



Interoffice Memo Office of Design Policy & Support

DATE: 8/22/2023

FILE: P.I.# 0019452
Bryan County / GDOT District 5 - Jesup
I-16 Frontage Road from SR 30 to W of CR 11/Tar City Road

FROM: *for Dave Peters*
R. Christopher Rudd, PE, State Design Policy Engineer

TO: SEE DISTRIBUTION

SUBJECT: APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

Distribution:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Clement Solomon, Director, Division of Intermodal
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
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Bobby Hilliard, Program Control Administrator
Eric Duff, State Environmental Administrator
Donn Digamon, State Bridge Engineer
Alan Davis, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Erik Rohde, State Project Review Engineer
Patrick Allen, State Materials Engineer
Nick Fields, State Utilities Administrator
Eric Conklin, State Transportation Data Administrator
Attn: Systems & Classification Branch
Lee Howell, Statewide Location Bureau Chief
Troy Pittman, District 5 District Engineer
Jonathan Martinez, District 5 Preconstruction Engineer
Greg Wasdin, District 5 Utilities Manager
W. Ron Nelson, Project Manager



Directed Scope Project Concept Report

Template version: 2022.05.13

Project Type:	New Construction	P.I. Number:	0019452
GDOT District:	5	County:	Bryan
Federal Route Number:	N/A	State Route Number:	US 280 / SR 30
Project Number:	N/A		

GDOT P.I. No. 0019452 proposes to construct a new location Frontage Road in Bryan County, Georgia, running south of and parallel to I-16 (SR 404), from SR 30 / US 280 in the west, continuing 3.3 miles eastward, terminating at east of Jernigan Road, and this project will be developed as Design Build Project.

Submitted for approval:

<u>Joel Jones</u> Consultant Designer & Firm	(Arcadis)	<u>5/30/2023</u> Date
<u>Darryl D. VanMeter</u> State Alternative Delivery Administrator		<u>6/23/2023</u> Date
<u>W. Ron Nelson</u> GDOT Project Manager		<u>06/23/2023</u> Date

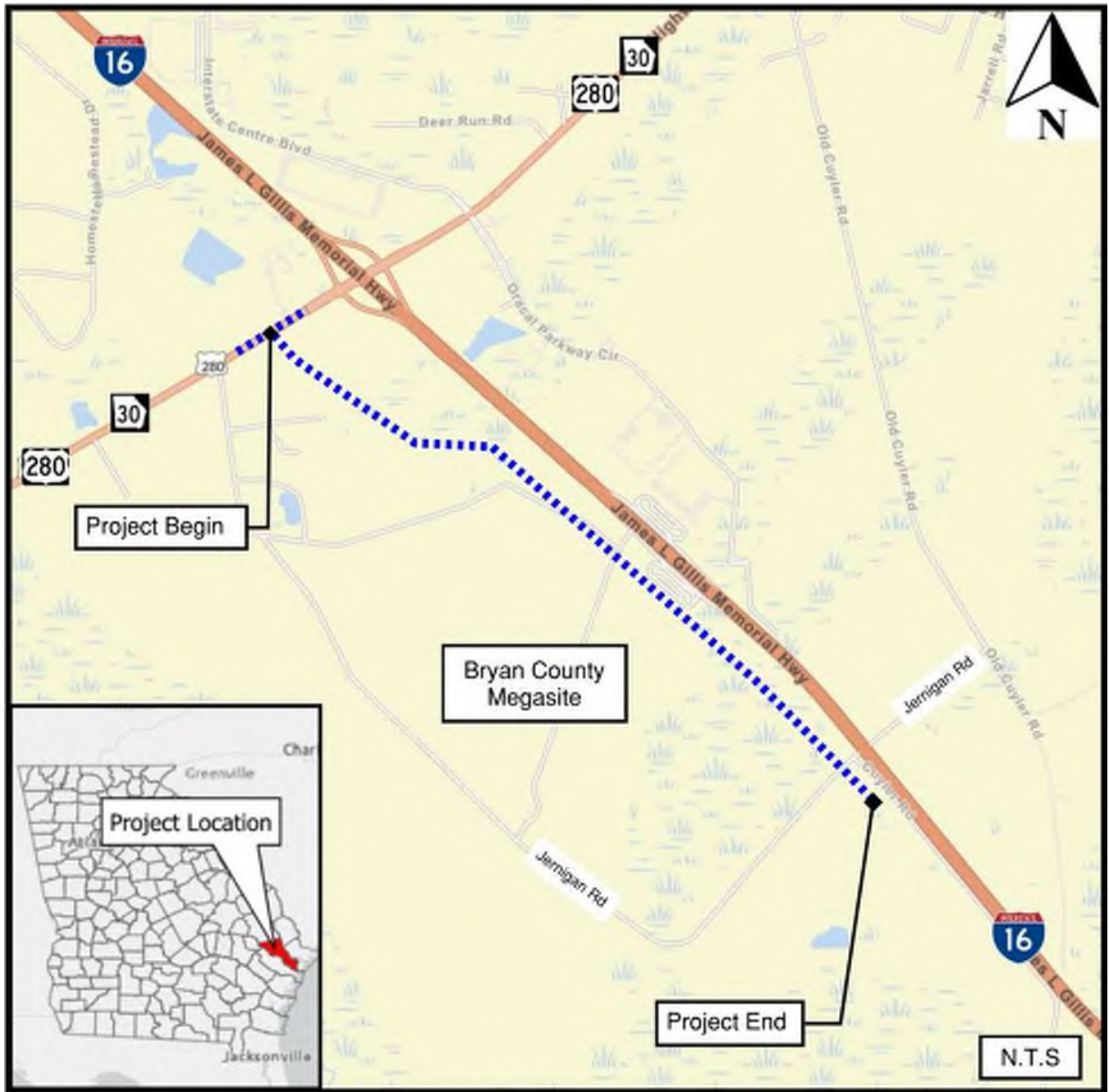
Recommendation for approval:

<u>Eric Duff</u> State Environmental Administrator	<u>05/11/2023</u> Date
<u>Oladimeji Onabanjo</u> for State Traffic Engineer	<u>07/13/2023</u> Date
<u>Erik Rohde</u> Project Review Engineer	<u>05/17/2023</u> Date
<u>Marcela Coll</u> for State Utilities Engineer	<u>06/05/2023</u> Date
<u>Troy Pittman</u> District Engineer	<u>08/01/2023</u> Date

- ☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- ☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

<u>Matt Markham</u> for Division of Planning	<u>06/12/2023</u> Date
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PROJECT LOCATION MAP



PLANNING AND BACKGROUND

Prepared By: *Office of Alternative Delivery* Date Completed: 1/25/2023

Project Justification Statement: PI 0019452

The purpose of the proposed project is to provide east-west connectivity between State Route US-280/SR-30 and the major economic development under construction in this area (Bryan County Mega-site). The proposed project would provide additional access to this major economic development to accommodate traffic generated by the development.

The Bryan County Mega-site is currently being developed and construction is anticipated to be completed in 2024. Currently east west access to this site is provided from US-280/SR-30 via South Access Rd, a new location roadway located between Olive Branch Rd & Aspen Ln. The access road is being constructed concurrently with the development of the Bryan County Mega-site.

Without the construction of the proposed project, the only access to this to this major economic development would be the South Access Rd. It is currently estimated that over 6,000 daily vehicular trips are anticipated at the development once opened and this number is projected to increase to nearly 20,000 daily vehicular trips by 2027 and over 25,000 daily vehicular trips by 2030.

Existing conditions:

US-280/SR-30 is classified as a principal arterial with a posted speed limits of 55-mph & 45-mph and is identified as a STRAHNET Connector route connecting to I-16. In the area of the project, US-280 consists of two 12-foot travel lanes (one lane in each direction) with 12-foot rural shoulders with fill slopes and ditches. US-280 widens to a four-lane configuration approaching its service interchange at I-16, with two lanes in each direction and a median. The median varies in width from 0 to approximately 24-feet and varies from rural depressed median with rural shoulders to raised grassed median with curb and gutter. There are no existing pedestrian or bicycle facilities along US-280/SR-30.

CR 11/Jernigan Road (formerly known as Tar City Rd/Groover Hill Rd) crosses over I-16 via a rural two-lane bridge; there is no access to I-16 from this road. CR 11/Jernigan Road is a dirt road with no shoulders and is classified as a local road.

Refer to Attachment 1 – Schematic Project Layout with PI Numbers

Other projects in the area:

The following table identifies other projects in the area. Coordination may be required, as indicated in the table, to ensure design elements, especially construction staging, do not overlap.

PI No.	Description	Status	County	Coordination Needed
0016507	I-16 @ CR 12/Olive Branch Rd 9.1 MI NE of Pembroke	Design	Bryan	No
0019049	I-16 @ 5 Locs – Dynamic Messaging Signs (DMS)	Design	Bryan, Bulloch, Laurens	No
0016618	I-16 at SR 30/US 280	Design	Bryan	Yes
0019451	I-16 at Old Cuyler Road Interchange	Design	Bryan	Yes
0015605	CR 927/OLD HWY 46 @ ASH BRANCH 11.6 MI SE OF BROOKLET	Construction	Bulloch	No

MPO: NA - not in an MPO **TIP #:** NA
Congressional District(s): 1
Federal Oversight: ☐ PoDI ☐ Exempt ☒ State Funded ☐ Other

Projected Traffic: Frontage Rd

24 HR T (Open Year): 23.5 % 24 HR T (Design Year): 28.5 %
Open Year (2025): 3,550 Design Year (2045): 3,450

Note: in the Design Year, GDOT PI 019451 (I-16 at Old Cuyler Road Interchange) to the east will be open to traffic. This adjacent project will extend the proposed Frontage Road to that new interchange. As a result, the majority of Frontage Road traffic is expected to utilize extended segment of Frontage Road to the east to access the new interchange. Two-way design year AADT on this extended section of Frontage Road is anticipated to be 10,800 vpd (21.5% truck).

Traffic data source: Volume Development / Projected by developer (Hyundai)
Traffic Projections Performed by: Arcadis U.S., Inc.
Date approved by the GDOT Office of Planning: 3/08/2023

AASHTO Functional Classification (Frontage Road): Minor Arterial

AASHTO Context Classification (Frontage Road): Rural Town

AASHTO Project Type Frontage Rd: New Construction

Is the project located on an NHS roadway? ☐ No ☒ Yes

US-280/SR-30 is located along a NHS roadway.

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: ☒ None ☐ Bicycle ☐ Pedestrian ☐ Transit

No bicycle and pedestrian warrants are met.

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? ☒ No ☐ Yes

Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required? ☒ No ☐ Yes

Feasible Pavement Alternatives: ☒ HMA ☐ PCC ☐ HMA & PCC

Frontage Rd is a newly constructed roadway. A Pavement Type Selection has been waived and is proposed as HMA due to the contract duration limitations.

Refer to Attachment 10 – Directed Scope Memo

Is the project located on a Special Roadway or Network? ☐ No ☒ Yes *STRAHNET Connectors*

US-280/SR-30 is located on an Oversize Truck Route & a STRAHNET Connector.

Per GDOT DPM 3.2.3 – Special Roadways and Networks located on Oversize Truck Routes & STRAHNET Connectors should at a minimum be designed for a WB-67. The need to accommodate OSOWs should also be evaluated.

Do the limits of the project include one or more signalized intersections? ☐ No ☒ Yes

There are no existing signals in the project limits; however, a signal is proposed as part of the project at the intersection of US-280/SR-30 and Frontage Rd. A traffic signal design shall be submitted to the TMC Permits group for review.

Is Federal Aviation Administration coordination anticipated?

☒ No

☐ Yes

A note will be added to the construction plans that says:

ANY CONSTRUCTION EQUIPMENT IN EXCESS OF 200 FEET ABOVE THE ROADWAY ELEVATION MUST BE EVALUATED BY THE FAA. EVALUATION BY FILING OF "NOTICE OF PROPOSED CONSTRUCTION" FAA FORM 7460-1 MUST BE ACCOMPLISHED NOT EARLIER THAN 18 MONTHS AND NOT LATER THAN 120 DAYS PRIOR TO CONSTRUCTION.

E-FILE AT <http://oeaaa.faa.gov/oeaaa/external/portal.jsp>

DESIGN AND STRUCTURAL

Description of the proposed project: (PI 0019452 – Frontage Road from US-280 to east of Jernigan Road)

This project proposes construction of a Frontage Road approximately 2.5-miles in length connecting US-280 to east of Jernigan Rd south of I-16. The proposed Frontage Road has design speed of 45-mph and will consist of four 12-foot lanes, two in each direction, rural shoulders totaling 10-feet (6'-6" paved), with a 20-ft flush and raised median. The proposed Frontage Road will have a signalized intersection at the junction with US-280/SR-30; this junction will be converted to a roundabout under PI0016618 - I-16 at SR 30/US 280. The proposed right-of-way width is 180 feet.

Frontage Road will terminate approximately 500-ft east of Jernigan Rd. The Frontage Road proposes to have driveways to provide access to the proposed development, and additional driveway access to the cell tower which is in the vicinity of the junction of the Frontage Road and Jernigan Road.

Jernigan Road is an existing gravel road, and it will be abandoned and demolished south of the intersection at Cuyler Rd.

Refer to Attachments 2 & 3 – Concept Layout – Preferred Alternative & Typical Cross Sections

Major Structures:

Structure	Existing	Proposed
Culvert	N/A	Double 36" Culvert Approx 109-LF (Frontage Rd – Approx 250-ft east of US-280)
Culvert	N/A	Quad 24" Culvert Approx 114-LF (Frontage Rd – Approx 2,200-ft east of US-280)

Accelerated Bridge Construction (ABC) techniques anticipated:

☒ No

☐ Yes

Mainline Design Features:

Frontage Road	Functional Classification: <i>Minor Arterial</i>		
Feature	Existing	*Policy	Proposed
Typical Section:			
- Number of Through Lanes	NA		4
- Lane Width(s) (feet)	NA	12 feet	12 feet
- Median Width (feet) & Type	NA	20-foot Raised / 14-foot Flush	20-foot Raised / 14-foot to 20-foot Flush
- Shoulder Width (feet) (Outside)	NA	10 feet (6.5 feet paved)	10 feet (6.5 feet paved)
- Border Area Width (feet)	NA	NA	NA
- Cross Slope (%)	NA	2%	2%
- Outside Shoulder Slope (%)	NA	6%	6%
- Inside Shoulder Width (feet)	NA	NA	NA
- Sidewalks (feet)	NA	NA	NA
- Auxiliary Lanes (# LTL, RTL or TWLTL/feet wide)	NA	12' RTL and LTL	12' RTL and LTL
- Bike Accommodations	NA	NA	NA
Posted Speed (mph)	NA		45
Design Speed (mph)	NA	45	45
Minimum Horizontal Curve Radius (feet)	NA	643 feet	711 feet
Maximum Superelevation Rate (%)	NA	6%	**4%
Maximum Grade (%)	NA	4%	1%
Access Control	NA	NA	NA
Design Vehicle	NA		WB-67
Check Vehicle	NA		WB-67
Pavement Type	NA		HMA

*According to current GDOT Design Policy if applicable

**A 4% eMax has been proposed due to the high likelihood the Frontage Rd will be an urban section with curb & gutter in the future due to the adjacent connecting developments.

US 280/SR-30	Functional Classification: <i>Minor Arterial</i>		
Feature	Existing	*Policy	Proposed
Typical Section:			
- Number of Through Lanes	2		2
- Lane Width(s) (feet)	12 feet	12 feet	12 feet
- Median Width (feet) & Type	NA	NA	NA
- Shoulder Width (feet) (Outside)	NA	NA	6'6"
- Border Area Width (feet)	NA	NA	NA
- Cross Slope (%)	2%	2%	2%
- Outside Shoulder Slope (%)	NA	6%	6%
- Inside Shoulder Width (feet)	NA	NA	NA
- Sidewalks (feet)	NA	NA	NA
- Auxiliary Lanes (# LTL, RTL or TWLT/feet wide)	NA		NA
- Bike Accommodations	NA	4	NA
Posted Speed (mph)	55		45/55
Design Speed (mph)**	55	55	45/55
Minimum Horizontal Curve Radius (feet)	1060 feet	1060 feet	9410 feet/ tangent
Maximum Superelevation Rate (%)	6%	6%	NC
Maximum Grade (%)	4%	4%	2%
Access Control	Partial	Partial	Partial
Design Vehicle	WB-67		WB-67
Check Vehicle	OSOW		OSOW
Pavement Type	HMA		HMA

*According to current GDOT Design Policy if applicable

**US 280/SR-30 is currently posted as 55mph. However, per an Engineering and Traffic Investigation Report conducted in April 2021 by GDOT Office of Traffic Operations, US 280 beginning at Mile Post 19.94 and continuing east to Milepost 20.92, this section of US 280 has recommended to reduce the posted speed to 45 mph. This project will propose signage in accordance with the MUTCD to indicate the 45-mph & 55-mph speeds along US-280/SR-30.

Design Exceptions/Design Variances to FHWA or GDOT Controlling Criteria anticipated

FHWA or GDOT Controlling Criteria	No	Undetermined	Yes	DE or DV	Approval Date (if available)
1. Design Speed	☒	☐	☐		
2. Design Loading Structural Capacity	☒	☐	☐		
3. Stopping Sight Distance	☒	☐	☐		
4. Horizontal Curve Radius	☒	☐	☐		
5. Maximum Grade	☒	☐	☐		
6. Vertical Clearance	☒	☐	☐		
7. Superelevation Rate	☒	☐	☐		
8. Lane Width	☒	☐	☐		
9. Cross Slope	☒	☐	☐		
10. Shoulder Width	☒	☐	☐		

Design Variances to GDOT Standard Criteria anticipated

GDOT Standard Criteria	No	Undetermined	Yes	Approval Date (if applicable)
1. Access Control	☒	☐	☐	
2. Shoulder Width	☒	☐	☐	
3. Intersection Sight Distance	☒	☐	☐	
4. Intersection Skew Angle	☒	☐	☐	
5. Tangent Lengths on Reverse Curves	☒	☐	☐	
6. Lateral Offset to Obstruction	☒	☐	☐	
7. Rumble Strips	☒	☐	☐	
8. Safety Edge	☒	☐	☐	
9. Median Usage	☒	☐	☐	
10. Roundabout Illumination Levels	☒	☐	☐	
11. Complete Streets Warrants	☒	☐	☐	
12. ADA Requirements in PROWAG	☒	☐	☐	
13. GDOT Construction Standards	☒	☐	☐	
14. GDOT Drainage Manual	☐	☐	☒	TBD

A Design Variance will be required for GDOT Drainage Manual Design Criteria regarding the dual 36" 109-lf culvert under Frontage Rd near the US-280/SR-30 intersection for Minimum Headwater Requirements, Pipe Cover Requirements, and Minimum Stormwater Velocity Requirements. The design variance is currently in review and awaiting final approval.

VE Study anticipated: ☒ No ☐ Yes ☐ Completed:

Per public law 112-141, Title 1 Federal Aid Highways, Subtitle E Miscellaneous, 15.02 Program Efficiencies, Section A, Subsection 5 "A and Official Code of Georgia O.C.G.A. § 32-2-41.2. Development of benchmarks; reports; value engineering studies.

Lighting Proposed: ☐ No ☒ Yes

Roadway lighting is being proposed along the Frontage Rd. A Preliminary Lighting Warrant Analysis has been conducted and AAHTO lighting warrants have not been met. However, project stakeholders have requested lighting due to the development proposed along the Frontage Rd. A Lighting Support Letter and Lighting Agreement is still being coordinated and will be made available to the Department upon its completion.

Off-site Detours Anticipated: ☒ No ☐ Undetermined ☐ Yes

If yes: Roadway type to be closed: ☐ Local Road ☐ State Route
 Detour Route selected: ☐ Local Road ☐ State Route
 District Concurrence w/Detour Route: ☐ No/Pending ☐ Received
 Detour Presented to Public: ☐ No ☐ Yes

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant ☐ Significant
 TMP Components Anticipated: ☒ TTC ☐ TO ☐ PI

INTERCHANGES AND INTERSECTIONS

Interchanges/Major Intersections:

Frontage Road at US 280

- Open Year: Traffic Signal (until Project PI 0016618)
- Design Year: Multilane roundabout (Project PI 0016618)

Intersection Control Evaluation (ICE) Required: ☒ No* ☐ Yes

*See Directed Scope Memo Approved 2/16/2023 - Attachment 10.

Roundabout Concept Validation Required: ☒ No ☐ Yes ☐ Completed

No roundabouts proposed as apart of this project.

UTILITY AND PROPERTY

Railroad Involvement: N/A

Utility Involvements:

<u>Utility Company</u>	<u>Facility Type</u>
AT&T	Telecommunications
American Tower	Telecommunications
Canoochee EMC	Electrical Distribution
City of Claxton	Natural Gas
Comcast	Telecommunications
Pembroke Advanced Communications (PAC)	Telecommunications
Georgia Power Company Transmission	Electrical
Bryan County	Water & Sewer

SUE Required: ☐ No ☒ Yes ☐ Undetermined

SUE QL-B will be performed for the project area. A Utility Risk Management Plan will be issued by the selected Design Build team.

Refer to Attachment 5 – Preliminary Utility Costs

Public Interest Determination Policy and Procedure recommended: ☐ No ☒ Yes

Right-of-Way (ROW): Existing width: N/A ft. Proposed width: 180 ft.

Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined

Easements anticipated: ☐ None ☒ Temporary ☒ Permanent * ☐ Utility ☐ Other

* Permanent easements include the right to place utilities.

PI Number		0019452
Anticipated total number of impacted parcels:		3
Displacements anticipated:	Businesses:	0
	Residences:	0
	Other:	0
Total Displacements:		0

Location and Design approval: ☒ Not Required ☐ Required

Impacts to federally managed property anticipated: ☒ No ☐ Yes ☐ Undetermined

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document: *GEPA ~ None*

Level of Environmental Analysis:

- ☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.
- ☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

GDOT MS4 Permit Compliance – Is the project located in a GDOT MS4 area? ☒ No ☐ Yes

If yes, is the GDOT MS4 Permit anticipated to apply to all or part of this project? ☒ No ☐ Yes

Is ecology water quality mitigation anticipated? ☒ No ☐ Yes

Will a Non-MS4 Detention Report be required during preliminary design? ☐ No ☒ Yes

Environmental Permits/Variations/Commitments/Coordination anticipated:

Permit/Variance/Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	☒	☐	
2. Forest Service/NPS	☒	☐	
3. CWA Section 404 Permit	☐	☒	Permit obtained by JDA
4. Tennessee Valley Authority Permit	☒	☐	
5. USACE Real Estate Outgrant	☒	☐	
6. Buffer Variance	☒	☐	
7. Coastal Zone Management Coordination	☒	☐	

8. NPDES	☐	☒	By DB Contractor, if needed
9. FEMA	☒	☐	
10. Cemetery Permit	☒	☐	
11. Other Permits	☒	☐	
12. Other Commitments	☒	☐	
13. Other Coordination	☒	☐	

Is a PAR required? ☒ No ☐ Yes ☐ Completed *Date*

Environmental Comments and Information:

NEPA/GEPA: No GEPA document is anticipated because the cost for the project will be less than \$100 million.

Ecology: Field work completed by Arcadis in September 2022. An Aquatic Resources Delineation Verification Request and Scope of Analysis (ARDR-SOA) was not required for submission to the US Army Corps of Engineers (USACE) given the Joint Development Authority (JDA) had already acquired the Clean Water Act (CWA) 404 Permit from USACE (10/4/22), which includes the Frontage Road right of way (ROW) within its permitted boundary. Arcadis ecology to complete a combined Ecology Resource Survey and Assessment of Effects Report (ERS-AOER) for GDOT. As this project is state funded, has an already issued 404 permit for jurisdictional waters impacts, and because protected species will not be effected or jeopardized by the proposed Frontage Road design, GDOT is not required to transmit the ERS-AOER to the Federal Highway Administration (FHWA) or USACE. The ecology report will instead be provided to JDA in support of their 404 permit records.

History: The project area was previously surveyed during the Section 106 compliance process for the industrial development. The project required a permit under Section 404 of the Clean Water Act and the Regulatory Branch, Savannah District, U.S. Army Corps of Engineers (Corps) was the lead federal agency responsible for Section 106 consultation. Previous surveys completed in 2015 and 2018 resulted in two resources within the APE that were determined to be not eligible. These eligibility determinations were concurred with by the Georgia SHPO in October 2018. A GDOT Section 106 notification is planned to open and close all cultural resource consultation for P.I. No. 0019452.

Archeology: No archaeological sites were identified in the Area of Potential Effect (APE) of GDOT P.I. No. 0019452 in the previous documentation or in September-October 2022 fieldwork performed by Edwards-Pitman.

Air Quality:

Is the project located in an Ozone Non-attainment area? ☒ No ☐ Yes

Bryan county is in attainment for Ozone.

Is a Carbon Monoxide hotspot analysis required? ☒ No ☐ Yes

Noise Effects: A noise analysis is not required for state funded projects.

Public Involvement: Early coordination letters were sent to local residents and stakeholders in September 2022. Two public information open house (PIOH) meetings have been held. One virtual live Question and Answer PIOH was held on January 9, 2023. One in-person PIOH was held on January 10, 2023, at the Bryan County Board of Education, located at 8810 US-280 Black Creek, GA 31308. The public comment period was open from December 14, 2022, to January 20, 2023. The project's website received 1,364 page views in total, 15 people attended the live Q&A meeting, and 50 people attended the in-person PIOH. A total of 42 comments were received during the comment period for this project. Of the 42 respondents, 27 were in support of the project, 6 were opposed, 4 were uncommitted, and 5 expressed conditional support. No significant project changes were made as a result of the comments received at the PIOHs.

Major stakeholders: Bryan County, JDA

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Materials procurement schedule (i.e., traffic signals, lighting, etc.); coordination among multiple contractors (e.g., Mega-site, adjacent transportation projects, etc.); design coordination for site development; subgrade conditions/unsuitable soils.

Early Completion Incentives recommended for consideration: ☐ No ☒ Yes

In a letter dated June 27, 2022, Commissioner McMurry stated that GDOT will use good faith efforts to expedite construction for completion by October 1, 2024. Committed substantial completion date as stated in the Economic Development Agreement (EDA) is December 31, 2024.

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Team Meeting: N/A

Concept Team Meeting: February 10, 2023.
Refer to Attachment 8 – Minutes of Concept Meetings

Other coordination to date: Regular coordination meetings with the JDA and Hyundai representatives have been occurring throughout the development of this project. Public information Open Houses (PIOHs) were held for the project in January 2023.

Refer to Attachment 9 – PIOH Response Letter

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Arcadis U.S., Inc (GEC)
Design	Design-Build Contractor
Right-of-Way Acquisition	GDOT/Design-Build Contractor
Utility Coordination (Preconstruction)	Design-Build Contractor
Utility Relocation (Construction)	Design-Build Contractor
Letting to Contract	GDOT/HNTB (PMC)
Construction Supervision	GDOT/ HNTB (PMC)
Providing Material Pits	Design-Build Contractor
Providing Detours	Design-Build Contractor
Environmental Studies, Documents	Arcadis U.S., Inc. (GEC)/Design-Build Contractor
Environmental Permit and Mitigation	Third Party Applicant (JDA)
Construction Inspection & Materials Testing	GDOT
PIOH	Arcadis/GDOT/HNTB (PMC)

Project Cost Estimate Summary and Funding Responsibilities: PI0019452						
	PE Activities		ROW ²	Reimbursable Utilities ³	CST ⁴	Total Cost ⁵
	PE Funding ¹	Section 404 Mitigation				
Date of Estimate:	12/6/2022	12/6/2022	12/6/2022	12/6/2022	12/6/2022	
Proposed Funding Source(s):	State	State/ Local	State / Local	State / Local	State	
Programmed Cost:	\$3,900,000		\$0	NA	\$47,100,000	\$51,000,000
Estimated Cost:	\$3,900,000	NA	\$0	NA	\$37,549,490	\$41,449,490
Total Cost Difference:						(\$9,550,510)

1. PE Cost includes the estimated pre-let engineering costs and estimated stipulated fee.
2. ROW has been secured by the Joint Development Authority (JDA) and is to be quit-claimed to GDOT for the construction of the Frontage Rd. Therefore, no ROW cost is anticipated.
3. Any reimbursable utilities are included in the CST costs.
4. CST includes Construction, Final Design, Quality Management, Bonding & Insurance, Contingency, Post-Let. GEC/CEI and PMC/Agency Costs. (Asphalt Fuel Price Adjustment included)
5. All values are in Year of Expenditure (YOE) escalated to the midpoint of phase.

Refer to Attachment 4 – Detailed Cost Estimate Memo

ALTERNATIVES DISCUSSION

Directed Scope Concept Development:

A memorandum has been produced that provides a summary of the GDOT's approach to incorporating the commitments made within the EDA and subsequent discussions with JDA pertaining to the Project detailed in this report. This memorandum also details portions of the design that were directed by GDOT Executive Leadership to be incorporated into the project's design, thereby eliminating the need for a traditional alternative selection evaluation. This memorandum has been circulated to GDOT Executive Leadership and was executed on February 16th, 2023. The memo (DRAFT) is included as Attachment 10.

Alternative selection:

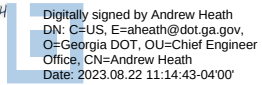
Preferred Alternative: Development of a Frontage Road roughly parallel to I-16, connecting US-280/SR-30 on the west with Jernigan Rd on the east. The Frontage Road will consist of four lanes with a 20-foot median, with rural shoulders (6-foot, 6-inches paved / 10-foot overall). A signalized intersection will be provided at the junction with US 280/SR 30. Proposed right-of-way is approximately 180 feet.			
Estimated Property Impacts:	4	Estimated Total CST Cost:	\$37,459,490
Estimated ROW Cost:	\$0	Estimated CST Time:	15 months
Rationale: This alternative was selected because it addresses the issues identified in the project justification statement meeting the requirements of the Directed Scope Memo.			

No-Build Alternative: This alternative would maintain the existing conditions.			
Estimated Property Impacts:	0	Estimated Total Cost:	\$ 0
Estimated ROW Cost:	\$ 0	Estimated CST Time:	0 months
Rationale: This alternative was not selected because it does not address the access and capacity issues identified in the project justification statement.			

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Schematic Project Layout with PI Numbers
2. Concept Layout – Preferred Alternative
3. Typical Sections
4. Detailed Cost Estimate Memo
5. Preliminary Utility Costs
6. Design Traffic Diagrams
7. Capacity Analysis Summary
8. Minutes of Concept Meetings
9. PIOH Response Letter
10. Directed Scope Concept Memo

APPROVALS

Concur:	 _____ Director of Engineering	8/17/2023 _____ Date
Approve:	 _____ Chief Engineer	 8/22/2023 _____ Date

Attachment 1

Schematic Project Layout with PI Numbers

Bryan County Mega-Site PI Planning Diagram

Blue: I-16 Frontage Road
PI 0019452 (Anticipated Let: June 2023)

Orange: I-16 at SR 30/US 280
PI 0016618 (Anticipated Let: Aug 2023)

Magenta: I-16 at Old Cuyler Road Interchange
PI 0019451 (Anticipated Let: July 2024)

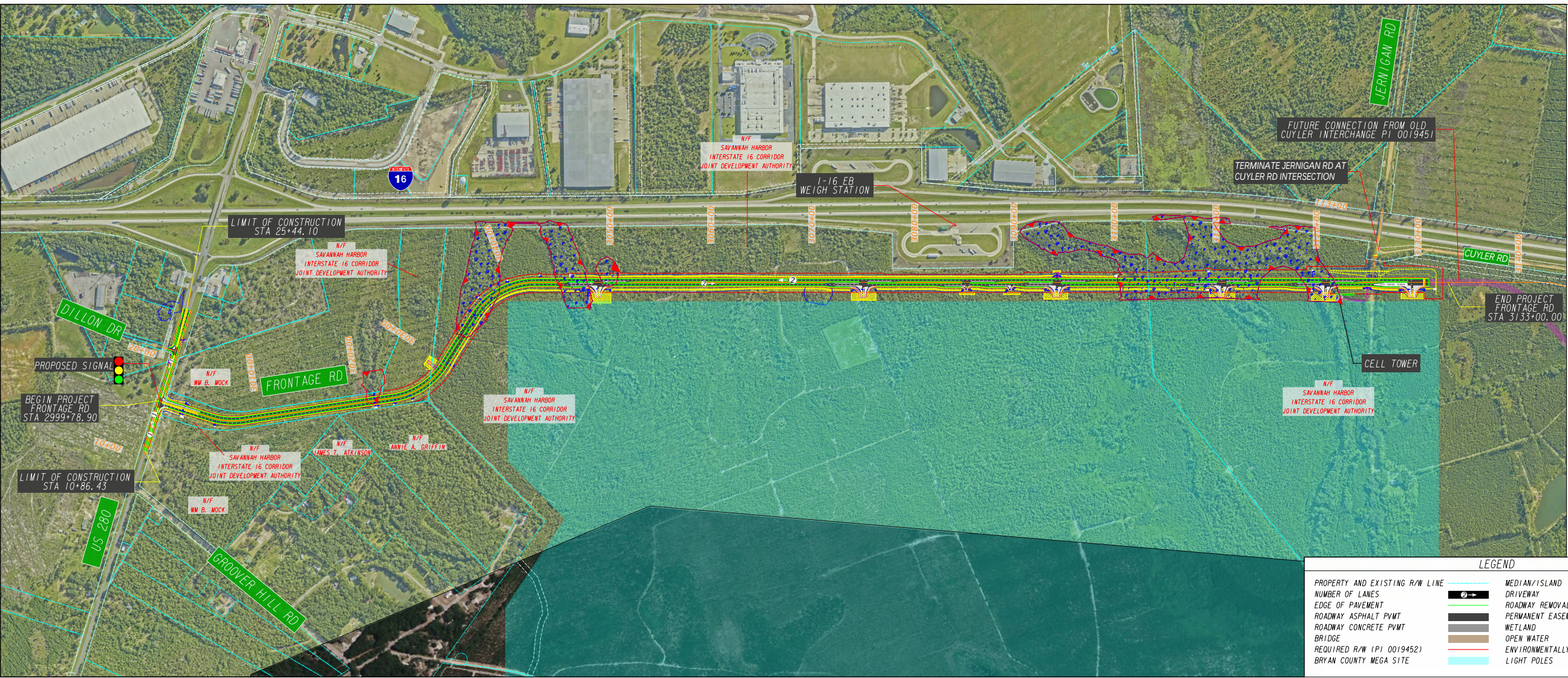


For Diagrammatic Purposes Only

Not to Scale

Attachment 2

Concept Layout – Preferred Alternative

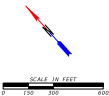


LEGEND		
PROPERTY AND EXISTING R/W LINE		MEDIAN/ISLAND
NUMBER OF LANES		DRIVEWAY
EDGE OF PAVEMENT		ROADWAY REMOVAL
ROADWAY ASPHALT PVMT		PERMANENT EASEMENT
ROADWAY CONCRETE PVMT		WETLAND
BRIDGE		OPEN WATER
REQUIRED R/W (PI 0019452)		ENVIRONMENTALLY SENSITIVE AREA
BRYAN COUNTY MEGA SITE		LIGHT POLES



Georgia
Department
of Transportation

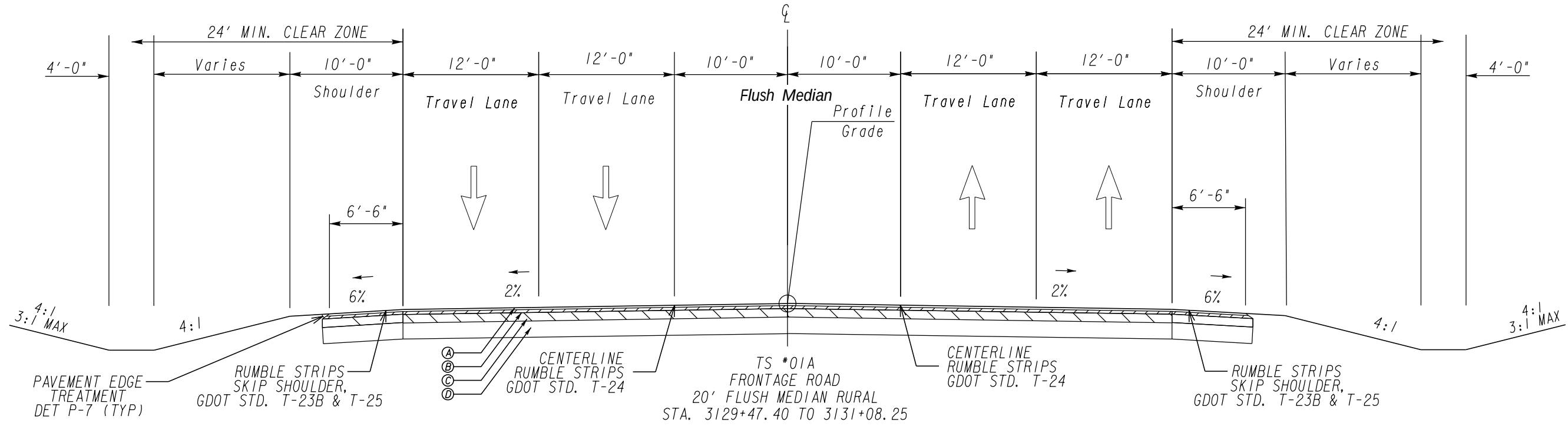
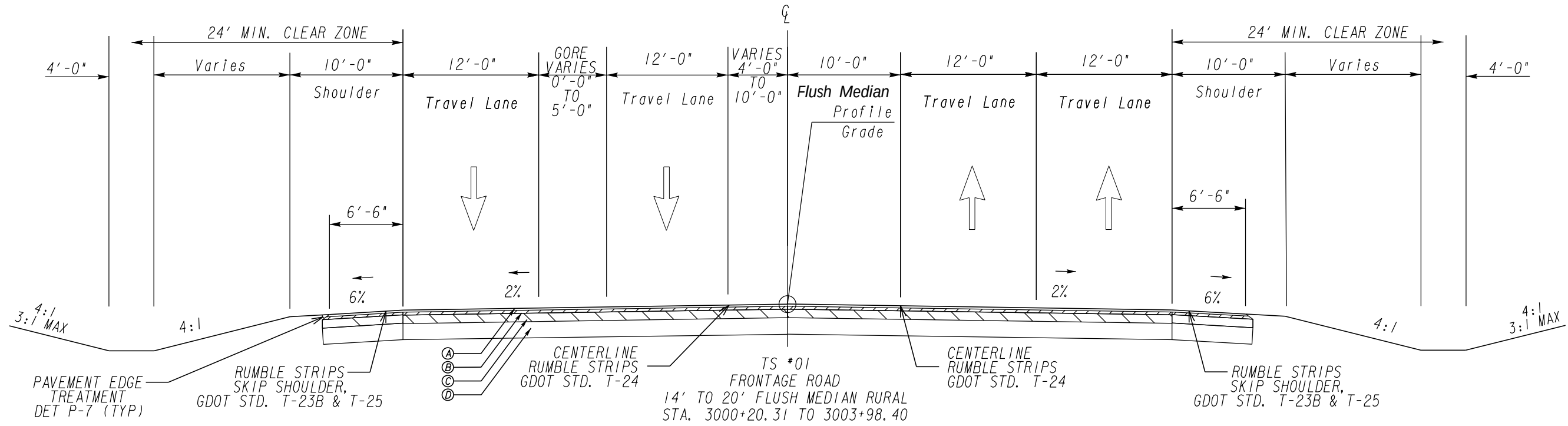
CONCEPT LAYOUT
PREFERRED ALTERNATIVE
PI NO. 0019452 - I-16 FRONTAGE ROAD
BRYAN COUNTY
PRELIMINARY - SUBJECT TO CHANGE
MAY 2023



SCALE 1"=100'

Attachment 3

Typical Sections



- Ⓐ RECYLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY (165 LB/SY)

Ⓑ RECYLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 ONLY (220 LB/SY)

Ⓒ RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (440 LB/SY)

*Ⓓ GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
- *ALTERNATIVE PAVEMENT SUBBASE
GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
CAN BE SUBSTITUTED WITH THE FOLLOWING:
RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (660 LB/SY)
OR
PRE-MIXED SOIL-CEM STAB BASE CRS, 10 IN, INCL MATL AND HAUL

GDOT

Georgia Department of Transportation

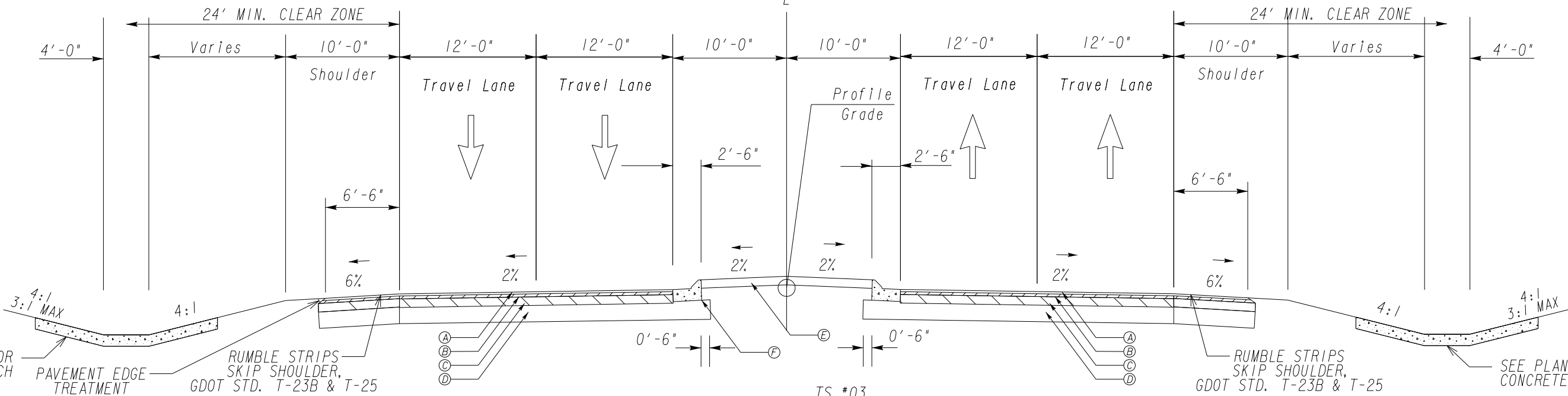
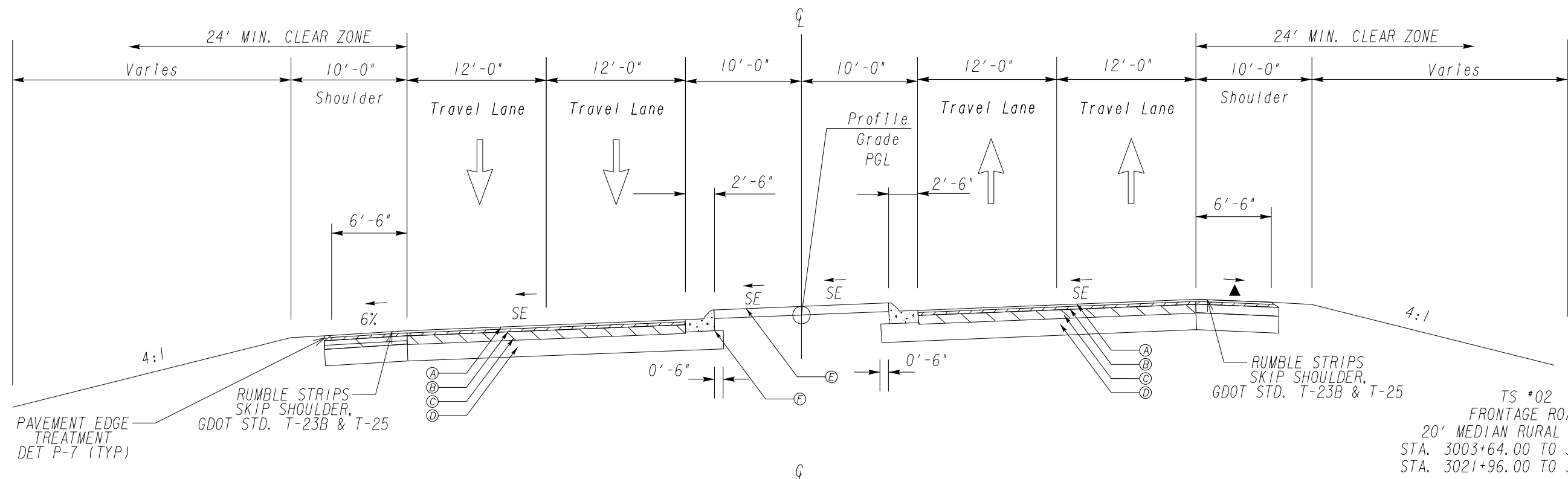
ARCADIS

KCI

NOT TO SCALE

REVISION DATES		

TYPICAL SECTIONS			
FRONTAGE RD BRYAN COUNTY MEGASITE			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:		
CORRECTED:	DATE:		
VERIFIED:	DATE:	05-0001	



- (A) RECYLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY (165 LB/SY)
- (B) RECYLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 ONLY (220 LB/SY)
- (C) RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (440 LB/SY)
- ★(D) GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
- (E) CONCRETE MEDIAN 4 INCH THICK
- (F) TYPE 7 CURB AND GUTTER GDOT STA. 9032b

STA. 3010+09.00 TO 3021+96.00
STA. 3031+31.00 TO 3033+83.00
STA. 3044+19.00 TO 3044+98.47
STA. 3052+58.62 TO 3071+04.43
STA. 3078+89.28 TO 3085+28.97

STA. 3089+07.97 TO 3090+49.25
STA. 3098+07.25 TO 3106+59.22
STA. 3114+42.25 TO 3116+85.78
STA. 3124+68.68 TO 3125+43.22

★ALTERNATIVE PAVEMENT SUBBASE
GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
CAN BE SUBSTITUTED WITH THE FOLLOWING:
RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (660 LB/SY)
OR
PRE-MIXED SOIL-CEM STAB BASE CRS, 10 IN, INCL MATL AND HAUL

▲ NORMAL SHOULDER SLOPE, NOT TO EXCEED
MAXIMUM SHOULDER BREAKOVER OF 8%.



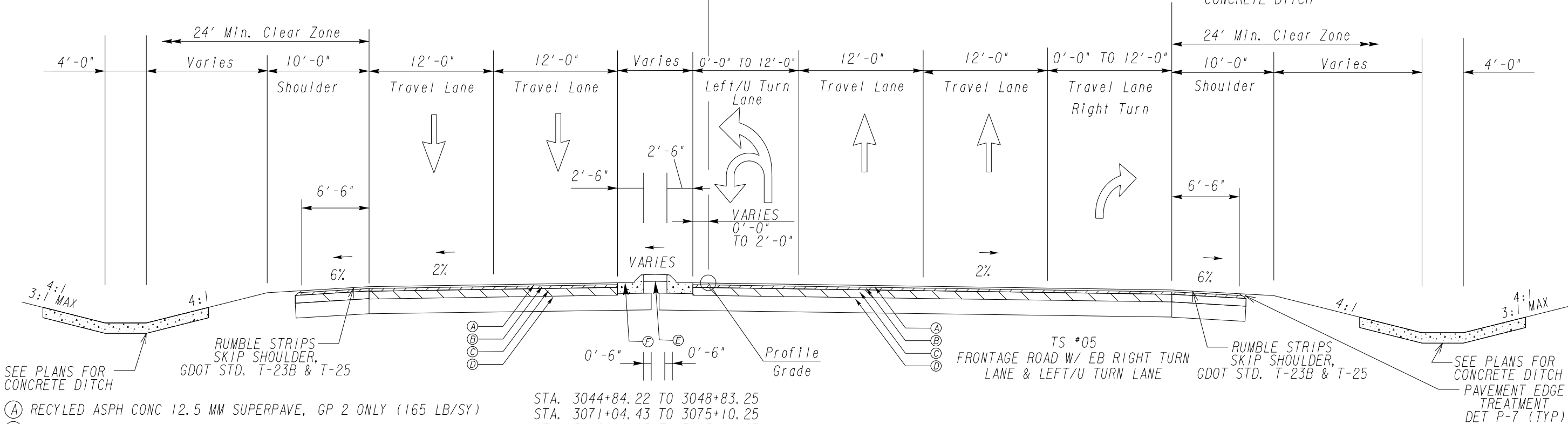
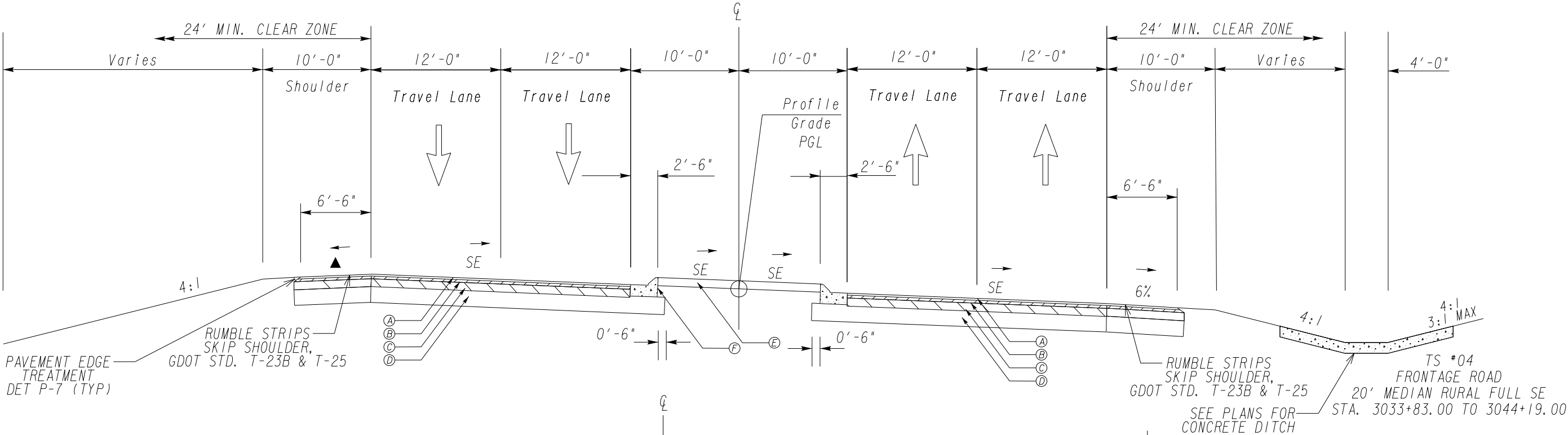
ARCADIS

Design & Consultancy
for natural and
built assets

KCI

NOT TO SCALE

REVISION DATES			TYPICAL SECTIONS			
			FRONTAGE RD BRYAN COUNTY MEGASITE			
			CHECKED:		DATE:	DRAWING No.
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	05-0002



- (A) RECYLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY (165 LB/SY)
- (B) RECYLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 ONLY (220 LB/SY)
- (C) RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (440 LB/SY)
- *(D) GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
- (E) CONCRETE MEDIAN 4 INCH THICK
- (F) TYPE 7 CURB AND GUTTER GDOT STA. 9032b

STA. 3044+84.22 TO 3048+83.25
STA. 3071+04.43 TO 3075+10.25
STA. 3082+06.95 TO 3085+28.97
STA. 3090+25.22 TO 3094+28.25
STA. 3106+59.22 TO 3110+63.25
STA. 3116+85.78 TO 3120+89.79
STA. 3125+43.22 TO 3129+46.25

▲ NORMAL SHOULDER SLOPE, NOT TO EXCEED
MAXIMUM SHOULDER BREAKOVER OF 8%.

*ALTERNATIVE PAVEMENT SUBBASE
GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
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OR
PRE-MIXED SOIL-CEM STAB BASE CRS, 10 IN, INCL MATL AND HAUL



NOT TO SCALE

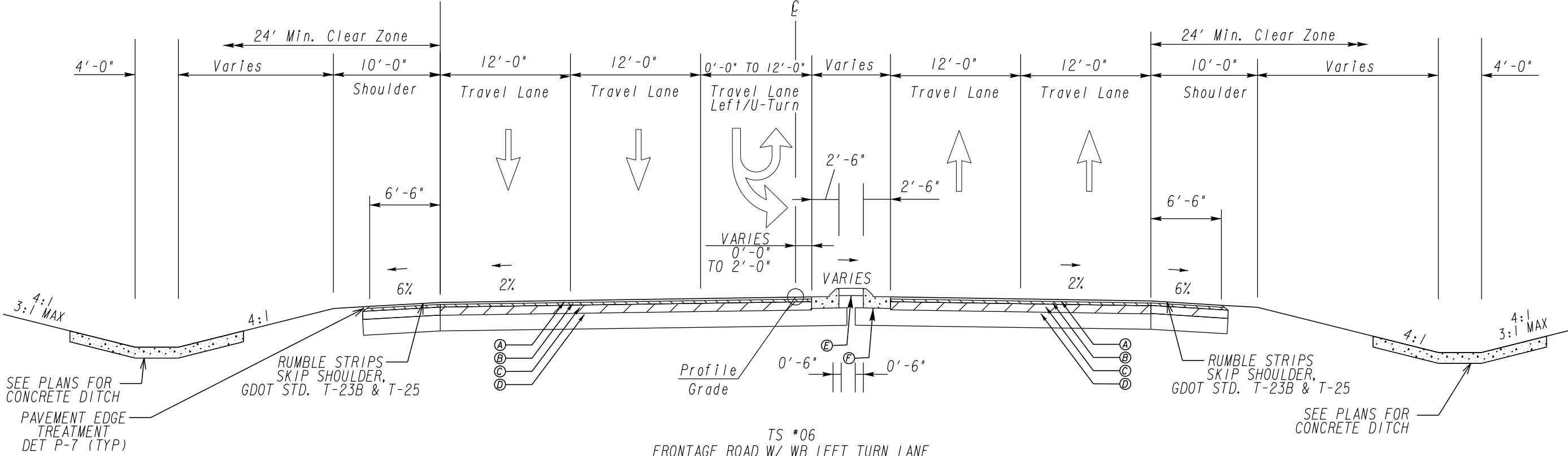
REVISION DATES

TYPICAL SECTIONS

FRONTAGE RD
BRYAN COUNTY MEGASITE

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

05-0003



TS #06
FRONTAGE ROAD W/ WB LEFT TURN LANE
STA. 3048+83.25 TO 3052+58.62
STA. 3075+10.25 TO 3078+89.28
STA. 3094+28.25 TO 3098+07.25
STA. 3110+63.25 TO 3114+42.25
STA. 3120+89.79 TO 3124+68.68

- (A) RECYLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY (165 LB/SY)
- (B) RECYLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 ONLY (220 LB/SY)
- (C) RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (440 LB/SY)
- * (D) GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
- (E) CONCRETE MEDIAN 4 INCH THICK
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*ALTERNATIVE PAVEMENT SUBBASE
GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
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GDOT

Georgia Department of Transportation

ARCADIS

KCI

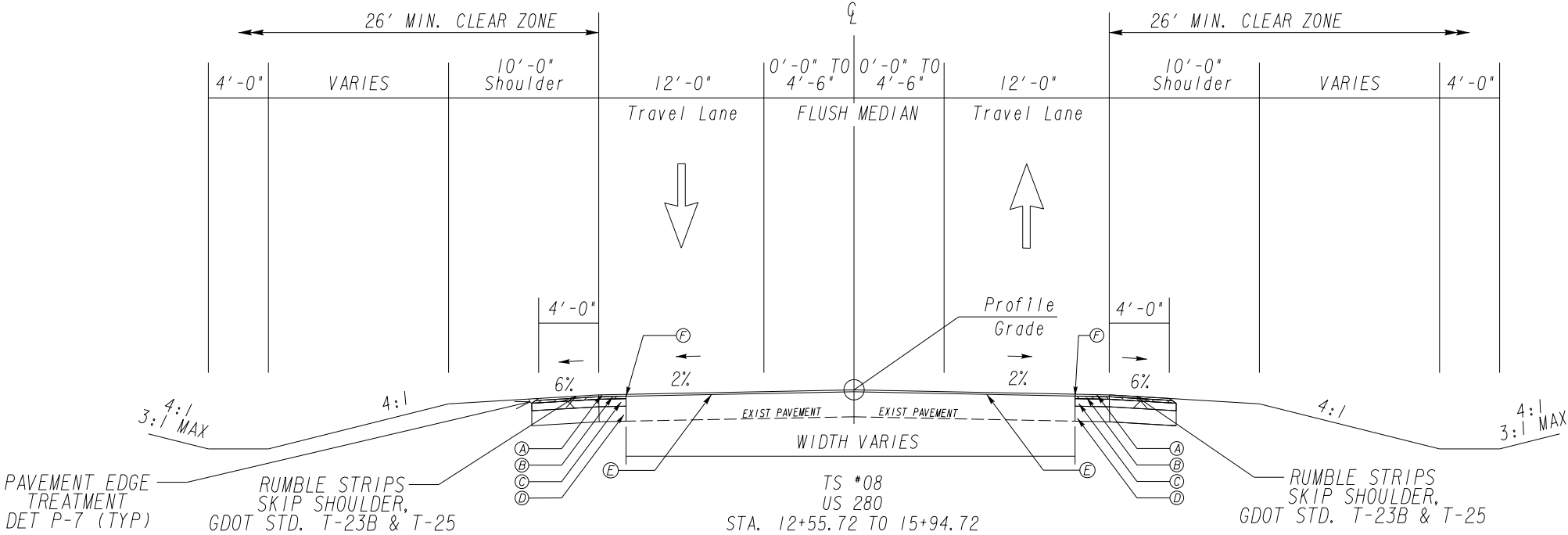
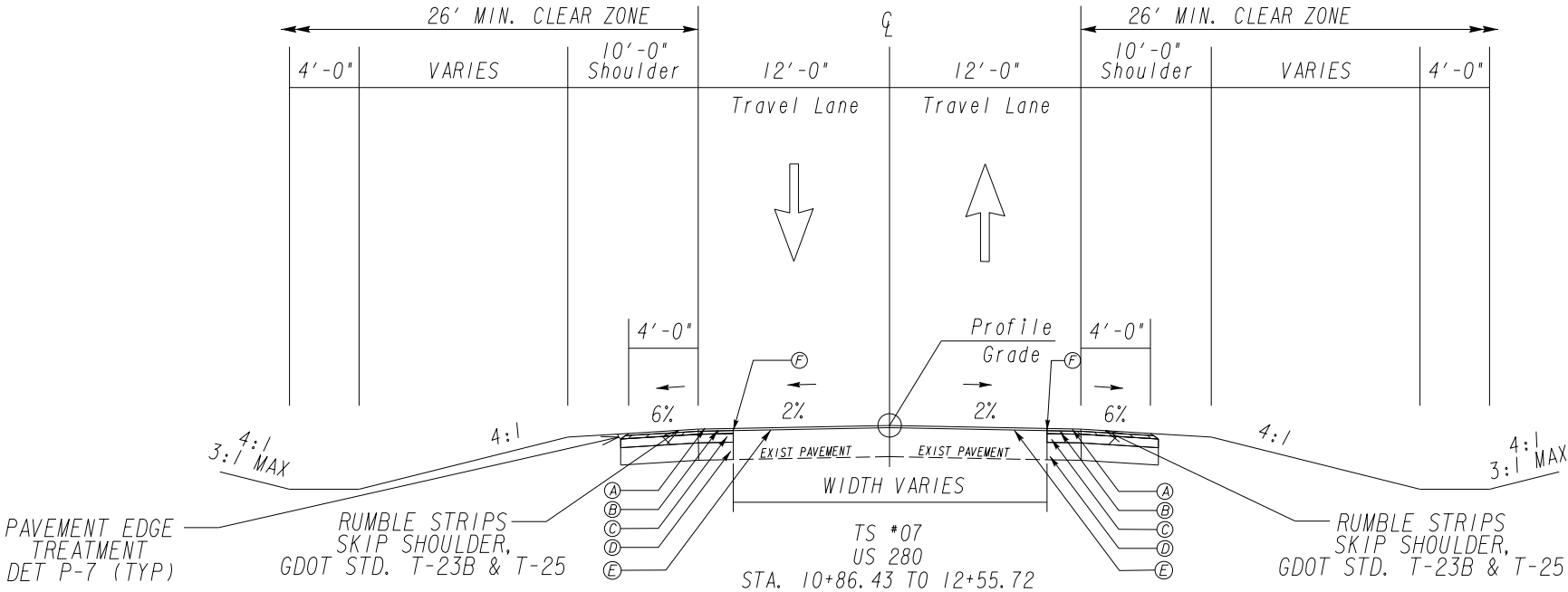
Design & Consultancy
for natural and
built assets

NOT TO SCALE

REVISION DATES		

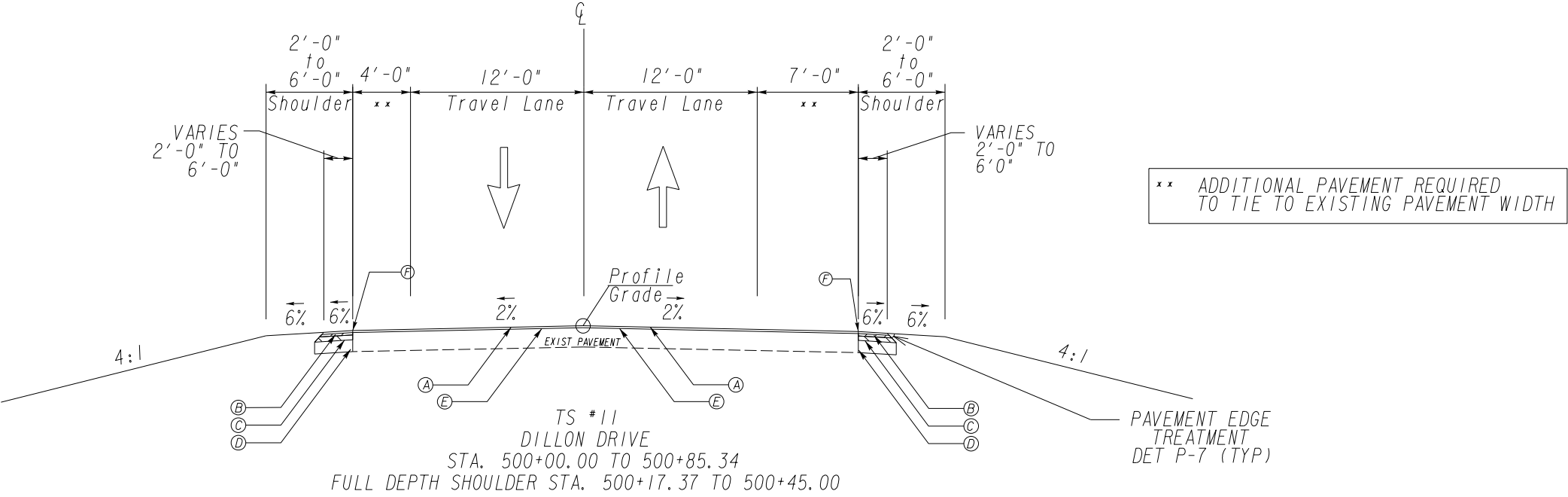
TYPICAL SECTIONS			
FRONTAGE RD			
BRYAN COUNTY MEGASITE			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
05-0004



- (A) RECYLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME (165 LB/SY)
- (B) RECYLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 ONLY (220 LB/SY)
- (C) RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (880 LB/SY)
- ★(D) GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
- (E) MILL EXISTING PAVEMENT 1 1/2 INCH DEPTH
- (F) 18 INCH TP.2 PAVEMENT REINFORCEMENT FABRIC

★ALTERNATIVE PAVEMENT SUBBASE
GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
CAN BE SUBSTITUTED WITH THE FOLLOWING:
RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (660 LB/SY)
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PRE-MIXED SOIL-CEM STAB BASE CRS, 10 IN, INCL MATL AND HAUL



- (A) RECYLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM MATL & H LIME (165 LB/SY)

(B) RECYLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 ONLY (220 LB/SY)

(C) RECYLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (880 LB/SY)

*(D) GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH

(E) MILL EXISTING PAVEMENT 1 1/2 INCH DEPTH

(F) 18 INCH TP.2 PAVEMENT REINFORCEMENT FABRIC
- *ALTERNATIVE PAVEMENT SUBBASE
GRADED AGGREGATE BASE COURSE, INCL MATL 12 INCH DEPTH
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RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 ONLY (660 LB/SY)
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PRE-MIXED SOIL-CEM STAB BASE CRS, 10 IN, INCL MATL AND HAUL

Attachment 4
Detailed Cost Estimate Memo



CONCEPT BASIS OF ESTIMATE

Bryan County Project 1 – Frontage
Road

Bryan County, GA

Revised November 2022

CONTENTS

ACRONYMS AND ABBREVIATIONS.....ii

PREFACE 1

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ACRONYMS AND ABBREVIATIONS

BOE	BASIS OF ESTIMATE
CSI	Construction Specifications Institute
GDOT	GEORGIA Department of Transportation
CTD	Contract Time Determination
O&P	Overhead and Profit
ROW	Right of Way
PMC	Program Management Consultant

PREFACE

Arcadis U.S., Inc. (Arcadis) has prepared an Independent Cost Estimate (ICE) report for the GDOT Bryan County Project 1 – Frontage Road located in Bryan County, GA.

The main objective of the ICE report preparation is to establish the Original Engineer's Estimate.

The cost estimate is prepared based on coordination with the Engineering team for the current project scope and existing field conditions.

The report is created by developing standard crews with man and equipment resources for various trades to derive the labor unit costs. Most of the material unit prices are obtained from the suppliers, similar past project cost data and standard reference rates for the material cost unable to receive from the vendors. The overhead, profit, contingencies, allowances, etc., is assumed based on the cost professional's experience with past projects of similar scale and complexity.

This report describes the overview of the project scope, basis of estimate, basis of assumptions, crew considerations, labor cost considerations, mark up considerations, and any other assumptions made to determine the final cost of the project.

INTRODUCTION

The project is located between US-280 and Tar City Road on the Southwest side of I-16 in Bryan County, GA. Frontage Road is being designed and built to facilitate ingress to and egress from the new Hyundai Plant (Bryan County Mega Site).

Based on the detailed estimate, the cost of the project is estimated as **\$37,549,490**

[rounded].

The summary of the project cost breakdown is shown below:

• General	-	\$ 4,661,851.09
• Design Services	-	\$ 3,479,489.38
• Construction	-	\$ 29,408,149.12

BASIS OF ESTIMATE

The Cost Estimate is developed based on utilizing the following documents/information:

- Coordination with Engineering Team for current project scope and existing field conditions.
- PIOH Layout dated October 2022.
- GDOT Standard Specifications dated 2021.

The bare labor cost data and fringes cost data are obtained from the U.S. Department of Labor prevailing wage rate under Davis-Bacon Act. The cost data is considered for Chatham County. Chatham County was selected due to the proximity to the project and the likelihood that labor would be traveling from that area. The bare labor cost was increased by 20 - 30% to reflect true current market wages for each worker type. The burdened labor rate for hourly wage laborers is calculated by adding the labor base rate, fringes, payroll tax and worker's compensation multiplier based on the trade.

The equipment rates are based on the 2022-RS Means Construction Cost Data. The production and the efficiency rates are considered based on the cost professional's judgement and experience by analysis of the work complexity, work hour restrictions and work sequence along with the historic production rates provided in the 2022-RS Means Construction Cost Data.

The material costs are based on budgetary quotes provided by local suppliers. For the materials with no supplier cost details, the material costs are used from the similar past projects cost data and 2022-RS Means Construction cost data. Also, the material costs are adjusted to account for the purchasing quantities, shipping etc.

The contract duration, work restriction and sequencing are considered based on the coordination with the engineer. The quantity takeoffs are computed by utilizing Bluebeam Revu software.

BASIS OF ASSUMPTIONS

The quantity takeoff and cost estimates were developed utilizing the preliminary layouts provided by the engineering team. However, there are some items which do not state the clear information. In such cases, certain logical assumptions are made from cost professional's experience to establish a complete cost estimate.

Some of the major assumptions considered in preparing the cost report are stated below:

- **Estimate**

- Frontage Rd. pavement has 2 – 12 LF travel lanes in each direction and a concrete median in the middle.
- Limits for Frontage Rd. permanent pavement are 365 LF from US-280 to Tar City Rd. The 365LF from US-280 will be temporary pavement with a temporary signal at the intersection that will be removed and replaced as part of the US-280 project.
- Pavement section for Frontage Rd. assumed to be 12" GAB, 6" 25mm, 2" 19mm, and 1.5" 12.5mm.
- Driveways to Hyundai site assumed to be concrete, 8" GAB, 3" 19mm, and 11" JPCP.
- Assuming no curb and gutter at outside edges of pavement, therefore utilizing TS #7.
- For preparation of the site, assuming that 24" of material will be removed to make sure stumps, root mat, etc. are removed, geotextile to be placed over existing, at areas requiring fill in excess of 10' a 2 foot thick layer of #57 stone will be placed to bridge suspected uncontrollable material, and then fill will be placed and compacted to subgrade.
- Except for the #57 aggregate 'bridge' referenced above, this BOE makes NO considerations for ground improvements (surcharging with or without wick drains, aggregate piers, etc.) that a geotechnical engineer may determine are necessary to bring post construction settlement expectations into an acceptable range.

- **Labor Crew**

- The unit labor rates are derived from the hourly unit rate of the built-up crew which includes the labor and the equipment costs associated with the trade.

- To simplify the complexity of labor unit cost calculations for each trade, the crews are optimized in such a way that a certain crew is utilized for more than one specific trades. Crews are developed by using multiple labor resources, and appropriate equipment and small tools required to perform the work.
- The work shift considered was 5 days at 8 hours per day.

ALLOWANCES

The cost estimation team worked their best to reduce the possible allowance costs but there are some unavoidable conditions where allowance costs need to be included in the estimate.

The following are items that are incorporated into the estimate based on a percentage of the **quantifiable direct construction costs** due to the stage of design. Costs will be updated in subsequent stages upon design completion.

Allowance	Frontage Road
Traffic Control	1.3%
Erosion Control	2.0%
Signage	0.25%
Landscaping	1.0%

The following are items that are incorporated into the estimate based on a percentage of the **total direct construction costs [Subtotal C. CONSTRUCTION]** at this stage of design. Costs will be updated in subsequent stages upon design completion.

Allowance	Frontage Rd
Mobilization	2.3%
Demobilization and Punch list	2.2%
Design Services	12.0%
Bonding & Insurance	3.0%
Design Builder Quality Management	2.0%
General Conditions / Project Management	8.0%

EXCLUSIONS

The cost estimation team worked their best to reduce the possible exclusion costs but there are some unavoidable conditions where exclusions exist in the estimate.

The following are the items that are excluded from the estimate.

