

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE**

FILE P.I. #132610-
STP00-0198-01(020)
GDOT District 1 - Gainesville
Hall County
SR 60 from SR 136 to CR 158/Yellow Creek Rd in
Murrayville

OFFICE Design Policy & Support

DATE August 7, 2012

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED CONCEPT REPORT

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

Attachment

DISTRIBUTION:

Bobby Hilliard, Program Control Administrator
Genetha Rice-Singleton, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Lisa Myers, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Bayne Smith, District Engineer
Brent Cook, District Preconstruction Engineer
Jason Dykes, for District Utilities Engineer
Otis Clark, Project Manager
BOARD MEMBER - 9th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

REVISED PROJECT CONCEPT REPORT

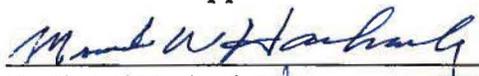
Project Type: : Widening & Reconstruction
GDOT District: 1
Federal Route Number: N/A

P.I. Number: 132610
County: Hall
State Route Number: S.R. 60

Changes and reasons for changes:

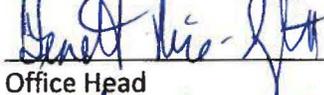
Typical section changed from a four 12-ft lane typical to a four 11-ft lane typical and from a 20-ft raised median to a 12-ft flush median for the majority of the project except from north of Fairmont St. to south of Willow Oak Dr. a 4-ft corrugated median is proposed to avoid/minimize historic and longitudinal streams impacts. The existing triple 10'x9' box culvert at Squirrel Creek will be replaced.

Submitted for approval:



Heath and Lineback Engineers

7/16/12
DATE



Office Head

7/24/2012
DATE



GDOT Project Manager

7/24/12
DATE

Recommendation for approval:

Glenn Bowman*

State Environmental Administrator

May 21, 2012
DATE

Ben Rabun*

State Bridge Design Engineer

July 20, 2012
DATE

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).

Cindy VanDyke/TEM* (see note below)

State Transportation Planning Administrator

May 22, 2012
DATE

* Recommendation on file

Note from Planning Office: Project needs to be added to ARC's 2040 Conformity Model. Planning will request for the project to be included in the limited update, which is anticipated to be completed late 2012/early 2013.

PLANNING, APPROVED CONCEPT, & BACKGROUND DATA:

Project Justification Statement: This project is needed due to increased traffic volumes generated by new development. Recent developments of several residential and commercial establishments have changed the formerly rural landscape into a more suburbanized setting, particularly near Price Road. The higher traffic volumes are also contributing to high crash, injury, and fatality rates that exceed the statewide rates for similar roadways. Widening and reconstruction of SR 60 will increase capacity for design year (2039) traffic.

Description of the approved concept: Project STP00-0198-01(020) Hall County proposes widening and reconstruction of SR 60 approximately 1.0 mile northwest of the city of Gainesville. Beginning at the end of the existing four lane section just north of S.R. 136 and extending along the existing S.R. 60 to the intersection of Yellow Creek Road (CR 158). The typical section is four 12-ft lanes separated by a 20-ft raised median. The total length of project is 4.3 miles.

PDP Classification: Major Minor

Federal Oversight: Full Oversight Exempt State Funded Other

Projected Traffic (ADT) as shown in the approved Concept Report:

Open Year (1999): 11,600 Design Year (2019): 19,700

Updated Traffic (ADT):

Open Year (2019): 16,850 Design Year (2039): 20,600

Functional Classification (Mainline):

From SR 136 to Elrod Road: Urban Principle Arterial
From Elrod Road to Yellow Creek Road: Rural Minor Arterial

VE Study anticipated: No Yes Completed – Date: 08/24/2011

See Attachment for VE implementation letter and responses. Note that several of the comments/implementations in the VE study are not represented in this report since they were not part of the approved concept. This is due to changes that were made after the concept was approved. For example, the bridge mentioned in the VE study was added after approval of the concept. Also, since the VE study an inspection of the culvert at Squirrel Creek has found that the culvert needs to be replaced due to age and condition.

PROPOSED REVISIONS

Approved Features:	Proposed Features:
<ul style="list-style-type: none"> • The approved roadway typical section is four 12-ft travel lanes. • Approved roadway typical section has 20-ft raised median. • Approved maximum vertical grade is 7.00%. • Extend the existing triple 10'x9' box culvert at Squirrel Creek. 	<ul style="list-style-type: none"> • Proposed typical section would be four 11-ft travel lanes. • Proposed typical section has a 12-ft flush median and a 4-ft corrugated median. A design variance will be required for the 12-ft flush median and the 4-ft corrugated median. • Maximum Vertical grade is 9.00% at the beginning of the project. A design exception will be required. • The existing triple 10'x9' box culvert at Squirrel Creek will be replaced.
<p>Reason(s) for change:</p> <ul style="list-style-type: none"> • Typical section changed from four 12-ft travel lanes to four 11-ft travel lanes to avoid historic and longitudinal stream impacts. • Typical section changed from a 20-ft raised median to a 12-ft flush median to avoid historic and longitudinal streams impacts. • Maximum grade at the beginning of the project changed to minimize/avoid longitudinal stream impacts and reduce the earthwork and required right of way. • The existing triple 10'x9' box culvert at Squirrel Creek will be replaced due to age and condition. Also raising the profile over the culvert will result in additional load. See attachments for culvert inspection recommendation. 	

ENVIRONMENTAL

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes
 Is the project located in an Ozone Non-attainment area? No Yes

The proposed project concept matches the conforming plan's model description. See attachment 7.

Potential environmental impacts of proposed revision: Environmental impacts reduced by reduced project footprint.

Have proposed revisions been reviewed by environmental staff? No Yes

Note: PAR Process was completed in March 2012.

Environmental responsibilities (Studies/Documents/Permits): GDOT

PROJECT COST & ADDITIONAL INFORMATION

Updated Cost Estimate		Date of Estimate
Base Construction Cost:	\$15,413,788.51	July 2012
Engineering and Inspection:	\$770,689.43	July 2012
Liquid AC Adjustment:	\$1,648,076.55	July 2012
<u>Total Construction Cost:</u>	\$17,832,554.49	July 2012
Right-of-Way:	\$14,005,000.00	June 2012
Utilities (reimbursable costs):	\$3,662,000.00	April 2012
Environmental Mitigation:	\$156,905.00	February 2012
TOTAL PROJECT COST:	\$35,656,459.49	July 2012

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

Attachments:

