

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT**

Project Number: NHS00-0001-00(570)

Counties: Mitchell/Thomas

P. I. Number: 0001570

Federal Route Number: 19

State Route Number: 3/300

The US19/SR300 median crossovers at CR 127/Marshall Street and Mitchell County MP 0.00 in proximity to SR 111 in Thomas County do not meet GDOT Design Policy Manual median opening spacing requirements and should be closed. The CR 246/Old Monticello Road and SR 202/CR247/County Line Road intersections should be removed from the project concept. MP 12.59/Constitution Avenue median crossover in Thomas County should be removed from the project concept.

Submitted for approval:

DATE 3/16/2011

Russell L. McManis
State Roadway Design Engineer

DATE 3/17/2011

Bobby Stalward
State Program Delivery Engineer

DATE 3/17/11

Jeremy T. Buday
Project Manager

Recommendation for approval:

DATE 3-23-11

Glenn Bowman (Recommendation on file)^{CC}
State Environmental Administrator

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 3-30-11

Cynthia L. Naupe
State Transportation Planning Administrator

REVISED PROJECT CONCEPT REPORT

P.I. Number: 0001570

Project Number: NHS00-0001-00(570)

Counties: Mitchell/Thomas

Need and Purpose: Crash data for the years of 2006-2008 show 49% of the accidents are rear end, 22% are angle intersecting, 19% are non-collision with a vehicle, 8% are side swipe and 2% are head on. In 2007 and 2008, the crash rates exceeded the statewide average for a similar facility, including one fatality each year. A need exists to reduce the crash frequency at the intersections along the proposed project corridor. The offset left turn lanes will improve sight distance to oncoming traffic. The construction of these turn lanes will allow vehicles to move out of the flow of traffic to decelerate. To reduce crash frequency and severity by helping to eliminate angle intersecting, rear end and side swipe crashes, these improvements are recommended.

Project location: The project begins approximately 3.03 miles south of the Thomasville City Limits (MP 10.50) in Thomas County, and runs north to approximately 1215 feet north of the Thomas County/Mitchell County line (MP 0.23) on SR 3/SR 300/US 19. The project length is 21.31 miles.

Description of the approved concept: At various locations on this corridor the existing median crossover will be reconstructed to provide Type “B” Median Crossovers – Offset left turn lanes for SR 3. The existing Type “A” Median Crossovers – Adjacent Left Turn Lanes will be reconstructed as Type “B” Median Crossovers. Right turn lanes will also be constructed and/or extended to meet speed design deceleration distances at various locations. Right turn lanes will only be constructed if they can be done within the existing right of way. The locations as shown in the approved concept are:

Thomas County

CR 219/Sunset Drive	CR 192/St. Mary’s Church Road
CR 246/Old Monticello Road	CR 79/Fredonia Road
CS 7891/Heritage Drive	SR 202 & CR 247/County Line Road
Median X-Over MP 11.49	CR 193/Pasco Road
Median X-Over MP 11.64	Median X-Over MP 18.82
Median X-Over MP 12.59	CR 70/Egg & Butter Extension
Median X-Over MP 12.73	CR 157/Egg & Butter Road & Myrick Road
Median X-Over MP 13.04	Median X-Over MP 21.15
CR 359/Timber Ridge Drive	CR 159/McMillan Road & Whip-O-Will Road
CR 234/Commercial Drive	CR 415/Groover Road
SR 122 & CR 385/Remington Avenue & Pavo Road	SR 188
Median X-Over MP 13.60	CR 126/Stage Road
CS 7401/Colonial Drive	CR 200/Chasen Road
SR 35BU & 319BU/Plantation Pkwy	CR 133/Rupp Road
Median X-Over MP 14.22	CR 129/Hansell Road
Median X-Over MP 14.26	CR 205/Midway Church Road
CR 287/Clark Road	Median X-Over MP 29.34
CR 190/Patterson Still Road	CR 305/Palmer Road
SR 35/North Bypass	CR 127/Marshall Street
	SR 111

Mitchell County

Median X-Over MP 0.09

PDP Classification: Major _____ Minor **X**

Federal Oversight: Full Oversight (), Exempt (**X**), State Funded (), or Other ()

Functional Classification: MP 10.50 to MP 16.28 – Urban Principal Arterial
MP 16.28 to End Project – Rural Principal Arterial

U. S. Route Number(s): 19, 84

State Route Number(s): 3/300/38

Traffic (AADT) as shown in the approved concept:

Location	Current Year (2012)	Design Year (2032)
Sunset Drive to Old Monticello Road	4,600	6,900
Old Monticello Road to Heritage Drive	4,100	6,350
Heritage Drive to Timber Ridge Drive	12,350*	19,100*
Timber Ridge Drive to Commercial Drive	12,650	19,550
Commercial Drive to Remington Ave./Pavo Road	12,600	19,450
Remington Ave./Pavo Road to Colonial Drive	16,750	25,650
Colonial Drive to Plantation Parkway	17,950	27,750
Plantation Parkway to Clark Road	12,900	19,950
Clark Road to Patterson Still Road	12,000	18,550
Patterson Still Road to North Bypass	11,100	17,150
North Bypass to St. Mary’s Church Road	7,500	11,550
St. Mary’s Church Road to Fredonia Road	7,300	11,300
Fredonia Road to County Line Road	7,250	11,200
County Line Road to Pasco Road	6,550	9,950
Pasco Road to Egg & Butter Road/Myrick Road	6,300	9,600
Egg & Butter Road/Myrick Road to McMillan Rd	5,450	8,450
McMillan Road to State Route 188	4,950	7,750
State Route 188 to Stage Road	4,450	7,000
Stage Road to Hansell Road	4,350	6,850
Hansell Road to Midway Church Road	4,250	6,650
Midway Church Road to Palmer Road	4,100	6,450
Palmer Road to Marshall Street	4,150	6,500
Marshall Street to State Route 111	4,300	6,650
State Route 111 to MP 0.09	4,500	6,950

Updated traffic data (AADT):

Location	Current Year (2013)	Design Year (2033)
Sunset Drive to Old Monticello Road	3,700	5,150
Old Monticello Road to Heritage Drive	4,000	5,550
Heritage Drive to Timber Ridge Drive	10,850*	15,150*
Timber Ridge Drive to Commercial Drive	11,200	15,600
Commercial Drive to Remington Ave./Pavo Road	12,300	17,150
Remington Ave./Pavo Road to Colonial Drive	14,700	20,500
Colonial Drive to Plantation Parkway	15,050	21,050
Plantation Parkway to Clark Road	9,600	13,350
Clark Road to Patterson Still Road	9,350	13,100
Patterson Still Road to North Bypass	5,950	8,300
North Bypass to St. Mary’s Church Road	6,250	8,700
St. Mary’s Church Road to Fredonia Road	5,850	8,200
Fredonia Road to County Line Road	5,250	7,350
County Line Road to Pasco Road	5,250	7,350
Pasco Road to Egg & Butter Road/Myrick Road	4,400	6,150
Egg & Butter Road/Myrick Road to McMillan Rd	5,450	8,450
McMillan Road to State Route 188	4,250	5,950
State Route 188 to Stage Road	3,400	4,750
Stage Road to Hansell Road	3,350	4,700
Hansell Road to Midway Church Road	3,400	4,750
Midway Church Road to Palmer Road	4,100	6,450
Palmer Road to Marshall Street	3,400	4,750
Marshall Street to State Route 111	3,550	5,000
State Route 111 to MP 0.09	3,550	5,000

* Includes local build up

Approved Programmed/Schedule:

P.E.: 2002 R/W: N/A Construction: 2015

VE Study Required Yes () No ()

Is the project located in an Ozone Non-attainment area? Yes () No ()

Is the project in a PM2.5 Non-Attainment area? Yes () No ()

<p>Approved Features: The approved project features are to reconstruct the existing Type “A” median crossovers on SR 3/SR 300/US 19 to provide Type “B” Median Crossovers. Right turn lanes will be constructed and/or extended to meet speed design deceleration distances only if they can be constructed within the existing right of way.</p>	<p>Proposed Features:</p> <ul style="list-style-type: none"> • Closures of median crossovers CR 127/Marshall Street in Thomas County and MP 0.00 in Mitchell County. • Add MP 0.00 median crossover in Mitchell County to the list of project locations. • Remove CR 246/Old Monticello Road and SR 202/CR 247/County Line Road intersections. Remove MP12.59/Constitution Avenue median crossover in Thomas County.
<p>Reasons for Changes: The SR 300/US19 median crossover at CR 127/Marshall Street and the SR 3/SR 300/US19 median crossover at Mitchell County MP 0.00 in proximity to SR 3/SR 111 in Thomas County do not meet GDOT Design Policy Manual median opening spacing requirements and should be closed. CR 127/Marshall Street and MP 0.00 have significantly lower traffic volumes than SR 3/SR 111, and SR 3/SR 111 should remain open. MP 0.00 median crossover in Mitchell County should be added to the list of project locations since its proposed closure is located within the project termini. The CR 246/Old Monticello Road intersection is a circulatory intersection and not an existing Type “A” Median Crossover. Crash, injury and fatality rates at this intersection are below the statewide average for the years of 2006-2008, so the intersection should be removed from the concept. The SR 202/CR 247/County Line Road intersection has been improved by intersection improvement project CSSTP-0007-00(075) and should be removed from the concept. MP12.59/Constitution Avenue median crossover is an existing Type “B” median crossover and should be removed from the concept.</p>	

Potential Environmental Impacts of the Proposed Revision:

No anticipated environmental effects.

Have proposed Revisions Been Reviewed by Environmental Staff? Yes (X) No ()

Environmental Responsibilities (Studies/Documents/Permits): GDOT

Updated Cost Estimate	
Base Construction Cost	\$11,650,193
Engineering and Inspection	\$ 582,510
Fuel & Asphalt Adjustment	\$ 4,369,615
<u>Total Construction Cost</u>	<u>\$16,602,318</u>
Right-of-Way	\$0

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

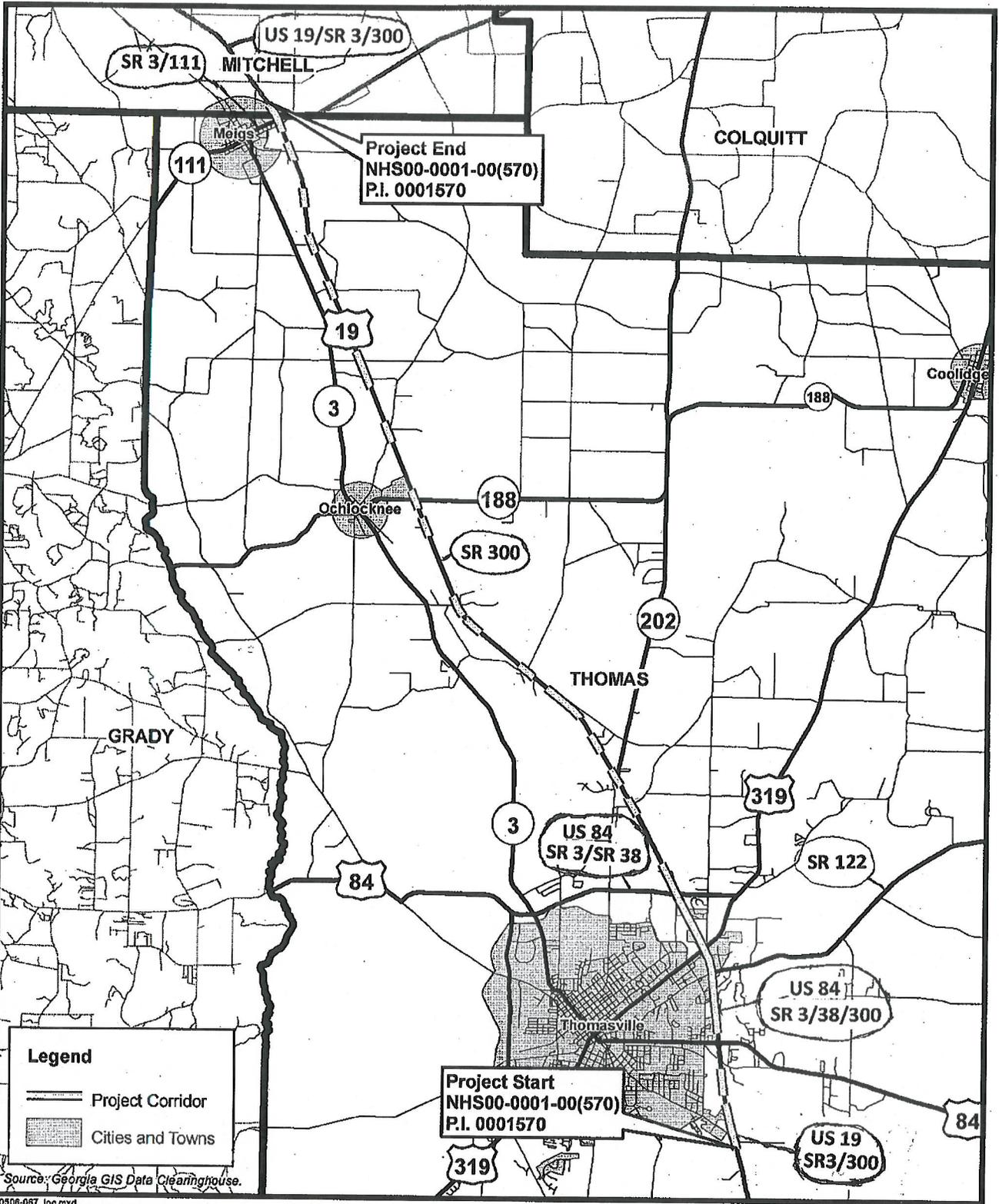
Attachments:

1. Location Map
2. Typical Layouts
3. Typical Section
4. Cost Estimate
5. Updated Traffic
6. QC/QA for Revised Concept Report
7. VE Implementation Summary

