimination of conflicting pavement markings by overpainting with unapproved paint or any type of liquid asphalt is not acceptable.

3. Intermediate Surface

Interim markings shall be removed by methods that will cause minimal damage to the pavement surface, while also ensuring that traveling public 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 the Engineer.

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 approval of the Engineer. Any damage to the final pavement surface caused by the pavement marking removal process shall be repaired at the Contractor’s expense by methods acceptable and approved by the Engineer. Section 400 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 interim traffic marking tape that can be removed without any blemishing of the final surface. Interim traffic marking tape shall be used on any of the following final surfaces; asphaltic concrete, Portland cement concrete, and bridge deck surfaces. The contractor may propose alternate traffic markings and removal methods on the final surface. Submitted proposals shall include the type of material, method of removal and a cost comparison to the traffic marking tape method. Prior to any approval, the contractor shall field demonstrate to the satisfaction of the Engineer that the proposed traffic markings can be removed without any blemishing of the final surface. If the proposal is determined to be acceptable, a supplemental agreement will be executed prior to the installation of the proposed alternate traffic markings. The supplemental agreement shall denote the type of traffic marking materials, method of removal and any cost and/or time savings to the Department. The Department will not consider or participate in any cost increase that may result from implementing the proposed alternate method.

5. Pay Factor Reduction for Asphaltic Concrete Final Surfaces

When the correction of an error in the layout of the final pavement markings requires the final surface to be grounded, blemished, scarred, or polished the pay factor shall be reduced to 0.95 for the entire surface area of the final topping that has a blemish, polished or a scarred surface. The reduced pay factor shall not be confined to only the width and length of the stripe or the dimensions of the blemished areas, the whole roadway surface shall have the reduced pay factor applied. The area of the reduced pay factor shall be determined by the total length and the total width of the roadway affected. If the affected area is not corrected, the reduction in pay shall be deducted from the final payment.
for the topping layer of asphaltic concrete. The Engineer shall make the final determination whether correction or a reduced pay factor is acceptable.

The eradication of pavement markings on intermediate and final concrete surfaces shall be accomplished by a method that does not grind, polish, or blemish the surface of the concrete. The method used for the removal of the interim markings shall not spall chip the joints in the concrete and shall not damage the sealant in the joints. Any joint or sealant repairs shall be included in the bid price for Traffic Control-Lump Sum. The proposed method of removal shall have the prior approval of the Engineer.

Failure to promptly remove conflicting or non-applicable pavement markings shall be considered as non-performance under Subsection 150.5.01.

6. 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. Interim traffic marking tape shall be used as a temporary substitute for the traffic markings being removed.

Before any change in traffic lane(s) 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, when approved by the Engineer. When an asphaltic concrete overlay is placed for the sole purpose of eliminating conflicting markings and the in place asphaltic concrete section will allow, said overlay will be eligible for payment only if designated in the Plans. Overlays to obliterate lines will be paid for only once and further traffic shifts in the same area shall be accomplished with removable markings. 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 in accordance with Section 656.

C. Raised Pavement Markers

Retroreflective raised pavement markers (RPMs) should be placed as listed below for all asphaltic concrete pavements before the roadway is open to traffic, unless noted this section. On the final surface, RPM’s shall be placed according to the timeframes specified in Subsection 150.3.10.D for full pattern pavement markings. When Portland Cement Concrete is an intermediate or final surface and is open to traffic, one (1) calendar day is allowed for cleaning and drying before the installation of RPMs is required.

Raised pavement markers are not allowed on the right edge lines under any situation.

Retroreflective raised pavement markers (RPMs) should be placed and/or maintained on intermediate pavements surfaces on all highways that the final ride surface is not completed within 45 calendar days which is 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. Eighty foot (80’) center on skip lines with curvature less than three degrees. (Includes tangents)
   b. Forty foot (40’) centers on solid lines and all lines with curvature between three degrees and six degrees.
   c. Twenty foot (20’) centers on curves over six degrees.
   d. Twenty foot (20’) centers on lane transitions or shifts.