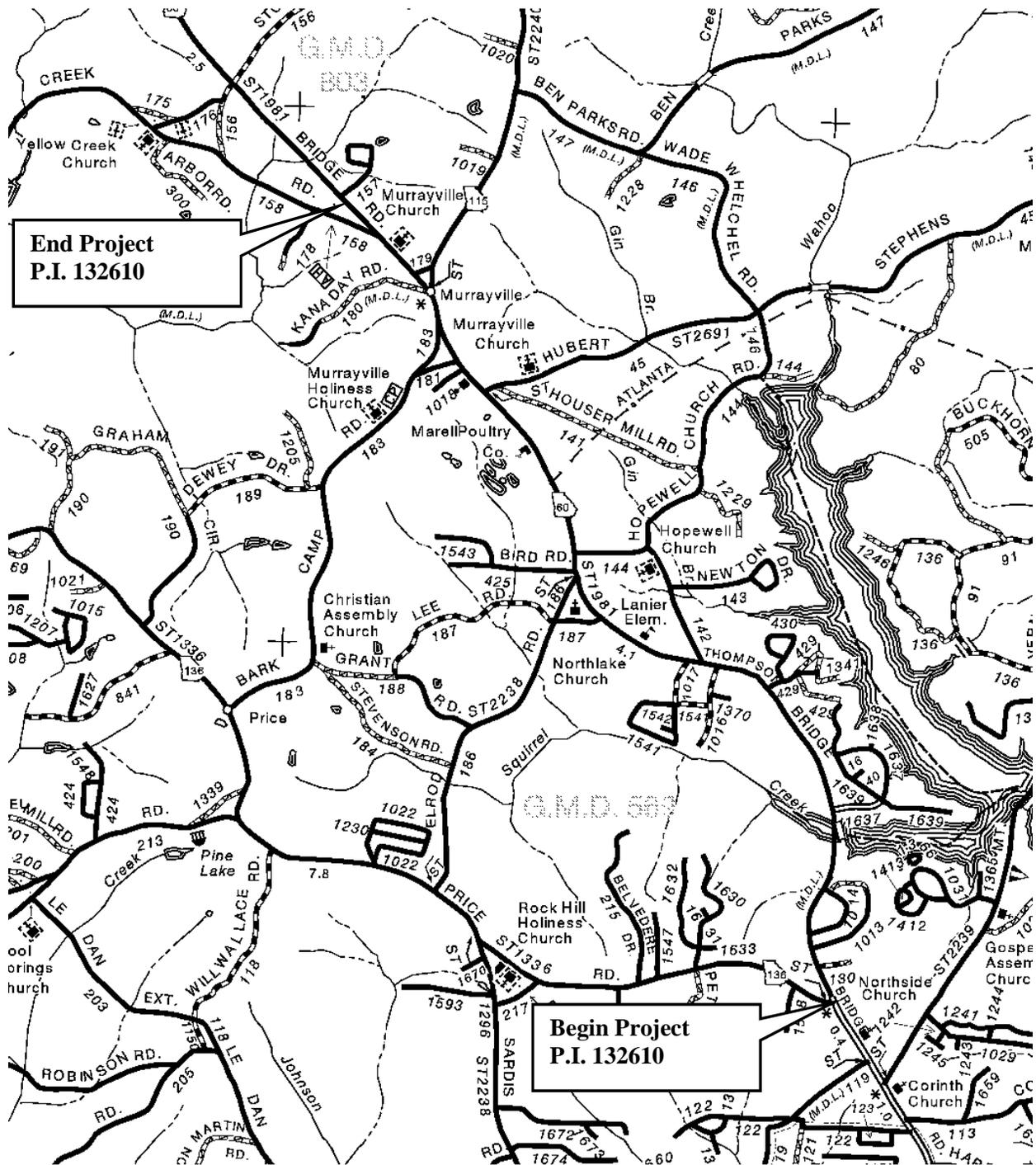
1. Sketch map
2. Cost Estimates
 - a. Summary
 - b. Construction Cost Estimate
 - c. Fuel & Asphalt Price Adjustment Worksheet
 - d. Right-of-Way Cost Estimate
 - e. Mitigation Cost Estimate
 - f. Utility Cost Estimate
3. Crash History
4. Typical Section
5. Traffic Data
6. Initial Concept Team Meeting Minutes
7. Culvert Inspection Recommendation
8. PIOH Synopsis
9. Conforming Plan's Network Schematics Showing Thru Lanes (Note: This attachment is required for non-attainment areas)
10. VE implementation letter and responses with attachments
11. Concept Layout

APPROVALS

Concur: Bill R McMillan
Director of Engineering

Approve: Deed M Ross
Chief Engineer

8/13/2012
DATE



Location Map
Project: STP00-0198-01(020) Hall County
PI No.: 132610
Description: SR 60 from SR 136 to Yellow Creek Road

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. , **OFFICE**
 DATE

P.I. No.

FROM

TO Lisa L. Myers, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

MNGT LET DATE

PROJECT MANAGER

MNGT R/W DATE

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

Reduced construction cost due to a reduction in project length, added liquid AC adjustments, revised R/W cost and added utility relocation cost.

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ 15,413,788.51	(Base Estimate)
Engineering and Inspection:	\$ 770,689.43	(Base Estimate x 5 %)
Total Liquid AC Adjustment	\$ 1,648,076.55	(From attached worksheet)
Construction Total:	\$ 17,832,554.49	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

Atlanta Gas Light

\$886,000.00

AT&T

\$856,000.00

Charter

\$208,000.00

City of Gainesville

\$600,000.00

GA Power

\$119,000.00

GA Power Transmission

\$200,000.00

Jackson EMC

\$793,000.00

Attachments

JOB ESTIMATE REPORT

JOB NUMBER : 132610
DESCRIPTION: WIDENING AND RECONSTRUCTION OF SR60 FROM SR136 TO YELLOW CRE
HALL COUNTY

ITEMS FOR JOB 132610

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - STP00-0198-01(020)	1.000	250000.00	250000.00
0008	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	69347.29	69347.29
0009	150-5010		EA	TRAF CTRL,PORABLE IMPACT ATTN	12.000	6336.08	76033.00
0010	205-0001		CY	UNCLASS EXCAV	121290.000	3.55	431660.19
0014	208-0100		CY	IN PLACE EMBANKMENT	196205.000	4.93	967712.49
0019	201-1500		LS	CLEARING & GRUBBING - STP00-0198-01(020)	1.000	1100000.00	1100000.00
0020	310-1101		TN	GR AGGR BASE CRS, INCL MATL	102923.000	13.26	1365712.05
0024	318-3000		TN	AGGR SURF CRS	7200.000	13.85	99741.74
0025	402-1812		TN	RECYL AC LEVELING,INC BM&HL	17000.000	59.87	1017854.60
0030	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	29495.000	58.11	1714004.59
0035	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	16560.000	56.61	937551.85
0040	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	21700.000	59.15	1283708.64
0045	413-1000		GL	BITUM TACK COAT	19708.000	2.39	47128.33
0049	441-0016		SY	DRIVEWAY CONCRETE, 6 IN TK	1118.000	28.25	31585.32
0050	441-0104		SY	CONC SIDEWALK, 4 IN	27350.000	19.47	532755.03
0055	441-0740		SY	CONC MEDIAN, 4 IN	6800.000	15.47	105229.80
0060	441-6222		LF	CONC CURB & GUTTER/ 8"X30"TP2	49203.000	9.65	475206.51
0065	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	15400.000	2.63	40624.28
0069	525-1000		EA	COFFERDAM	1.000	200000.00	200000.00
0070	522-1000		LS	SHORING STP00-0198-01(020)	1.000	211200.00	211200.00
0074	620-0100		LF	TEMP BARRIER, METHOD NO. 1	10000.000	19.81	198115.30
0075	634-1200		EA	RIGHT OF WAY MARKERS	450.000	92.86	41790.28
0080	641-1200		LF	GUARDRAIL, TP W	22200.000	14.69	326119.55
0085	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	30.000	605.22	18156.62
0090	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	30.000	1820.75	54622.71
0095	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	10000.000	1.37	13767.50
0100	500-3101		CY	CLASS A CONCRETE	944.620	393.76	371962.78
0105	511-1000		LB	BAR REINF STEEL	159246.000	0.67	106822.22
0110	550-1180		LF	STM DR PIPE 18", H 1-10	20700.000	26.75	553833.47
0115	550-1181		LF	STM DR PIPE 18", H 10-15	1004.000	27.42	27529.77
0130	550-1240		LF	STM DR PIPE 24", H 1-10	1616.000	34.52	55793.27
0135	550-1241		LF	STM DR PIPE 24", H 10-15	66.000	42.65	2815.10
0140	550-1300		LF	STM DR PIPE 30", H 1-10	293.000	49.25	14433.00
0145	550-1361		LF	STM DR PIPE 36", H 10-15	228.000	63.48	14474.98
0150	550-1422		LF	STM DR PIPE 42", H 15-20	98.000	70.00	6860.00
0155	550-1481		LF	STM DR PIPE 48", H 10-15	83.000	84.83	7041.59
0170	550-4218		EA	FLARED END SECT 18 IN, ST DR	160.000	437.91	70065.70
0175	550-4224		EA	FLARED END SECT 24 IN, ST DR	22.000	552.51	12155.28
0180	550-4230		EA	FLARED END SECT 30 IN, ST DR	2.000	728.30	1456.60
0185	550-4436		EA	FLARED END SECT 36 IN, SLP DR	4.000	750.00	3000.00
0190	576-1018		LF	SLOPE DRAIN PIPE, 18 IN	1190.000	23.16	27562.47