Concur: _____
Director of Engineering

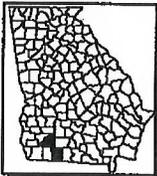
Approve: Dee m Por
Chief Engineer

Date: 8-2-11



50908-087 loc.mxd

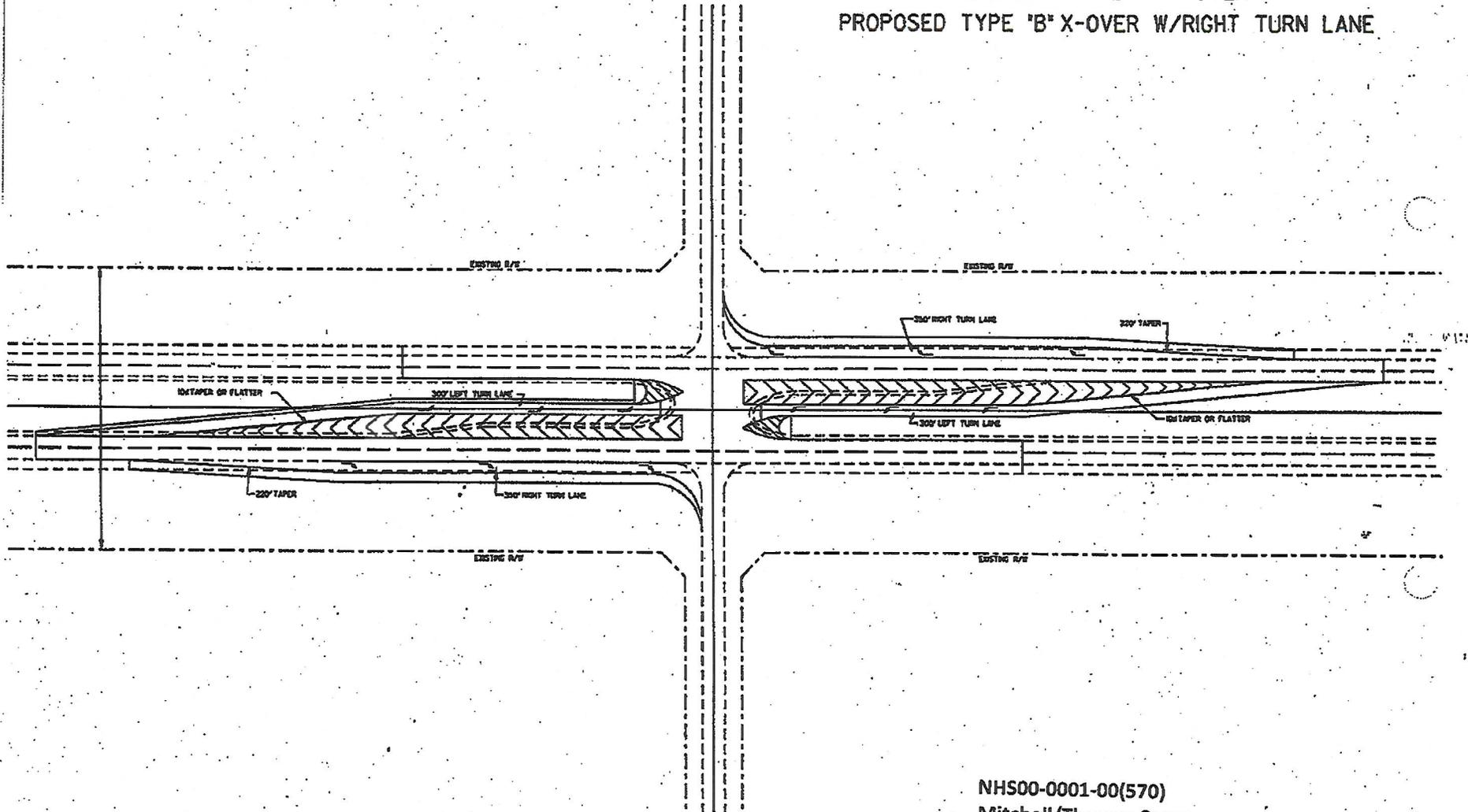
FIGURE 1: Project Location Map



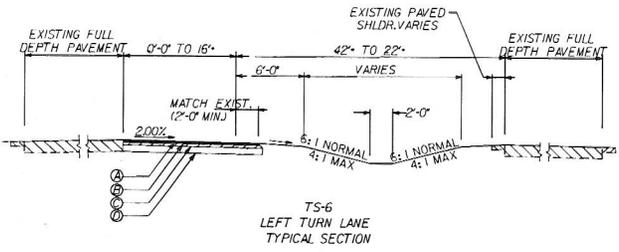
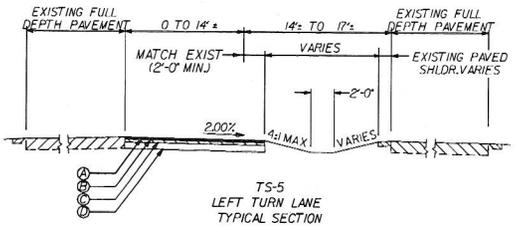
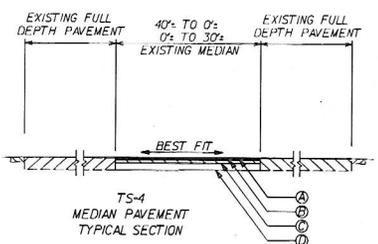
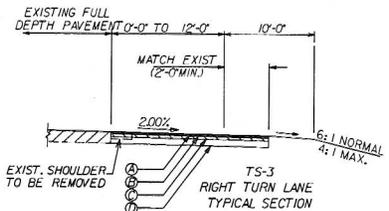
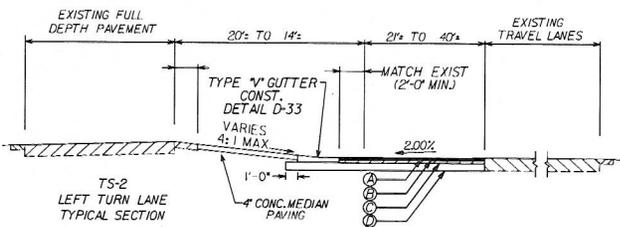
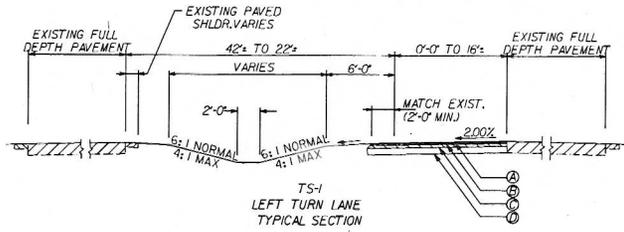
NHS00-0001-00(570)
Mitchell/Thomas County
P.I. No: 0001570



EXISTING TYPE 'A' X-OVER
PROPOSED TYPE 'B' X-OVER W/RIGHT TURN LANE



NHS00-0001-00(570)
Mitchell/Thomas County
PI 0001570



- REQUIRED PAVEMENT**
- (A) ASPHALTIC CONCRETE 12.5 mm SUPERPAVE. 165 LBS/SY.GP 2 ONLY, INCL. POLYMER-MODIFIED BITUM. MATL. & H. LIME
 - (B) ASPHALTIC CONCRETE 19 mm SUPERPAVE. 220 LBS/SY.GP 1 OR 2, INCL. BITUM. MATL. & H. LIME
 - (C) ASPHALTIC CONCRETE 25 mm SUPERPAVE. 800 LBS/SY.GP 1 OR 2, INCL. BITUM. MATL. & H. LIME
 - (D) GRADED AGGREGATE BASE, 10", INCL. MATL.

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES	

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROADWAY DESIGN
TYPICAL SECTION

DRAWING NO.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE PENHS-001-00(570), Thomas/Mitchell County
SR3/US19 Turn Lanes
P.I. No. 0001570

OFFICE Program Delivery

DATE June 1, 2011

FROM:  Bobby K. Gilliard, P.E., State Program Delivery Engineer

TO : Ronald E. Wishon, Project Review Engineer

SUBJECT: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER: Jeremy Busby

MGMT LET DATE: 12/15/2011

MGMT ROW DATE: N/A

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$14,747,026

DATE: 9/30/2010

RIGHT OF WAY \$0

DATE: N/A

UTILITIES \$0

DATE: N/A

REVISED COST ESTIMATES

CONSTRUCTION* \$16,602,318

RIGHT OF WAY \$0

UTILITIES \$0

MITIGATION \$0

* Costs contain 5% Engineering and Inspection and Fuel and Liquid AC Adjustments.

REASON FOR COST INCREASE: annual update, increase in Fuel and Liquid AC Adjustments

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$11,650,193	(Base Estimate)
Engineering and Inspection:	\$582,510	(Base Estimate x 5 %)
Construction Contingency:	\$0	(Base Estimate x 0 %)
Total Fuel Adjustment	\$1,580,223	(From attached worksheet)
Total Liquid AC Adjustment	\$2,789,392	(From attached worksheet)
Construction Total:	\$16,602,318	
Utility Cost Estimate:	\$0	
Utility Contingency:	0%	
Utility Total:	\$0	

REIMBURSABLE UTILITY COST

<i>Utility Owners</i>	<i>Reimbursable Costs</i>

Attachments

STATE HIGHWAY AGENCY

DATE : 06/01/2011

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JOB ESTIMATE REPORT

JOB NUMBER : 0001570

SPEC YEAR: 01

DESCRIPTION: SR3/US19 TURN LANES

ITEMS FOR JOB 0001570

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - NHS00-0001-00(570)	1.000	281550.85	281550.85
0010	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	60146.65	60146.65
0015	210-0100		LS	GRADING COMPLETE - NHS00-0001-00(570)	1.000	2499320.27	2499320.27
0019	310-5060		SY	GR AGGR BS CRS 6IN INCL MATL	330.000	11.64	3841.54
0020	310-5100		SY	GR AGGR BS CRS 10IN INCL MATL	121592.000	15.29	1859539.29
0025	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	53500.000	55.55	2972333.21
0030	402-4510		TN	RECYL AC 12.5 MM SP,GP2ONLY,INC P-MBM&HL	10059.000	82.76	832515.53
0035	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	13411.000	63.90	856983.82
0040	413-1000		GL	BITUM TACK COAT	12779.000	2.65	33952.01
0045	441-0108		SY	CONC SIDEWALK, 8 IN	669.000	47.61	31851.46
0055	441-0740		SY	CONC MEDIAN, 4 IN	3335.000	24.50	81713.37
0060	441-3999		LF	CONCRETE V GUTTER	3152.000	16.12	50825.78
0065	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	72274.000	1.42	103025.14
0120	550-1150		LF	STM DR PIPE 15",H 1-10	4384.000	21.42	93927.86
0125	550-1180		LF	STM DR PIPE 18",H 1-10	1174.000	28.14	33042.77
0130	550-1240		LF	STM DR PIPE 24",H 1-10	80.000	41.44	3315.57
0135	550-2150		LF	SIDE DR PIPE 15",H 1-10	60.000	26.86	1611.93
0140	550-2180		LF	SIDE DR PIPE 18",H 1-10	438.000	24.85	10885.50
0145	550-2240		LF	SIDE DR PIPE 24",H 1-10	288.000	26.33	7583.29
0150	550-3315		EA	SAFETY END SECTION 15",STD,4:1	3.000	579.85	1739.56
0155	550-3318		EA	SAFETY END SECTION 18",STD,4:1	7.000	548.56	3839.97
0160	550-3324		EA	SAFETY END SECTION 24",STD,4:1	1.000	927.47	927.48
0175	550-3342		EA	SAFETY END SECTION 42",STD,4:1	1.000	2632.68	2632.68
0176	550-3515		EA	SAFETY END SECTION 15",STD,6:1	2.000	405.88	811.77
0177	550-3518		EA	SAFETY END SECTION 18",STD,6:1	13.000	604.22	7854.89
0178	550-3524		EA	SAFETY END SECTION 24",STD,6:1	3.000	842.59	2527.78
0180	550-4215		EA	FLARED END SECT 15 IN, ST DR	4.000	434.29	1737.18
0185	550-4218		EA	FLARED END SECT 18 IN, ST DR	2.000	501.42	1002.85
0190	610-6512		EA	REM HEADWALL - X	15.000	882.01	13230.15
0210	611-3010		EA	RECONSTR DROP INLET, GROUP 1	6.000	1339.86	8039.20
0215	611-3030		EA	REC STORM SEW MANHOLE, TYPE 1	43.000	1095.98	47127.35
0220	611-8040		EA	ADJUST DROP INLET TO GRADE	1.000	885.51	885.52
0225	668-2100		EA	DROP INLET, GP 1	124.000	1787.50	221650.00
0230	668-4300		EA	STORM SEW MANHOLE, TP 1	16.000	2138.33	34213.33
0235	163-0232		AC	TEMPORARY GRASSING	11.000	452.33	4975.67
0240	163-0240		TN	MULCH	586.000	153.38	89885.04
0245	163-0300		EA	CONSTRUCTION EXIT	75.000	1147.19	86039.55
0250	163-0520		LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	100.000	16.79	1679.58
0255	163-0527		EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	5.000	276.68	1383.44
0260	163-0528		LF	CONSTR AND REM FAB CK DAM -TP C SLT FN	15285.000	3.20	48985.37

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JOB ESTIMATE REPORT

0265	163-0542	EA	CONSTR & REM STONE FILTER RING	2.000	771.00	1542.02
0270	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	230.000	145.19	33395.84
0275	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	16671.000	0.45	7623.15
0280	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	7648.000	0.75	5741.35
0285	165-0101	EA	MAINT OF CONST EXIT	75.000	287.00	21525.29
0290	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	230.000	25.38	5837.85
0294	165-0111	EA	MAINT OF STONE FILTER RING	2.000	123.37	246.75
0295	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	60.000	628.44	37706.84
0300	167-1500	MO	WATER QUALITY INSPECTIONS	30.000	621.00	18630.00
0305	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	33342.000	3.03	101277.99
0310	643-8200	LF	BARRIER FENCE (ORANGE), 4 FT	2653.000	1.94	5158.17
0315	716-2000	SY	EROSION CONTROL MATS, SLOPES	6713.000	1.52	10249.27
0320	603-2182	SY	STN DUMPED RIP RAP, TP 3, 24"	188.000	66.97	12591.52
0325	603-7000	SY	PLASTIC FILTER FABRIC	188.000	3.83	721.66
0330	700-6910	AC	PERMANENT GRASSING	21.000	613.26	12878.51
0335	700-7000	TN	AGRICULTURAL LIME	63.000	44.90	2828.92
0340	700-7010	GL	LIQUID LIME	53.000	17.37	920.64
0345	700-8000	TN	FERTILIZER MIXED GRADE	40.000	470.18	18807.36
0350	700-8100	LB	FERTILIZER NITROGEN CONTENT	2100.000	2.38	5005.12
0355	710-9000	SY	PERM SOIL REINFORCING MAT	286.000	4.27	1222.00
0700	109-0100	*\$*	PRICE ADJ - UNLEADED FUEL	1.000	356574.79	356574.79
0705	109-0200	*\$*	PRICE ADJ - DIESEL FUEL	1.000	1223648.00	1223648.00
0710	109-0300	*\$*	PRICE ADJ - ASPHALT CEMENT	1.000	2789392.80	2789392.80
0715	632-0003	EA	CHANGEABLE MESS SIGN,PORT,TP 3	4.000	9218.20	36872.83
0720	636-1020	SF	HWY SGN,TP1MAT,REFL SH TP3	1820.000	12.27	22332.78
0725	636-1029	SF	HWY SGN,TP2 MATL,REFL SH TP 3	1799.000	14.64	26344.65
0730	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	2782.000	16.53	45995.67
0735	636-2070	LF	GALV STEEL POSTS, TP 7	972.000	7.61	7397.91
0740	636-1041	SF	HWY SIGNS,TP 2MAT,REFL SH TP 9	1095.000	22.30	24429.31
0745	636-2080	LF	GALV STEEL POSTS, TP 8	6673.000	8.36	55817.38
0750	636-2090	LF	GALV STEEL POSTS, TP 9	714.000	7.60	5430.69
0755	636-3010	EA	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	40.000	582.62	23304.90
0760	652-0210	EA	PAVEMENT MARKING, WORD, TP 1	24.000	38.80	931.25
0765	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	471.000	63.91	30104.49
0770	653-0170	EA	THERM PVMT MARK, ARROW, TP 7	107.000	86.01	9203.57
0775	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	2003.000	2.91	5840.61
0780	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	2361.000	1.62	3837.10
0784	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	233441.000	0.20	48121.53
0789	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	31322.000	0.30	9530.97
0794	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	135400.000	0.11	16187.07
0795	653-3502	GLF	THERMO SKIP TRAF ST, 5 IN, YEL	1000.000	0.22	224.05
0805	653-6004	SY	THERM TRAF STRIPING, WHITE	60157.000	2.35	141673.95
0810	653-6006	SY	THERM TRAF STRIPING, YELLOW	1293.000	2.73	3538.02
0815	654-1001	EA	RAISED PVMT MARKERS TP 1	395.000	3.28	1296.21
0820	654-1003	EA	RAISED PVMT MARKERS TP 3	6770.000	2.65	17977.67
0825	654-1010	EA	RAISED PVMT MARKERS TP 10	96.000	35.18	3378.21
0830	653-0100	EA	THERM PVMT MARK, RR/HWY X SYM	4.000	383.18	1532.75
0835	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	85800.00	85800.00
0840	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	102100.00	102100.00
0845	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 3	1.000	100400.00	100400.00
0850	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 4	1.000	95700.00	95700.00
0855	682-6130	LF	CONDUIT, RIGID, 3 IN	681.000	32.07	21844.52