- Escalation to Midpoint of Construction
- Contingency
- Environmental Mitigation – mitigation costs covered by the JDA
- Geotechnical requirements – addressed in risk register

ATTACHMENTS

1. Cost Estimate Summary
2. Detailed Estimate

PI# 0019452 I-16 Frontage Rd from US 280 to Tar City Rd				
ROW #	DESCRIPTION	%	TOTAL COST	COMMENTS
1	Construction cost (Direct)		\$ 26,422,977	Assumed \$20,000/Month for 12 months
2	Field Office Type III		\$ 240,000	
3	SUB-TOTAL (1)		\$ 26,662,977	
4	Training Hours		\$ 8,000	For every \$100M, assumed 20,000 training hours @ \$0.8/hour.
5	Drainage	0.00%	\$ -	Drainage account for in quantifiable scope
6	Erosion Control	2.00%	\$ 533,260	Percentage markup based on historical data from similar projects.
7	Landscaping	1.00%	\$ 266,630	
8	Signage	0.25%	\$ 66,657	
9	Utilities		\$ 645,000	As per attached (Michael McNitt)
10	Lighting	1.75%	\$ 466,602	
11	Traffic Control	1.30%	\$ 346,619	
12	TOTAL BASE CONSTRUCTION COST (2)		\$ 28,995,745	
13	Mobilization/Demobilization and Punch list	4.50%	\$ 1,304,809	Percentage Markups based on historical data from similar projects. Refer to General conditions tab for backup
14	Final Design Fee	12.00%	\$ 3,479,489	
15	Bonding & Insurance Costs	3.00%	\$ 869,872	
16	Project Management	8.00%	\$ 2,319,660	
17	Design-Builder Quality management	2.00%	\$ 579,915	Percentage Markups based on historical data from similar projects.
18	SUB-TOTAL (3)		\$ 37,549,490	
19	Right of Way (ROW)			no ROW required
20	Stipulated Fee / Payment for Work in Place	0.00%	\$ -	Assumed no MS4 structure required on the project
21	MS4 BMP		\$ -	
22	Streamline Mitigation		\$ -	
23				
24				

Attachment 5
Preliminary Utility Costs

Frontage Road Preliminary Utility Cost Estimate			
Utility Owner	Design Cost	Construction Cost	Total Cost
PAC Fiber	\$2,000.00	\$18,000.00	\$20,000.00
AT&T	\$10,000.00	\$111,500.00	\$121,500.00
City of Claxton-Gas	\$15,000.00	\$200,000.00	\$215,000.00
Canoochee EMC	\$5,000.00	\$35,000.00	\$40,000.00
Comcast	\$700.00	\$11,300.00	\$12,000.00
Bryan County	\$3,000.00	\$27,000.00	\$30,000.00

Attachment 6
Design Traffic Diagrams

TRAFFIC DIAGRAM SCENARIO INDEX

TRAFFIC DIAGRAMS
INCLUDED IN CONCEPT
REPORT

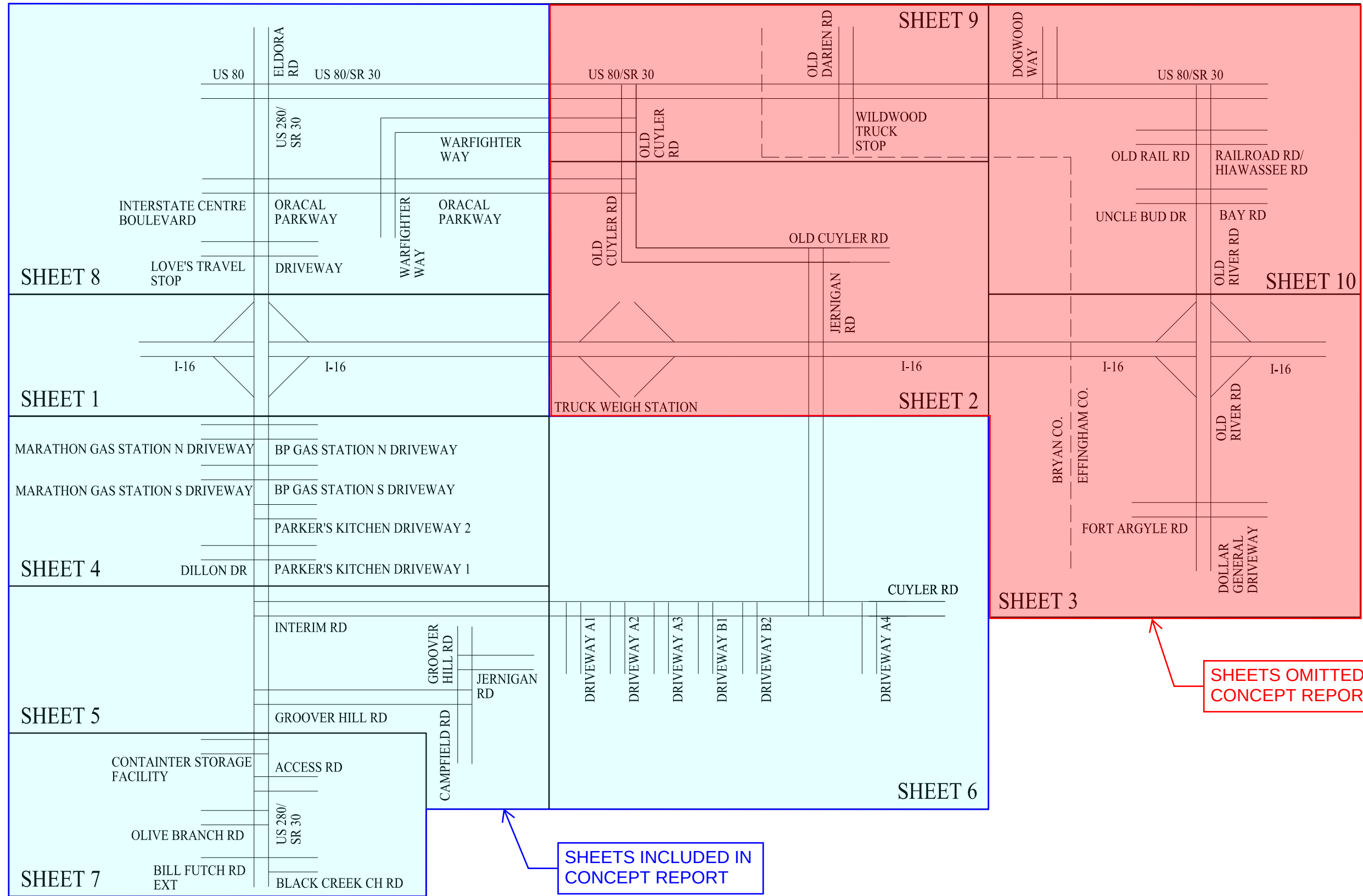
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INDEX SHEET	1		
EXISTING LAYOUT	2		
EXISTING YEAR 2022 AADT	3	TO	9
EXISTING YEAR 2022 DHV	10	TO	16
PI Nos. 0016618 & 0019452: OPEN YEAR NO-BUILD LAYOUT	17		
PI Nos. 0016618 & 0019452: OPEN YEAR 2025 NO-BUILD AADT	18	TO	27
PI Nos. 0016618 & 0019452: OPEN YEAR 2025 NO-BUILD DHV	28	TO	37
PI Nos. 0016618 & 0019452: DESIGN YEAR NO-BUILD LAYOUT	38		
PI Nos. 0016618 & 0019452: DESIGN YEAR 2045 NO-BUILD AADT	39	TO	48
PI Nos. 0016618 & 0019452: DESIGN YEAR 2045 NO-BUILD DHV	49	TO	58
PI Nos. 0016618 & 0019452: OPEN YEAR BUILD LAYOUT	59		
PI Nos. 0016618 & 0019452: OPEN YEAR 2025 BUILD AADT	60	TO	69
PI Nos. 0016618 & 0019452: OPEN YEAR 2025 BUILD DHV	70	TO	79
PI Nos. 0016618 & 0019452: DESIGN YEAR BUILD LAYOUT	80		
PI Nos. 0016618 & 0019452: DESIGN YEAR 2045 BUILD AADT	81	TO	90
PI Nos. 0016618 & 0019452: DESIGN YEAR 2045 BUILD DHV	91	TO	100
PI Nos. 0016618 & 0019452: OPEN YEAR +2 2027 NO-BUILD AADT	101	TO	110
PI Nos. 0016618 & 0019452: OPEN YEAR +2 2027 NO-BUILD DHV	111	TO	120
PI Nos. 0016618 & 0019452: DESIGN YEAR +2 2047 NO-BUILD AADT	121	TO	130
PI Nos. 0016618 & 0019452: DESIGN YEAR +2 2047 NO-BUILD DHV	131	TO	140
PI Nos. 0016618 & 0019452: OPEN YEAR +2 2027 BUILD AADT	141	TO	150
PI Nos. 0016618 & 0019452: OPEN YEAR +2 2027 BUILD DHV	151	TO	160
PI Nos. 0016618 & 0019452: DESIGN YEAR +2 2047 BUILD AADT	161	TO	170
PI Nos. 0016618 & 0019452: DESIGN YEAR +2 2047 BUILD DHV	171	TO	180
PI No. 0019451: OPEN YEAR NO-BUILD LAYOUT	181		
PI No. 0019451: DESIGN YEAR NO-BUILD LAYOUT	182		
PI No. 0019451: OPEN/DESIGN YEAR 2027/2047 NO-BUILD AADT	183	TO	192
PI No. 0019451: OPEN YEAR 2027 NO-BUILD DHV	193	TO	202
PI No. 0019451: DESIGN YEAR 2047 NO-BUILD DHV	203	TO	212
PI No. 0019451: OPEN YEAR BUILD LAYOUT	213		
PI No. 0019451: DESIGN YEAR BUILD LAYOUT	214		
PI No. 0019451: OPEN/DESIGN YEAR 2027/2047 BUILD AADT	215	TO	224
PI No. 0019451: OPEN YEAR 2027 BUILD DHV	225	TO	234
PI No. 0019451: DESIGN YEAR 2047 BUILD DHV	235	TO	244
PI No. 0019451: OPEN/DESIGN YEAR +2 2029/2049 NO-BUILD AADT	245	TO	254
PI No. 0019451: OPEN YEAR +2 2029 NO-BUILD DHV	255	TO	264
PI No. 0019451: DESIGN YEAR +2 2049 NO-BUILD DHV	265	TO	274
PI No. 0019451: OPEN/DESIGN YEAR +2 2029/2049 BUILD AADT	275	TO	284
PI No. 0019451: OPEN YEAR +2 2029 BUILD DHV	285	TO	294
PI No. 0019451: DESIGN YEAR +2 2049 BUILD DHV	295	TO	304



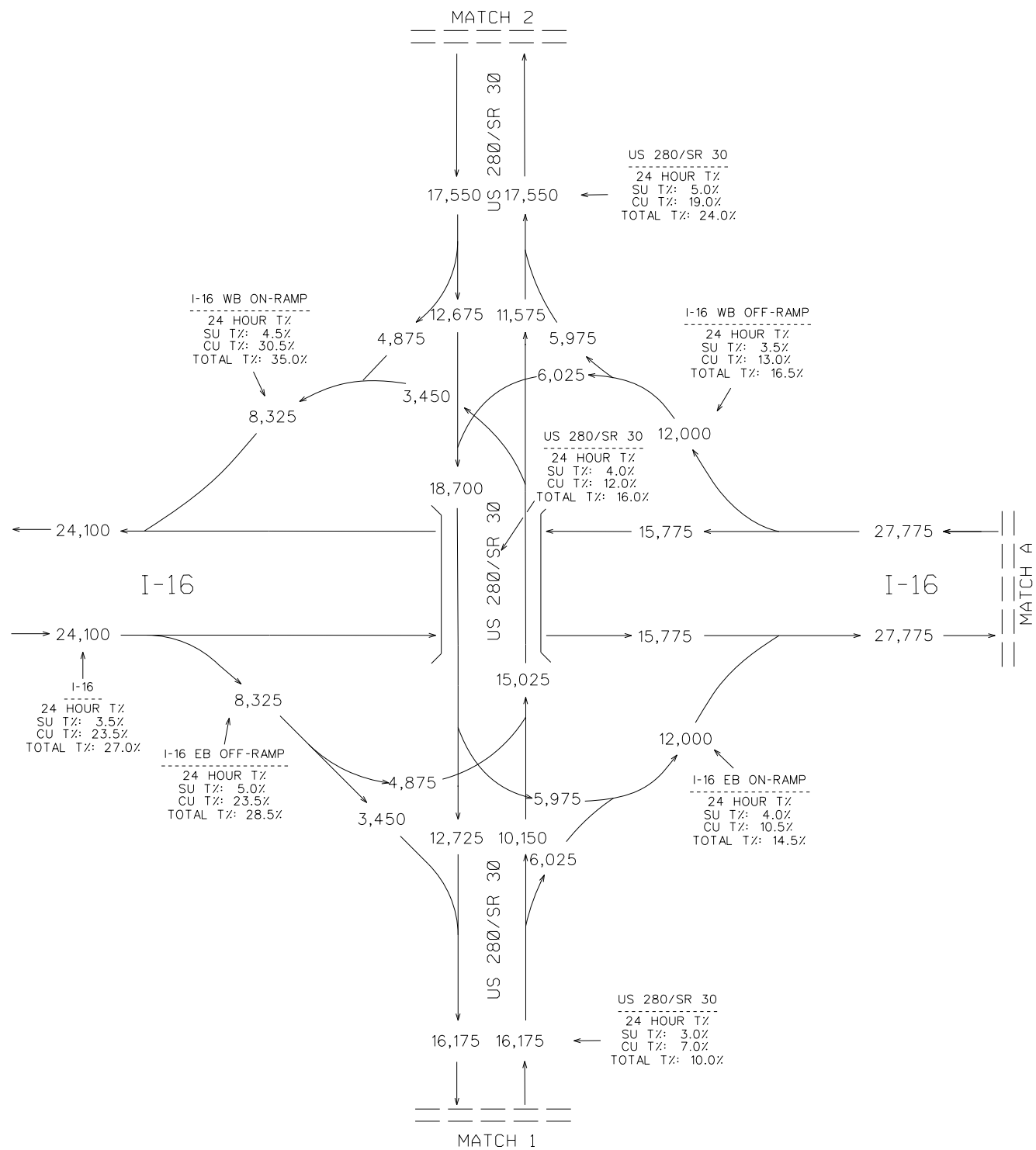
REVISION DATES

TRAFFIC DIAGRAM
PROJECT EA
INDEX SHEET
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	10-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	



AADT VOLUMES
OPEN YEAR 2025 NO-BUILD
2025 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



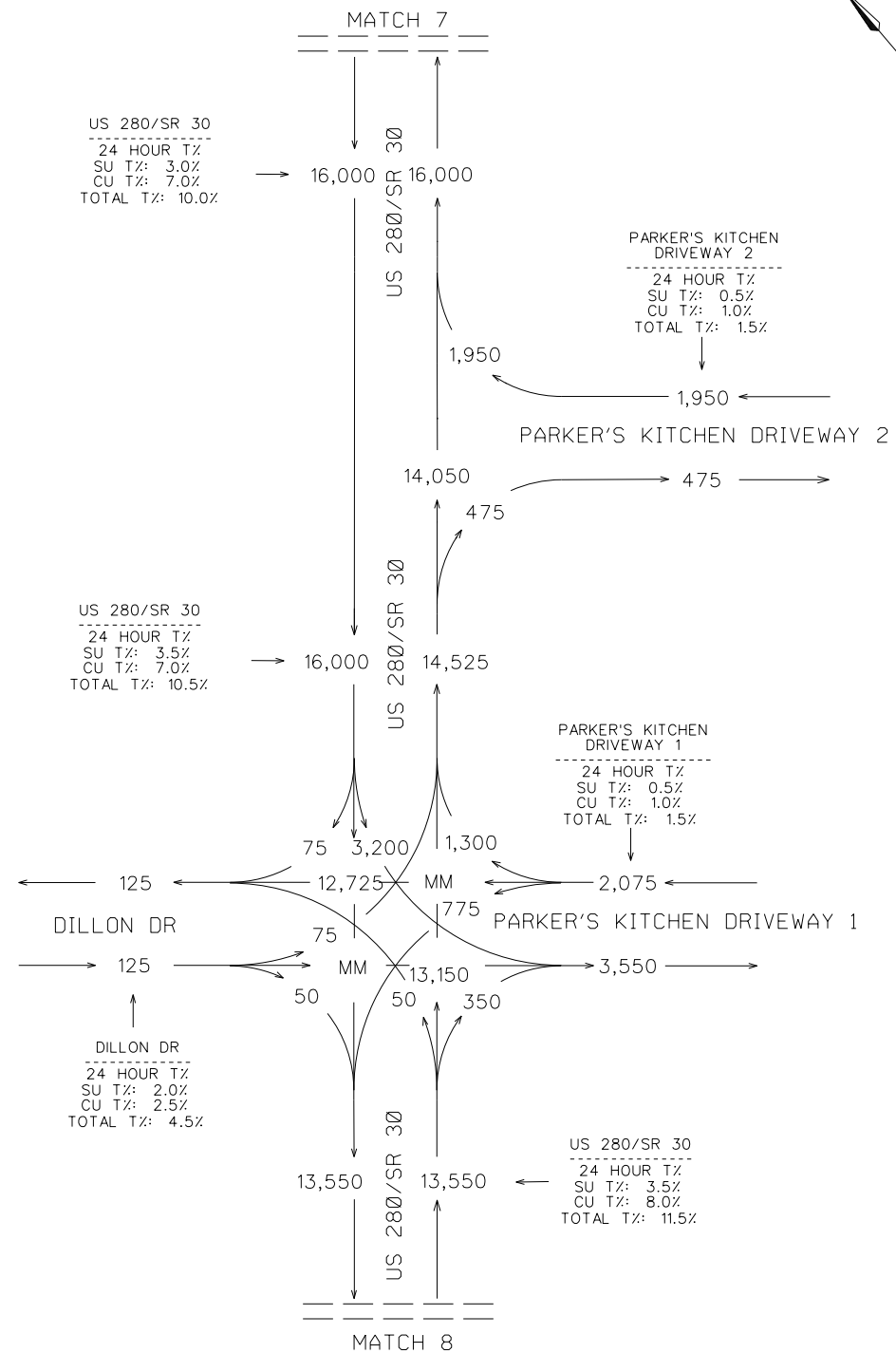
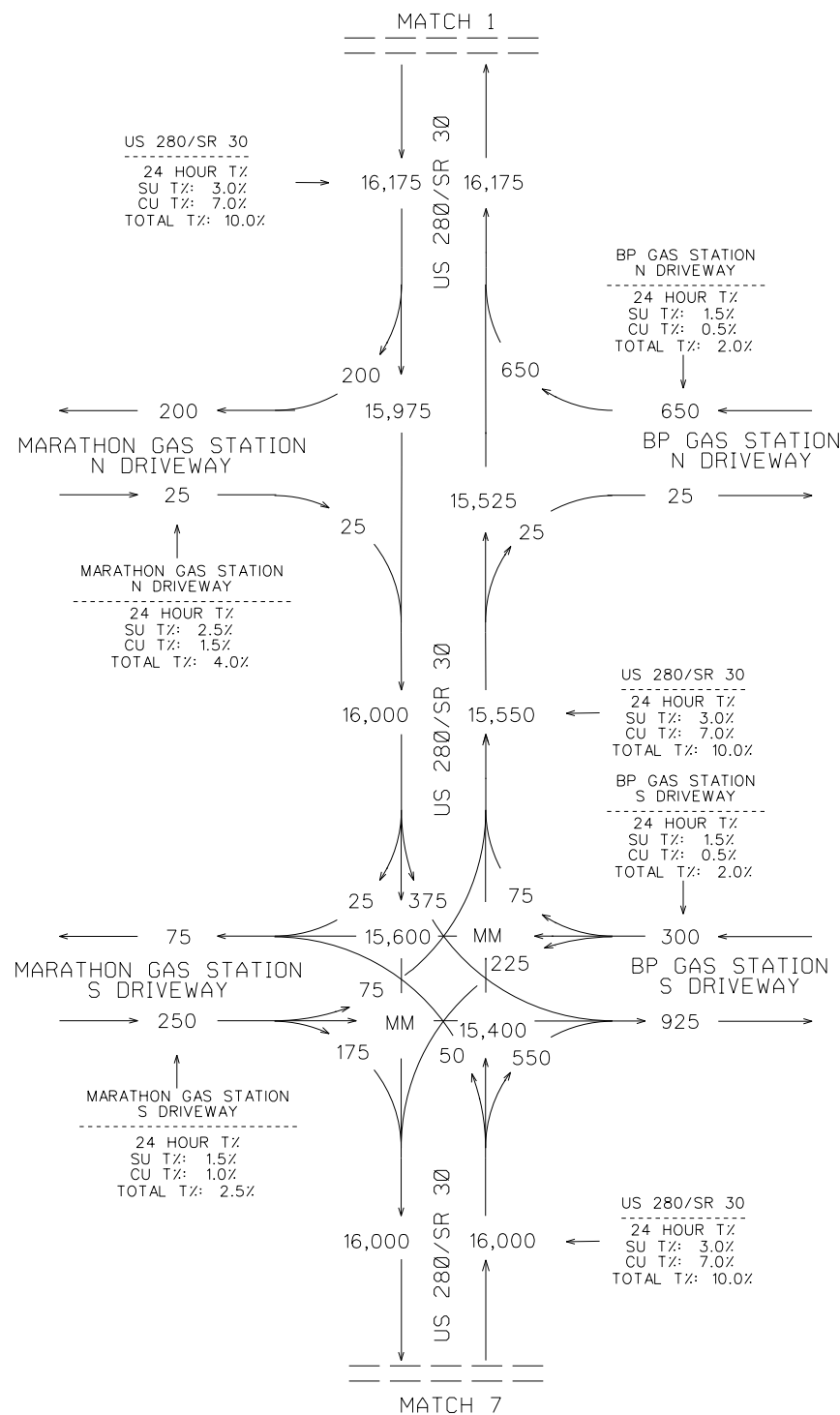
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0018

AADT VOLUMES
OPEN YEAR 2025 NO-BUILD
2025 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
for natural and
built assets

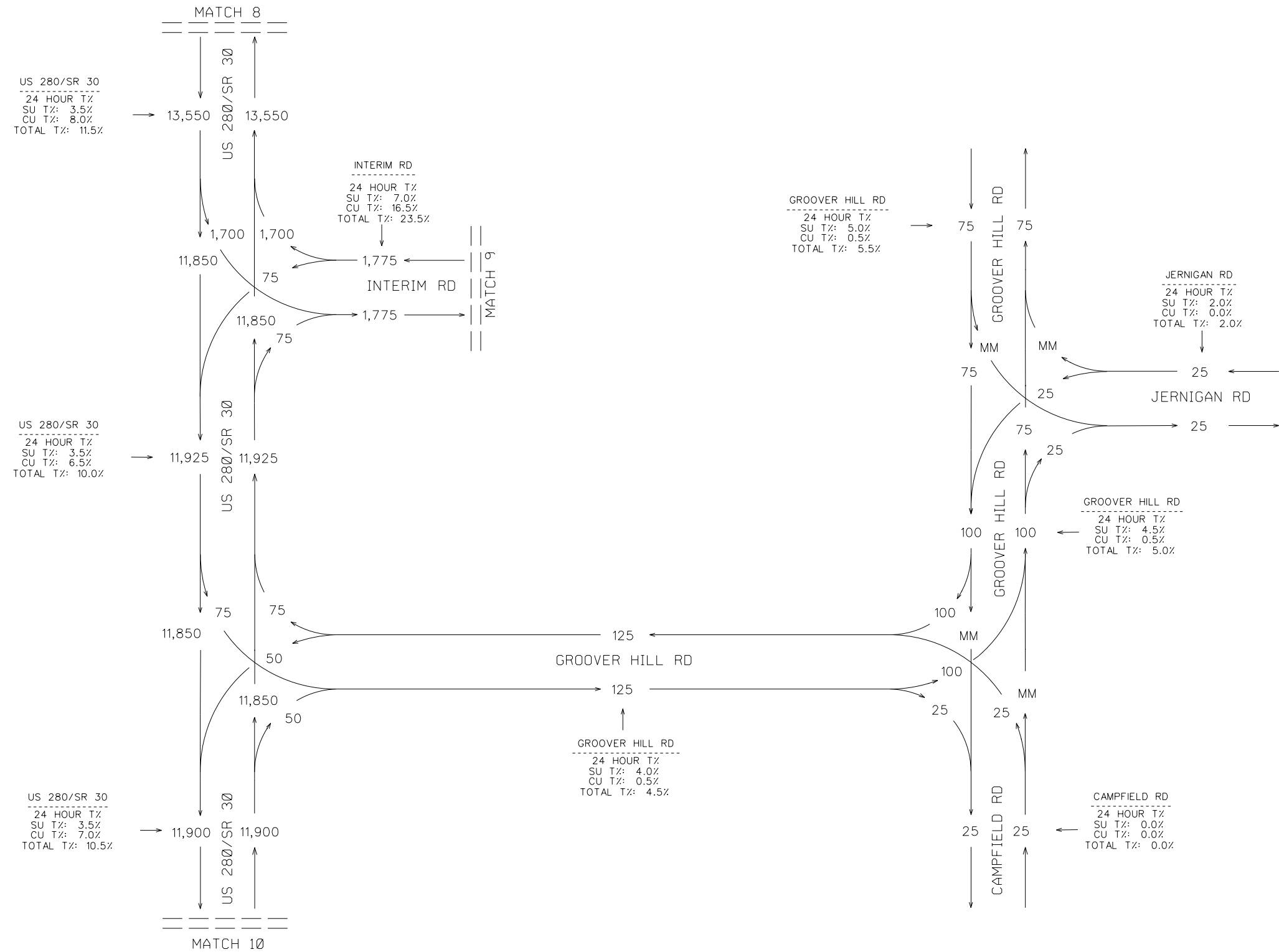
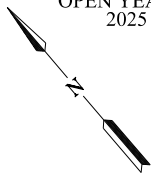
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0021

AADT VOLUMES
OPEN YEAR 2025 NO-BUILD
2025 AADT = XXX



SHEET 5 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



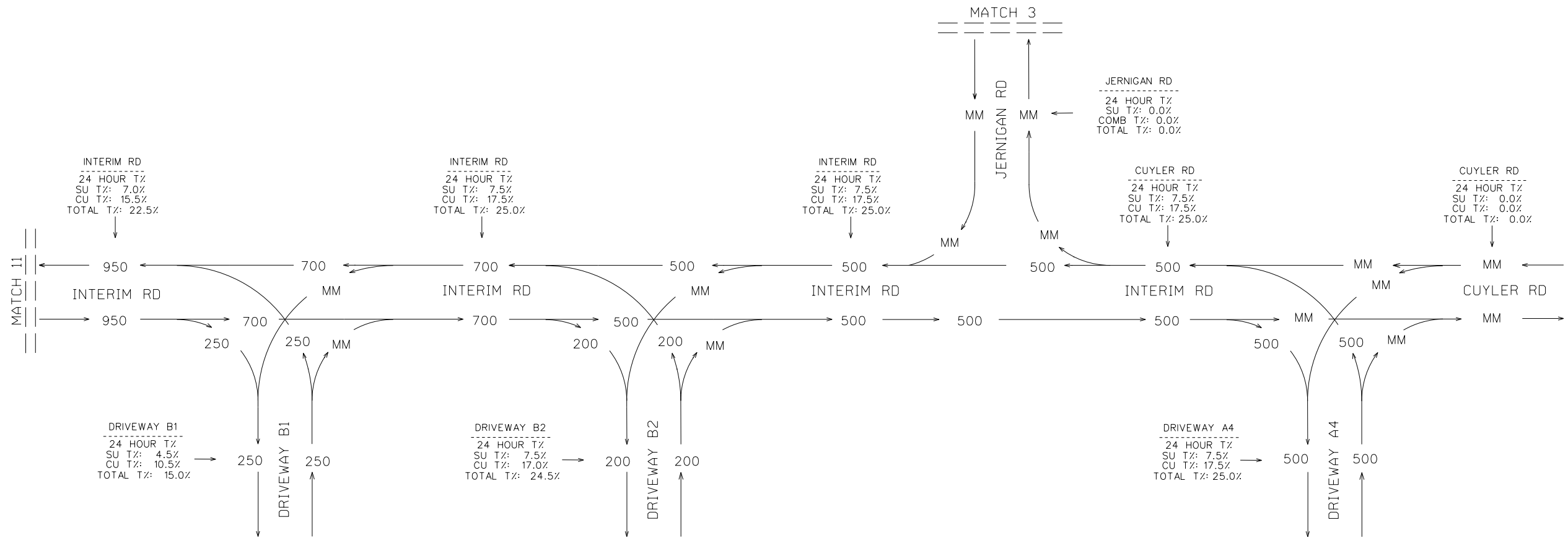
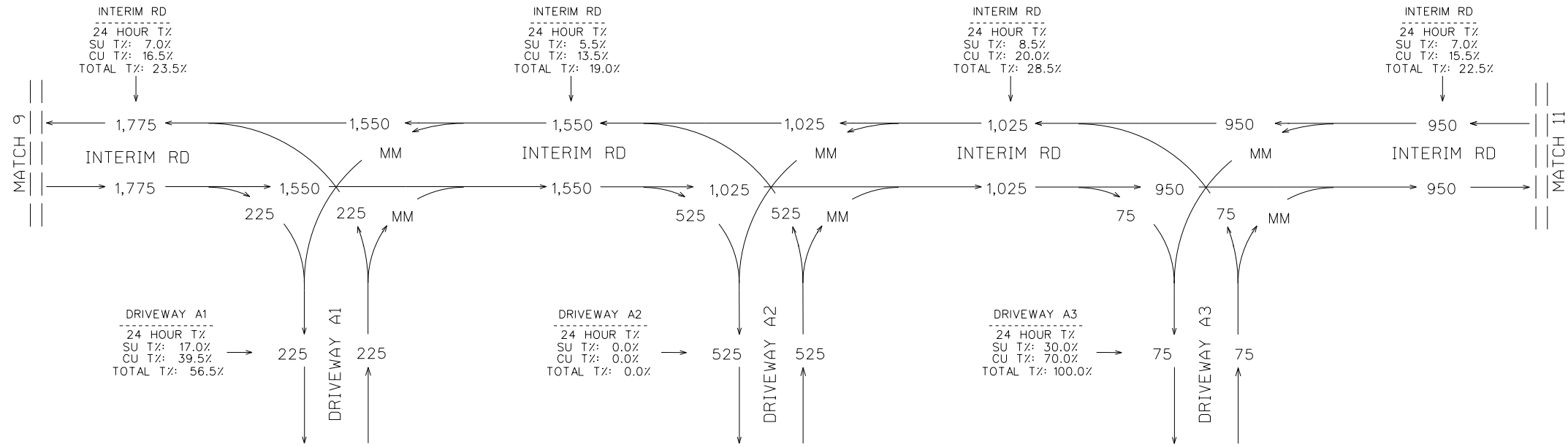
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0022

AADT VOLUMES
OPEN YEAR 2025 NO-BUILD
2025 AADT = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
for natural and
built assets

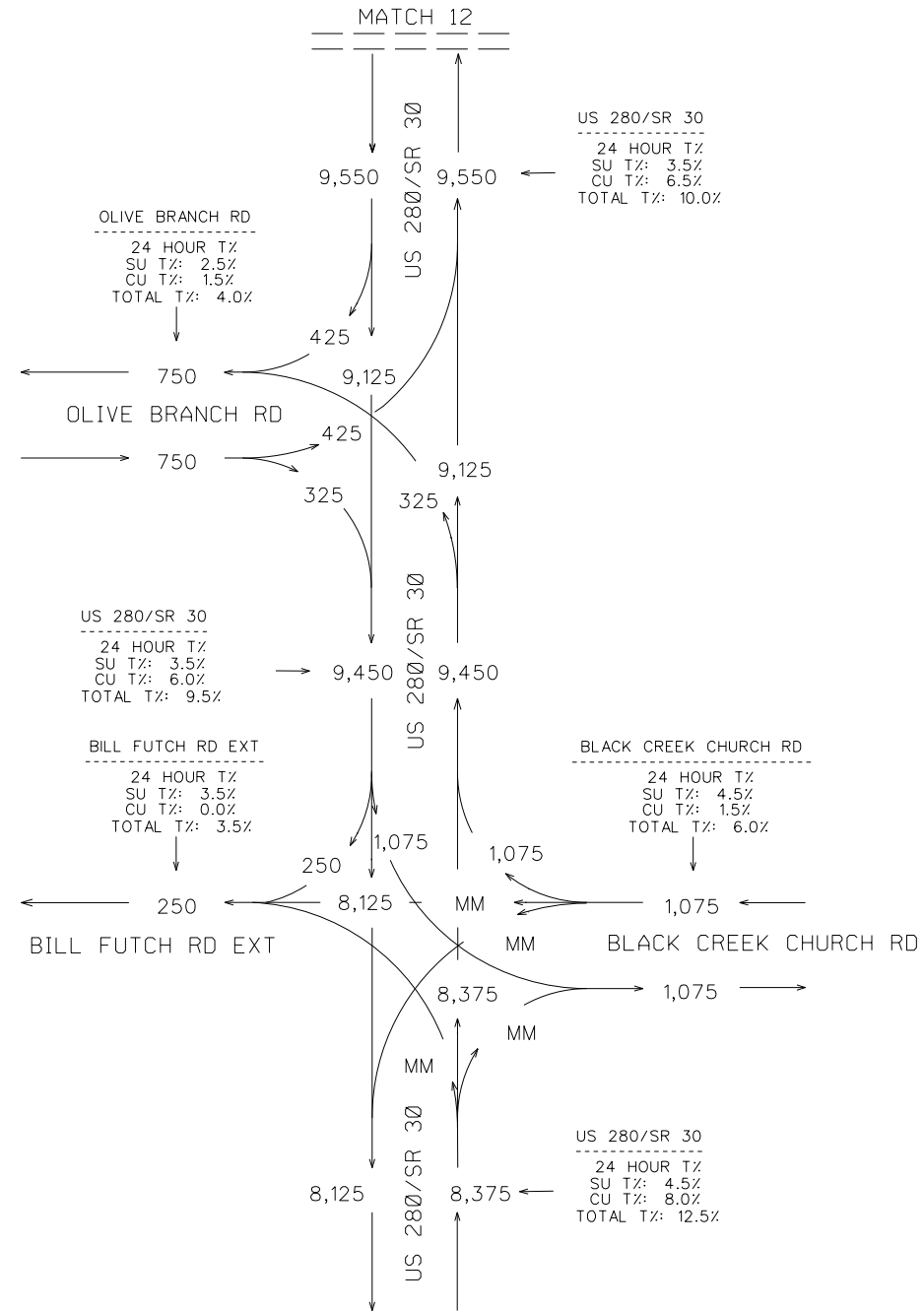
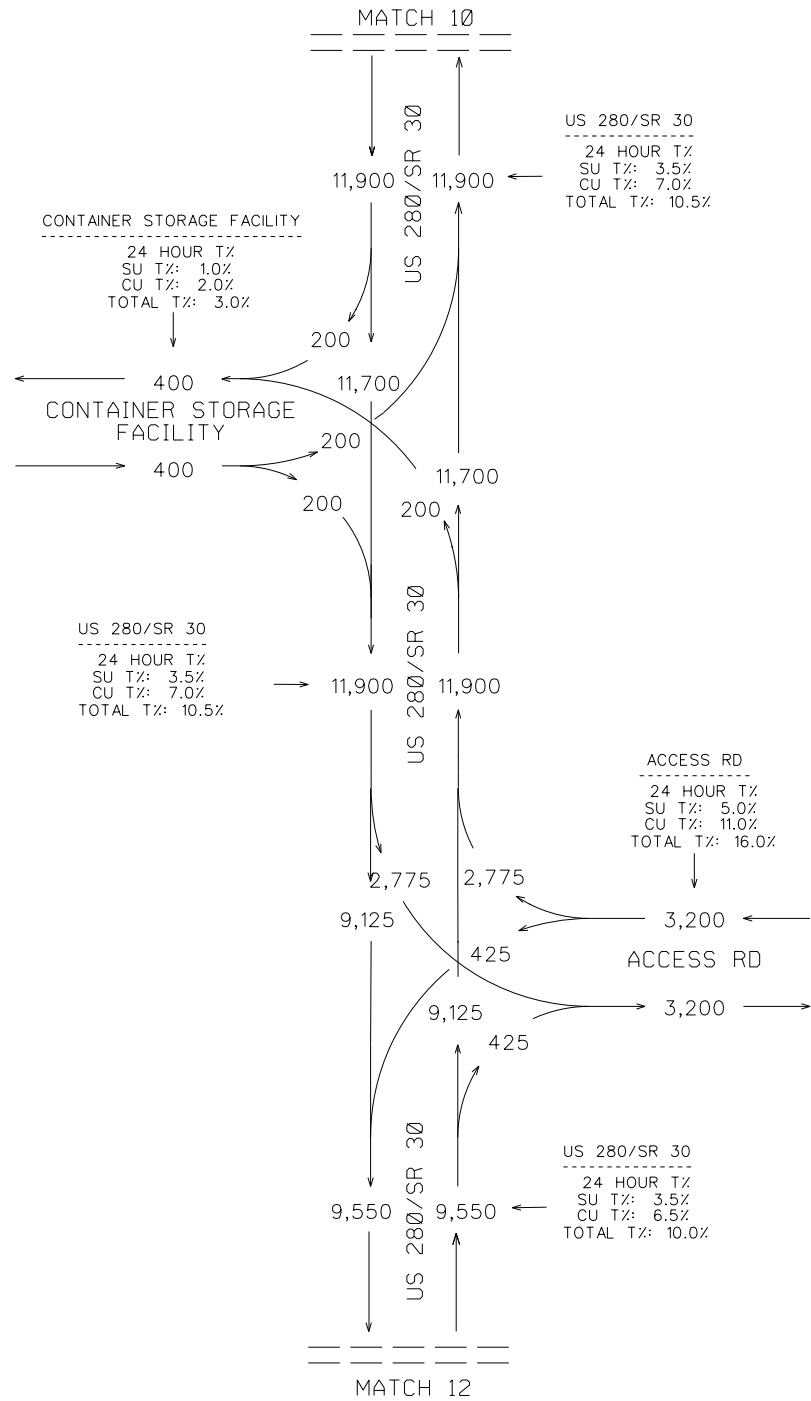
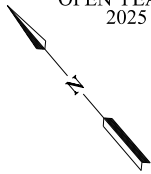
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0023

AADT VOLUMES
OPEN YEAR 2025 NO-BUILD
2025 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



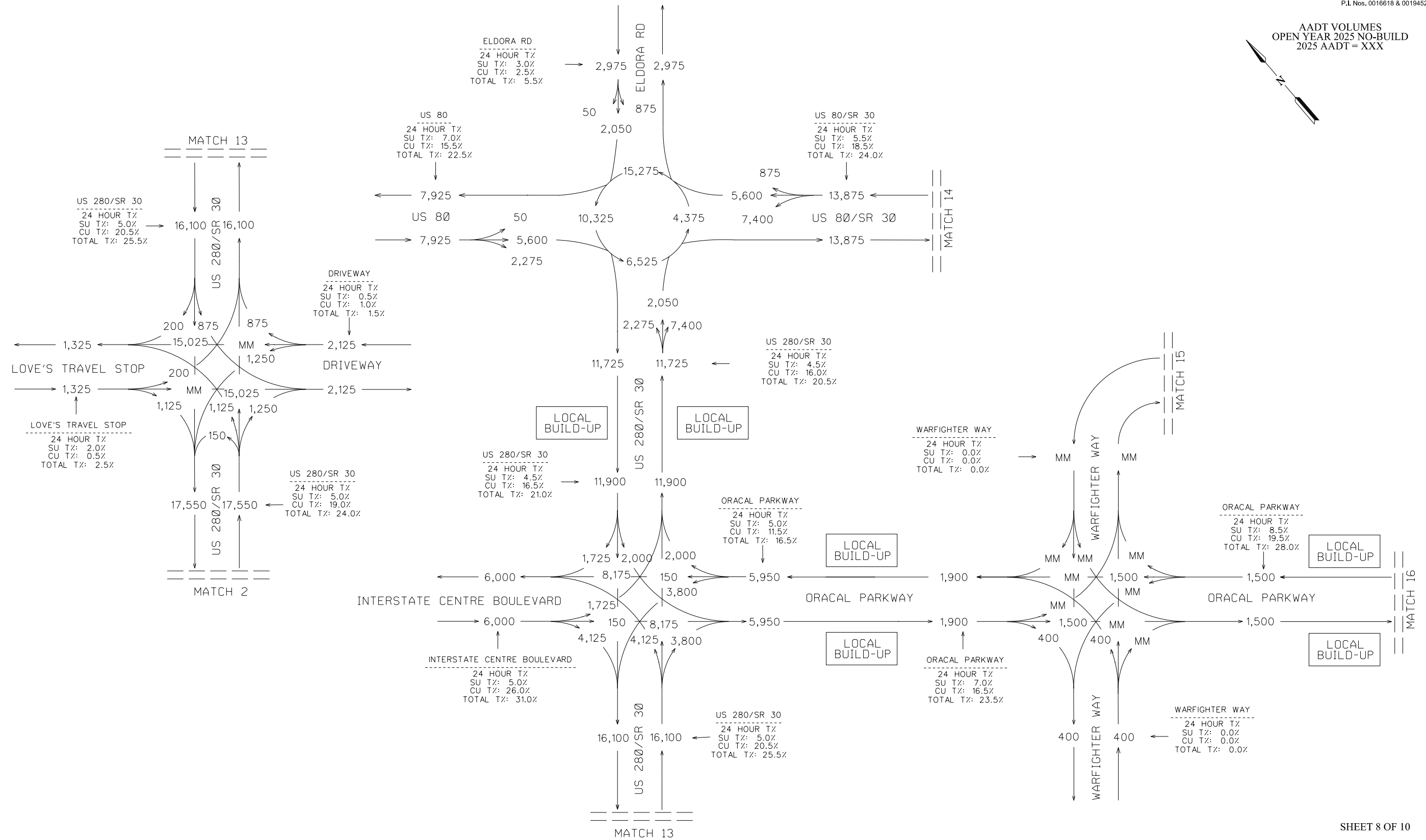
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0024

AADT VOLUMES
OPEN YEAR 2025 NO-BUILD
2025 AADT = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



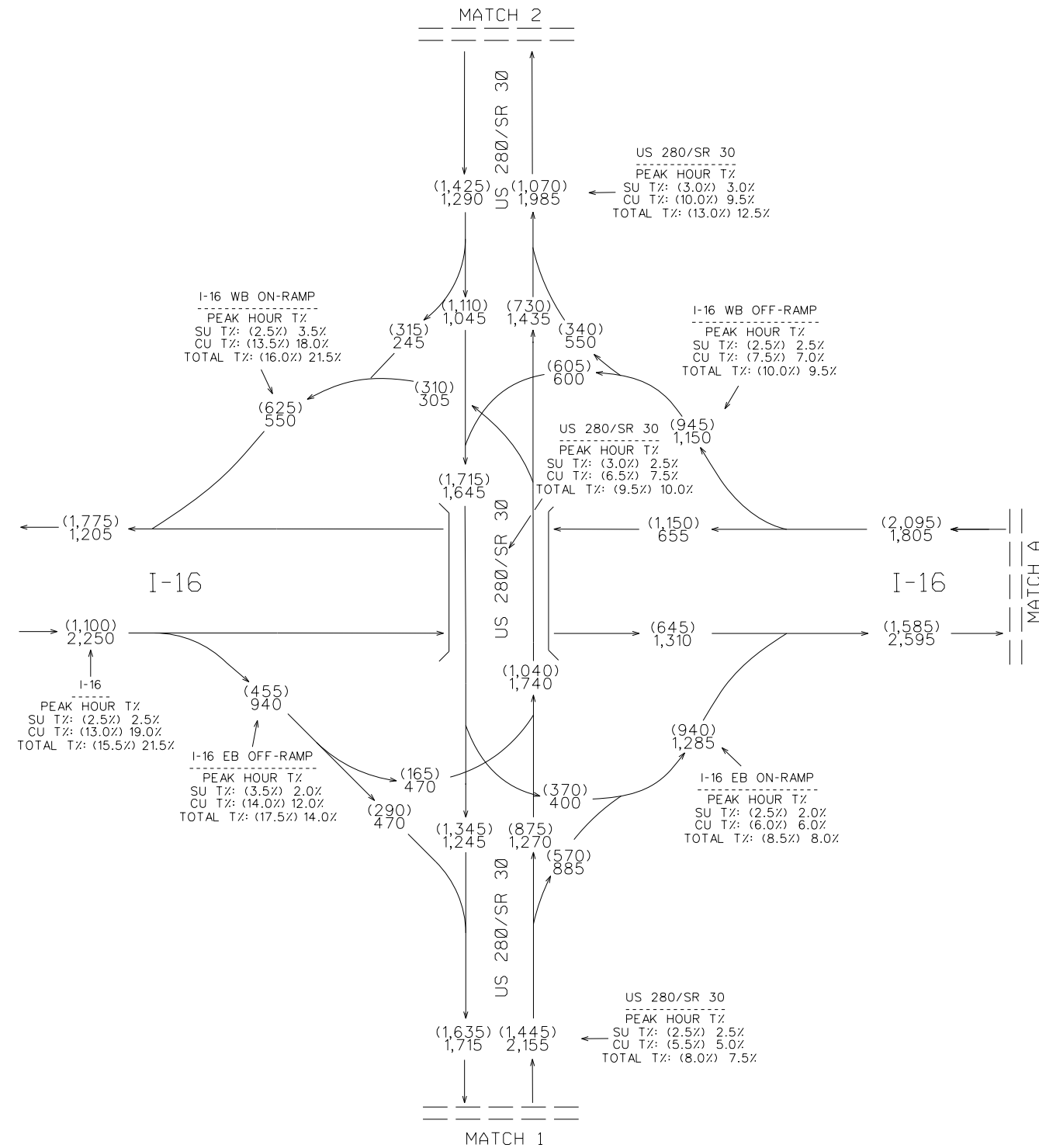
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0025

DHV VOLUMES
OPEN YEAR 2025 NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
for natural and
built assets

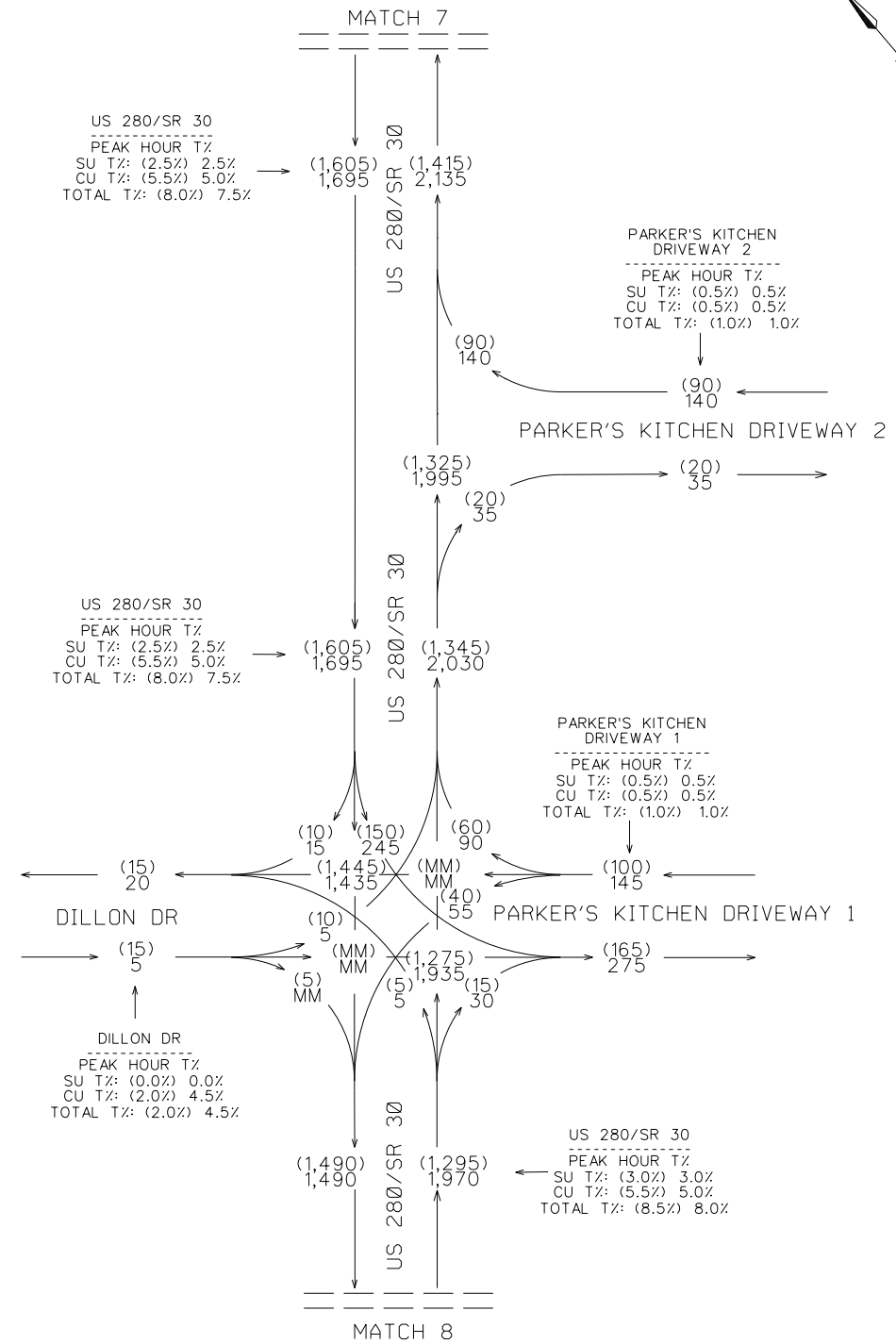
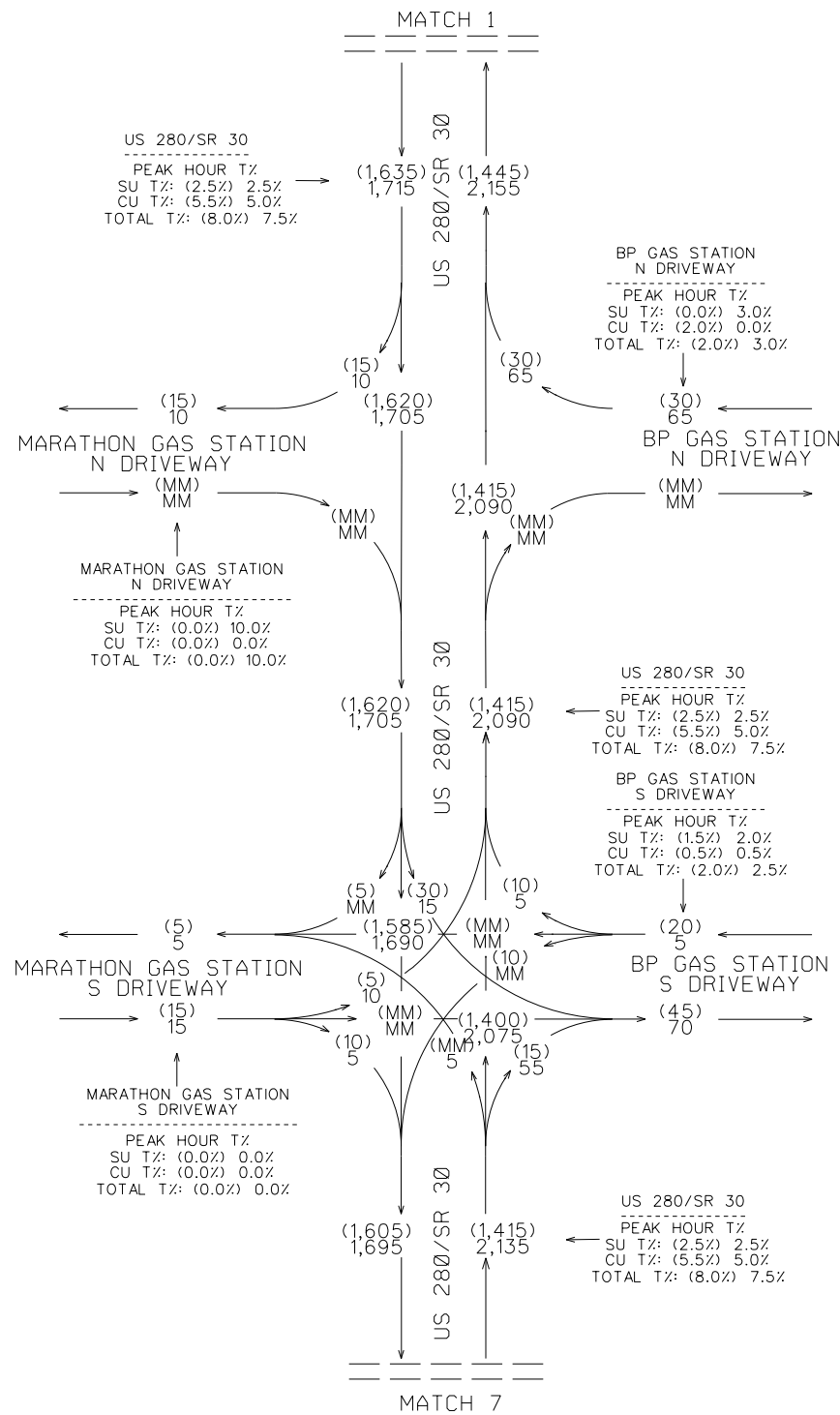
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0028

DHV VOLUMES
OPEN YEAR 2025 NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

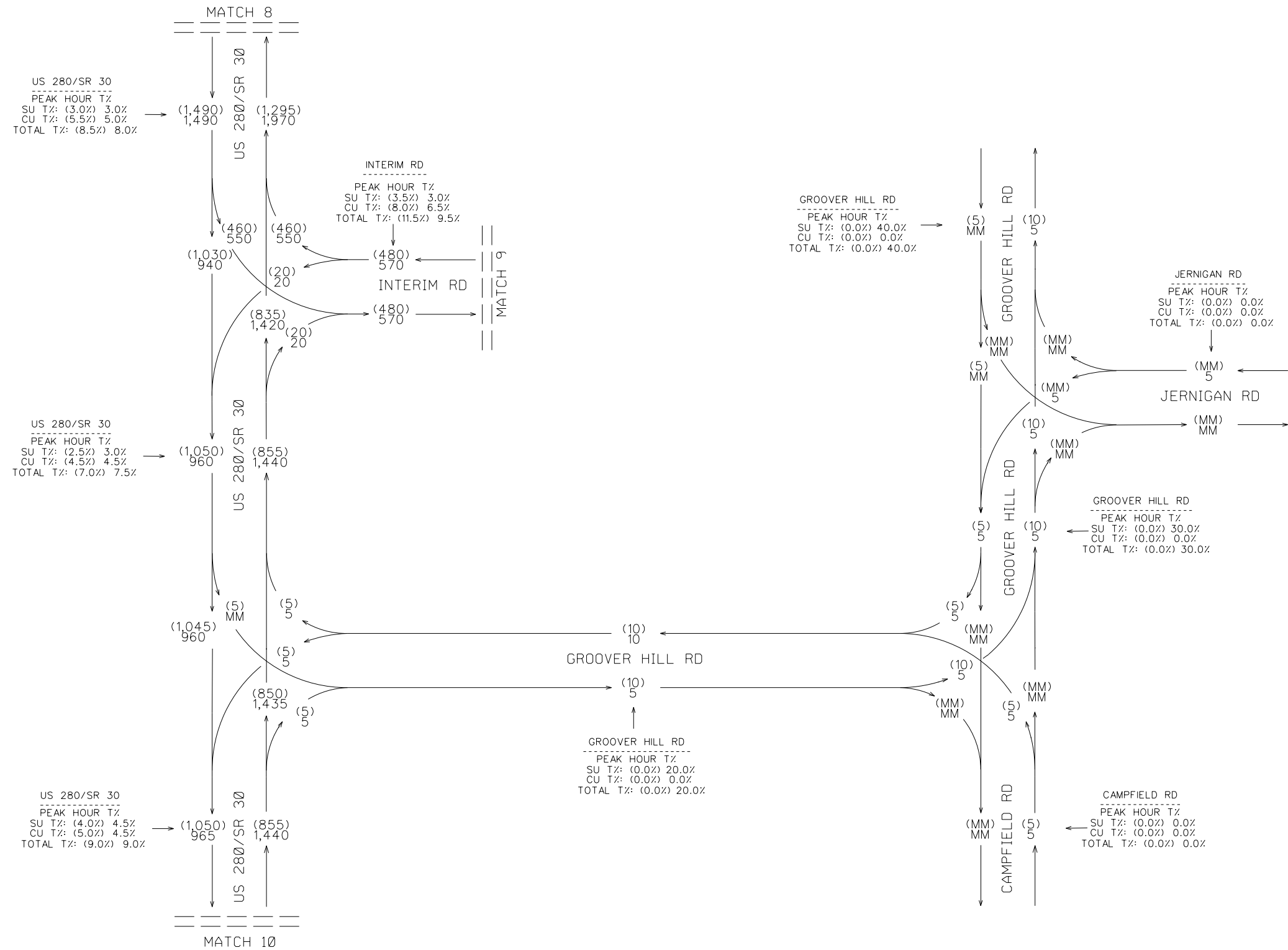
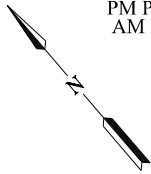
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0031

DHV VOLUMES
OPEN YEAR 2025 NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



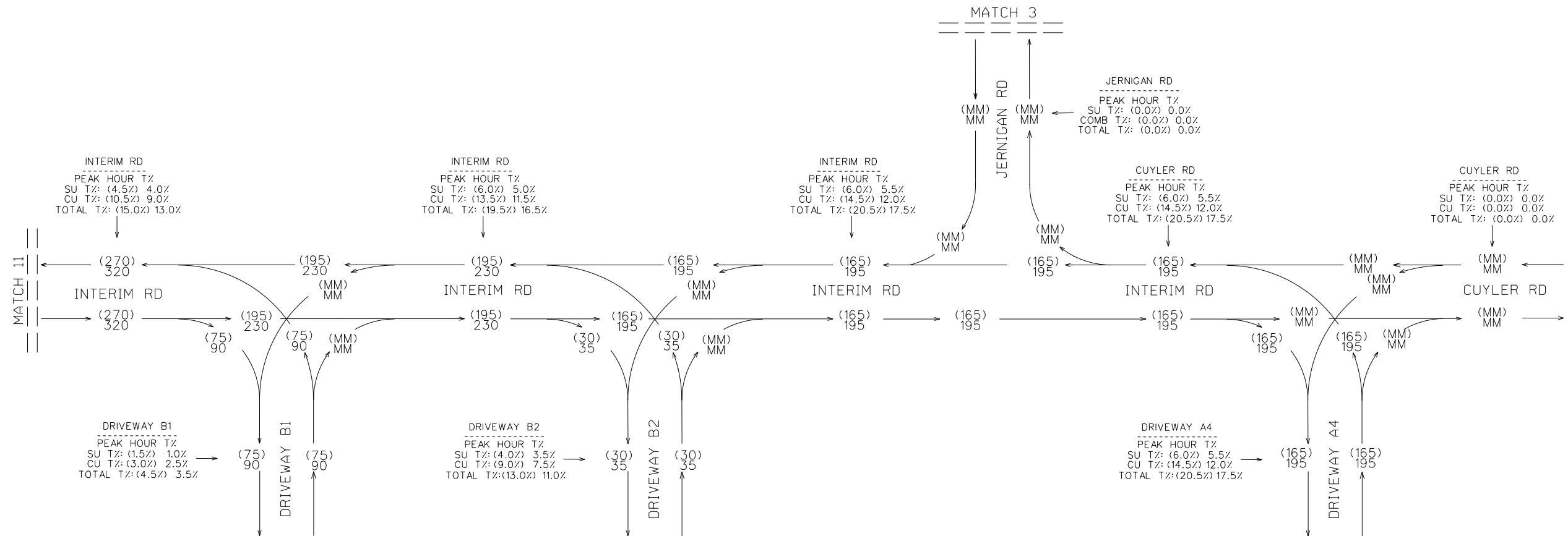
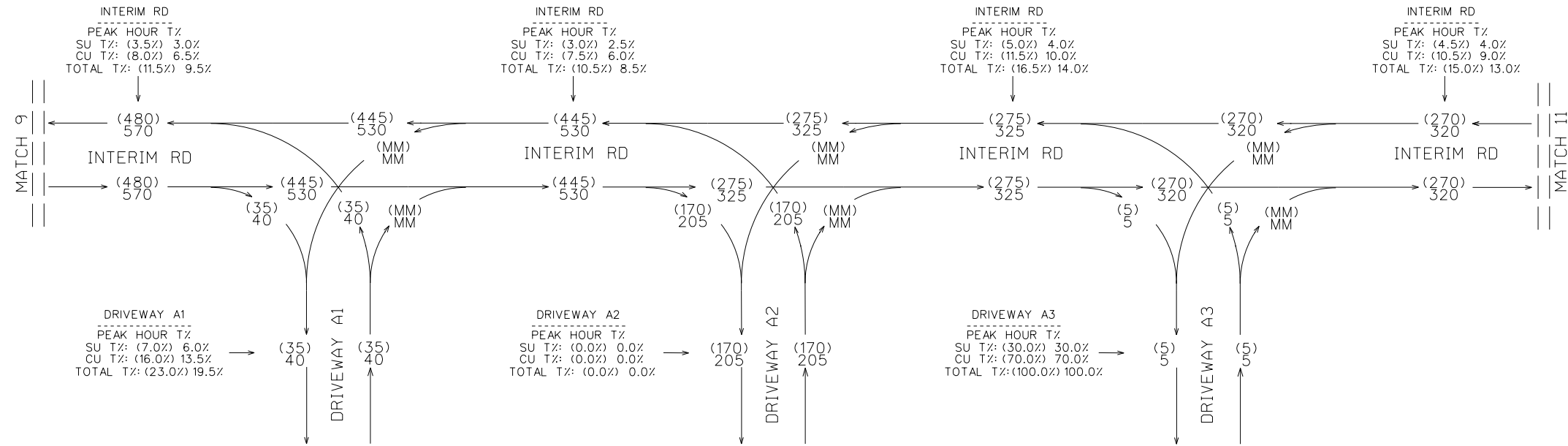
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0032

DHV VOLUMES
OPEN YEAR 2025 NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

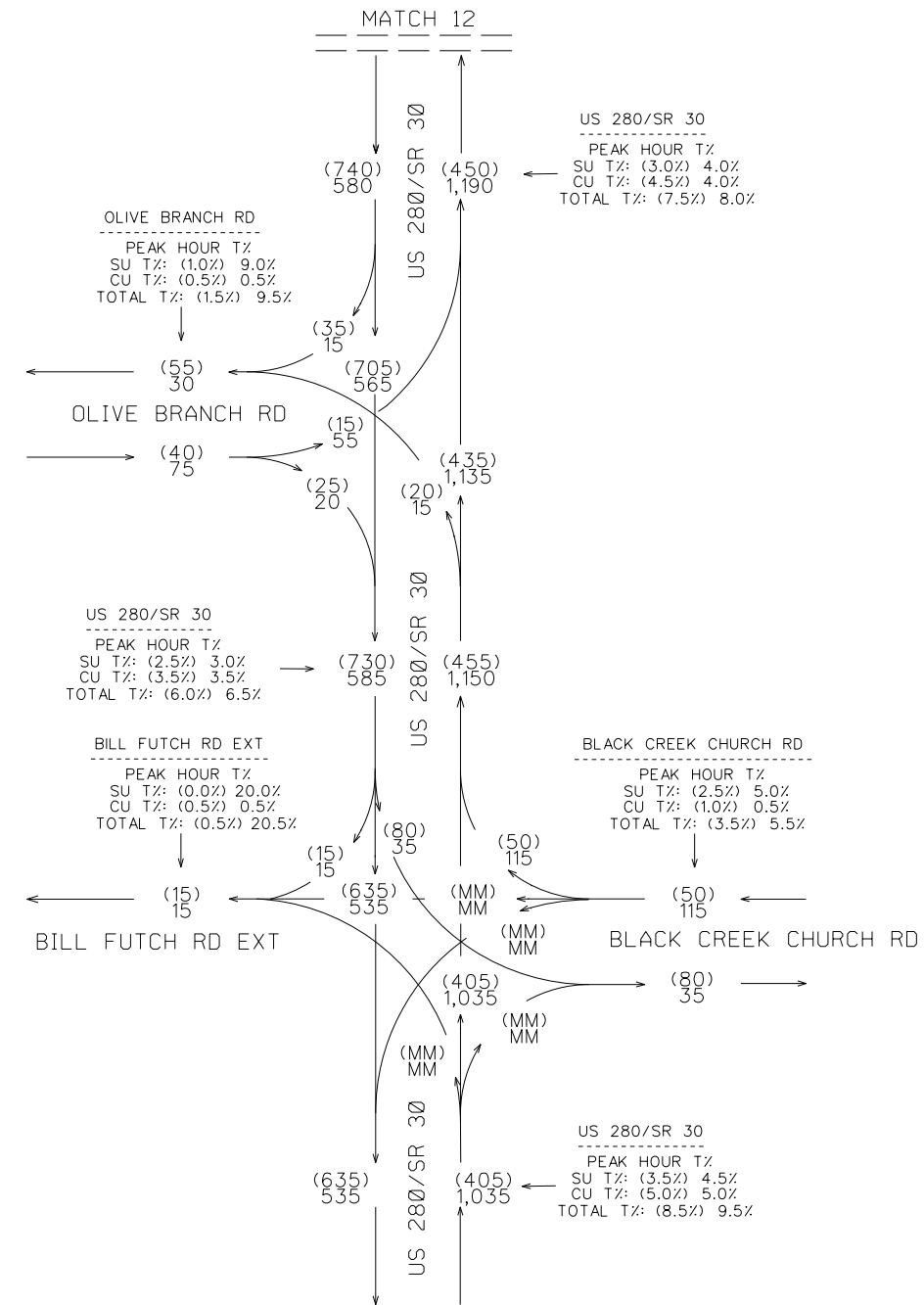
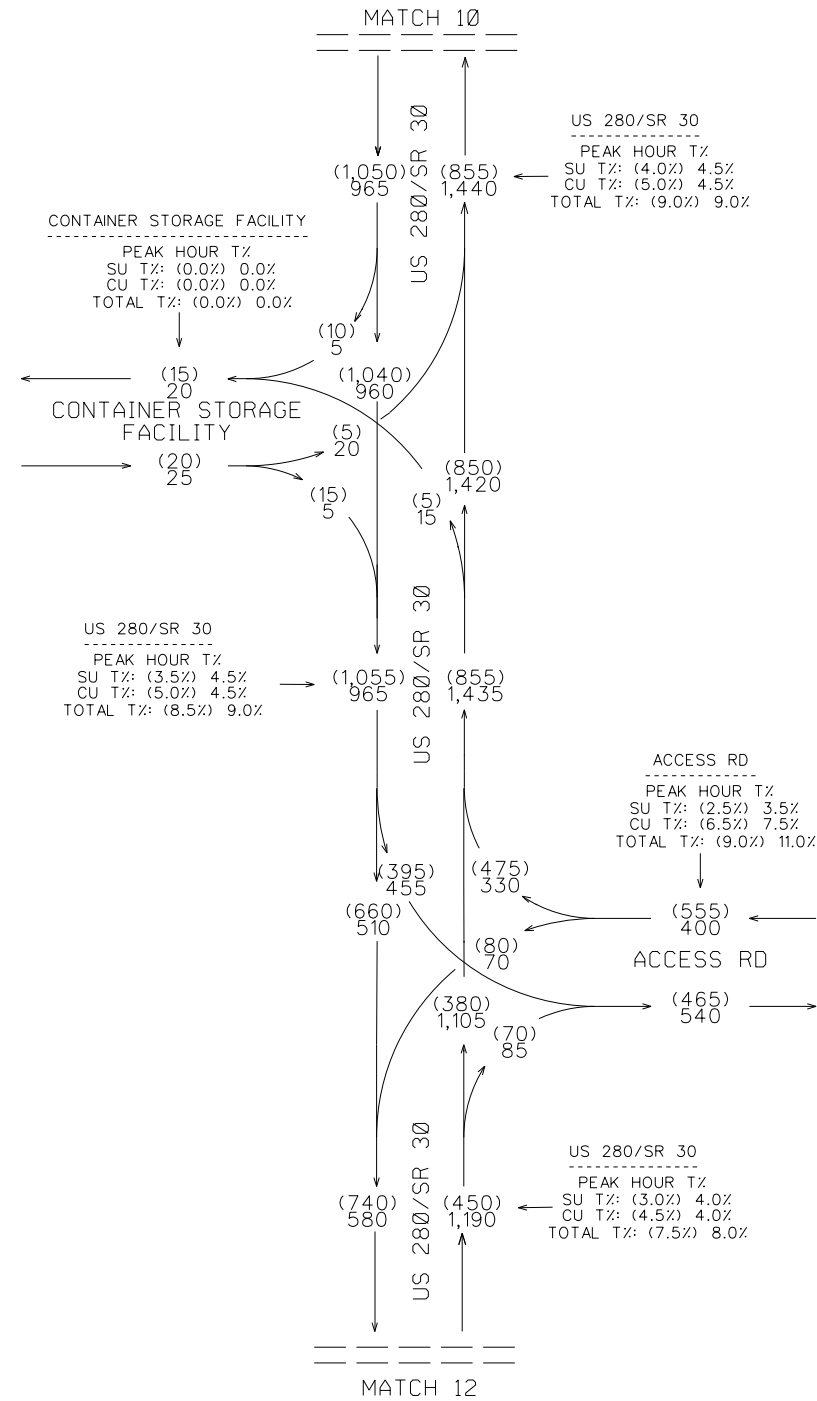


REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	10-0033

DHV VOLUMES
OPEN YEAR 2025 NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



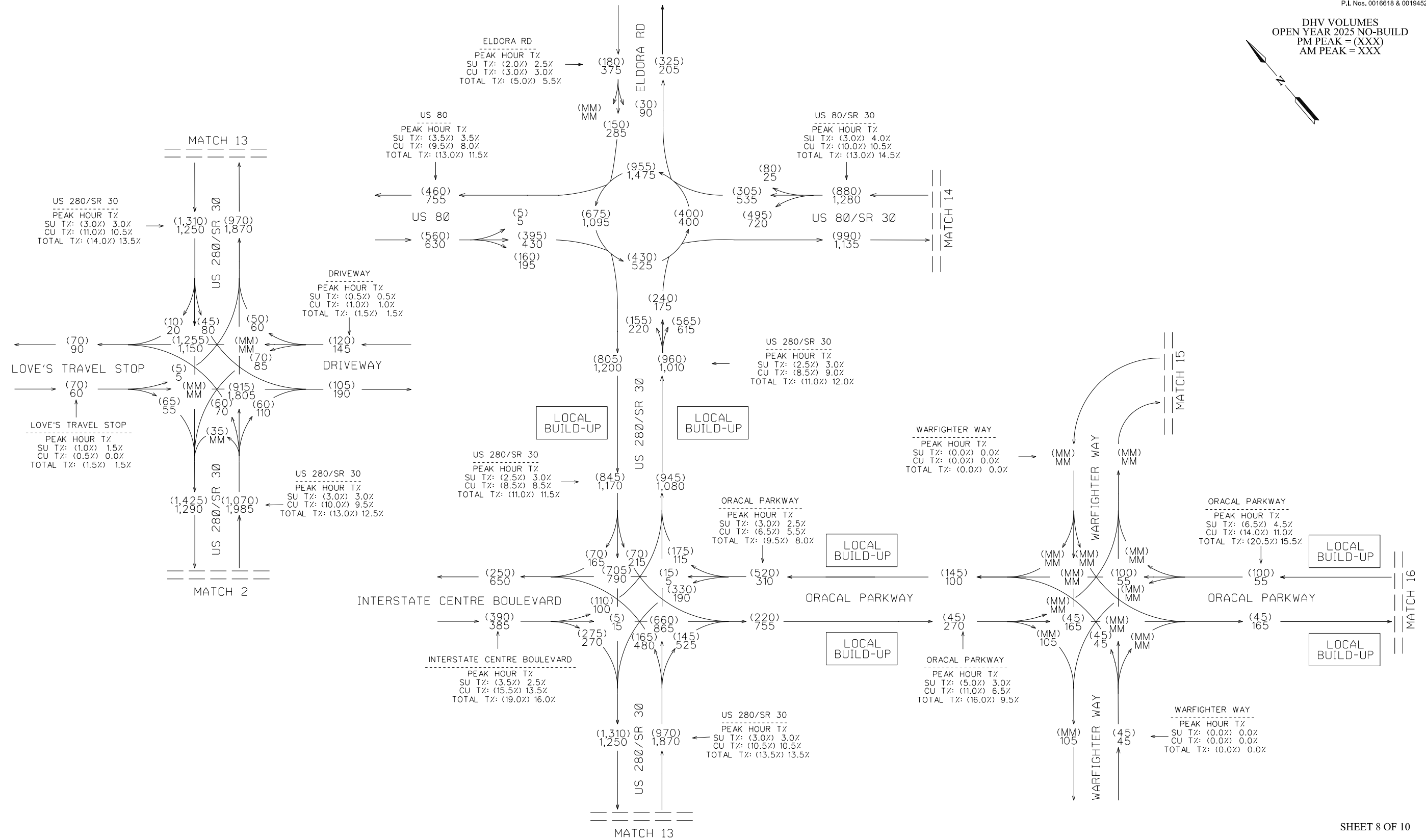
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0034

DHV VOLUMES
OPEN YEAR 2025 NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



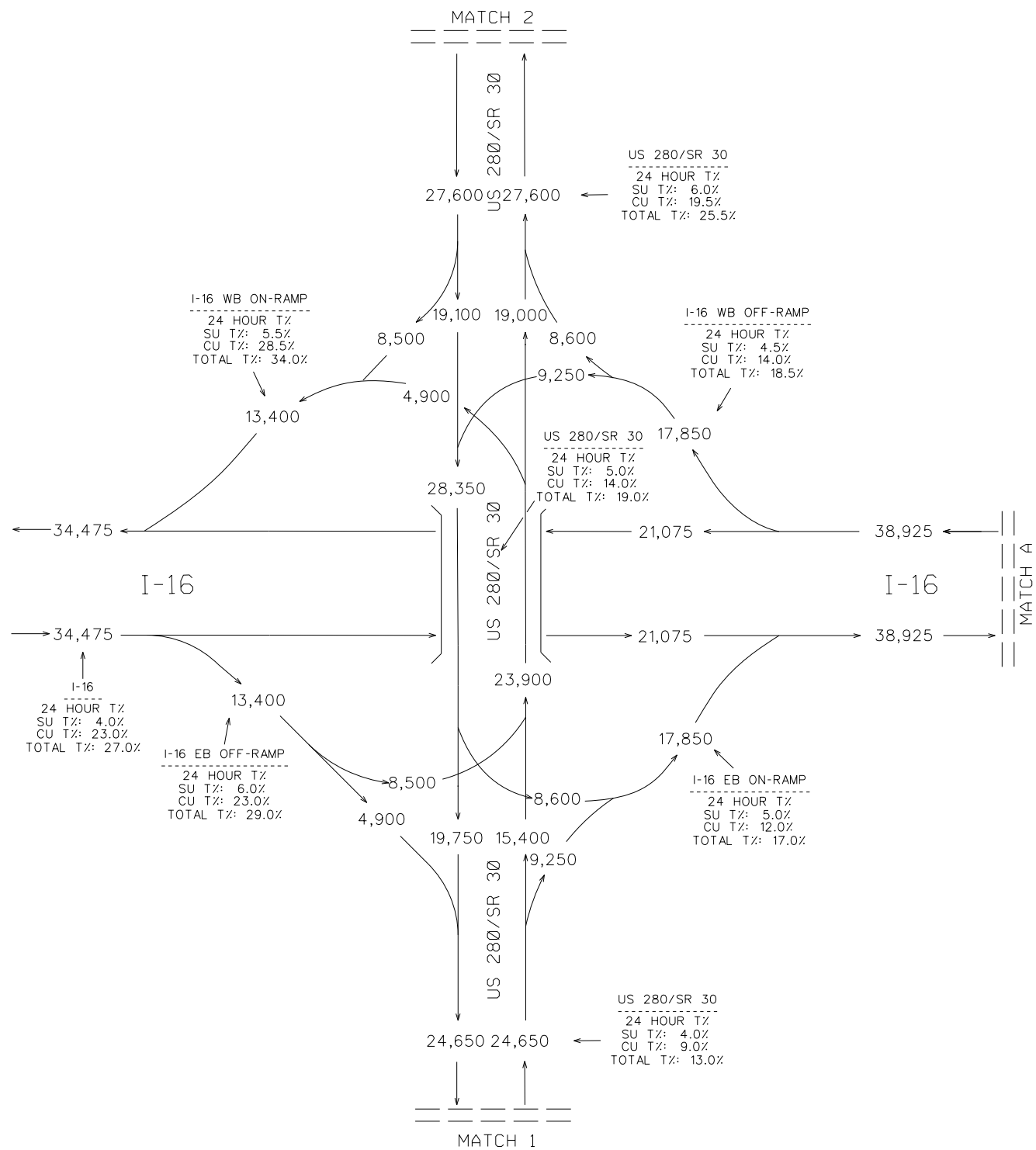
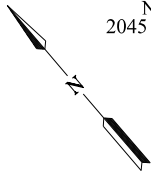
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0035

AADT VOLUMES
DESIGN YEAR 2045
NO-BUILD
2045 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



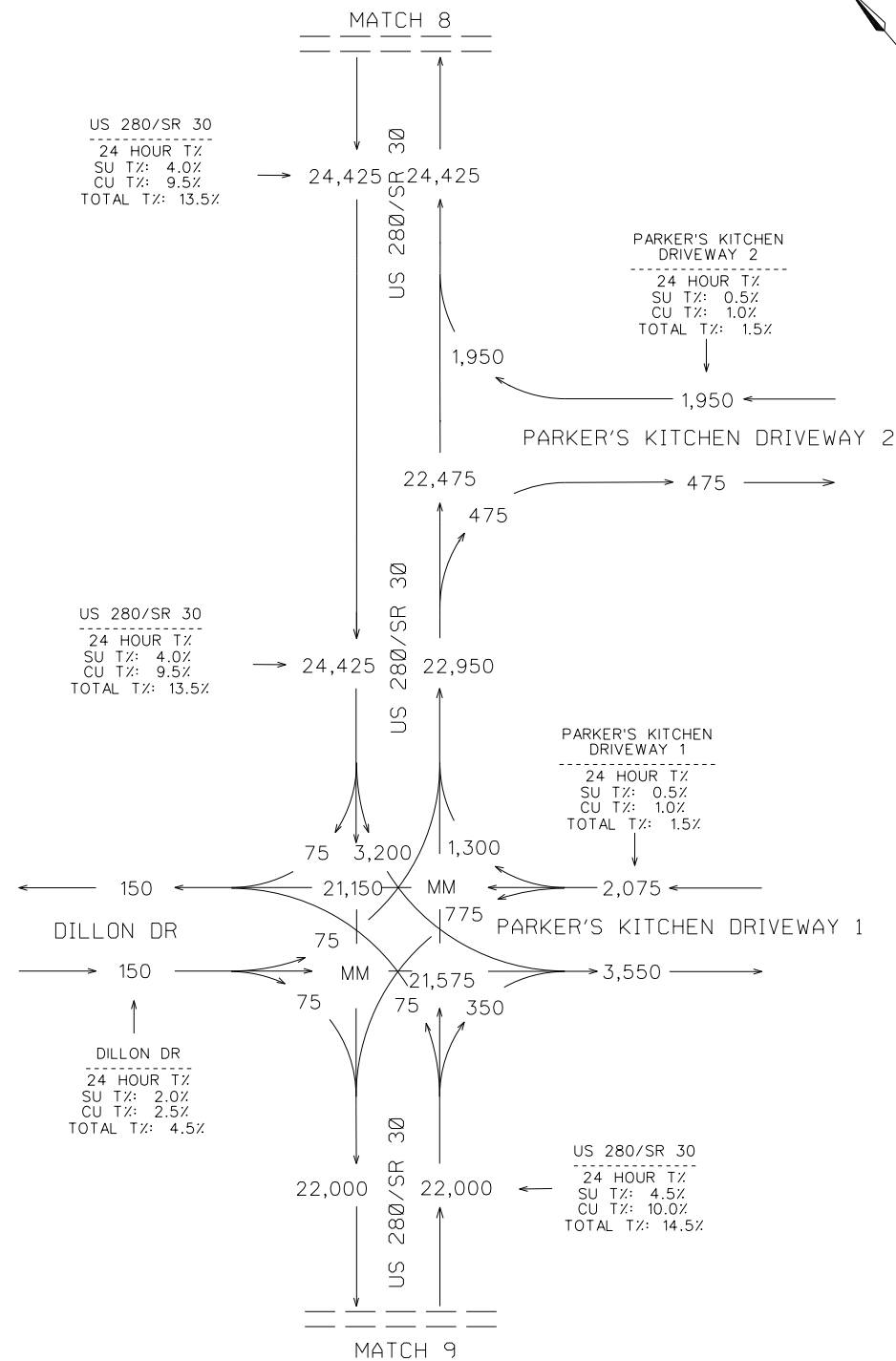
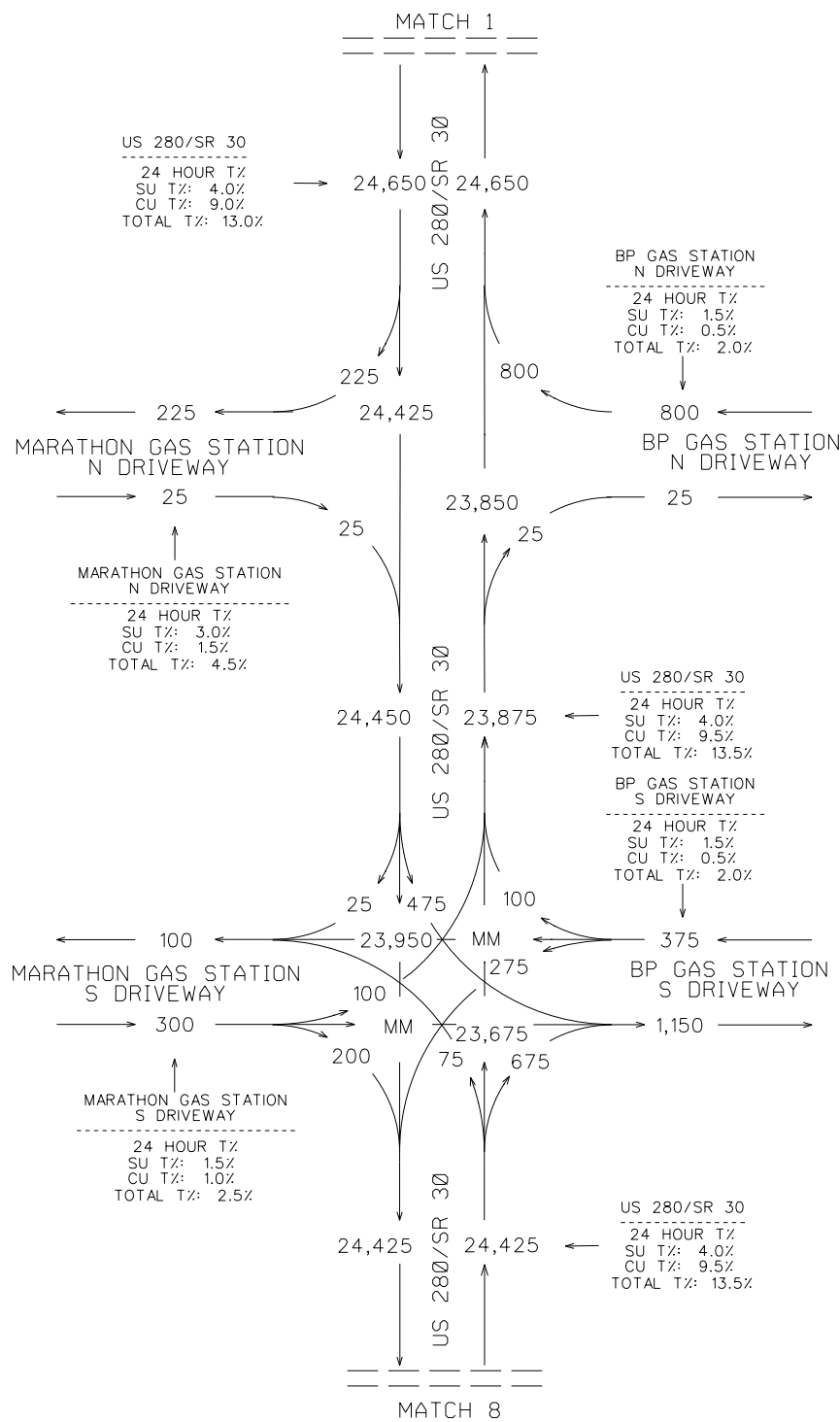
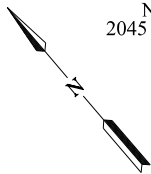
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0039