STATE HIGHWAY AGENCY

DATE : 07/02/2012
PAGE : 2

JOB ESTIMATE REPORT

ITEM	DESCRIPTION	QTY	UNIT	AMOUNT	TOTAL
0195	SLOPE DRAIN PIPE, 24 IN	120.000		24.78	2973.79
0200	CATCH BASIN, GP 1	120.000		1987.34	238481.40
0205	CATCH BASIN, GP 1, ADDL DEPTH	80.000		160.40	12832.08
0210	DROP INLET, GP 1	40.000		1847.59	73903.90
0215	DROP INLET, GP 1, ADDL DEPTH	34.000		169.14	5750.91
0220	STORM SEW MANHOLE, TP 1	13.000		1648.51	21430.72
0225	ST SEW MANHOLE, TP 1, A DEP, CL 2	30.000		219.76	6592.96
0230	ST SEW MANHOLE, TP 1, A DEP, CL 3	30.000		220.00	6600.00
0235	BARRICADES	1800.000		44.55	80204.02
0240	HWY SIGNS, TP1MAT,REFL SH TP 9	1550.000		16.46	25515.91
0245	GALV STEEL POSTS, TP 7	4000.000		6.47	25896.20
0250	TRAF SIGNAL INSTALLATION NO -	1.000		125000.00	125000.00
0255	STP00-0198-01(020)	1.000		125000.00	125000.00
0260	TRAF SIGNAL INSTALLATION NO -	1.000		125000.00	125000.00
0265	STP00-0198-01(020)	1.000		125000.00	125000.00
0270	STP00-0198-01(020)	105.000		68.53	7195.65
0275	PAVEMENT MARKING, ARROW, TP 3	8.000		70.00	560.00
0280	PAVEMENT MARKING, ARROW, TP 7	20.000		85.03	1700.60
0285	THERMO SOLID TRAF ST, 5 IN YEL	300000.000		0.31	95061.00
0290	THERMO SOLID TRAF STRIPE,24",WH	300.000		4.54	1363.23
0295	THERMO SOLID TRAF STRIPE, 8",WH	4549.000		1.80	8216.77
0300	THERMO SKIP TRAF ST, 5 IN, WHI	55000.000		0.24	13477.20
0305	THERM TRAF STRIPING, WHITE	1573.000		2.97	4684.90
0310	RAISED PVMT MARKERS TP 1	147.000		3.67	540.54
0315	RAISED PVMT MARKERS TP 3	538.000		3.15	1694.72
0320	TEMPORARY GRASSING	37.000		29.57	1094.21
0325	MULCH	1300.000		141.33	183735.79
0330	CONSTRUCTION EXIT	30.000		1068.26	32048.00
0335	CONSTR AND REMOVE SILT CONTROL GATE, TP 3	15.000		427.36	6410.54
0340	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN	1400.000		211.97	296769.72
0345	CONSTR & REM ROCK FILTER DAMS	120.000		337.28	40474.78
0350	CONS & REM INLET SEDIMENT TRAP	500.000		137.56	68783.86
0355	MAINT OF TEMP SILT FENCE, TP C	50000.000		0.59	29722.00
0360	MAINT OF SILT CONTROL GATE, TP 3	18.000		87.13	1568.42
0365	MAINT OF CONST EXIT	30.000		471.46	14144.09
0370	MAINT OF INLET SEDIMENT TRAP	400.000		37.98	15194.21
0375	MAINT OF ROCK FILTER DAM	40.000		97.14	3885.98
0380	WATER QUALITY INSPECTIONS	18.000		772.11	13898.01
0385	TEMPORARY SILT FENCE, TYPE C	84718.000		2.48	210351.41
0390	STN DUMPED RIP RAP, TP 1, 24"	2600.000		31.29	81368.87
0395	STN DUMPED RIP RAP, TP 3, 18"	2400.000		27.42	65818.15
0400	PLASTIC FILTER FABRIC	5000.000		3.43	17155.55
0405	PERMANENT GRASSING	200.000		617.69	123539.55
0410	AGRICULTURAL LIME	400.000		15.27	6111.85
0415	FERTILIZER MIXED GRADE	120.000		372.85	44742.80
0420	FERTILIZER NITROGEN CONTENT	6000.000		1.49	8970.30
0425	EROSION CONTROL MATS, SLOPES	30000.000		3.38	101519.70
0430	MSE WALL FACE, 0 - 10 FT HT, WALL NO	123188.000		0.72	89377.82
0435	COPING A, WALL NO - STP00-0198-01(020)	1646.000		30.51	50232.89
ITEM TOTAL		165.000		71.27	11759.62
					15413788.51

PROJ. NO.

STP-00-0198-01(020)- Hall County

CALL NO.

P.I. NO.

132610

DATE

7/2/2012

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)

\$ 6,429.85

\$

6,429.85

Monthly Asphalt Cement Price month placed (APM)

\$ 1,012.80

\$

1,012.80

Monthly Asphalt Cement Price month project let (APL)

\$ 633.00

\$

633.00

Total Monthly Tonnage of asphalt cement (TMT)

16.92956979

Bitum Tack

SY Gals/SY

Gals

gals/ton

tons

Single Surf. Trmt.

19708

0.20

3941.6

232.8234

16.92956979

Double Surf. Trmt.

0.44

0

232.8234

0

Triple Surf. Trmt

0.71

0

232.8234

0

16.92956979

TOTAL LIQUID AC ADJUSTMENT

\$

1,648,076.55

**GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 6/28/2012 Project: STP00-0198-01(020)
 Revised: County: 132610
 PI: 132610

Description: SR 60 from SR 136 to Yellow Creek Rd, N or Murrayville
 Project Termini: Widen SR 60-from SR 136 to Yellow Creek Rd

Existing ROW: Varies
 Required ROW: Varies
 Parcels: 155

Land and Improvements _____ \$9,866,550.00

Proximity Damage \$500,000.00
Consequential Damage \$525,000.00
Cost to Cures \$395,000.00
Trade Fixtures \$0.00
Improvements \$3,000,000.00

Valuation Services _____ \$231,250.00

Legal Services _____ \$1,004,625.00

Relocation _____ \$1,115,000.00

Demolition _____ \$485,000.00

Administrative _____ \$1,302,500.00

TOTAL ESTIMATED COSTS _____ \$14,004,925.00

TOTAL ESTIMATED COSTS (ROUNDED) _____ \$14,005,000.00

Preparation Credits	Hours	Signature

Prepared By:

LaShone Alexander

CG#: 256999

6/28/2012

Approved By:

LaShone Alexander

CG#: 256999

6/28/2012

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

ECOLOGICAL IMPACTS

Alternative & Open Water/Wetland Impact Area (acres)				
PAR Alternatives			Additional Considerations (bridge over Squirrel Creek)	
Site Number	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)
Wetland 14	0.01	0.01	0.01	0.01
Open Water 15	0.60	0.60	0	0
Total Impacts	0.61	0.61	0.01	0.01

Alternative & Stream Impact Area (linear feet)				
PAR Alternatives			Additional Considerations (bridge over Squirrel Creek)	
Site Number	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)
Stream 03	105 (0.01 acre)	105 (0.01 acre)	105 (0.01 acre)	105 (0.01 acre)
Stream 04	84 (0.01 acre)	0 (0 acre)	84 (0.01 acre)	0 (0 acre)
Stream 09	148 (0.01 acre)	125 (0.01 acre)	148 (0.01 acre)	125 (0.01 acre)
Stream 10	110 (0.01 acre)	57 (<0.01 acre)	110 (0.01 acre)	57 (<0.01 acre)
Stream 11	226 (0.02 acre)	226 (0.02 acre)	226 (0.02 acre)	226 (0.02 acre)
Stream 19	89 (0.02 acre)	89 (0.02 acre)	89 (0.02 acre)	89 (0.02 acre)
Total Impacts	762 (0.07 acre)*	602 (0.06 acre)*	762 (0.07 acre)*	602 (0.06 acre)*

*Due to rounding area of impact does not total to the sum of the areas indicated in the column above.