STATE HIGHWAY AGENCY

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JOB ESTIMATE REPORT

ITEM TOTAL
INFLATED ITEM TOTAL

16019808.12
16019808.13

TOTALS FOR JOB 0001570

ESTIMATED COST:
CONTINGENCY PERCENT (0.0):
ESTIMATED TOTAL:

16019808.13
0.00
16019808.13

P.I. Number 0001570

County Mitchell/Thomas

Date 5/31/2011

Project Number NHS00-0001-00(570)

**Special Provision, Section 109-Measurement and Payment
FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)**

ENTER FPL DIESEL	4.079
ENTER FPM DIESEL	9.178

ENTER FPL UNLEADED	3.862
ENTER FPM UNLEADED	8.6895

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)	61305.000	0.29	17778.45	0.15	9195.75	
Excavations paid as specified by Sections 206 (CUBIC YARD)		0.29		0.15		
GAB paid as specified by the ton under Section 310 (TON)	68507.000	0.29	19867.03	0.24	16441.68	
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)	76970.000	2.90	223213.00	0.71	54648.70	
PCC Pavement paid as specified by the square yard under Section 430 (SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __ Concrete (CY) Section 500				8.00		1.50		
Class __ Concrete (CY) Section 500				8.00		1.50		
Class __ Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Stru Steel <u>Plan Quantity (LB)</u> Section 501				8.00		1.50		
Stru Steel <u>Plan Quantity (LB)</u> Section 501				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
Stru Reinf <u>Plan Quantity(LB)</u> Section 511				8.00		1.50		
Stru Reinf <u>Plan Quantity(LB)</u> Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511				8.00		1.50		
Piling____ inch (LF) Section 520				8.00		1.50		
Piling____ inch (LF) Section 520				8.00		1.50		
Piling____ inch (LF) Section 520				8.00		1.50		
Piling____ inch (LF) Section 520				8.00		1.50		
Piling____ inch (LF) Section 520				8.00		1.50		
Piling____ inch (LF) Section 520				8.00		1.50		
Drilled Caisson____ (LF) Section 524				8.00		1.50		
Drilled Caisson____ (LF) Section 524				8.00		1.50		
Drilled Caisson____ (LF) Section 524				8.00		1.50		
Pile Encasement____(LF) Section 547				8.00		1.50		
Pile Encasement____(LF) Section 547				8.00		1.50		
SUM QF DIESEL=			260858.48	SUM QF UNLEADED=			80286.13	
DIESEL PRICE ADJUSTMENT(\$)					\$1,223,648.00			
UNLEADED PRICE ADJUSTMENT(\$)					\$356,574.79			

THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

TC #
2750045



TC #
275
0252

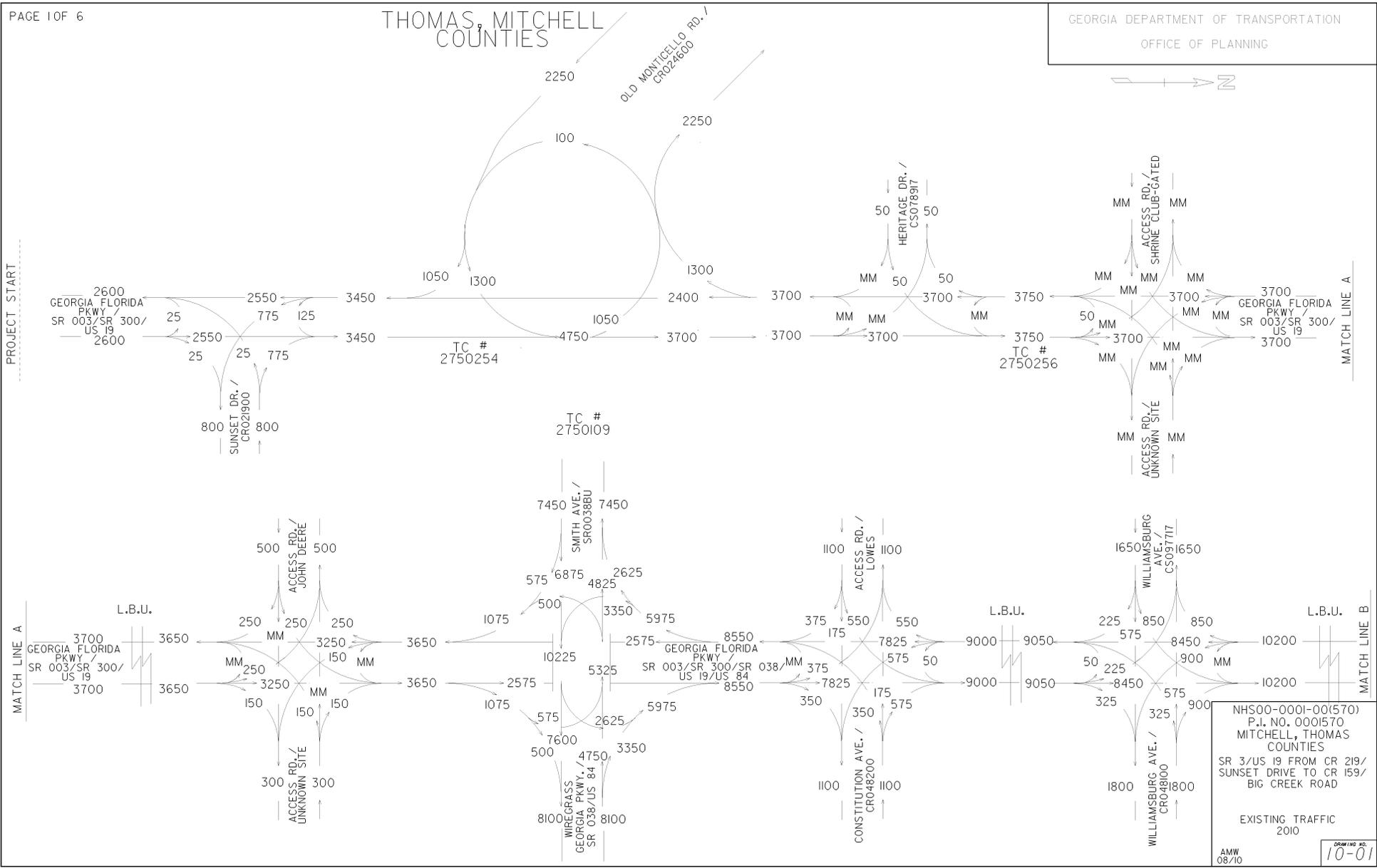
PROJECT START

MATCH LINE A

MATCH LINE A

MATCH LINE B

TC #
275
0258



TC #
2750112

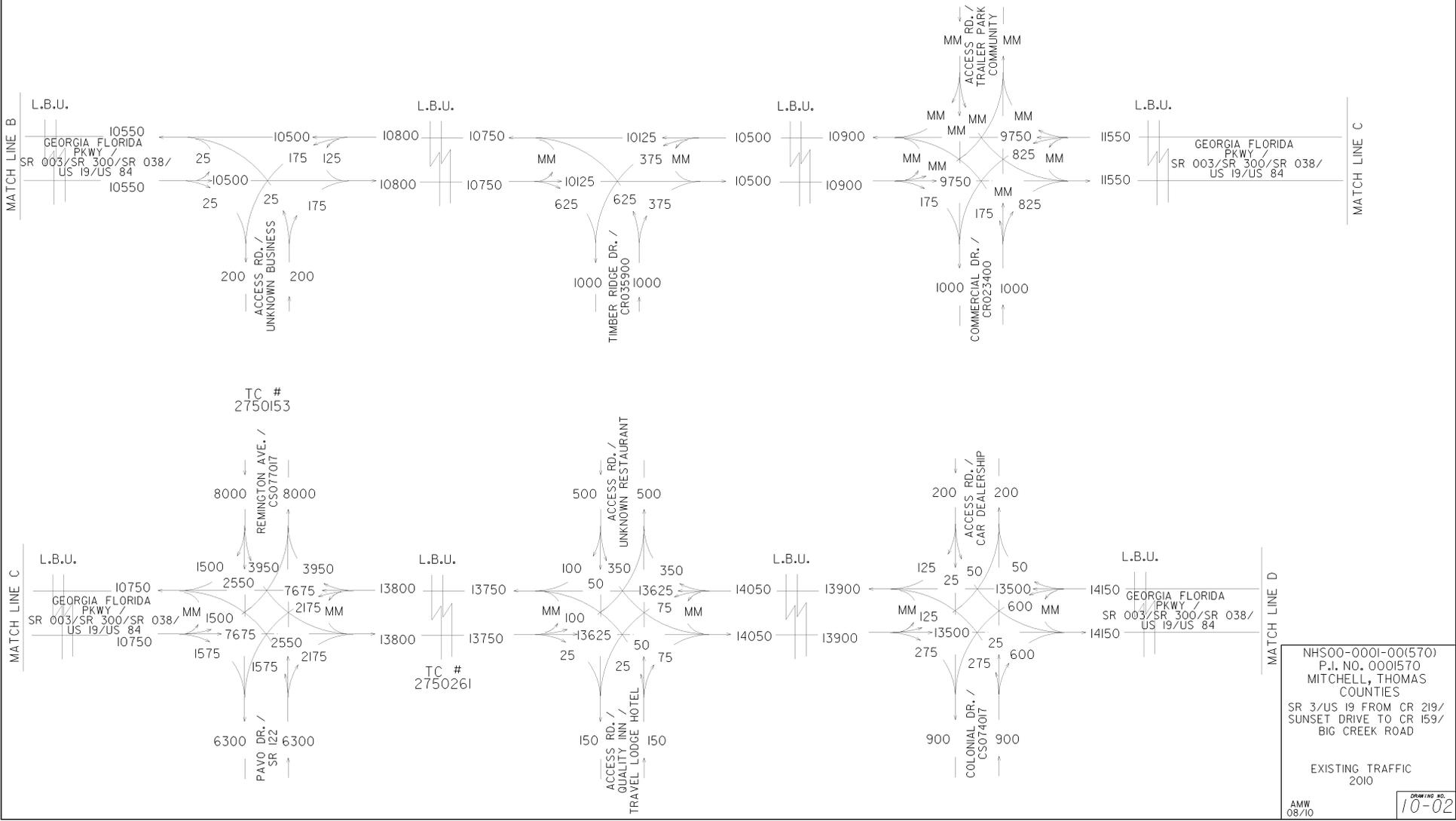
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P.I. NO. 0001570
MITCHELL, THOMAS
COUNTIES
SR 3/US 19 FROM CR 219/
SUNSET DRIVE TO CR 159/
BIG CREEK ROAD

EXISTING TRAFFIC
2010
AMW
08/10

DRAWING NO.
10-01

THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



NHS00-0001-00(570)
 P.I. NO. 0001570
 MITCHELL, THOMAS
 COUNTIES
 SR 3/US 19 FROM CR 219/
 SUNSET DRIVE TO CR 159/
 BIG CREEK ROAD