AADT VOLUMES
DESIGN YEAR 2045
NO-BUILD
2045 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

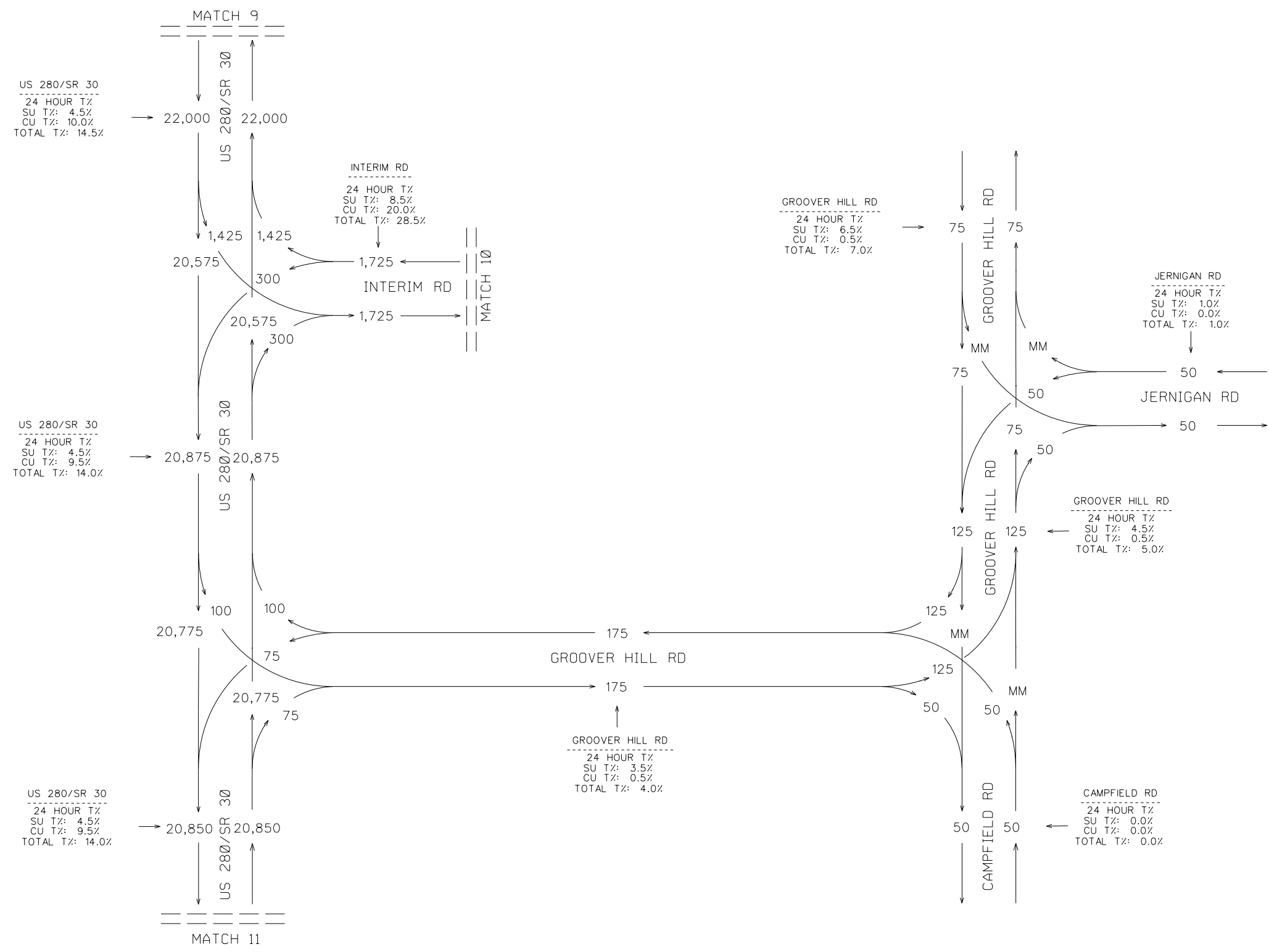
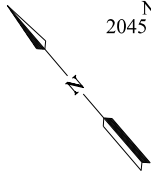
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0042

AADT VOLUMES
DESIGN YEAR 2045
NO-BUILD
2045 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



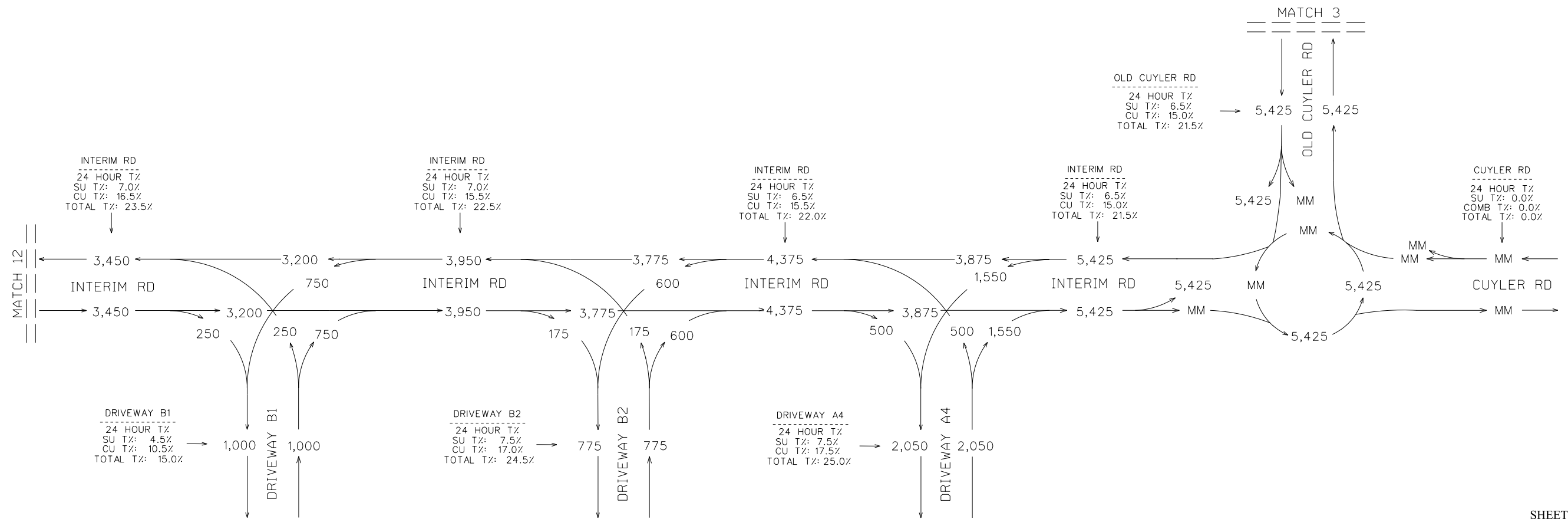
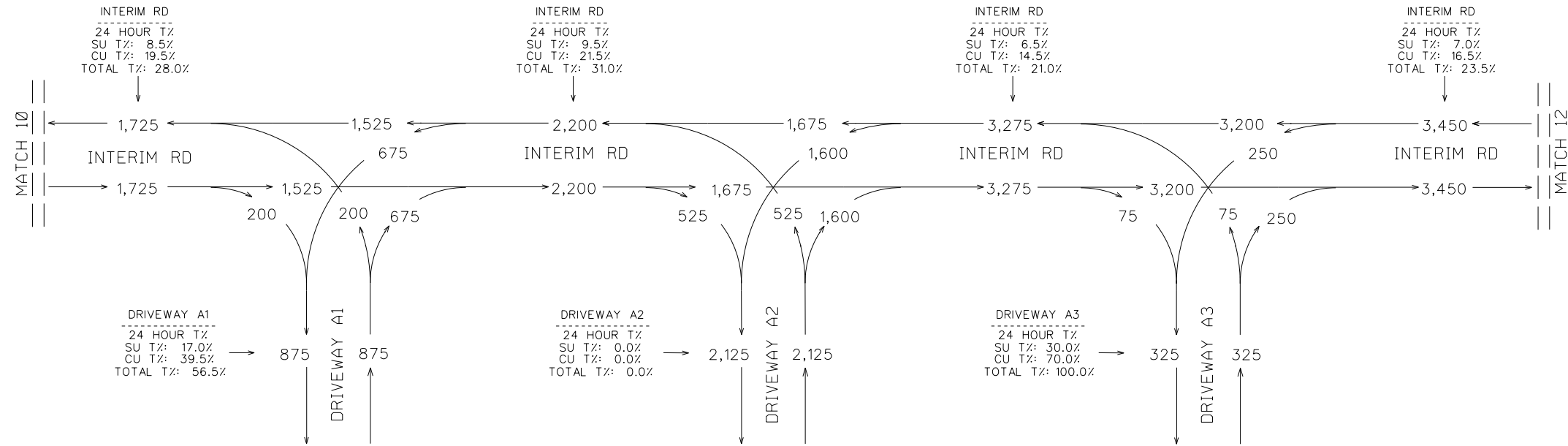
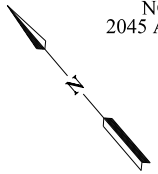
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0043

AADT VOLUMES
DESIGN YEAR 2045
NO-BUILD
2045 AADT = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



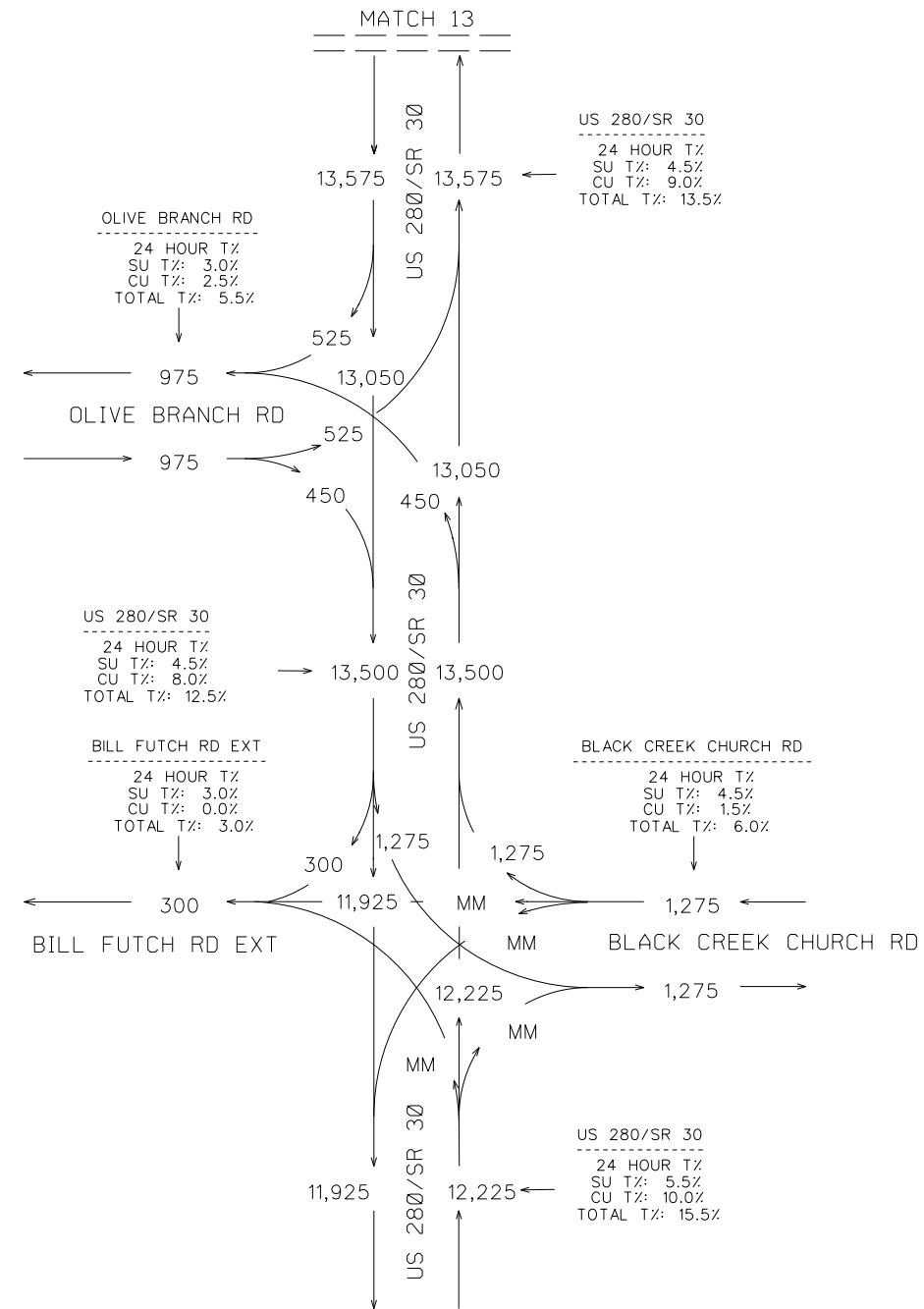
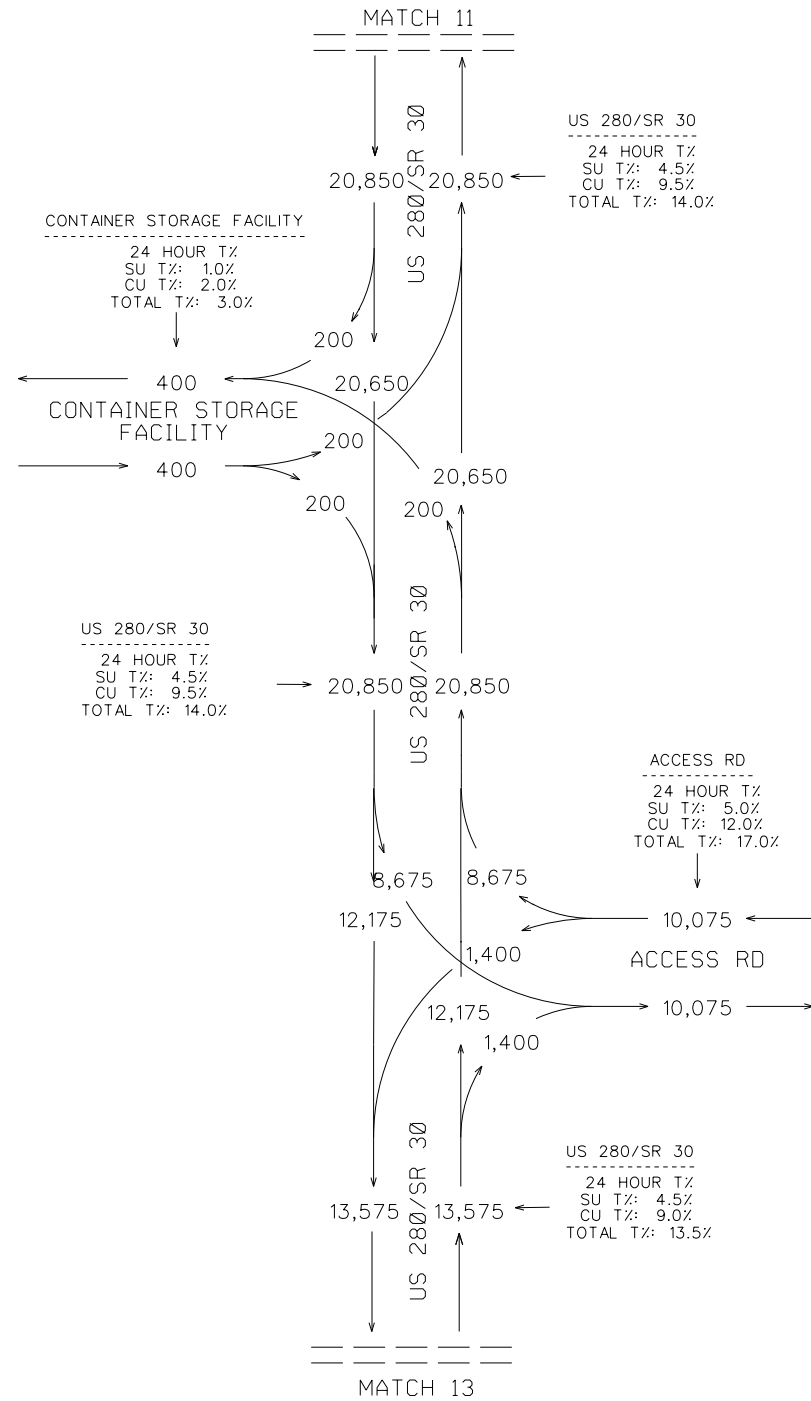
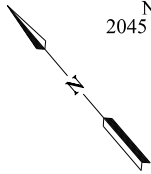
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0044

AADT VOLUMES
DESIGN YEAR 2045
NO-BUILD
2045 AADT = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

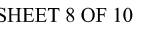


REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

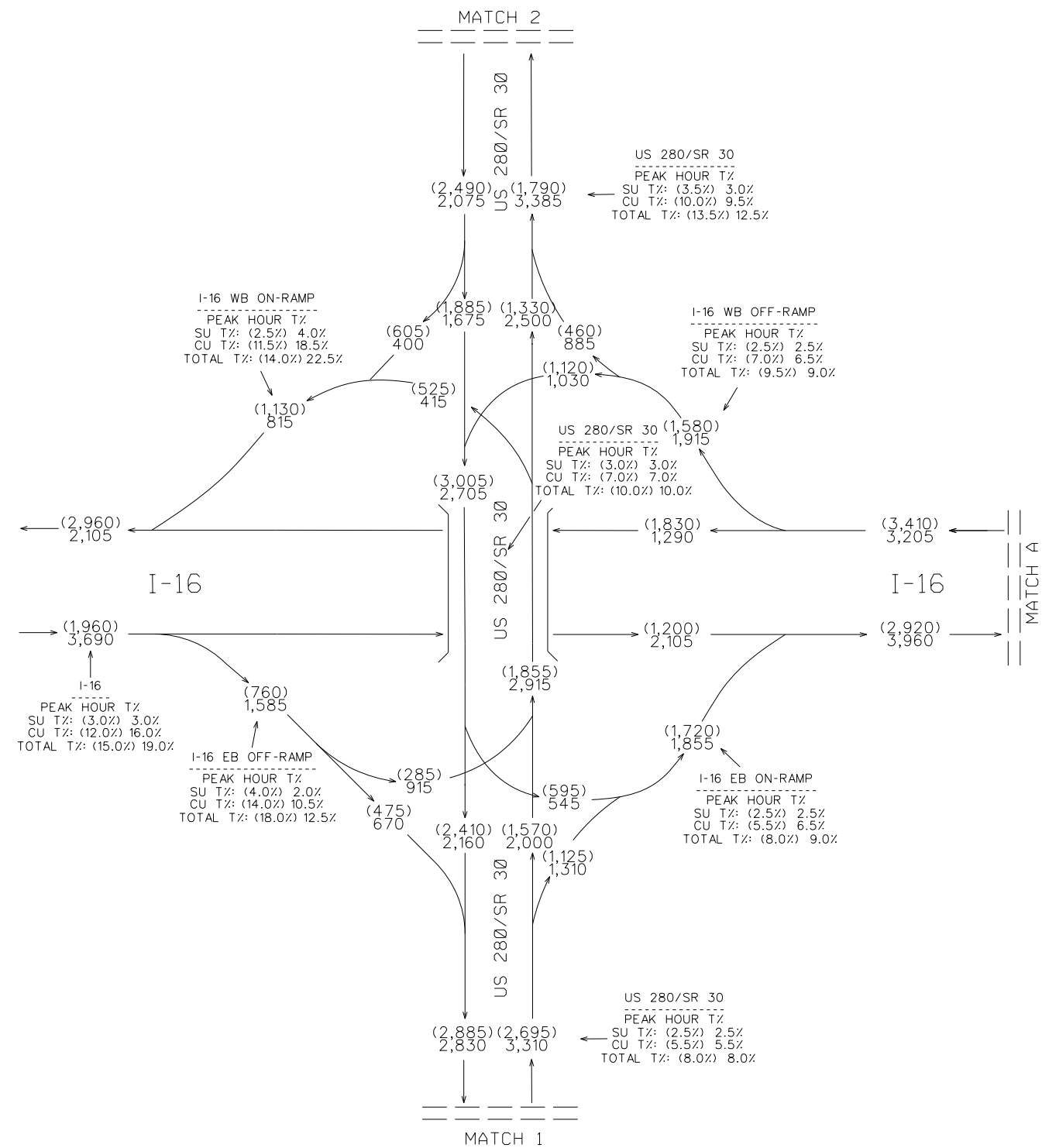
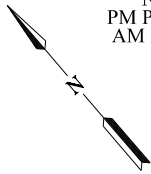
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BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0045



CHECKED:		DATE:		DRAWING No. 10-0046
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

DHV VOLUMES
DESIGN YEAR 2045
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



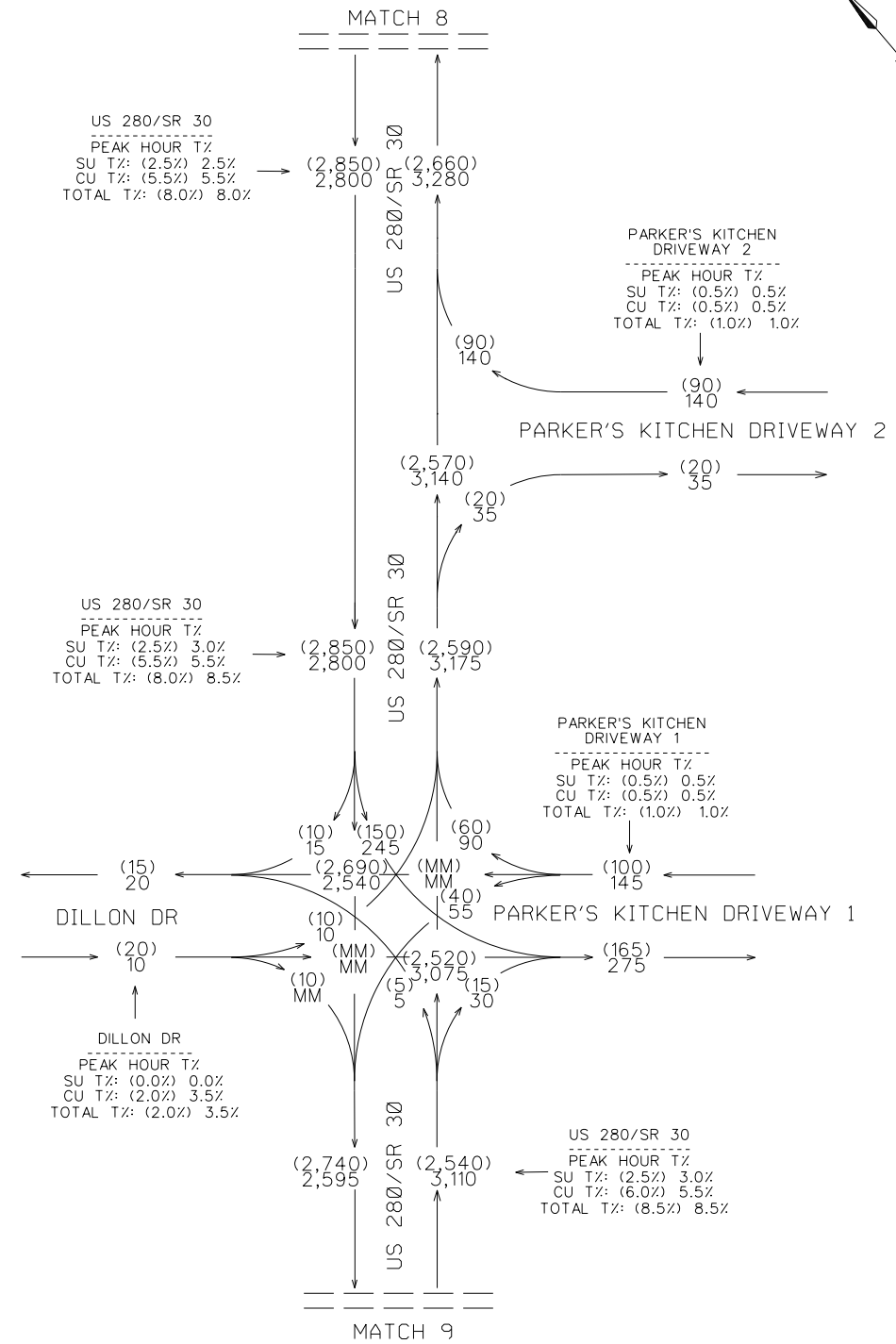
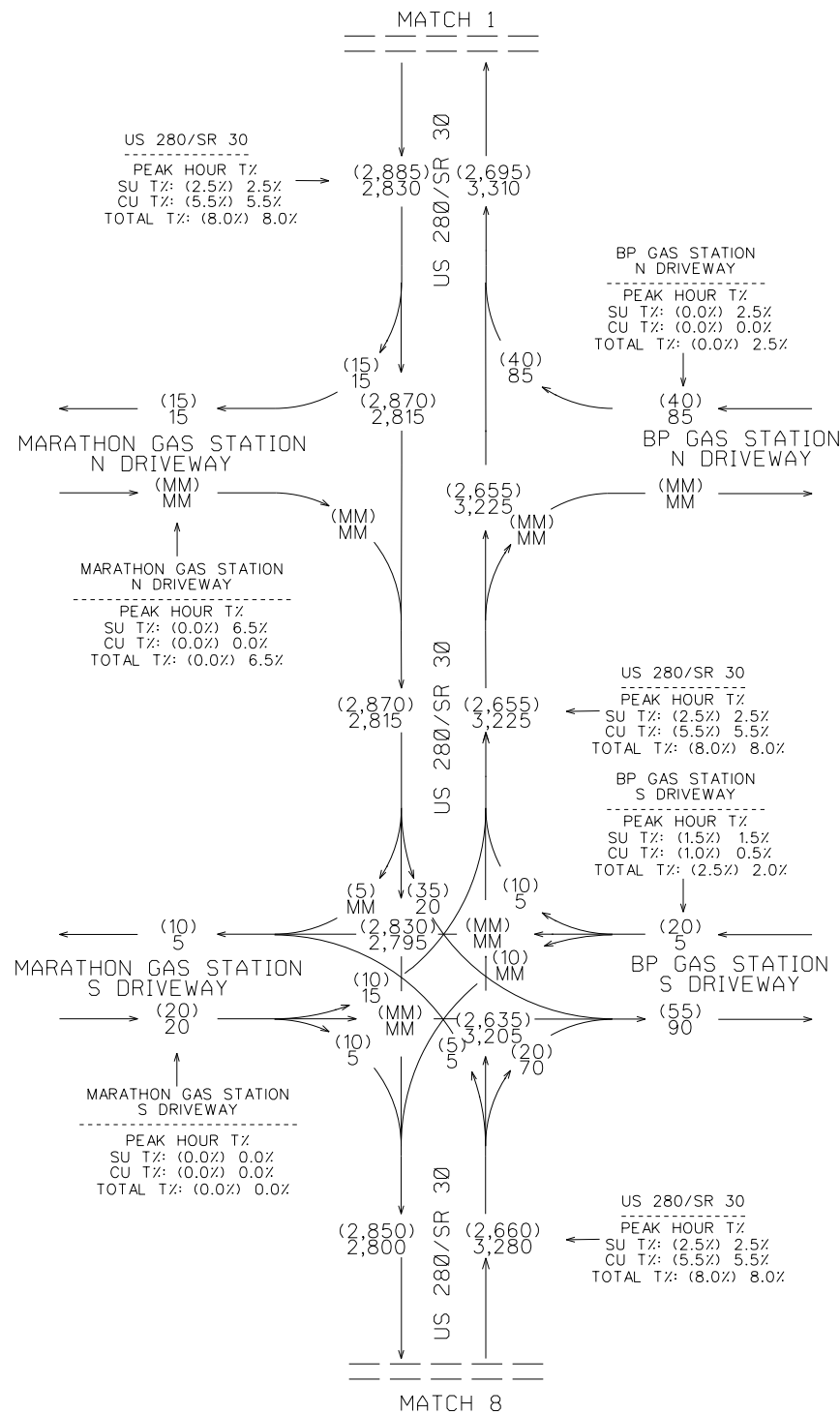
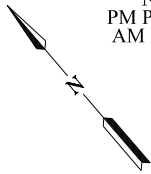
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0049

DHV VOLUMES
DESIGN YEAR 2045
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

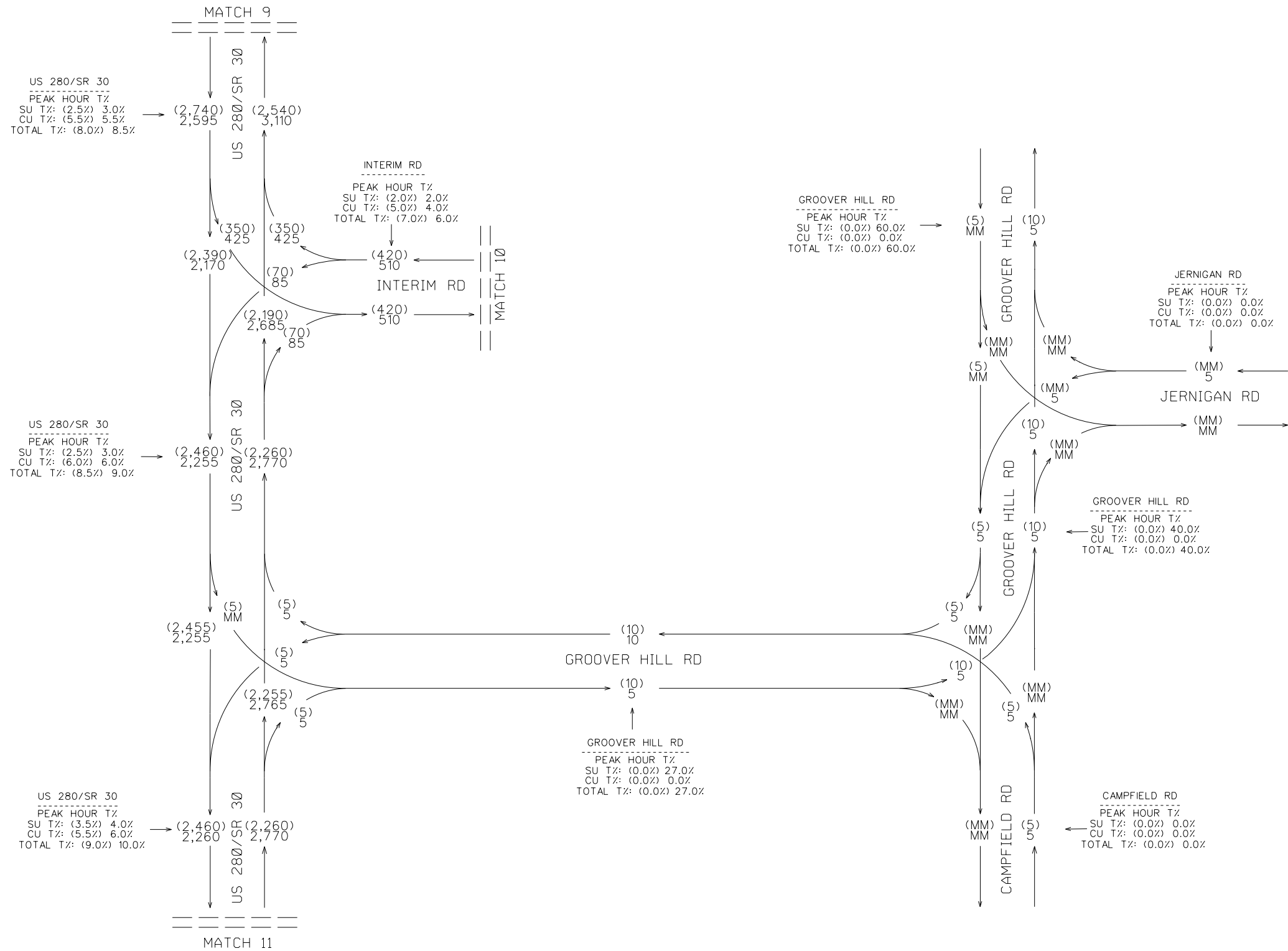
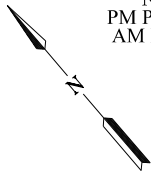
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0052

DHV VOLUMES
DESIGN YEAR 2045
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



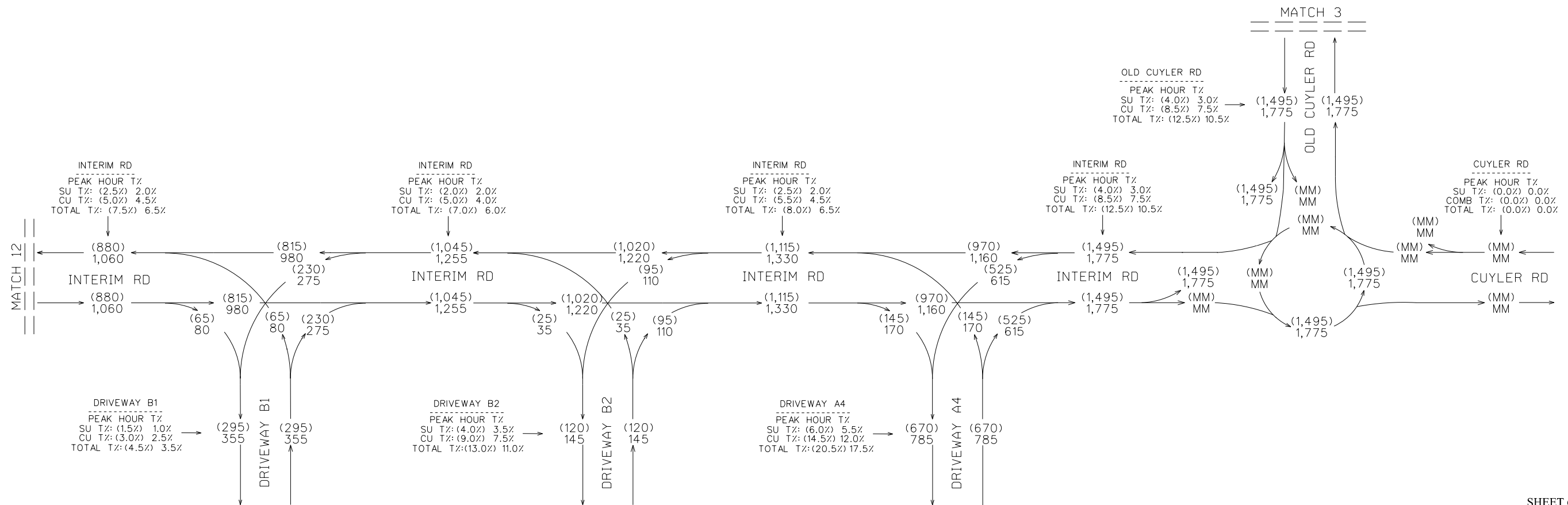
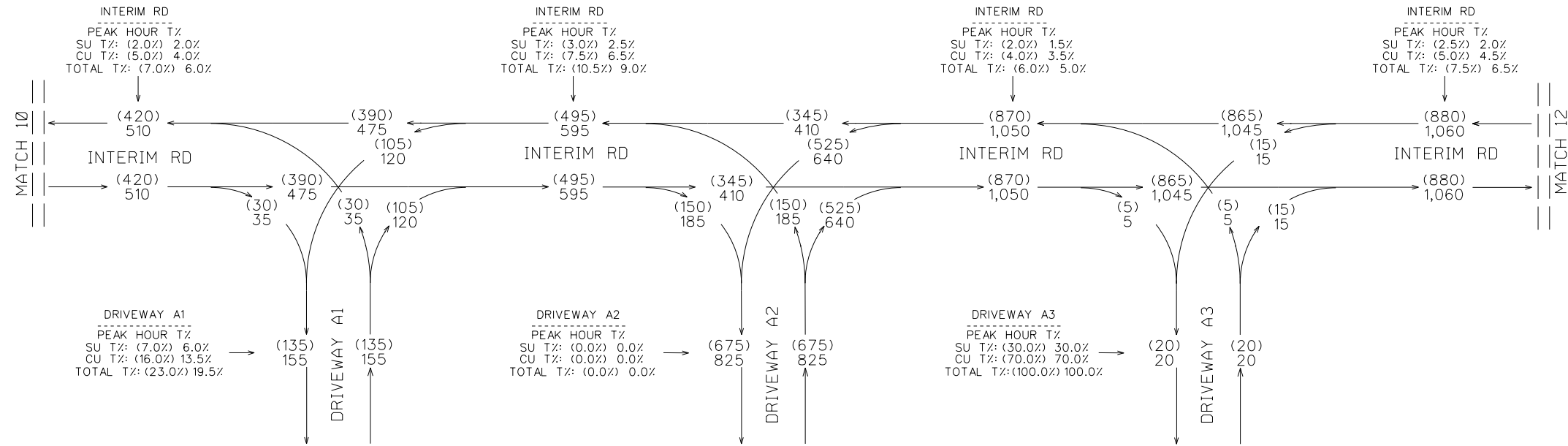
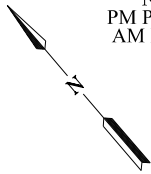
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0053

DHV VOLUMES
DESIGN YEAR 2045
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

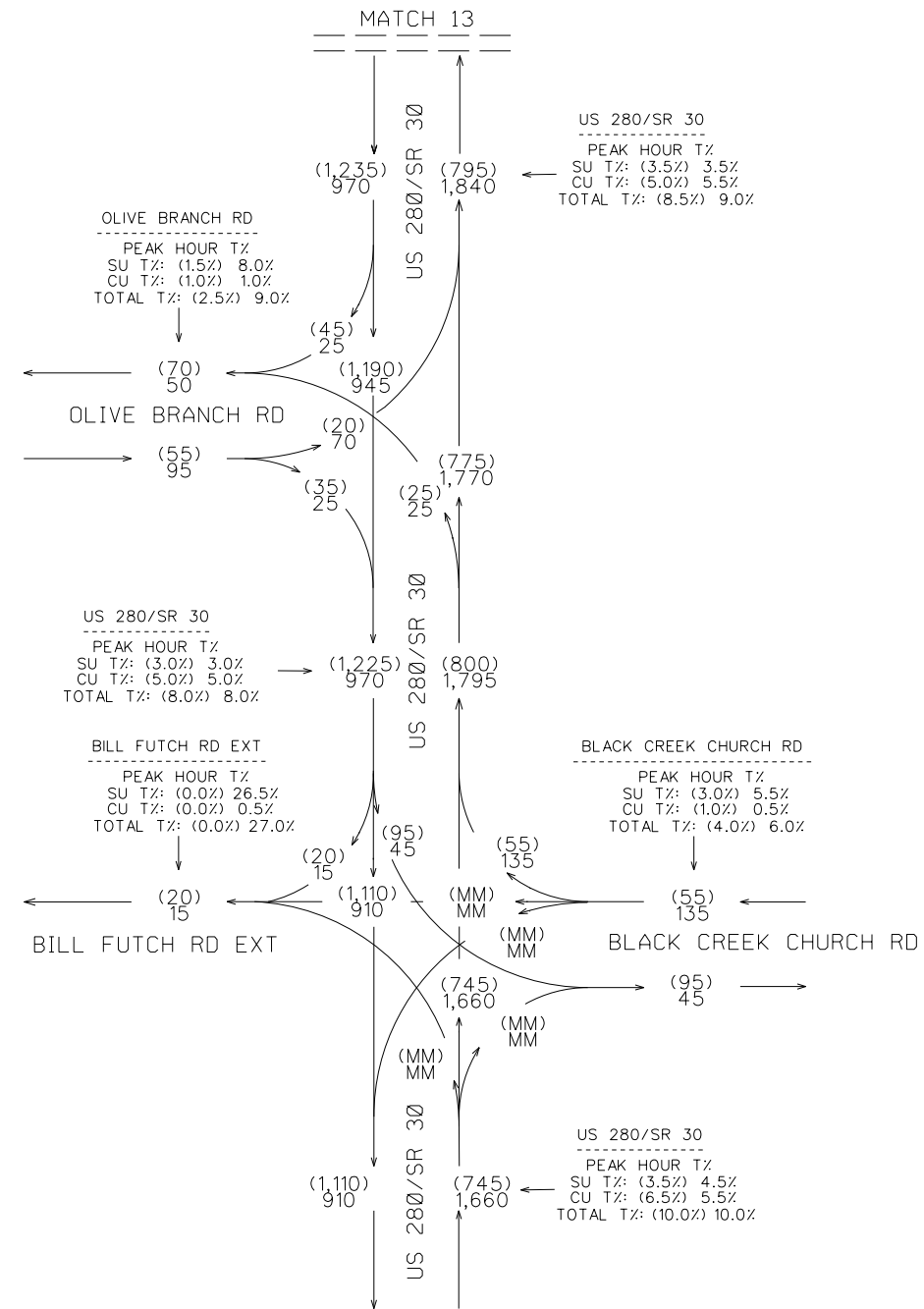
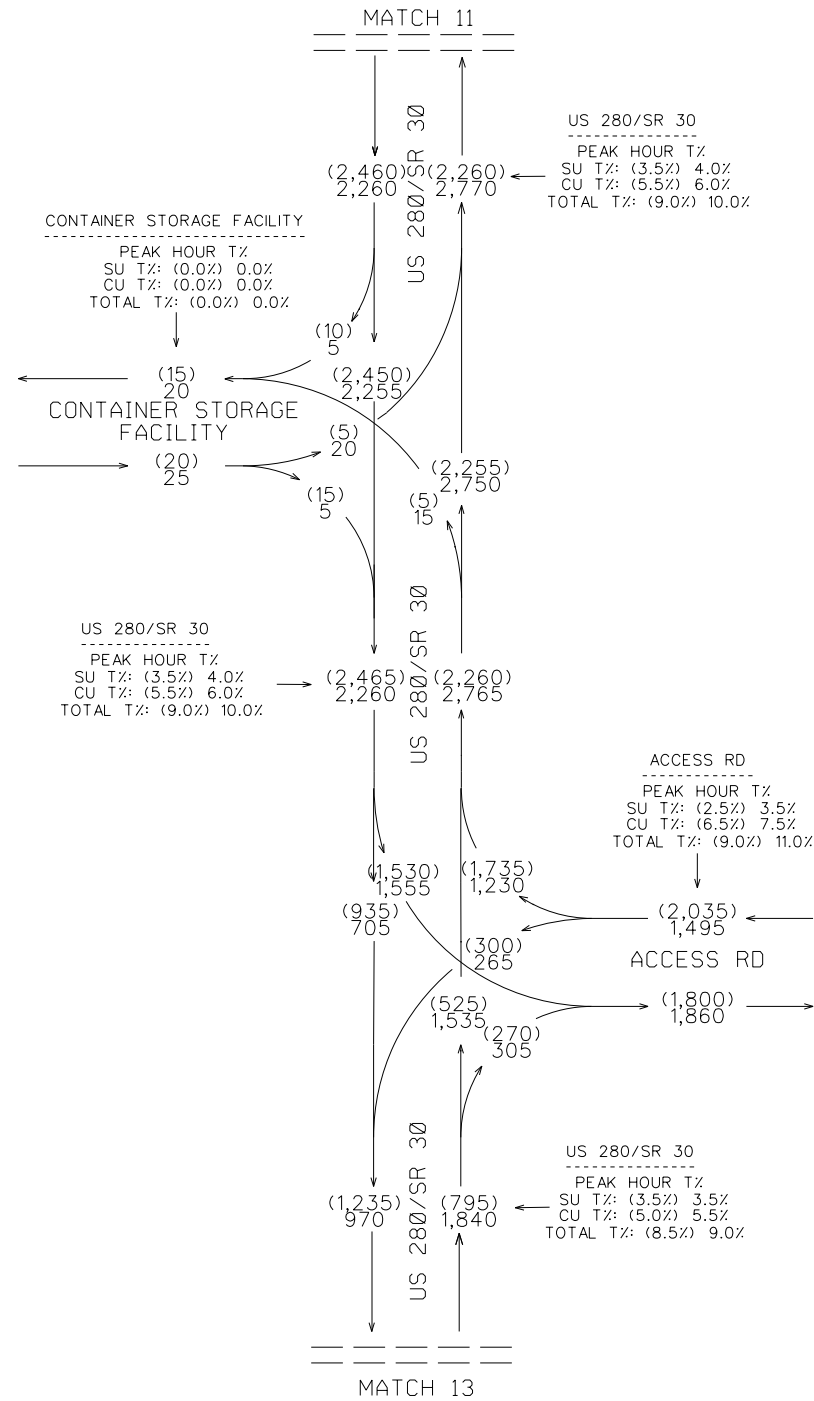
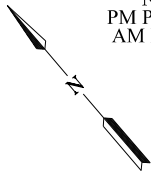
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0054

DHV VOLUMES
DESIGN YEAR 2045
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



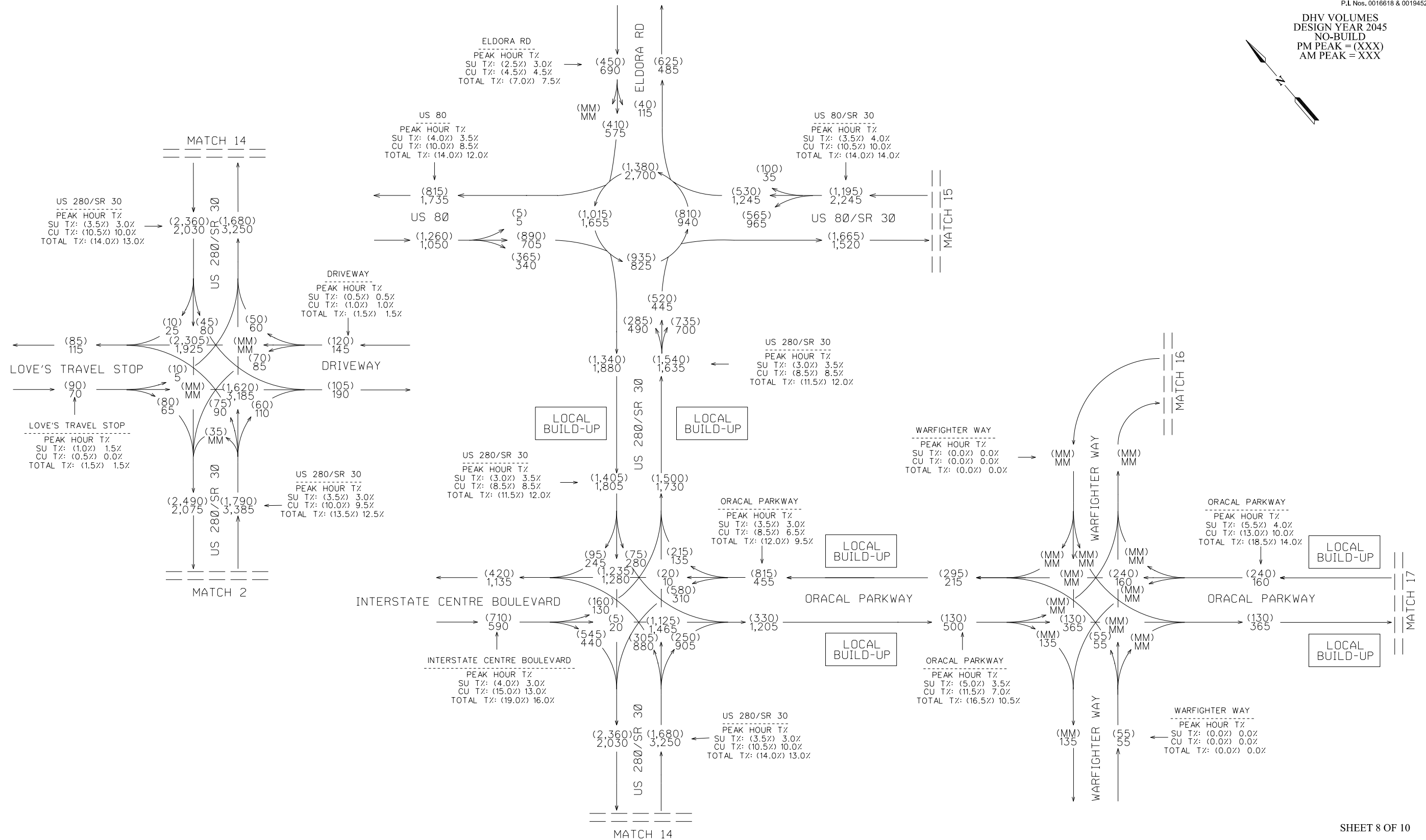
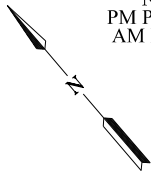
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0055

DHV VOLUMES
DESIGN YEAR 2045
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10

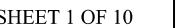
COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

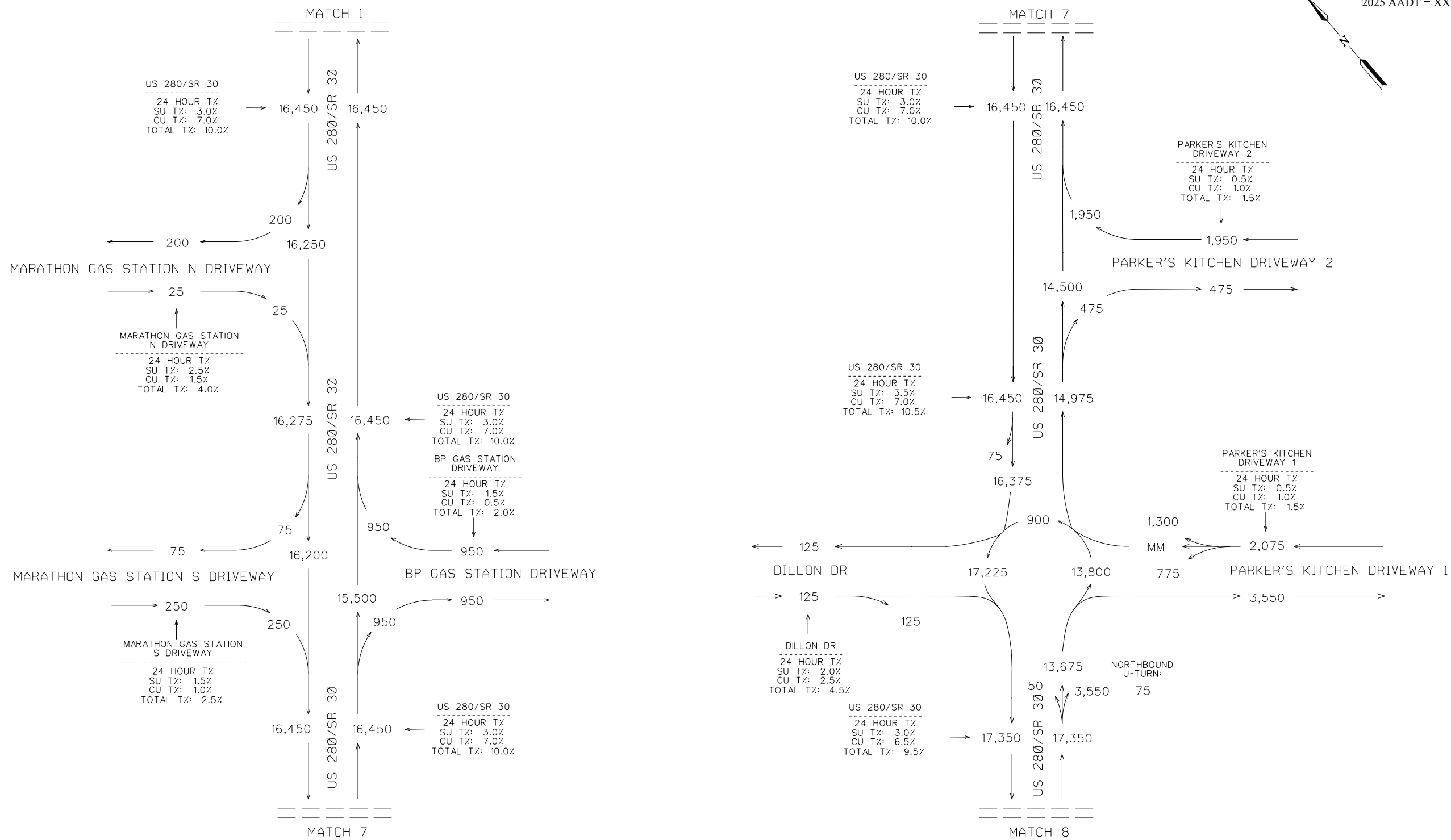
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0056



10-0060

AADT VOLUMES
OPEN YEAR 2025 BUILD
2025 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
for natural and
built assets

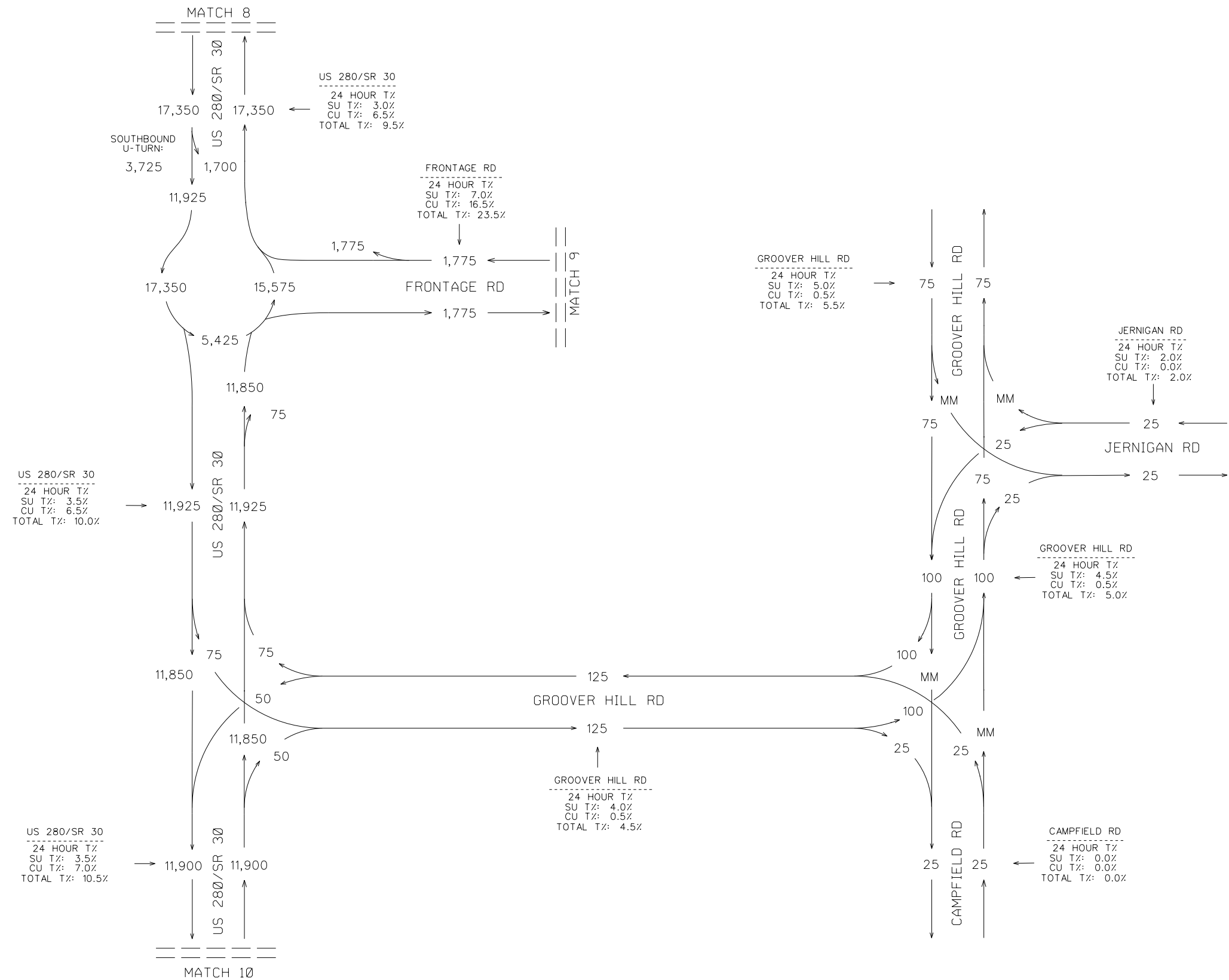
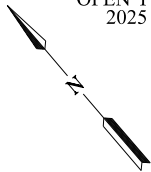
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0063

AADT VOLUMES
OPEN YEAR 2025 BUILD
2025 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



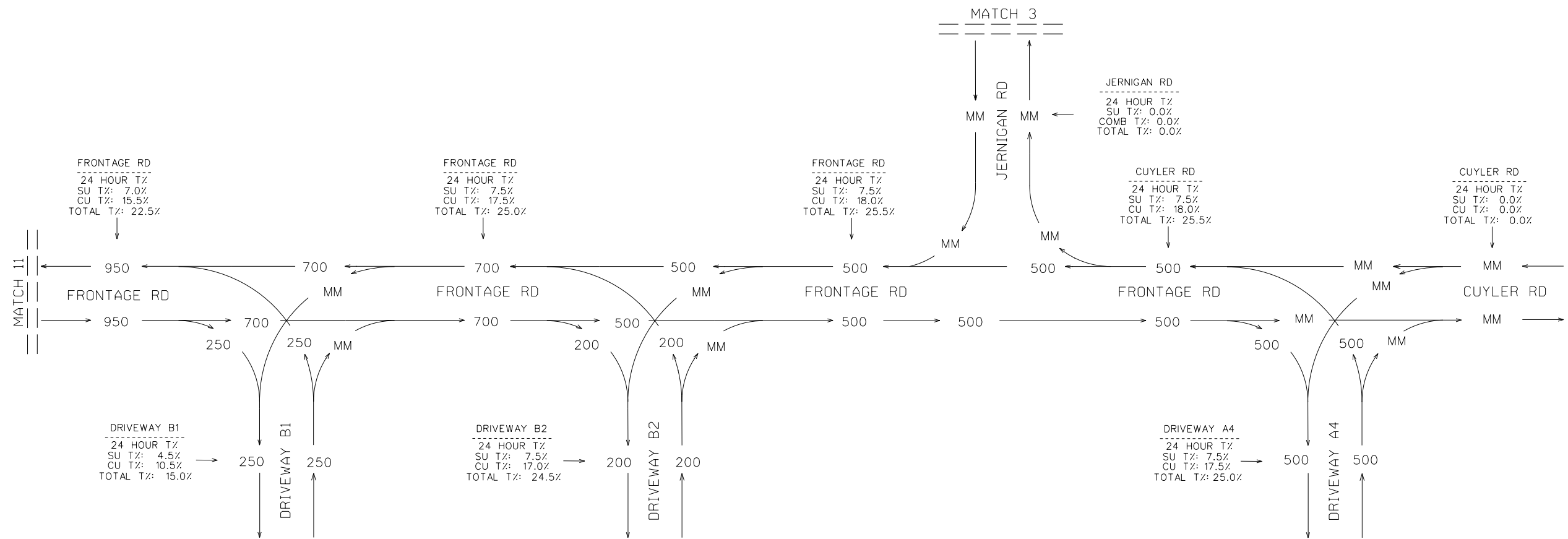
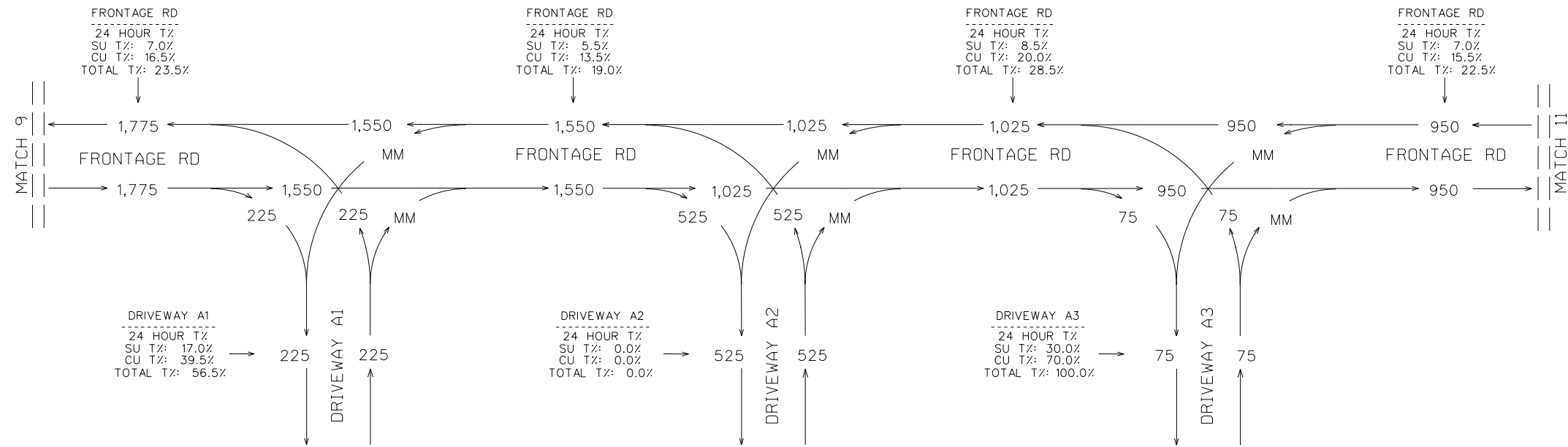
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0064

AADT VOLUMES
OPEN YEAR 2025 BUILD
2025 AADT = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



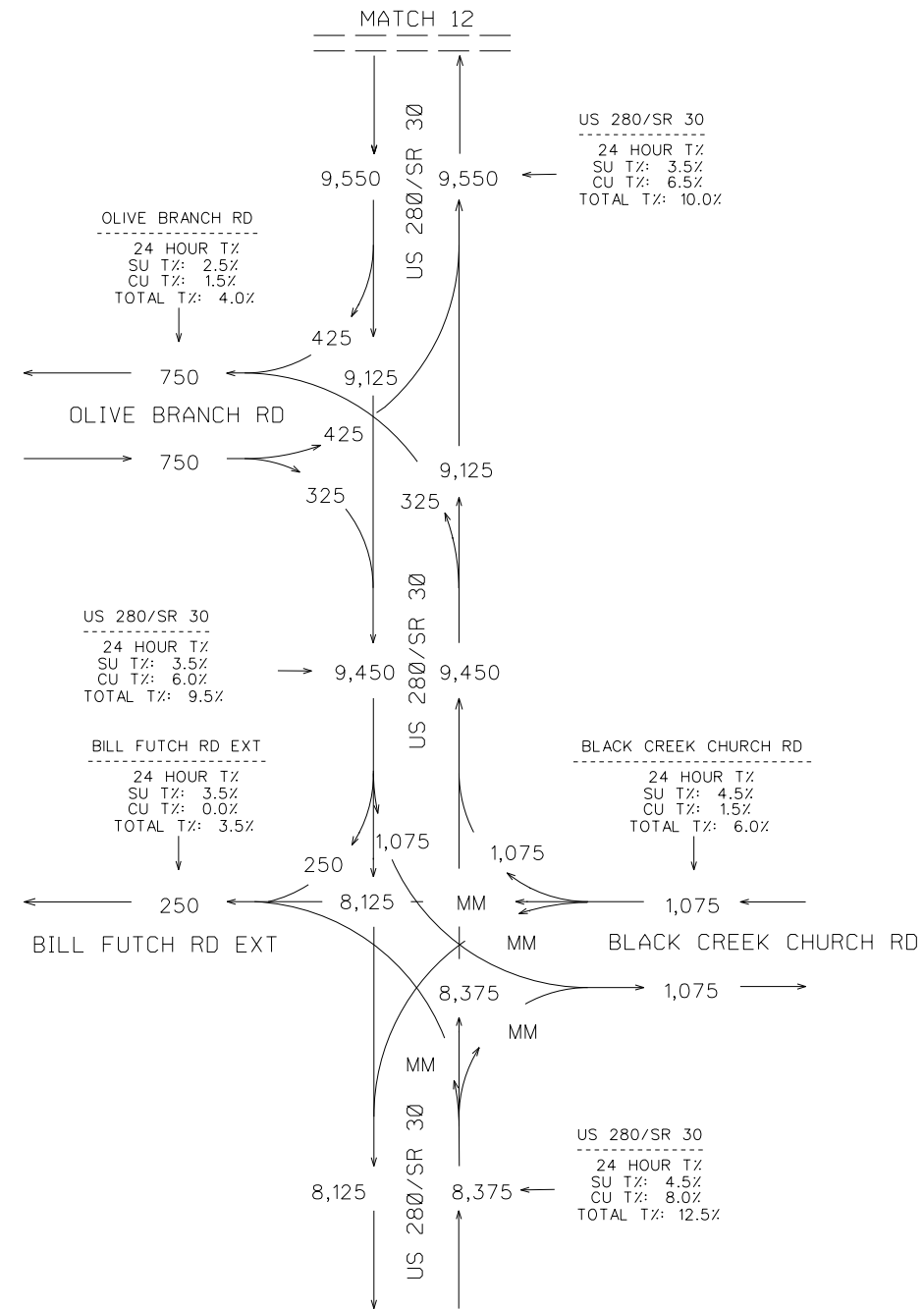
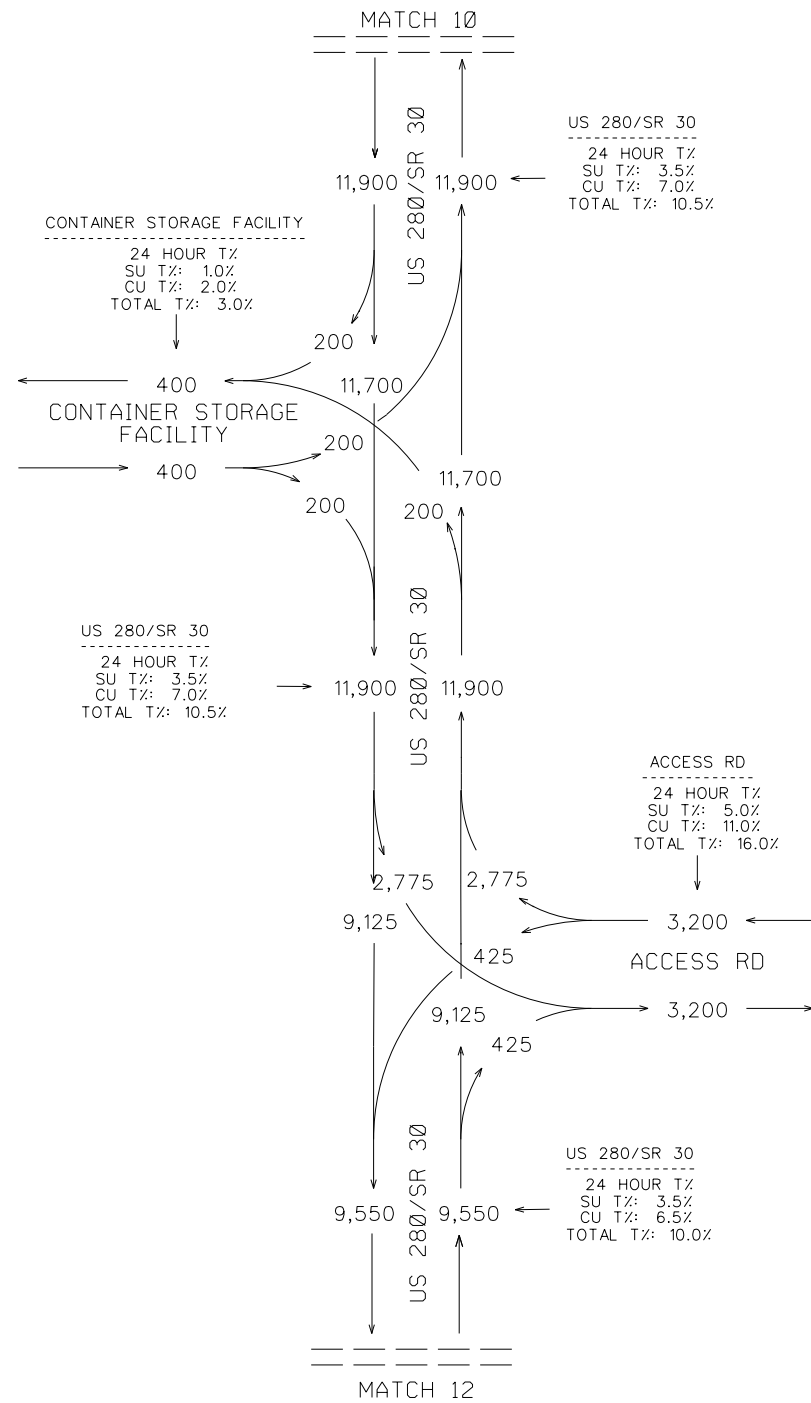
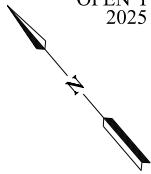
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0065

AADT VOLUMES
OPEN YEAR 2025 BUILD
2025 AADT = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



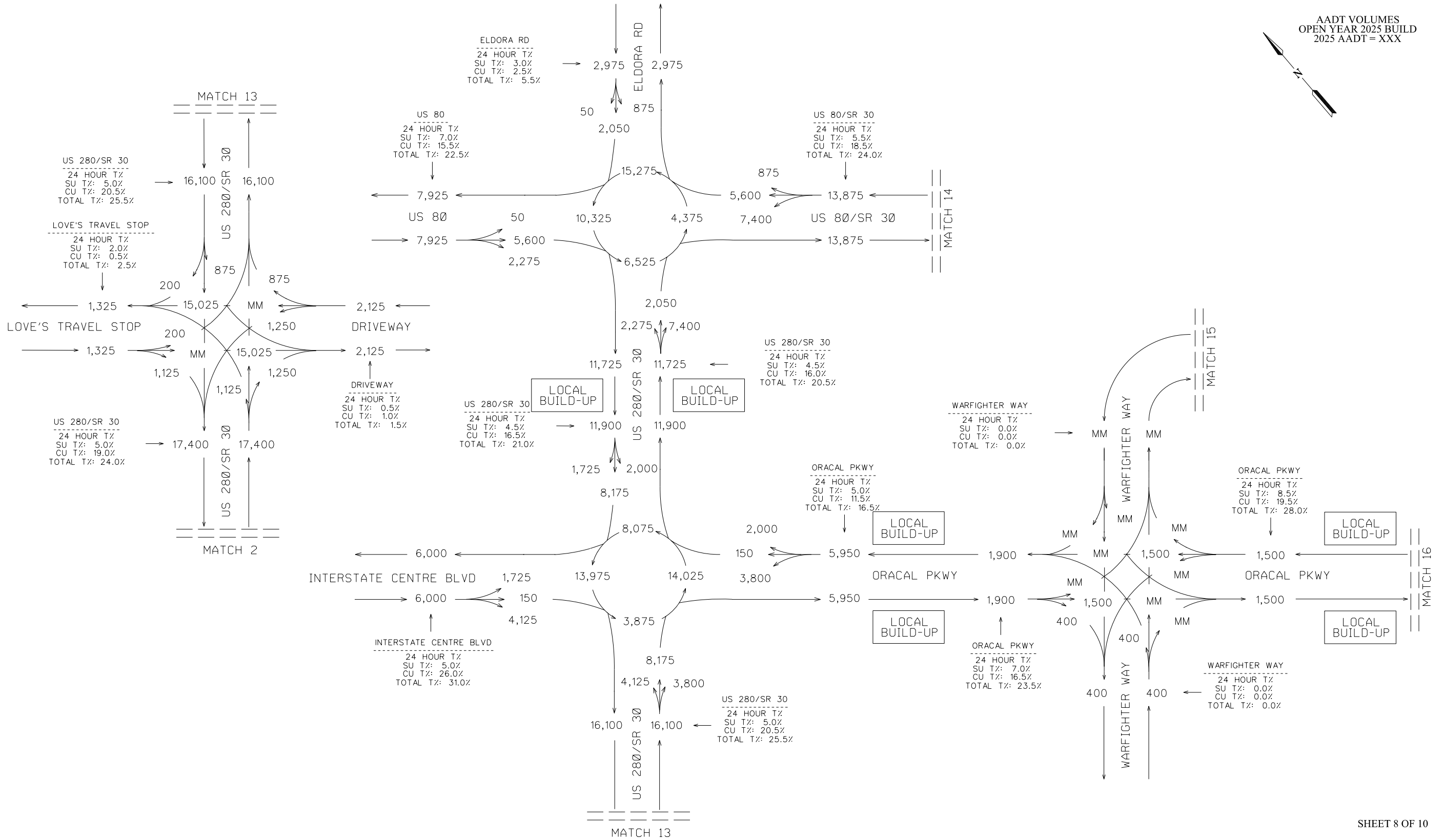
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0066

AADT VOLUMES
OPEN YEAR 2025 BUILD
2025 AADT = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