Alternative & Non-Exempt State Water Buffer Impact Area (square feet)				
PAR Alternatives			Additional Considerations (bridge over Squirrel Creek)	
Site Number	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)
Buffer 04-1	6,220	0	6,220	0
Buffer 04-2	6,770	0	6,770	0
Buffer 09-1	106	0	106	0
Buffer 09-2	2,610	0	2,610	0
Buffer 09-3	5,437	7,131	5,437	7,131
Buffer 10-1	1,000	440	1,000	440
Buffer 10-2	1,254	0	1,254	0
Buffer 15-1	3,528	3,528	0	0
Buffer 15-2	91	91	0	0
Buffer 15-3	9,061	9,061	0	0
Buffer 15-4	7,650	7,650	0	0
Buffer 19-1	3,144	3,144	3,144	3,144
Total Impacts	46,871	31,045	26,541	10,715

Alternative Summary Table

	PAR Alternatives		Additional Considerations (bridge over Squirrel Creek)	
	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)	Alternative 1 (Best Fit)	Alternative 2 (Wetland Minimization)
Length	5.4 miles			
Typical Section & Design Speed	4 - 11 ft. lanes w / 12 ft. flush median, 2 - 5 ft sidewalks, and curb and gutter drainage Design Speed Varies – 45 and 55 MPH			
Displacements				
Residential	4	9	4	9
Business	6	6	6	6
Cultural Resources				
Historic	1	1	1	1
Archeological	0	0	0	0
Streams				
# of Impacts	6	5	6	5
Total LF Impacted	762	602	762	602
Total Stream Area Impacted (acres)	0.07	0.06	0.07	0.06
Estimated Credits	2,171	1,363	2,171	1,363
Open Waters/Wetlands				
# of Impacts	2	2	1	1
Total Wetland Area Impacted (acres)	0.01	0.01	0.01	0.01
Total Open Water Area Impacted (acres)	0.60	0.60	0	0
Total Area of Open Water/Wetland Impacts (acres)	0.61	0.61	0.01	0.01
Estimated Credits	5.0	5.0	0.1	0.1
State Waters				
# of Non-exempt Buffer Impacts	12	7	8	3
Total Square Feet Impacted	46,871	31,045	26,541	10,715
Cost Estimates				
*Estimated Mitigation Costs	\$156,905.00	\$112,465.00	\$120,155.00	\$75,715.00
Mitigation Cost				

*Assumes \$55 per credit for stream credit and \$7,500 per wetland credit

Safety

As shown in Table 2, the section of SR 60 between Price Road and Elrod Road does not have consistently higher crash or injury rates than statewide rates for similar roadways. However, fatality rates are generally higher, indicating that this portion of SR 60 experiences more severe crashes than the segment between Elrod Road and Yellow Creek Road. Between Elrod Road and Old Dahlenega Highway, and again between Old Dahlenega Highway and Yellow Creek Road, crash and injury rates are consistently higher than the statewide rate; however, crashes are less severe with slightly lower injury rates and fewer fatalities.

Table 2. SR 60 Crash History, 2007-2009*

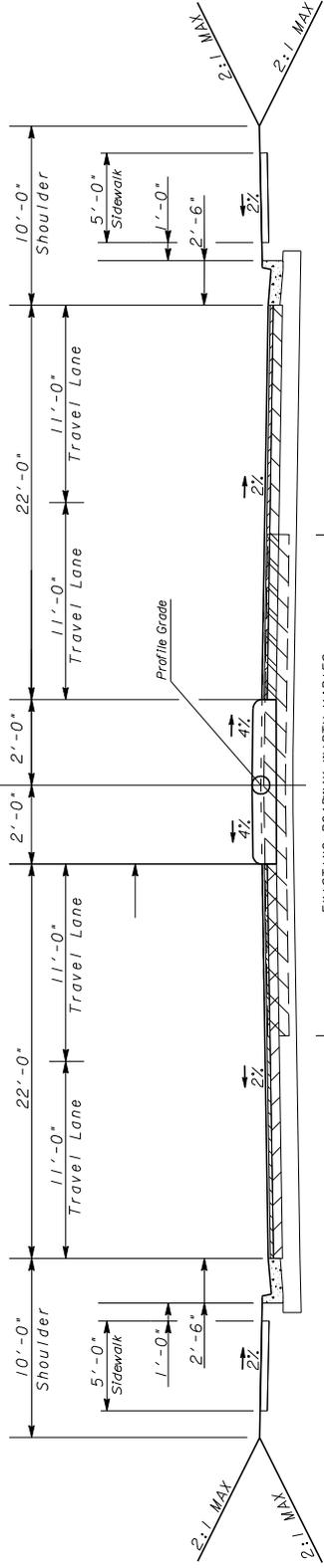
Section	Type	2007		2008		2009	
		Statewide**	SR 60	Statewide	SR 60	Statewide	SR 60
SR 136/Price Road to Elrod Road	Collision	649	347	612	420	603	279
	Injuries	227	130	213	178	214	176
	Fatalities	1.53	8.67	1.33	10.5	1.32	0
Elrod Road to Old Dahlenega Highway	Collision	194	448	186	326	187	339
	Injuries	106	209	100	199	98	160
	Fatalities	2.76	0	2.65	54.3	2.35	0
Old Dahlenega Highway to Yellow Creek Road	Collision	194	353	186	190	187	310
	Injuries	106	196	100	95	98	186
	Fatalities	2.76	0	2.65	0	2.35	0

*Note: Rates shown are per 100 million vehicles miles traveled.

**Statewide rates are provided for rural minor arterials and urban principal arterials to match the appropriate roadway classification along SR 60.

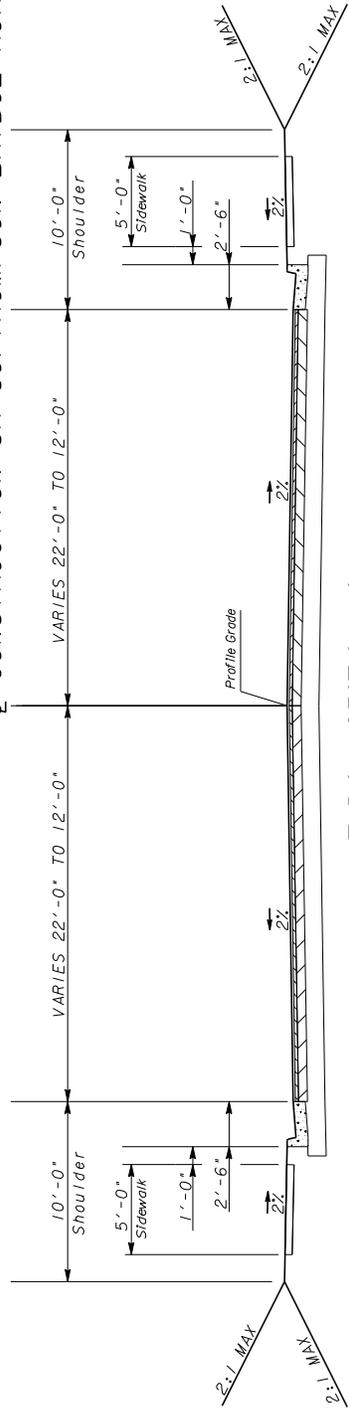
Source: Wolverton & Associates, Traffic Engineering Report, June 2011.