EXISTING TRAFFIC
 2010

AMW
 08/10

DRAWING NO.
 10-02

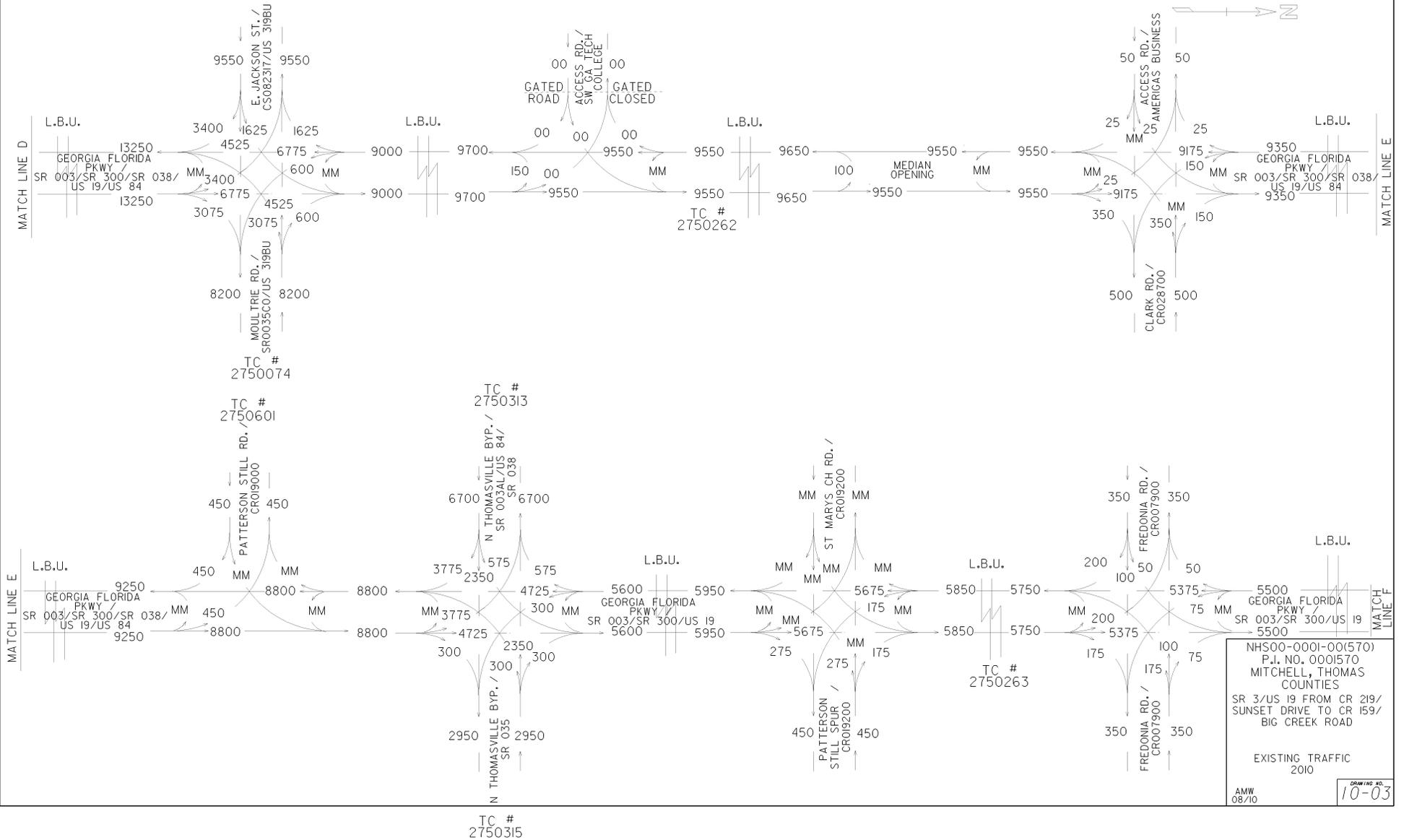
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TC #
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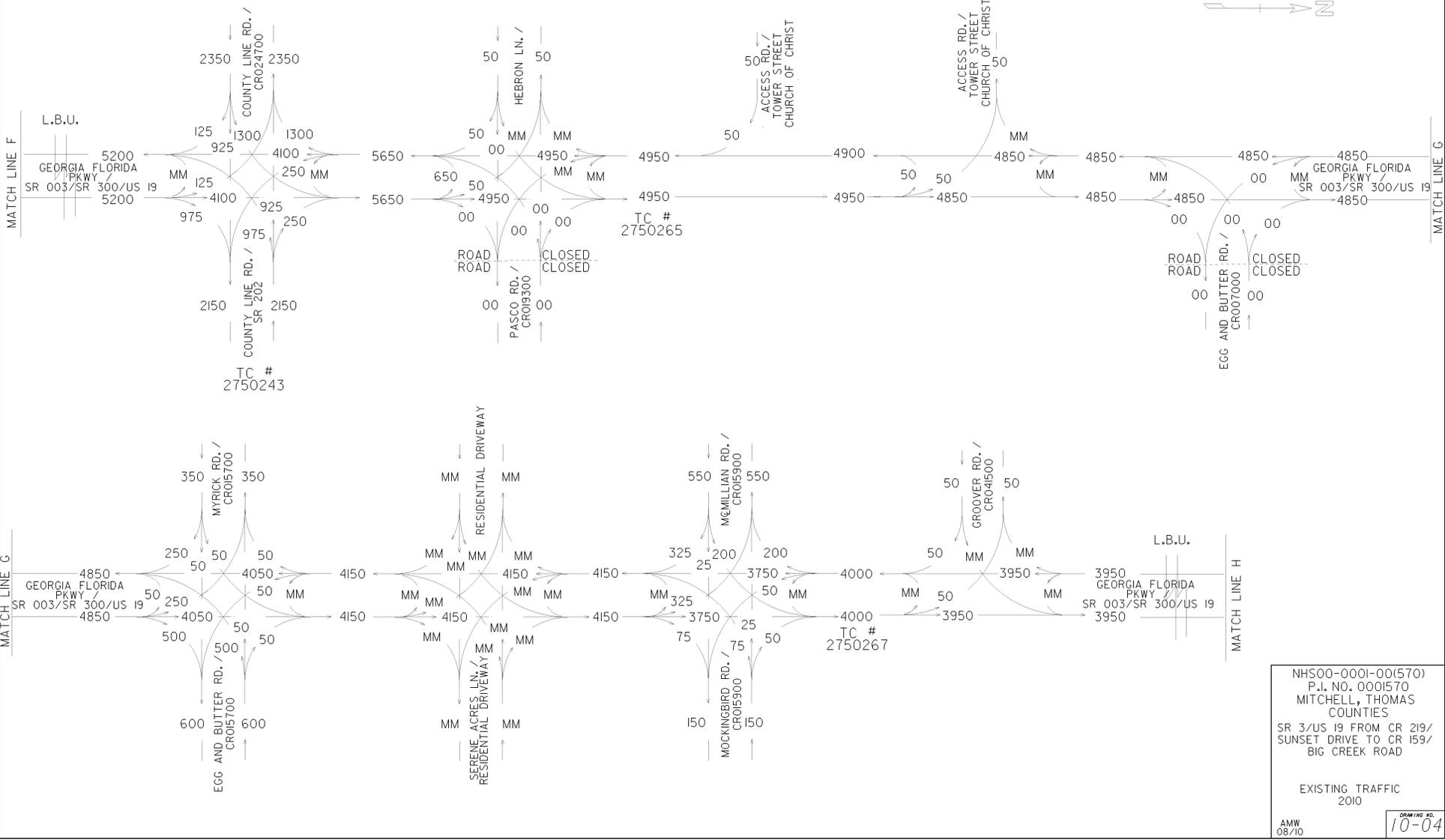
THOMAS, MITCHELL COUNTIES

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OFFICE OF PLANNING



THOMAS, MITCHELL COUNTIES

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OFFICE OF PLANNING



NHS00-0001-00(570)
 P.I. NO. 0001570
 MITCHELL, THOMAS COUNTIES
 SR 3/US 19 FROM CR 219/
 SUNSET DRIVE TO CR 159/
 BIG CREEK ROAD

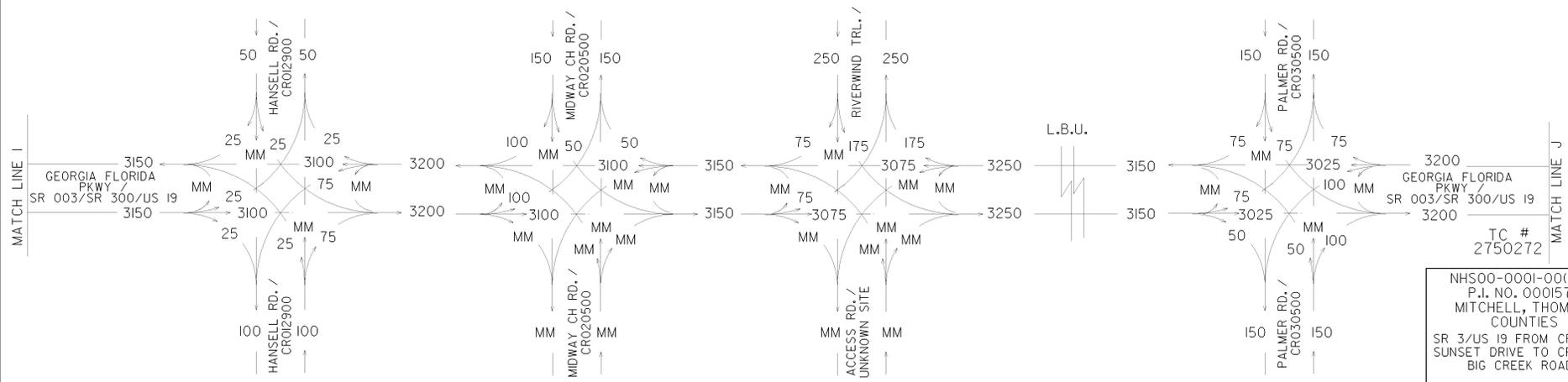
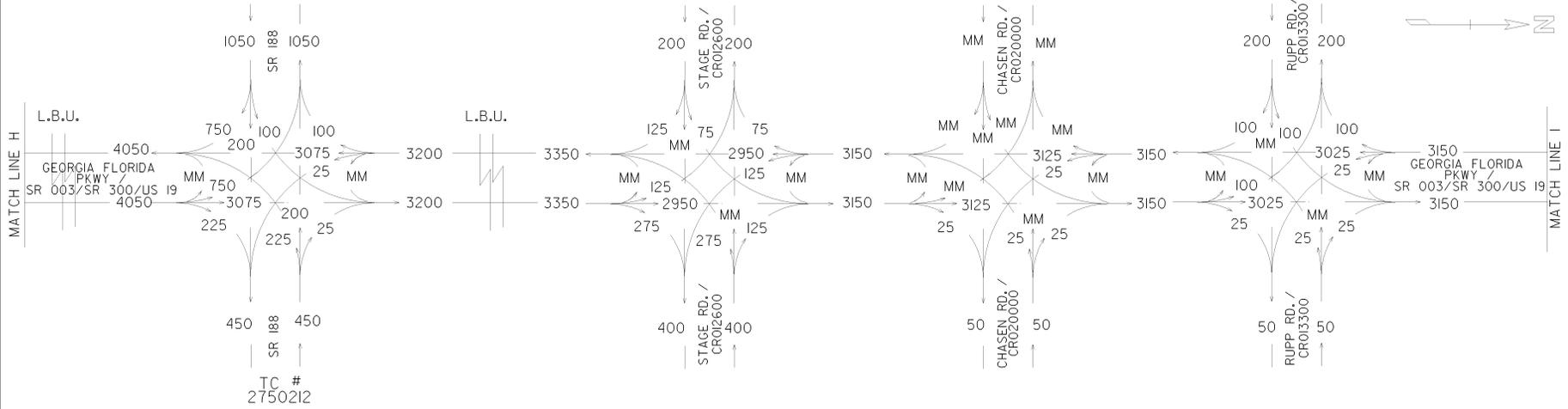
EXISTING TRAFFIC
 2010

AMW
 08/10

DRAWING NO.
 10-04

THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
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NHS00-0001-00(570)
 P.I. NO. 0001570
 MITCHELL, THOMAS COUNTIES
 SR 3/US 19 FROM CR 219/
 SUNSET DRIVE TO CR 159/
 BIG CREEK ROAD

EXISTING TRAFFIC
2010

AMW
08/10

DRAWING NO.
10-05

TC #
2750276

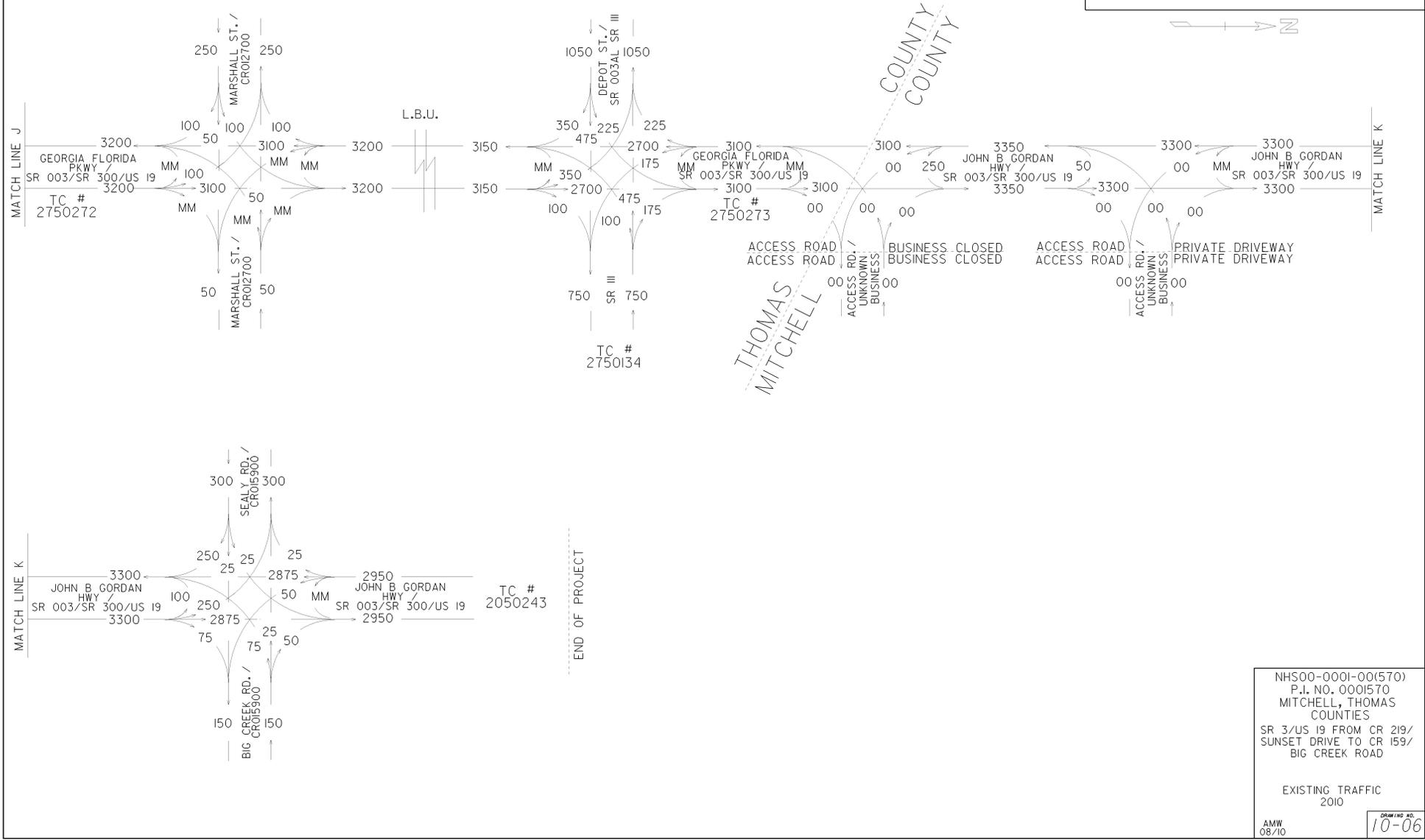
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THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



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NHS00-0001-00(570)
P.I. NO. 0001570
MITCHELL, THOMAS
COUNTIES
SR 3/US 19 FROM CR 219/
SUNSET DRIVE TO CR 159/
BIG CREEK ROAD