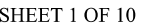


REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

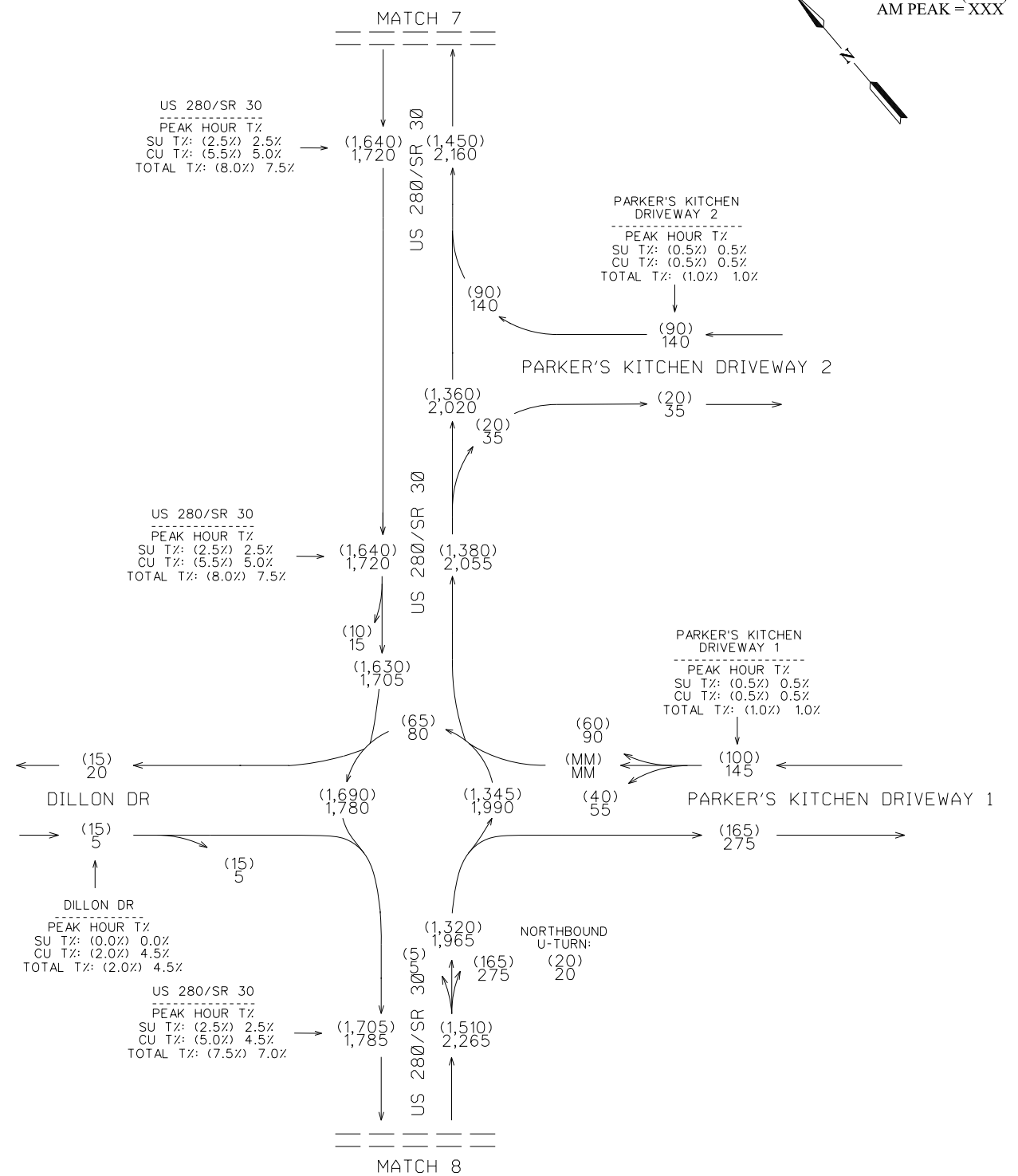
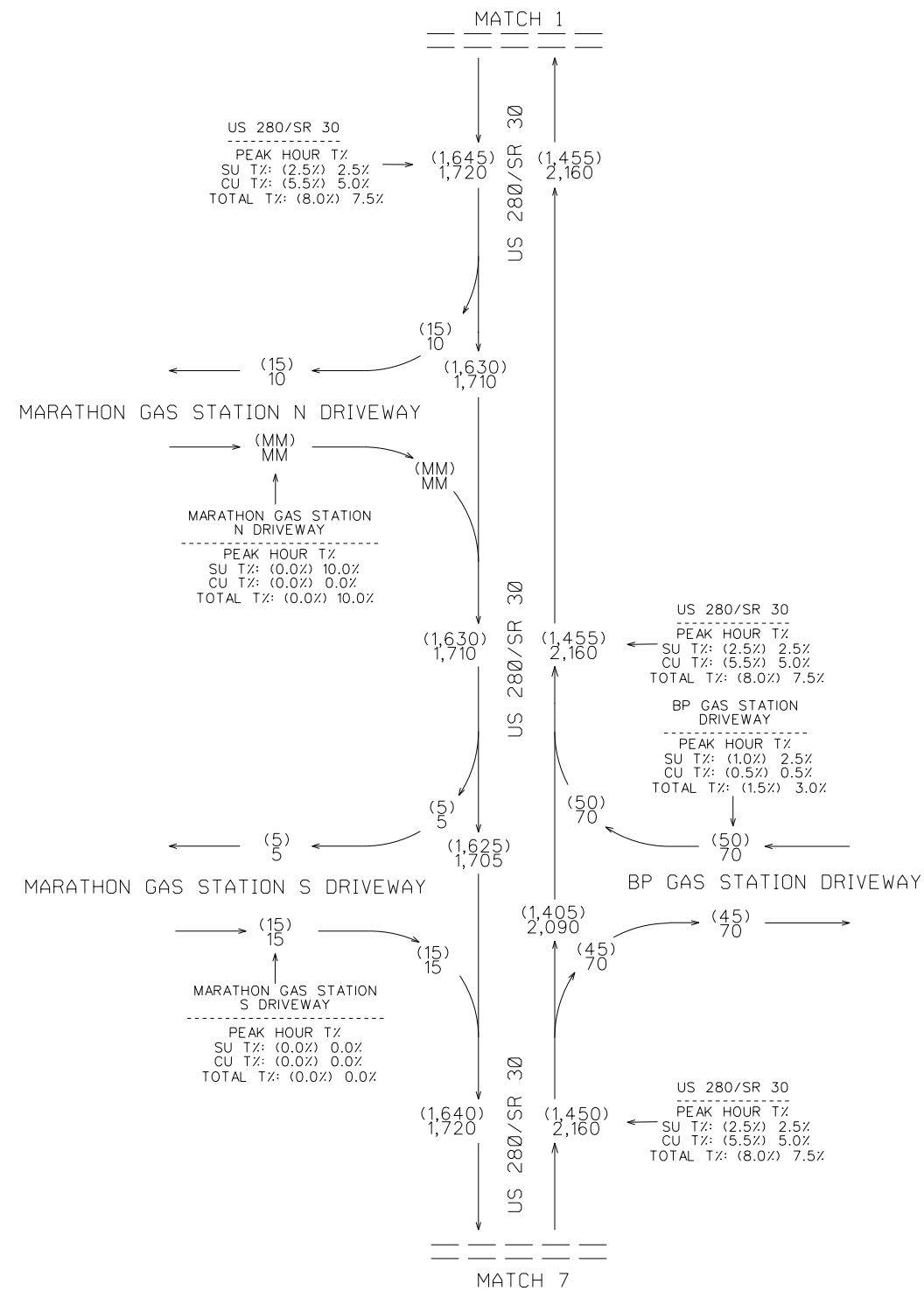
10-0067



**Design & Consultancy
for natural and
built assets**

REVISION DATES			TRAFFIC DIAGRAM			
			US-280 IMPROVEMENTS & FRONTAGE RD			
			OPEN YEAR 2025 BUILD DHV			
			BRYAN/EFFINGHAM COUNTY			
			CHECKED:		DATE:	
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	
			DRAWING No.			
			10-0070			

DHV VOLUMES
OPEN YEAR 2025 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



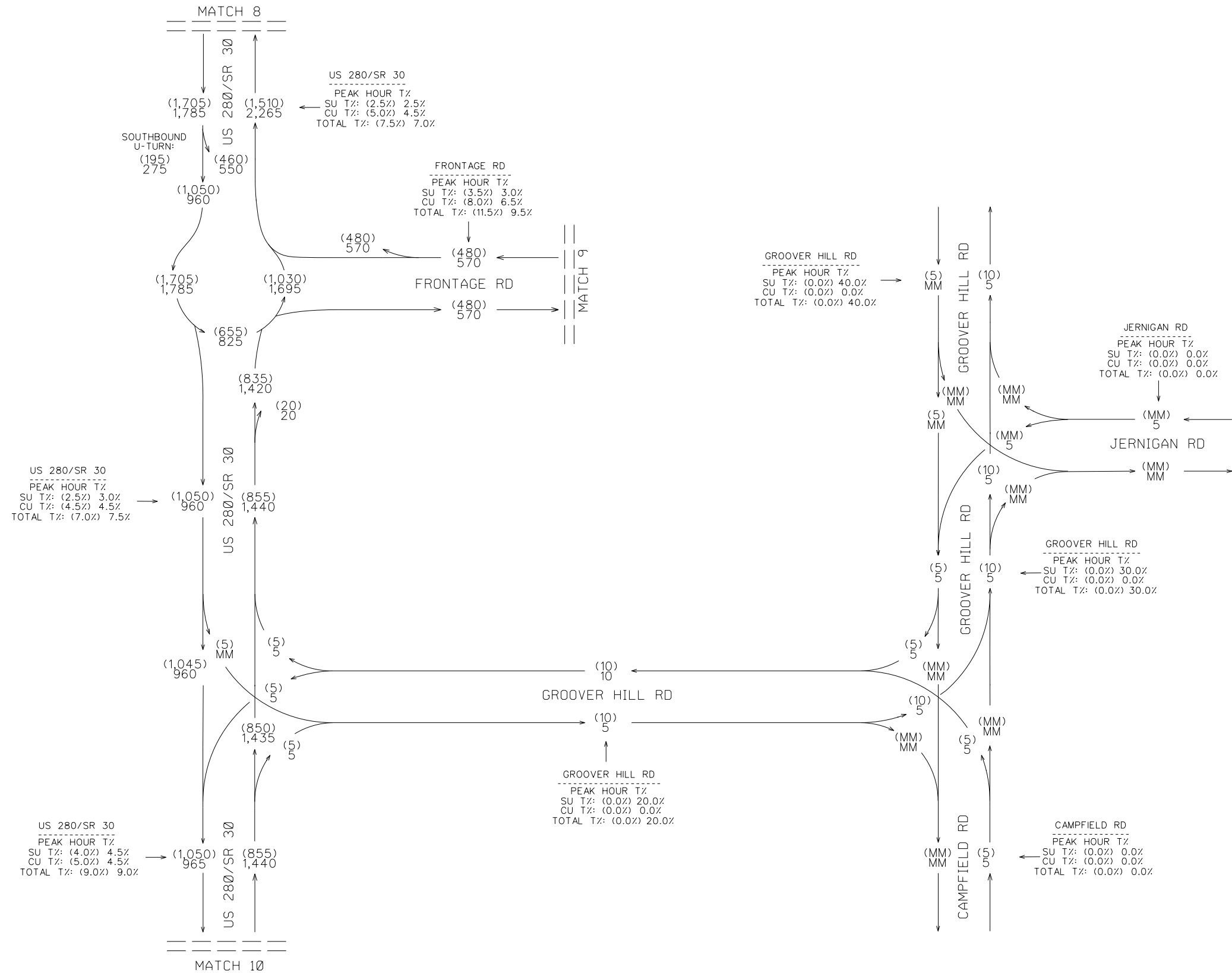
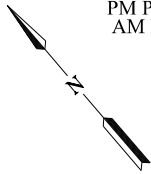
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0073

DHV VOLUMES
OPEN YEAR 2025 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



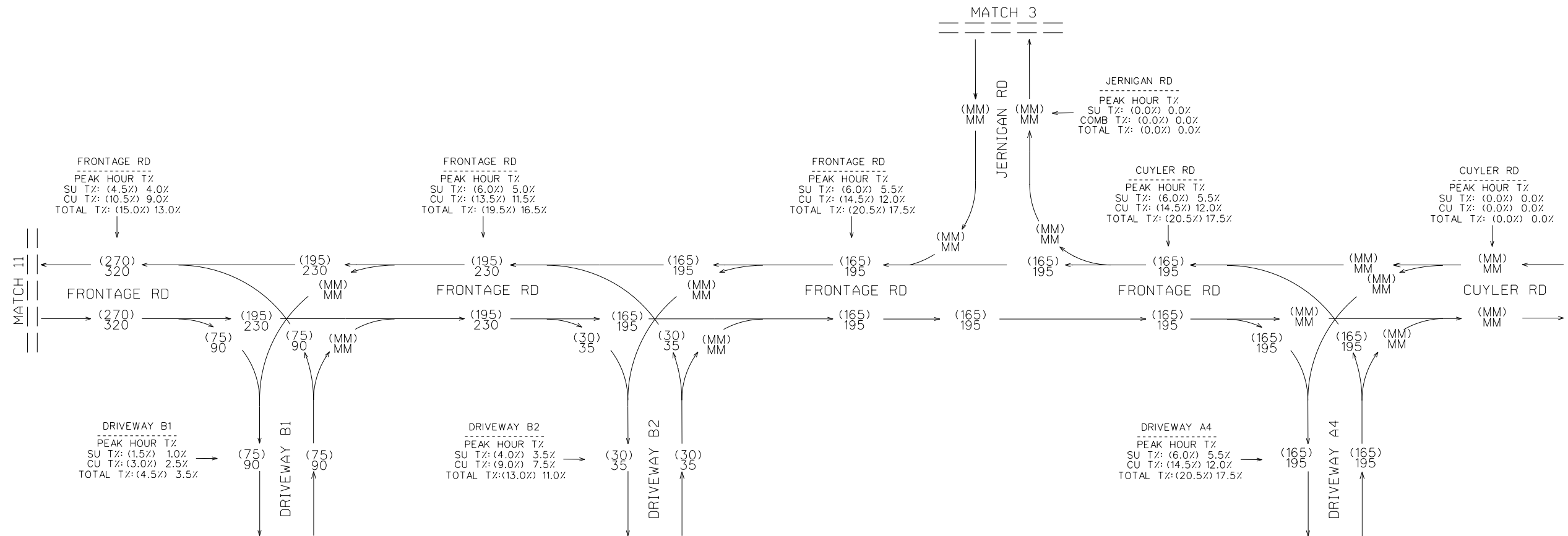
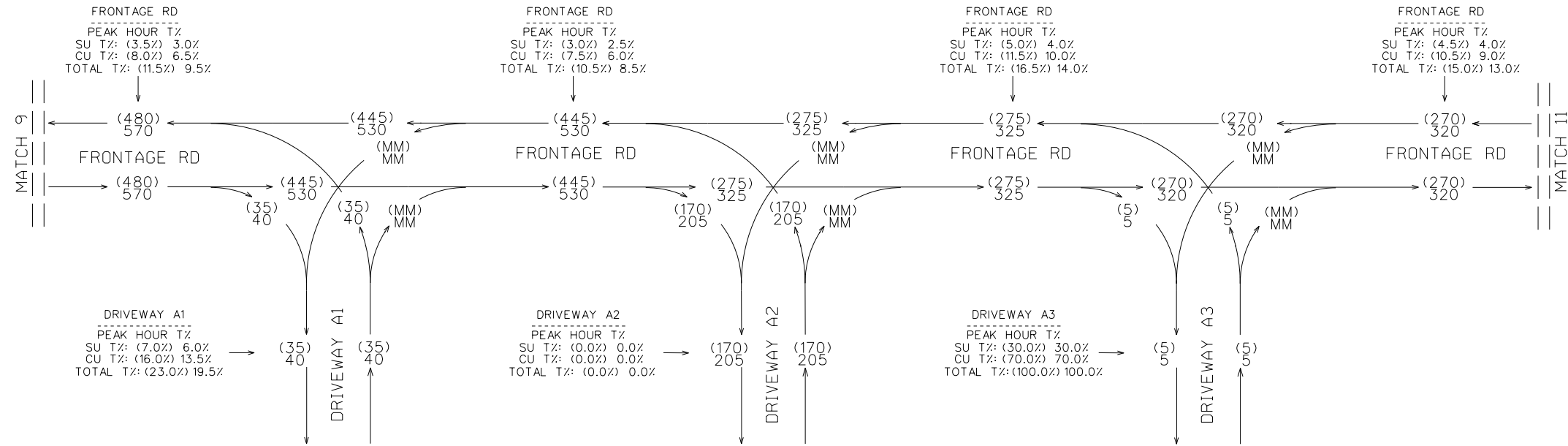
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0074

DHV VOLUMES
OPEN YEAR 2025 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



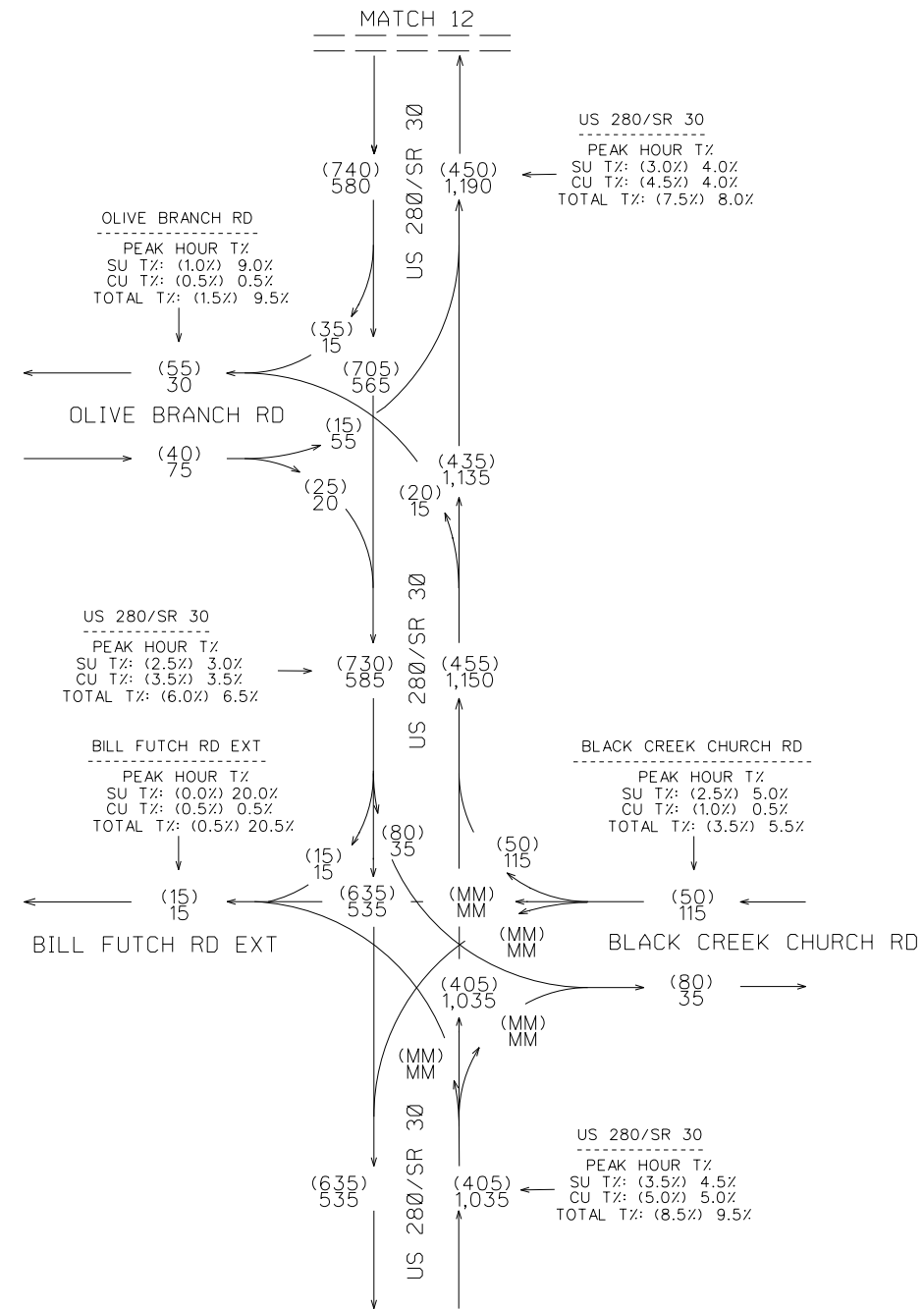
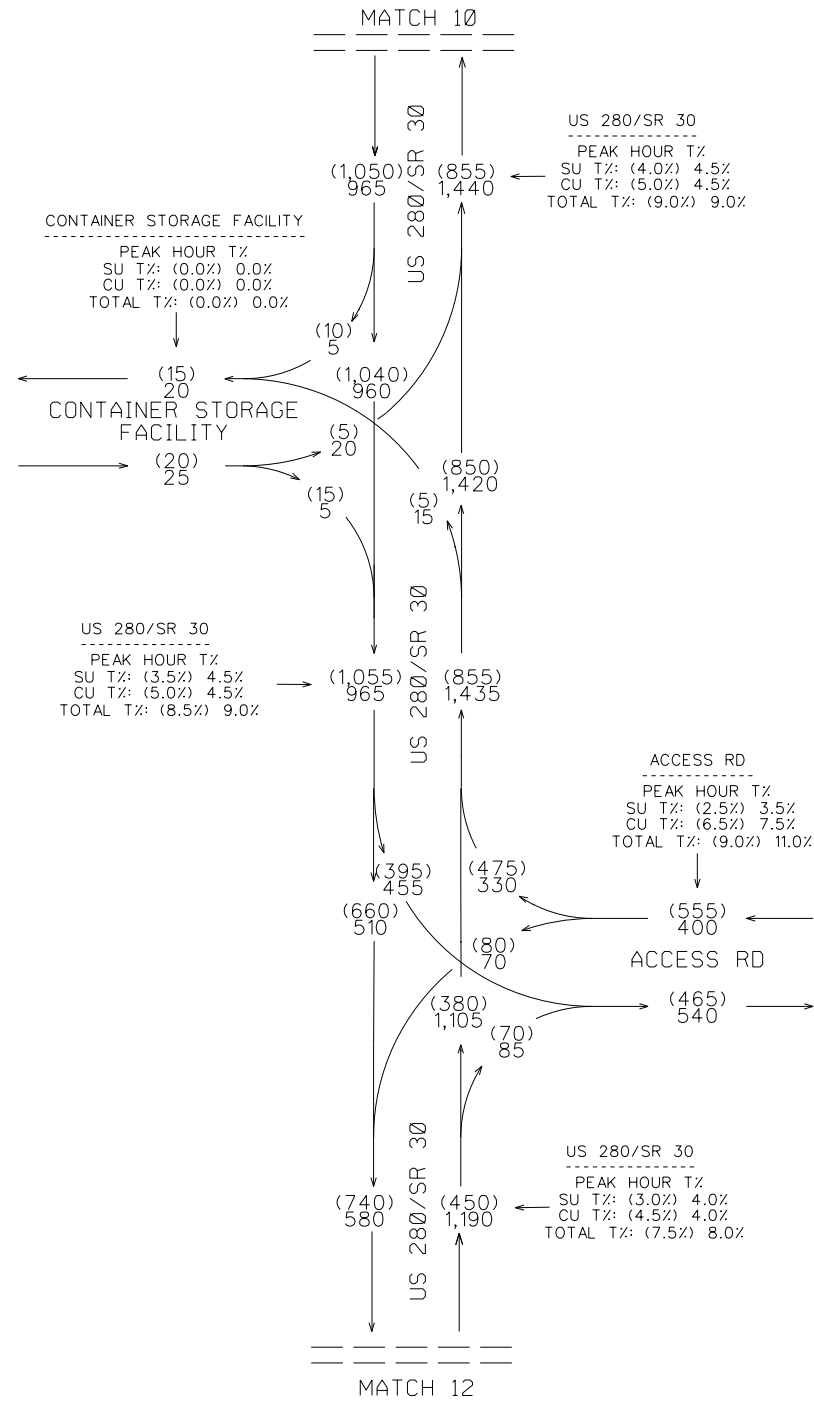
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0075

DHV VOLUMES
OPEN YEAR 2025 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

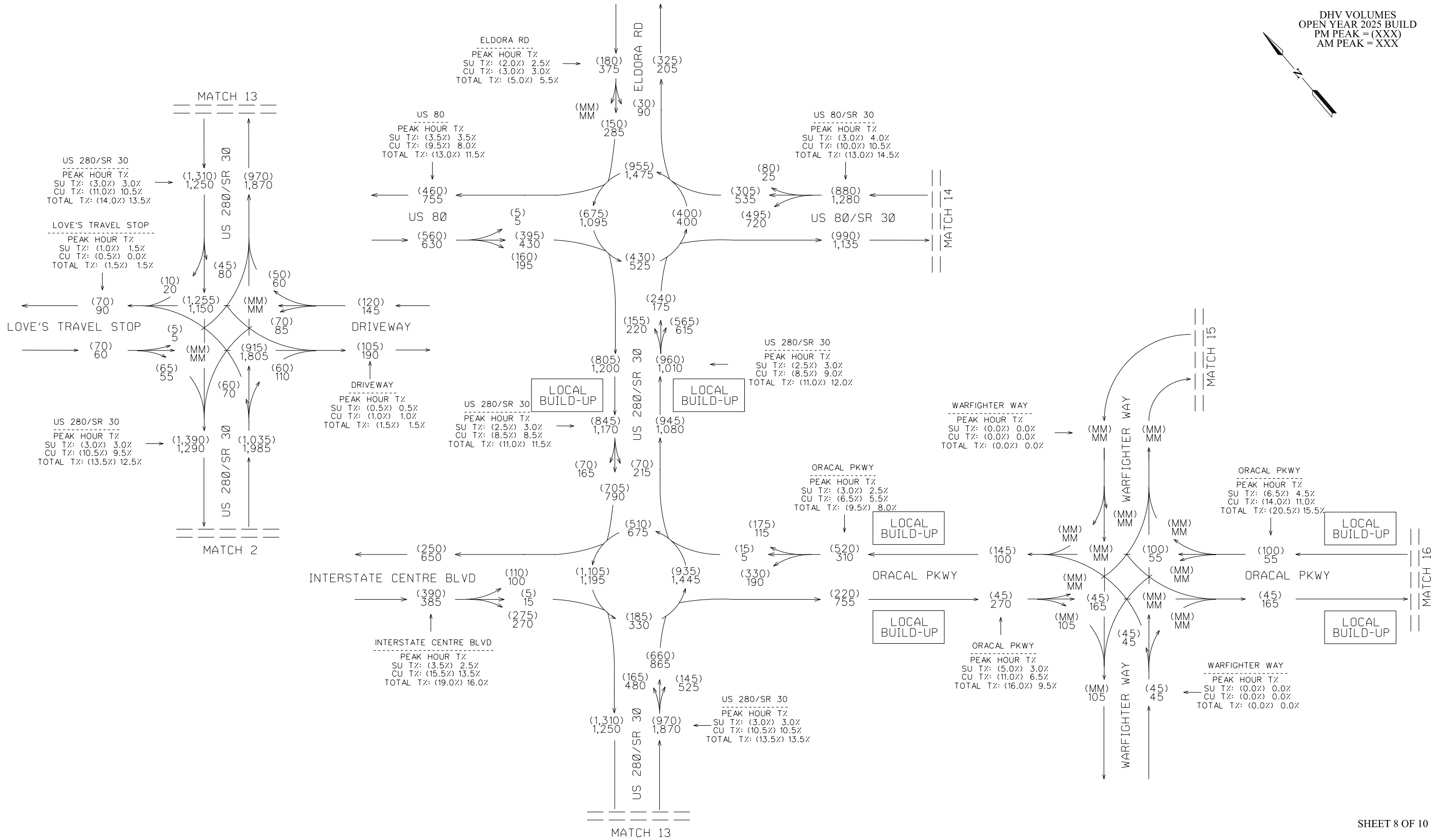
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0076

DHV VOLUMES
OPEN YEAR 2025 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



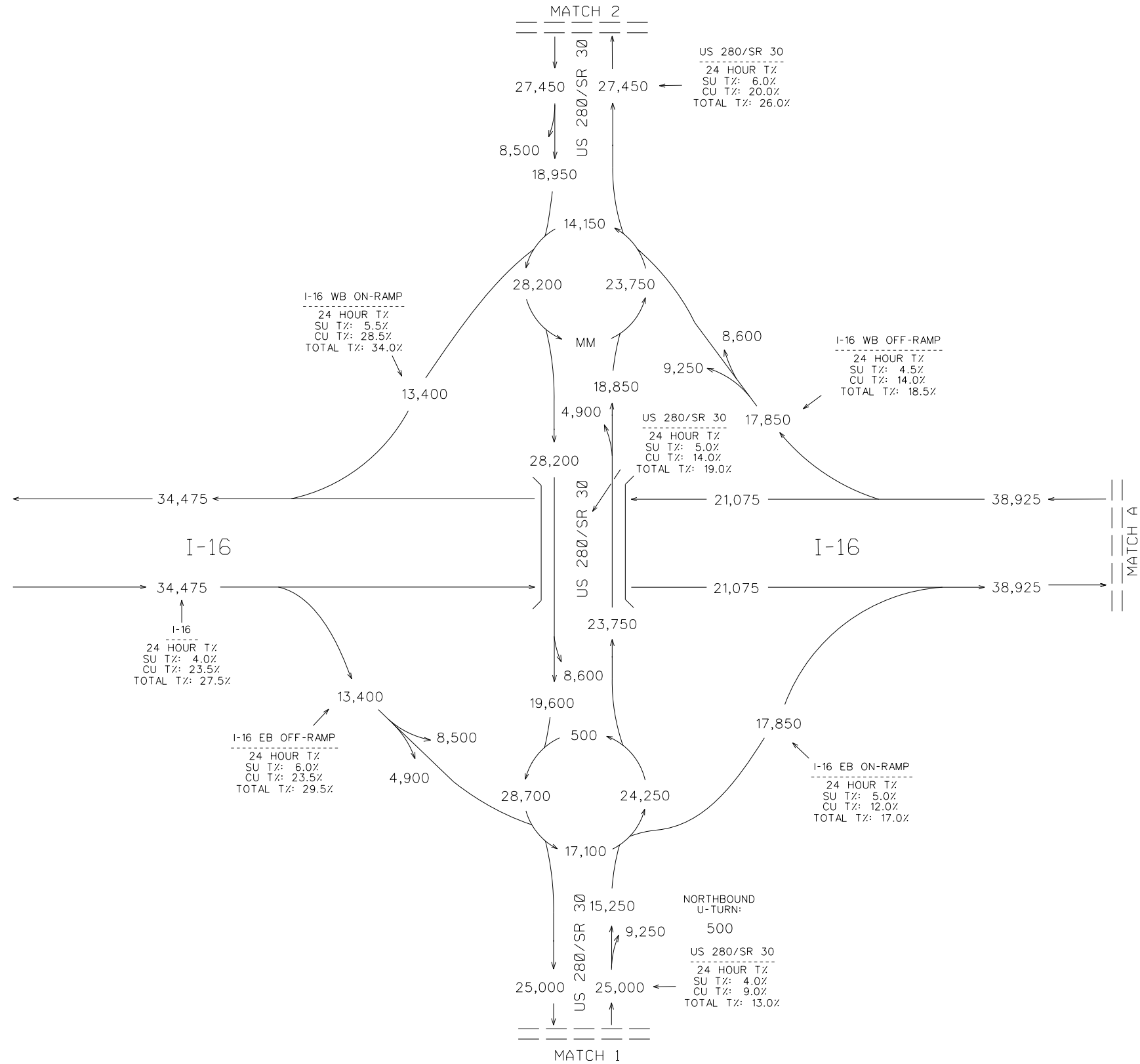
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR 2025 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0077

AADT VOLUMES
DESIGN YEAR 2045 BUILD
2045 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



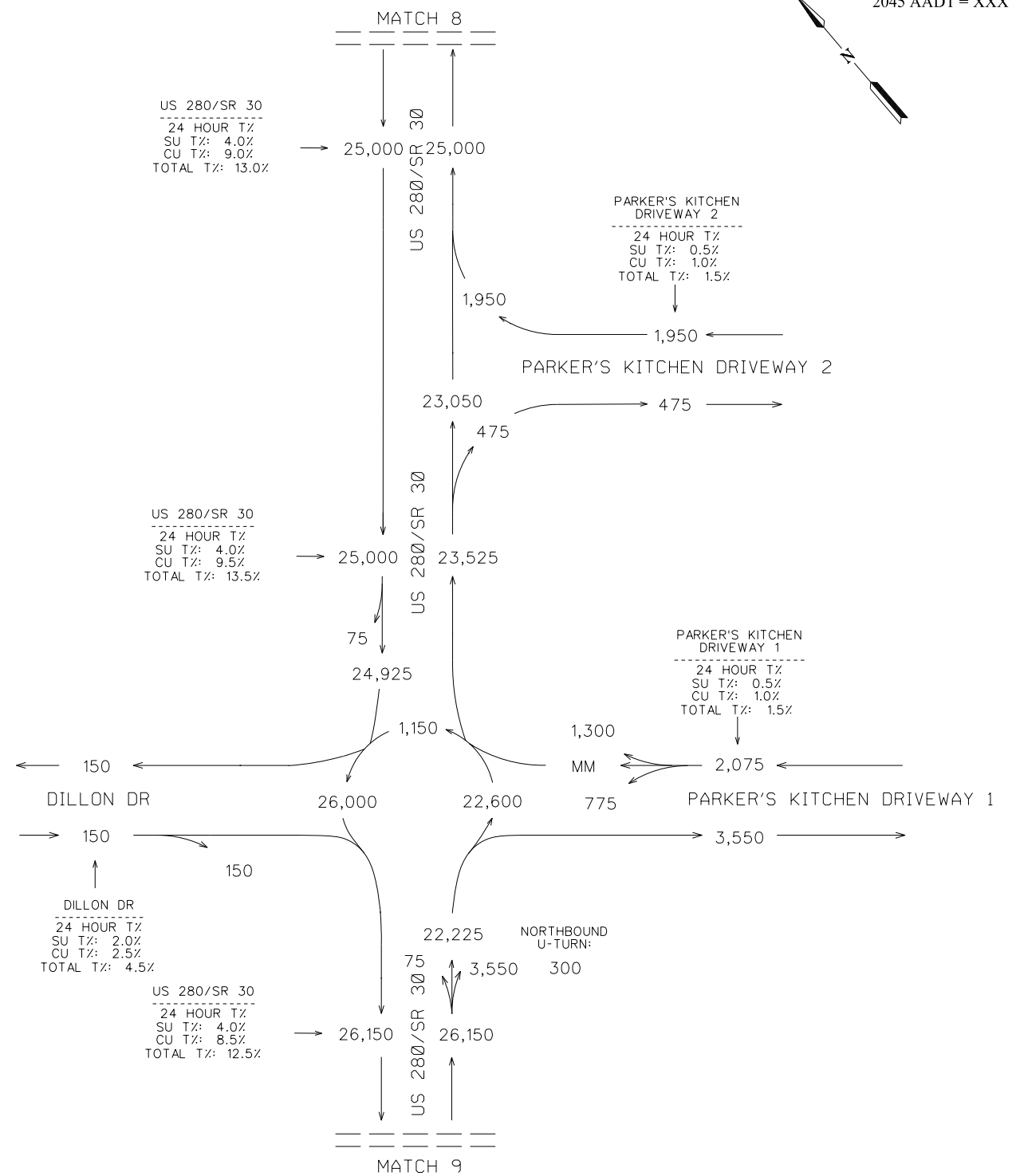
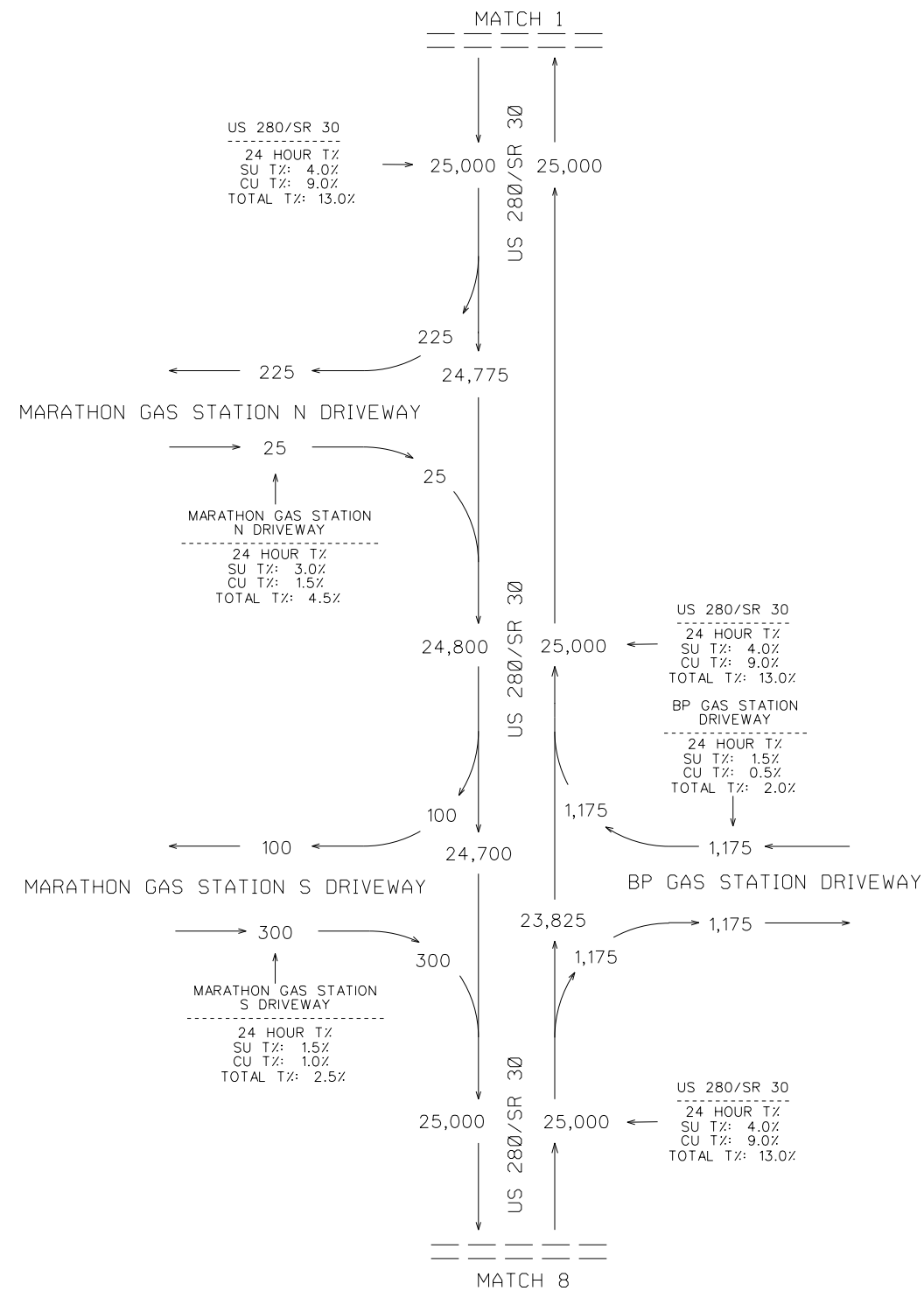
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0081

AADT VOLUMES
DESIGN YEAR 2045 BUILD
2045 AADT = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

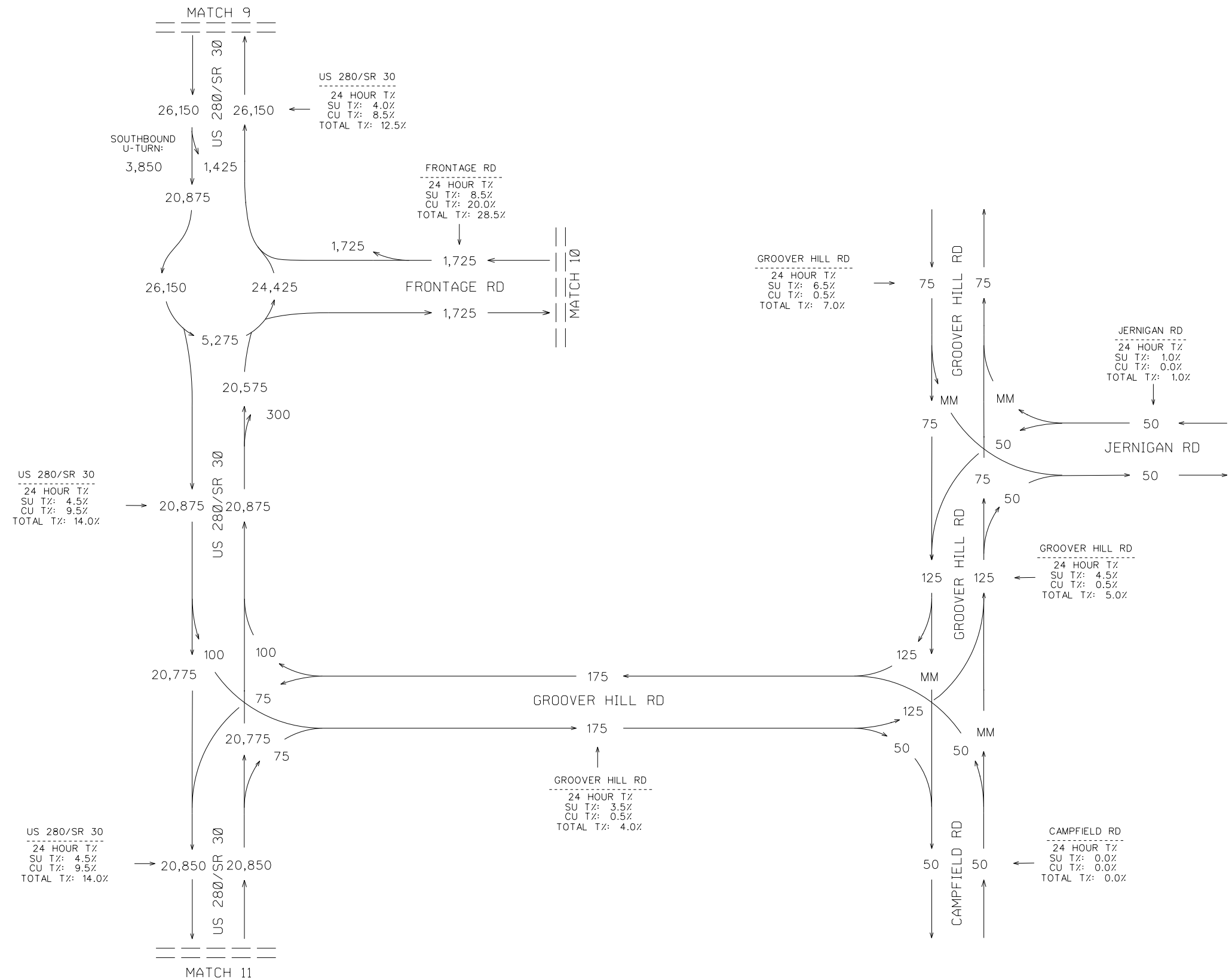
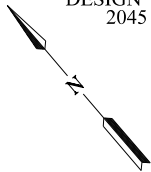
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0084

AADT VOLUMES
DESIGN YEAR 2045 BUILD
2045 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



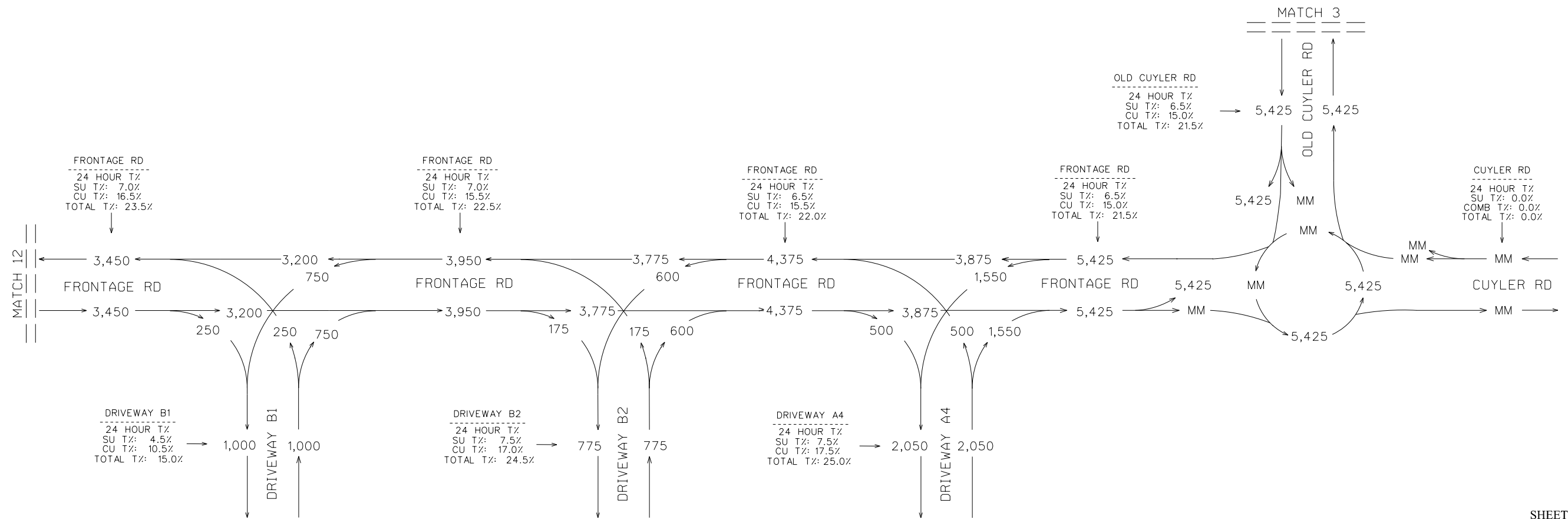
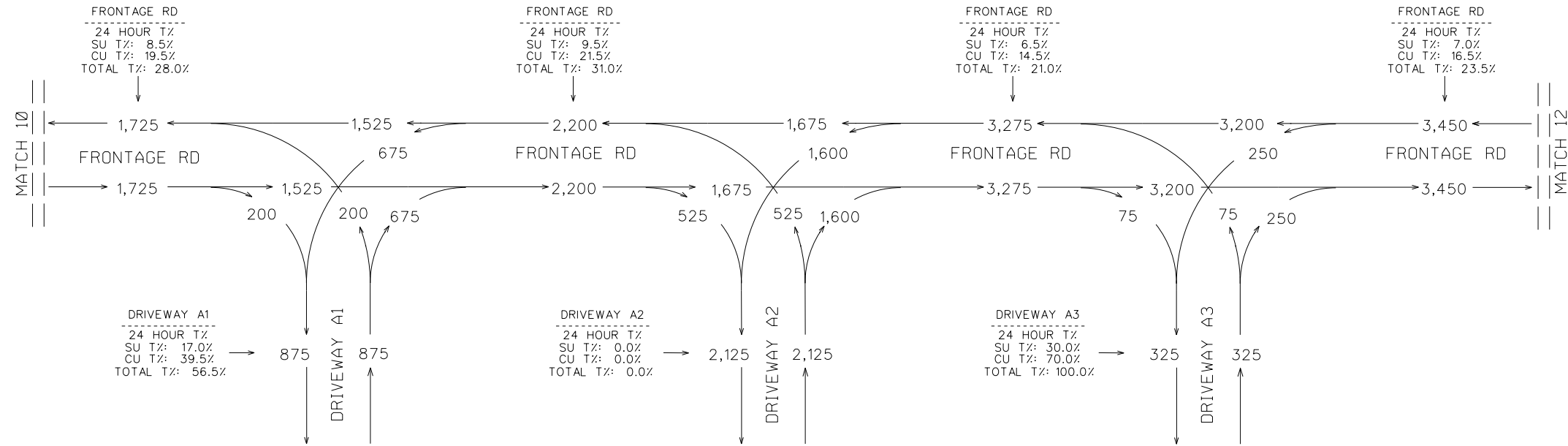
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0085

AADT VOLUMES
DESIGN YEAR 2045 BUILD
2045 AADT = XXX



SHEET 6 OF 10

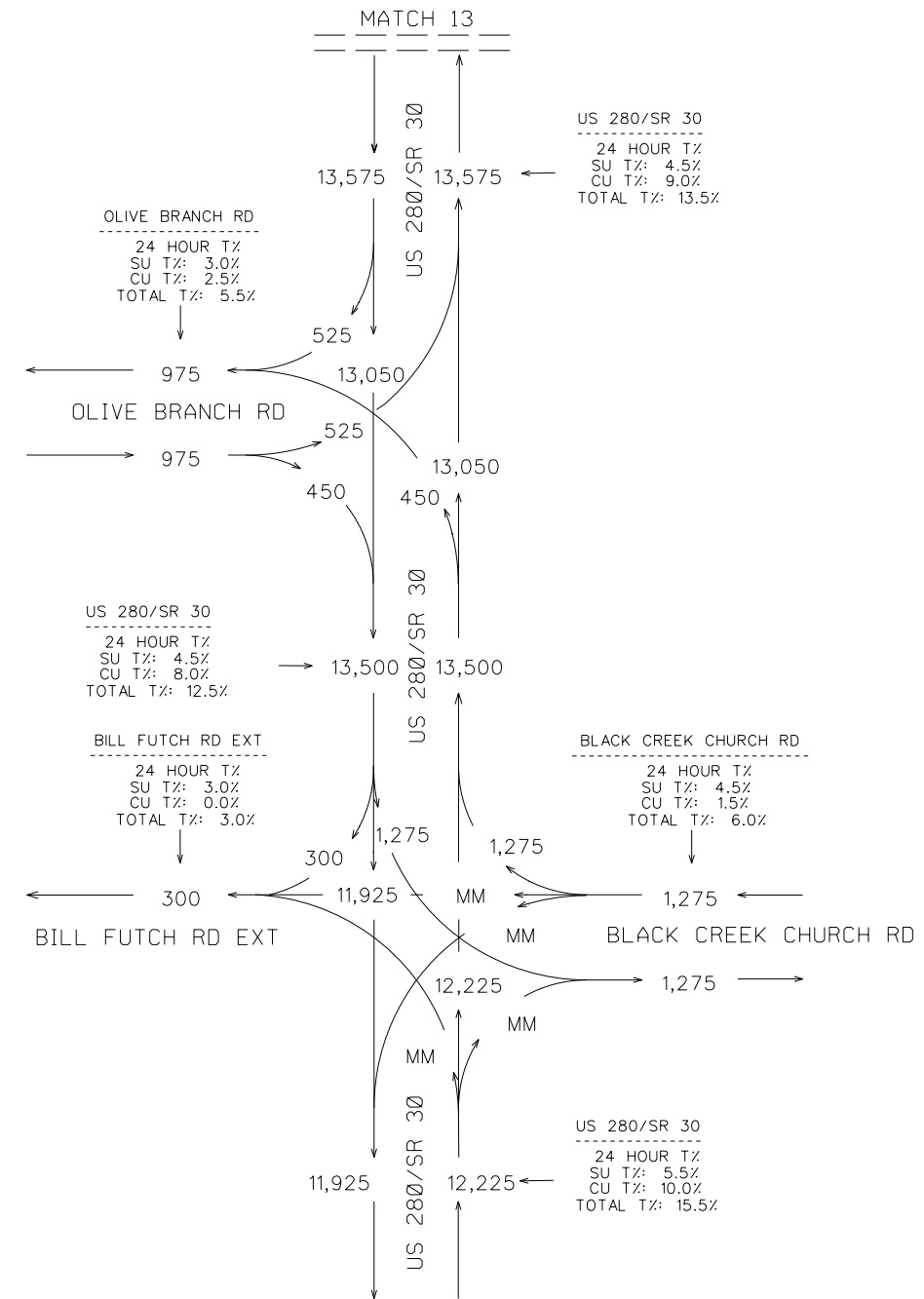
COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0086

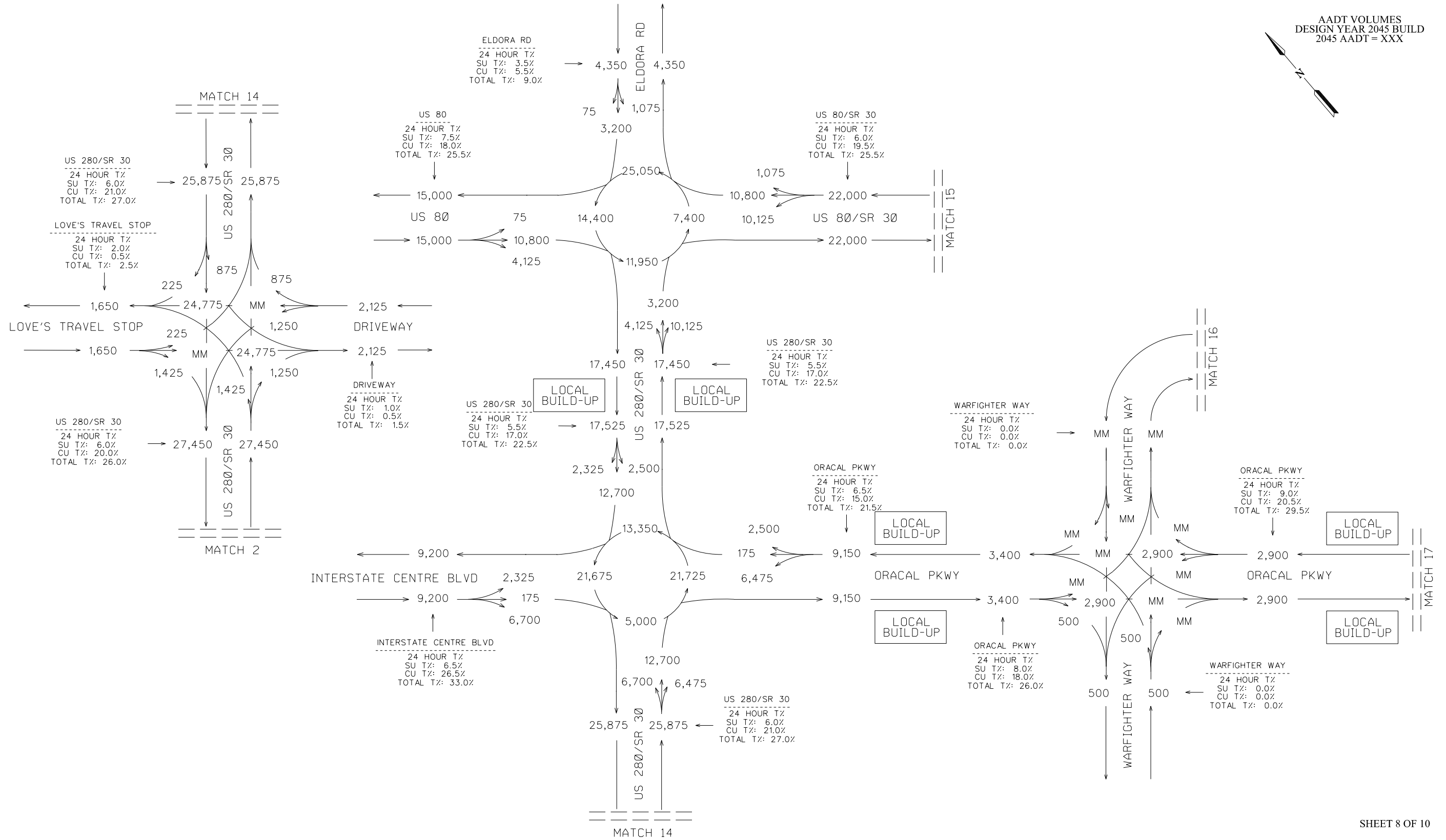


COUNTS COLLECTED DURING COVID-19 AND ADJUSTED PER GDOT FORECASTING GUIDANCE



REVISION DATES			TRAFFIC DIAGRAM			
			US-280 IMPROVEMENTS & FRONTAGE RD			
			DESIGN YEAR 2045 BUILD AADT			
			BRYAN/EFFINGHAM COUNTY			
			CHECKED:		DATE:	
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	
			DRAWING No.			
			10-0087			

AADT VOLUMES
DESIGN YEAR 2045 BUILD
2045 AADT = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

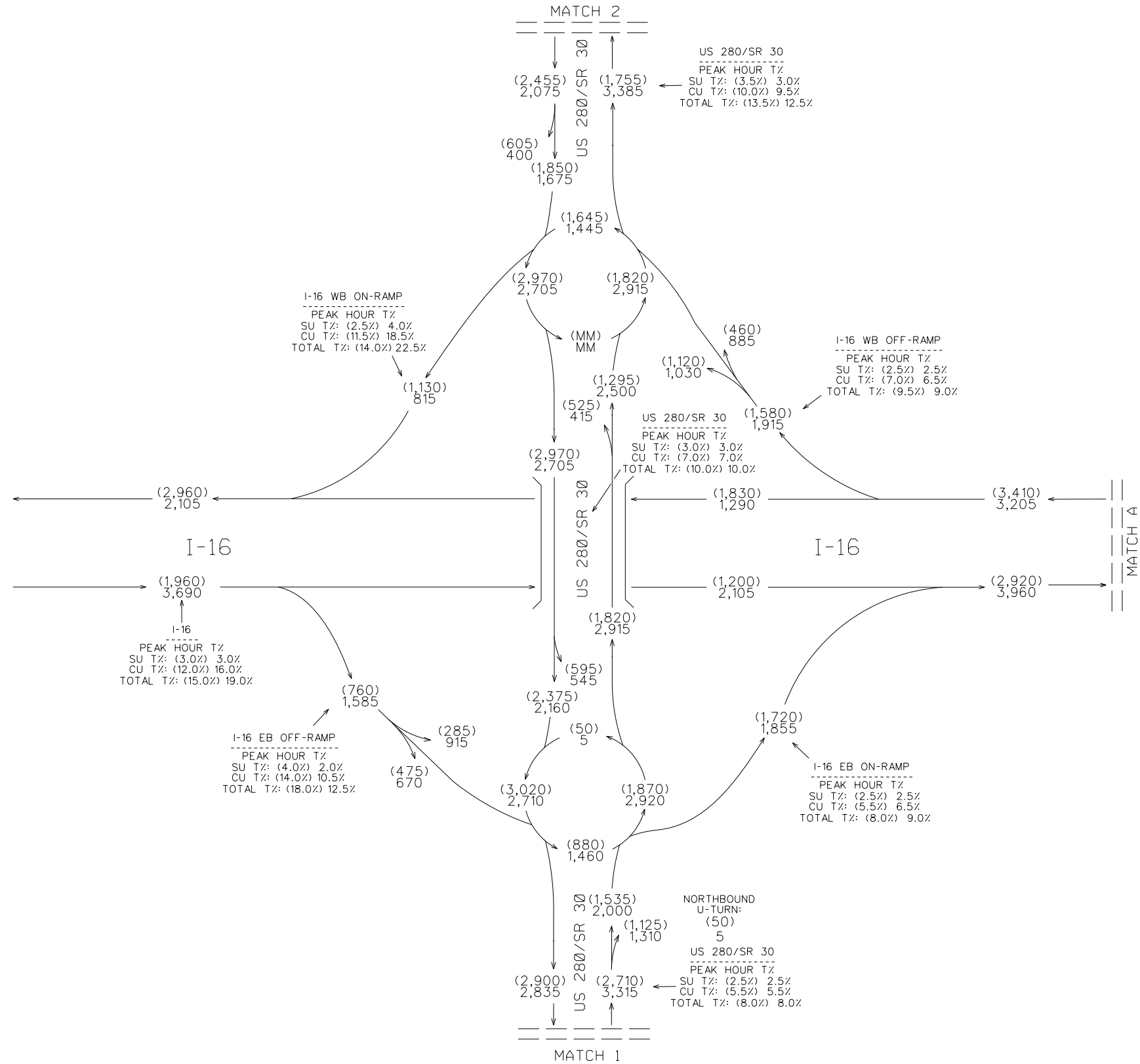
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0088

DHV VOLUMES
DESIGN YEAR 2045 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
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built assets

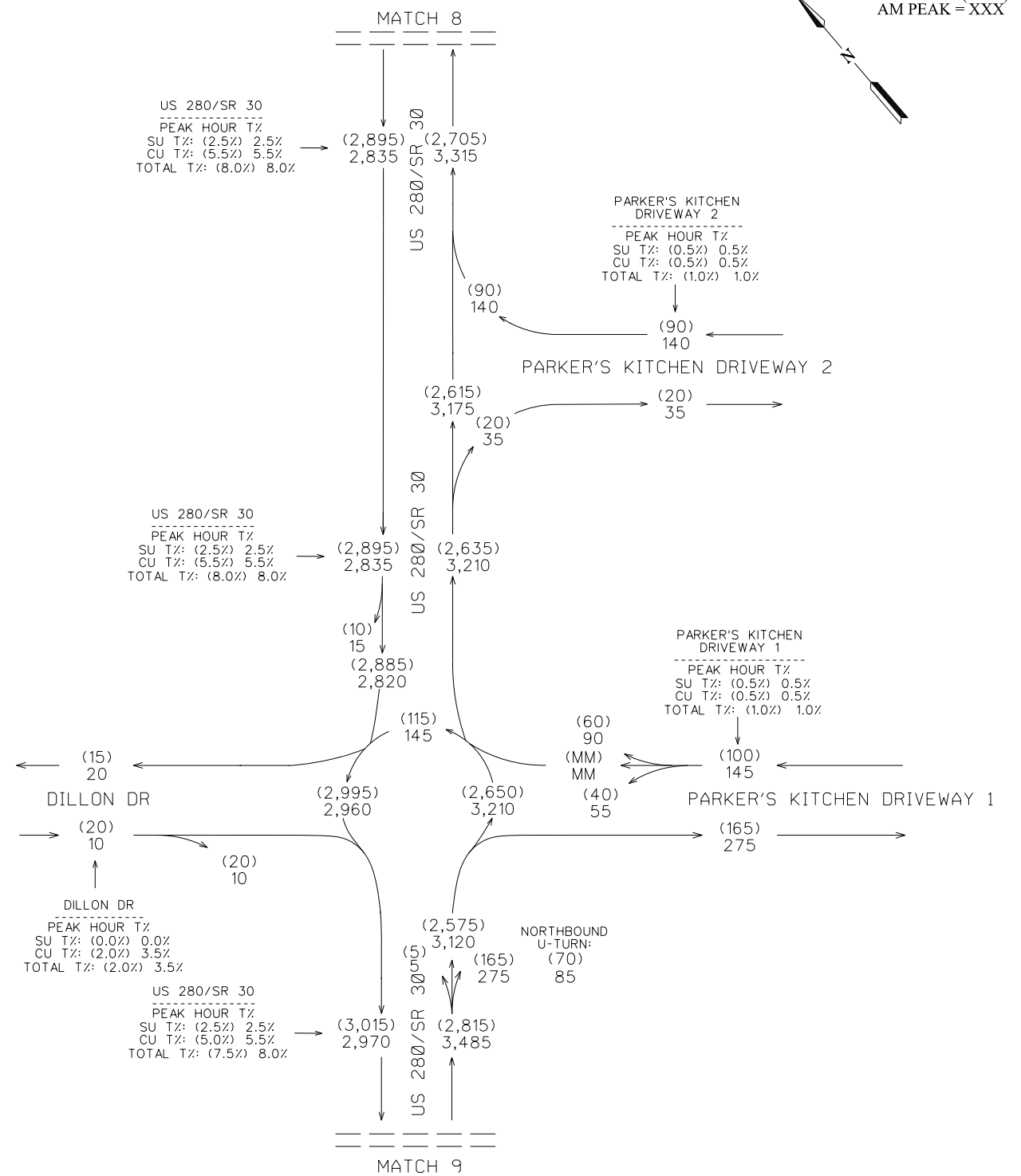
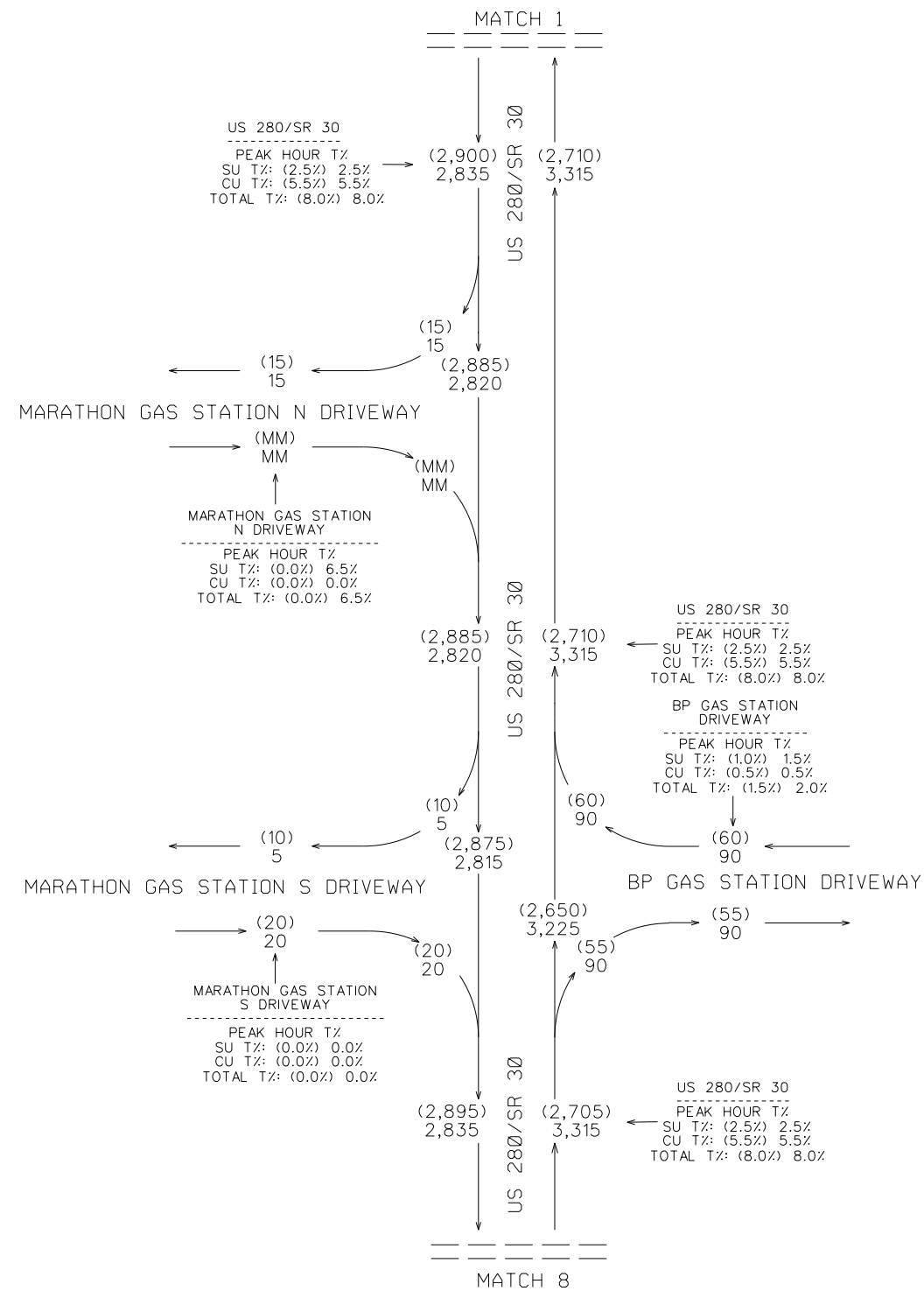
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0091

DHV VOLUMES
DESIGN YEAR 2045 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



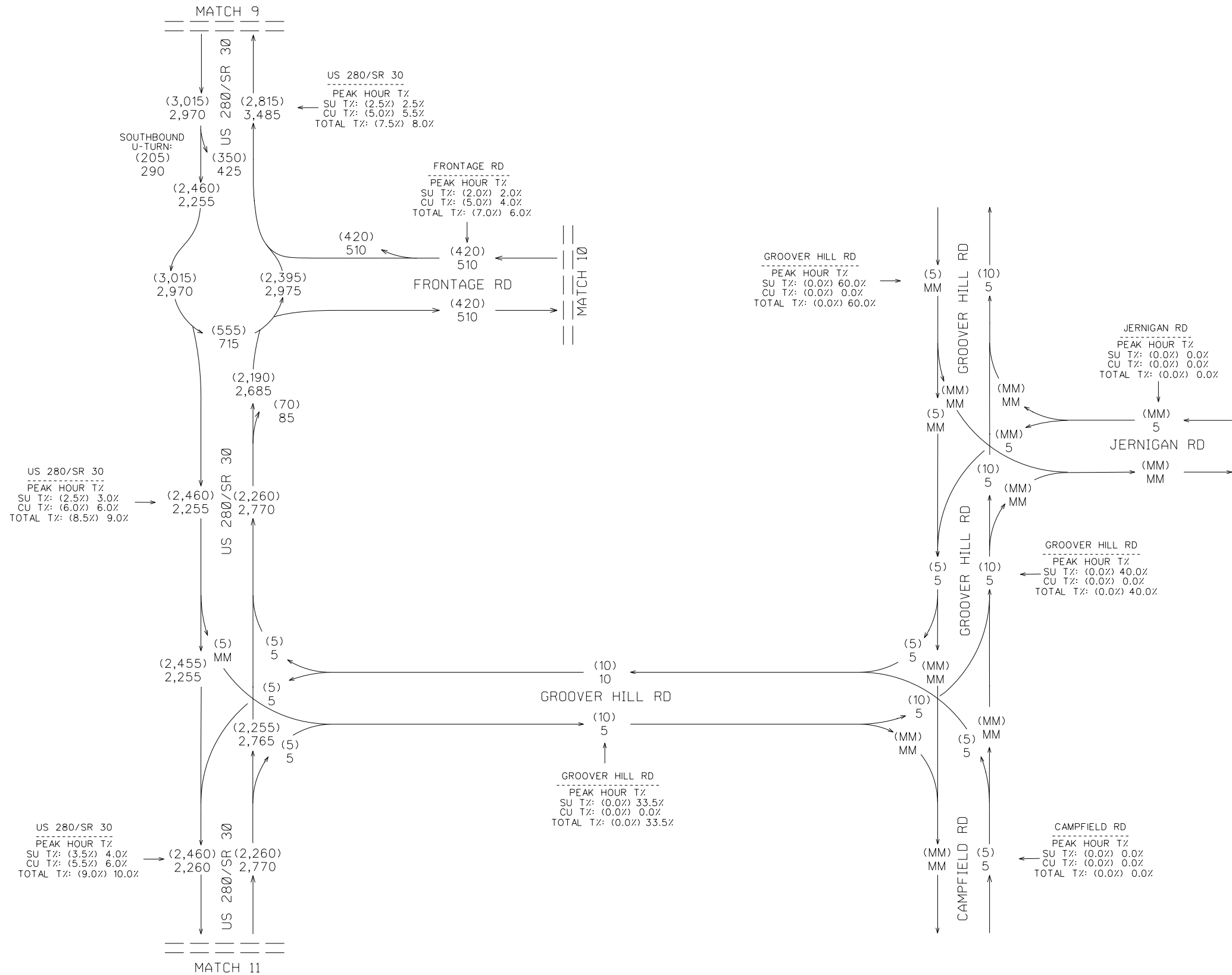
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0094

DHV VOLUMES
DESIGN YEAR 2045 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



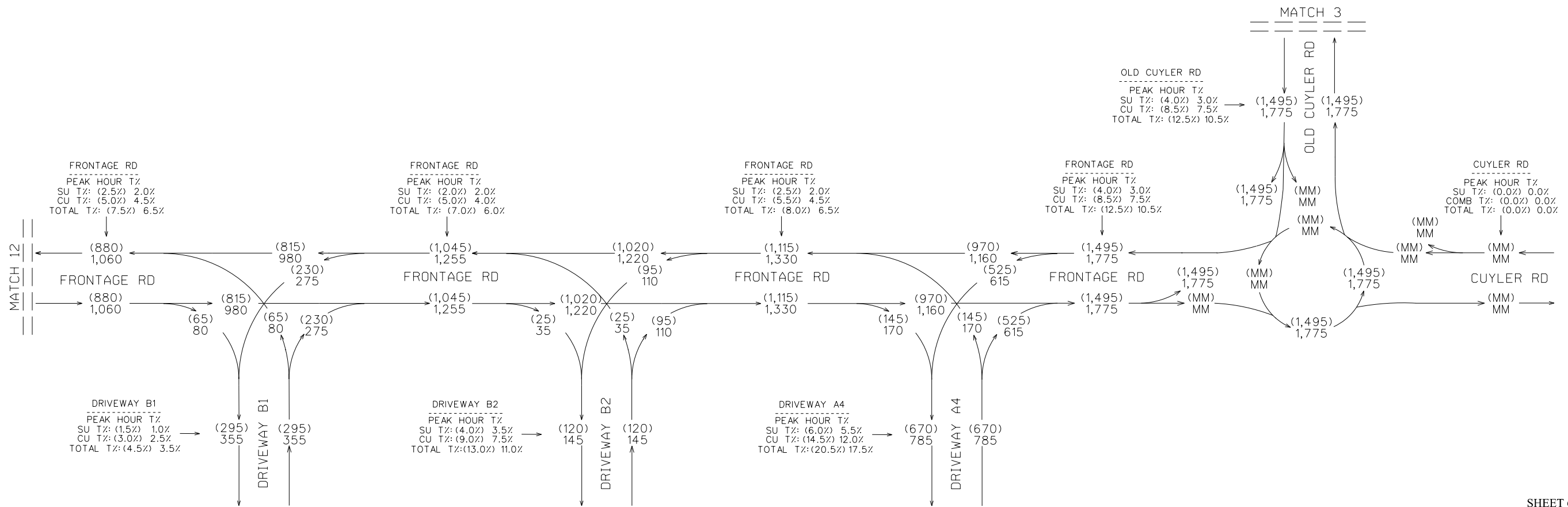
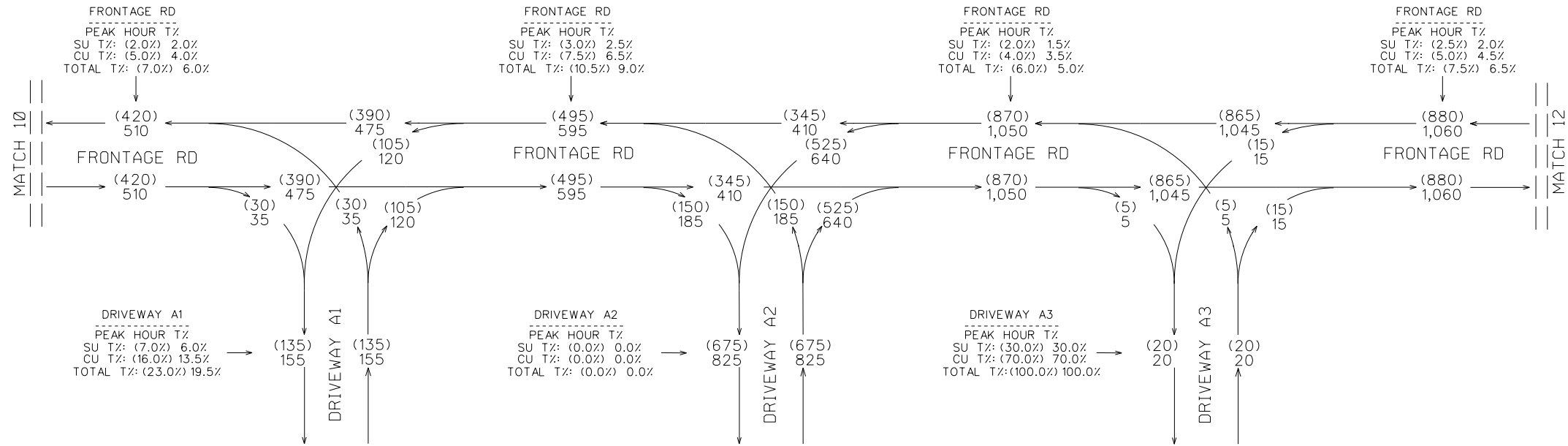
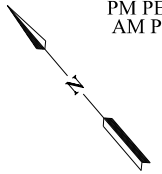
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0095

DHV VOLUMES
DESIGN YEAR 2045 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