CONSTRUCTION SR 60/THOMPSON BRIDGE ROAD



EXISTING ROADWAY WIDTH VARIES
 TYPICAL SECTION NO. 2
 WITH 4" CORRUGATED MEDIAN
 STA. 53+00.00 TO STA. 68+50.00

CONSTRUCTION SR 60/THOMPSON BRIDGE ROAD



TYPICAL SECTION NO. 4
 STA. 275+00.00 TO STA. 285+00.00

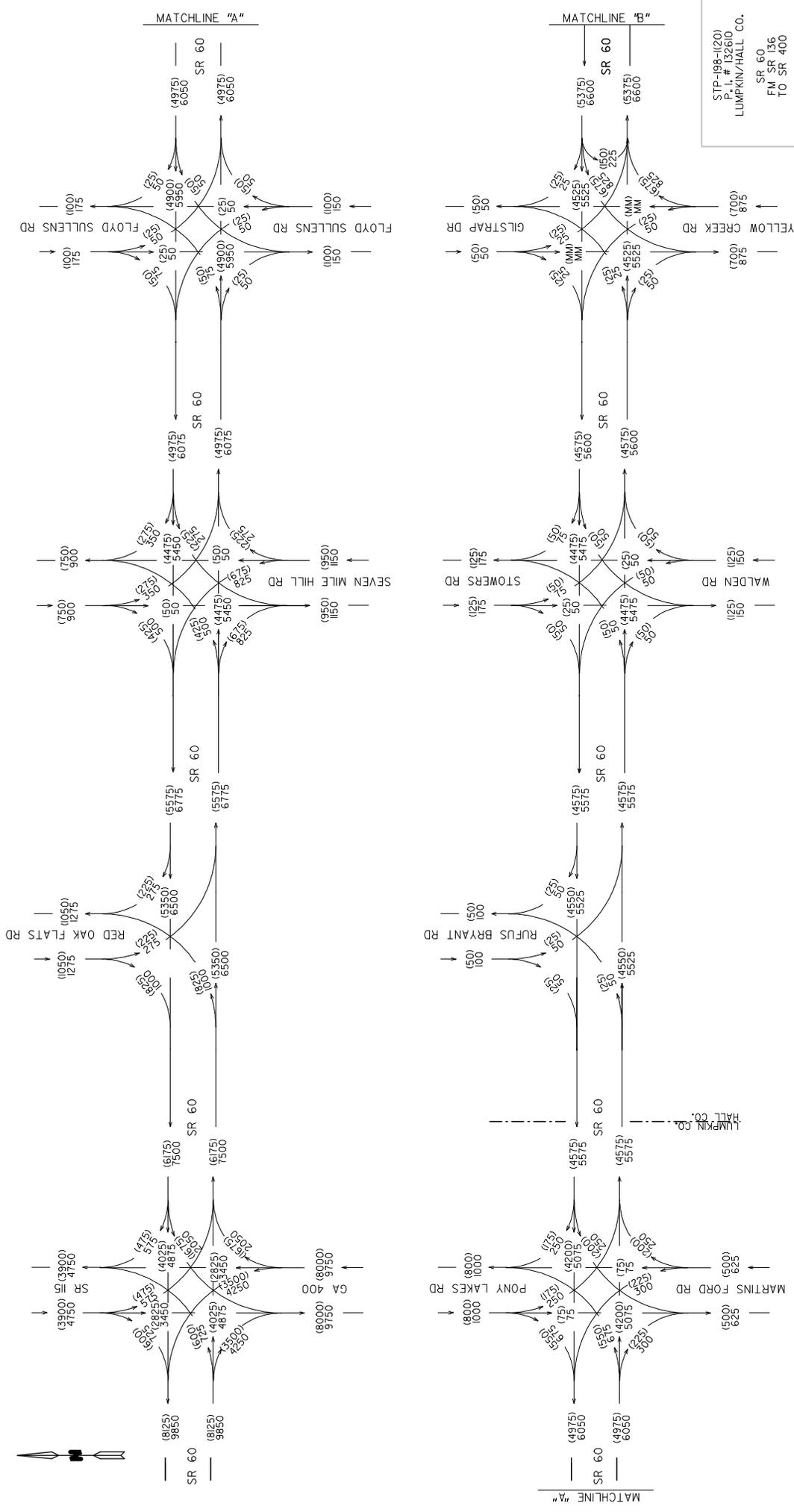
STATE OF GEORGIA		REVISION DATES
DEPARTMENT OF TRANSPORTATION		
OFFICE: TYPICAL SECTIONS		
SR 60 WIDENING FROM		
SR 136 TO YELLOW CREEK RD		
DRAWING NO.		5-002



LUMPKIN/HALL COUNTY



WOLVERTON & ASSOCIATES, INC.
6745 SULLENS PARKWAY
DULUTH, GA 30097
(770) 447-9999



STP-198-1(20)
P.L. # 132610
LUMPKIN/HALL CO.