2. Supplementing Ramp Gore Lines:
   a. Twenty foot (20’) centers, two each, placed side by side.
3. Other Lines:
   a. As shown on the plans or directed by the Engineer.

D. Exceptions for Interim Markings

Some exceptions to the time of placement and pattern of markings are permitted as noted below; however, full pattern pavement markings are required for the completed project.

1. Two-Lane, Two-Way Roadways
   a. Skip Lines

   If used, interim temporary tape or paint skip (broken) stripe may only be used for a maximum of three (3) calendar days. The stripes shall be at least two feet (>2') long with a maximum gap of thirty-eight feet (≤38'). On curves greater than six degrees (>6°), a one-foot (1') stripe with a maximum gap of nineteen feet (≤19') shall be used. In lane shift areas, solid lines will be required.

   Interim raised pavement markers may be substituted for the interim skip (broken) stripes. If raised pavement markers are substituted for the two foot (2') interim skip stripe, three (3) markers spaced at equal intervals over a two feet (2') distance will be required. No separate payment will be made if the interim raised pavement markers are substituted for interim skip lines.

   Interim raised pavement markers shall be retro-reflective, shall be the same color as the pavement markers for which they are substituted, and shall be visible during daytime.

   The type of interim 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 (3) calendar days as an interim marker. Any flexible reflective markers in use shall be from the QPL-76.

   The interim raised pavement markers shall be maintained until the full pattern pavement markings are applied. At the time full pattern markings are applied the interim raised markers shall be removed in a manner that will not interfere with application of the full pattern pavement markings.

   b. No Passing Zones Two-Lane, Two-Way Roadways

   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 the Engineer. For periods not to exceed three (3) calendar 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) twenty-four inches by thirty inches (24” x 30”) at the beginning and at intervals not to exceed one-half (≤½) mile within each no-passing zone. A post or portable mounted PASS WITH CARE regulatory sign (R4-2) twenty-four inches by thirty inches (24” x 30”) 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.

   On new location projects and on projects where either horizontal or vertical alignments has been modified, the location of No-Passing Zones will be identified by the Engineer.

   c. Edge lines

   - 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 sixty (<60) calendar days except at bridge
approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edge lines shall be placed within thirty (≤30) calendar days of the time that the final surface was placed.

- All Other Types of Pavement

Edge lines will not be required on intermediate surfaces that are in use for a period of less than thirty (<30) calendar days except at bridge approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edge lines shall be placed within fourteen (≤14) calendar days of the time that the surface was placed.

2. Multi-Lane Highways – With No Paved Shoulder(s) or Paved Shoulder(s) Four Feet or Less (≤ 4’)
   a. Undivided Highways (Includes Paved Center Turn Lane)
      - Centerlines and No-Passing Barrier-Full Pattern centerlines and no-passing barriers shall be restored before opening to traffic.
      - Lane lines- Interim skip (broken) stripe as described in Subsection 150.3.10.D.1.a. may be used for periods not to exceed three (≤ 3) calendar days. Skip lines are not permitted in lane shift areas. Solid lines shall be used.
      - Edge lines- Edge lines shall be placed on intermediate and final surfaces within three (3) calendar days of obliteration.
   b. Divided Highways (Grass or Raised Median)
      - 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.
      - Centerline/Edge line- Solid lines shall be placed on intermediate and final surfaces within three calendar days of obliteration.

3. Limited Access Roadways and Roadways with Paved Shoulders Greater Than Four Feet (> 4’)
   a. Same as Subsection 150.3.10.D.2 except as noted in (b) below.
   b. Edge lines-
      - Asphaltic Concrete Pavement- Edge lines shall be placed on intermediate and final surfaces prior to opening to traffic.
      - Portland Cement Concrete Pavement- Edge lines shall be placed on any surface open to traffic no later than one calendar day after work is completed on a section of roadway. All water and residue shall be removed prior to daily striping.