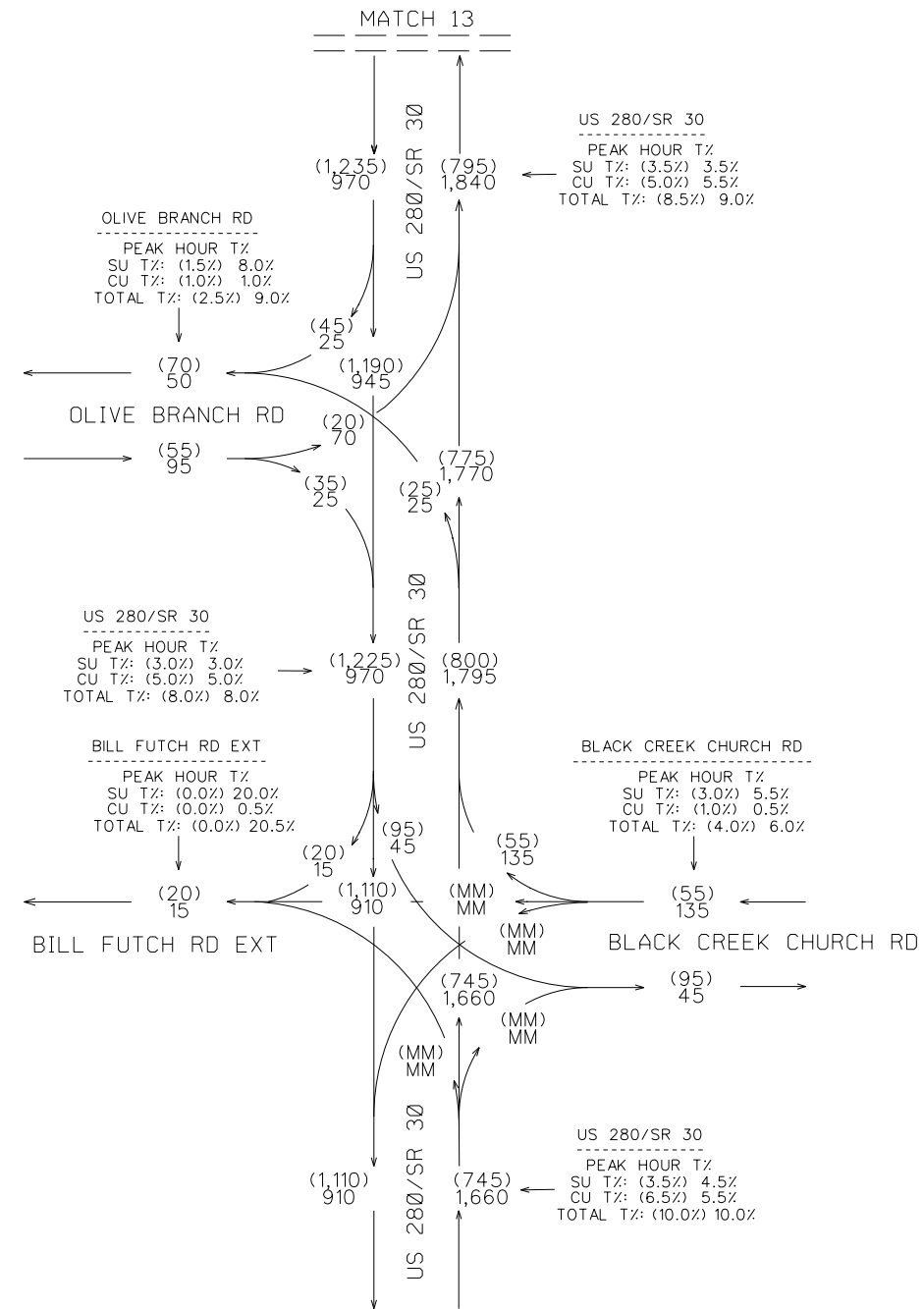
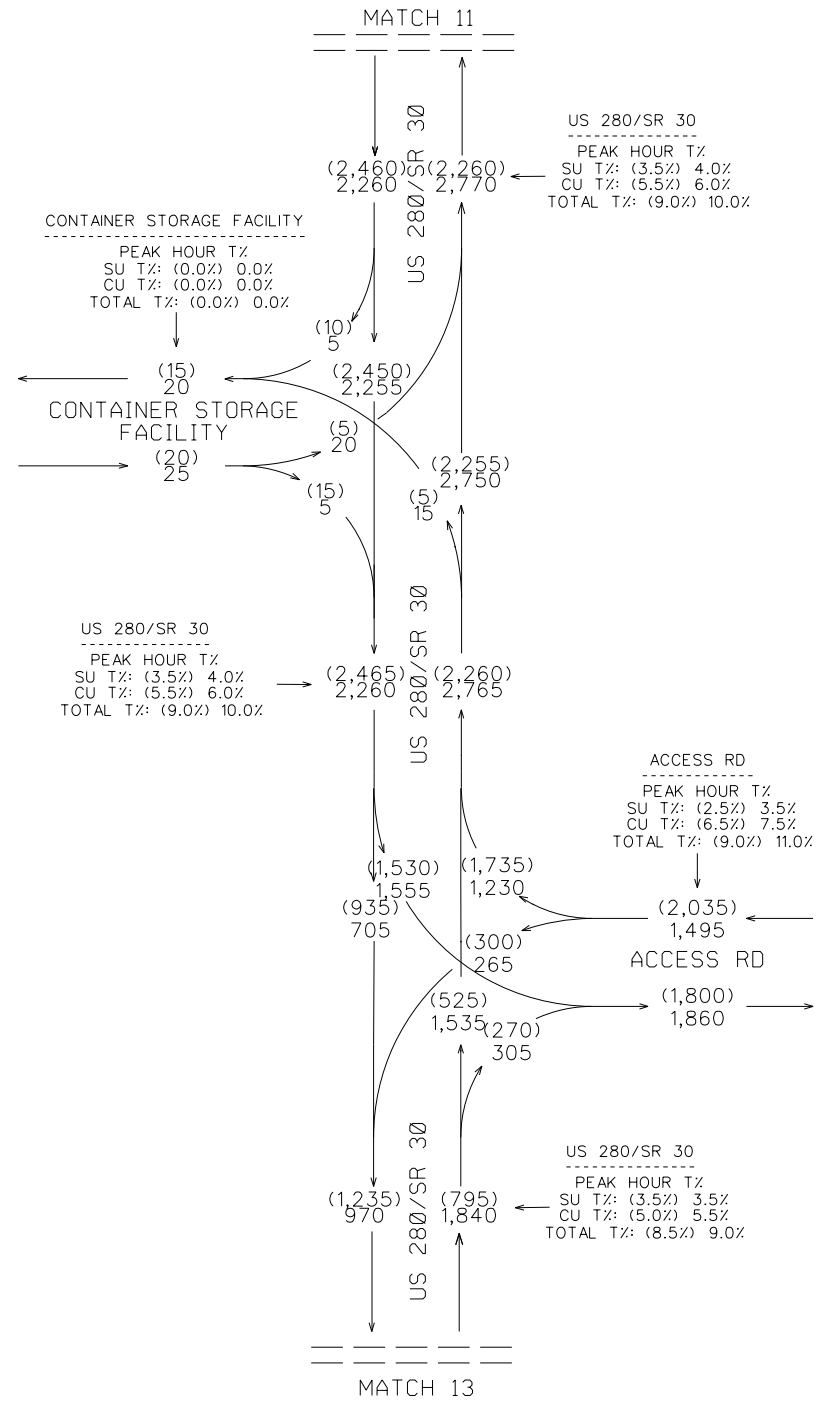
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0096

DHV VOLUMES
DESIGN YEAR 2045 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



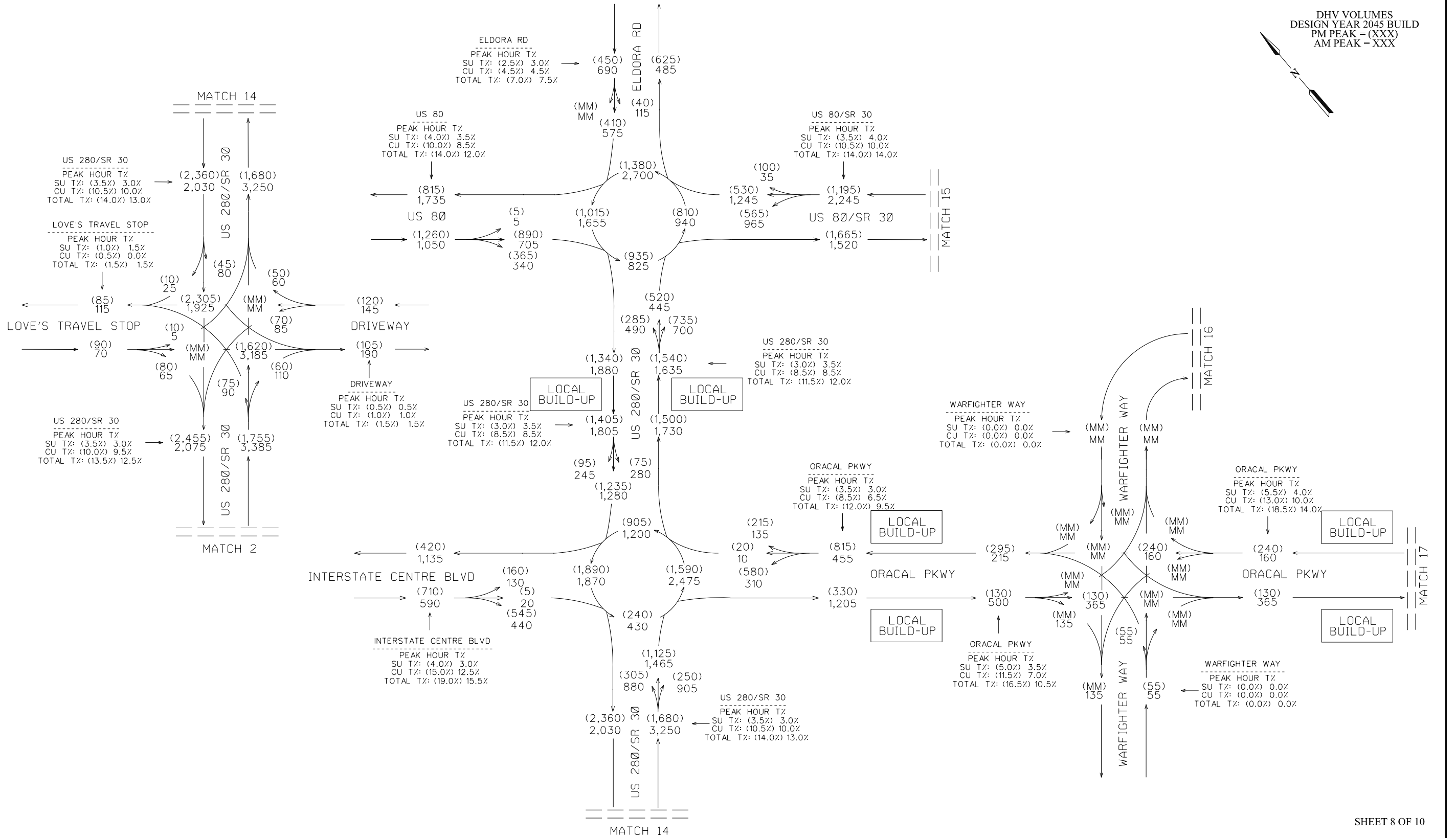
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0097

DHV VOLUMES
DESIGN YEAR 2045 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

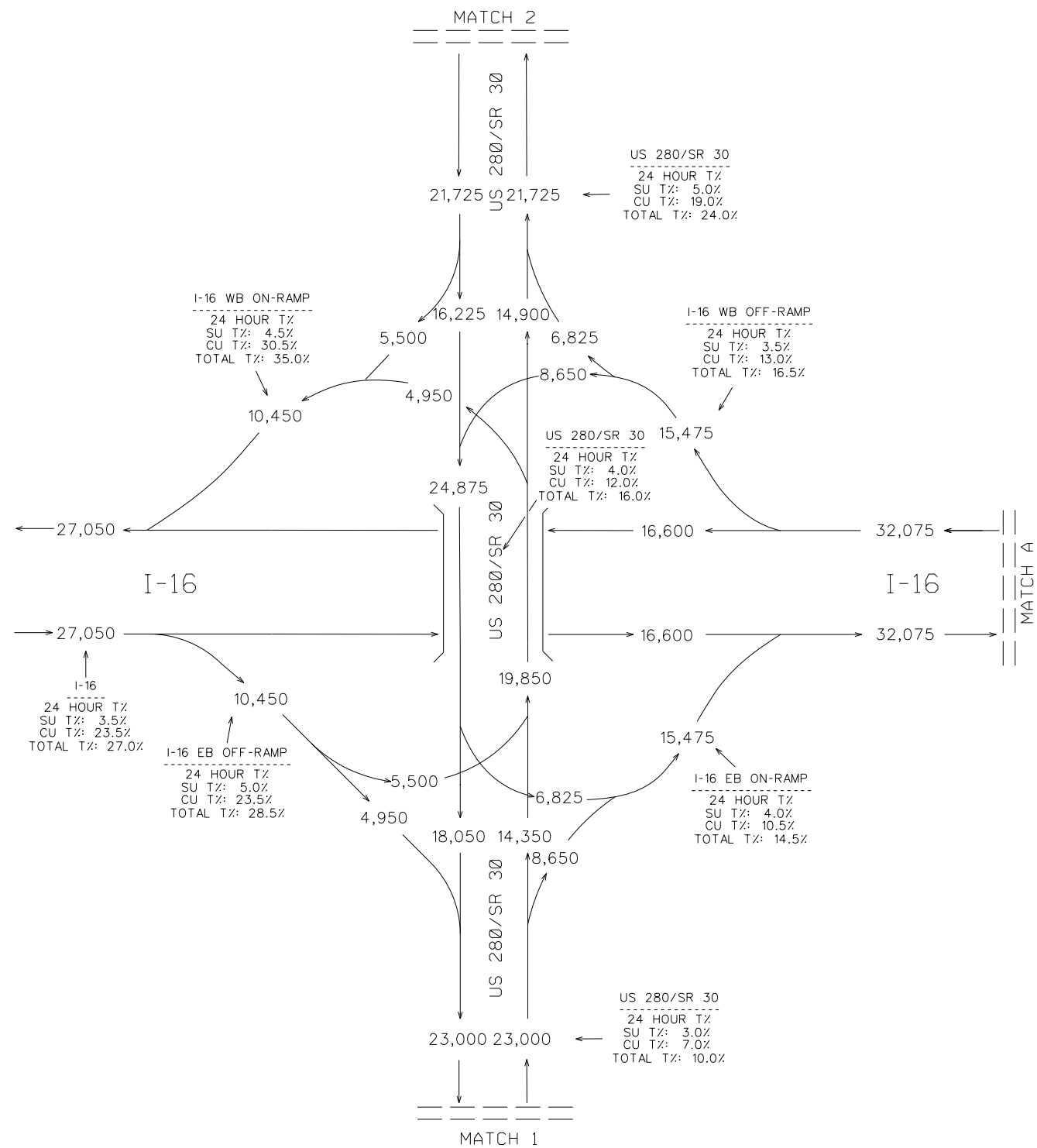
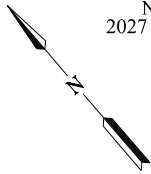
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR 2045 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0098

AADT VOLUMES
OPEN YEAR +2 2027
NO-BUILD
2027 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



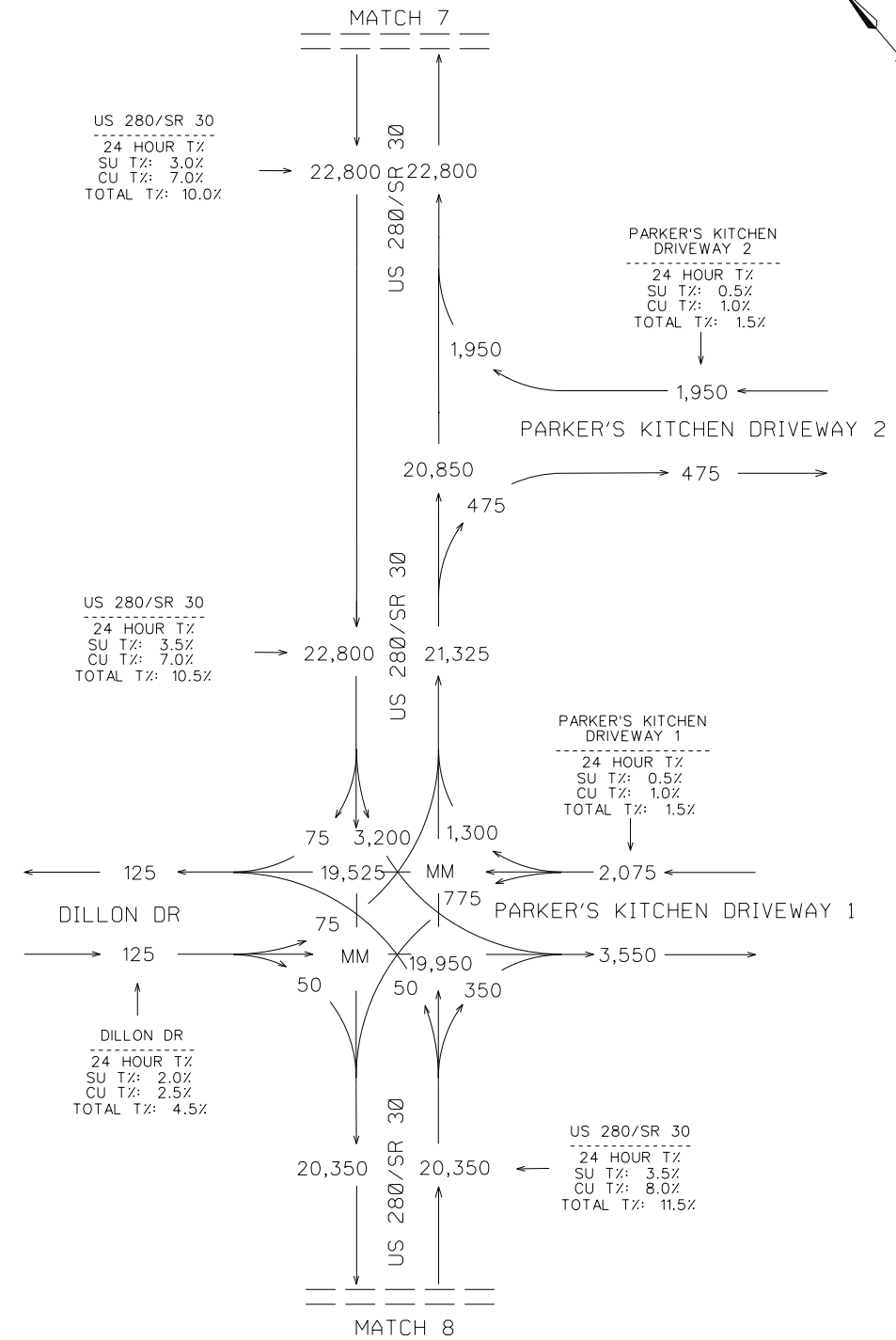
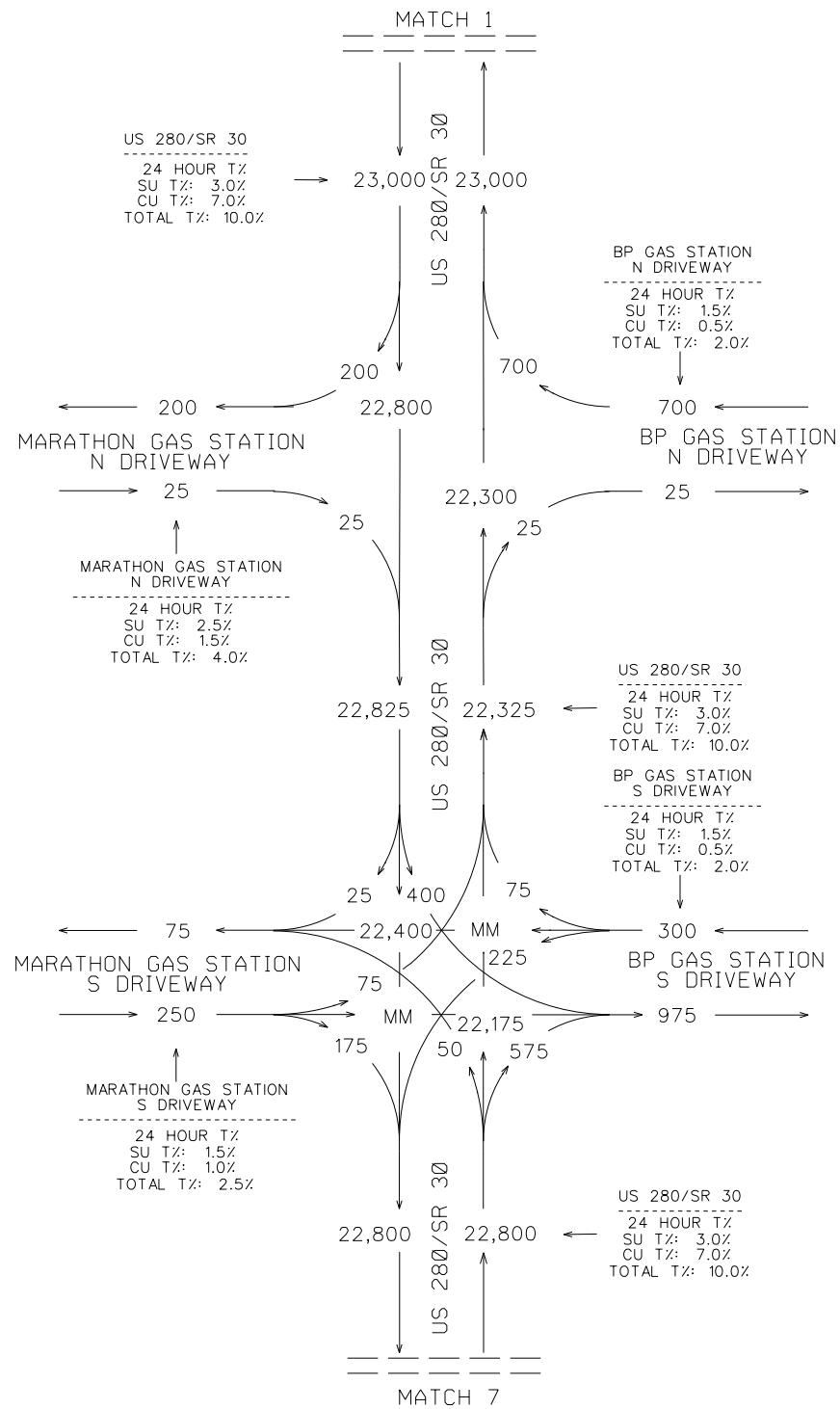
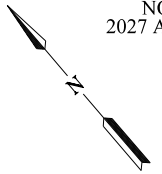
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0101

AADT VOLUMES
OPEN YEAR +2 2027
NO-BUILD
2027 AADT = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



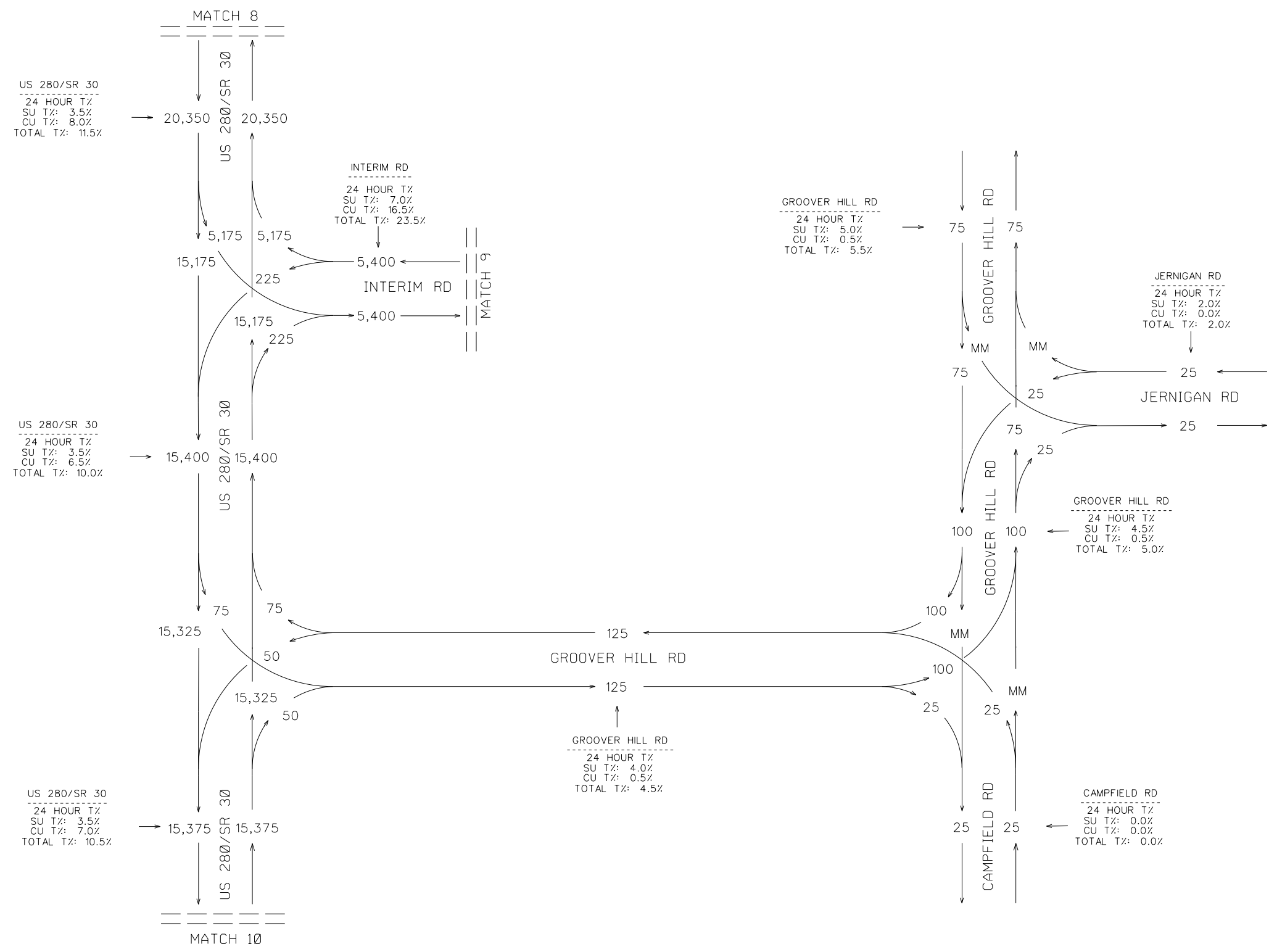
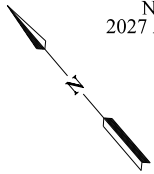
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0104

AADT VOLUMES
OPEN YEAR +2 2027
NO-BUILD
2027 AADT = XXX



SHEET 5 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



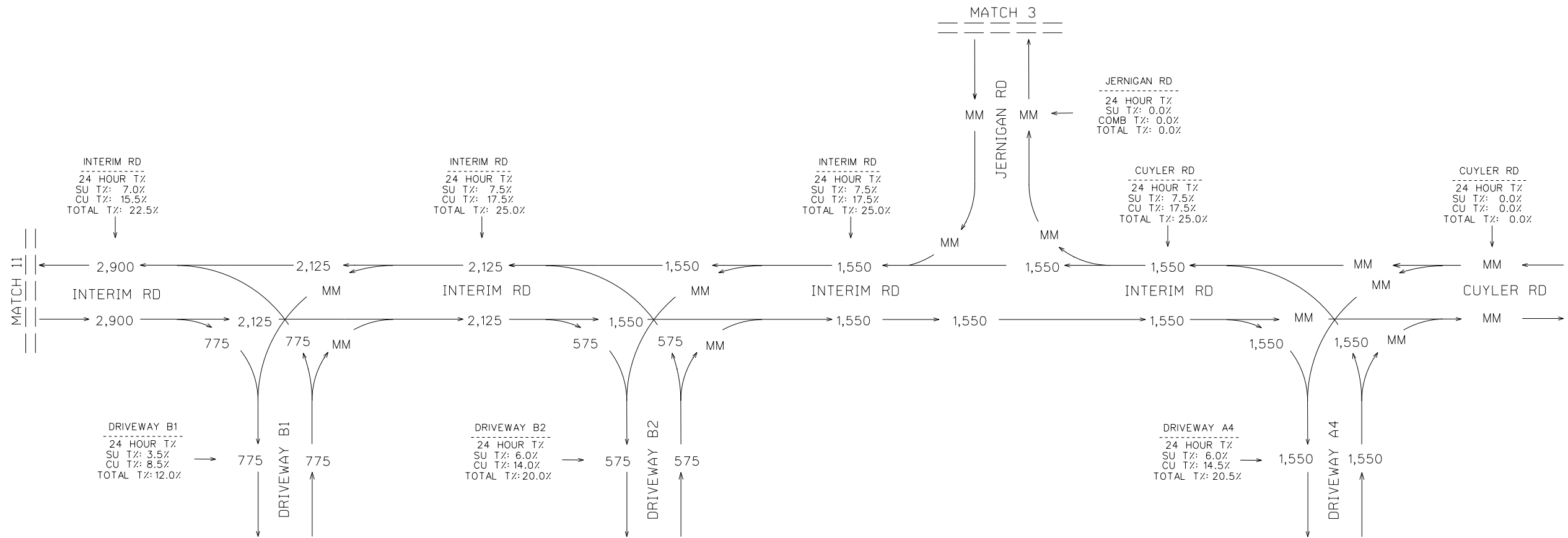
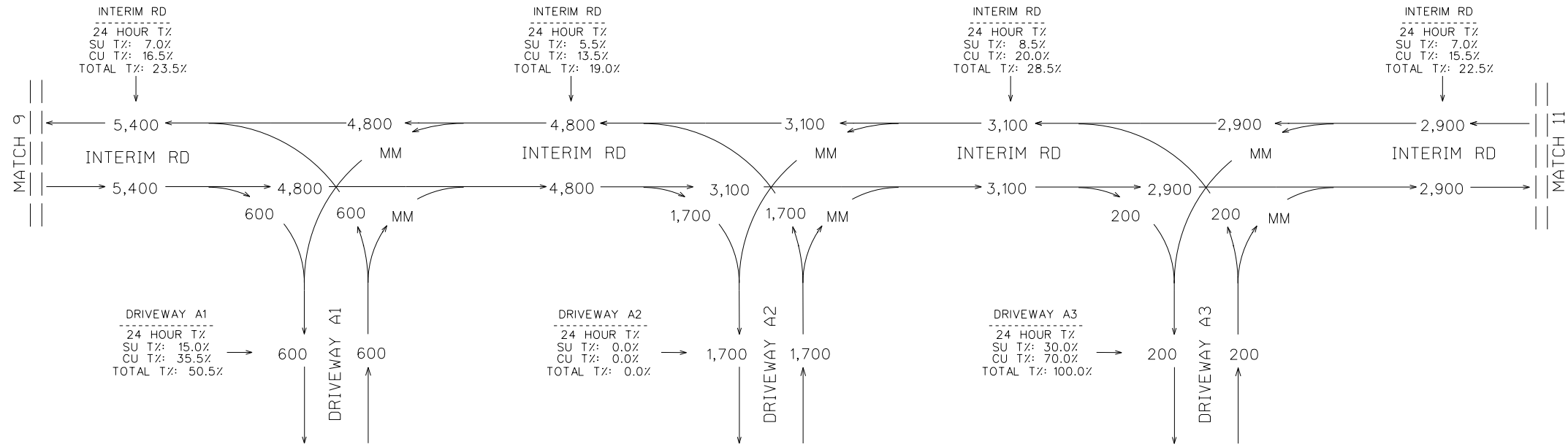
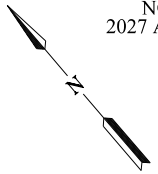
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0105

AADT VOLUMES
OPEN YEAR +2 2027
NO-BUILD
2027 AADT = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



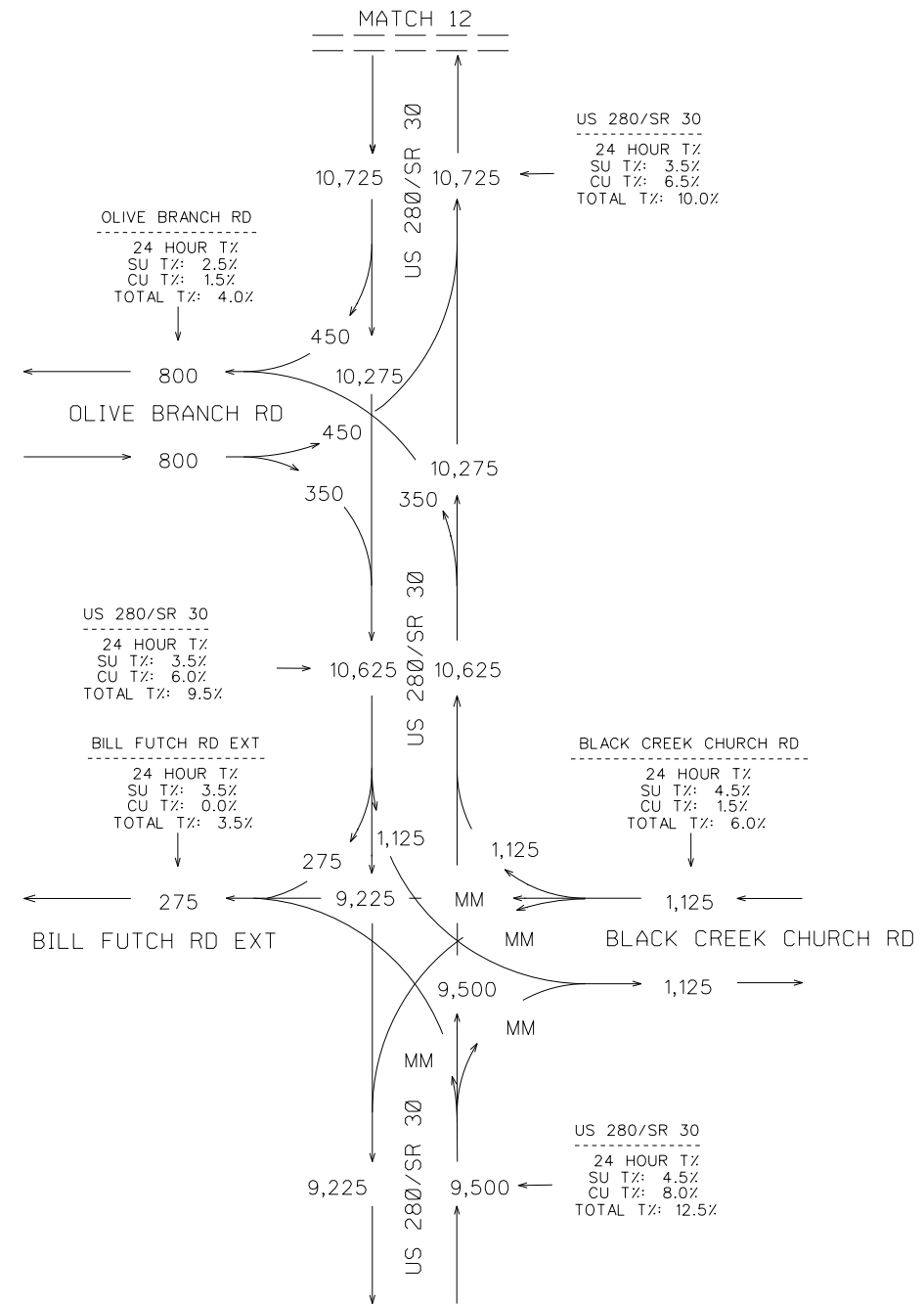
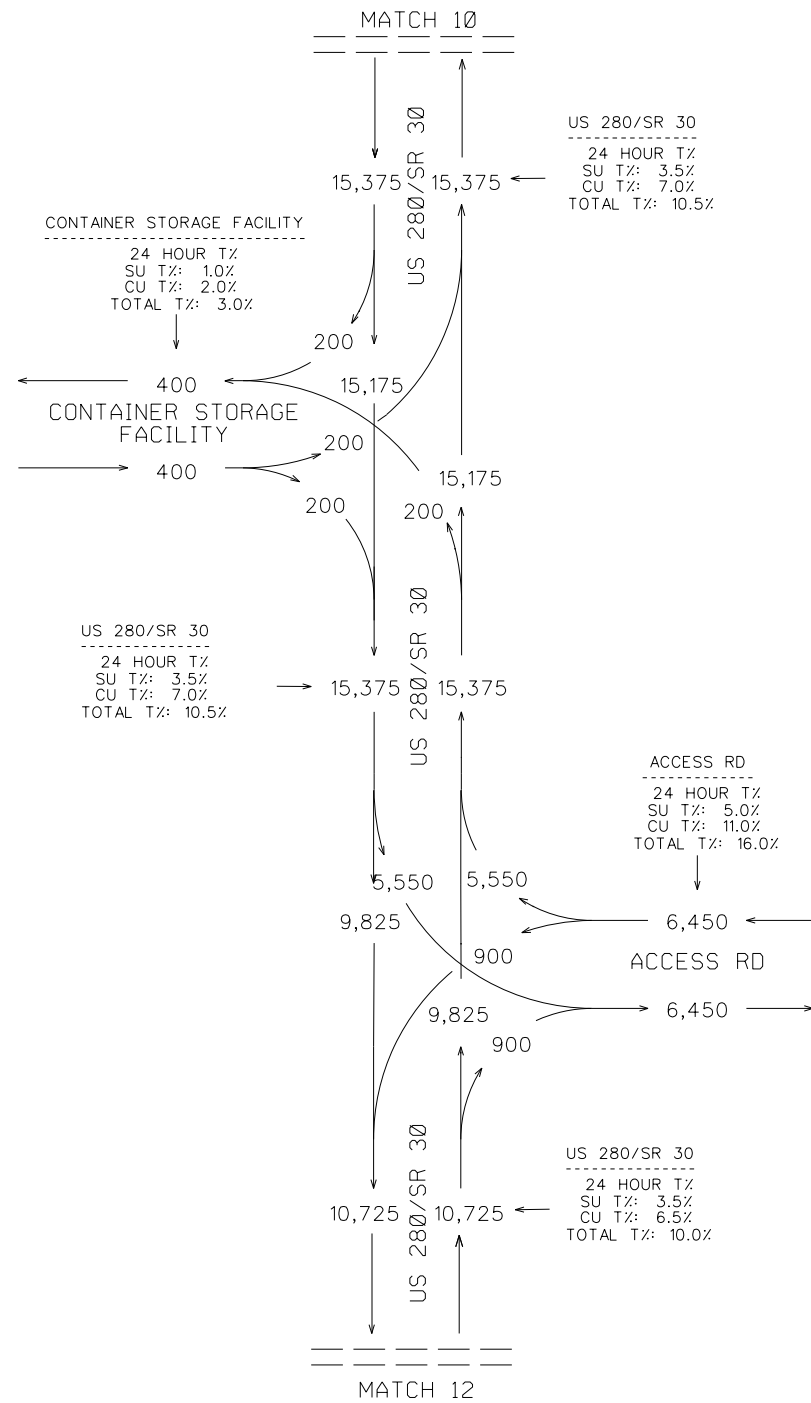
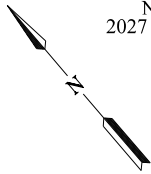
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0106

AADT VOLUMES
OPEN YEAR +2 2027
NO-BUILD
2027 AADT = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

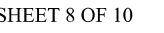


REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

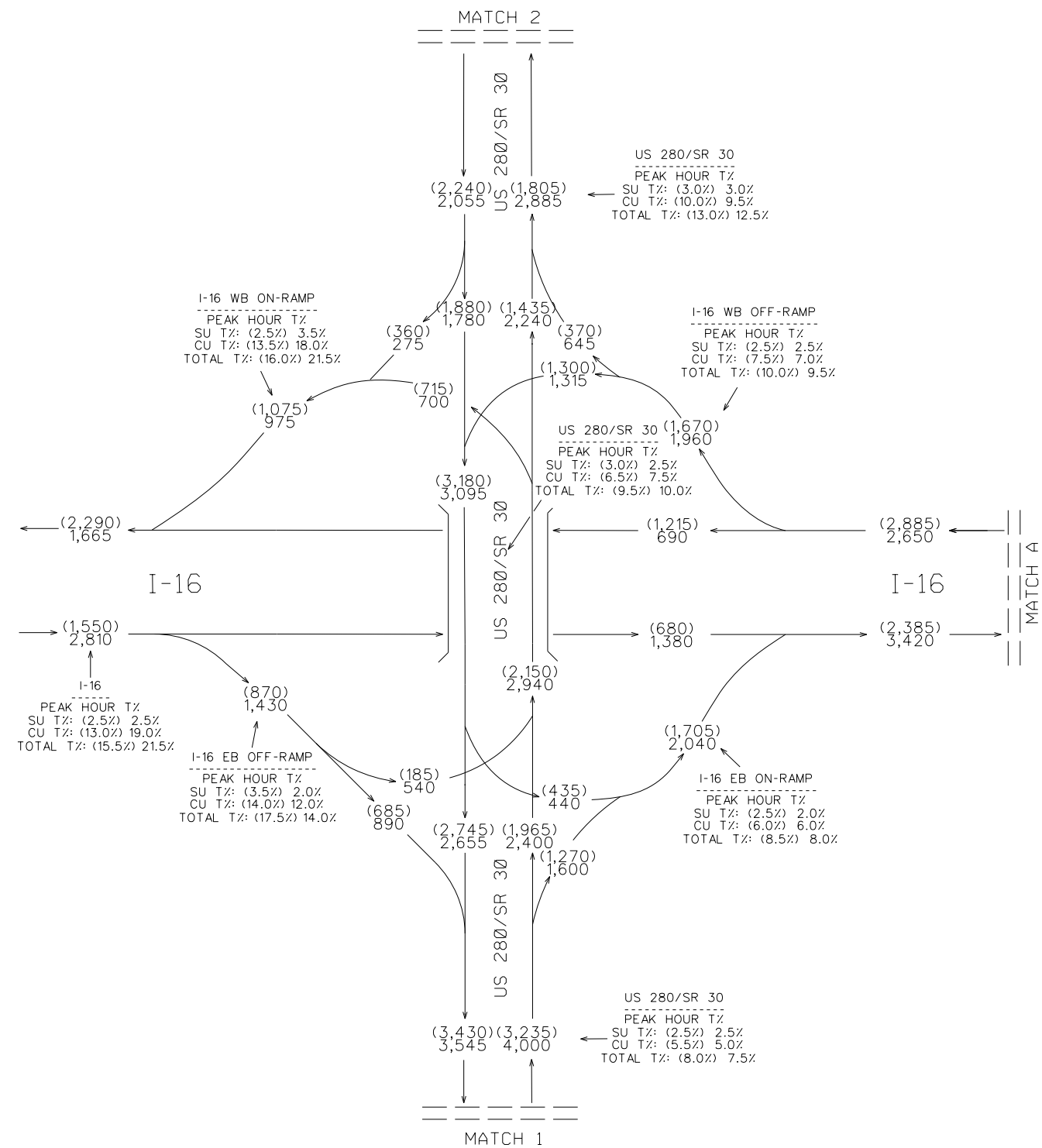
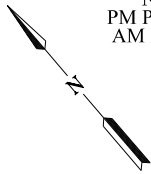
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BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0107



CHECKED:		DATE:		DRAWING No. 10-0108
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

DHV VOLUMES
OPEN YEAR +2 2027
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
for natural and
built assets

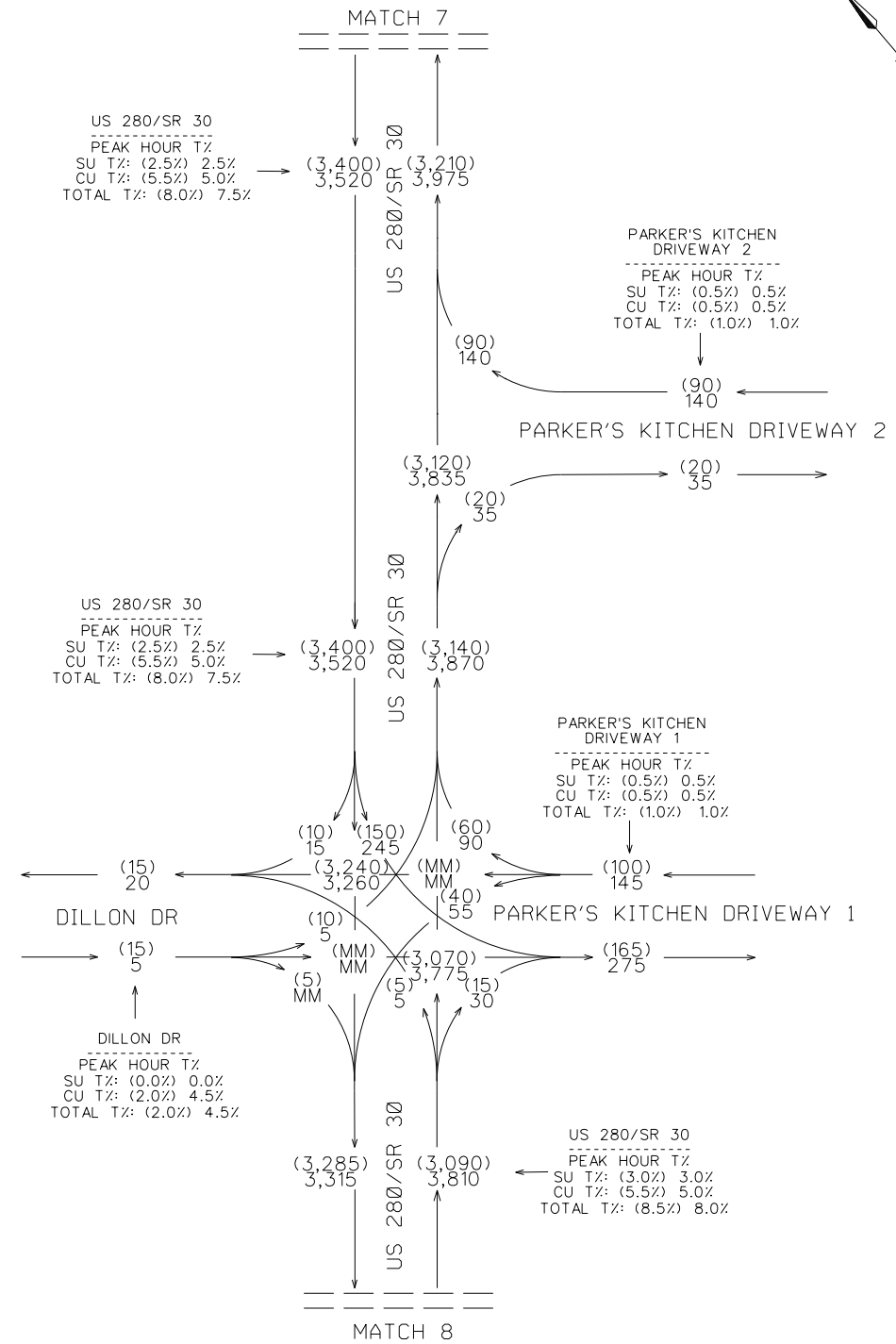
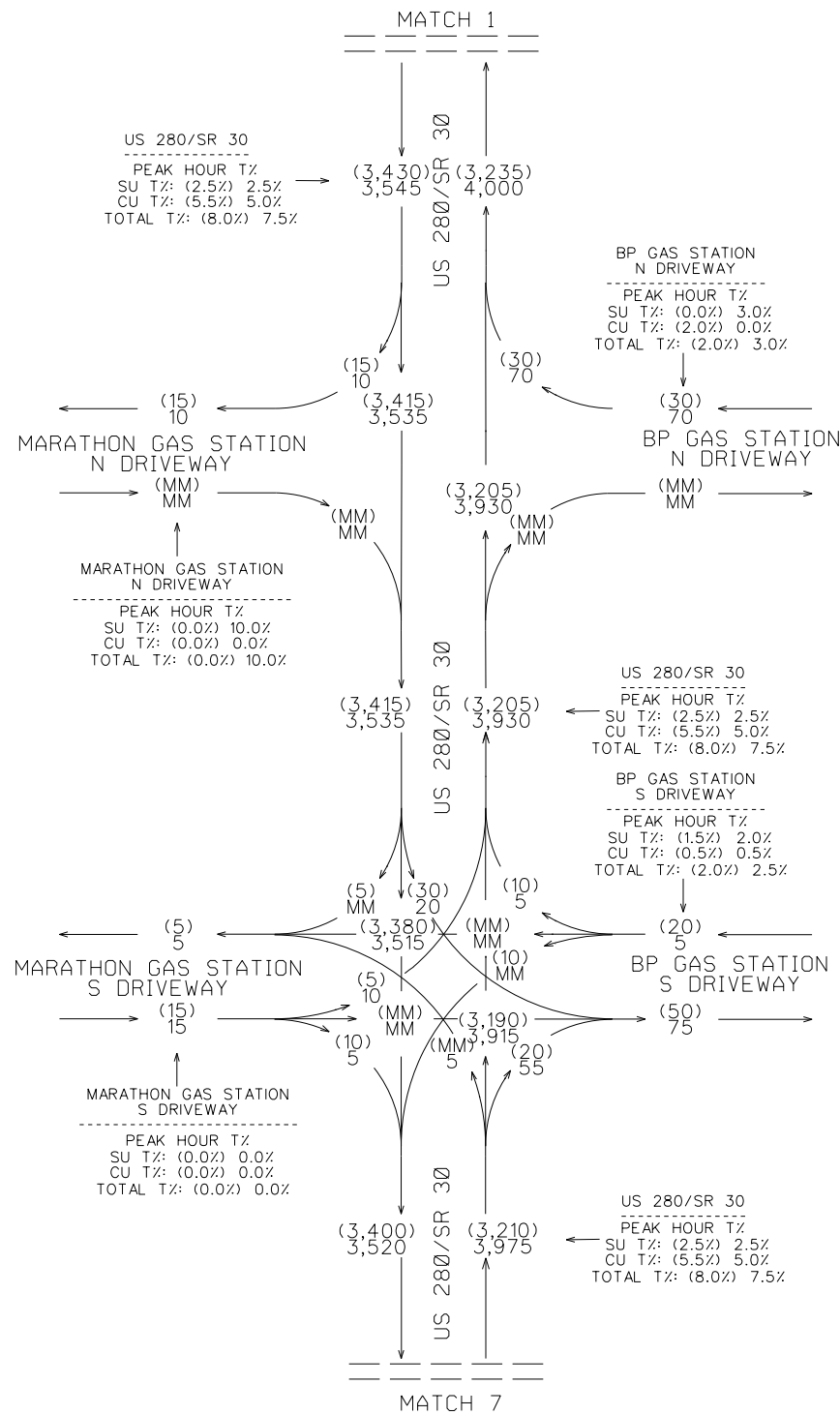
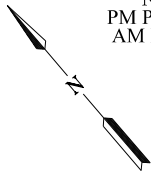
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0111

DHV VOLUMES
OPEN YEAR +2 2027
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

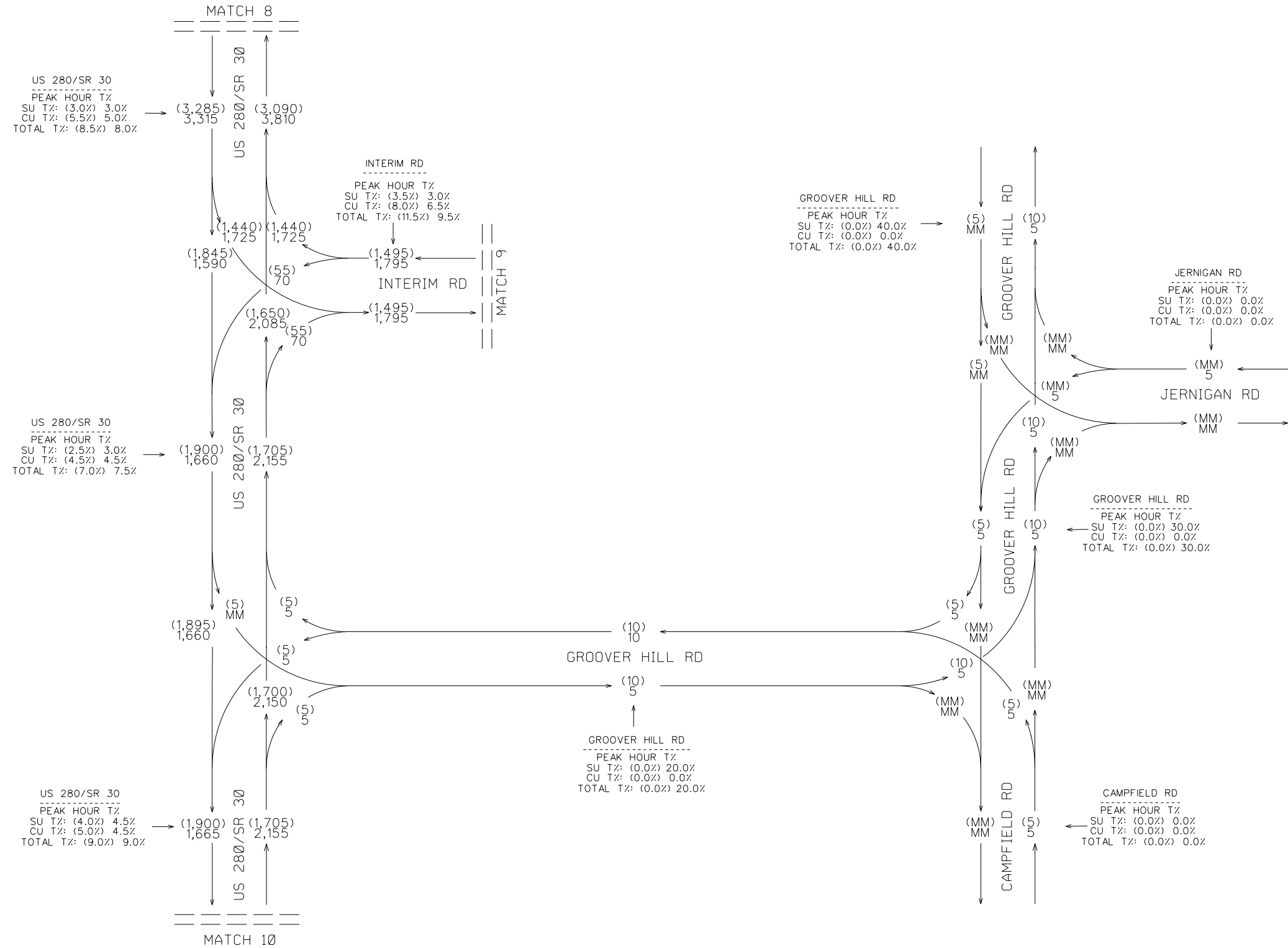
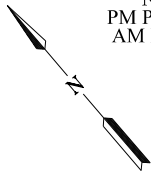
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0114

DHV VOLUMES
OPEN YEAR +2 2027
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



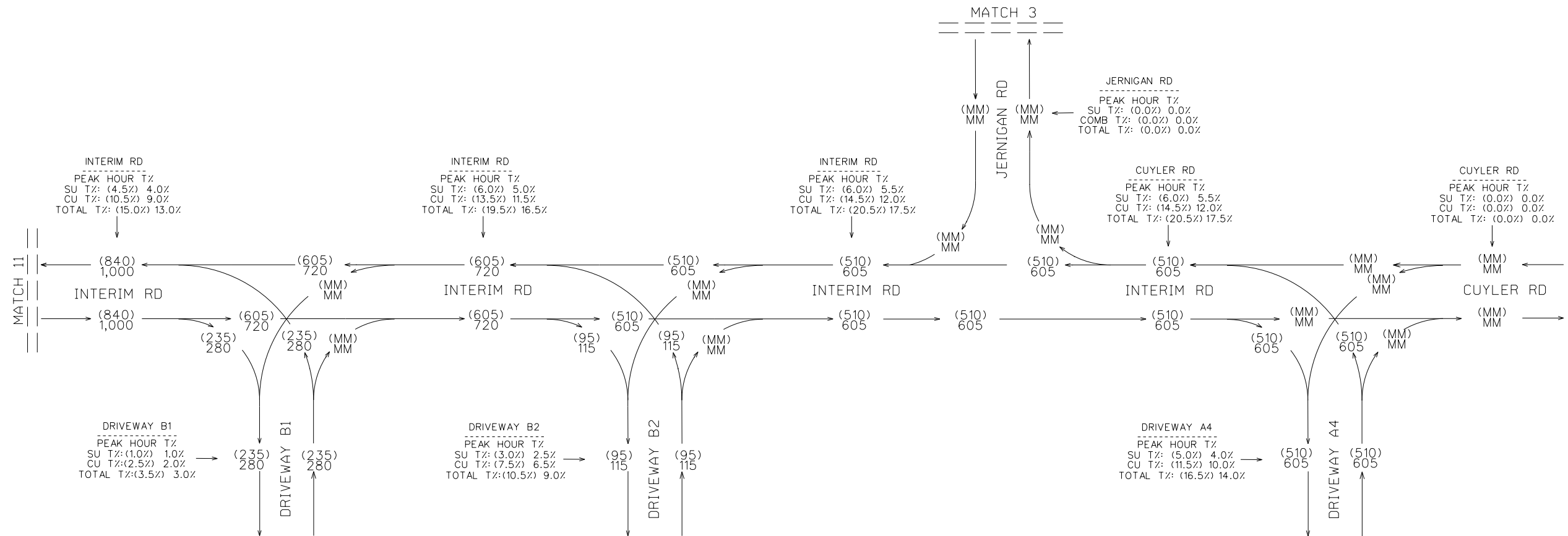
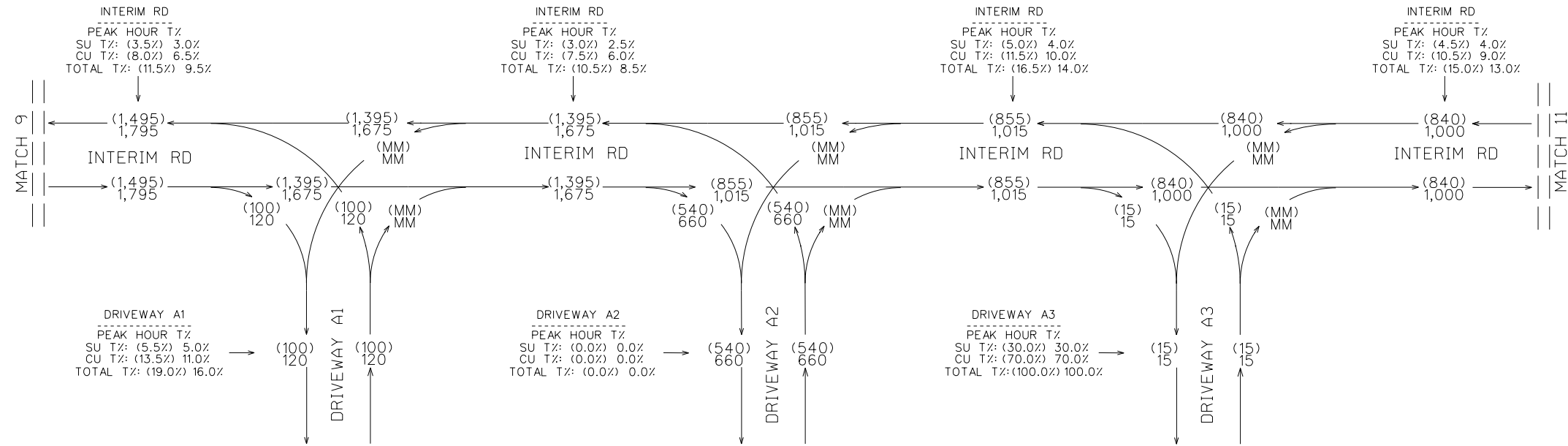
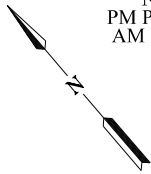
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0115

DHV VOLUMES
OPEN YEAR +2 2027
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



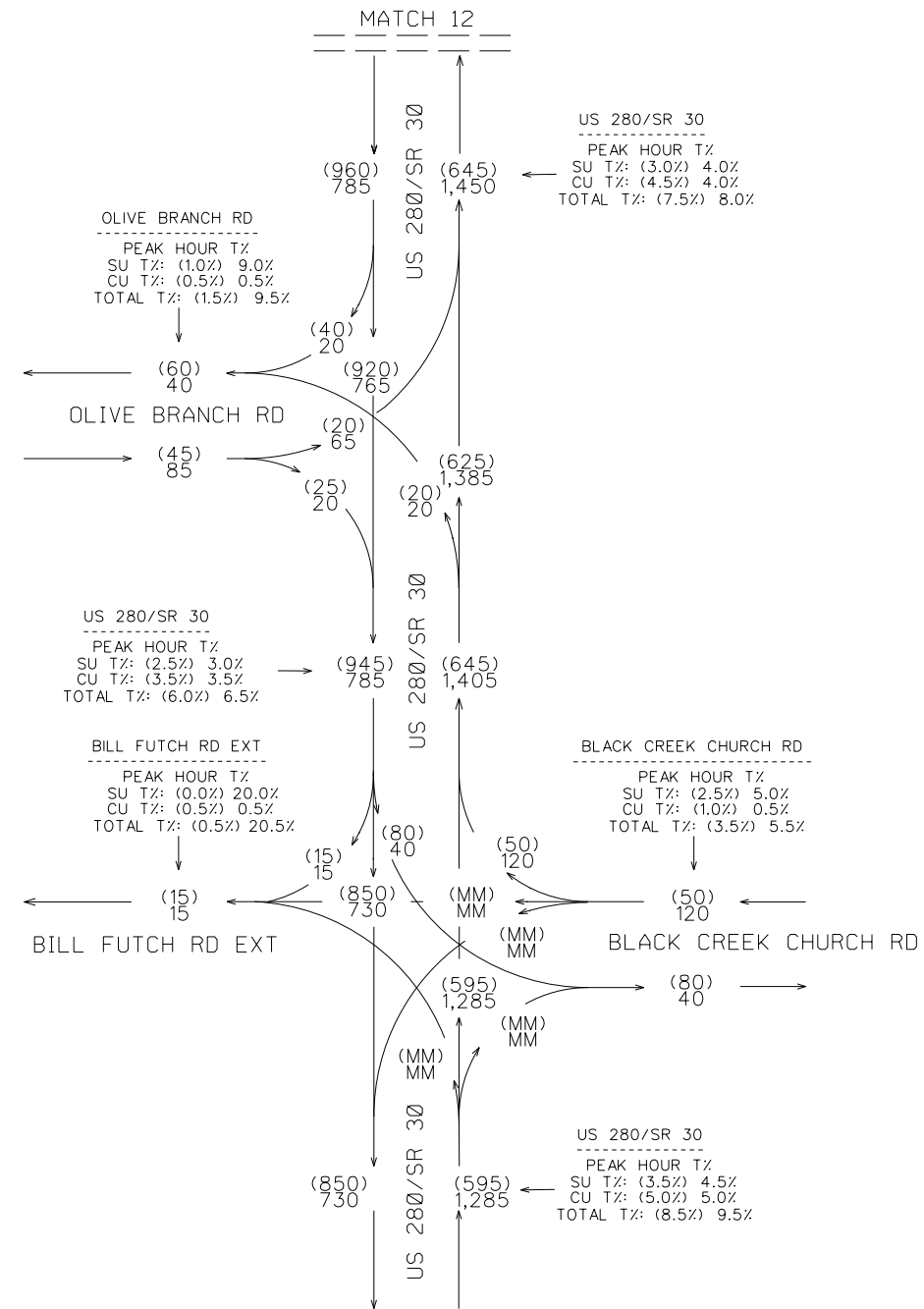
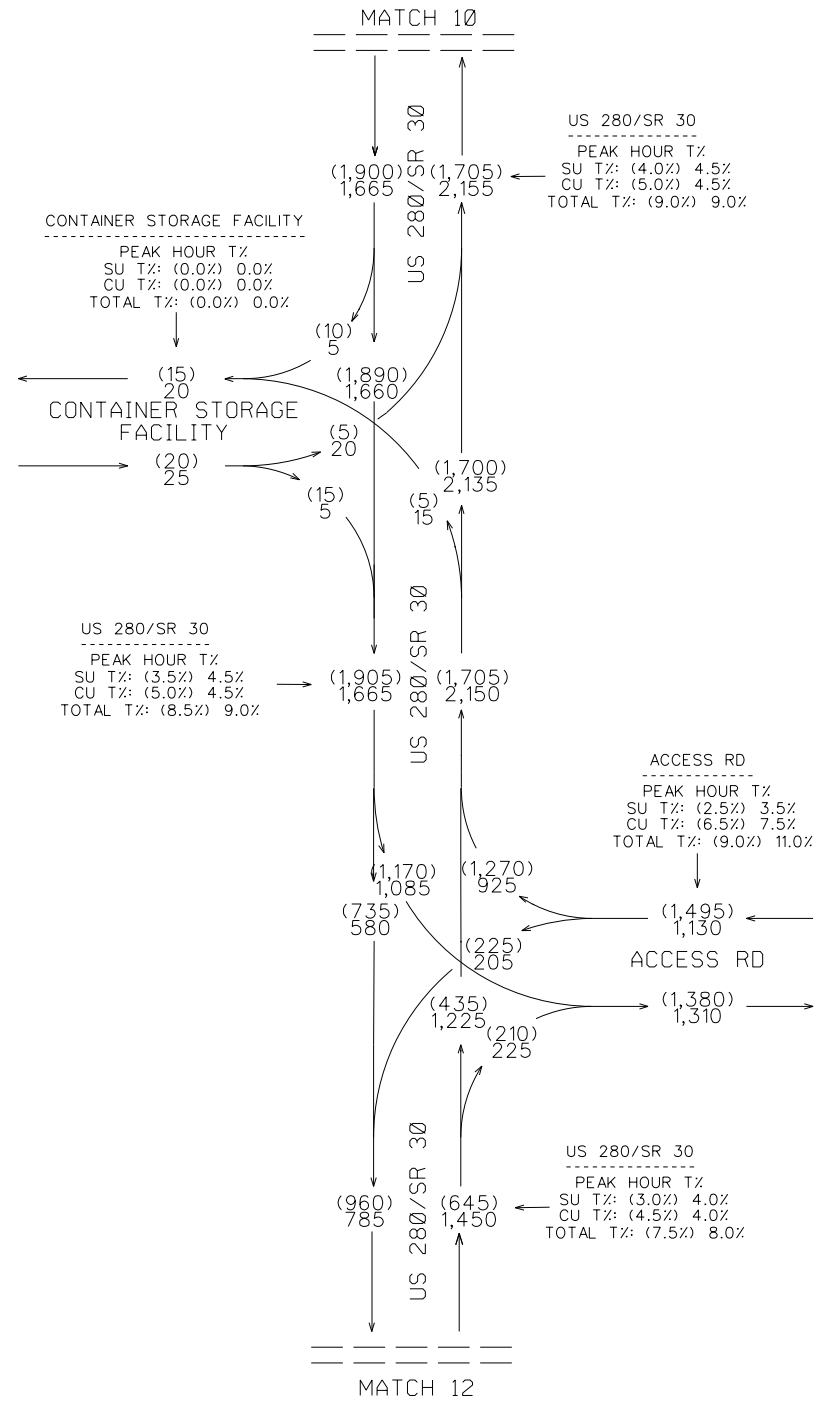
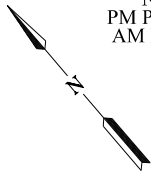
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0116

DHV VOLUMES
OPEN YEAR +2 2027
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



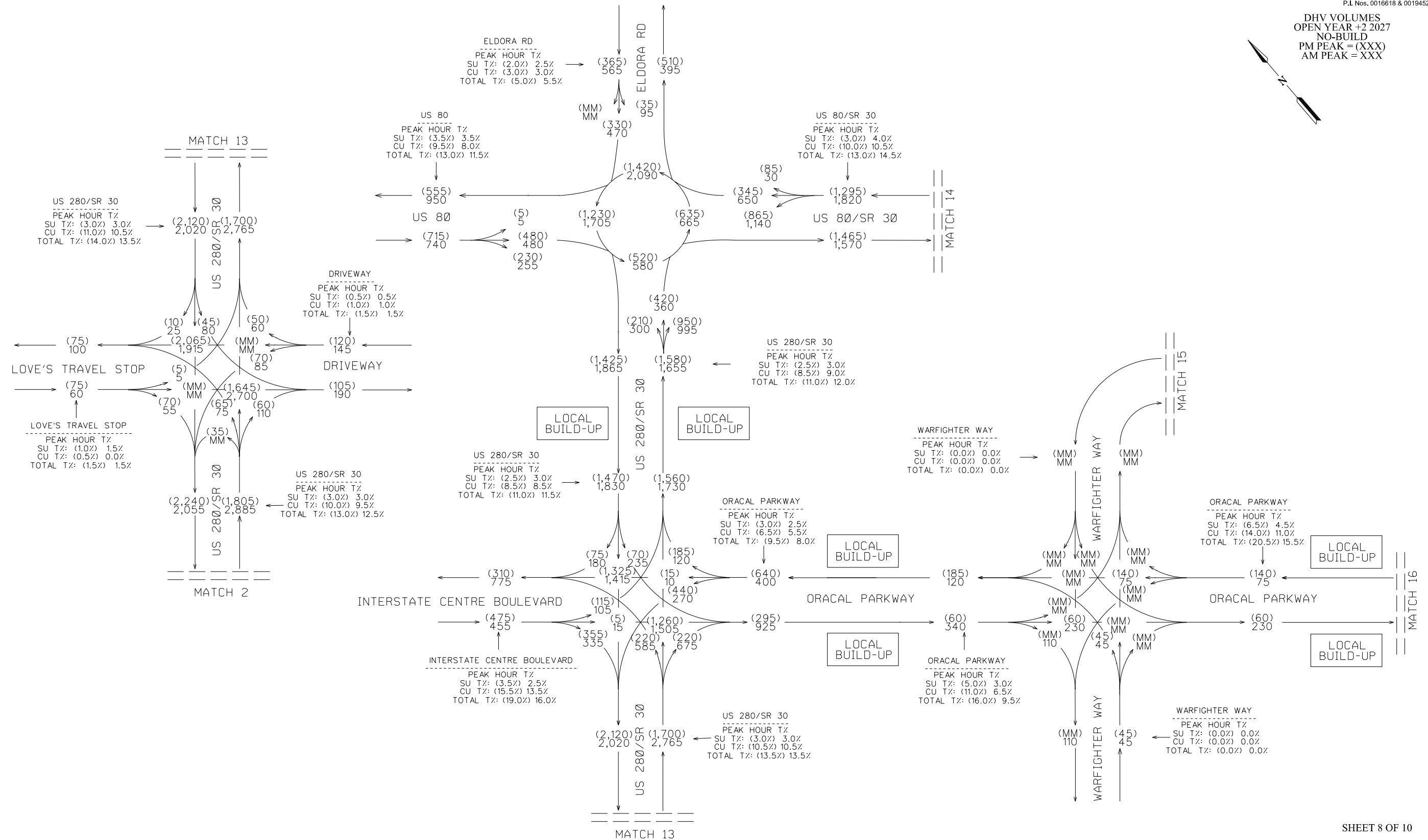
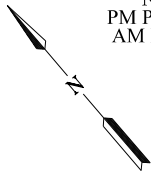
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0117

DHV VOLUMES
OPEN YEAR +2 2027
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

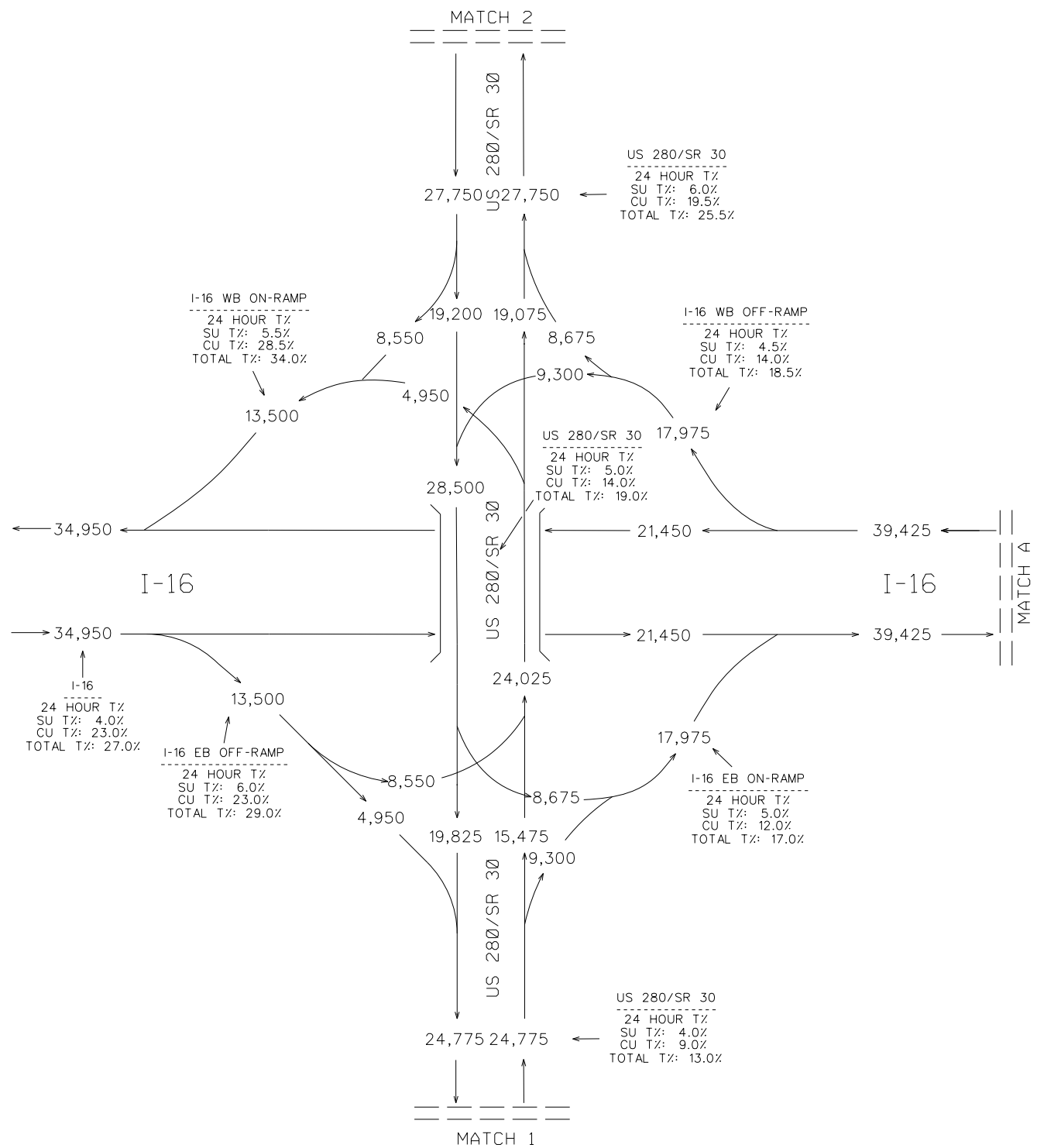
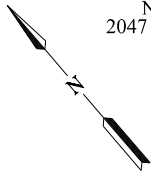
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0118

AADT VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
2047 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



Design & Consultancy
for natural and
built assets

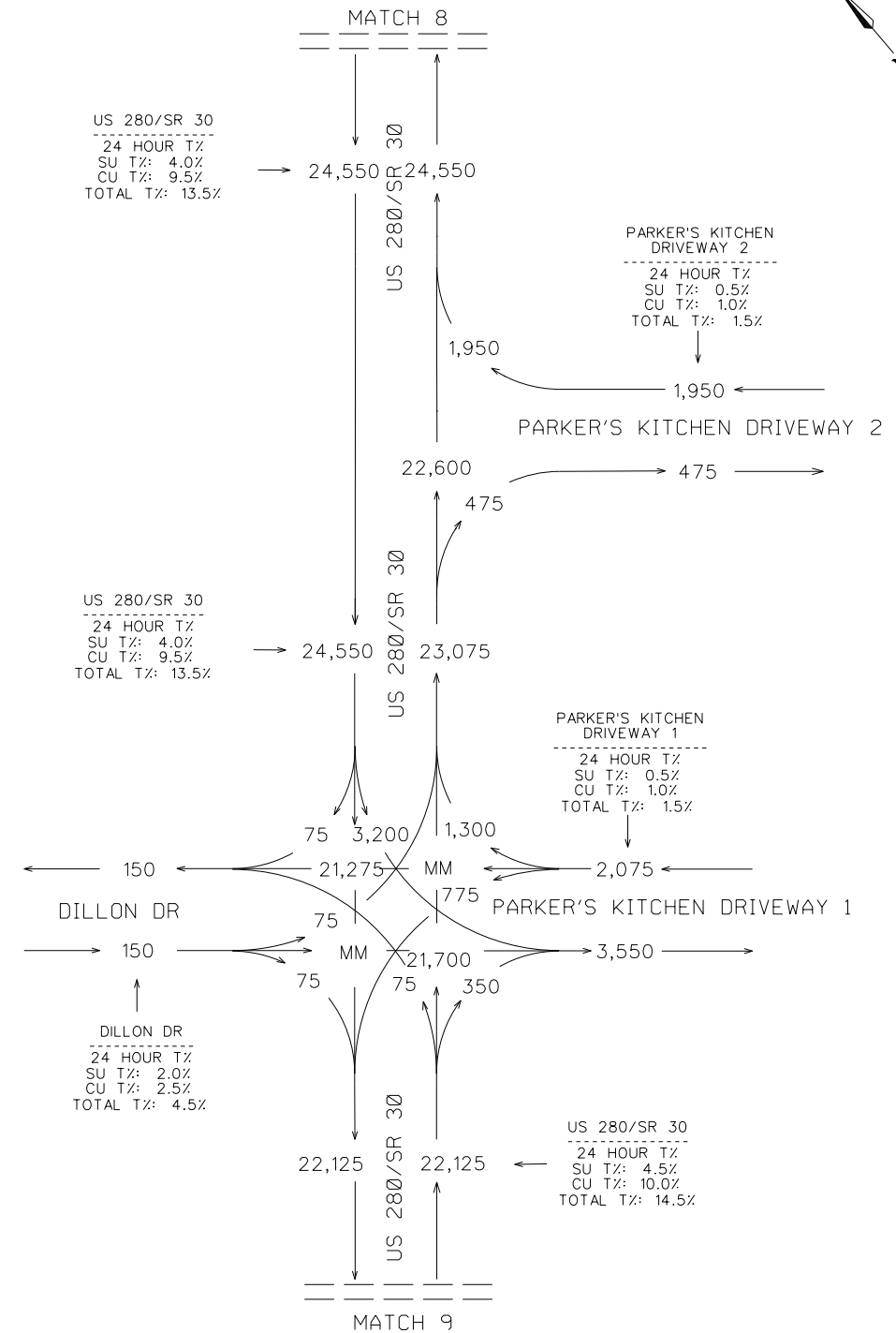
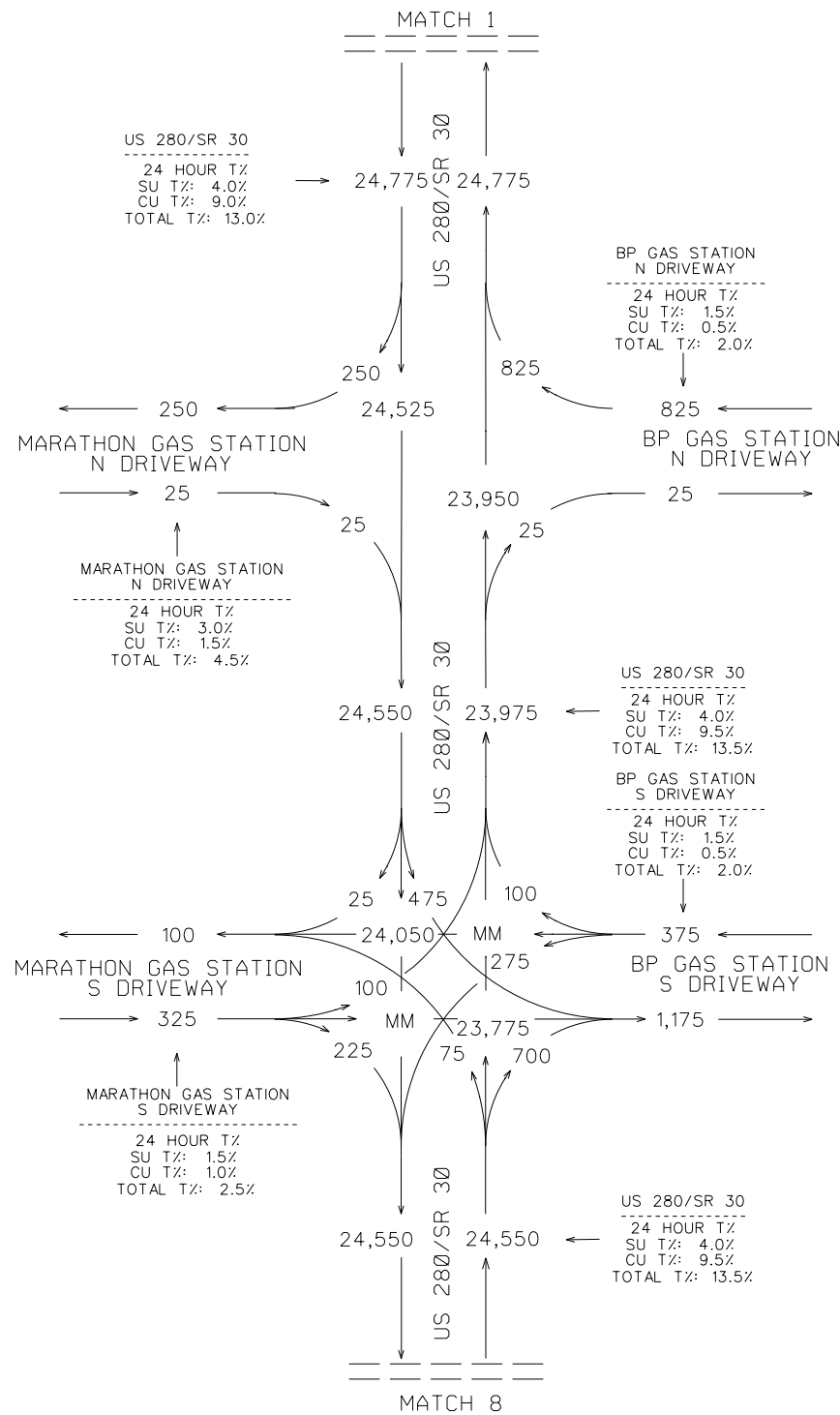
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0121