SR 60
FM SR 136
TO SR 400

2019 ADT = (000)
2039 ADT = 000
24 HOUR TRUCK 9%
S.U. = 8%
COMB. = 1%

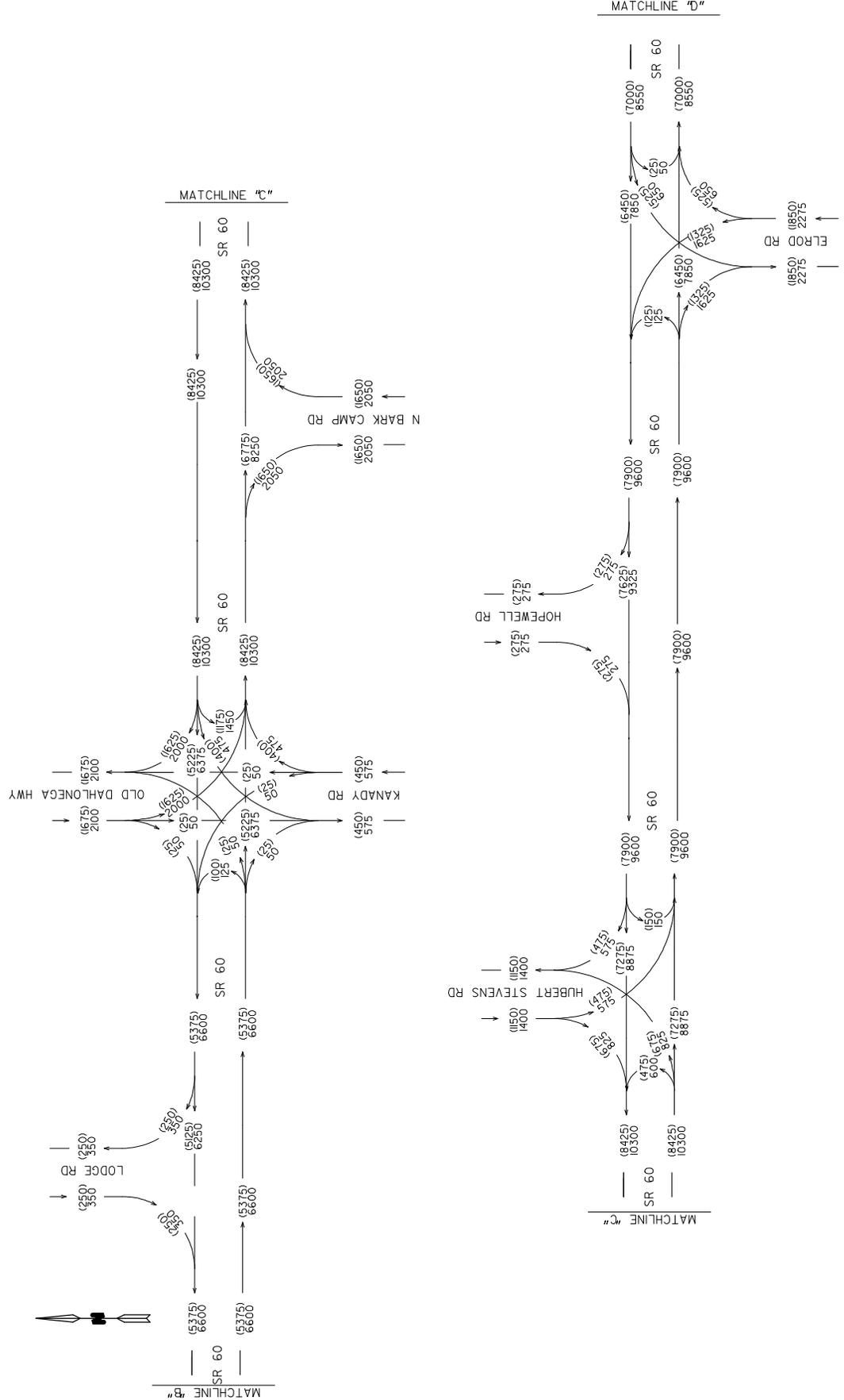
MTD
04/11

BUILD CONDITIONS

LUMPKIN/HALL COUNTY



WOLVERTON & ASSOCIATES, INC.
 6745 SULLY CREEK PARKWAY
 DULUTH, GA 30097
 (770) 447-9999



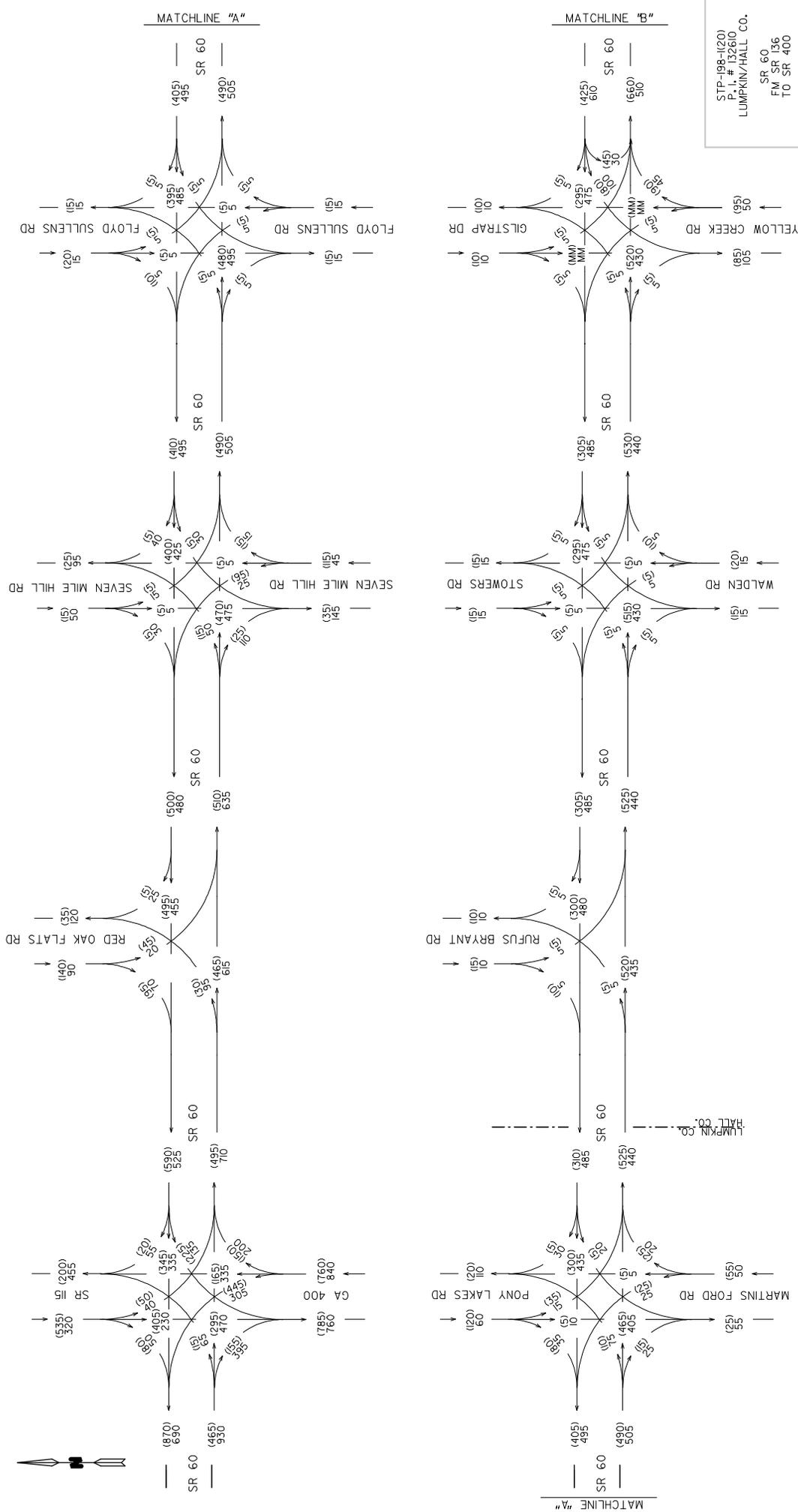
BUILD CONDITIONS

STP-198-(120)
 P. I. # 132610
 LUMPKIN/HALL CO.
 SR 60
 FM SR 136
 TO SR 400
 2019 ADT = (000)
 2039 ADT = 000
 24 HOUR TRUCK 9%
 S.U. = 8%
 COMB. = 1%
 MTD
 04/11

LUMPKIN/HALL COUNTY



WOLVERTON & ASSOCIATES, INC.
6745 SULLY PARKWAY
DULUTH, GA 30097
(770) 447-9999



STP-198-(120)
P.L. # 132610
LUMPKIN/HALL CO.