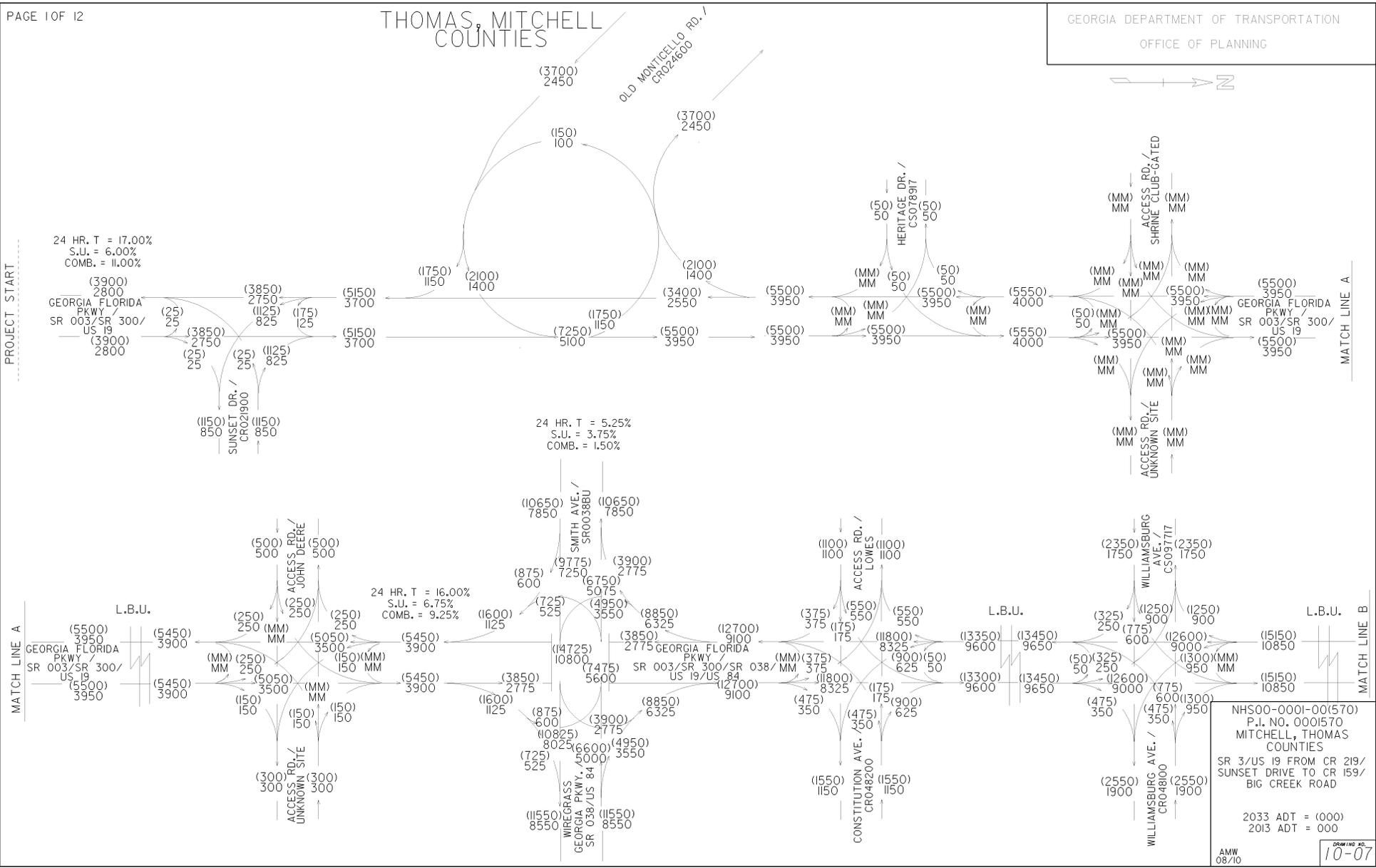
EXISTING TRAFFIC
2010

AMW
08/10

DRAWING NO.
10-06

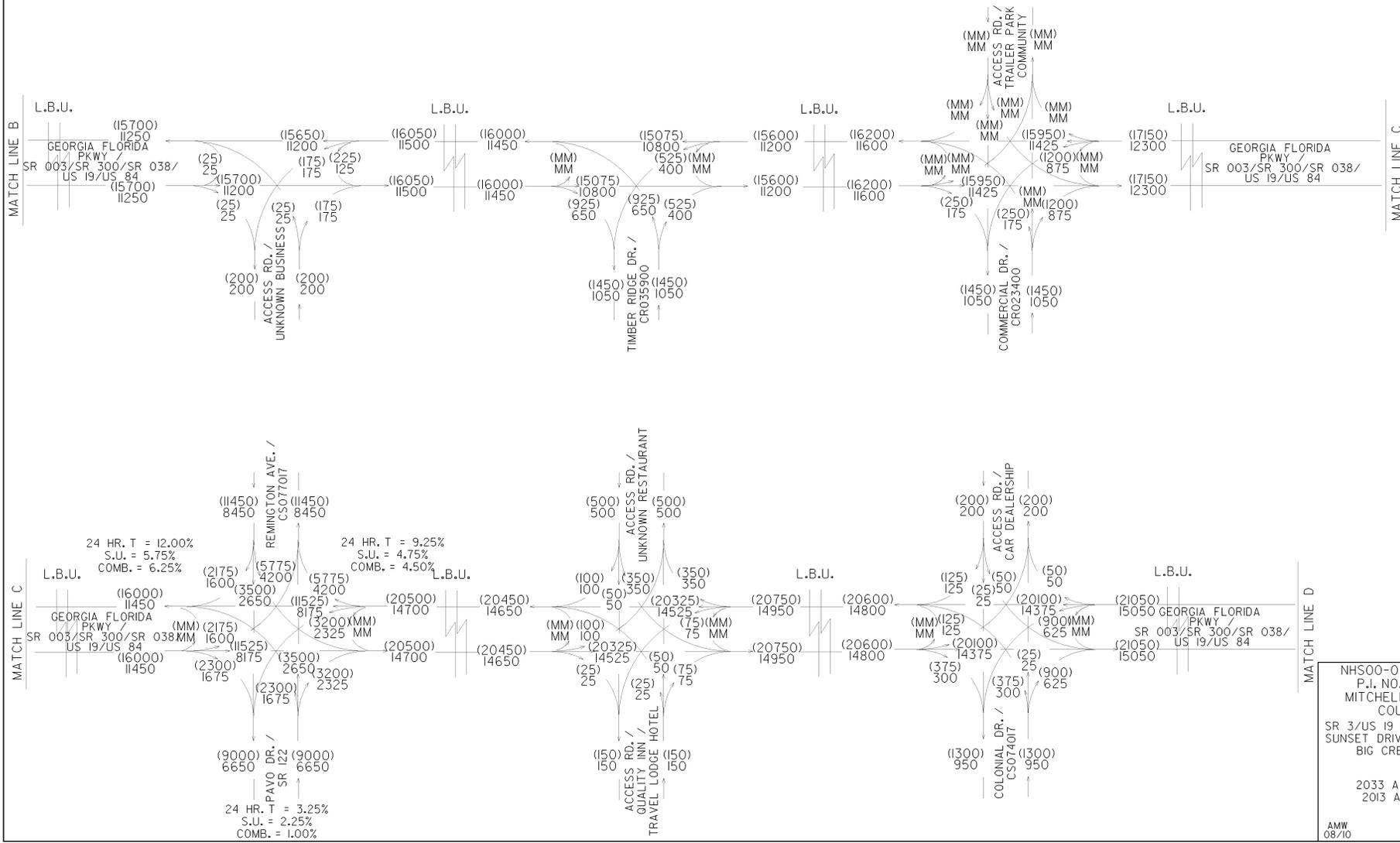
THOMAS, MITCHELL COUNTIES

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THOMAS, MITCHELL COUNTIES

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MITCHELL, THOMAS
COUNTIES
SR 3/US 19 FROM CR 219/
SUNSET DRIVE TO CR 159/
BIG CREEK ROAD

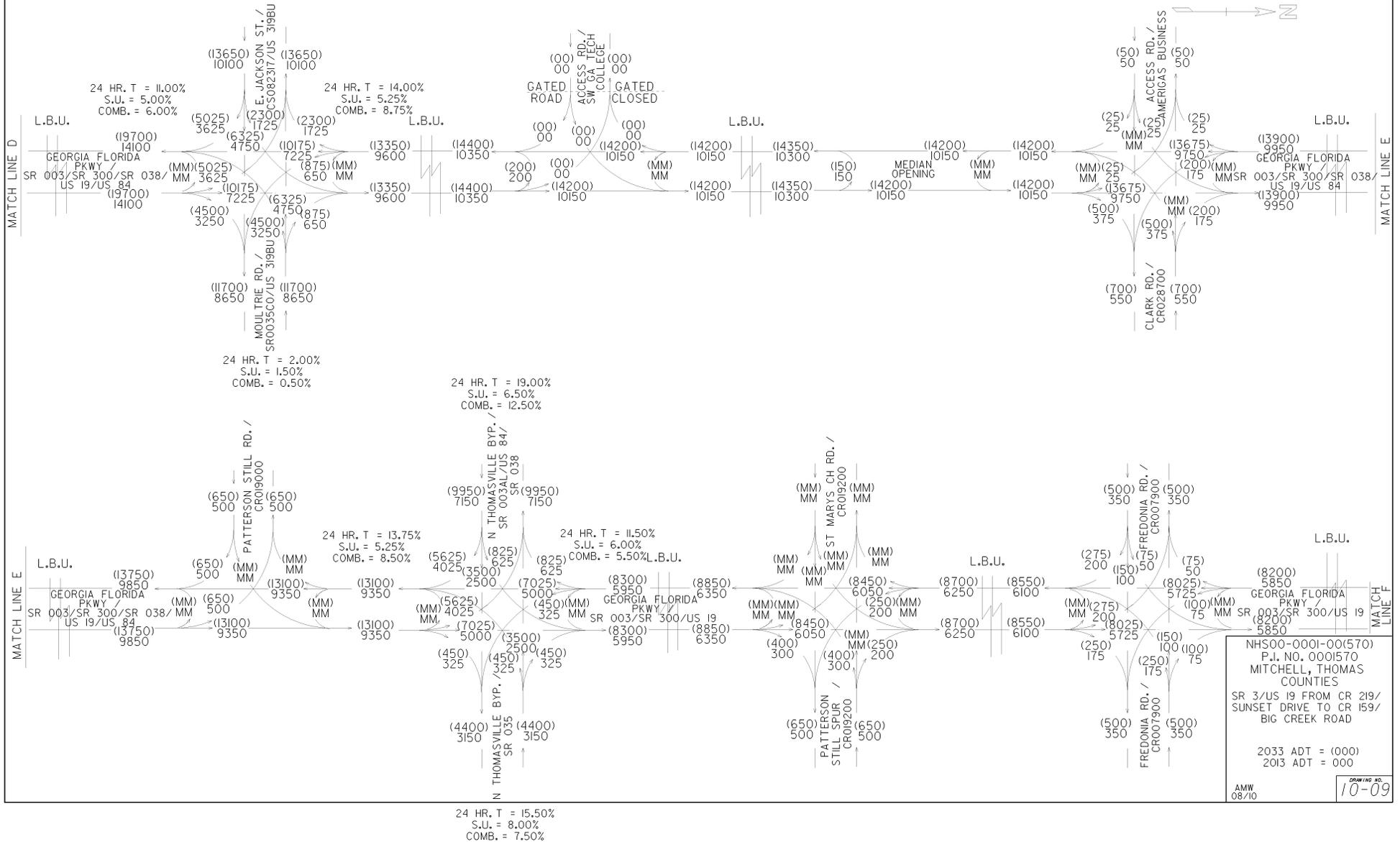
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AMW
08/10

DRAWING NO.
10-08

THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



NHS00-0001-00(570)
P.I. NO. 0001570
MITCHELL, THOMAS
COUNTIES
SR 3/US 19 FROM CR 219/
SUNSET DRIVE TO CR 159/
BIG CREEK ROAD

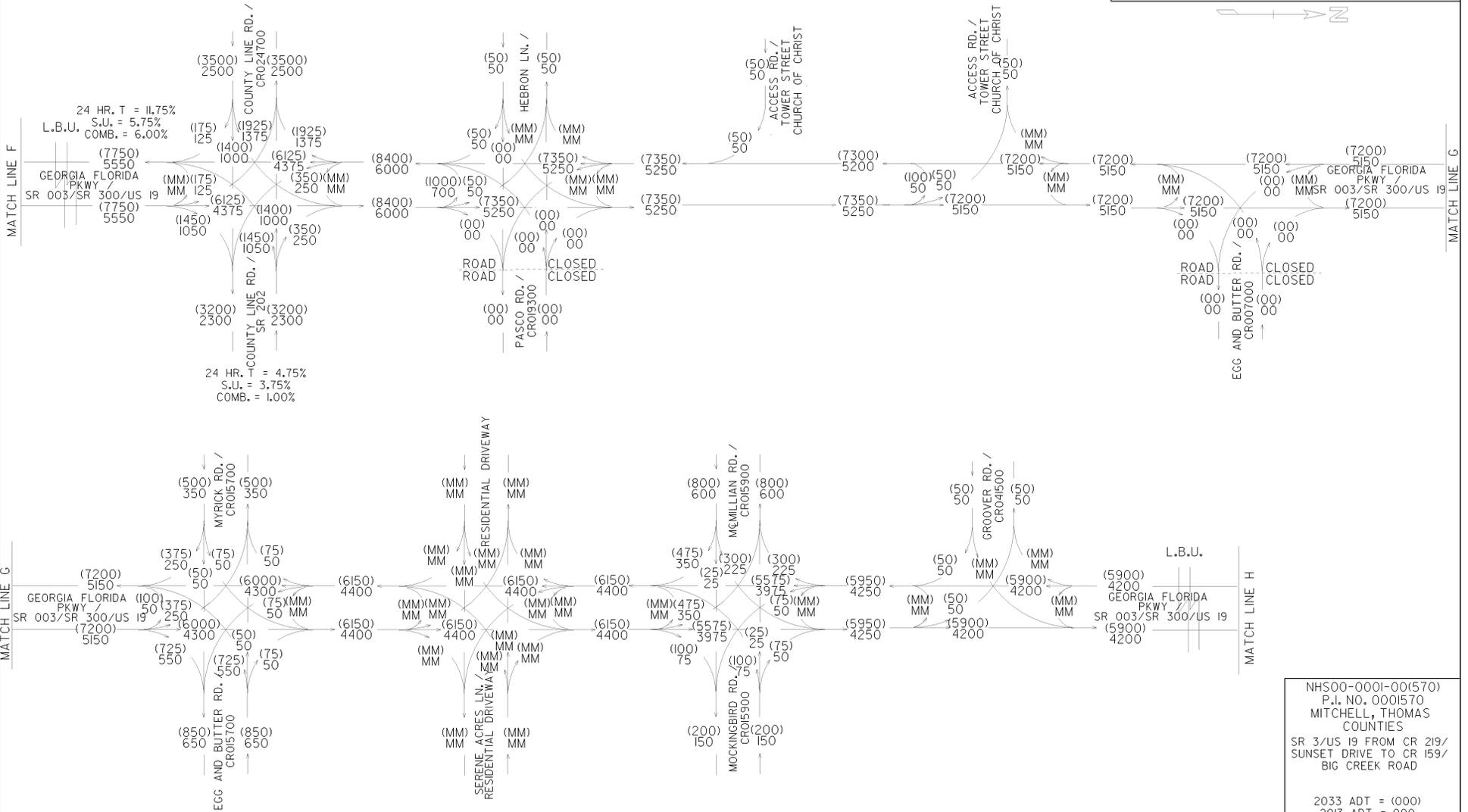
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AMW
08/10

10-09

THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
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NHS00-0001-00(570)
P.I. NO. 0001570
MITCHELL, THOMAS COUNTIES
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BIG CREEK ROAD