4. 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 (3) calendar days on an intermediate surface. Appropriate channelization devices shall be spaced at a maximum of twenty-five feet (25’) intervals until the other stripe has been installed.

The final surface shall have both stripes placed prior to opening the ramp to traffic.

5. Miscellaneous Pavement Markings
a. Final Surface

School zones, railroads, symbols, words and other similar markings shall be placed on final surfaces conforming to Section 652 within fourteen (14) calendar days of completion of the final surface. Final markings shall conform to the type of pay item in the plans. When no pay item exists in the plans the final markings shall conform to Section 652 for painted markings.

b. Intermediate Surface

Intermediate surfaces that will be in use for more than forty-five (45) calendar days shall have the miscellaneous pavement markings installed to conform to the requirement of Section 652. Under Subsection 150.6, Special Conditions, or as directed by the Engineer these markings may be eliminated.

c. Stop Line

All stop signs and traffic signals shall have temporary twelve inch (12") stop lines placed in accordance with MUTCD (3B.16) on all surfaces prior to opening to traffic. Temporary tape may be used.

150.3.11 Differences In Elevations Between Travel Lanes And Shoulders

All time frames and requirements may be changed with the Engineer’s approval.

A. Differences in Elevations

Difference in elevations due to construction between travel lanes and/or shoulders within the clear zone should be limited to the following:

1. Difference of two inches (≤ 2") or less between adjacent travel lanes should remain for a maximum period of fourteen (14) calendar days.

2. Difference of two inches (≤ 2") or less between adjacent travel lane and paved shoulder should remain for a maximum of thirty (30) calendar days. Traffic control devices shall be in accordance with Detail 150-G.

3. Difference of greater than two inches (> 2") is permitted for continuous operations. Traffic control devices shall be in accordance with Detail 150-E.

4. Difference of greater than two inches (> 2") between travel lanes and/or shoulders for non-continuous operations will not be allowed for more than a twenty-four (24) hour period. For the first twenty-four (24) hours, traffic control shall be in accordance with Detail 150-E. After twenty-four (24) hours the section should be healed according to Detail 150-H. This condition can exist for a maximum sixty (60) calendar days.

   a. A single length of area that does not exceed 1000 feet total length may be left open as a startup area for periods not to exceed forty-eight (48) hours provided the Contractor can demonstrate the ability to complete the Work in a proficient manner. Prior approval of the Engineer shall be obtained before any startup area may be allowed.

   b. For cement stabilized base, work adjacent to the travel lane and/or shoulders shall be healed as per Detail 150-H within forty-eight (48) hours after the seven (7) calendar day curing period is complete for each section placed. During the placement and curing period, traffic control shall be in accordance Detail 150-E.

Failure to meet these requirements shall be considered as non-performance of Work under Subsection 150.5.01.

B. Healed Section

Healed section and traffic control devices should be placed in accordance with Detail 150-H. If crushed stone materials are used to provide a healed section no separate payment will be made for the material used to heal any section. The
Contractor may submit a plan to utilize existing pay items for crushed stone provided the plan clearly demonstrates that the materials used to heal an area will be incorporated into the work with minimal waste. Handling and hauling of any crushed stone used to heal shall be kept to a minimum. The Engineer shall determine if the crushed stone used to heal meets the specifications for gradation and quality when the material is placed in the final location.

C. Emergency Situations

Inclement weather, traffic accidents, and other events beyond the control of the Contractor may prevent the work from being completed as required above. The Contractor shall notify the Engineer in writing stating the conditions and reasons that have prevented the Contractor from complying with the time limitations. The Contractor shall also outline a plan detailing immediate steps to complete the work. Failure to correct these conditions on the first calendar day that conditions will allow corrective work shall be considered as non-performance of Work under Subsection 150.5.01.