AADT VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
2047 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

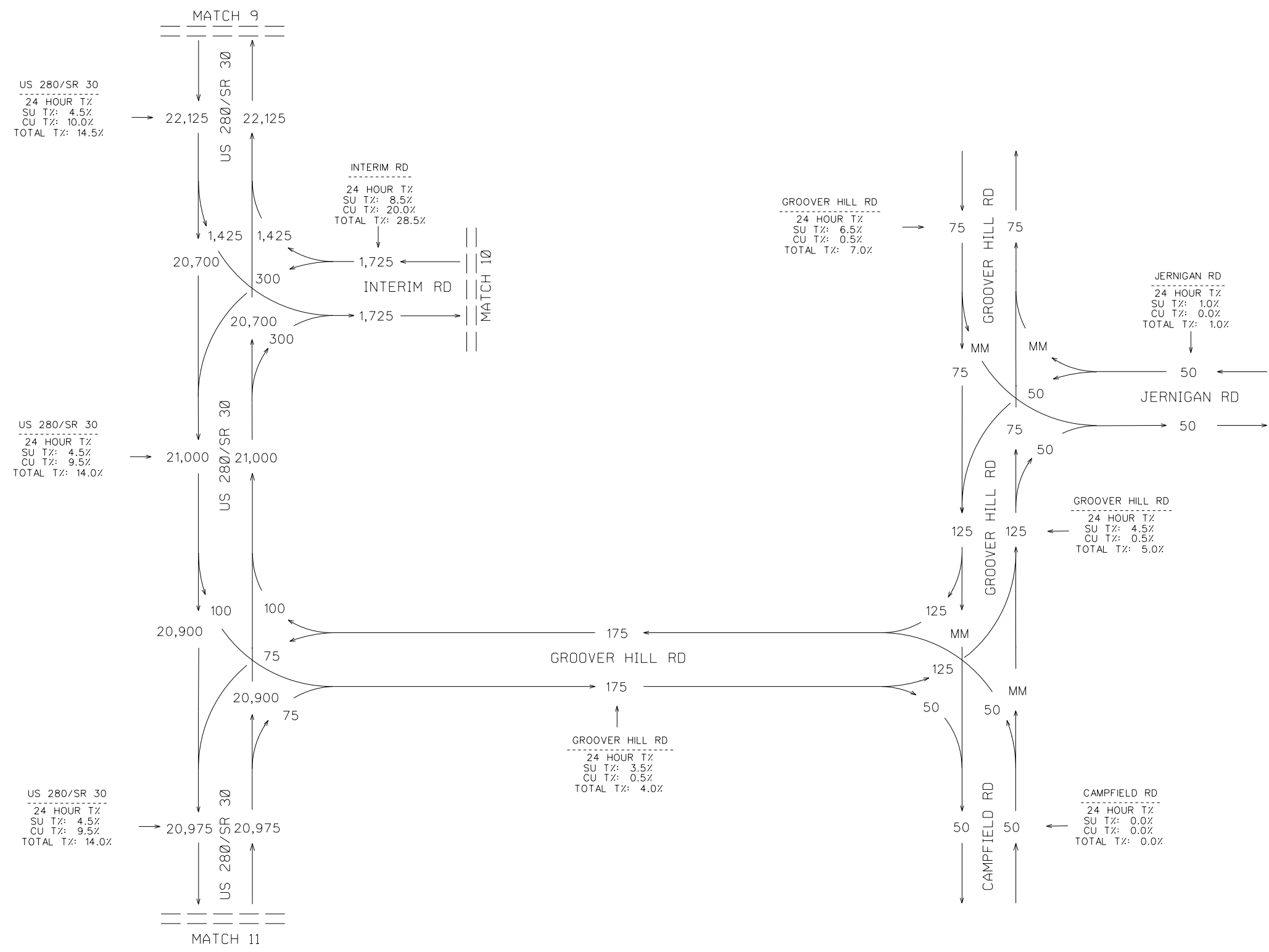
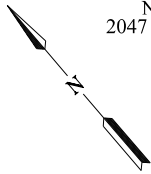
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0124

AADT VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
2047 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



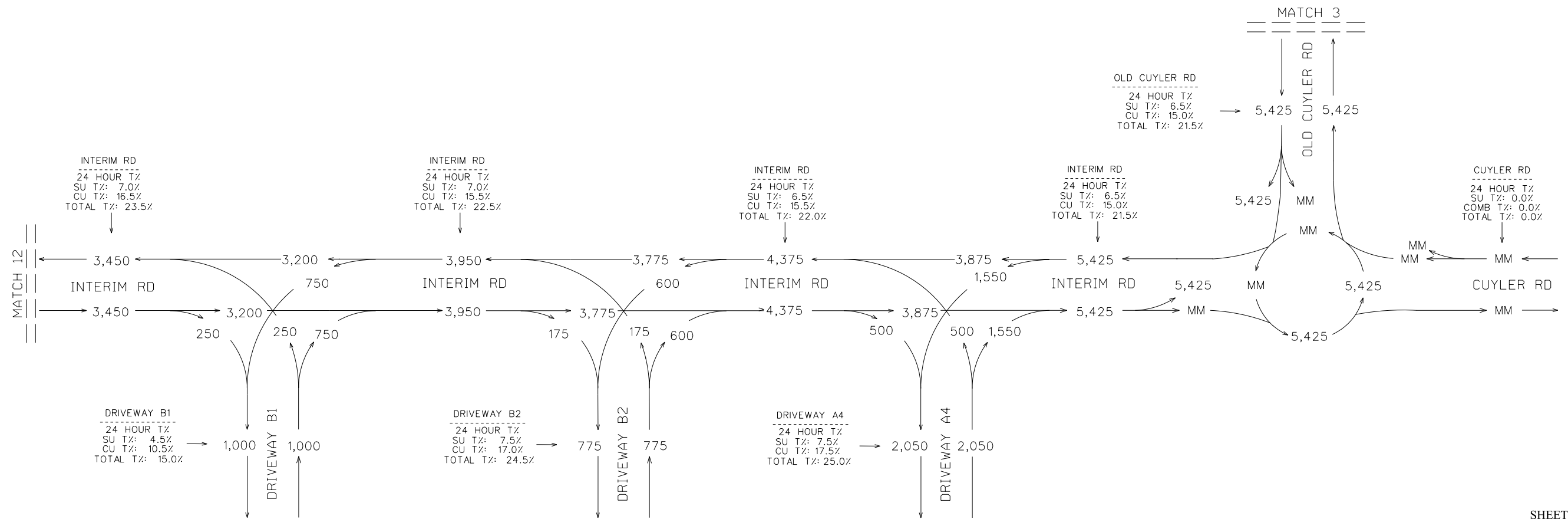
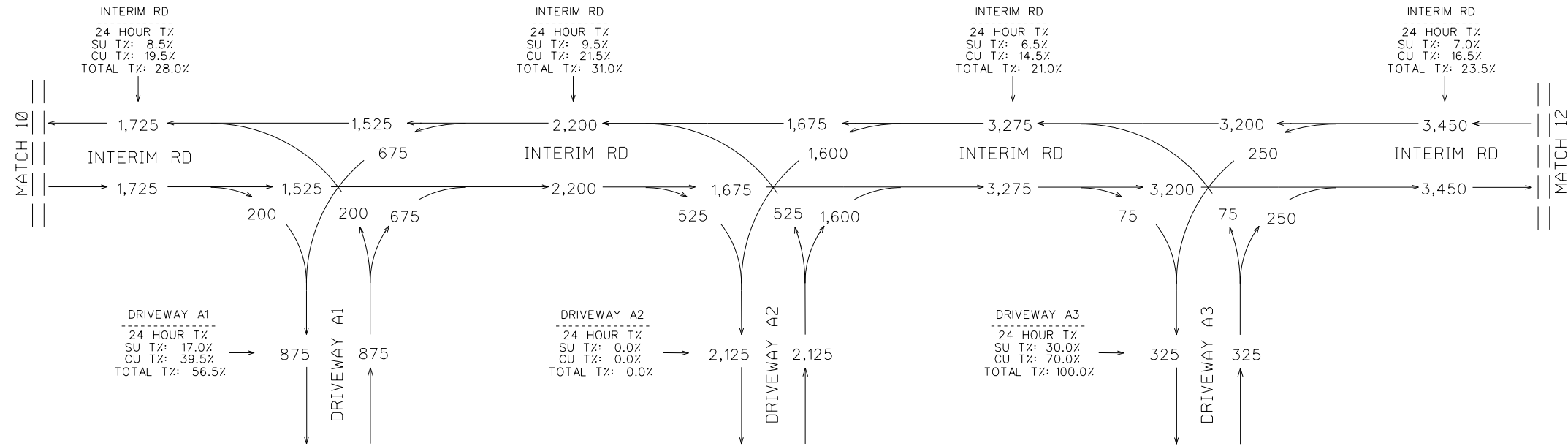
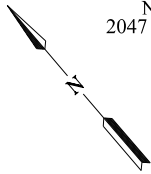
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0125

AADT VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
2047 AADT = XXX



SHEET 6 OF 10

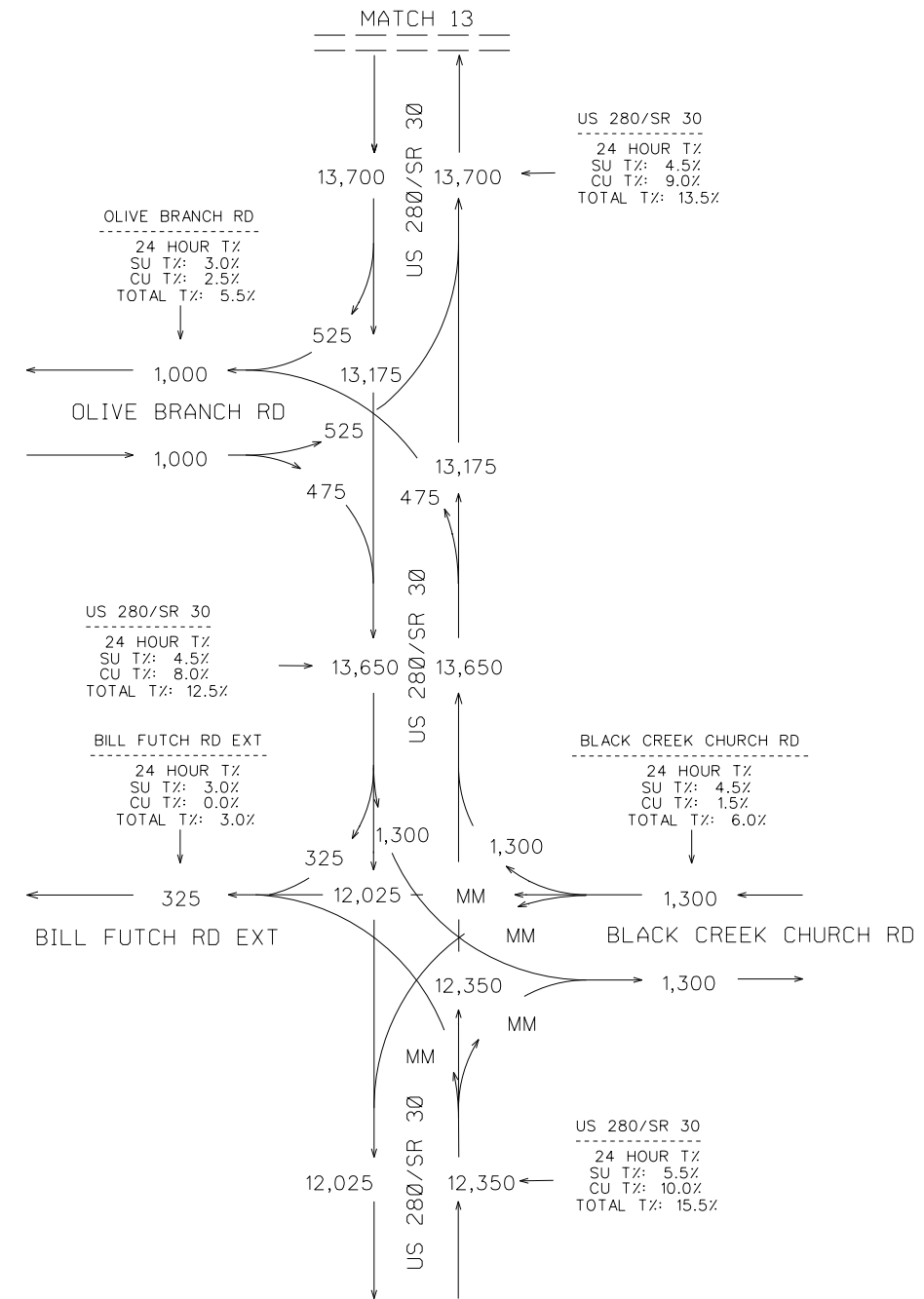
COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0126

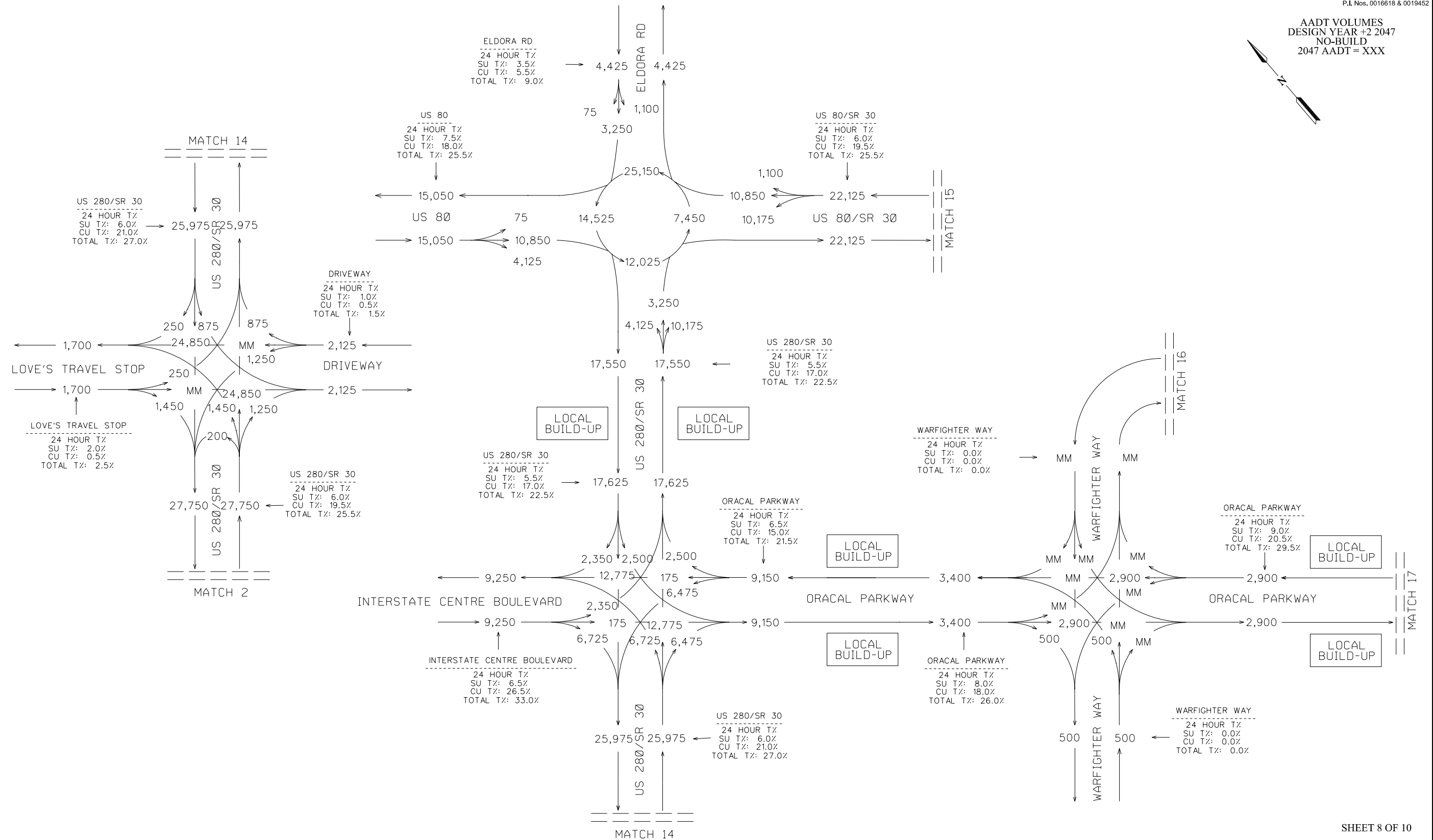
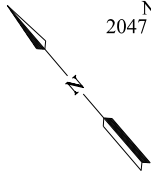


COUNTS COLLECTED DURING COVID-19 AND ADJUSTED PER GDOT FORECASTING GUIDANCE



REVISION DATES			TRAFFIC DIAGRAM			
			US-280 IMPROVEMENTS & FRONTAGE RD			
			DESIGN YEAR +2 2047 NO-BUILD AADT			
			BRYAN/EFFINGHAM COUNTY			
			CHECKED:		DATE:	
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	
			DRAWING No.			
			10-0127			

AADT VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
2047 AADT = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



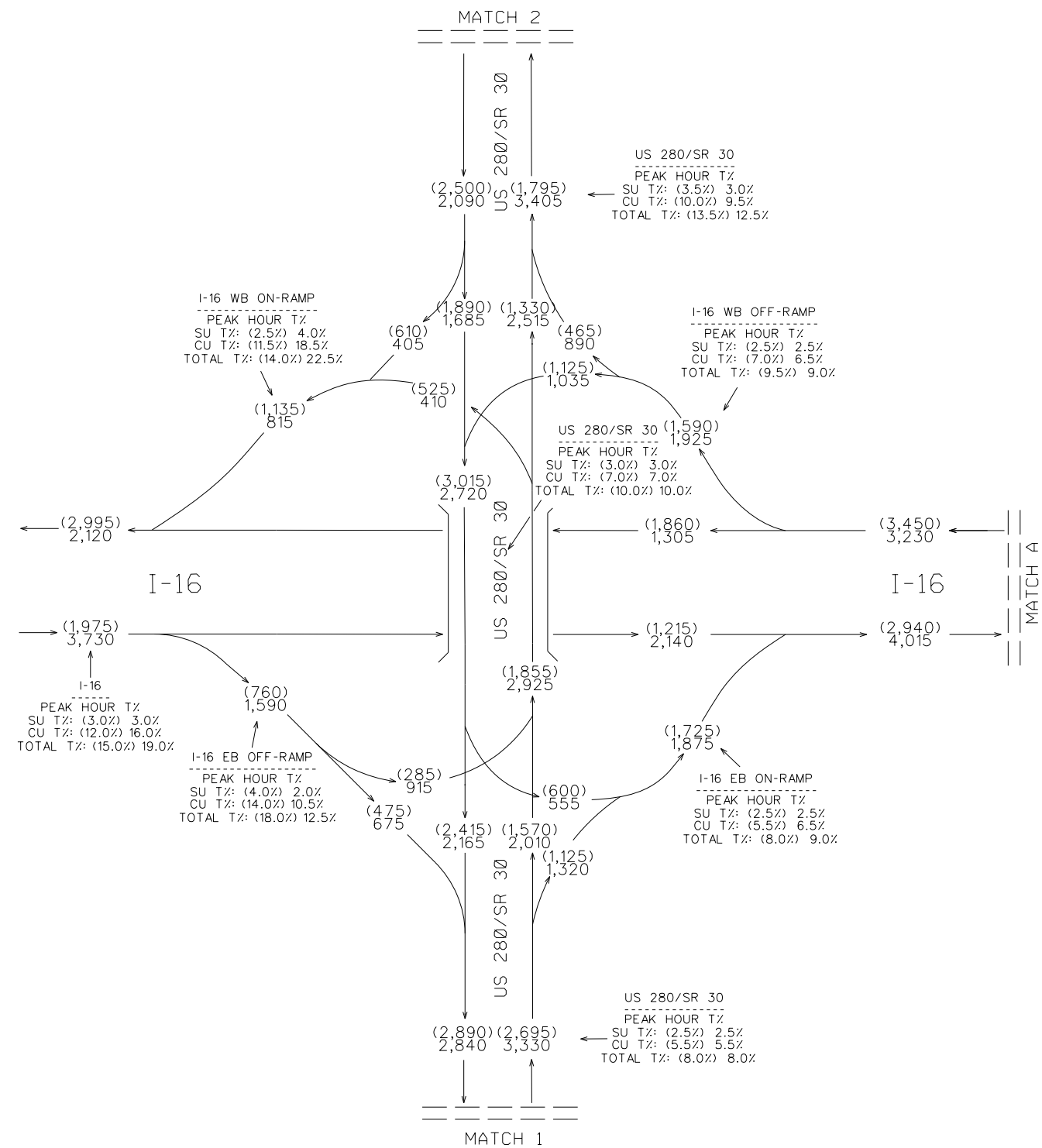
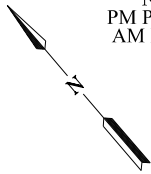
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0128

DHV VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



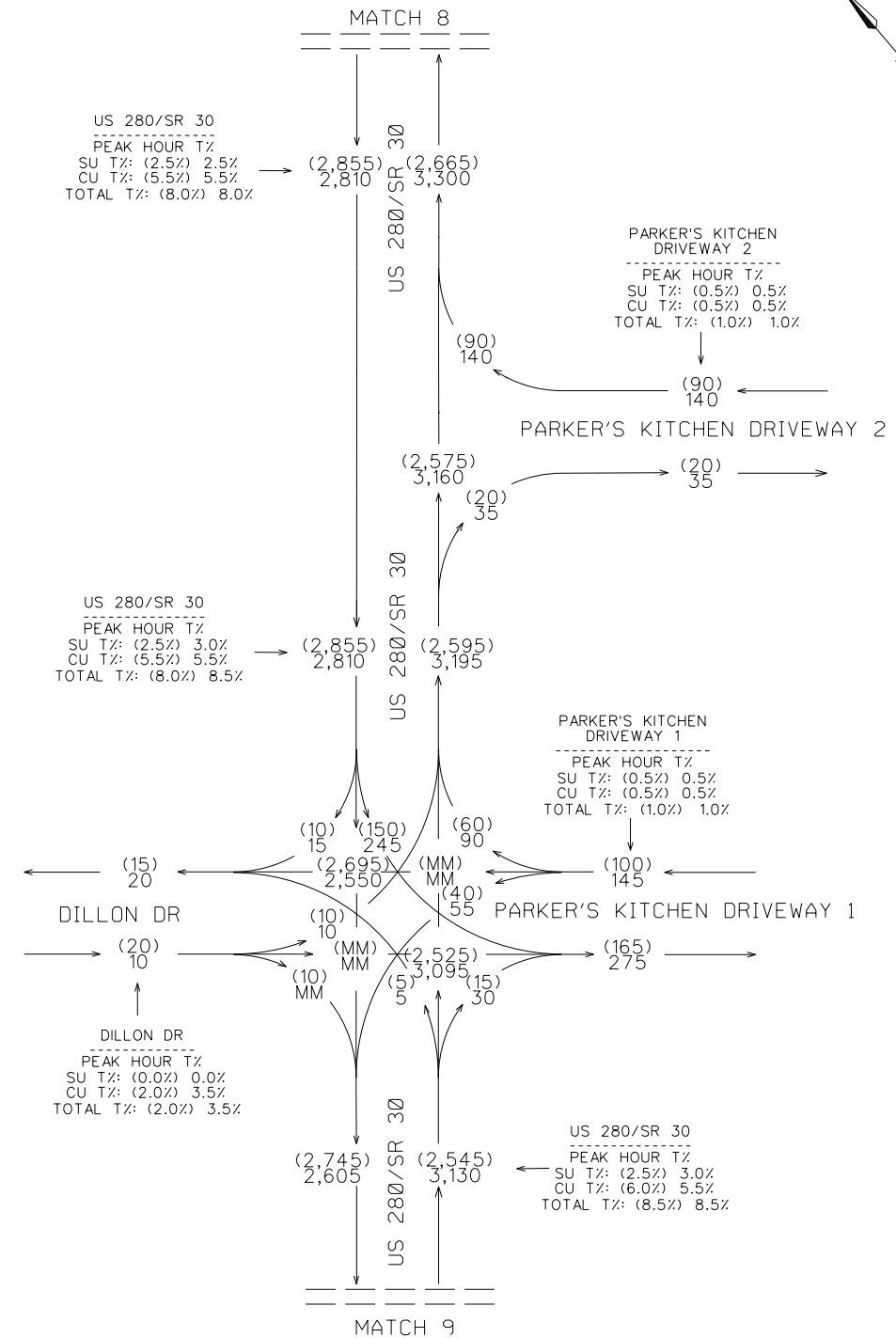
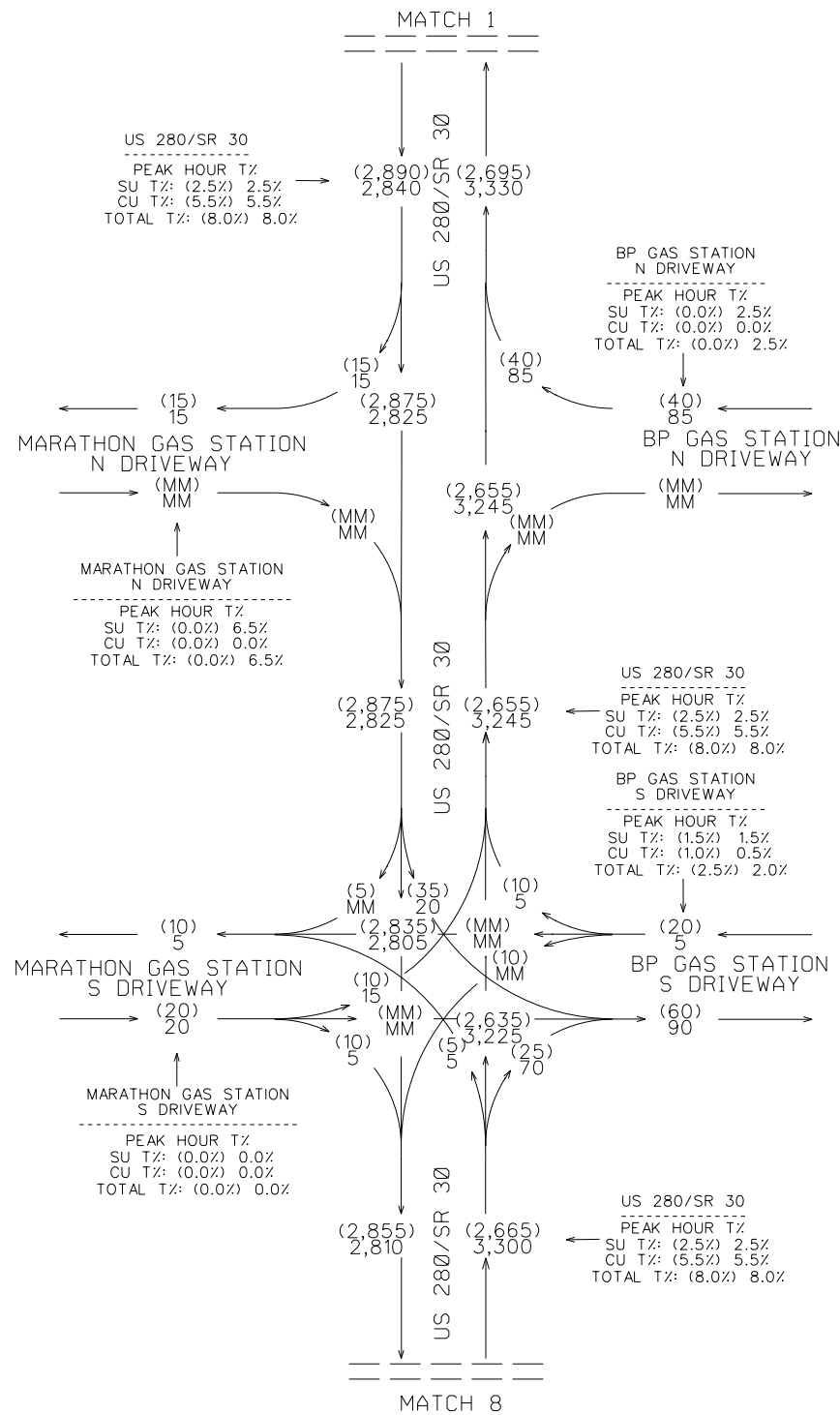
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0131

DHV VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

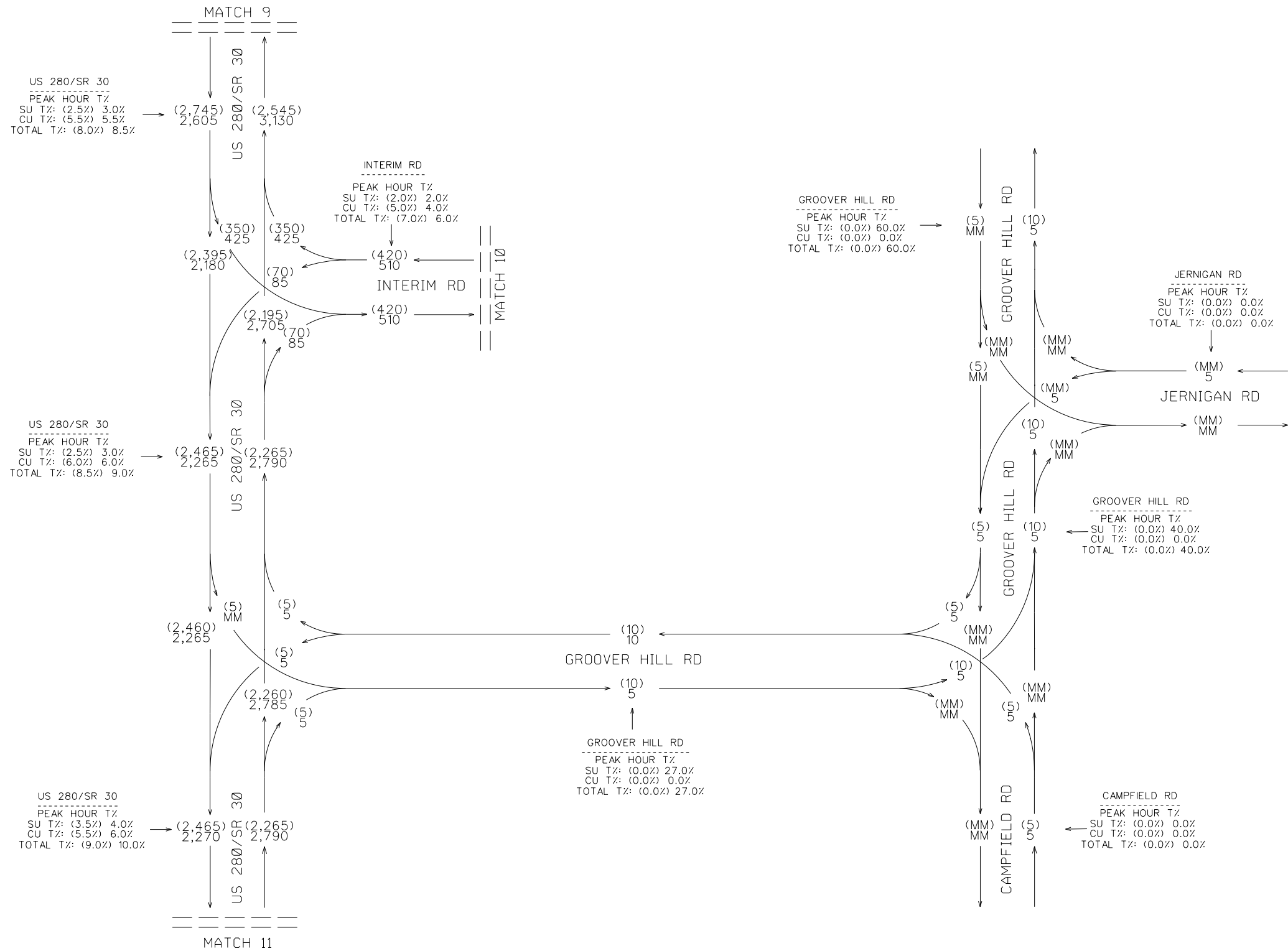
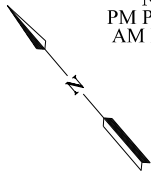
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0134

DHV VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 5 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



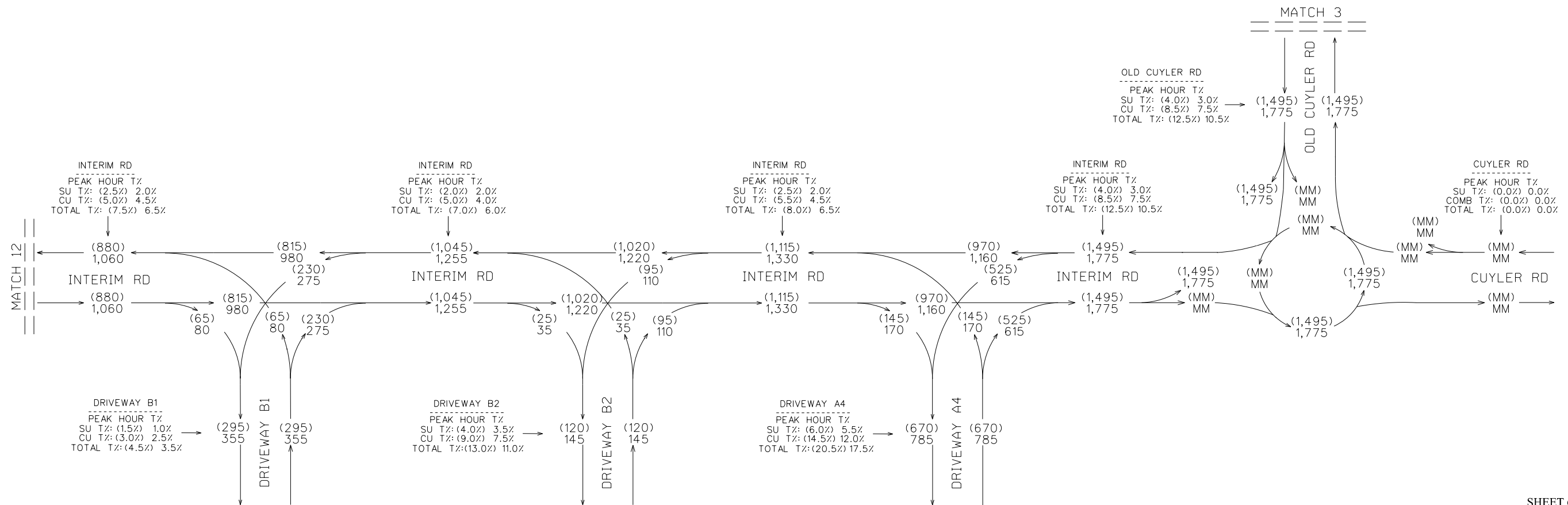
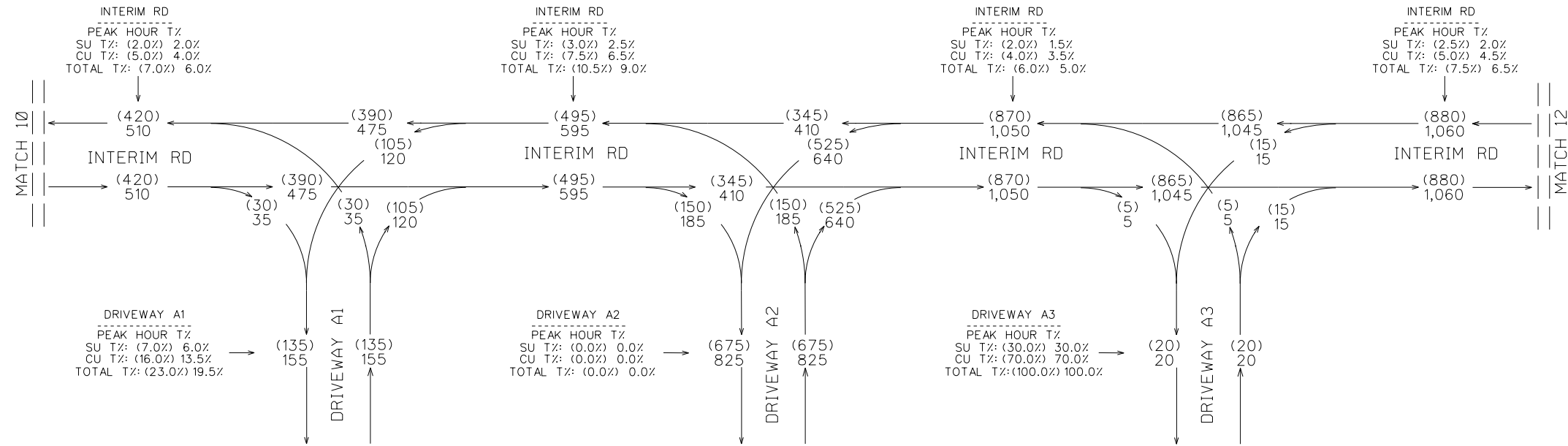
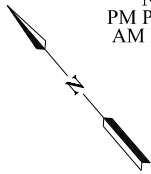
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0135

DHV VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

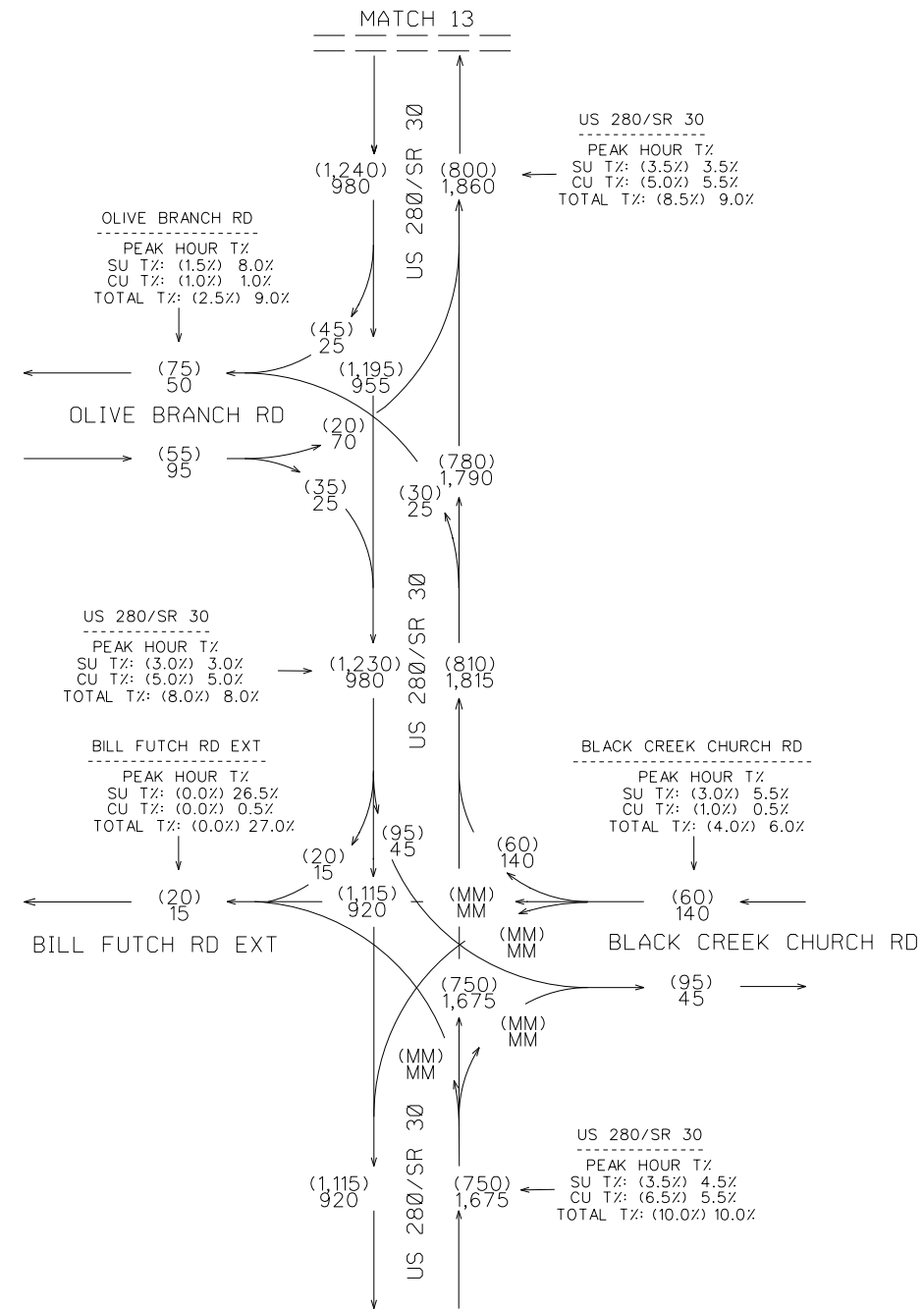
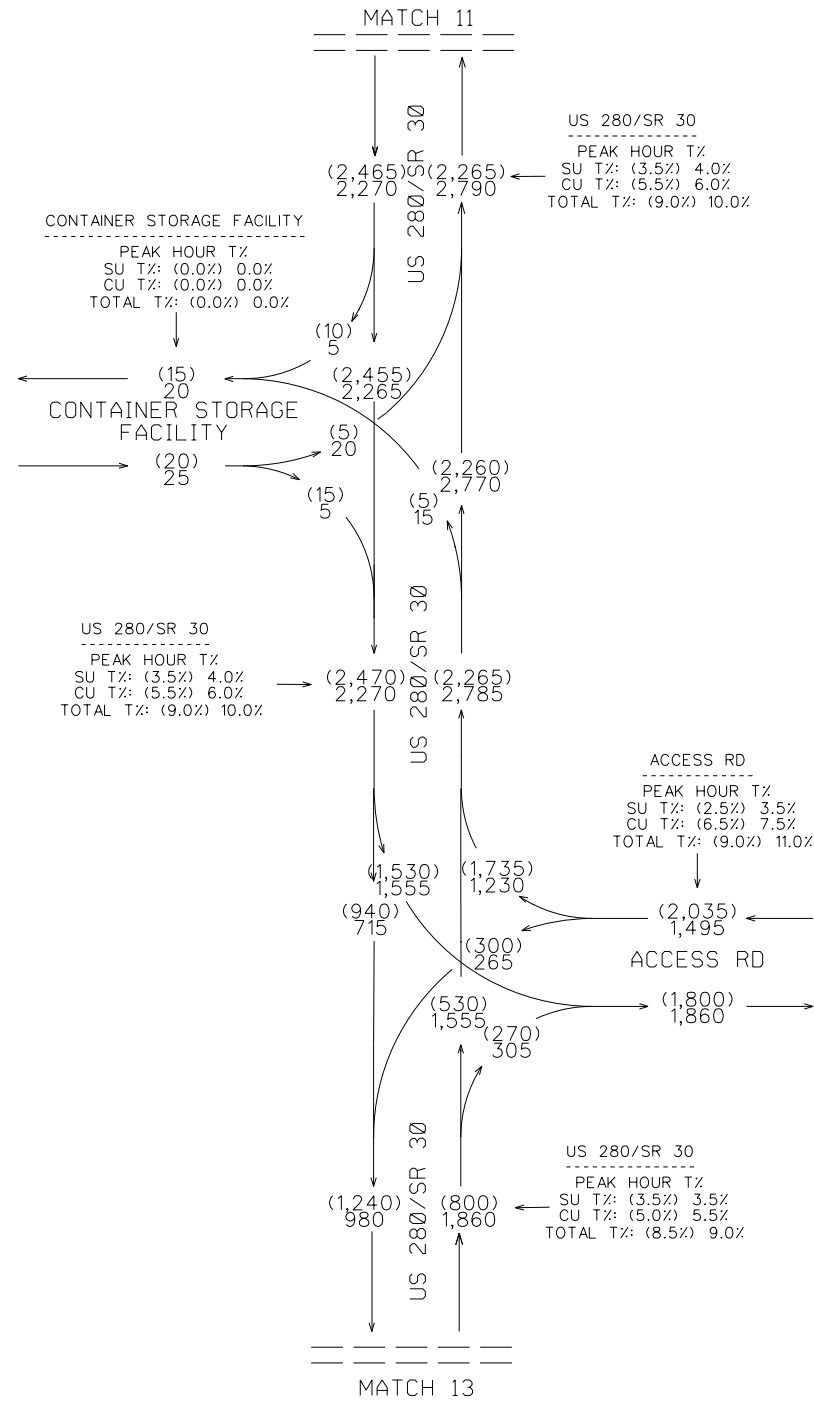
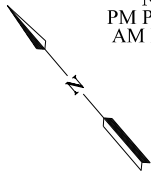
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0136

DHV VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

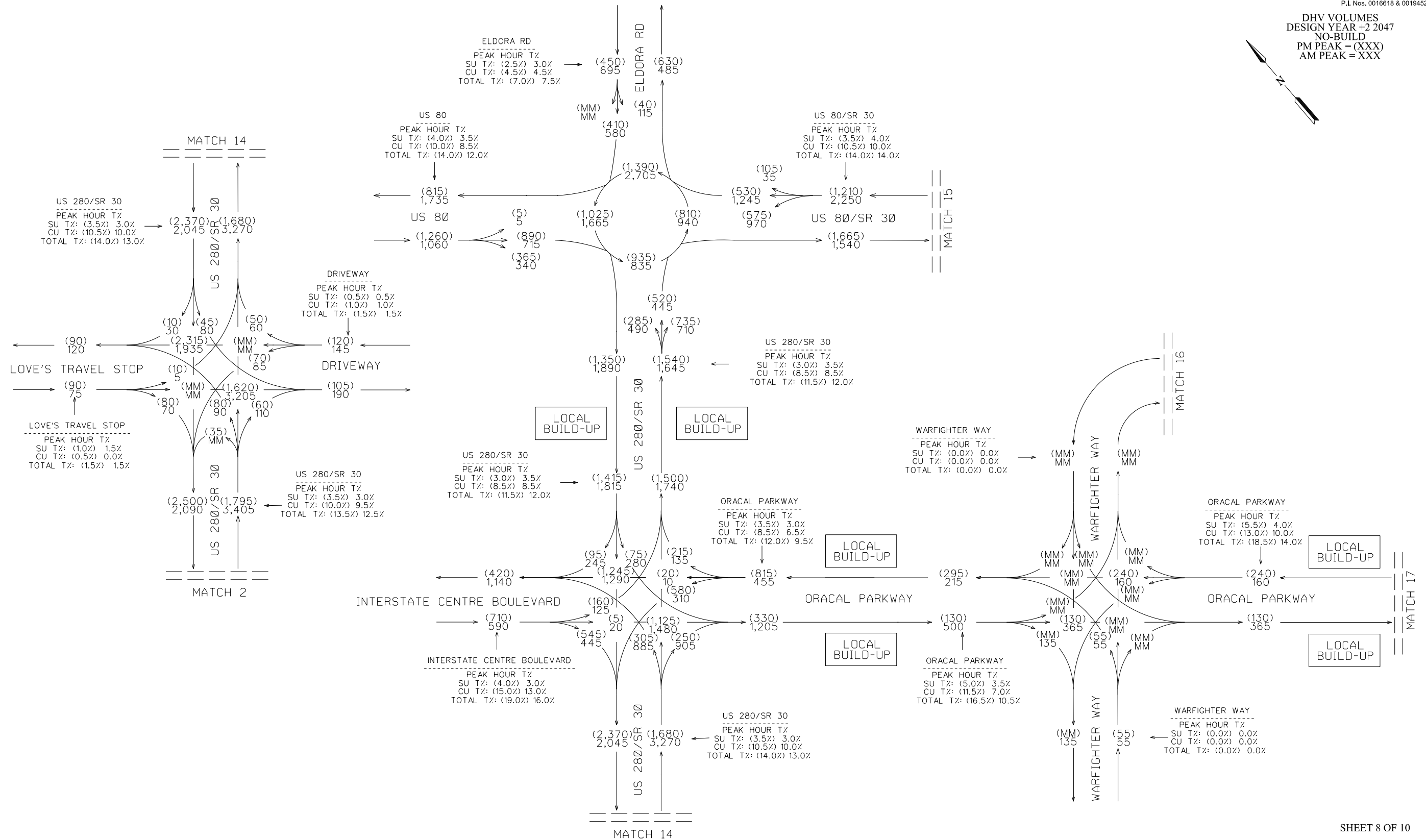
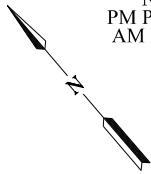
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0137

DHV VOLUMES
DESIGN YEAR +2 2047
NO-BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



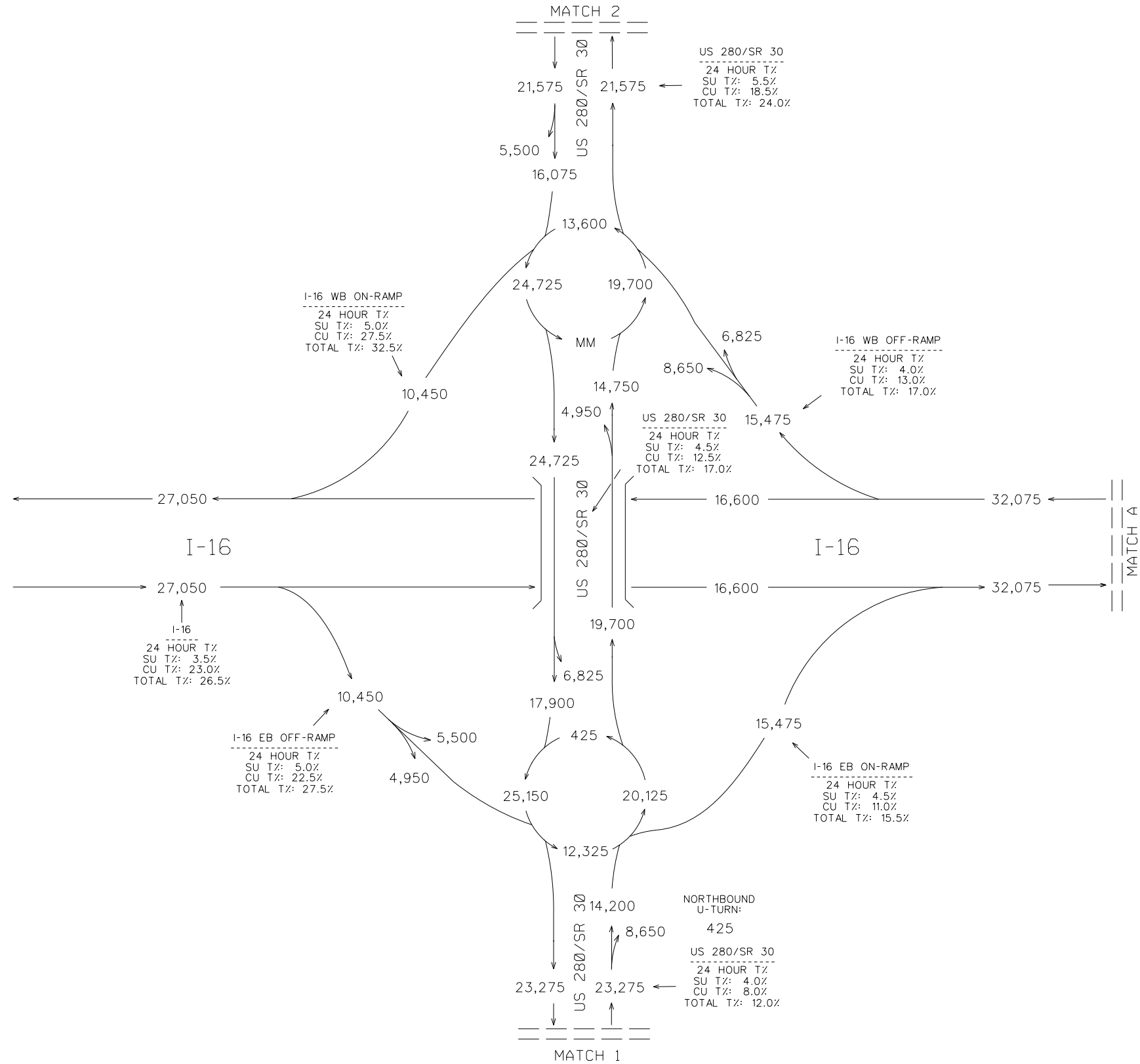
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 NO-BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0138

AADT VOLUMES
OPEN YEAR +2 2027 BUILD
2027 AADT = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



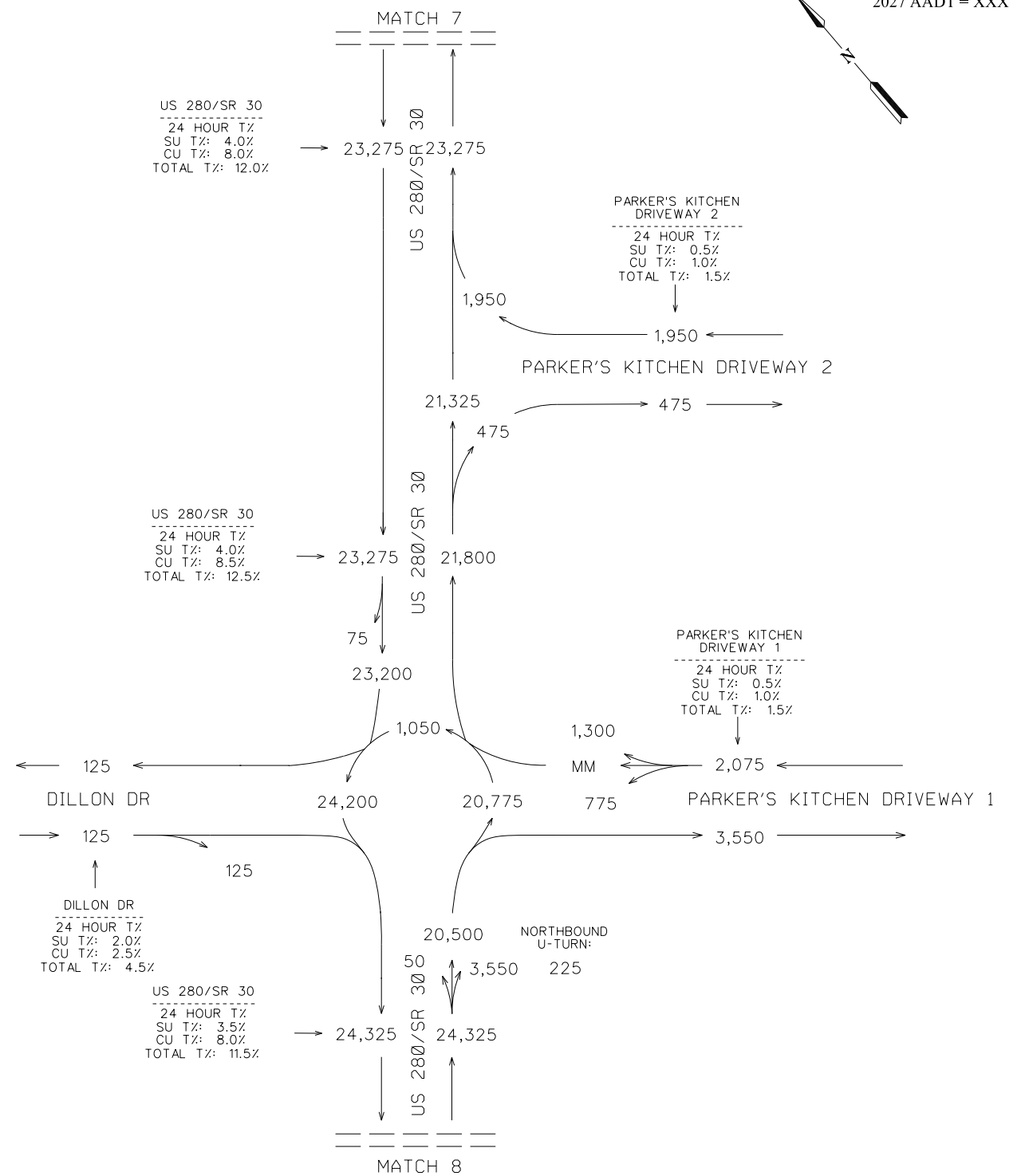
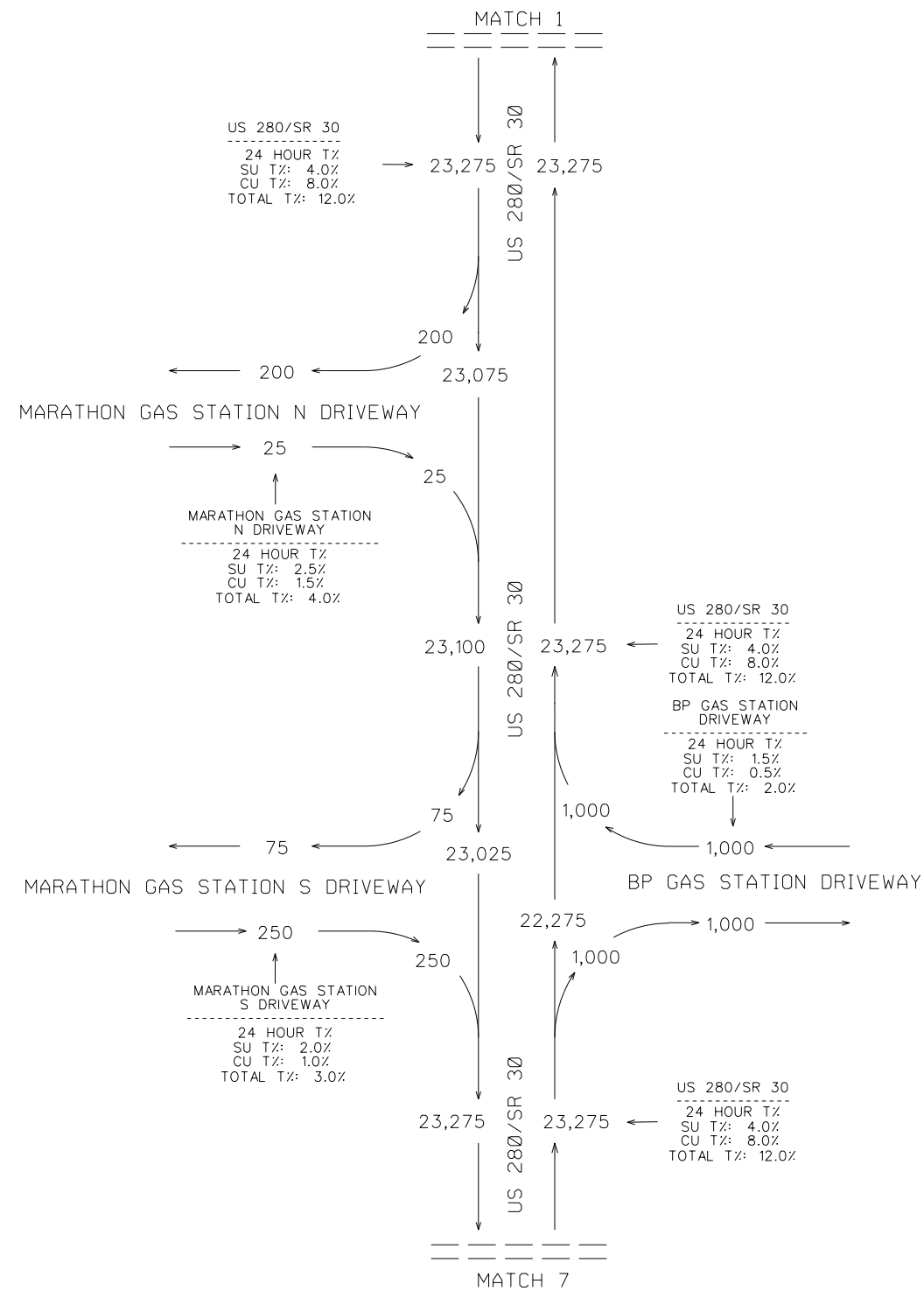
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0141

AADT VOLUMES
OPEN YEAR +2 2027 BUILD
2027 AADT = XXX



SHEET 4 OF 10

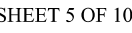
COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD AADT
BRYAN/EFFINGHAM COUNTY

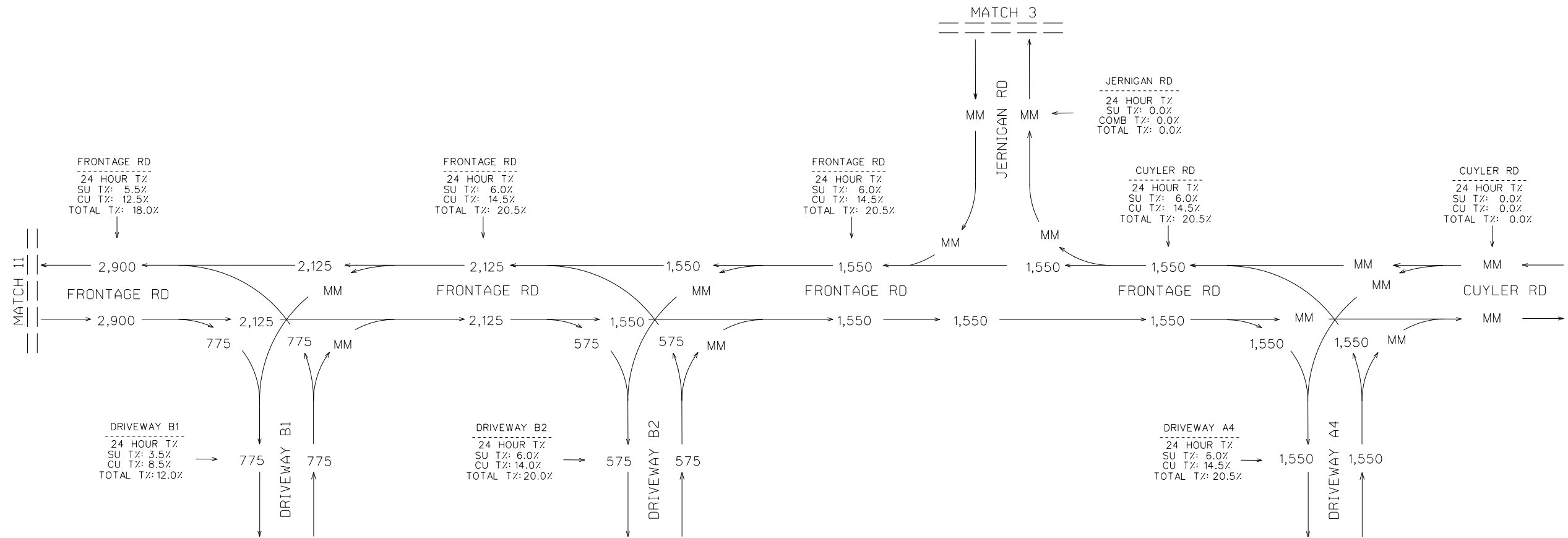
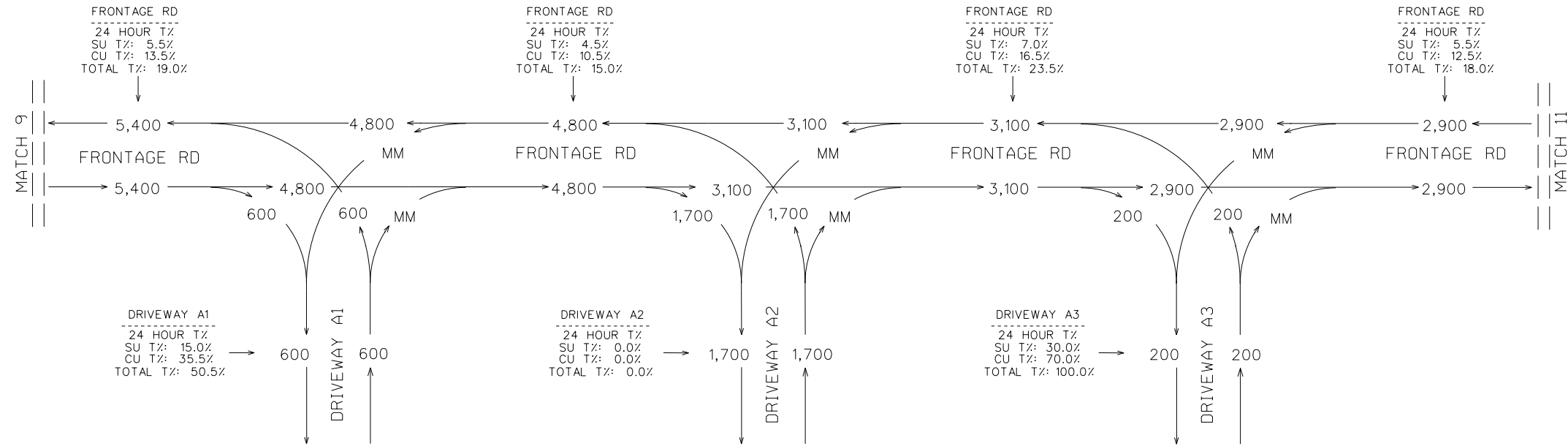
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VERIFIED:		DATE:		

10-0144



CHECKED:		DATE:		DRAWING No. 10-0145
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

AADT VOLUMES
OPEN YEAR +2 2027 BUILD
2027 AADT = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



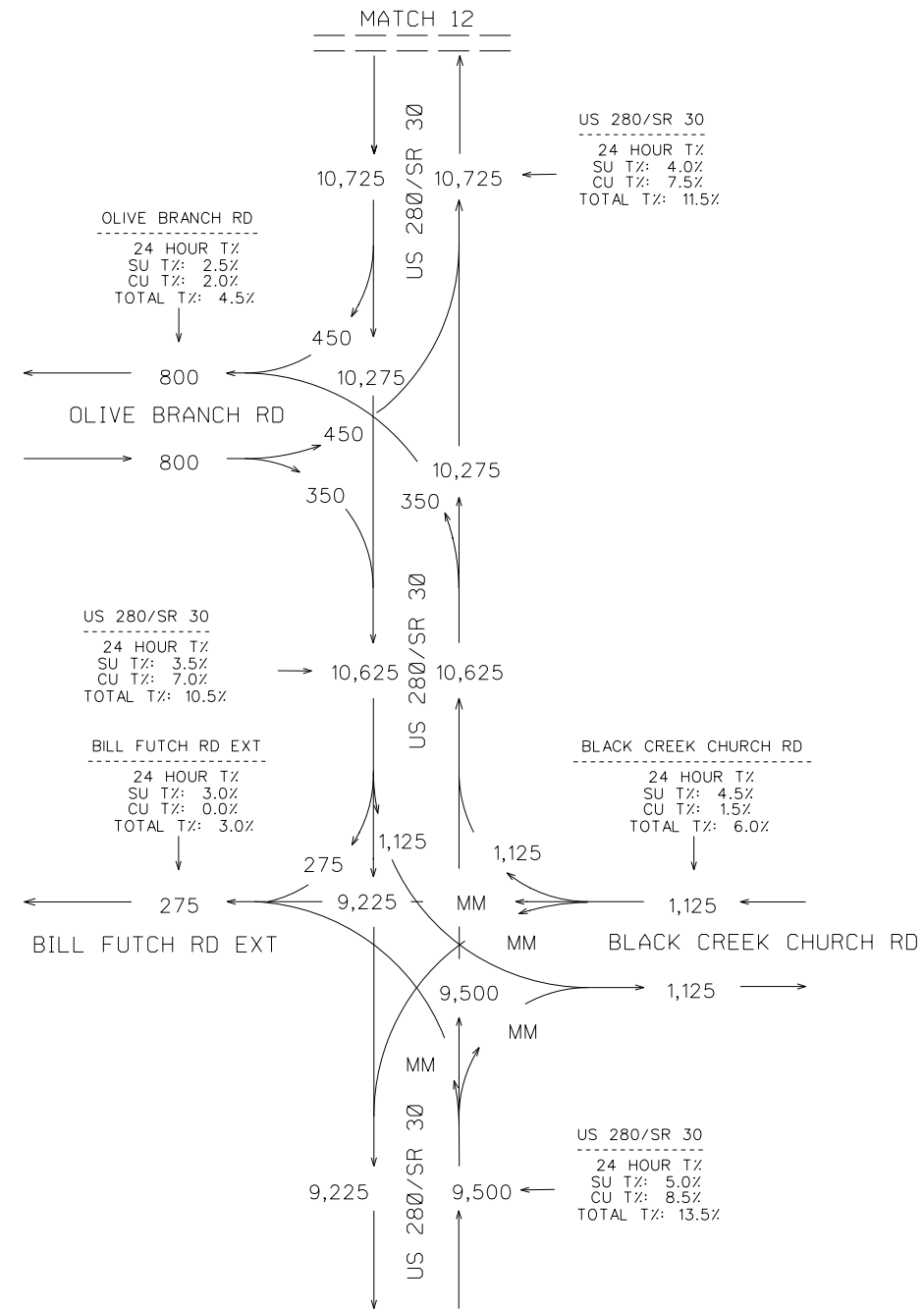
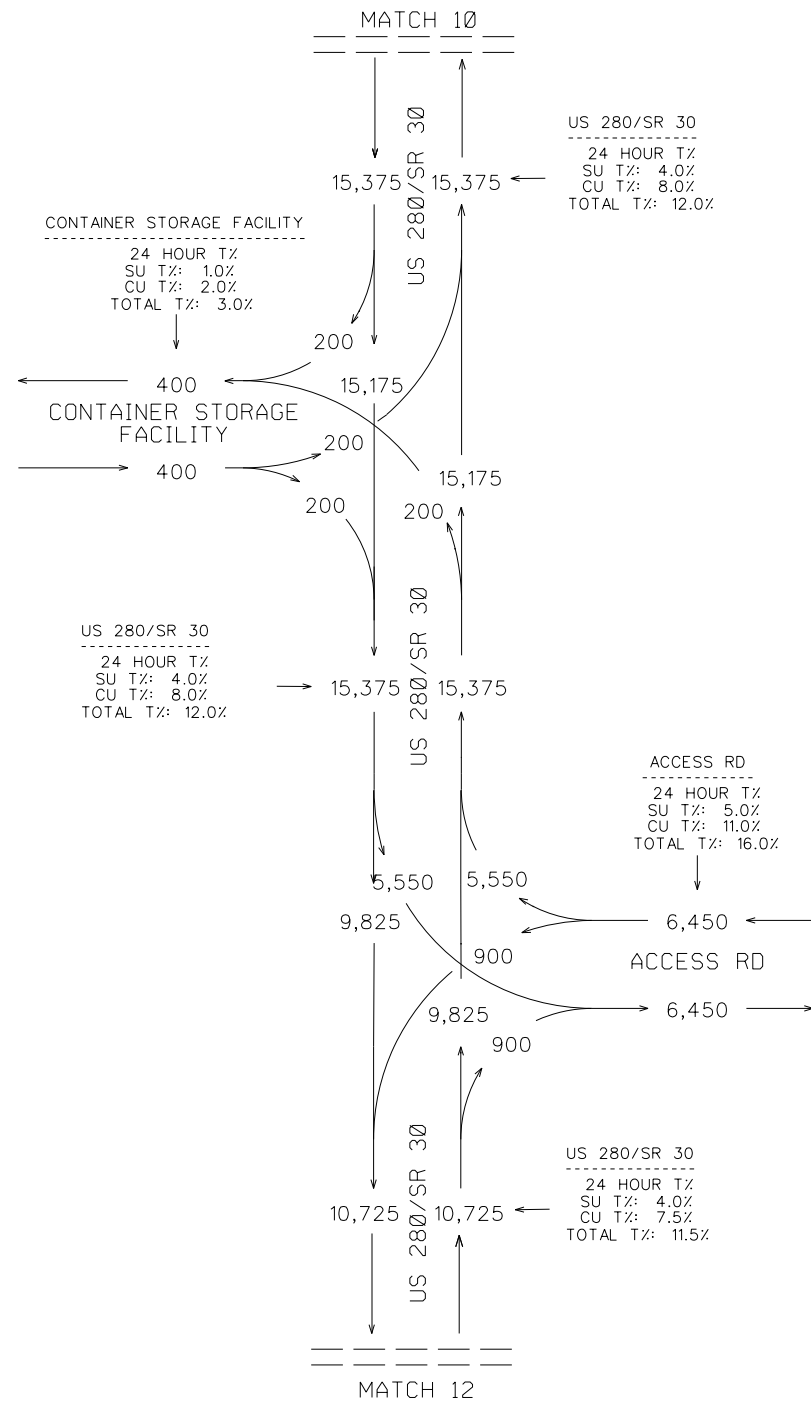
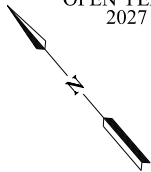
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0146

AADT VOLUMES
OPEN YEAR +2 2027 BUILD
2027 AADT = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



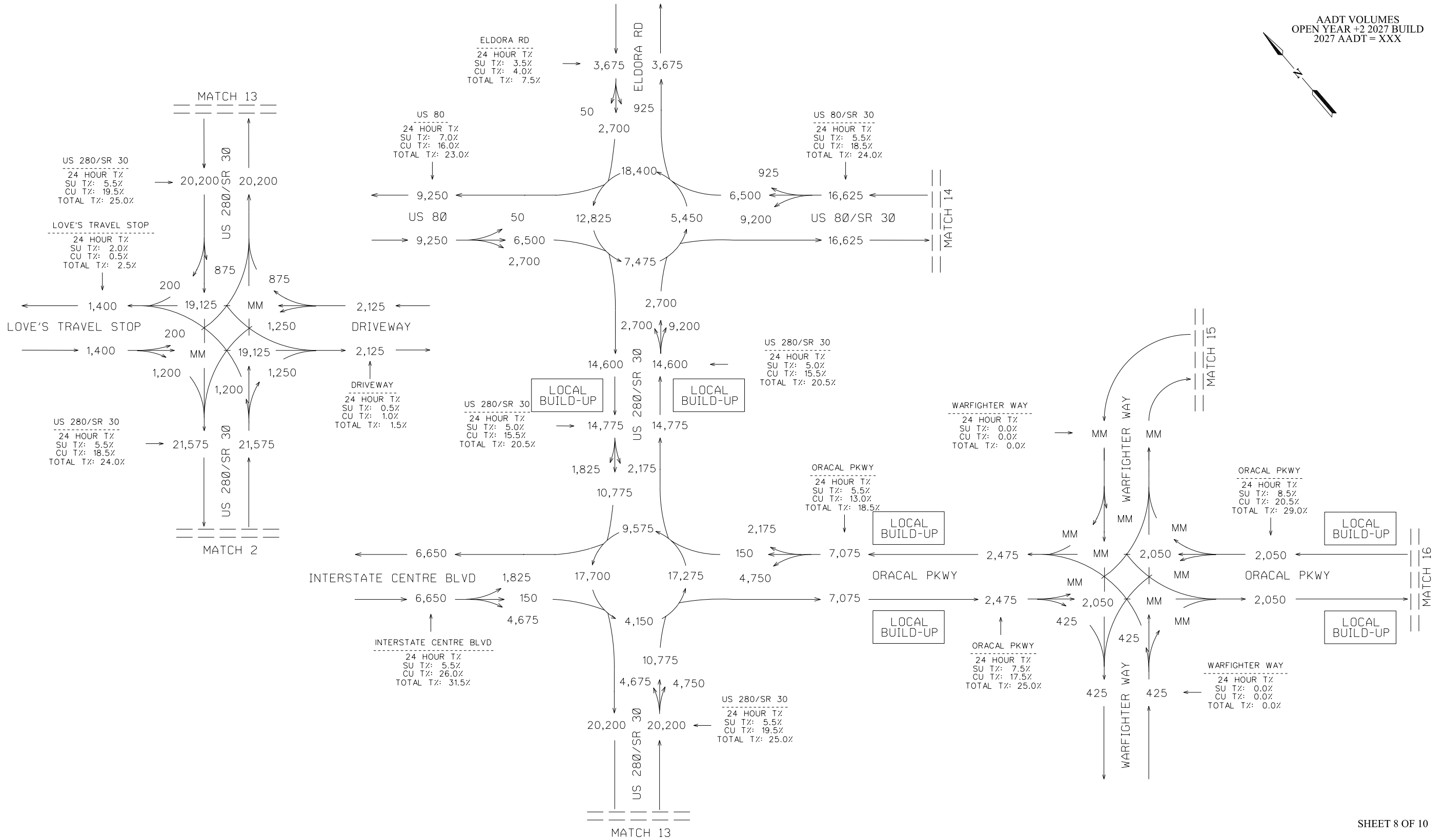
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0147