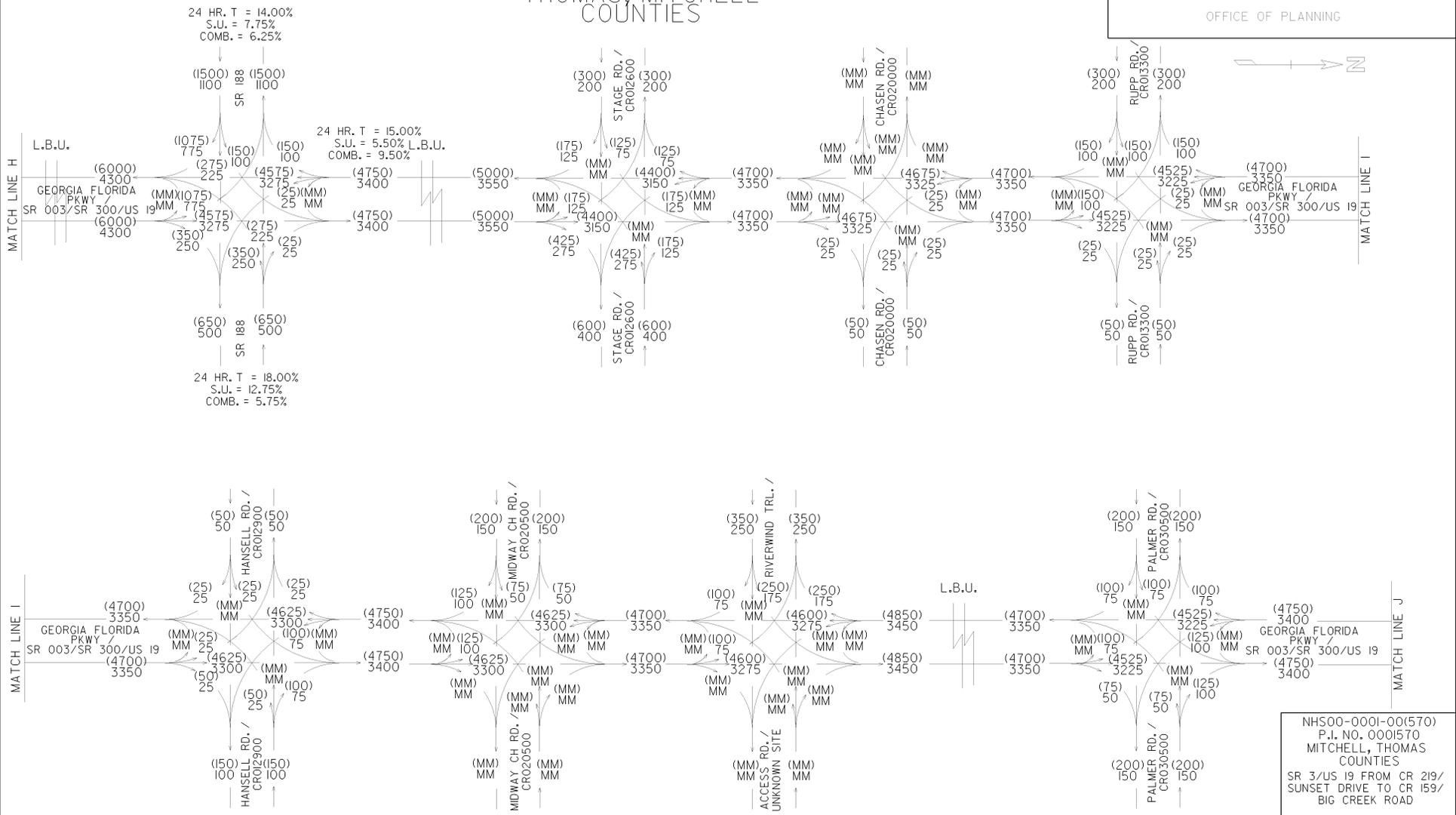
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DRAWING NO.
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THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
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NHS00-0001-00(570)
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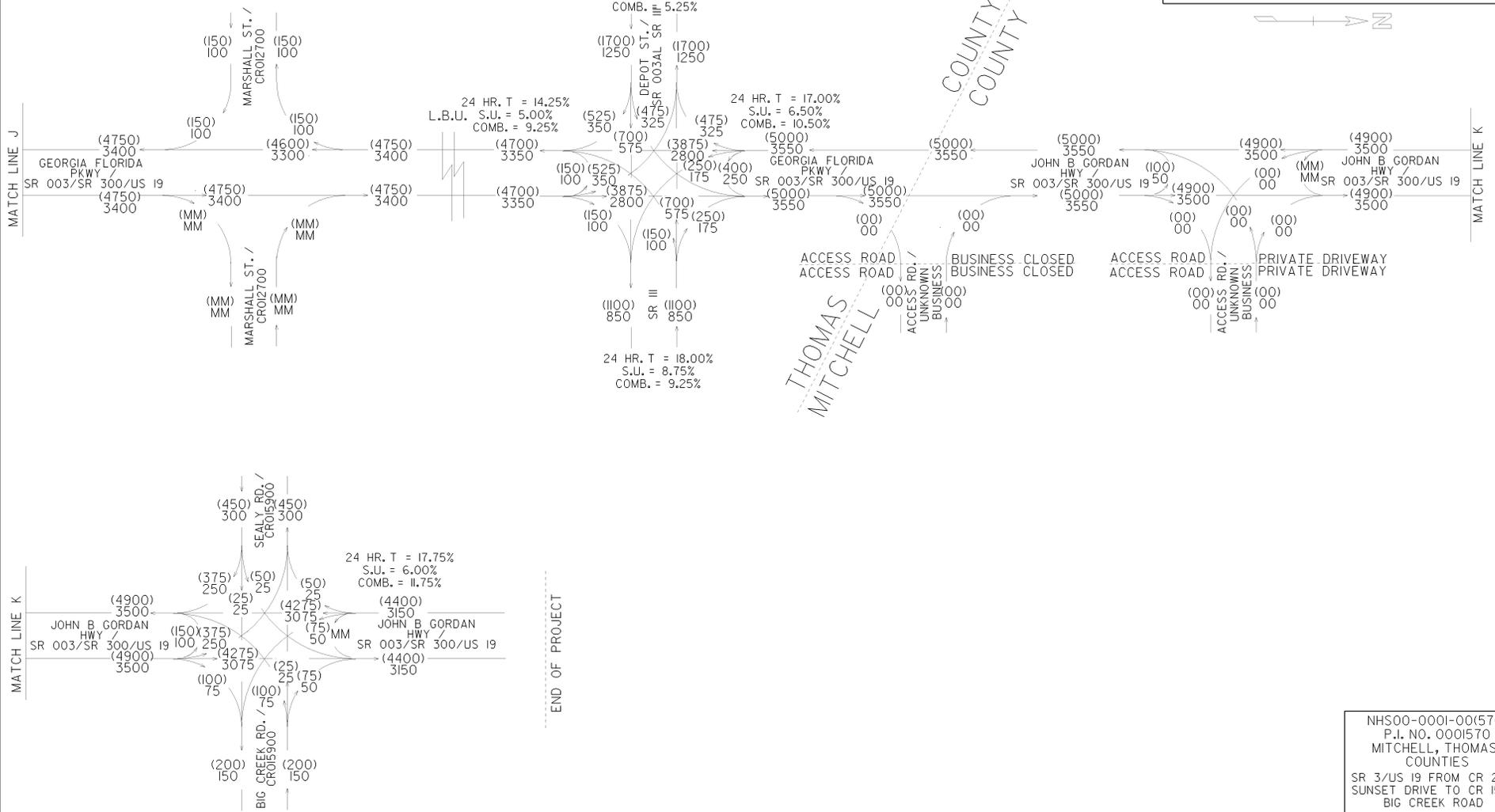
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AMW
08/10

DRAWING NO.
10-11

THOMAS MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



END OF PROJECT

NHS00-0001-00(570)
P.I. NO. 0001570
MITCHELL, THOMAS COUNTIES
SR 3/US 19 FROM CR 219/
SUNSET DRIVE TO CR 159/
BIG CREEK ROAD

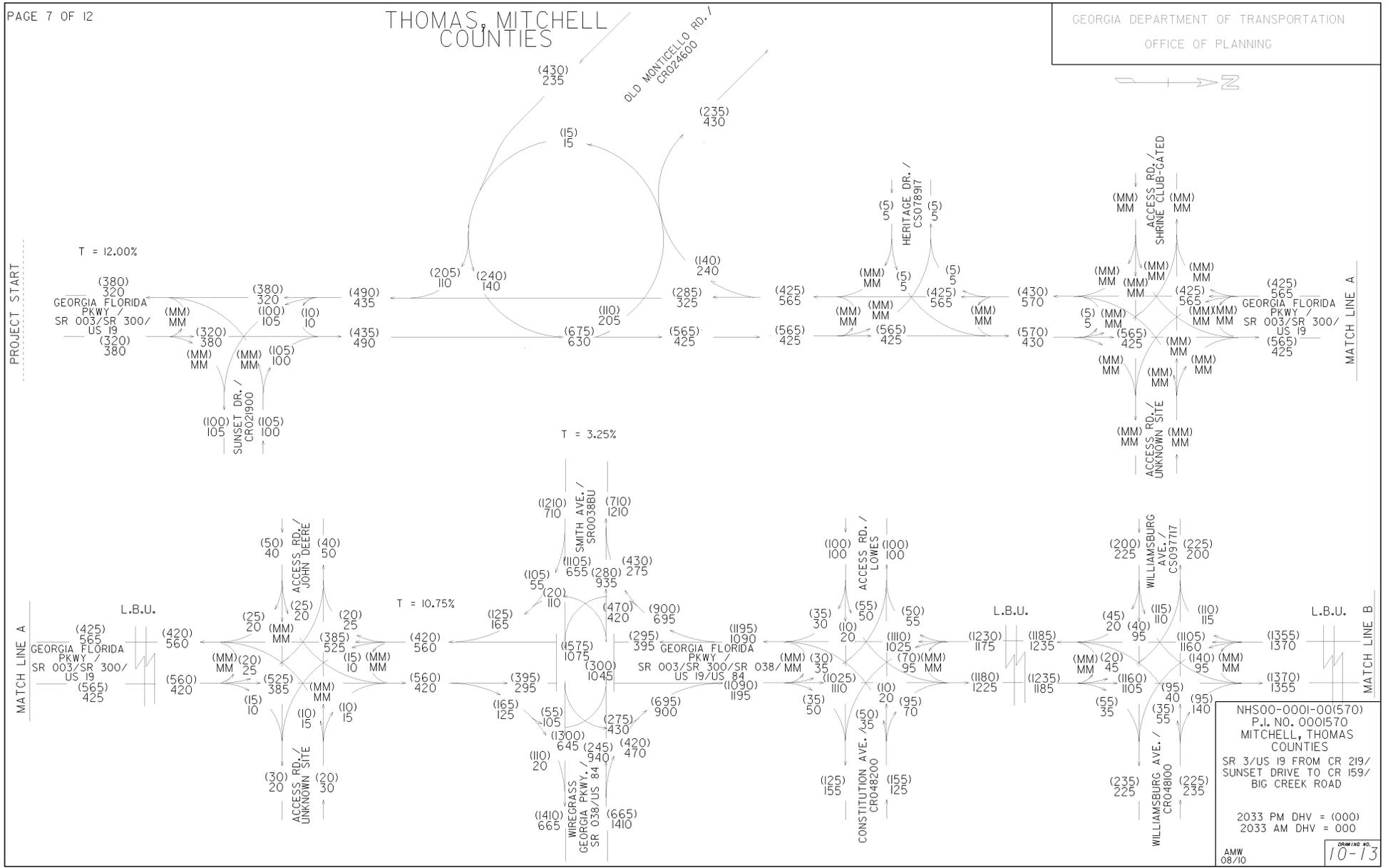
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AMW
08/10

DRAWING NO.
10-12

THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



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T = 3.25%

T = 10.75%

T = 4.75%

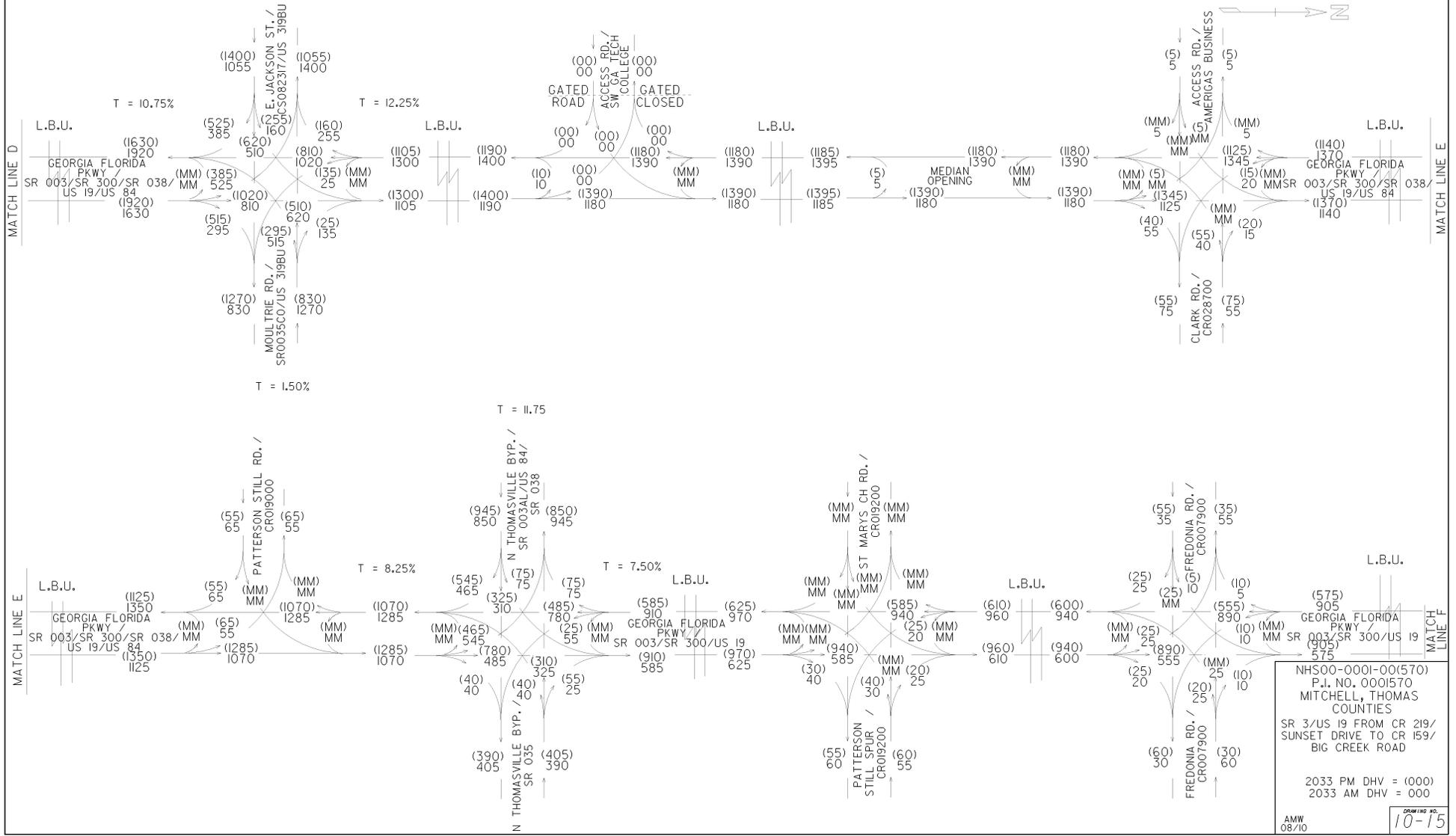
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 MITCHELL, THOMAS
 COUNTIES
 SR 3/US 19 FROM CR 219/
 SUNSET DRIVE TO CR 159/
 BIG CREEK ROAD