D. Plating

Plating for drainage structures, utility facilities, etc. is prohibited on the interstates. Plating on State Routes and secondary roads will require the prior approval of the project engineer. Steel plates shall not be used on highways with a posted speed greater than forty-five (45) mph. 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(s). Temporary traffic control warning signs W8-24 shall be posted in advance warning motorists about plates in roadway in accordance with the MUTCD. Plating should not remain in place for more than four (4) calendar days.

E. Asphaltic Concrete Resurfacing Projects

1. Shoulder Construction Included as a Part of the Contract

When the placement of asphaltic concrete materials creates a difference in elevation greater than two inches (> 2”) 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 four feet (< 4’) in width, the Contractor shall place and maintain drums in accordance with the requirements of Subsection 150.2.04.B.3. When the edge of the paved surface is tapered with a safety edge, drums may be spaced at two (2) 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.

2. Shoulder Construction Not Included as a Part of the Contract

When the placement of asphaltic concrete materials creates a difference in elevation greater than two inches (> 2”) 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 four feet (< 4’) in width, the Contractor shall notify the Engineer, in writing, when the resurfacing work including all punch list items has been completed.
Drums spaced at twenty foot (20') intervals. **Note:** If the travel way width is reduced to less than ten feet (< 10') by the use of drums, vertical panels shall be used in lieu of drums.

Location of drums when Elevation Difference exceeds four inches (> 4’)

![Diagram of drums spaced at 20 foot intervals with New Construction and Travel Lane]

**ELEVATION DIFFERENCE GREATER THAN FOUR INCHES (> 4’)**

**DETAIL 150-E**

Drums spaced at forty foot (40’) intervals.

Location of drums when Elevation Difference is greater than two inches (> 2”) to four inches (4”) 6 inches ±

![Diagram of drums spaced at 40 foot intervals with New Construction and Travel Lane]

**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

Location of drums immediately after completion of healed sections spaced at 40 foot (40’) intervals

Compacted graded aggregate, subbase material or dirt. NO STEEPER THAN 4:1

TOP OF DRUM TO BE LEVEL

NEW CONSTRUCTION

HEALED SECTION

DETAIL 150-H
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. Payment for work zone law enforcement will be made only for the utilization in work zones during lane closures, traffic pacing, or other activities that occur within travel lanes. The Contractor will be responsible for negotiating a rate of reimbursement and making reimbursement to that law enforcement agency.

The Contractor will be responsible for coordinating and scheduling the utilization of the work zone law enforcement. The Engineer may require the use of work zone law enforcement at specific times and locations.

Measurement

Traffic Control Items

A. Traffic Control

When listed as a pay item in the Proposal, payment will be made at the lump sum price bid, which will include all traffic control not paid for separately, and will be paid as follows:

When the first Construction Report is submitted, a payment of twenty-five percent (25%) of the lump sum price will be made. For each progress payment thereafter, the total of the Project percent complete shown on the last pay statement plus twenty-five percent (25%) will be paid (less previous payments), not to exceed one hundred percent (100%).

When no payment item for Traffic Control-Lump Sum is shown in the Proposal, all of the requirements of Section 150 and the Temporary Traffic Control Plan shall be in full force and effect. The cost of complying with these requirements will not be paid for separately, but shall be included in the overall bid submittal.

B. Changeable Message Sign, Portable

Portable changeable message sign will be measured as specified in Section 632.

C. Flashing Beacon Assembly

Flashing beacon assemblies will be measured as specified in Section 647.

D. Pavement Markings

Pavement markings will be measured as specified in Section 150.

E. Portable Impact Attenuators

Each portable impact attenuator will be measured by the unit/array which shall include all material components, hardware, incidentals, labor, site preparation, and maintenance, including spare parts recommended by the manufacturer for repairing accident damage. Each unit will be measured only once regardless of the number of locations installed, moves required, or number of repairs necessary because of traffic damage. Upon completion of the project, the units shall be removed and retained by the Contractor.