AADT VOLUMES
OPEN YEAR +2 2027 BUILD
2027 AADT = XXX



SHEET 8 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



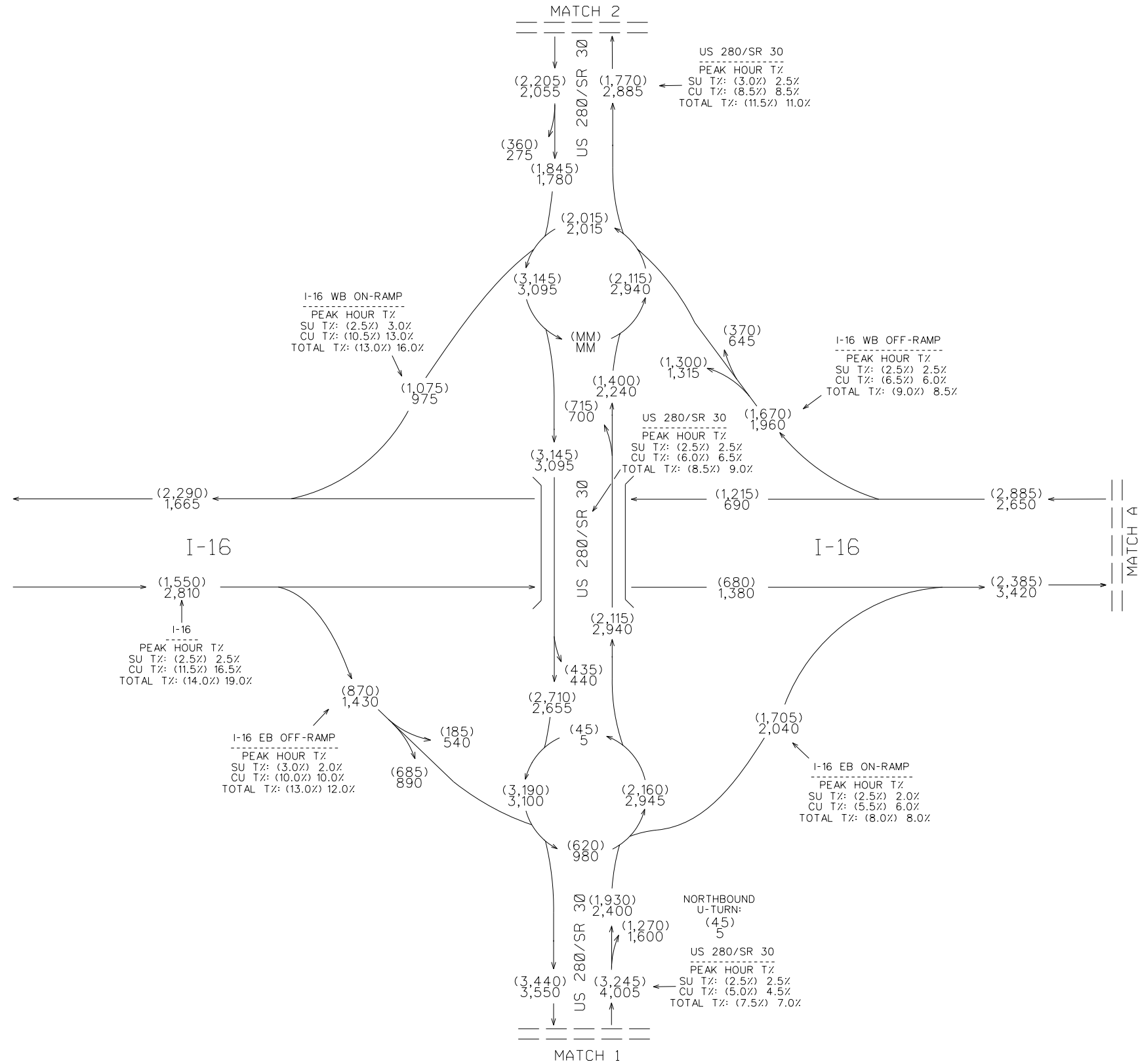
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0148

DHV VOLUMES
OPEN YEAR +2 2027 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



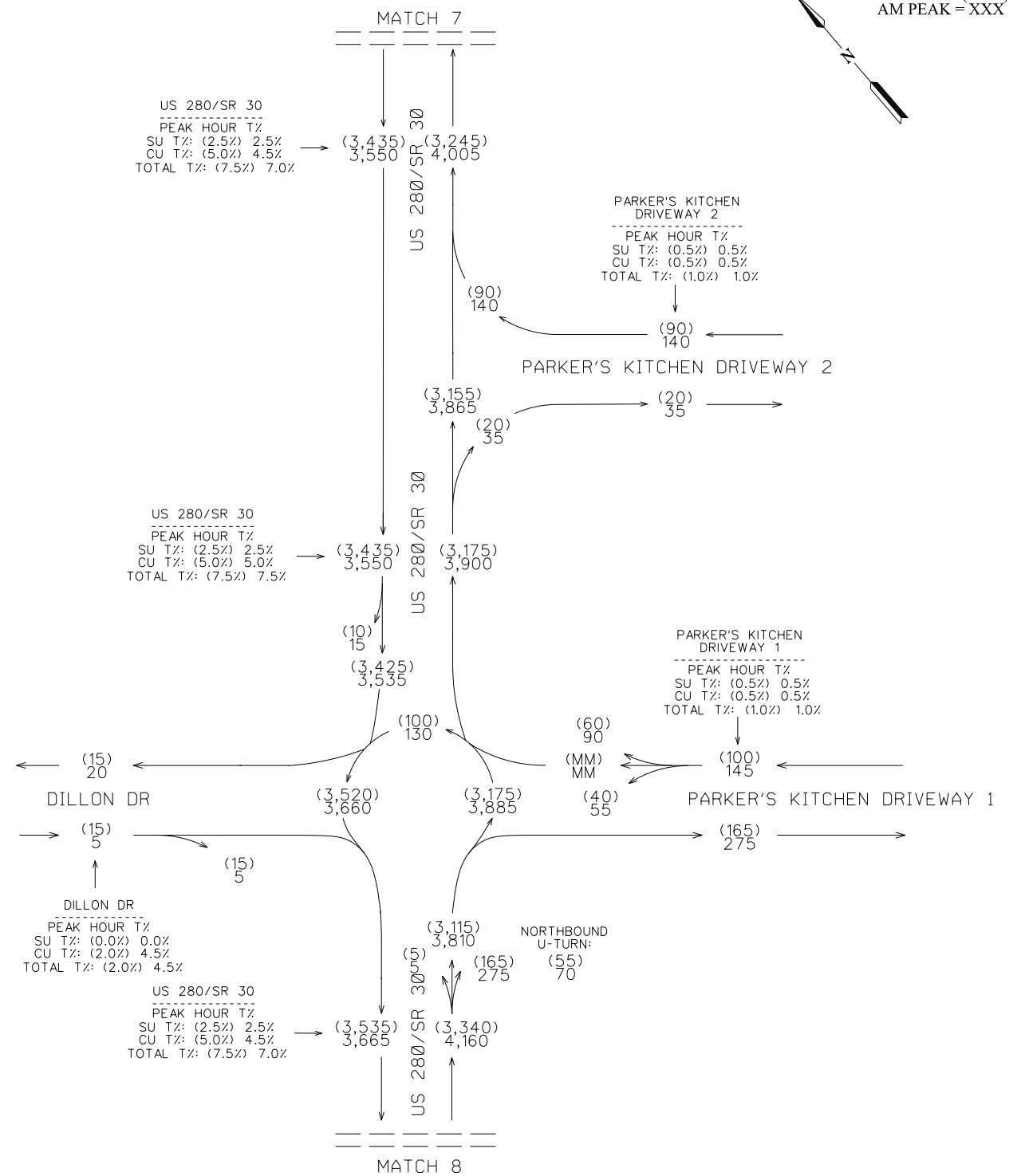
Design & Consultancy
for natural and
built assets

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0151

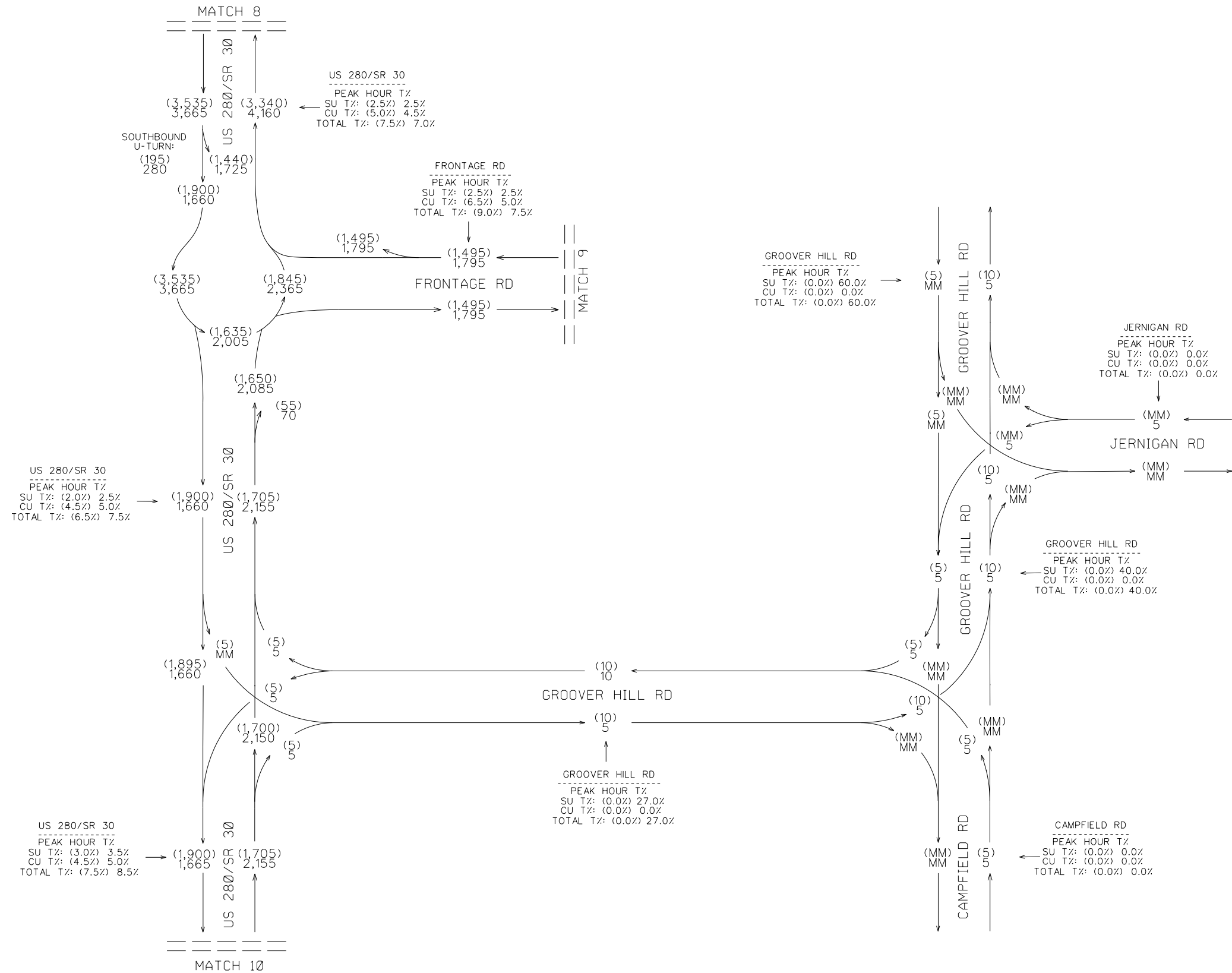


COUNTS COLLECTED DURING COVID-19 AND ADJUSTED PER GDOT FORECASTING GUIDANCE



REVISION DATES			TRAFFIC DIAGRAM US-280 IMPROVEMENTS & FRONTAGE RD OPEN YEAR +2 2027 BUILD DHV BRYAN/EFFINGHAM COUNTY				
			CHECKED:		DATE:		DRAWING No. 10-0154
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		

DHV VOLUMES
OPEN YEAR +2 2027 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 5 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



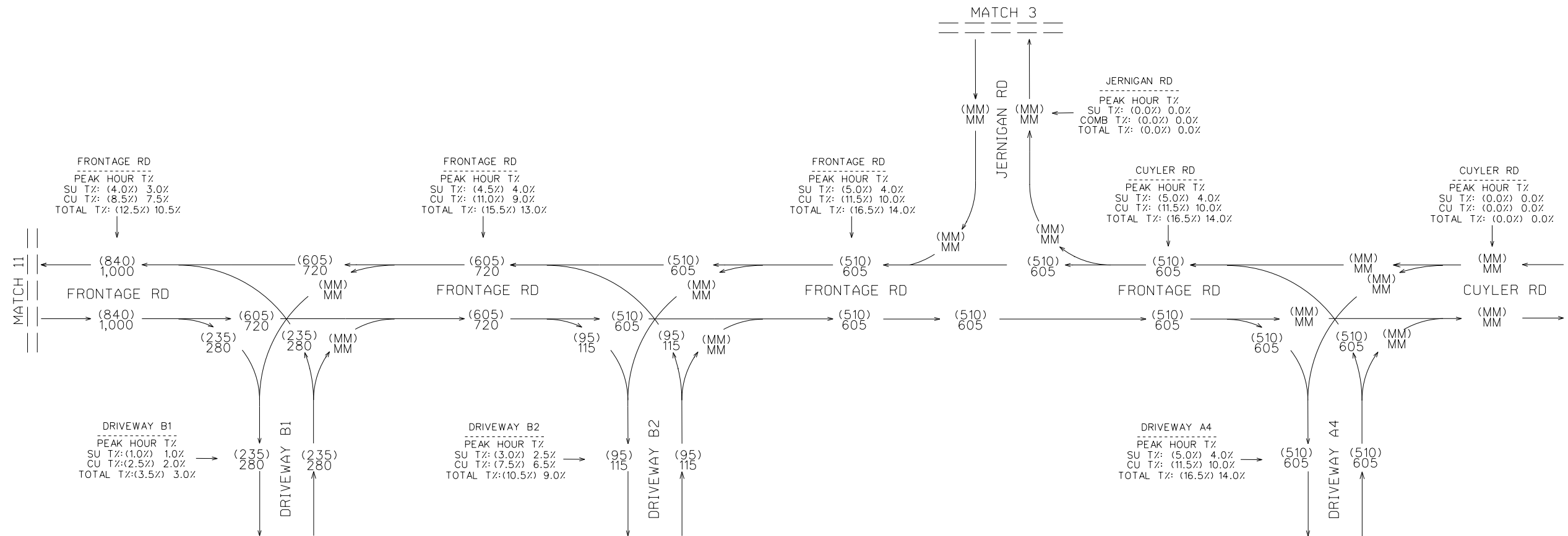
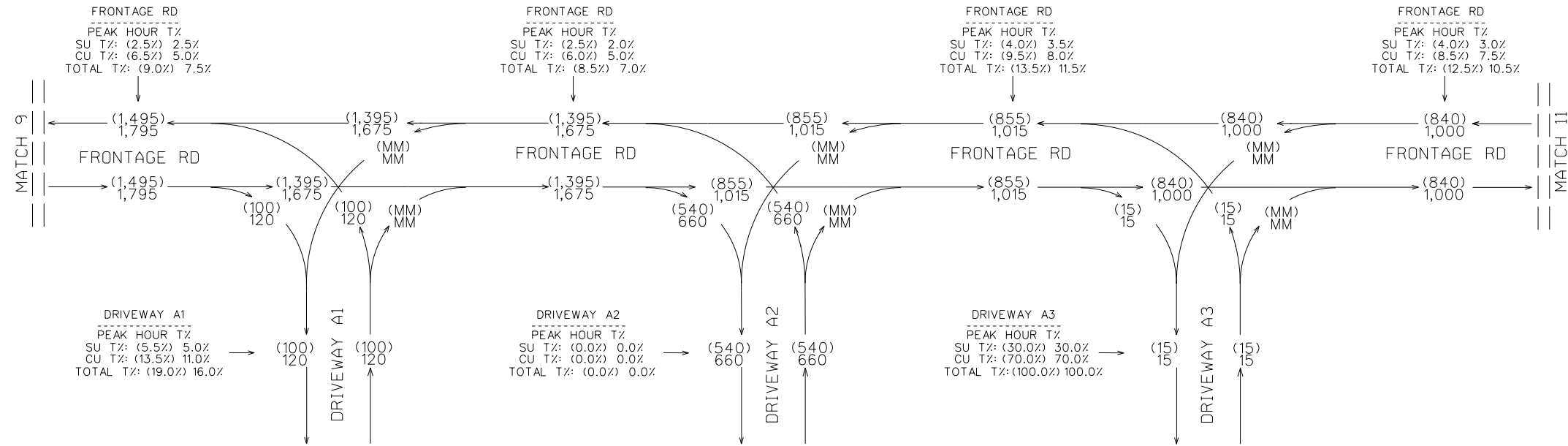
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0155

DHV VOLUMES
OPEN YEAR +2 2027 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



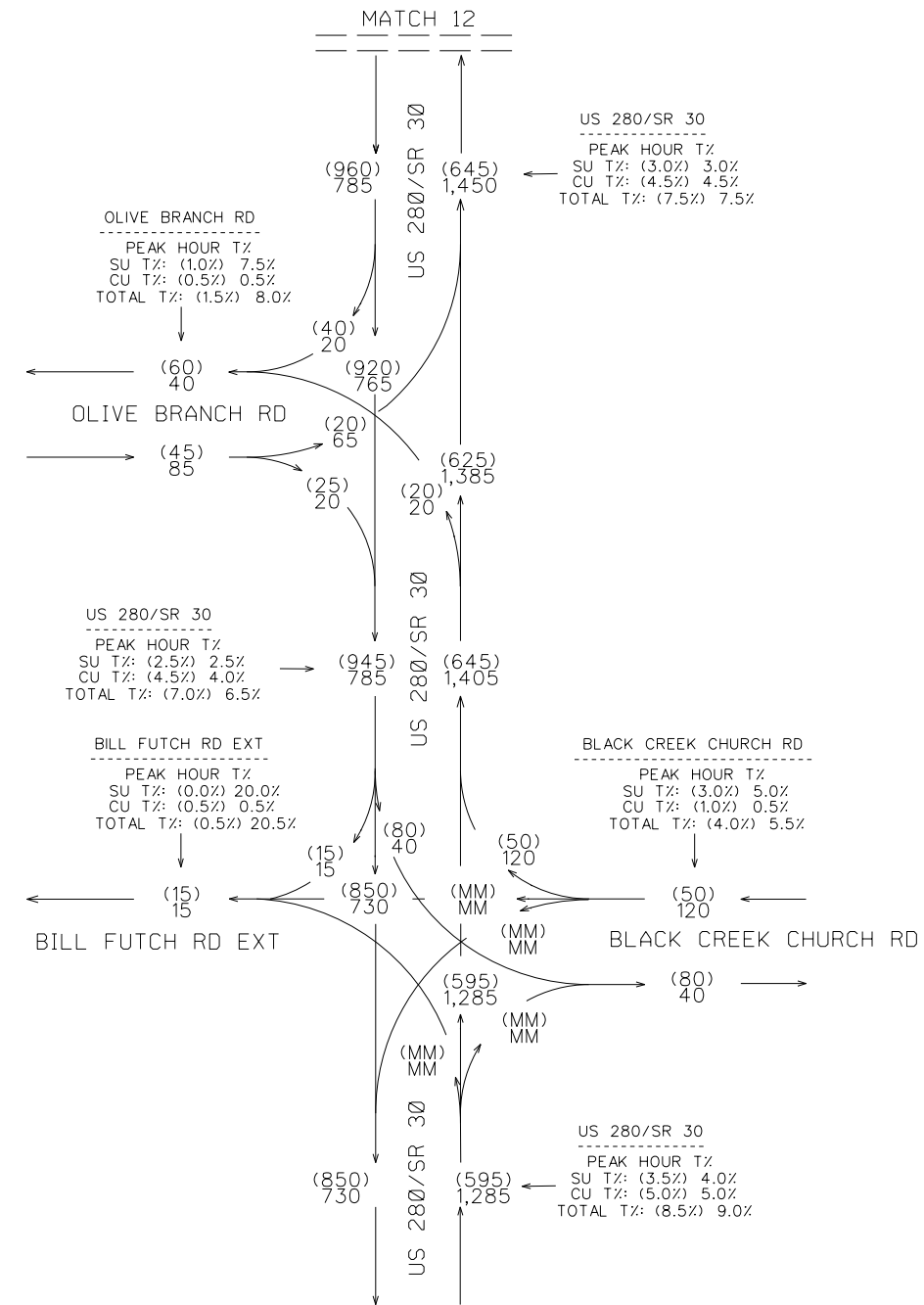
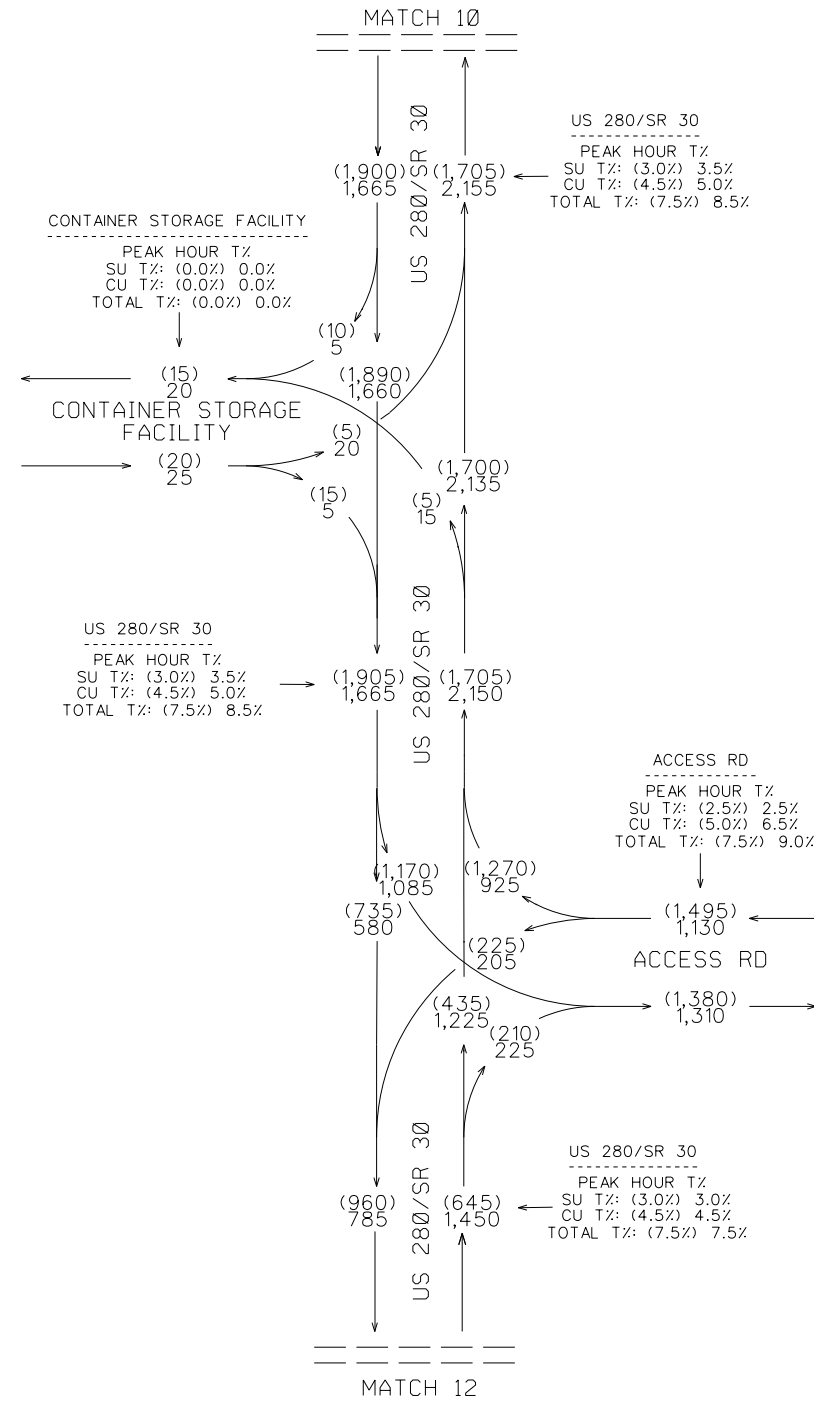
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0156

DHV VOLUMES
OPEN YEAR +2 2027 BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

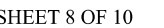


REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
OPEN YEAR +2 2027 BUILD DHV
BRYAN/EFFINGHAM COUNTY

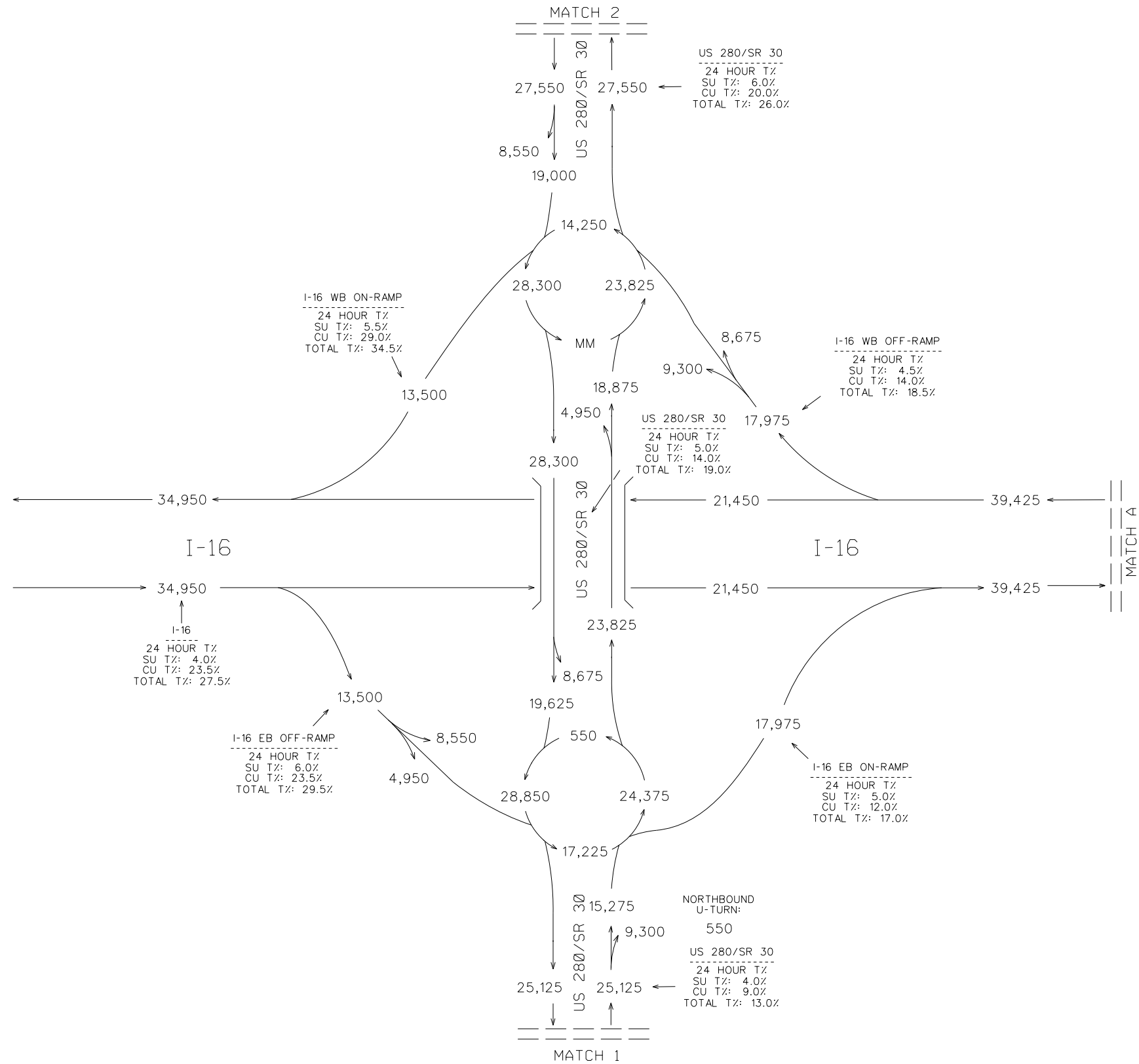
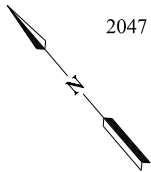
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CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0157



CHECKED:		DATE:		DRAWING No. 10-0158
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

AADT VOLUMES
DESIGN YEAR +2 2047
BUILD
2047 AADT= XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



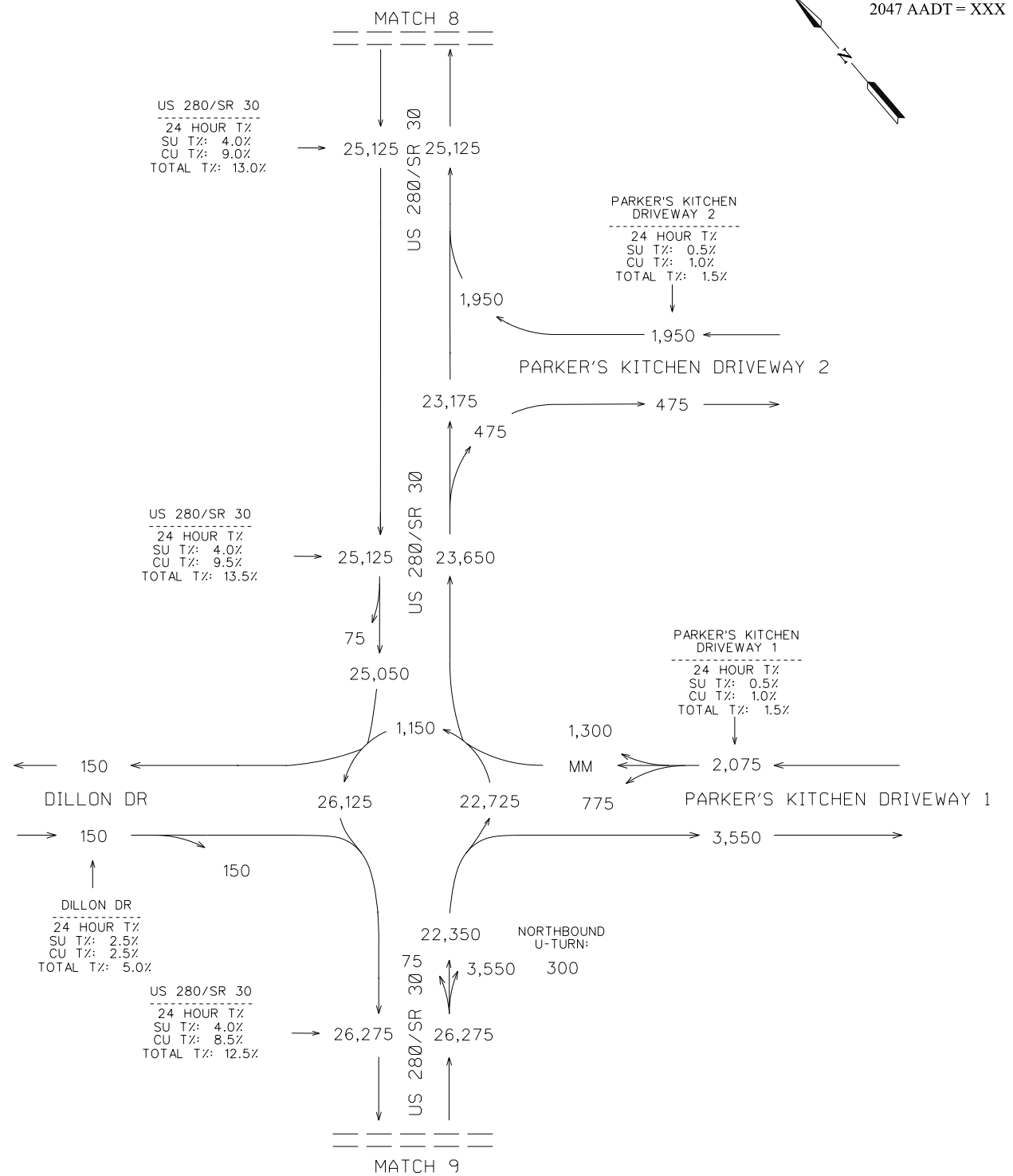
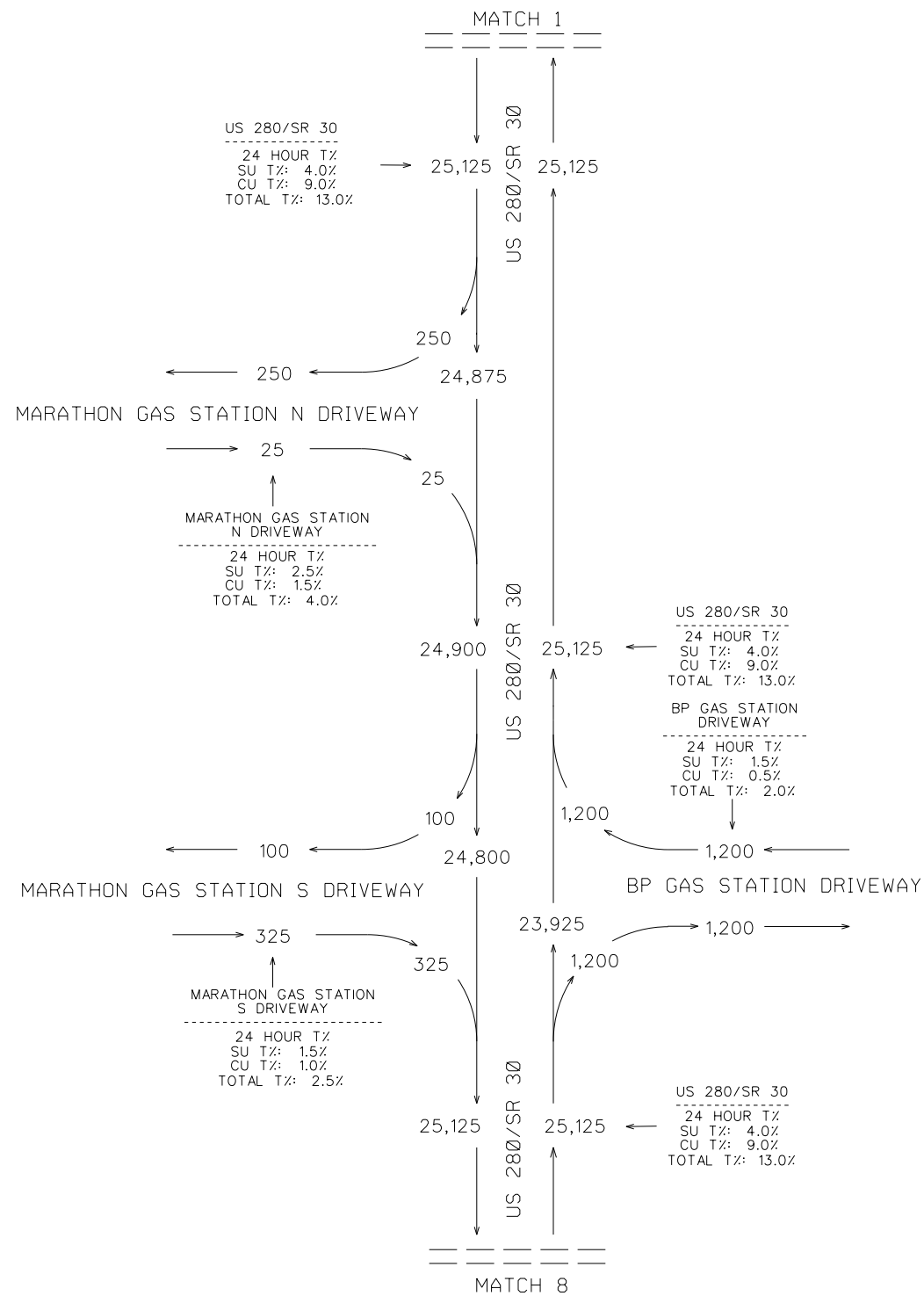
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0161

AADT VOLUMES
DESIGN YEAR +2 2047
BUILD
2047 AADT= XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



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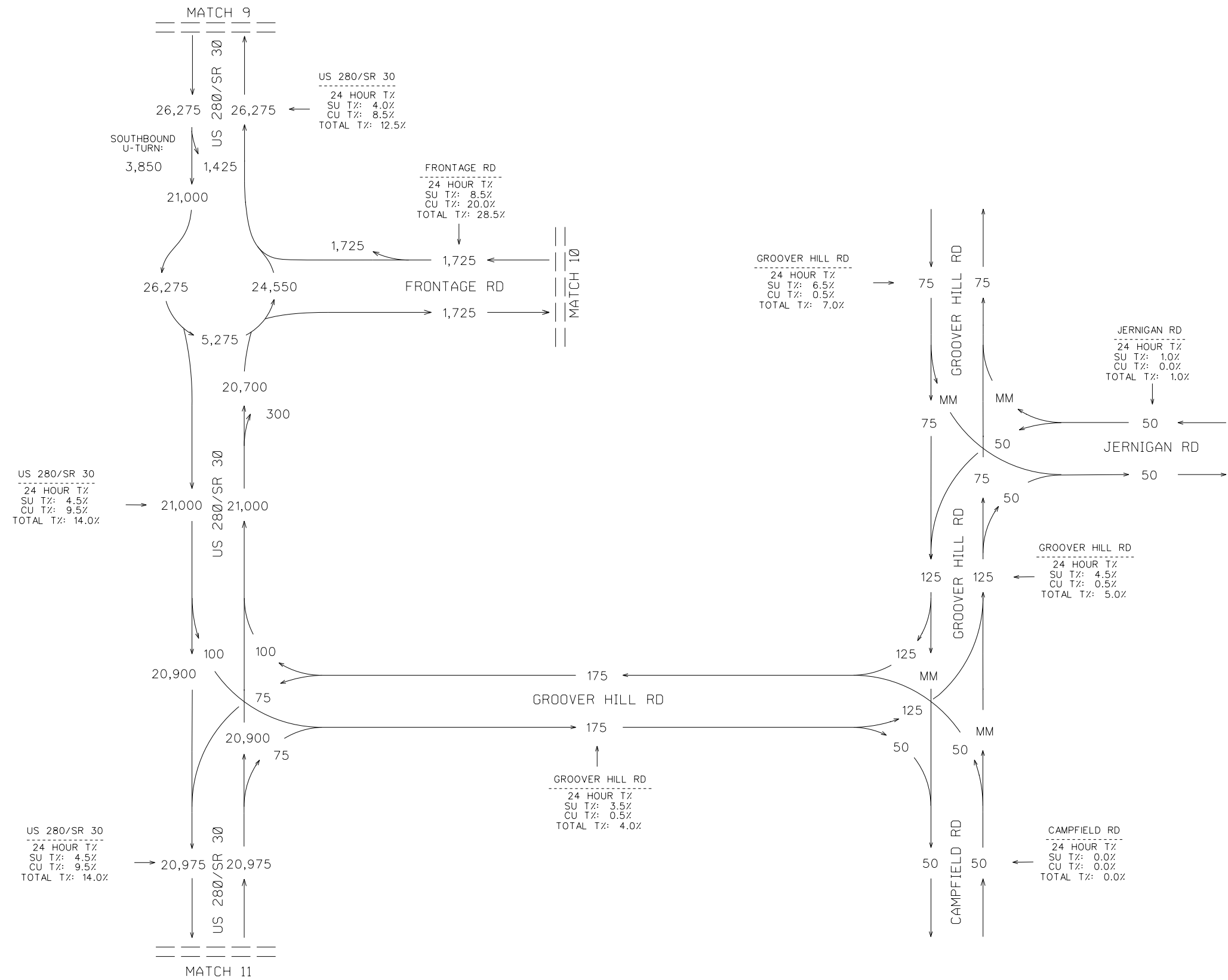
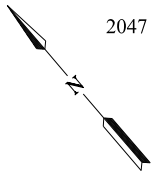
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0164

AADT VOLUMES
DESIGN YEAR +2 2047
BUILD
2047 AADT= XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

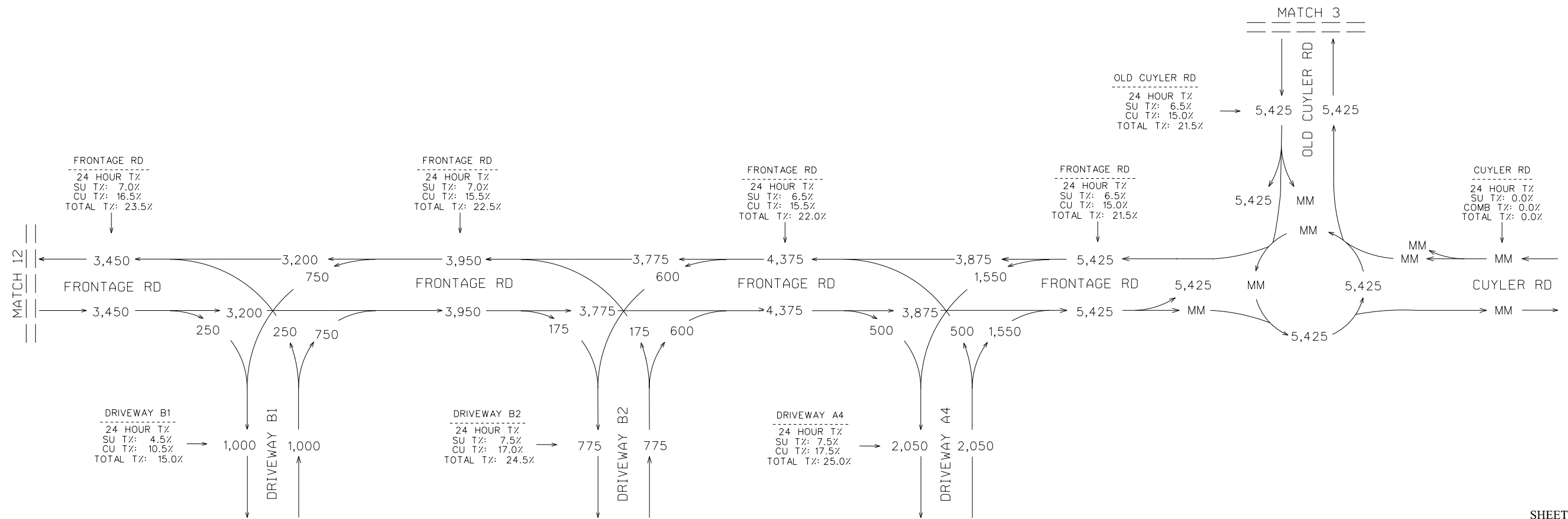
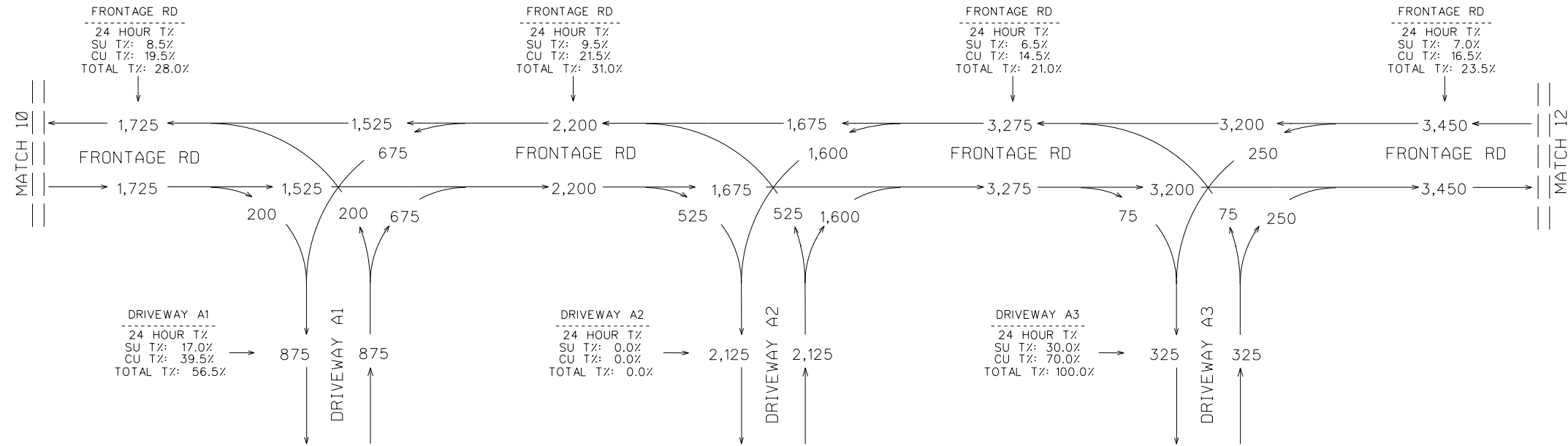
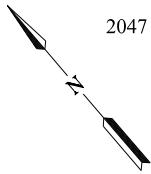
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0165

AADT VOLUMES
DESIGN YEAR +2 2047
BUILD
2047 AADT= XXX



SHEET 6 OF 10

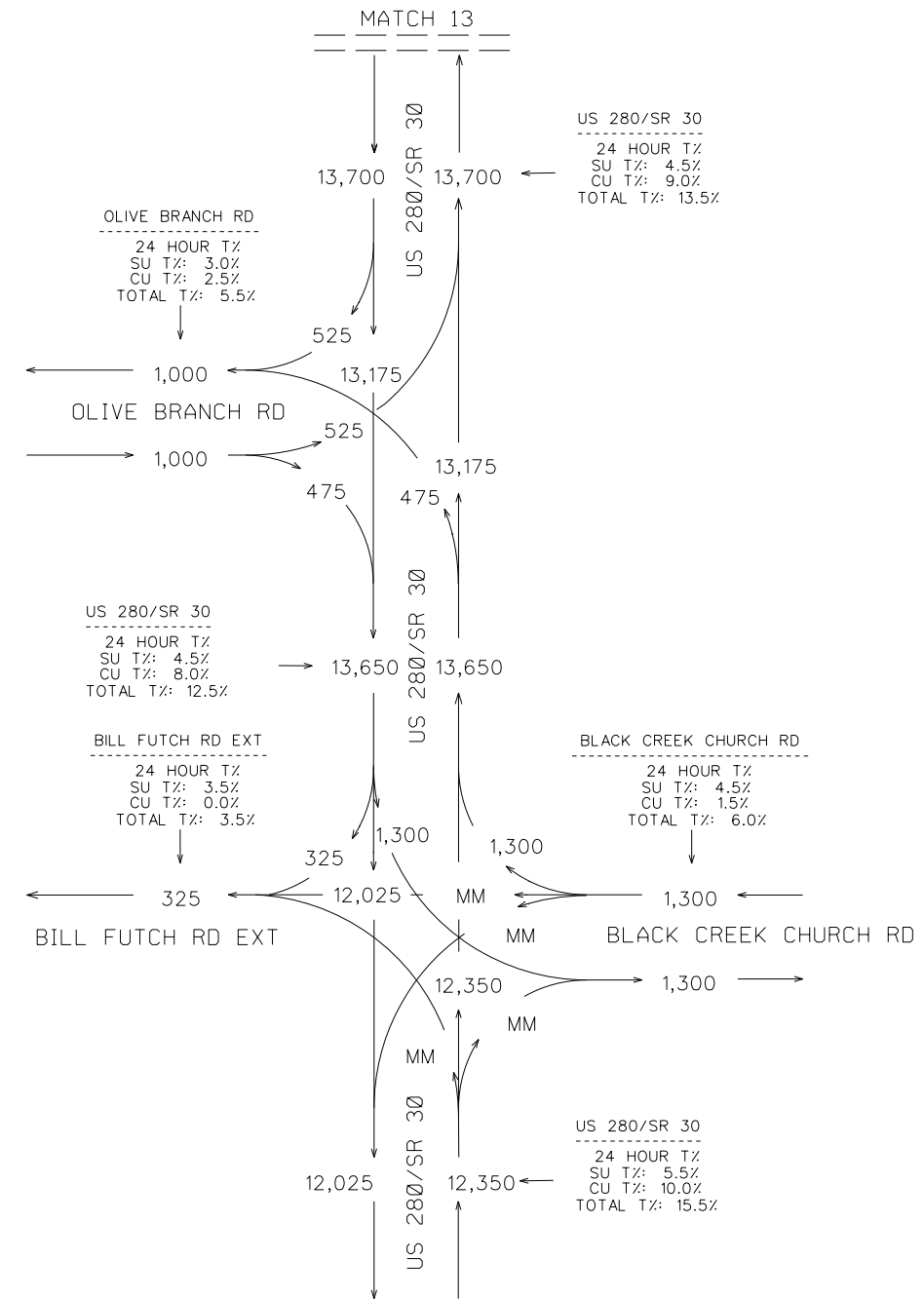
COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD AADT
BRYAN/EFFINGHAM COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

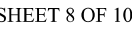
10-0166



COUNTS COLLECTED DURING COVID-19 AND ADJUSTED PER GDOT FORECASTING GUIDANCE

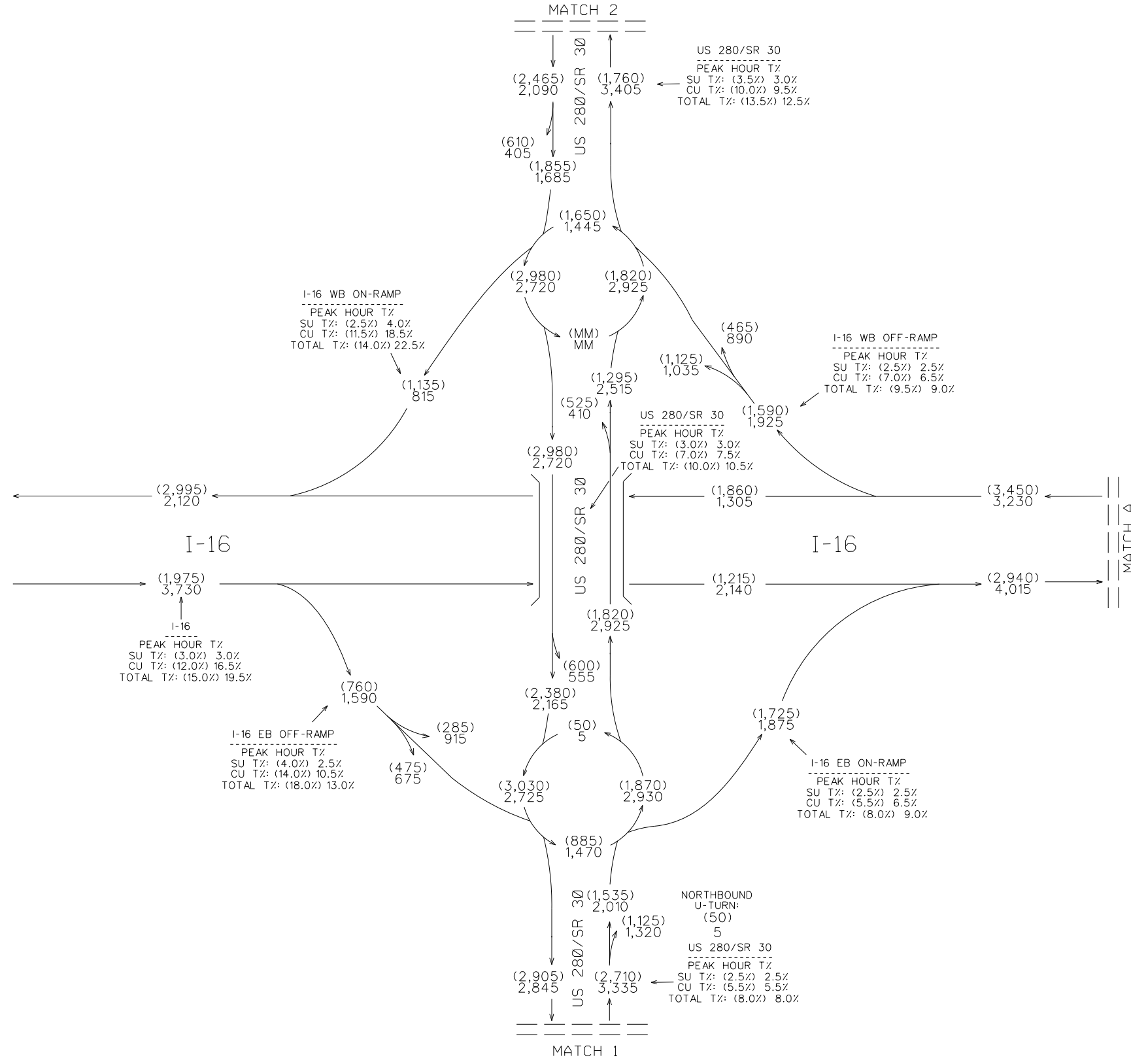
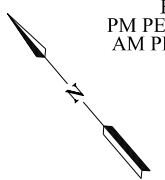


REVISION DATES			TRAFFIC DIAGRAM			
			US-280 IMPROVEMENTS & FRONTAGE RD			
			DESIGN YEAR +2 2047 BUILD AADT			
			BRYAN/EFFINGHAM COUNTY			
			CHECKED:		DATE:	
			BACKCHECKED:		DATE:	
			CORRECTED:		DATE:	
			VERIFIED:		DATE:	
			DRAWING No.			
			10-0167			



CHECKED:		DATE:		DRAWING No. 10-0168
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

DHV VOLUMES
DESIGN YEAR +2 2047
BUILD
PM PEAK = (XXX)
AM PEAK = XXX



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



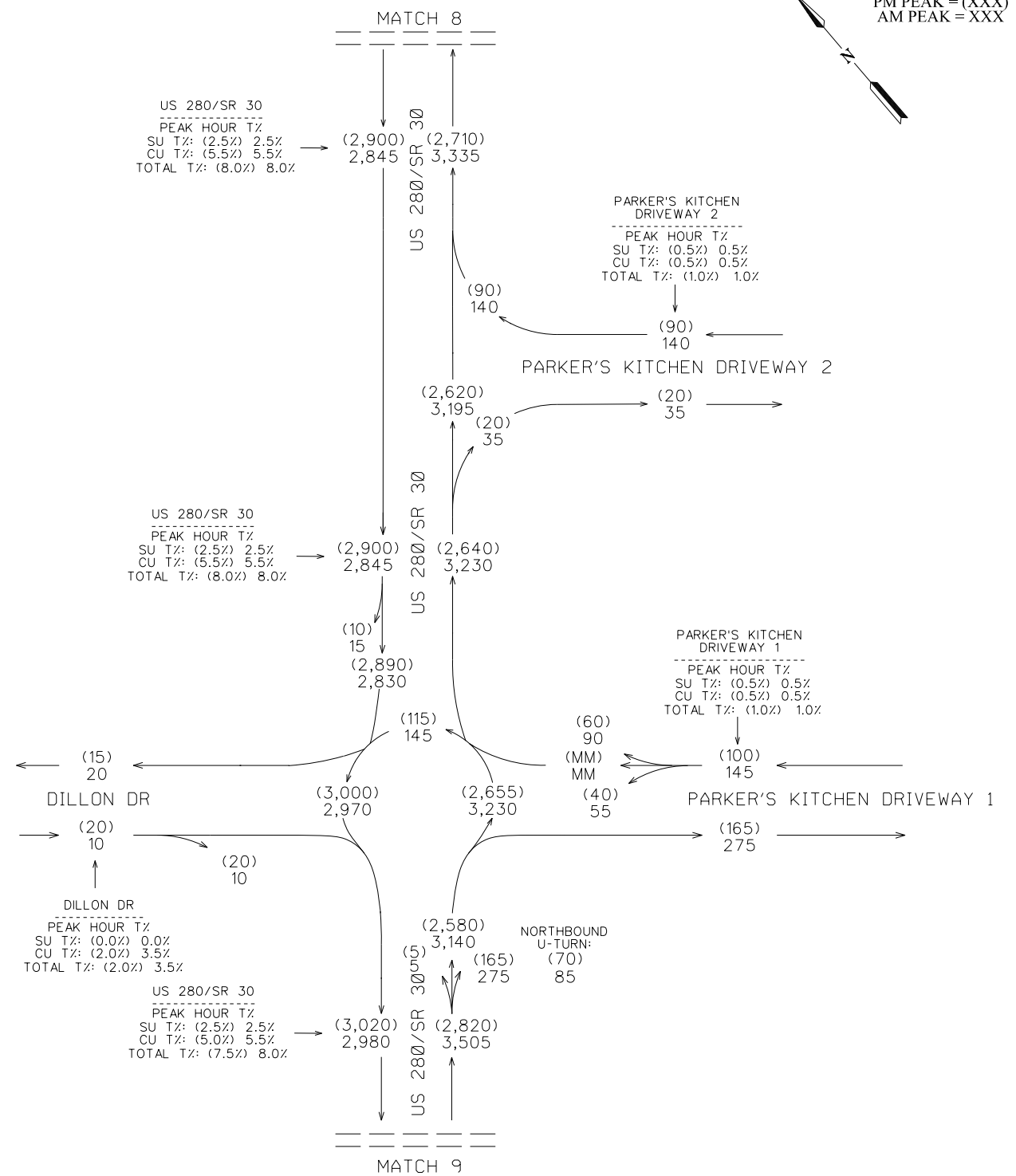
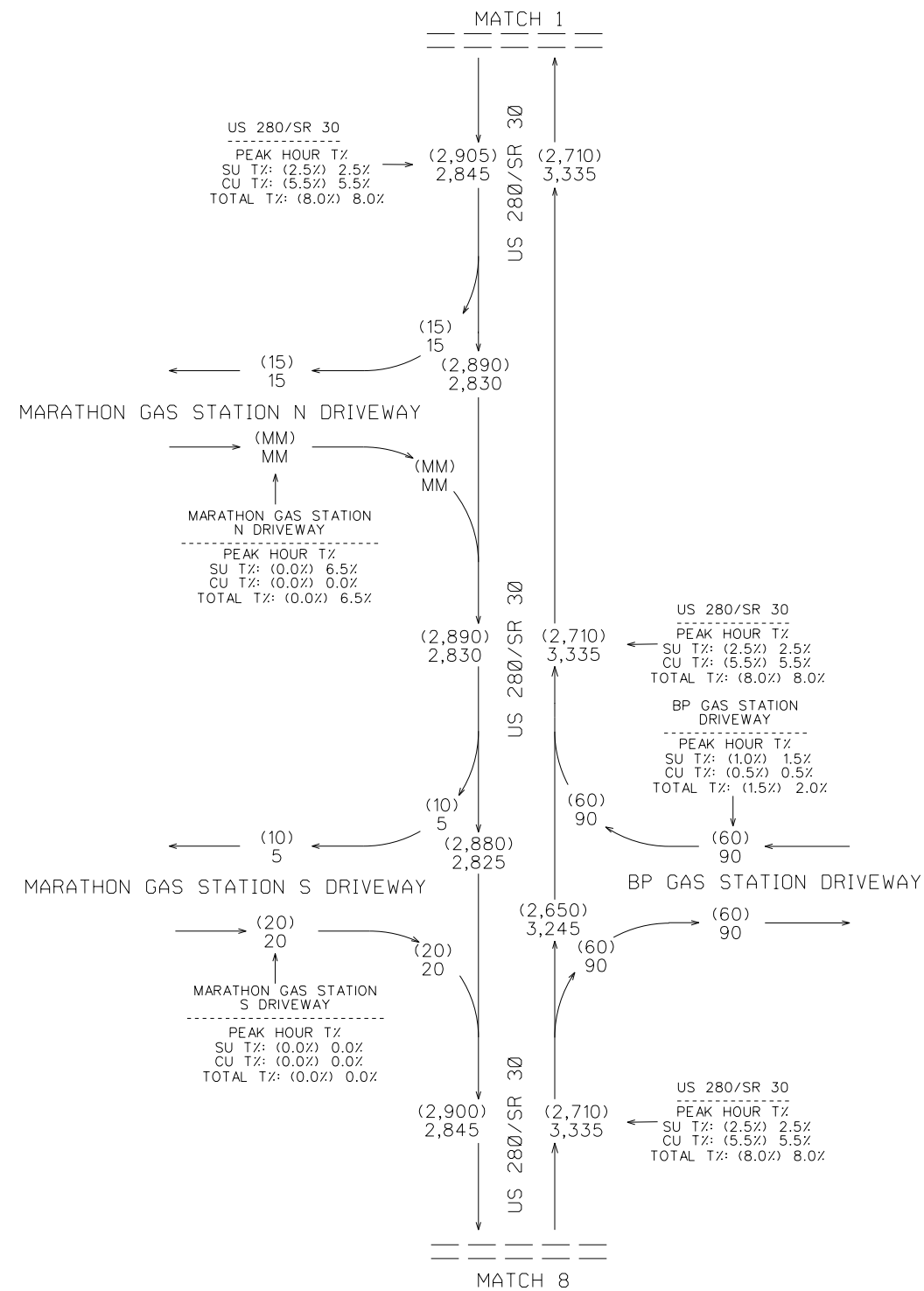
REVISION DATES		

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0171

DHV VOLUMES
DESIGN YEAR +2 2047
BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 4 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



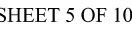
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
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VERIFIED:	DATE:	

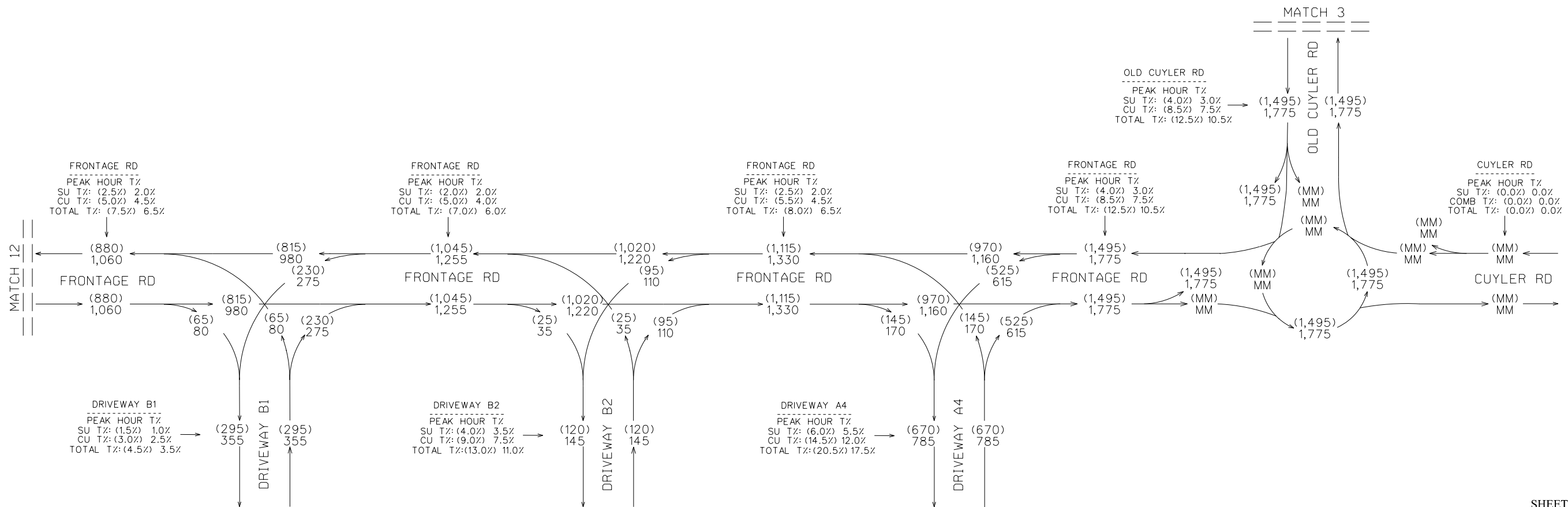
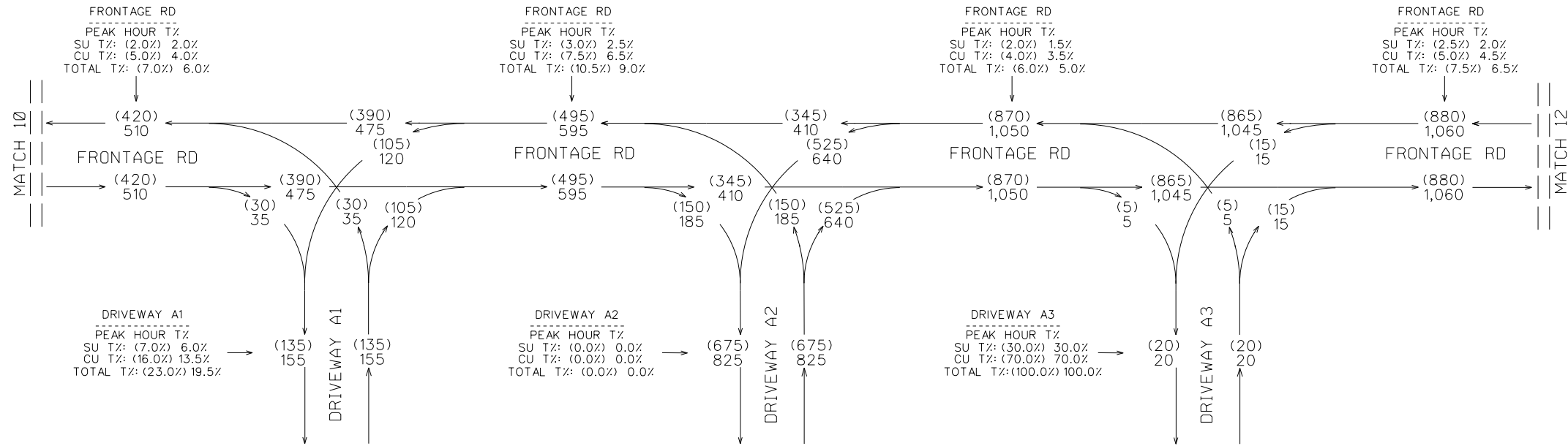
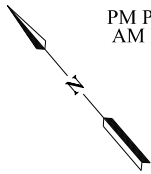
10-0174

PM PE
AM P



CHECKED:		DATE:		DRAWING No. 10-0175
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

DHV VOLUMES
DESIGN YEAR +2 2047
BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 6 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

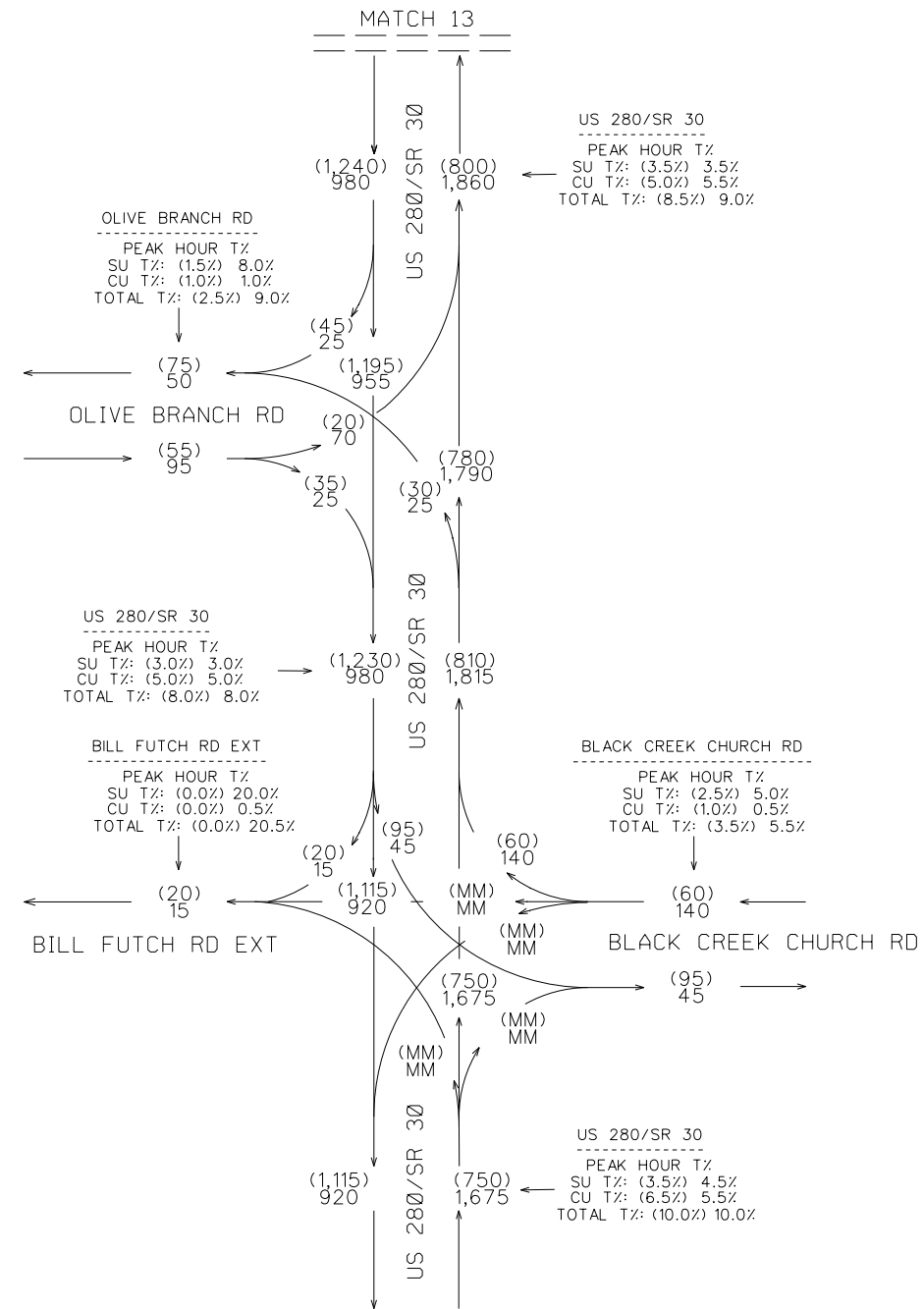
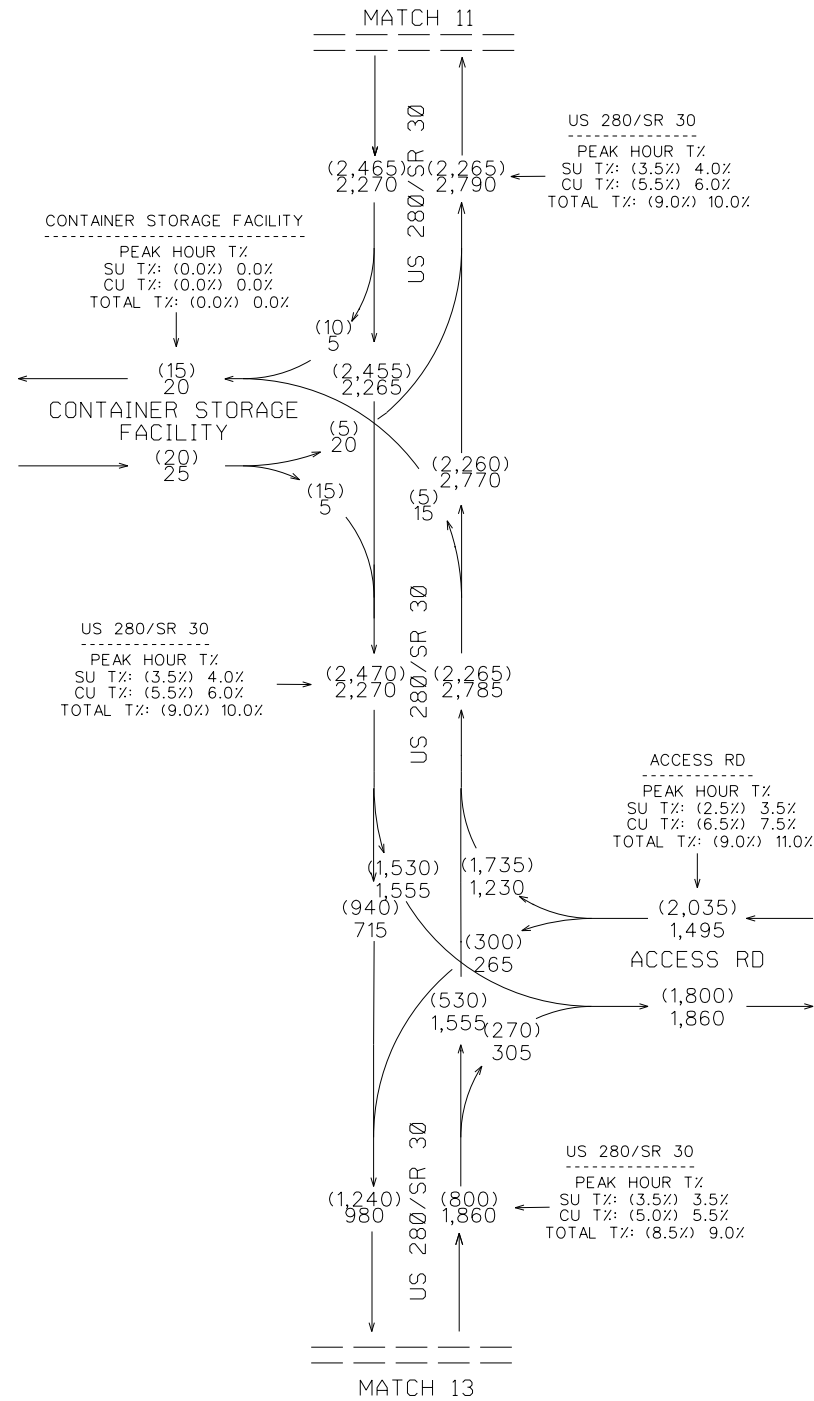
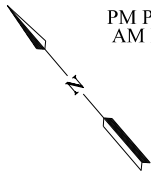
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0176

DHV VOLUMES
DESIGN YEAR +2 2047
BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 7 OF 10

COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE



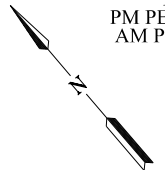
REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD DHV
BRYAN/EFFINGHAM COUNTY

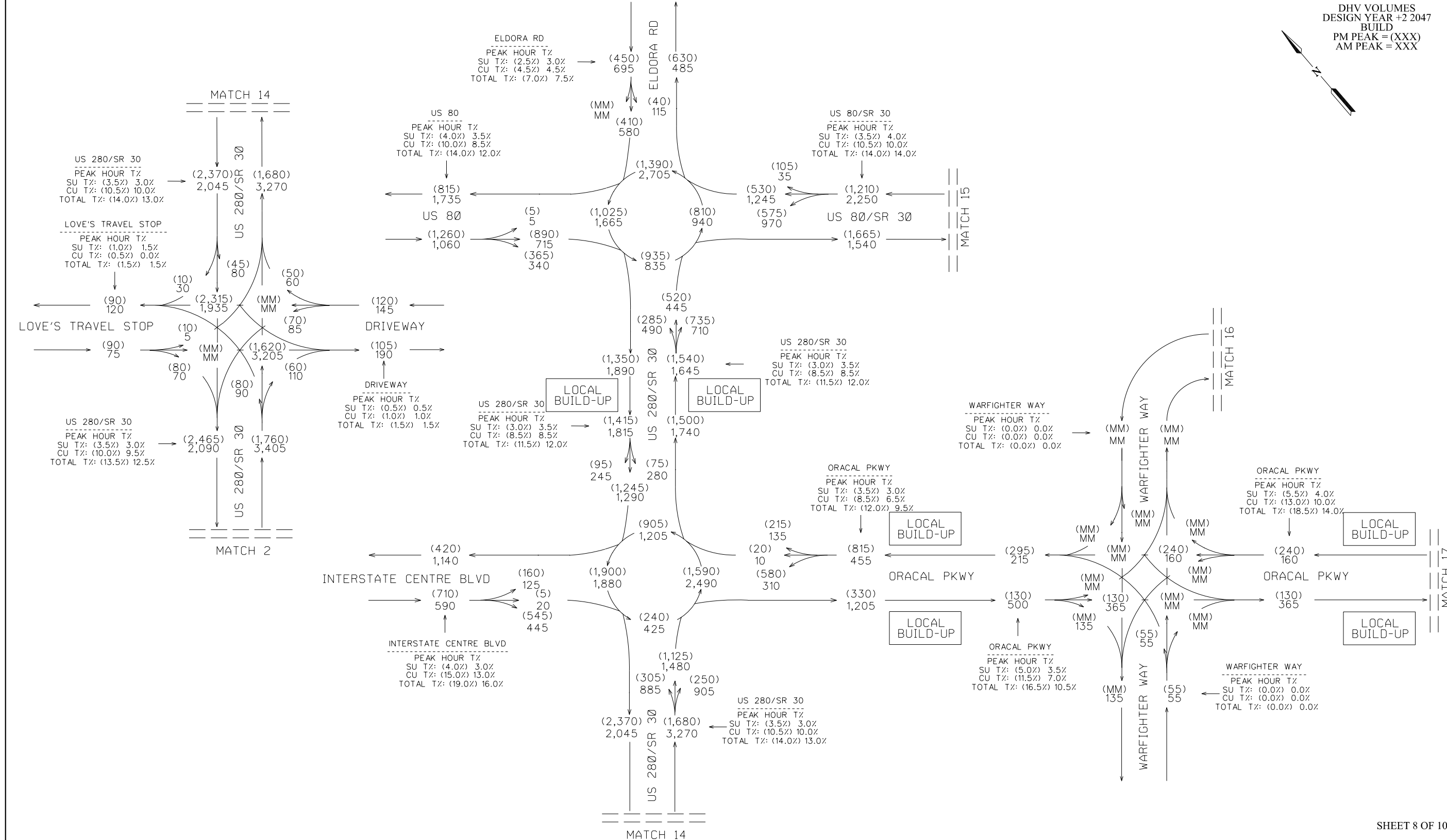
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CORRECTED:		DATE:		
VERIFIED:		DATE:		

10-0177

DHV VOLUMES
DESIGN YEAR +2 2047
BUILD
PM PEAK = (XXX)
AM PEAK = XXX



SHEET 8 OF 10



COUNTS COLLECTED DURING
COVID-19 AND ADJUSTED PER
GDOT FORECASTING GUIDANCE

REVISION DATES

TRAFFIC DIAGRAM
US-280 IMPROVEMENTS & FRONTAGE RD
DESIGN YEAR +2 2047 BUILD DHV
BRYAN/EFFINGHAM COUNTY

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

10-0178

Attachment 7
Capacity Analysis Summary

Summary Capacity Analysis Synchro 11 (HCM6)

Temporary Signal Intersection Delay and Level of Service – Frontage Road at US 280 (Open Year)

	Delay (Sec)	LOS
AM Peak Hour	127.9	F
PM Peak Hour	13.1	B

HCM 6th Signalized Intersection Summary

29: US HWY 280 (NB)/US HWY 280 (SB) & FRONTAGE ROAD (WB)

05/26/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	550	1420	20	550	940
Future Volume (veh/h)	20	550	1420	20	550	940
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1767	1767	1796	1796	1781	1781
Adj Flow Rate, veh/h	22	0	1543	0	598	1022
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	7	7	8	8
Cap, veh/h	36		1170		433	1619
Arrive On Green	0.02	0.00	0.65	0.00	0.22	0.91
Sat Flow, veh/h	1682	1497	1796	0	1697	1781
Grp Volume(v), veh/h	22	0	1543	0	598	1022
Grp Sat Flow(s),veh/h/ln	1682	1497	1796	0	1697	1781
Q Serve(g_s), s	1.7	0.0	83.5	0.0	28.5	15.8
Cycle Q Clear(g_c), s	1.7	0.0	83.5	0.0	28.5	15.8
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	36		1170		433	1619
V/C Ratio(X)	0.62		1.32		1.38	0.63
Avail Cap(c_a), veh/h	321		1170		433	1619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	0.0	22.4	0.0	46.2	1.3
Incr Delay (d2), s/veh	16.1	0.0	149.7	0.0	185.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	76.9	0.0	34.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	78.3	0.0	172.0	0.0	231.2	2.1
LnGrp LOS	E		F		F	A
Approach Vol, veh/h	22		1543			1620
Approach Delay, s/veh	78.3		172.0			86.6
Approach LOS	E		F			F
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	33.0	88.0			121.0	7.2
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	28.5	83.5			116.5	24.5
Max Q Clear Time (g_c+I1), s	30.5	85.5			17.8	3.7
Green Ext Time (p_c), s	0.0	0.0			9.5	0.0

Intersection Summary

HCM 6th Ctrl Delay	127.9
HCM 6th LOS	F

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

29: US HWY 280 (NB)/US HWY 280 (SB) & FRONTAGE ROAD (WB)

03/29/2023



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	460	835	20	460	1030
Future Volume (veh/h)	20	460	835	20	460	1030
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1796	1796	1781	1781
Adj Flow Rate, veh/h	22	0	908	0	500	1120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	11	11	7	7	8	8
Cap, veh/h	41		1016		556	1522
Arrive On Green	0.02	0.00	0.57	0.00	0.23	0.85
Sat Flow, veh/h	1654	1472	1796	0	1697	1781
Grp Volume(v), veh/h	22	0	908	0	500	1120
Grp Sat Flow(s), veh/h/ln	1654	1472	1796	0	1697	1781
Q Serve(g_s), s	1.0	0.0	33.1	0.0	13.6	18.3
Cycle Q Clear(g_c), s	1.0	0.0	33.1	0.0	13.6	18.3
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	41		1016		556	1522
V/C Ratio(X)	0.54		0.89		0.90	0.74
Avail Cap(c_a), veh/h	438		1721		977	2664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	0.0	14.2	0.0	20.0	2.1
Incr Delay (d2), s/veh	10.8	0.0	3.6	0.0	6.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	10.2	0.0	7.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.6	0.0	17.8	0.0	26.0	2.8
LnGrp LOS	D		B		C	A
Approach Vol, veh/h	22		908			1620
Approach Delay, s/veh	46.6		17.8			10.0
Approach LOS	D		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	21.5	46.6			68.1	6.3
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	35.5	71.3			111.3	19.7
Max Q Clear Time (g_c+l1), s	15.6	35.1			20.3	3.0
Green Ext Time (p_c), s	1.5	7.0			11.9	0.0

Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Attachment 8
Minutes of Concept Meetings

Meeting Minutes

PI# 0016618 I-16 @ SR 30/US 280, PI# 0019452 I-16 Frontage Rd., PI# 0019451 I-16 @ Old Cuyler Rd.– Project EA

Project Name

Project EA
(PI numbers 0016618, 0019452, 0019451)

Date of Meeting

02/10/2023

Location

Microsoft Teams Meeting

Time

2:00 – 4:00 PM

Purpose of Meeting

Concept Team Meeting for PI 0016618 & PI 0019452

Attendees

GDOT

Ron Nelson
Marlo Clowers
Marcela Coll
Victoria Coulter
Joseph Capellow

Colin Abbey
Eric Duff
Eric Conklin
Patrick Allen
Hiral Patel
Daniel Pass
Jonathan Martinez
Shajan Joseph
Oldimeji Onabanjo

Troy Pitman

Amber Phillips
Dave Peters
Laura Nesbitt
Marlene Delgadillo Canizares

PMC

Brian Burch
John Tuttle
Nick Castronova
Tim Hatton
Joe Alexander
Nick Castronova
Anton Sova

GEC

Matt Crenshaw
Robin Stevens
Joel Jones
Chris Presnell
Jaap Tigelaar

Ty Denning
Jonathan Langley
Tshiams Katala
Lauren Bolstad
William Dial
Jerod June
Billy Hurley
Patrick Pecot
Tim Jacks

Meeting Minutes

Concept Team Meeting Presentation:

- Marlo Clowers gave a brief introduction to the three projects (PI 0016618, PI 0019452, & PI 0019451).
- Matt Crenshaw with the GEC presented on the Concept Team Meeting Presentation for PI 0016618 – SR-30/US-280 Widening Project & PI 0019452 – I-16 Frontage Rd project which detailed the elements of the design including the Directed Scope Memo.