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AMW 08/10 DRAWING NO. 10-13

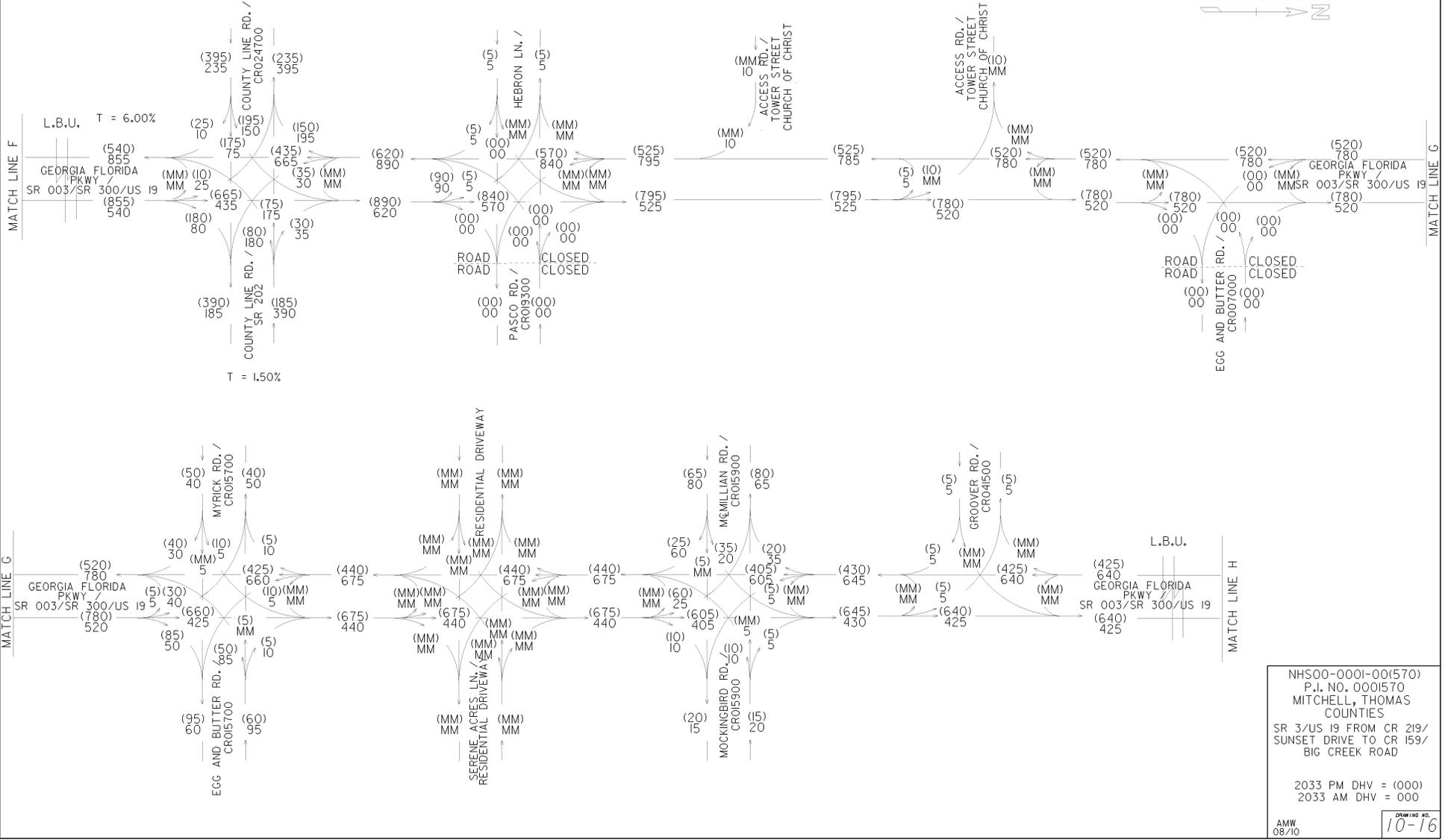
THOMAS, MITCHELL COUNTIES

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OFFICE OF PLANNING



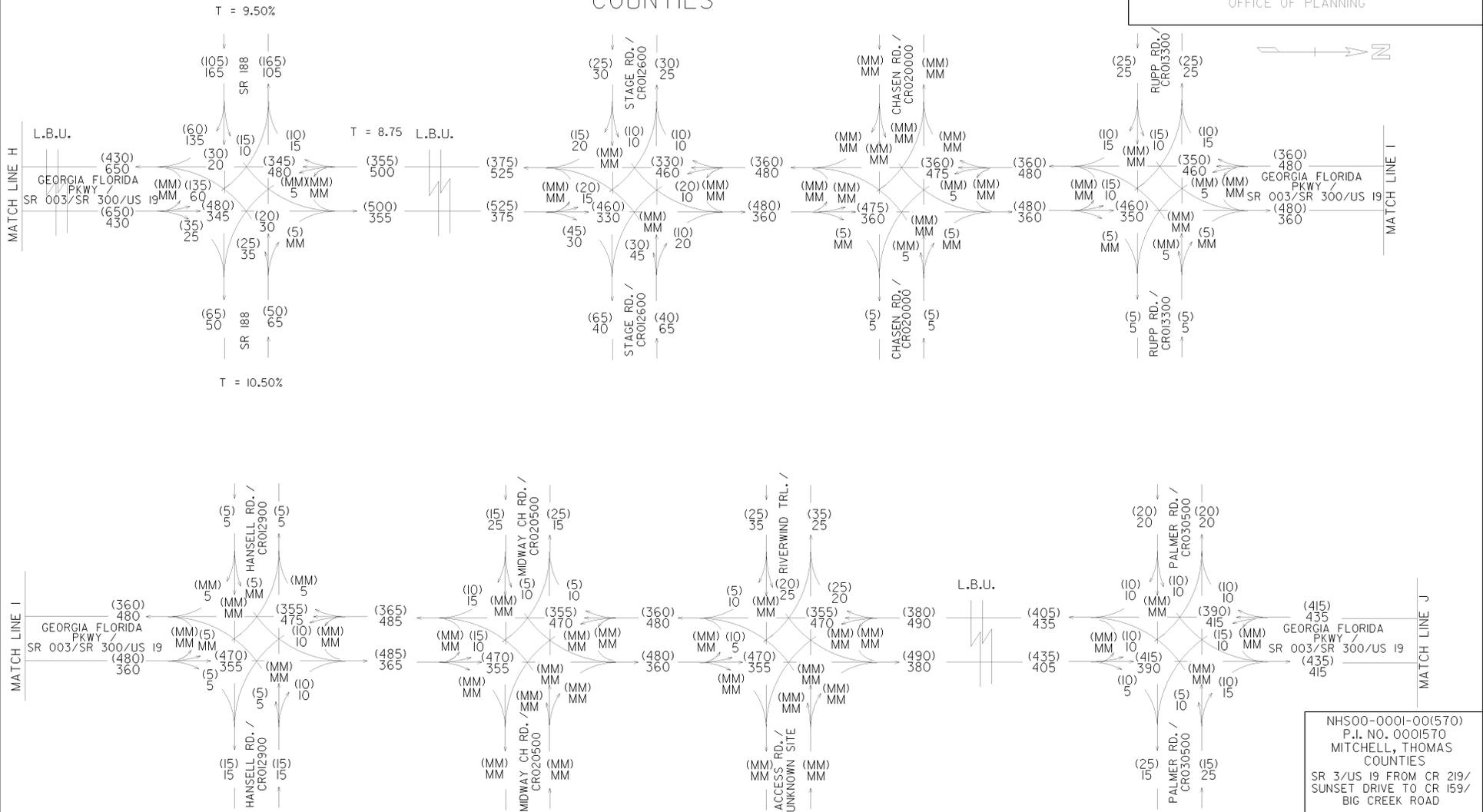
THOMAS, MITCHELL COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
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THOMAS, MITCHELL COUNTIES

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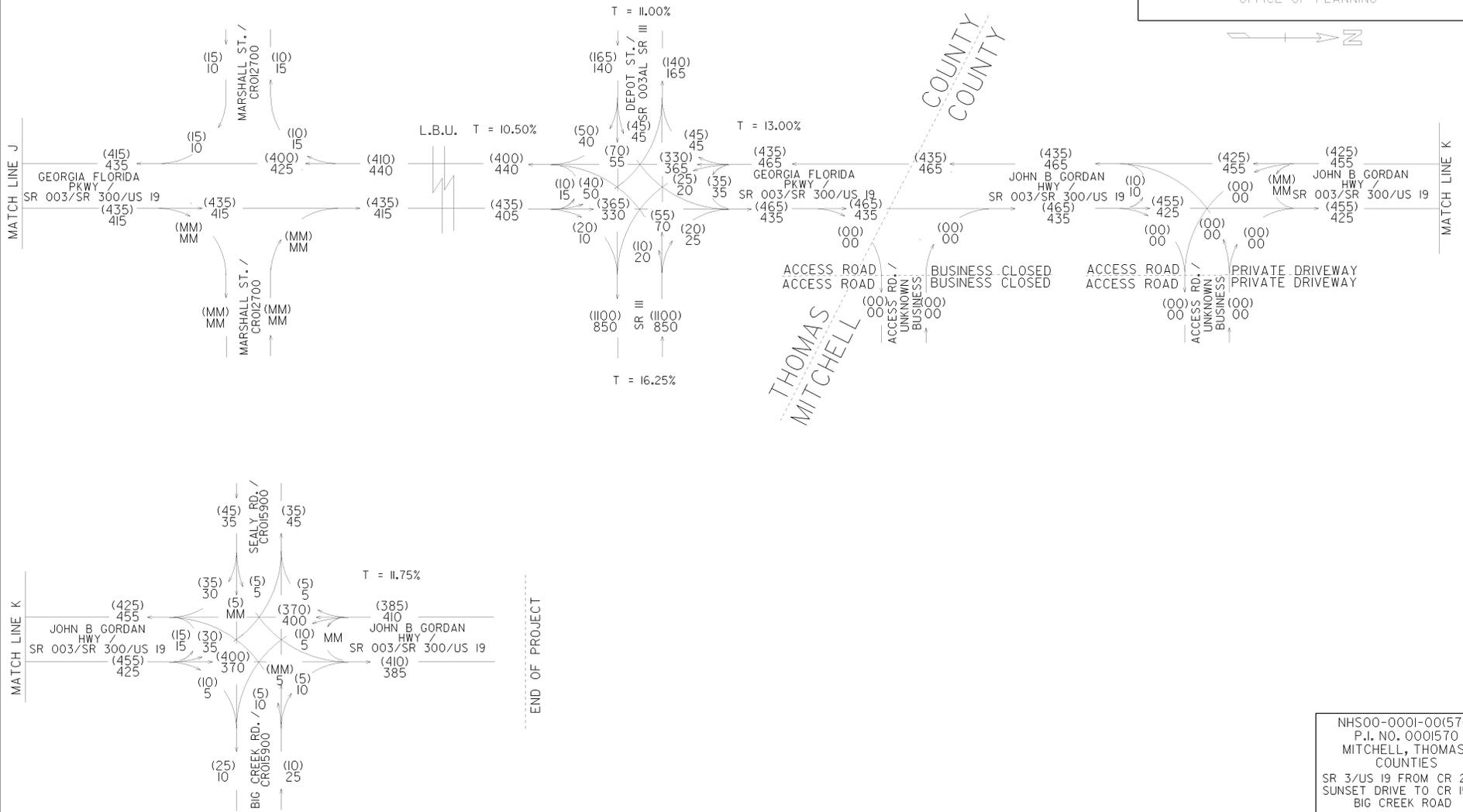


NHS00-0001-00(570)
 P.I. NO. 0001570
 MITCHELL, THOMAS
 COUNTIES
 SR 3/US 19 FROM CR 219/
 SUNSET DRIVE TO CR 159/
 BIG CREEK ROAD

2033 PM DHV = (000)
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THOMAS, MITCHELL
COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



END OF PROJECT

NHS00-0001-00(570)
P.I. NO. 0001570
MITCHELL, THOMAS
COUNTIES
SR 3/US 19 FROM CR 219/
SUNSET DRIVE TO CR 159/
BIG CREEK ROAD

2033 PM DHV = (000)
2033 AM DHV = 000

AMW
08/10

DRAWING NO.
10-18

**Georgia Department of Transportation
Quality Control and Quality Assurance Program**

Component of Quality Assurance:

Revised: September 22, 2010

REVISED

1. Concept Report & Layout Review

Review Panel: Assistant Office Head, Design Group Manager, Lead Design Engineer

Review Schedule: Hold review 4 weeks prior to submission of the concept report or revised report.

Review Elements:

- Project addresses the Need & Purpose and is consistent with Logical Termini.
- Project conforms to RTP/TIP/STIP (model yr/open to traffic, # of lanes, termini, cost estimates).
- Traffic Volumes reflect current and design year estimates and cover side roads adequately.
- Geometric Design Policy has been adequately determined – functional classification, design speed, design vehicle, min radius, max grades, max SE rate, access control, clear zone, median usage. See Chapters 3, 4, and 5 of the GDOT DPM.
- Typical Sections (see Chapter 6 of the GDOT DPM).
- Capacity Analysis demonstrates acceptable Level of Service (LOS) for Functional Classification.
- Lane configuration (number of lanes, turn lanes) is consistent with the Capacity Analysis.
- Provisions for u-turns have been assessed at appropriate locations along the roadway.
- Accident/Crash History - the concept addresses critical locations along the project?
- Avoidance of environmental resources has been adequately considered.
- State Waters and Stream Buffers have been identified by the ecologist and noted on plans.
- FEMA Flood Plains, Biota Impaired Streams, Fish Passage has been assessed. ~
- Avoidance of major utilities has been adequately considered.
- Considerations for pedestrian and bicycle access has been adequately addressed.
- Constructability has been assessed (staging, detours, road closures, access, major utilities, etc.).
- Structural elements have been adequately considered (bridge, culvert, retaining wall, noise wall).
- Vertical clearances are addressed (see GDOT Bridge and Structures Design Policy Manual). *N/A*
- FAA coordination has occurred (if project is within 2 miles of an airport or aviation facility). *N/A*
- Design Exceptions and Variances are addressed.
- Coordination with stakeholders has occurred (FHWA, local governments, civic groups, utility companies, railroad companies, other federal and state agencies, etc...).
- R/W & easement limits are reasonable (see Chapter 3 of the GDOT DPM). *N/A*
- V.E. study recommendations have been implemented if applicable.
- Feasible alternative alignments have been adequately considered and noted.
- Roadway Quantities have been reviewed and are satisfactory.**

Action:

- Lead Design Engineer will incorporate revisions resulting from the review into the Concept Report and layout; and/or conduct additional studies to support decisions or resolve questions, and follow-up with Assistant Office Head for closure.
- Document and file, in QC/QA folder, a copy of the review notes and any actions taken by the review panel.

Project: 0001570
NH500-0001-00 (570) AOH: CAC Date: 2/9/11
MITCHELL / THOMAS

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE	STP00-0001-00(565) Lamar Pike Spalding	0001565	OFFICE	Engineering Services
	STP00-0001-00(574) Bartow	0001574		
	STP00-0001-00(564) Grady Thomas	0001564		
	STP00-0001-00(570) Thomas	0001570		
	STP00-0001-00(562) Dougherty	0001562		
	STP00-0001-00(575) Floyd	0001575		
	STP00-0001-00(560) Crisp	0001560		
	STP00-0001-00(561) Decatur	0001561		
	STP00-0001-00(567) Mitchell	0001567		
	STP00-0001-00(571) Brooks Thomas	0001571		
	STP00-0001-00(568) Mitchell	0001568		
	STP00-0001-00(566) Lowndes	0001566		
	STP00-0001-00(558) Glynn	0001558		
	STP00-0001-00(569) Seminole Decatur	0001569		
	STP00-0001-00(559) Brooks Lowndes	0001559		
	STP00-0001-00(563) Seminole Early	0001563		
	STP00-0001-00(572) Worth	0001572		
	CSSTP-0007-00(126) Thomas	0007126		
	Median Turn Lane Projects		DATE	September 18, 2009

FROM: Ronald E. Wishon, Project Review Engineer *REW*

TO: Bobby Hilliard, PE, State Program Delivery Engineer
Attn.: David Norwood

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above projects was held May 4-7, 2009. Responses were received on September 17, 2009. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

It should be noted that nine of the projects have had at least one Field Plan Review and nine have had no Field Plan Reviews. The recommendations will be implemented on the projects that have not had plan reviews. For projects that have had plan reviews and are not scheduled for an upcoming letting, recommendations will be implemented where possible as long as they do not delay the project.

Due to the unique nature of this VE Study, several offices were involved in creating the responses. Responses for pavement recommendations have been coordinated through the Office of Materials and Research by Steve Pahnio, AJ Jubran, Tom Scruggs, Georgene Geary and JT Rabun. Responses for striping and traffic related issues were coordinated through the Office of Traffic Safety and Design by Kathy Zahul and Cynthia Burney. Savings revisions and compilation of the recommendations were done by David Norwood in the Office of Program Delivery.