F. Signs

When shown as a pay item in the contract, interim special guide signs will be paid for as listed below. All other regulatory, warning, and guide signs, as required by the Contract, will be paid for under Traffic Control Lump Sum or included in the overall bid submitted.

1. Interim ground mounted or interim overhead special guide signs will be measured for payment by the square foot. This payment shall be full compensation for furnishing the signs, including supports as required, erecting, illuminating...
overhead signs, maintaining, removing, re-erecting, and final removal from the Project. Payment will be made only one time regardless of the number of moves required.

2. Remove and reset existing special guide signs, ground mount or overhead, complete, in place, will be measured for payment per each. Payment will be made only one time regardless of the number of moves required.

3. Modify special guide signs, ground mount or overhead, will be measured for payment by the square foot. The area measured shall include only that portion of the sign modified. Payment shall include materials, removal from posts or supports when necessary, and remounting as required.

G. Temporary Audible Information Device

Temporary audible information devices are measured as the actual number furnished and installed in accordance with the manufacturer’s recommendations, which shall include all necessary materials, equipment, labor, site preparation, maintenance and removal. Each temporary audible information device will be paid for only one time regardless of the number of times it’s reused during the duration of The Work. These devices shall remain the property of the Contractor.

H. Temporary Barrier

Temporary barrier shall be measured as specified in Sections 620.

I. Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps are measured as the actual number formed and poured, complete and accepted, which shall include all necessary materials, equipment, labor, site preparation, maintenance and removal. No additional payment will be made for sawing existing sidewalk and removal and disposal of removed material for temporary wheelchair ramp construction. No additional payment will be made for constructing the detectable warning surface.

J. Temporary Guardrail Anchorage, Type 12

Temporary guardrail anchorage- type 12 will be measured by each assembly, complete in place and accepted according to the details shown in the plans, which shall also include the additional guardrail and appurtenances necessary for transition and connection to temporary concrete barrier. Payment shall include all necessary materials, equipment, labor, site preparation, maintenance and removal.

K. Temporary Walkways with Detectable Edging

Temporary walkways with detectable edging will be measured in linear feet (meters), complete in place and accepted, which shall include all necessary materials, equipment, labor, site preparation, temporary pipes, passing spaces, maintenance and removal. Excavation and backfill are not measured separately for payment. No payment will be made for temporary walkways where existing pavements or existing edging (that meets the requirements of MUTCD) are utilized for the temporary walkway. Payment for temporary detectable edging, including approved barriers and channelizing devices, installed on existing pavement shall be included in Traffic Control-Lump Sum.

L. Traffic Signal Installation- Temporary

Temporary traffic signal installation will be measured as specified in Section 647.

M. Work Zone Law Enforcement

When work zone law enforcement is shown as a pay item, work zone law enforcement will be measured for payment by the hour. The Contractor shall provide a daily work record containing the actual number of hours charged by the law enforcement officer. The daily work record shall be compiled on a form provided by the Department, signed by the law enforcement officer, signed by the Contractor's Worksite Traffic Control Supervisor attesting that the law enforcement was utilized during the time recorded, and then submitted to the Engineer.
Work zone law enforcement will be measured for payment by the hour up to the maximum number of hours included in the contract. The Engineer may at his discretion increase the maximum number of hours.

Payment shall be full compensation for reimbursing the law enforcement agency, and for all cost incurred by the Contractor in coordinating, scheduling, and administering the item work zone law enforcement.

If no work zone law enforcement pay item is included in the contract, then all work zone law enforcement cost shall be included in Traffic Control – Lump Sum.