SR 60
FM SR 136
TO SR 400

2019 AM DHV = (000)
2019 PM DHV = 000
DHV TRUCK 8%
S.U. = 7%
COMB. = 1%

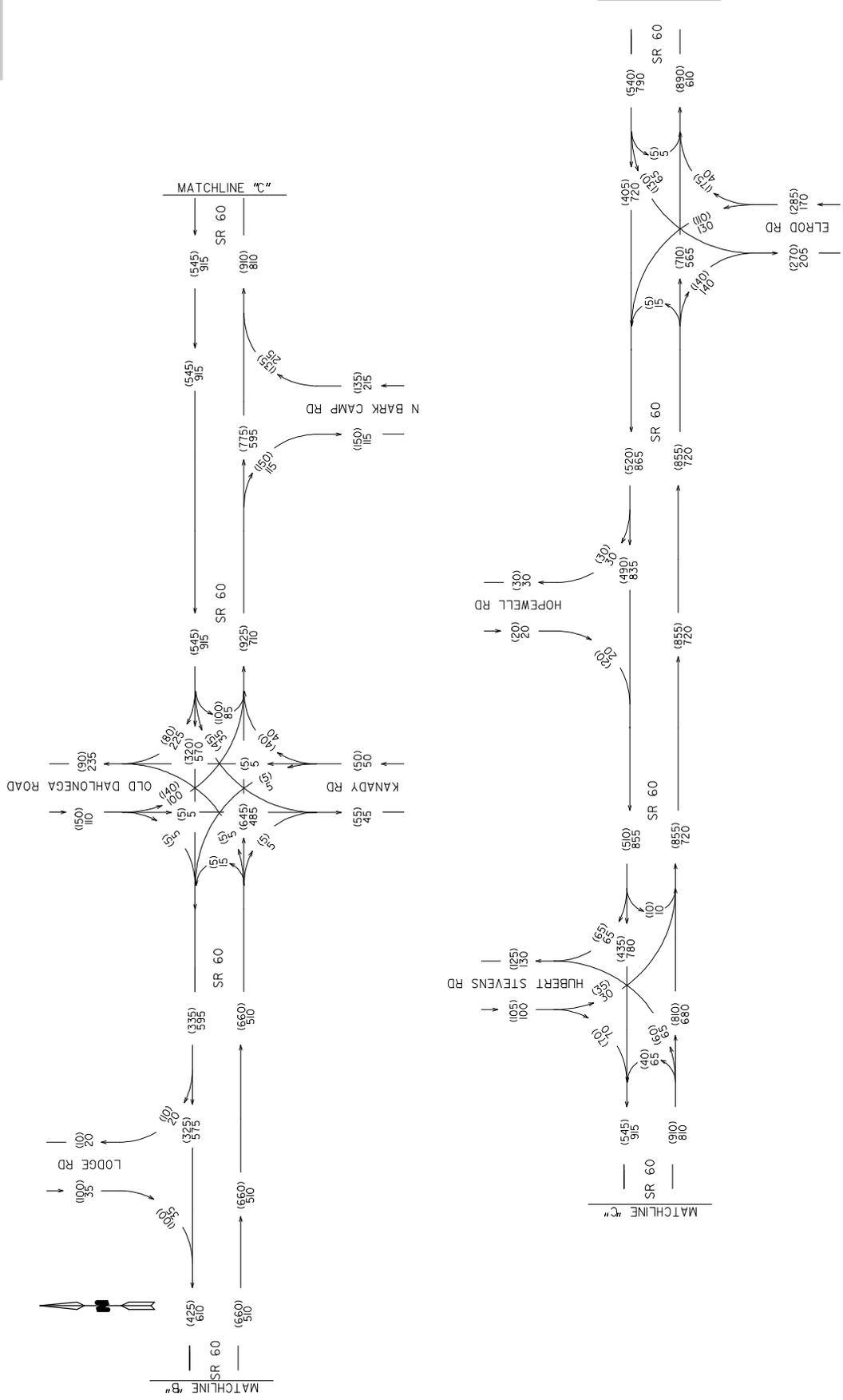
MTD
04/11

BUILD CONDITIONS

LUMPKIN/HALL COUNTY



WOLVERTON & ASSOCIATES, INC.
 6745 SULLY ROAD
 DULUTH, GA 30097
 (770) 447-9995

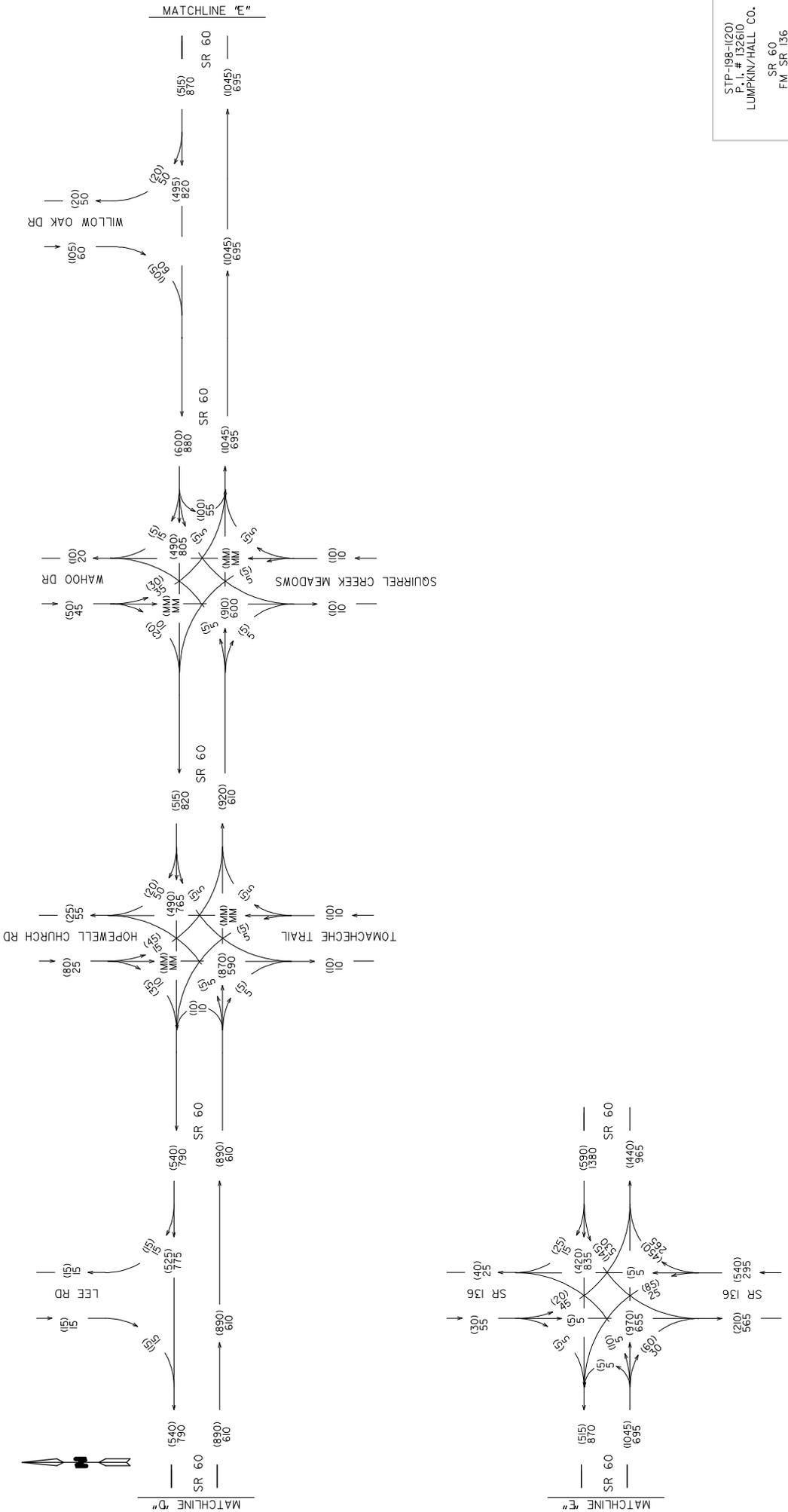


BUILD CONDITIONS

STP-198-1(20)
 P. I. # 132610
 LUMPKIN/HALL CO.
 SR 60
 FM SR 136
 TO SR 400
 2019 AM DHV = (000)
 2019 PM DHV = 000
 DHV TRUCK 8%
 S.U. = 7%
 COMB. = 1%
 MTD
 04/11

LUMPKIN/HALL COUNTY

Wolterton & Associates
 ENGINEERS, ARCHITECTS & PLANNERS
 WOLVERTON & ASSOCIATES, INC.
 6745 SULLYWOOD PARKWAY
 DULUTH, GA 30097
 (770) 441-9999



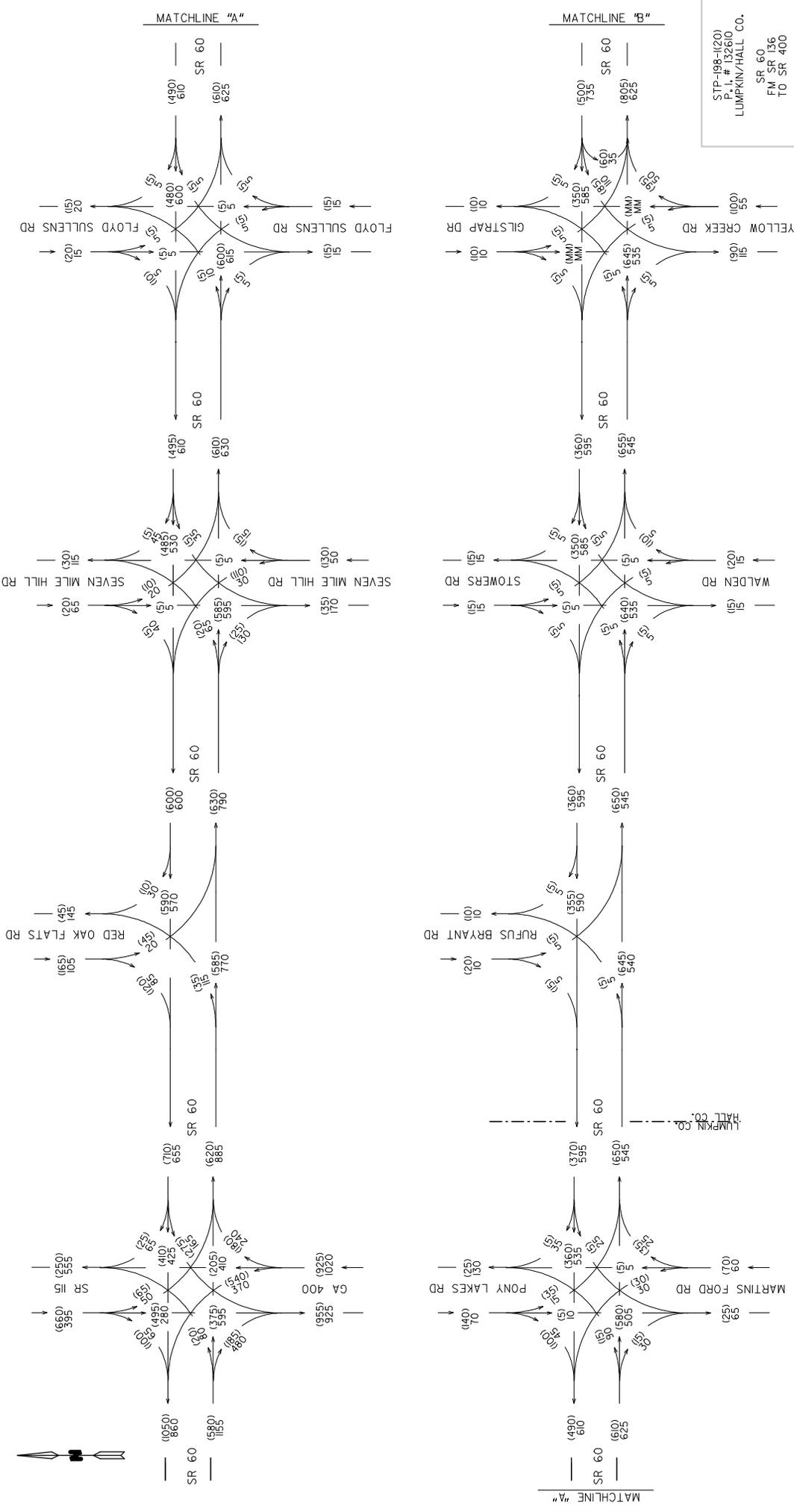
BUILD CONDITIONS

STP-198-1(20)
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 LUMPKIN/HALL CO.
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LUMPKIN/HALL COUNTY