**Median Turn Lane Projects
Implementation of Value Engineering Study Alternatives**

ALT #	Description	Potential Savings/LCC	Implement	Comments
A-4	Develop an independent pavement design that can be used for turn lane applications in lieu of using mainline pavement design (median crossovers).	Proposed = \$5,807,000 Actual = \$4,015,502	Yes	The VE report recommends a pavement design consisting of 1.5" of 12.5 mm, 2" of 19 mm, 3" of 25 mm and 6" of GAB. OMR has agreed to this with the following distinctions:
A-5	Develop an independent pavement design that can be used for turn lane applications in lieu of using mainline pavement design (cross road intersections).	Proposed = \$7,043,000 Actual = \$4,870,045	Yes	The turn lanes and crossovers should use whatever mix and thickness was used on the mainline. By matching surface mix types and thicknesses, future rehabilitation will remain uniform across the width of the roadway.
A-6	Develop an independent pavement design that can be used for turn lane applications in lieu of using mainline pavement design (right turn lanes).	Proposed = \$2,702,000 Actual = \$1,867,524	Yes	The proposed 6" of GAB is not acceptable. The 3 projects north of the fall line should use 12" GAB and the 15 south of the fall line should use 8" GAB. Savings have been revised accordingly.
A-11	Construct Type B median openings using the minimum deceleration length for all minor movement intersections.	Proposed = \$6,500,000 Actual = \$3,250,000	Yes	This will be done for the 9 projects still in preliminary design phase. The savings have been adjusted accordingly.
A-12	Construct Type B median openings using the minimum deceleration length in lieu of the desirable deceleration length for all median crossovers.	Proposed = \$11,000,000 Actual = \$5,500,000	Yes	This will be done for the 9 projects still in preliminary design phase. The savings have been adjusted accordingly.
A-18	Utilize Type A openings at median u-turn crossovers with low traffic and negligible accident history.	\$41,269,000	No	This is essentially a no-build option. These projects were created for the purpose of enhancing safety by providing the Type B median openings. The potential cost savings would not outweigh the safety benefits, particularly when the Type B median openings can be constructed within the existing median and without acquiring additional right of way.

**Median Turn Lane Projects
Implementation of Value Engineering Study Alternatives**

I-1	Reduce the amount of thermoplastic pavement markings in the gore areas between the left turn lanes and the mainline pavement.	Proposed = \$949,000 Actual = \$386,250	No	<p>The VE team compared a striping detail from Florida DOT with one from GDOT. FDOT uses 18" striping while GDOT uses 24". The spacing between stripes is the same. GDOT pays for this type of striping by the square yard; therefore, bid history is not indicative of actual anticipated cost savings. Material cost would be reduced by 25%. Assuming this results in 25% actual installed costs, the savings would be reduced to \$386,250.</p> <p>Additional research is needed to determine whether safety would be impacted by reducing the pavement markings. TS&D will continue to review available research to determine what width of striping should be used for gore striping statewide.</p>
I-2	Install turn signs at each intersection to meet the guidelines in Signing and Marking Guide. Remove installation of signs in excess of these guidelines.	\$564,000	Yes	Signage will be adjusted to comply with the MUTCD. Any proposed signs that are not required will be eliminated from the design.
A-7	Close U-Turn median openings when other median openings are close by.	Design Suggestion	Yes	This will not be done for projects that have had a PFPR; this will be reviewed for the 9 projects still in preliminary design phase. Additional public involvement will be required.
A-14	Remove existing mainline roadway mill and overlay items from project scope.	Design Suggestion	Yes	This will be done for the 9 projects still in preliminary design phase.
A-16	Remove median part of the urban roadway typical section to eliminate the small embankment under the paved median.	Design Suggestion	Yes	This has been done.
A-19	Install minimum pavement test sections at select U-turn/crossover locations	Design Suggestion	Yes	OMR has a testing program in place. Should they choose to use a turn-lane project for testing purposes, the Project Managers will comply.

**Median Turn Lane Projects
Implementation of Value Engineering Study Alternatives**

E-1	Limit signal work to adjusting the existing signals to accommodate the modified turn lanes. (PI No. 0001575)	Design Suggestion	Yes	This has been done.
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Additional information was provided by Kathy Zahul from Traffic Safety and Design on September 16, 2009.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:


Gerald M. Ross, PE, Chief Engineer

Date:



REW/LLM

Attachments

- c: Genetha Rice-Singleton – Office of Program Control
Mike Haithcock/David Norwood – OPD
Brad Ehrman – Road Design
Lamar Pruitt – District 3 Construction
Joe Cowan – District 4 Construction
Will Murphy – District 5 Construction
Patrick Bowers/Kenny Beckworth – District 6 Construction
Cynthia Burney/Derrick Cameron/Ken Werho – Traffic Safety and Design
Lisa Myers
Matt Sanders

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE: Statewide Turn-Lane Projects
(See below for Project Numbers) **OFFICE:** Program Delivery
DATE: September 18, 2009

FROM: Bobby Hilliard, P.E., State Program Delivery Engineer *Bobby Hilliard*

TO: Ronald E, Wishon, State Project Review Engineer

SUBJECT: Value Engineering Study-Responses

Reference is made to the recommendations that were contained in the Value Engineering Study Report dated May 12, 2009 for the below referenced projects. Our responses to the recommendations in the report follows. The projects covered in this VE Study are:

0001565 Lamar Pike Spalding STP00-0001-00(565)	0001574 Bartow STP00-0001-00(574)
0001564 Grady Thomas STP00-0001-00(564)	0007126 Thomas CSSTP-0007-00(126)
0001570 Thomas STP00-0001-00(570)	0001563 Seminole Early STP00-0001-00(563)
0001562 Dougherty STP00-0001-00(562)	0001572 Worth STP00-0001-00(572)
0001575 Floyd STP00-0001-00(575)	0001559 Brooks/Lowndes STP00-0001-00(559)
0001560 Crisp STP00-0001-00(560)	0001569 Seminole/Decatur STP00-0001-00(569)
0001561 Decatur STP00-0001-00(561)	0001558 Glynn STP00-0001-00(558)
0001567 Mitchell STP00-0001-00(567)	0001566 Lowndes STP00-0001-00(566)
0001571 Brooks Thomas STP00-0001-00(571)	0001568 Mitchell STP00-0001-00(568)

Recommendation Responses:

These responses were answered by a team consisting of Cynthia Burney (TSD), Steve Pahnno (OMR) and David Norwood (OPD) with the input and concurrence from Traffic Safety and Design Office and the Office of Material and Research. The office responsible for the response is noted below should you have any questions or need follow up considering the response.

A-4, A-5 and A-6 (OMR) – This response was coordinated through the Office of Materials & Research by Steve Pahnno, AJ Jubran, Tom Scruggs, Georgene Geary and JT Rabun. Their response is as follows: In principle, we are for thinning the sections for the turning lanes and crossovers on these projects. The fact that there is no mainline work to be done at the same time is good for reducing any confusion during construction.

The revised asphalt thicknesses are OK with the following distinction: where the mainline uses 1.5 inches of 12.5mm SP (or whatever mix and thickness), the turning lanes and crossovers should also use 1.5 inches of SP (or whatever mix and thickness). By matching surface mix types and thicknesses,

future rehabilitation will remain uniform across the width of the roadway, which will provide for an ease of maintenance and a better product.

The proposed 6 inches of GAB for the base is not acceptable. The use of 8 inches on state roads is considered the minimum GAB thickness allowed. For the projects north of the Fall Line, the Geotechnical Engineering Bureau typically recommends a minimum GAB thickness of 10 or 12 inches. Geotechnical's approval will be required to deviate from the typical recommendation.

For projects South of the Fall Lines, we recommend maintaining the typical minimum 8 inches of GAB.

There are 3 projects in this study North of the Fall Line and 15 south of the Fall Line. Therefore the potential savings are revised as follows (using 12" GAB for 3 projects North of Fall Line and 8" GAB for the 15 below the Fall Line):

A-4 – Revised from \$5,807,000 to \$4,015,502

A-5 – Revised from \$7,043,000 to \$4,870,045

A-6 – Revised from 2,702,000 to \$1,867,524

A-11 (TSD) This will be done for projects still in Preliminary Design Phase. Of the 18 projects, 9 are still in the Preliminary Design Phase. The present worth savings can be calculated at 50% of that shown in the VE Report (\$6.5M) for a revised value of \$3,250,000.

A-12 (TSD) This will be done for projects still in Preliminary Design Phase. Of the 18 projects, 9 are still in the Preliminary Design Phase. The present worth savings can be calculated at 50% of that shown in the VE Report (\$11M) for a revised value of \$5,500,000.

A-18 (TSD) The use of offset left turn lanes has been recommended in the NCHRP Report 500 Series Volume 12, "A Guide for Reducing Collisions at Signalized Intersections." FHWA-HRT-09-036, a technical brief published by Federal Highway Administration in June 2009, is a Safety Evaluation of Offset Improvements for Left-Turn Lanes. It states unequivocally that sight distance for left turning vehicles is diminished by the negative offset of left turn lanes. Sight distance can be improved by shifting left turn lanes with no offset to provide a positive offset. The general conclusion of the research was that providing offset left-turn lanes has the potential to reduce crashes and crash severity. The conservative benefit:cost ratio estimated in the report was 2:1. The study included only signalized intersections. However, increased sight distance is at least as beneficial to drivers making a decision to turn left at an uncontrolled intersection.

This and other median crossover conversion projects statewide were created for the purpose of enhancing safety by providing the positive offset. The Office of Traffic Operations asserts that the potential cost savings would not outweigh the safety benefits, particularly when a Type B crossover can be constructed entirely within the existing median and without acquiring additional right of way.

I-1 (TSD) The VE Team provided the Florida DOT's detail of pavement markings for traffic channelization for traffic flows in the same direction. The FDOT striping width is 18" versus GDOT 24". Both FDOT and GDOT use the same spacing between stripes. The Department currently pays for this type of striping by the square yard. Therefore, bid history is not indicative of actual anticipated cost

savings. Material costs would be reduced by roughly 25%. Assuming this results in 25% actual installed costs, the savings associated with implementing striping in accordance with the Florida detail would be \$386,250.

Original cost	\$1,545,000
Cost using FDOT Detail	\$1,158,750
Savings (25%)	\$386,250

Additional research is needed to determine whether safety would be impacted by reducing the pavement markings. The Office of Traffic Operations will continue to review available research to determine what width of striping should be used for gore striping statewide. Traffic Operations requests specific approval from the Chief Engineer prior to modifying the striping for these projects if the changes were required prior to modifying detail M-3.

I-2 (TSD) Yes and any signs required by MUTCD.

Suggestion Responses:

A-7 (TSD) Not without public involvement; therefore, not on any projects at PFPR stage or beyond.

A-14 (TSD) Yes, projects that have do not have PFPR plans prepared.

A-16 (OPD) Yes – This has been done.

A-19 (OPD) The Office of Materials and Research has a testing program in place. Should they choose to use a turn-lane project for testing purposes the designers will cooperate.

E-1 (OPD) Yes- This has been done.

<u>A-4</u>	<u>Orig Pvmt Design</u>	<u>Unit</u>	<u>No. Units</u>	<u>Cost/Unit</u>	<u>Cost</u>
	12.5 mm	TN	364	\$64.00	\$23,296
	19 mm	TN	486	\$68.26	\$33,174
	25 mm	TN	1215	\$60.11	\$73,034
	GAB	TN	1944	\$17.99	\$34,973
					\$164,477
153 Median Crossovers			Total=		\$25,164,915.21

	<u>Orig. VE Pvmt Design</u>				
	12.5 mm	TN	364	\$64.00	\$23,296
	19 mm	TN	486	\$68.26	\$33,174
	25 mm	TN	729	\$60.11	\$43,820
	GAB	TN	1458	\$17.99	\$26,229
					\$126,520
153 Median Crossovers			Total=		\$19,357,555

Used 8" of GAB for 15 projects below Fall Line and 12" GAB for 3 above.

	<u>Revised VE Pvmt Design</u>				
	12.5 mm	TN	364	\$64.00	\$23,296
	19 mm	TN	486	\$68.26	\$33,174
	25 mm	TN	729	\$60.11	\$43,820
127 Median Crossovers below Fall Line	GAB	TN	1613	\$17.99	\$29,018
26 Median Crossovers above Fall Line	GAB	TN	496	\$17.99	\$8,923
					\$138,231
			Total=		\$21,149,413

VE Stated Savings \$5,807,360
REVISED TOTAL SAVINGS \$4,015,502

<u>A-5</u>	<u>Orig Pvmt Design</u>	<u>Unit</u>	<u>No. Units</u>	<u>Cost/Unit</u>	<u>Cost</u>
	12.5 mm	TN	254	\$64.00	\$16,256
	19 mm	TN	339	\$68.26	\$23,140
	25 mm	TN	848	\$60.11	\$50,973
	GAB	TN	1357	\$17.99	\$24,412
					\$114,782
266 Intersections				Total=	\$30,531,972

	<u>Orig. VE Pvmt Design</u>				
	12.5 mm	TN	254	\$64.00	\$16,256
	19 mm	TN	339	\$68.26	\$23,140
	25 mm	TN	509	\$60.11	\$30,596
	GAB	TN	1018	\$17.99	\$18,314
					\$88,306
266 Intersections				Total=	\$23,489,383

Used 8" of GAB for 15 projects below Fall Line and 12" GAB for 3 above.

	<u>Revised VE Pvmt Design</u>				
	12.5 mm	TN	254	\$64.00	\$16,256
	19 mm	TN	339	\$68.26	\$23,140
	25 mm	TN	509	\$60.11	\$30,596
221 Intersections below Fall Line	GAB	TN	1126	\$17.99	\$20,257
45 Intersections above Fall Line	GAB	TN	346	\$17.99	\$6,225
					\$96,473
				Total=	\$25,661,927

VE Stated Savings \$7,042,589
REVISED TOTAL SAVINGS \$4,870,045

<u>A-6</u>	<u>Orig Pvmt Design</u>	<u>Unit</u>	<u>No. Units</u>	<u>Cost/Unit</u>	<u>Cost</u>
	12.5 mm	TN	130	\$64.00	\$8,320
	19 mm	TN	173	\$68.26	\$11,809
	25 mm	TN	433	\$60.11	\$26,028
	GAB	TN	692	\$17.99	\$12,449
					\$58,606
200 Sites				Total=	\$11,721,138

	<u>Orig. VE Pvmt Design</u>				
	12.5 mm	TN	130	\$64.00	\$8,320
	19 mm	TN	173	\$68.26	\$11,809
	25 mm	TN	260	\$60.11	\$15,629
	GAB	TN	519	\$17.99	\$9,337
					\$45,094
				Total=	\$9,018,878

Used 8" of GAB for 15 projects below Fall Line and 12" GAB for 3 above.

	<u>Revised VE Pvmt Design</u>				
	12.5 mm	TN	130	\$64.00	\$8,320
	19 mm	TN	173	\$68.26	\$11,809
	25 mm	TN	260	\$60.11	\$15,629
166 below Fall Line	GAB	TN	575	\$17.99	\$10,344
34 Sites above Fall Line	GAB	TN	176	\$17.99	\$3,166
					\$49,268
				Total=	\$9,853,614

VE Stated Savings \$2,702,260
REVISED TOTAL SAVINGS \$1,867,524