Concept Report & Presentation Discussion

- Laura Nesbit – Is build volume assuming other interchange will be open afterwards?
 - GEC indicated that the new interchange associated with PI 0019451 is assumed to be constructed and open for both the Build and No-Build conditions.
- Laura Nesbit – How is the cross section for US-280 temporary signal (As apart of PI 0016618) be affected by the US-280 Widening Project?
 - The technical provisions have allowed this signal to be constructed using timber poles or hung using strain poles allowing the US-280 Design-Builder to relocate the signal during the reconstruction of US-280/SR-30. The typical section proposed as apart of PI 0019452 utilizes an asymmetrical widening typical section which minimize the impact east of US-280/SR-30. However, the Deign-Builder will be responsible for the coordination, maintaining, and relocating the signal until the final roundabout configuration is established.
- GDOT – US-280/SR-30 (PI 0019452) is showing Federal Funds. Will this be updated?
 - Marlo Clowers - OAD (Office of Alternative Delivery) is working with OFM (Office of Financial Management) on replacing the Federal Funds with State Funds.
- Marcella Coll – US-280/SR-30 (PI 0019452) currently has an approved Concept Report. Is this report being amended/revised?
 - Marlo Clowers – Indicated that since the original project had a much smaller scope that a new Concept Report would be required. Additionally, it should be noted that this PI has a “Directed Scope” and therefore would require a new Concept Report to be issued & approved.
- Laura Nesbit – Minor Stop Controlled Intersections along US-280 (PI 0019452):
 - Is there a reason the side roads are being allowed full access between Olive Branch Rd to Frontage Rd?
 - GEC – The Directed Scope Memo indicated that this section to be full access with the incorporation of a 14-ft Two Way Left Turn Lane (TWLTL).
 - Usually this would require an ICE Analysis and the evaluation of an R-Cut.
 - GEC – The Directed Scope Memo also indicated that these projects have been granted ICE Waivers.
 - Laura indicated that the use of a 14-ft TWTL would be helpful in lieu of R-Cuts.
- Dan Pass – Instructed the GEC and PMC to review the Lighting Warrant Analysis with Robert Graham & Office of Design Policy & Support (DP&S) as soon as it is completed.
 - GEC – Indicated that coordination efforts are in the works and will continue to coordinate the lighting requirements with the appropriate GDOT offices.
- Office of Environmental Services (OES)
 - No Comments for Frontage Rd (PI 0016618)
 - US-280/SR-30 (PI 0019452) has (2) historic resources, and both would be impacted adversely. Eric Duff asked if we are working with OES on mitigation.

- GEC – Indicated that the team is actively coordinating with OES regarding any mitigation required for these parcels.
- Marlene Delgadillo Canizares – Interchange Justification Report Discussion (PI 0019452):
 - Requested a link or PDF to the CTM Presentation and indicated that it would be helpful with the IJR verbiage memo to FHWA.
 - GEC – The presentation has been distributed however, the PDF would of the presentation would also be attached to the Meeting Minutes.
 - What is the estimated timeframe is to have FHWA approval for the IJR and it's relationship to the Concept Report. Additionally asked if the Concept Report comments would be reflected in the IJR.
 - GEC – The FHWA approval is associated with the PI 0019451 interchange project. Approval is anticipated in April of 2023. The IJR was presented separately to GDOT to address any comments and will be reflected in the IJR submission to FHWA.
 - Indicated FHWA will not want to lower the level of service on the mainline.
 - GEC – Noted the comment.
- Marcela Coll – Why are reimbursable utilities shown as N/A and if they could be separated out.
 - Anton Sova with PMC – indicated that for Design-Build projects utilities are usually a lump sum associated with overall construction cost.
 - GEC – Indicated they would review if a TPro would be required or if it could be shown in the Concept Report with a note indicating that the construction costs includes the reimbursable utilities costs.

Concept Layout Discussion

- Frontage Rd Layout Review
 - No Comments
- US-280 Concept Layout Review
 - Office of Traffic Ops – Curious about open median/side street stop controls. Particularly at the Love's Travel Stop. Can a roundabout be used for the left turn movements?
 - GEC – Indicated that this was Directed Scope item to provide full access to the site.
 - Traffic Ops asked if the GEC could review this and update the district RAID Team on the findings.
 - GEC – Indicated yes. (It should be noted that the Directed Scope Memo has been approved with this location provided as full access)
 - Joseph Capello – Indicated that the developments south of I-16 have median and are not full access. Can we make the argument the Love's requires full access whereas these existing developments do not? Reiterated strong support for at least an R-Cut at this location.

- Pedestrian & Bicycle Accommodation Discussion:
 - Colin Abbey – Bike and PED accommodations along US-280/SR-30 are inconsistent and not being provided throughout the entire corridor.
 - GEC - indicated that existing pedestrian facilities are being replaced. No other areas appear to warrant pedestrian accommodations.
 - Laura Nesbit – Use of pedestrian accommodations and detectable warning strips are concerning towards the existing bridge since the bridge does not have any pedestrian accommodations. Would need some signage indicating that there are no accommodations at the bridge.
 - GEC – indicated the use of pedestrian ramps towards the bridge would be reevaluated to discourage this movement and would also look at signage indicating the sidewalk ends.
 - Troy Pitman – Has there been discussion about rural shoulders around the roundabouts? This may eliminate the considerations of sidewalks where there is an inconsistency in pedestrian accommodations.
 - GEC – indicated that this was discussed and ultimately decided against due to speed control and channelization of the roundabouts.
 - Dan Pass – Put a paragraph or so in the Concept Report about PED Warrants
 - GEC – indicated that the Concept Report would be revised to include a description about PED Warrants.
- Laura Nesbit – Will roundabout performance checks be provided in the next submission of the concept report?
 - GEC – indicated that that the Roundabout performance checks & calculations will be provided in the concept report.
- Dan Pass – Capacity Analysis is included in the list of Concept Report attachments. Please include this when resubmitting the concept report.
 - GEC – noted this comment and indicated that the capacity analysis would be added when the concept report was resubmitted.
- Discussion of Hurricane Gates:
 - GEC – Asked if any guidance existed regarding the placement of hurricane gates at roundabouts.
 - GDOT – indicated that there is not much guidance surrounding gates other than what is listed in the roundabout manual for gates at railroad crossings. GDOT indicated that the final placement would need to be coordinated with the District.
 - GEC – Indicated that this language would be added to the technical provisions and would be further coordinated with PMC and GDOT SMEs to review language so that the replacement of the gates is adequately addressed in the RFP.

- Joseph Capello – Does Hyundai want signs for their plan approaching the interchanges of I-16 with US-280/SR-30?
 - Ty Denning discussed “Project Adventure” as an example. It was not included in the US-278 project but was for the new interchange project. GDOT did not want to set a precedent for advertising for a private business and would likely take the same approach with this project. Additionally, it was noted that no surface streets signs were provided either.
- Laura Nesbit – Has the project been advertised to the public showing the project with (5) roundabouts along US-280/SR-30?
 - GEC – indicated yes. An in-person and virtual PIOH had been held with minimal opposition.
 - Laura asked for a link to the PIOH information/website access.
 - It was noted that the PIOH information was on GDOT’s website and publicly available.

Attachments

1. Concept Team Meeting Presentation

The notes contained herein are our understanding of the topics discussed and the decisions reached. All figures, layouts, and diagrams presented within these notes are subject to change.

Agenda

- Project Location and Overview
- Traffic
- Schedule
- Project Design Elements
- Environmental/Permitting
- Utilities
- DE / DV / DD
- Directed Scope Elements
- Programmed and Estimated Cost
- Concept Report Walk-thru
- Open Discussion



Other Large Development Map



Concept Team Meeting

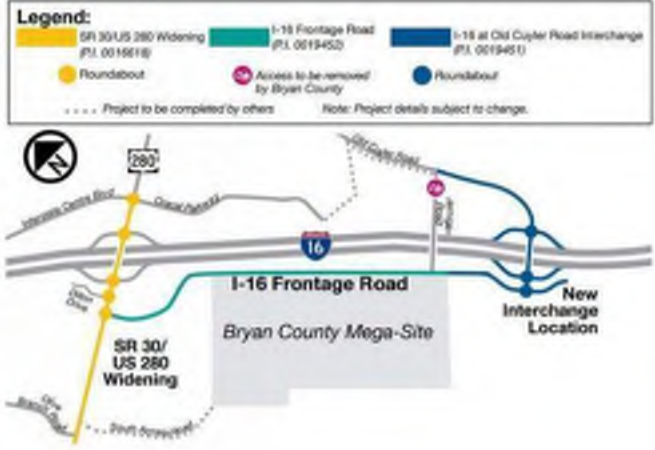
- Bryan County Mega Site
- PI 0019452 – I-16 Frontage Rd
 - PI 0016618 – US 280/SR 30 Widening



Project Location and Overview

- Two of the three projects being constructed to support the Bryan County Mega Site car manufacturing facility and other large developments planned for the area

- PI 0019452 – I-16 Frontage Road
- PI 0016618 – US 280/SR 30 Widening
- PI 0019451 – I-16 Interchange at Old Cuyler Road



Directed Scope Process

- GDOT's Leadership, GDOT Design Policy and Support, the Program Management Consultant (PMC) and General Engineering Consultant (GEC), in close coordination with State of Georgia and the Georgia Department of Economic Development (GECED), have assisted in developing a Directed Scope Concept for use on the Bryan County Mega-site project, which differs slightly from the normal concept reporting processes followed by GDOT. The directed scope process was necessitated by major third-party stakeholder input, projects specific needs, and a highly accelerated schedule.
- The Directed Scope Memorandum, and the related documents signed by all parties, facilitated the development of the projects by providing and documenting the design basis and decisions for the project early in the concept development process. This has facilitated better coordination between the PMC, GEC and various GDOT offices.
- The Alternatives Evaluation section of the Concept Report was limited to the commitments contained within the Directed Scope Memo and the signed Economic Development Agreement (EDA). The traditional evaluation of potential project alternatives is modified in the Concept Report. Instead, only "no build" and the "preferred alternative" are included in the Concept Report's Alternative Evaluation narrative.

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Project Location and Overview

Project Justification/Need and Purpose

PI 0019452 – I-16 Frontage Road:

- Project would provide east-west connectivity between US 280/SR 30 and the major economic development under construction in this area (Bryan County Mega-site).
- Project would provide additional access to this major economic development to accommodate traffic generated by the development.

PI 0016618 – US 280/SR 30 Widening:

- Project would help address future congestion and capacity needs in the project area.
- Annual growth rates are 2.67% (2022-2025) and 0.94% (2025-2045), with additional trips generated by the area's several current and anticipated economic developments. Substantial increases in traffic are anticipated.

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Directed Scope Components

US 280/SR 30 Widening (PI 0016618) Design Decisions

- Begins south of the Olive Branch Rd junction with US 280/SR 30 and extends north of I-16 ramp termini to the Oracal Parkway/Interstate Centre Boulevard intersection. Proposes a design speed of 45 mph for US 280/SR 30 from the Frontage Road to Oracal Parkway/Interstate Centre Boulevard, and a 55 mph design speed south of the Frontage Road to the southern project limit. Retains the existing bridges over I-16. No pedestrian or bicycle facilities will be provided on these bridges. Provides a turnaround option along US 280/SR 30 south of Olive Branch Road. Provides full access/median opening and stop control at the Love's Travel intersection with US 280/SR 30 (ICE requirements waived).
- Widens US 280/SR 30 from its existing 2 lanes to 4 travel lanes (two in each direction), rural shoulders (except between Frontage Road and I-16 EB Ramps and at the Love's facility), and a 14-foot flush median south of Frontage Road and variable-width raised median north of Frontage Road.
- Provides intersection improvements in the form of roundabouts at the intersections of US 280/ SR 30 with the eastbound and westbound I-16 ramp terminals, the I-16 Frontage Road (PI 0019452), Dillon Drive, and Oracal Parkway/Interstate Centre Boulevard (ICE requirements waived). Install a traffic signal at the US 280/SR 30 intersection with the Southern Access Road (to be constructed by others) (ICE requirements waived).
- Proposes HMA pavement section for the circulatory portion of the roundabouts (waiver of Pavement Type selection).

GDOT will:

- Identify various access locations and requirements for the Hyundai development, including intersections and driveways along US 280/SR 30.
- Costing plans exclude a Pavement Evaluation Survey (PES).

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Directed Scope Components

I-16 Frontage Road (PI 0019452) Design Decisions

- Begins south of and parallel to I-16 from US 280/SR 30 and ends approximately 500' east of Jernigan Road. Proposes a design speed of 45 mph. Includes a 4-lane section with a 20-foot raised median and rural shoulders.
- Excludes the purchase of any additional right-of-way (ROW) or easements for project construction.
- Proposes a traffic signal at the intersection of Frontage Road and US 280/SR 30 (Intersection Control Evaluation (ICE) waived). This traffic signal will be an interim condition before PI 0016618 constructs a roundabout at this intersection (see below).
- Proposes a Hot Mix Asphalt (HMA) pavement section due to contract time duration limitations (waiver of Pavement Type selection).
- Maintain access to the existing Jernigan Road bridge during and after construction of the Frontage Road. Existing bridge clearances over I-16 will be maintained.
- Full access to Dillon Drive and the Parker's Kitchen property will be maintained from US 280/SR 30 during construction of the Frontage Road. (Note: Dillon Drive and the Parker's Kitchen property will convert to a right-in and right-out after construction of the roundabouts under PI 0016618, as described below).

GDOT will:

- Evaluate potential lighting along the Frontage Road
- Coordinate access for the Quick Start driveways along the proposed Frontage Road

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Project Location and Overview – PI 0019452 (cont'd)

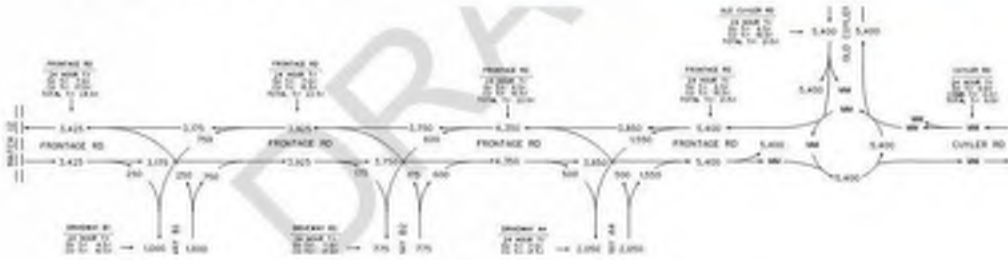
- ROW that is required along proposed Frontage Road is being acquired by Joint Development Authority (JDA).
- State funded; GEPA compliance
- JDA/Third Party has acquired Section 404 Individual permit (Clean Water Act) for the Frontage Road (part of site permit)



Traffic – PI 0019452 (I-16 Frontage Road)

- The proposed I-16 Frontage Road will provide connectivity to the Bryan County Mega Site from US 280/SR 30.
- A proposed Interchange will be constructed in 2027 under PI 0019451: I-16 Interchange at Old Cuyler Rd, which will connect to the Frontage Road to the east.

I-16 Frontage Road	No-Build (2025)	Build (2025)	No-Build (2045)	Build (2045)
AADT	N/A	3,550	N/A	10,800
DHV	N/A	AM 575 PM 480	N/A	AM 1,775 PM 1,495
% Trucks (24h)	N/A	28.5	N/A	31.0



Project Location and Overview – PI 0019452



- Constructs a new 2.5-mile frontage road parallel and to the south of I-16, from US 280/SR 30 to just east of CR 11/ Jernigan Road
- Traffic signal on US 280/SR 30 will be replaced with roundabout under PI 0016618
- Frontage Road will consist of four travel lanes with median and rural shoulders

Project Location and Overview – PI 0016618



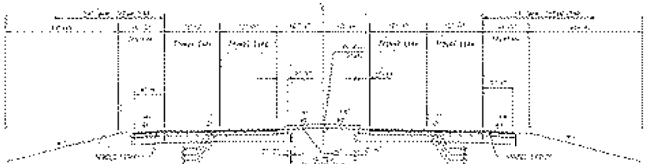
- Proposes widening from the existing two-lane typical section to a four-lane typical section with a combination of flush and raised median from Olive Branch Road to Deer Run Road (approximately 2.3 miles).
- Proposes five roundabouts along US 280/SR 30 at the intersections with the new I-16 Frontage Road (PI 0019452), Dillon Drive, the I-16 ramps, and Orcal Pkwy/Interstate Center Pkwy
- State funded; GEPA compliance

Schedule – PI 0019452

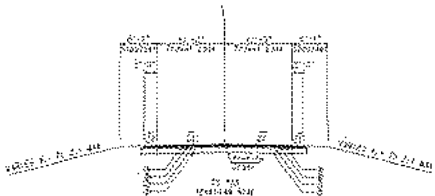
- The frontage road is required to open to traffic (substantial completion) by December 31, 2024. GDOT has committed to a good faith effort to accelerate opening to October 1, 2024.
- Very accelerated schedule – many activities occurring concurrently

PI 0019452 Activities	Actual/Anticipated Date
PNA Advertisement	11/2022
Hold PIOH	01/10/2023
RFQ Advertisement	01/2023
Concept Team Meeting	02/10/2023
Concept Report Approval	04/13/2023
RFP Advertisement	03/24/2023
GDOT Letting	06/16/2023
NTP 1	Q3 2023
Construction Start	Q1/Q2 2024
Open to Traffic	Q4 2024

Project Design Elements – PI 0019452 Typical Sections

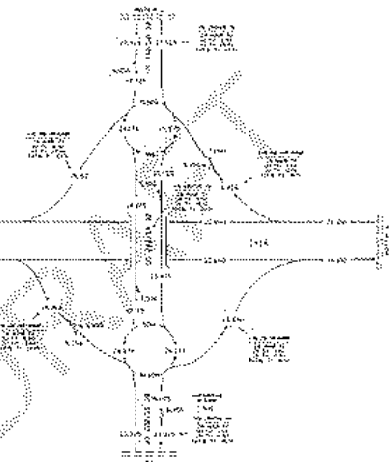


I-16 Frontage Road – Rural Arterial



Jernigan Road – Rural Local Road

Traffic – PI 0016618 (US 280/SR 30 Widening)



- The proposed widening of US 280/SR 30 will add more capacity and improve operations along the corridor. Increased traffic volumes, especially truck traffic, will be able to navigate through the corridor more efficiently.

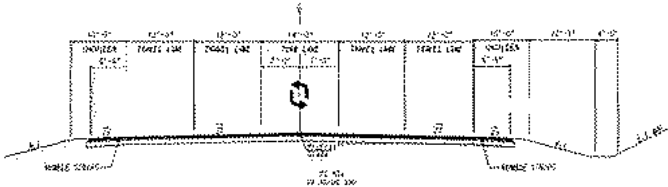
US 280/SR 30	No-Build (2025)	Build (2025)	No-Build (2045)	Build (2045)
AADT, US 280/SR 30	34,250	34,600	55,350	55,050
DHV, US 280/SR 30	AM 2,005 PM 1,430	AM 1,865 PM 2,200	AM 2,975 PM 2,730	AM 3,545 PM 2,730
% Trucks (24h)	26.0	26.0	28.5	28.5

Schedule – PI 0016618

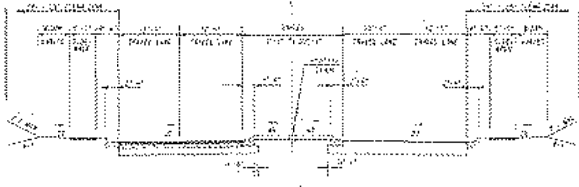
- US 280/SR 30 is committed to being open to traffic (substantial completion) by March 31, 2025.
- Very accelerated schedule – many activities occurring concurrently
- Utility relocation has been moved to pre-let to allow more construction time.

PI 0019452 Activities	Actual/Anticipated Date
PNA Advertisement	11/2022
Hold PIOH	01/10/2023
Concept Team Meeting	02/10/2023
Concept Report Approval	04/2023
RFP Advertisement	05/19/2023
GDOT Letting	08/18/2023
NTP 1	Q4 2023
Construction Start	Q2 2024
Open to Traffic	Q2 2025

Project Design Elements – PI 0016618 Typical Sections



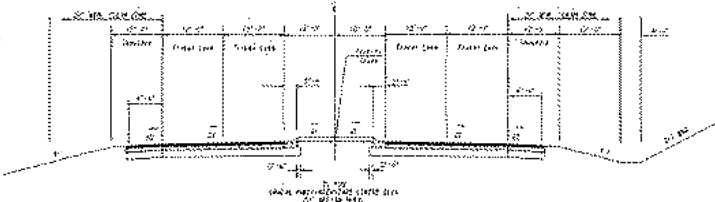
US 280/SR 30 Widening with Flush Median – Rural Arterial*



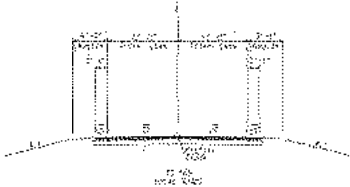
US 280/SR 30 Widening with Raised Median – Rural Arterial

*overlay is allowed
 provided a PES is
 completed

Project Design Elements – PI 0016618 Typical Sections (cont'd)

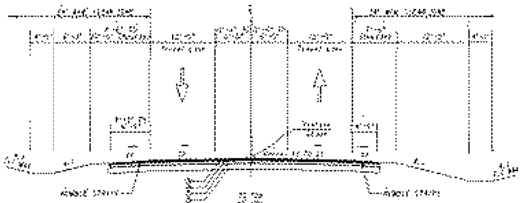


Interstate Centre Boulevard/Oracal Parkway



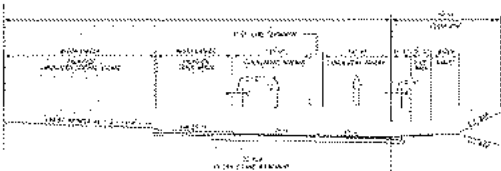
Olive Branch Road, Aspen Lane and Groover Hill Road

Project Design Elements – PI 0019452 Typical Sections

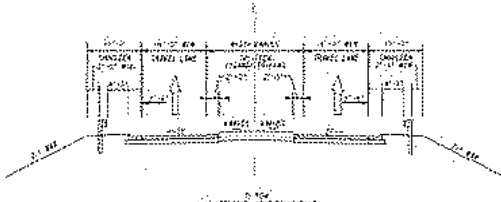


Temporary US 280/SR 30 – Rural Arterial

Project Design Elements – PI 0016618 Typical Sections (cont'd)



US 280/SR 30 Widening – Roundabout Locations



I-16 Ramps

Project Design Elements – Intersection Layout

PI 0019452

- Signalized intersection with US 280/SR 30 (temporary)
- Eastbound U-Turn movement and Westbound Left-Turn movement allowed at median openings along Frontage Road for access to driveways
 - 2 of the 8 driveways will be Right In, Right Out (RIRO)
- Jernigan Road will be RIRO

PI 0016618

- Minor stop-controlled with: Olive Branch Road, Aspen Lane, Groover Hill Road and Love's Travel Stop
- Signalized intersection with Southern Access Road. Southern Access Road will be built by others
- Case 3 design – WB-67s can navigate roundabout side-by-side with: Frontage Road, Dillon Drive, I-16 Ramps and Interstate Centre Boulevard/Oracal Parkway

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Project Design Elements – Drainage and MS4

Stormwater Drainage

- Detention Analysis of the I-16 Frontage Road and US 280/SR 30 will be included in this project.
- Proposed drainage for this roadway will include ditches, stormdrain systems, crossdrains, and special design spillway under sidewalk.
- Special design spillway proposed because of site slope constraint.
- Concrete ditches will be designed where longitudinal slopes are less than 0.5%.
- US 280 @ Frontage Rd will be raised to eliminate the Headwater Variance under the Frontage Rd Project.
- Multi barrel culvert near US 280 @ Frontage Rd might need to be lowered by to provide needed slope to upstream ditches along US 280. Temporary ponding D/S the culvert needs to be resolved.
- GDOT drainage to outfall into Hyundai stormwater BMPs

MS4

- Projects are outside the MS4 Permit Area (PLE #2). No PCSR will be required.
- Non-MS4 Detention Report will be required
- No ecology PCSR required.



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Project Design Elements– Pavement Material

PI 0019452

- I-16 Frontage Road will be asphalt pavement for the entire project limits.

PI 0016618

- The US 280/SR 30 corridor will be full-depth replacement asphalt pavement including the roundabouts using poly mod.
- The I-16 Ramp reconstruction will be concrete pavement.

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Project Design Elements – Right-of-Way (ROW)

PI 0019452

- ROW that is required along proposed I-16 Frontage Road is being acquired by Joint Development Authority (JDA).
 - Required ROW width will vary from 160-ft - 250-ft

PI 0016618

- ROW is being acquired by GDOT
 - The existing ROW width varies along US 280/SR 30 and at the interchange.
 - The proposed ROW will be an additional 180-ft wider at certain locations, but mostly 80-ft to accommodate the asymmetric widening and roundabouts
 - There are 47 anticipated impacted parcels
 - There are 2 anticipated displacements

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Environmental Resources and Permitting – PI 0019452

State-funded (GEPA); No GEPA Document (\$100M)

History: No National Register of Historic Places (NRHP) eligible resources

Archaeology: No NRHP-eligible resources

Ecology: Section 404 Individual Permit previously acquired by JDA/Third Party (part of site permit). No buffer variance anticipated.

Noise: Noise assessment not applicable.



Major Utilities/Utility Conflicts

Utility Owner	PI 0019452	PI 0016618
AT&T	X	X
American Tower	X	
Canoochee EMC	X	X
City of Claxton Gas	X	X
Comcast	X	X
Pembroke Advanced Communications (PAC)	X	X
Georgia Power Company Transmission		X
Bryan County Water	X	X
Bryan County Sewer		X

- Utility relocation for PI 0016618 has been advanced pre-let due to accelerated construction schedule and number of conflicts for that project.
- Access to the American Tower cell tower under PI 0019452 will be the responsibility of the JDA

Project Design Elements – Lighting

I-16 Frontage Road (PI 0019452)

- Lighting warrant analysis has been performed
- Lighting is warranted. Still determining lighting operation/maintenance responsibilities

US 280/SR 30 Widening (PI 0016618)

- Lighting warrant analysis has been performed
- Lighting required at all roundabout locations
- Warrant Analysis
 - CFL – 1 of 4 warrants met
 - CIL – 3 of 4 warrants met
 - PIL – 2 of 3 warrants met
 - Bridges – not warranted
 - Underpasses and Tunnels – N/A
 - Nighttime Crash Rate – not warranted

Lighting Warrant Categories

- Continuous Freeway Lighting (CFL)
- Complete Interchange Lighting (CIL)
- Partial Interchange Lighting (PIL)
- Lighting for Bridges
- Lighting for Underpasses and Tunnels
- Nighttime to Daytime Crash Rates

Environmental Resources and Permitting - PI 0016618

State-funded (GEPA); No GEPA Document (\$100M)

History: Two NRHP-eligible resources in the area of potential effect (APE) of the project: Resource 225086 and the Mock House.

Archaeology: No NRHP-eligible resources

Ecology: Section 404 regional permit anticipated. No buffer variance anticipated.

Noise: Noise assessment not applicable.



Programmed and Estimated Cost – PI 0019452

Project Cost Estimate Summary and Funding Responsibilities: PI0019452

Date of Estimate: 12/6/2022	PE Funding	ROW	Reimbursable Utilities	CST	Total Cost
Proposed Funding Source(s)	State	State/Local	State/Local	State	
Programmed Cost	\$3,900,000	\$0	NA	\$47,100,00	\$51,000,000
Estimated Cost	\$3,900,000	\$0	NA	\$39,500,000	\$43,400,000
Total Cost Difference					\$7,600,000

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PI 0019452 Concept Report Walk-thru and General Comments



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Design Exceptions/Variances/Deviations

- PI 0019452:** At this time, 2 Design Variances (DV) and 4 Design Deviations (DDs) identified
 - DV for Shoulder Width – US 280 outside shoulder
 - DV for GDOT Drainage Manual – high water freeboard at culverts
 - DDs for: horizontal curves $< 15 * V$, median opening spacing, M-3A Median Crossovers Detail – full width storage and full pavement widening for u-turns, T-23B & T-25 Detail and median usage (20-ft flush)
- PI 0016618:** At this time, 3 DVs and 1 DD identified
 - DV for Access Control – existing commercial driveways near I-16 ramps
 - DV for Shoulder Width – existing bridges over I-16 typical section will violate GDOT Bridge Manual for shoulder width
 - DV for Guardrail attachment on existing US 280/SR 30 overpass bridge
 - DD for horizontal curves $< 15 * V$

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Programmed and Estimated Cost – PI 0016618

Project Cost Estimate Summary and Funding Responsibilities: 0016618

Date of Estimate: 12/6/2022	PE Funding	ROW	Reimbursable Utilities	CST	Total Cost
Proposed Funding Source(s)	State	State/Local	State/Local	State	
Programmed Cost	\$5,700,000	\$4,200,000	NA	\$65,200,000	\$75,100,000
Estimated Cost	\$5,700,000	\$4,200,000	NA	\$33,314,000	\$43,214,000
Total Cost Difference					\$31,886,000

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Open Discussion

THANK
YOU

For Viewing


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www.dot.ga.gov/MMIP



PI 0016618 Concept Report Walk-thru and General Comments



Attachment 9
PIOH Response Letter



Russell R. McMurtry, P.E., Commissioner
One Georgia Center
600 West Peachtree NW
Atlanta, GA 30308
(404) 631-1990 Main Office

March 27, 2023

Re: Responses to Public Information Open House (PIOH) Comments for PI Nos: 0019452, 0016618, 0019451, Bryan County; Interstate 16 (I-16) Frontage Road Construction, State Route (SR) 30/US 280 Widening, and Old Cuyler Road at I-16 Interchange

To Whom It May Concern,

Thank you for your feedback concerning the proposed project referenced above. We appreciate your participation and the questions and comments received through the project's website and the in-person PIOH. Every comment provided during the project's comment period beginning on December 14, 2022, and ending on January 20, 2023, will be made part of the project's official record.

The project's website received **1,364** page views in total, and **50** people attended the in-person PIOH held on **January 10, 2023**. A total of 127 comments were received during the comment period. The following is a breakdown of the comments received by project, where specified.

PI No. 0019452 (I-16 Frontage Road Construction): Of the **42** respondents who formally commented on PI No. 0019452, **27** were in **support** of the project, **6** were **opposed**, **4** were **uncommitted**, and **5** expressed **conditional support**.

PI No. 0016618 (SR 30/US 280 Widening): Of the **43** respondents who formally commented on PI No. 0016618, **25** were in **support** of the project, **5** were **opposed**, **1** were **uncommitted**, and **12** expressed **conditional support**.

PI No. 0019451 (Old Cuyler Road at I-16 Interchange): Of the **42** respondents who formally commented on PI No. 0019452, **31** were in **support** of the project, **3** were **opposed**, **5** were **uncommitted**, and **3** expressed **conditional support**.

The Georgia Department of Transportation (Georgia DOT) has prepared a single response letter that addresses all questions and comments received during the comment period (via the project website and the in-person PIOH) which are summarized below (in *italics*) followed by our response.

- *Commenters raised the issue of semi-trucks using the US 280 exit to get to US 80 to avoid the weigh station on I-16. The construction of the Frontage Road will result in more trucks using the US 280 exit to bypass the weigh station, particularly once it's connected to the new interchange. This is adding a lot of unnecessary traffic to US 280.*

Law enforcement is outside the authority of the Georgia DOT. However, the Georgia DOT is aware of this issue and will continue to work with local law enforcement and the Motor Carrier Compliance Division to enforce compliance with applicable laws and regulations.

- *Has it been considered to build a separate exit off I-16 to the Hyundai plant at the GSP weigh station to divert traffic, particularly truck traffic, away from US 280?*

Georgia DOT PI No. 0019451 proposes the construction of a new interchange at Old Cuyler Road, east of the GSP weigh station. This project is anticipated to divert traffic associated with the Hyundai plant, including truck traffic, away from the US 280 interchange.

- *Jernigan Road should be upgraded to route the remaining traffic onto US 280 as far south of the proposed roundabouts as possible.*

Jernigan Road south of I-16 is in the location of the Bryan County Mega-Site development. South of the proposed I-16 Frontage Road (Georgia DOT PI No. 0019452) alignment, Jernigan Road is being removed as part of the Mega-Site development. Once the new I-16 interchange is constructed at Old Cuyler Road as part of Georgia DOT PI No. 0019451, Bryan County has plans to remove access across I-16 via Jernigan Road.

- *US 280 should be widened from US 80 south to Wilma Edwards Road.*

The Georgia DOT recognizes the need for improvements along US 280. There is a project (Georgia DOT PI No. 0004779) to widen US 280 from SR 119 to US 80 in Georgia DOT's long-range plan.

- *Commenters feel as though US 280 needs to be widened as soon as possible.*

The US 280/SR 30 Widening project is anticipated to be Let to construction in August 2023 under a Design-Build delivery method. The project is projected to be open to traffic by March 2025.

- *There are too many roundabouts proposed. Is there a way to decrease the number of roundabouts, and possibly make one large roundabout at Dillon Road and Frontage Road (with 6 entry points instead of the standard 4)? Please install traffic lights instead of roundabouts along US 280. Roundabouts are difficult for semis and people with campers to maneuver.*

Traffic projections and the high volume of trucks anticipated indicate that traditional signed or signalized intersections would cause undue delay at major project area intersections. This delay is largely attributed to the large volume of traffic that will need to make left turns into the Mega-Site, left turns onto/from I-16, and turns to access planned, future development(s) in the area. Roundabouts are a very efficient method of handling the traffic patterns anticipated at these intersections and are anticipated to reduce delay times as compared to a traditional signal.

Additionally, roundabouts demonstrate several safety and operational benefits over traditional stop-controlled and traffic light-controlled intersections. Roundabouts, by their nature, allow for a steadier traffic stream (as opposed to signals or all-way stops) and allow for a more efficient traffic operation while still reducing the potential for crashes. Roundabouts have fewer conflict points compared to a conventional traffic light-controlled intersection, have lower speeds, and have been found to reduce crashes, crash severity, traffic delays, fuel consumption, and air pollution. Because of the large volume of trucks anticipated on this project, the roundabouts are being designed so that trucks can circulate through the roundabout without encroaching on adjacent travel lanes.

A single large roundabout at Dillon Road and Frontage Road is not proposed because of increased right-of-way and construction impacts and because it would be more difficult to limit speed within the large roundabout.

- *One commenter requested that US 280 be widened away from Aspen Lane.*

Based on preliminary design, the Georgia DOT is proposing to widen US 280 to the west side, away from Aspen Lane.

- *One commenter asked that right-turn and left-turn lanes be implemented along the widened US 280 and make the storage in those lanes long enough to accommodate large trucks.*

Where feasible, a two-way left-turn lane is proposed to be provided along the widened US 280 south of the proposed Frontage Road, which would provide storage capacity for large trucks.

- *Please include widening of the US 280 overpass as part of this project.*

Widening of the US 280 overpass is not part of the scope for PI No. 0016618. However, Georgia DOT has programmed a long-range project, PI No. 0004779, which proposes widening US 280 from SR 119 to US 80. The US 280 overpass will be evaluated under PI No. 0004779. Georgia DOT maintains ongoing efforts to evaluate the needs of the US 280 interchange. The new proposed interchange at Old Cuyler Road will help alleviate traffic volumes at the I-16/US 280 interchange by providing another access point to I-16.

- *Respondents inquired about how the Frontage Road should not connect to US 280 in the area currently proposed due to the proximity of that intersection to the other proposed roundabouts as well as worry about Frontage Road being on a hilltop.*

Intersection sight distance at the US 280/Frontage Road intersection will be evaluated and designed to current Georgia DOT standards. A roundabout is proposed at this intersection as part of PI No. 0016618. Given the proximity of this intersection to other nearby intersections, the proposed roundabout design would allow for operations of those nearby intersections.

- *Frontage Road entrance and exit needs to be clearly signed.*

Frontage Road will be adequately signed in accordance with Georgia DOT guidelines.

- *Commenters request that there are no obstructions to sight distance along US 280 at the side roads and driveways.*

As part of project design, intersection sight distance will be evaluated and designed based on current Georgia DOT standards.

- *The drainage problems along US 280 need to be addressed.*

The proposed drainage design for the US 280 Widening project will meet current Georgia DOT drainage design manual requirements.

- *The proposed traffic signal at the Southern Access Road to the Mega-Site is on a hill and might not be visible if you are traveling east on US 280.*

The signal at the Southern Access Road will be designed to achieve adequate sight distance. If needed, advanced warning signs will be added at the approaches to the signal.

- *The southern terminus of the US 280 widening project should end with a right-turn lane onto Olive Branch due to the high number of vehicles turning there.*

The project team has evaluated this request and has added a proposed southbound right-turn lane onto Olive Branch Road.

- *Commenters would like to see bike lanes and sidewalks installed along US 280/SR 30.*

Currently, sidewalks are only proposed to be constructed in areas where there are existing sidewalks. The design team will evaluate pedestrian/bike warrants for the corridor as part of project development. The construction of the project would not preclude the construction of sidewalks and/or bicycle facilities along US 280 in the future.

- *The proposed project will help alleviate the large volumes of traffic that are existing and projected.*

The proposed project would provide more efficient access for motorists and freight traveling to and from the new development site, and the surrounding area. Specifically, PI No. 0019452 would provide east-west access and connectivity between US 280/SR 30 and the major economic development under construction in this area. PI No. 0016618 would improve traffic operations at the US 280/I-16 interchange ramp terminals and other intersections along US 280 and would accommodate future traffic generated by current and planned future economic development adjacent to US 280. PI No. 0019451 would improve traffic operations and traffic safety by diverting traffic away from other local roads and the existing US 280/SR 30 interchange and would provide new access to I-16 in the area.

- *Commenters reacted in support of the project and discussed how the new interchange will divert traffic from US 280 and its residential areas.*

Thank you for your support. As noted above, PI No. 0019451 would improve traffic operations and traffic safety by diverting traffic away from other local roads and the existing US 280/SR 30 interchange and would provide new access to I-16 in the area.

- *Widening US 280 will increase the already high volumes of truck traffic using US 280. The amount of truck traffic coming off the I-16 interchange at US 280 is too high and the trucks cause issues with safety.*

The large volume of truck traffic utilizing US 280 and surrounding roads is the result of ongoing area development. Vehicular traffic (including trucks) is anticipated to continue to increase in the future due to continued area development with or without the proposed transportation improvement project. The proposed transportation improvement project would not increase the demand for truck usage of the corridor. Rather, the proposed project aims to help alleviate some of the operational challenges associated with these high anticipated future traffic volumes.

The construction of roundabouts at the I-16/US 280 interchange ramps as part of Georgia DOT PI No. 0016618 would improve safety and operations at this interchange. Roundabouts have been shown to improve safety, promote traffic calming/lower speeds, reduce conflict points, and improve overall operational performance of intersections. Additionally, the new interchange proposed at Old Cuyler Road under PI No. 0019451 would move some of the truck traffic using the I-16/US 280 interchange to the new interchange, further improving congestion.

- *The new Hyundai plant needs a new interchange/exit for the traffic that will come to and from the plant.*

PI No. 0019451 would provide a new interchange/exit for the traffic that will come to and from the plant.

- *Can GDOT force all truck traffic for the Hyundai plant to use the new interchange at Old Cuyler Road to access the Frontage Road and plant instead of US 280?*

Drivers will utilize the most efficient routes for their destinations. Georgia DOT will provide proper signage for the new interchange and Frontage Road but cannot direct drivers to use specific routes.

- *Multiple inquiries about the speed limit along US 280 and requests that it be decreased.*

An Engineering and Traffic Investigation Report was conducted in April 2021 by the Georgia DOT Office of Traffic Operations for US 280, beginning at Mile Post 19.94 and continuing east to Milepost 20.92. As a result of this study, this section of US 280 has been recommended for a posted speed reduction from 55 miles per hour (mph) to 45 mph.

- *Will the roundabouts slow traffic down?*

Yes. For this proposed project, the design of the roundabout would slow vehicle speeds through the intersection to 25 mph.

- *What is the plan for the US 280/Wilma Edwards Road intersection? This intersection is very dangerous. Increased US 280 traffic will make this worse.*

Bryan County is currently working to design a roundabout at the intersection of Wilma Edwards Road and US 280. Please direct additional questions to Kirk Croasmun, Bryan County Department of Engineering (kcroasmun@bryan-county.org).

- *Request for truck traffic to be removed from Highway 80.*

The purpose of PI No. 0019452 is to provide east to west connectivity on the south side of I-16. The purpose of PI No. 0019451 is to provide new connectivity to I-16 from Old Cuyler Road. The purpose of PI No. 0016618 is to increase capacity and provide operational improvements to US 280 in the area of the I-16/US 280 interchange and the Bryan County Mega-Site development in an effort to relieve congestion associated with future anticipated traffic volumes. Because US 80 is outside the project limits, improvements to this route would not contribute to the need and purpose of PI No. 0016618. However, the proposed project listed above and presented at the PIOH does not preclude future improvements along US 80. Your comment has been shared with the Georgia DOT and Bryan County.

- *Request traffic signals be installed at the I-16 eastbound and westbound ramps at US 280 to relieve traffic until the roundabout construction is complete.*

The Georgia DOT District 5 Traffic Operations Division is currently working on providing temporary signals at the I-16 eastbound and westbound ramps on US 280. The intersections are currently being evaluated to place signals to alleviate traffic congestion until the roundabouts can be constructed under PI No. 0016618.

- *Will the overpass at Olive Branch Road at I-16 be replaced at the same time as the US 280 interchange work is occurring? I am worried that if the work is occurring at the same time, there may be limitations on getting in or out of the area in the event of emergencies (e.g., weather events).*

The I-16 bridge over Olive Branch Road (PI No. 0016507) is not anticipated to begin construction until 2026. The widening of US 280 will begin in 2024. The two projects are not expected to have overlapped construction timelines.

- *Commenters requested a roundabout at US 280 and Bill Futch Road.*

As noted above, Bryan County is currently working to design a roundabout at the intersection of Wilma Edwards Road and US 280. Due to the proximity of Bill Futch Road to Wilma Edwards Road, a roundabout is not feasible at the Bill Futch Road intersection with US 280. However, because Bill Futch Road and Wilma Edwards Road intersect just northwest of US 280, the roundabout at Wilma Edwards Road is anticipated to improve access to Bill Futch Road. Please direct additional questions to Kirk Croasmun, Bryan County Department of Engineering (kcroasmun@bryan-county.org).

- *These projects affect people that have lived in this area. We do not support the Mega-Site project and associated development.*

The Georgia DOT is proactively responding to the transportation needs of this community based on a thorough analysis of current and future needs and demands related to the new Mega-Site development, along with other area developments. The Georgia DOT recognizes that there is a need to provide roadway enhancements and improvements that offer efficient access to the new development, as well as reduce potential future traffic congestion and improve the surrounding infrastructure for all users, including the local communities it serves.

- *The projects and development are destroying wildlife habitat.*

Clearing of wildlife habitat has occurred for the development of the Mega-Site. Additional clearing would be necessary for the proposed roadway improvements. Georgia DOT is assessing impacts to wildlife habitat in the Ecology Resources Survey and Assessment of Effects reports prepared for each roadway improvement project. In addition, Georgia DOT will work with our partnering agencies to ensure proper avoidance and minimization measures are in place for wildlife and protected species during the construction phases of the proposed project.

- *The project protects historic Pembroke.*

No impacts to historic Pembroke are anticipated as a result of the proposed roadway improvement project.

- *There is a problem with tree limbs covering the speed limit signs south of Olive Branch Road, so no one slows down.*

This maintenance issue been shared with the Georgia DOT District 5 Office.

- *Commenters requested that Tar City Road be renamed to Jernigan Road.*

A request has been made with Google Maps to change the Tar City Road name to Jernigan Road. Project documents refer to this road as Jernigan Road.

- *Request turn lanes where SR 119 and US 80 intersect.*

Given the location of this intersection is well outside the project limits and within Bulloch County, improvements to this intersection would not meet the need of the proposed project as referenced above. However, your comment has been shared with the Georgia DOT District 5 Engineer.

- *What is planned at the intersection of US 80 and 280?*

Georgia DOT currently has a programmed project, PI No. 0018386, which proposes improvements at the intersection of US 80 and US 280. The anticipated intersection control would be a multi-lane roundabout including pedestrian facilities and lighting.

- *Can widening be adjusted to include more land on the left side of 280 heading southwest from I-16?*

Georgia DOT makes every attempt to minimize property acquisition and relocations during the project design phase. For PI No. 0016618, the widening is proposed to occur primarily to the west side (left) of US 280, approaching I-16, in order to minimize utility impacts on the east side of US 280. Right-of-way impacts along US 280 will be further evaluated to minimize property impacts as the road alignment is finalized.

Again, thank you for your feedback. Should you have further questions or comments, please call the project manager, Ron Nelson, at 912-424-9112 or the environmental analyst, Erin McGehee, at 470-259-6329.

Sincerely,



Eric Duff
State Environmental Administrator

ED/EM/LB

cc: Ann R. Purcell, Georgia DOT Board Member (District 1)
Lehman Franklin, State Representative (District 160)
Ben Watson, State Senator (District 1)
Ron Nelson, Georgia DOT Project Manager (via email)
PDF for Project File

Attachment 10

Directed Scope Concept Memo

Memorandum

PIs 0019452, 0016618, and 0019451: Bryan County Mega-Site

Project Name

Bryan County Mega-Site
PIs 0019452, 0016618, and 0019451
Georgia Department of Transportation (GDOT) Office
of Alternative Delivery

Date

February 1, 2023

Submitted To

GDOT Office of Alternative Delivery and
Program Management Consultant

Subject

Directed Scope Concept Summary Memorandum

DIRECTED SCOPE CONCEPT SUMMARY MEMORANDUM

Purpose

On July 21, 2022, the State of Georgia executed an Economic Development Agreement (EDA) among Hyundai Motor Group METAPLANT America, LLC, the State of Georgia and the Georgia Department of Economic Development (GDEcD), and Savannah Harbor-Interstate 16 Corridor Joint Development Authority of Bryan County, Bulloch County, Chatham County, and Effingham County (JDA).

This memo summarizes GDOT's role in fulfilling portions of the EDA, on behalf of the State of Georgia, relating to the transportation infrastructure commitments within the agreement. To fulfill the obligations of the State of Georgia, the following projects have been programmed:

PI	Project Name
0019452	I-16 Frontage Road
0016618	US 280/SR 30 Widening
0019451	I-16/Old Cuyler Road Interchange

The purpose of this memorandum is to provide documentation of project scope that has been directed by GDOT leadership to meet the requirements of the EDA in a timely manner.

Related Documentation

The following documents have been executed and provide direction regarding the State of Georgia's commitments:

Economic Development Agreement

The EDA, executed on July 21, 2022, details commitments and provisions among the State of Georgia, Hyundai, and the JDA. GDOT is fulfilling certain transportation commitments, including those within Section 2.4.d and Exhibit A-10-1, of the EDA. This includes construction of an I-16 Frontage Road between US 280/SR30 and Old Cuyler Road, the widening of US 280/SR 30, and a new interchange, Old Cuyler interchange, on I-16.

Old Cuyler Interchange Justification Report (IJR)

An IJR is being prepared by GDOT for execution by the Federal Highway Administration (FHWA). This IJR examines the transportation demand generated by existing conditions and various proposed developments in the vicinity of US 280 / SR 30 and Old Cuyler Road and evaluates interchange alternatives for I-16 and Old Cuyler Road. The IJR will recommend an interchange configuration based on the results of the alternatives analysis.

Memorandum of Understanding (MOU)

JDA will obtain the stream and wetland mitigation credits required in connection with obtaining the required Wetland Permit under Section 404 of the Clean Water Act for the Mega Site development, which includes the I-16 Frontage Road.

Project Components

GDOT's Program Management Consultant (PMC) and General Engineering Consultant (GEC) were tasked with coordination with the JDA and Hyundai. Through close coordination with all parties of the EDA, including participation of GDOT leadership, the following design elements, layout configurations, and criteria have been selected on the listed projects:

PI 0019452 – Frontage Road from US 280/SR 30 to Jernigan Road:

This project proposes to construct a new frontage road along the south side of I-16. Further description of the project is given below. Refer to Attachment 2 for the proposed Typical Sections. This project:

- Begins south of and parallel to I-16 from US 280/SR 30 and ends approximately 500' east of Jernigan Road.
- Proposes a design speed of 45 mph.
- Includes a 4-lane section with a 20-foot raised median and rural shoulders.
- Excludes the purchase of any additional right-of-way (ROW) or easements for project construction.
- Proposes a traffic signal at the intersection of Frontage Road and US 280/SR 30 (Intersection Control Evaluation [ICE] waived). This traffic signal will be an interim condition before PI 0016618 constructs a roundabout at this intersection (see below).
- Proposes a Hot Mix Asphalt (HMA) pavement section due to contract time duration limitations (waiver of Pavement Type selection)
- Maintain access to the existing Jernigan Road bridge during and after construction of the Frontage Road. Existing bridge clearances over I-16 will be maintained.
- Full access to Dillon Drive and the Parker's Kitchen property will be maintained from US 280/SR 30 during construction of the Frontage Road. [Note: Dillon Drive and the Parker's Kitchen property will convert to a right-in and right-out after construction of the roundabouts under PI 0016618, as described below).

GDOT will:

- Identify various access locations and requirements for the Hyundai development, including intersections and driveways along the Frontage Road.
- Evaluate potential lighting along the Frontage Road with a warrant analysis and in coordination with the JDA and the EDA

- Coordinate access for the Quick Start driveways along the proposed Frontage Road
- Hold one combined Public Information Open House (PIOH) for all three projects/PIs

PI 0016618 – US 280 / SR 30 Widening:

This project proposes to widen US 280 / SR 30 from two travel lanes to four travel lanes with a flush median. Further description of the project is given below. Refer to Attachment 2 for the proposed Typical Sections. This project:

- Begins south of the Olive Branch Rd Junction with US 280/SR 30 and extends north of I-16 ramp termini to the Oracal Parkway/Interstate Centre Boulevard intersection.
- Proposes a design speed of 45 mph for US 280/SR 30 from the Frontage Road to Oracal Parkway/Interstate Centre Boulevard, and a 55 mph design speed south of the Frontage Road to the southern project limits.
- Widens US 280/SR 30 from its existing 2-lanes to 4 travel lanes (two in each direction), rural shoulders (except at the Love's facility), and a 14-foot flush median south of Frontage Road and variable-width raised median north of Frontage Road.
- Provides intersection improvements in the form of roundabouts at the intersections of US 280/SR 30 with the eastbound and westbound I-16 ramp terminals, the I-16 Frontage Road (PI 0019452), Dillon Drive, and Oracal Parkway/Interstate Centre Boulevard [ICE requirements waived]
- Proposes HMA pavement section for the circulatory portion of the roundabouts (waiver of Pavement Type selection)
- Provides a turnaround option along US 280/SR 30 south of Olive Branch Road
- Install a traffic signal at the US 280/SR 30 intersection with the Southern Access Road (to be constructed by others) [ICE requirements waived]
- Retains the existing bridges over I-16. No pedestrian or bicycle facilities will be provided on these bridges.
- Provides full access/median opening and stop control at the Love's Travel intersection with US 280/SR 30 [ICE requirements waived]

GDOT will:

- Identify various access locations and requirements for the Hyundai development, including intersections and driveways along US 280/SR 30
- Costing plans exclude a Pavement Evaluation Survey (PES).
- Hold one combined PIOH for all three projects/PIs

PI 0019451 -- I-16 at Old Cuyler Road Interchange:

This project proposes to construct a new service interchange at Old Cuyler Road on I-16. Further description of the project is given below. Refer to Attachment 2 for the proposed Typical Sections. This project:

- Realigns a section of Old Cuyler Road north of I-16 and develops a new interchange by constructing a new bridge over I-16
- Extends the Frontage Road typical section constructed under PI 0019452 from approximately Jernigan Road to the new interchange
- Proposes a 2-lane section for Old Cuyler Road that will tie into to a Bryan County Oracal extension project, a 4-lane bridge section with raised 20-foot median for the new interchange on I-16, and a 2-lane connection to Cuyler Road

- Proposes a design speed of 45 mph for the realigned section of Old Cuyler Road

GDOT will:

- Evaluate intersection alternatives at the eastbound and westbound I-16 ramp terminals (to be completed in the IJR)
- Evaluate intersection alternatives connecting the proposed new interchange to the I-16 Frontage Road (constructed under PI 0019452)
- Evaluate potential lighting along the interchange
- Hold one combined PIOH for all three projects/PIs

Adoption of Projects

In fulfillment of the State of Georgia's commitment made within the EDA, GDOT adopts the scope and design of the projects as described above.



Meg Pirkle, P.E.
Chief Engineer, GDOT

2-16-2023

Date

Attachments

Attachment 1: Excerpts from the EDA referenced within this Memo

Attachment 2: Typical sections as directed to align with GDOT's commitments within the EDA

Attachment 1:

Excerpts from the EDA referenced within this Memo

Mitigation to exceed \$30,645,000 (the “**Total Wetland Mitigation Budget**”), then the Company and Battery JV shall be responsible for the payment of all costs of the Wetland Mitigation above the Total Wetland Mitigation Budget directly arising from or attributable to such changes or modifications. In the event the Wetland Mitigation is completed for a cost less than the Total Wetland Mitigation Budget, the Company shall not be entitled to any remaining portion of the Total Wetland Mitigation Budget. The Public Parties shall cause the completion of the Wetland Mitigation to occur on or prior to wetlands being impacted.

(c) **UTILITIES.** Water and wastewater infrastructure and services are to be provided to the Project Site by Bryan County Water and Sewer Department (the “**Water & Sewer Utility**”). The JDA will use its commercially reasonable efforts (i) to coordinate with the Water & Sewer Utility in assisting the Company in obtaining water and wastewater service to the Project Site as desired by the Company, (ii) to cause a third party provider to provide electric distribution lines to a mutually agreeable point of service on the Project Site, (iii) to cause the City of Claxton/Municipal Gas Authority to provide natural gas distribution lines to a mutually agreeable point of service on the Project Site, (iv) to cause Pembroke Advanced Communications (“**PAC Fiber**”) to provide telecommunications services (including without limitation fiber services) for the Project Site, and (v) to assist the Company with negotiating contracts for services and lines on terms and conditions as favorable to the Company as those offered to other comparable institutional customers. Letters from the City of Claxton/Municipal Gas Authority, and PAC Fiber regarding availability of service and costs are attached hereto as **Exhibit J**.

(d) **ROADS.** At the State’s sole cost and expense, the State, through the Georgia Department of Transportation (“**DOT**”) and its contractors, shall construct certain on-site and off-site roadway improvements with respect to the Project in accordance with the proposed layout of the Project Site as shown on **Exhibit A-10-1**, including clearing and grubbing, drainage, grading, structure, base, paving, utility relocation and related improvements and transportation infrastructure (the “**State Roadway Improvements**”). The State Roadway improvements shall include the widening of a portion of Highway 280 from two (2) to five (5) lanes, construction of a frontage road, intersection improvements, and the addition of a second interchange on Interstate-16. The Company will allow the State to utilize reasonable portions of the Company Site and the Battery JV Site as is reasonably necessary for the construction and operation of the State Roadway Improvements pursuant to easement or license agreements that are in forms reasonably approved by the Company, and will otherwise cooperate with DOT as may be reasonably requested by DOT in the construction of the State Roadway Improvements. The State will deliver the Highway 280 and related intersection improvements (including traffic signals) in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types and including traffic signals, but may not yet include ancillary improvements, including without limitation landscaping and lighting, which will be completed by DOT also) not later than March 31, 2025; and further deliver the frontage road in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types and including traffic signals, but may not include ancillary improvements, including without limitation landscaping and lighting, which will be completed by DOT also) not later than December 31, 2024; and further deliver the second Interstate-16 interchange in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types including traffic signals, but may not include ancillary improvements, including without limitation landscaping and lighting, which will be completed by DOT also) not later than March 31, 2027, but using all

commercially reasonable efforts to deliver sooner than that. The State Roadway Improvements are subject to DOT Board approval, and any other conditions contained within that DOT Commitment Letter at **Exhibit A-10-2**.

At the JDA's sole cost and expense, the JDA, through its contractors, shall construct certain on-site and off-site roadway improvements with respect to the Project in accordance with the proposed layout of the Project Site as shown on **Exhibit A-10-3**, including clearing and grubbing, drainage, grading, structure, base, paving and related improvements and transportation infrastructure (the "**Second Access Road**", together with the State Roadway Improvements, the "**Public Roadway Improvements**"). The Company and the Battery JV will allow the JDA to utilize reasonable portions of the Company Site and the Battery JV Site as is reasonably necessary for the construction and operation of the Second Access Road pursuant to easement or license agreements that are in forms reasonably approved by the Company and will otherwise cooperate with JDA as may be reasonably requested by JDA in the construction of the Second Access Road. The JDA will deliver the Second Access Road in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types and including any traffic signals, but may not include ancillary improvements, including without limitation landscaping and lighting, which will be completed by JDA also) not later than June 30, 2023.

All Public Roadway Improvements constructed or improved in connection with the Project will be dedicated for public use, and accepted by the relevant applicable Public Party. The Company and the Battery JV agree to provide the Public Parties with all necessary site plans, at the Company's and or the Battery JV's expense and in a timely manner, such that construction of the Public Roadway Improvements may be planned and completed in accordance therewith. The Public Roadway Improvements will be constructed to specifications determined by the Public Parties with input from the Company, which shall meet all requirements of the State and the relevant county for the intended use of the Project. The Public Parties will cause DOT and all other applicable third parties who control road construction to help ensure that all public roads for ingress and egress to the Project Site shall be reasonably sufficient to allow the Company and the Battery JV to operate the Project for the purposes intended, including but not limited to obtaining all appropriate and/or desirable permits or approvals in connection with Public Roadway Improvements or other infrastructure improvements. The rights-of-way for the proposed Public Roadway Improvements or other State roads servicing the Project Site will be retained by the appropriate Public Party and will not be a part of the Project Site. Notwithstanding the foregoing, the Company and the Battery JV shall have the right to use all public roads in connection with its use of the Project Site in the same manner as the general public and to allow the Company and the Battery JV to operate the Project for the purposes intended at no additional cost to the Company or the Battery JV or the other Private Parties. The costs of completing and delivering the State Roadway Improvements shall be directly borne by DOT. The costs of completing the delivering the Second Access Road shall be directly borne by the JDA.

The State and the JDA each agree to take all steps required to rename a portion of Highway 280 adjacent to the Project Site to "Hyundai Way" and the frontage road to "Genesis Drive."

The Company and the Battery JV agree that, during the construction of the Public Roadway Improvements, all traffic on to or off of the Project Site shall be confined to the Temporary Access Road, as shown on **Exhibit A-10-3**. JDA agrees to improve the Temporary Access Road to a two-

lane temporary construction road in accordance with industry standards and will use commercially reasonable efforts to have such road completed by no later than November 30, 2022. The Company further agrees that, following completion of the Second Access Road, all construction vehicles shall continue to use the Temporary Access Road. In the event the Second Access Road is damaged through its use by Company, Company Representatives, Affiliate Suppliers, or Battery JV, beyond normal business use, the Company shall bear the cost of repairs undertaken by the JDA or its contractors.

(e) **RAILROAD.** The only short line railroad proximate to the Project Site is Georgia Central Railway, L.P. (“GC”), a subsidiary of Genesee & Wyoming Inc. The Company is discussing with GC the provision of rail service to the Company Site. Each of the Public Parties shall use its commercially reasonable efforts to assist the Company in its negotiations with GC for an agreement which will provide for rail service for the Company on terms and conditions as favorable to the Company as those offered to other vehicle manufacturers that are served by GC with comparable volumes of vehicles to be transported. Additionally, the JDA, using legislatively appropriated funding in the amount of \$6,872,800, which will be provided through an intergovernmental agreement with DOT, will cause, through an agreement with the GC, the construction of a portion of a rail extension to the Project Site, in an amount not to exceed \$6,872,800, as more particularly shown in **Exhibit A-3**. The Company shall complete or cause to be completed any remaining portion of the rail extension or any other rail related improvements in connection with the Project and shall be responsible for any such costs. The Public Parties shall work together to implement all rail improvements in a manner that is as cost efficient as possible, including the use of a single contractor, if needed. GC has agreed to undertake construction of a portion of the rail extension, subject to receipt of the \$6,872,800 and execution of an agreement with the JDA, as more particularly described in the letter attached as Exhibit G hereto.

(f) **PUBLIC ENTITY CONSTRUCTION CONTRACTS.** All contracts entered into by the Public Parties for Site Infrastructure Work shall be procured and carried out in compliance with Chapter 91, Title 36 of the Code, or other applicable public bidding requirements of the Public Parties. To the extent that any Site Infrastructure Work has not been fully completed by the Closing, then the obligations of the Public Parties with respect to such Site Infrastructure Work shall continue in full force and effect following the Closing. The Public Parties represent that any of the incentives offered to the Private Parties by any of the Public Parties are not subject to any local procurement requirements under the state or local procurement codes or laws applicable to any part of the Project to the extent the construction and procurement for the Project is conducted by the Private Parties or their contractors under the direction of the Private Parties or their Affiliates. Notwithstanding the foregoing, any Project work undertaken by the Public Parties shall be subject to state and local procurements codes or laws.

2.5 PROJECT SITE PERMITTING

(a) **ASSISTANCE WITH PERMITS.** The Public Parties shall use commercially reasonable efforts to assist the Company in applying for and pursuing permits which are necessary or desirable in connection with site development and operations of the Project. The County has provided a letter, a copy of which is attached hereto as **Exhibit A-10-4**, committing to use commercially reasonable efforts to assist the Company with obtaining and to expedite processing of all County permits which are necessary or desirable in connection with site development and operations of

EXHIBIT A-10-1

PROJECT SITE PUBLIC ROADWAY IMPROVEMENTS LAYOUT

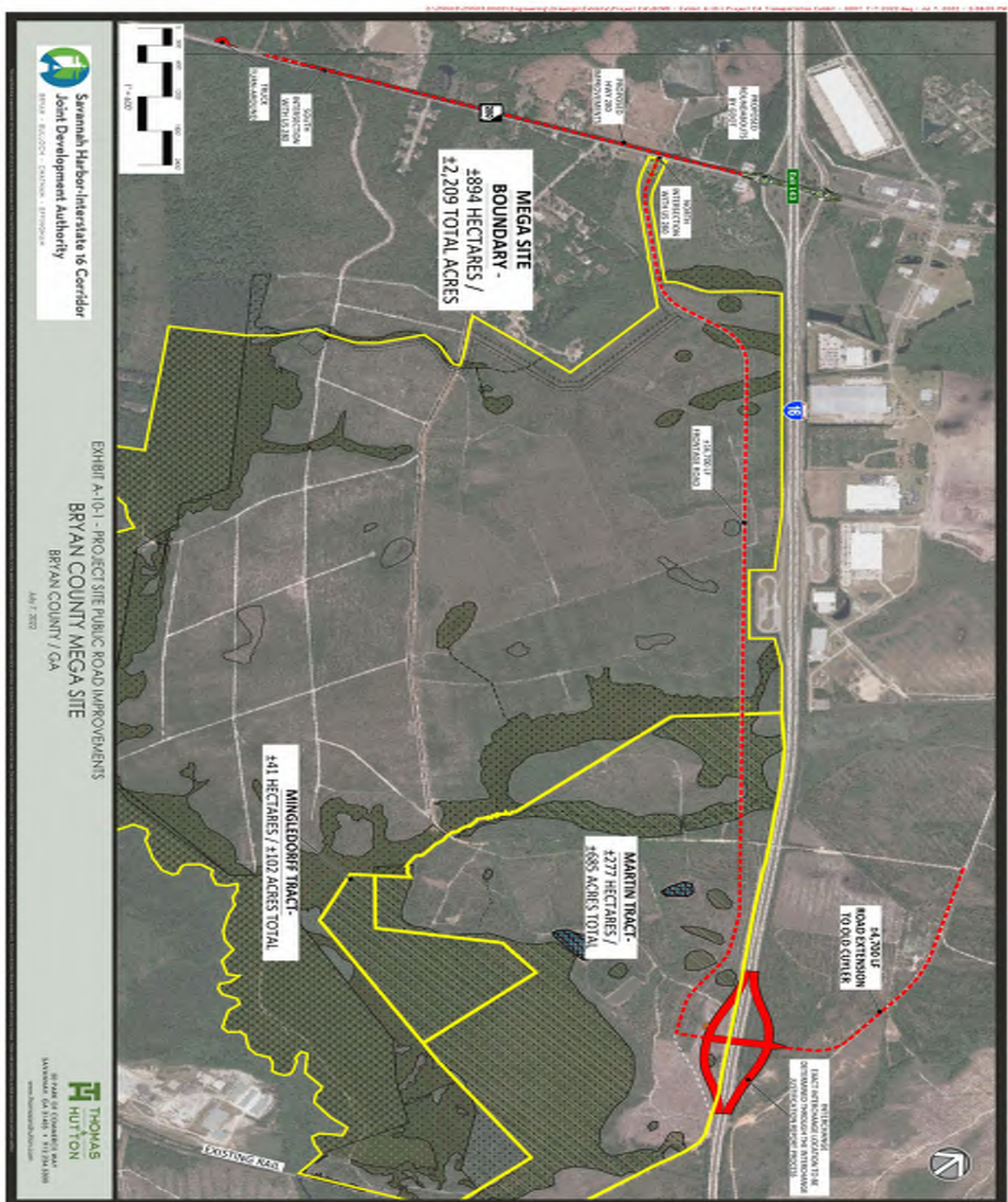


EXHIBIT A-10-2

GEORGIA DEPARTMENT OF TRANSPORTATION COMMITMENT LETTER



Russell R. McMurtry, P.E., Commissioner
One Georgia Center
600 West Peachtree Street, NW
Atlanta, GA 30308
(404) 631-1000 Main Office

June 27, 2022

Mr. Pat Wilson, Commissioner
Georgia Department of Economic Development
75 Fifth Street NW, Suite 1200
Atlanta, Georgia 30308

Hyundai Motor Group Metaplant America, LLC
10550 Talbert Avenue
Fountain Valley, California 92708
Attn: Young Lee, Manager

Dear Commissioner Wilson and Mr. Lee:

Please accept this letter as further confirmation of the Georgia Department of Transportation's ("GDOT") commitment to fund and implement the following transportation improvements projects to support the Bryan County Megasite and Project EA:

1. Construction of new I-16 adjacent Frontage Road from US 280 to New Interchange; 4 lanes:

Delivery (including traffic signals or other appropriate intersection improvements at Frontage Road terminals) in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types and including traffic signals, but may not yet include ancillary improvements, including without limitation landscaping and lighting, which will be completed by DOT also) by no later than December 31, 2024, with GDOT to use good faith efforts to expedite construction for completion by October 1, 2024.

2. Widening of Hwy 280 from I-16 to Access Road #2 from 2 to 5 lanes; including roundabouts:

Delivery (including traffic signals or other appropriate intersection improvements at both the Access Road #2 terminal and roundabouts at I-16 ramps) in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types and including traffic signals, but may not yet include ancillary improvements, including without limitation landscaping and lighting, which will be completed by DOT also) by no later than March 31, 2025.

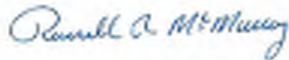
3. New I-16 Interchange for Southeast Access to the site:

With required submission and approval of the Interchange Justification Report to the Federal Highway Administration, delivery (including traffic signals or other appropriate intersection improvements) in a substantially completed condition (meaning that such improvements are capable of supporting vehicular travel of all types and including traffic signals, but may not yet include ancillary improvements, including without limitation landscaping and lighting, which will be completed by DOT also) by no later than March 31, 2027.

With required approval by the State Transportation Board, these improvements shall be delivered, as outlined in the Economic Development Agreement between Hyundai Motor Group Metaplan America LLC, the State of Georgia and the Georgia Department of Economic Development, and the Savannah Harbor-Interstate 16 Corridor Joint Development Authority.

The State Transportation Board is expected to approve inclusion of the above projects into GDOT's construction work program on August 18, 2022, as required. Additionally, funding is identified and committed, and the remaining projects detailed above have been fully programmed or are being programmed as required to enable completion.

Sincerely,



Russell R. McMurtry, P.E.
Commissioner



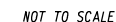
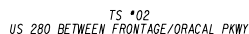
Jannine Miller
Director of Planning

Attachment 2:

Typical sections as directed to align with GDOT's commitments within the EDA



RECEIVED	DATE	05-0001
DISPATCHED	DATE	
COMPLETED	DATE	
RECEIVED	DATE	



CHECKED:	DATE:	DRAWING No. 05-0001
RECHECKED:	DATE:	
CORRECTED:	DATE:	
APPROVED:	DATE:	

CREATED:	DATE:	DRAWING No. 05-0001
BACKLOGGED:	DATE:	
CONNECTED:	DATE:	
REMOVED:	DATE:	