150.5 Payment

When shown in the Schedule of Items in the Proposal, the following items will be paid for separately. Payment will be made under:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
<th>Description</th>
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<tbody>
<tr>
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<td>Traffic control</td>
<td>- Lump sum</td>
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<td>150.5</td>
<td>Traffic control, solid traffic stripe _ inch, (color)</td>
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<tr>
<td>150.5</td>
<td>Traffic control, skip traffic stripe _ inch, (color)</td>
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<tr>
<td>150.5</td>
<td>Traffic control, solid traffic stripe, thermoplastic 24 inch, color</td>
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<tr>
<td>150.5</td>
<td>Remove and reset, existing special guide signs, overhead, complete-in-place</td>
<td>Per each</td>
</tr>
<tr>
<td>150.5</td>
<td>Temporary walkways with detectable edging</td>
<td>Per linear foot</td>
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<tr>
<td>150.5</td>
<td>Temporary curb cut wheelchair ramps</td>
<td>Per each</td>
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<tr>
<td>150.5</td>
<td>Temporary audible information device</td>
<td>Per each</td>
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<tr>
<td>150.5</td>
<td>Single lane closure</td>
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<td>150.5</td>
<td>Multilane closure</td>
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<tr>
<td>150.5</td>
<td>Work Zone Law Enforcement</td>
<td>Per hour</td>
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150.5.01 Enforcement and Adjustments

The safe passage of pedestrians and traffic through and around the temporary traffic control zone, while minimizing confusion and disruption to traffic flow, shall have priority over all other Contractor activities. Continued failure of the Contractor to comply with the requirements of Section 150 - Traffic Control will result in non-refundable deductions of monies from the Contract as shown in this Subsection for non-performance of Work.

Failure of the Contractor to comply with this Specification shall be reason for the Engineer suspending all other work on the Project, except erosion control and traffic control, taking corrective action as specified in Section 105, and/or withholding payment of monies due to the Contractor for any work on the Project until traffic control deficiencies are corrected. These other actions shall be in addition to the deductions for non-performance of traffic control.

<table>
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<th>SCHEDULE OF DEDUCTIONS FOR EACH CALENDAR DAY OF DEFICIENCIES OF TRAFFIC CONTROL INSTALLATION AND/OR MAINTENANCE</th>
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ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Illinois, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Illinois (herein collectively called the "Companies"), by Robert D. Murray, President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint, W. Parker III, Carrie J. Key, David C. Eades, Bradley B. Lastinger and Avery C. Kenimer, all of Atlanta, Georgia, EACH, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 23rd day of October, A.D. 2019.

By: Robert D. Murray  
Vice President

By: Dawn E. Brown  
Secretary

State of Maryland  
County of Baltimore

On this 23rd day of October, 2019, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Robert D. Murray, Vice President and Dawn E. Brown, Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2023
EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 28th day of January, 2021.

[Signature]

Brian M. Hodges, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:

Zurich Surety Claims
1299 Zurich Way
Schaumburg, IL 60196-1056
www.reportsfclaims@zurichna.com
800-626-4577
## Certificate Of Completion

**Envelope Id:** FC7DC4FBBABCB497AABB4E4459473E1C2  
**Status:** Completed

**Subject:** B31PD2101052-0/BROOKS-BERRY-HAYNIE & ASSOCIATES INC

**Source Envelope:**
- **Document Pages:** 504
- **Certificate Pages:** 5  
- **AutoNav:** Enabled
- **Envelopeld Stamping:** Enabled
- **Time Zone:** (UTC-05:00) Eastern Time (US & Canada)

**Envelope Originator:**
- **GDOT DocuSign Admin**  
  - **Address:** 600 W Peachtree St, NW  
  - **City:** Atlanta  
  - **State:** GA  
  - **Zip:** 30308  
  - **Email:** gdot_contracts@dot.ga.gov

**Record Tracking**
- **Status:** Original  
  - **Holder:** GDOT DocuSign Admin  
    - **Email:** gdot_contracts@dot.ga.gov

**Security Appliance Status:** Connected  
**Storage Appliance Status:** Connected

**Signer Events**

### Jason Owen
- **Role:** President
- **Company:** Brooks-Berry-Haynie & Associates, Inc.
- **Security Level:** Email, Account Authentication (None)

**Signature:**
- **Signature Adoption:** Uploaded Signature Image
- **Using IP Address:** 69.222.130.77

**Electronic Record and Signature Disclosure:**
- **Accepted:** 9/1/2017 9:06:57 AM  
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### David Eades
- **Role:** Attorney-in-fact
- **Company:** Fidelity and Deposit Company of Maryland
- **Security Level:** Email, Account Authentication (None)

**Signature:**
- **Signature Adoption:** Uploaded Signature Image
- **Using IP Address:** 96.32.160.165

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### Stephen J. Lively
- **Role:** Security Level: Email, Account Authentication (None)

**Signature:**
- **Signature Adoption:** Pre-selected Style
- **Using IP Address:** 143.100.53.12

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### Russell R McMurry
- **Role:** Security Level: Email
- **Company:** 2/8/2021 8:31:24 PM

**Signature:**
- **Signature Adoption:** Pre-selected Style
- **Using IP Address:** 45.20.183.19

**Electronic Record and Signature Disclosure:**
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<th>Status</th>
<th>Timestamp</th>
</tr>
</thead>
</table>

### Agent Delivery Events

<table>
<thead>
<tr>
<th>Status</th>
<th>Timestamp</th>
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</thead>
</table>

### Intermediary Delivery Events

<table>
<thead>
<tr>
<th>Status</th>
<th>Timestamp</th>
</tr>
</thead>
</table>

### Certified Delivery Events

<table>
<thead>
<tr>
<th>Status</th>
<th>Timestamp</th>
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</thead>
</table>

### Carbon Copy Events

<table>
<thead>
<tr>
<th>Status</th>
<th>Timestamp</th>
</tr>
</thead>
</table>

### Witness Events

<table>
<thead>
<tr>
<th>Signature</th>
<th>Timestamp</th>
</tr>
</thead>
</table>

### Notary Events

<table>
<thead>
<tr>
<th>Signature</th>
<th>Timestamp</th>
</tr>
</thead>
</table>

### Envelope Summary Events

<table>
<thead>
<tr>
<th>Status</th>
<th>Timestamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envelope Sent</td>
<td>1/26/2021 11:32:37 AM</td>
</tr>
<tr>
<td>Certified Delivered</td>
<td>2/9/2021 7:30:13 AM</td>
</tr>
<tr>
<td>Signing Complete</td>
<td>2/9/2021 7:31:04 AM</td>
</tr>
<tr>
<td>Completed</td>
<td>2/9/2021 7:31:04 AM</td>
</tr>
</tbody>
</table>

### Payment Events

<table>
<thead>
<tr>
<th>Status</th>
<th>Timestamp</th>
</tr>
</thead>
</table>

### Electronic Record and Signature Disclosure
ELECTRONIC RECORD AND SIGNATURE DISCLOSURE
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To withdraw your consent with Georgia Department of Transportation
To inform us that you no longer want to receive future notices and disclosures in electronic format you may:
   i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
   ii. send us an e-mail to gdot_contracts@dot.ga.gov and in the body of such request you must state your e-mail, full name, IS Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent.
   The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process.

Required hardware and software

<table>
<thead>
<tr>
<th>Operating Systems:</th>
<th>Windows2000? or WindowsXP?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsers (for SENDERS):</td>
<td>Internet Explorer 6.0? or above</td>
</tr>
<tr>
<td>Browsers (for SIGNERS):</td>
<td>Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)</td>
</tr>
<tr>
<td>Email:</td>
<td>Access to a valid email account</td>
</tr>
<tr>
<td>Screen Resolution:</td>
<td>800 x 600 minimum</td>
</tr>
<tr>
<td>Enabled Security Settings:</td>
<td>• Allow per session cookies</td>
</tr>
<tr>
<td></td>
<td>• Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection</td>
</tr>
</tbody>
</table>

** These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that time providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.
Acknowledging your access and consent to receive materials electronically
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• I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and

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