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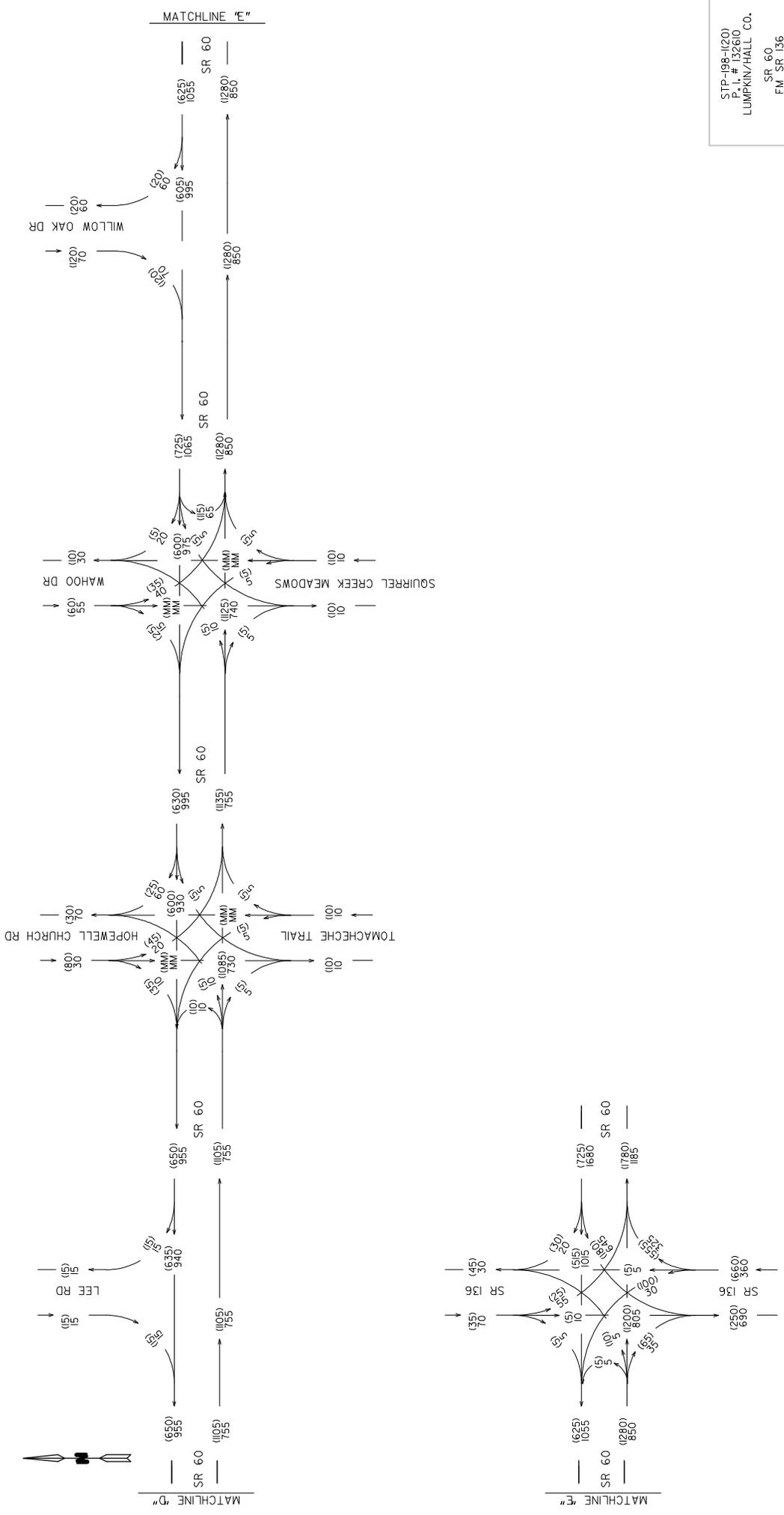


STP-198-1(20)
 P.L. # 132610
 LUMPKIN/HALL CO.
 SR 60
 FM SR 136
 TO SR 400
 2039 AM DHV = (000)
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BUILD CONDITIONS

LUMPKIN/HALL COUNTY

Wolterton & Associates
 WOLVERTON & ASSOCIATES, INC.
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 DULUTH, GA 30097
 (770) 447-9999



BUILD CONDITIONS

STP-198-1(20)
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 SR 60
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 2039 AM DHV = (000)
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 DHV TRUCK 8%
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 MTD
 04/11

INITIAL CONCEPT

MEETING MINUTES

March 16, 2007

SR 60 Widening and reconstruction

Project No. STP00-0198-01(020) PI No. 132610

LOCATION: GDOT District 1 Office, Gainesville, Ga.

Attendees: Mark Holmberg – Heath & Lineback Engineers
Matt Tarver – City of Gainesville
Tommy Evans – Jackson EMC
Tommy Terrell – Terrell, Hundley & Carroll Right of Way
Gary Webb – Terrell, Hundley & Carroll Right of Way
Scott Jordan – Heath & Lineback Engineers
Chuck Davis – GDOT, Area 4 Engineer
Scott Puckett – Hall County
Jody Woodall – Hall County
Brent Cook – GDOT, Traffic Operations
Jeff Jaques – GDOT, Utilities
Kim Coley – GDOT, Environmental
Jessica Kliesrath – Mulkey
Chris Edmondson – Heath & Lineback Engineers
Billy Cantwell – GDOT, Planning
Robert Mahoney – GDOT, Preconstruction
Otis Clark – GDOT, OCD
Speedy Boutwell – Wolverton and Associates
Heather Colston – Mulkey
Eddy Harris – Lumpkin County
Brandon Kirby – GDOT, Area 1 Engineer

The meeting was held to discuss conceptual layouts and draft Concept Report for the project.

Robert Mahoney opened the meeting by thanking everyone for attending and asking that everyone introduce themselves. He then asked that the draft concept be reviewed for misspelled words, and turned the meeting over to Mark Holmberg.

Mark Holmberg began by reading from the draft concept report. Mark read over the Facility Overview, the Need and Purpose, and the Project Description.

Mark noted that the original approved concept report for the project was dated 1997, and that the original report ended the project at the intersection of Yellow Creek Rd. He stated that the draft Concept Report suggests that the northern terminus be moved to the intersection of SR 400. He noted that the traffic study prepared by Wolverton and Associates did not significantly drop traffic volume at Yellow Creek Rd. Mark stated that FHWA had reviewed the recommendation for moving the northern terminus of the project to SR 400 and concurs with this recommendation.

Mr. Holmberg continued to discuss the draft concept report by covering the proposed characteristics of the project including the functional classification, major intersections, major structures, number of impacted parcels, number of side roads, and traffic volumes. It was noted that SR 60 traffic volumes are 29,300 VPD rather than 41,900 VPD.

Robert Mahoney asked that the limits of the differing functional classifications be clearly defined in the Concept Report.

Robert Mahoney noted that Hall County has recently been added to the non-attainment list for PM 2.5 and Ozone.

Mr. Holmberg discussed the different alternates that had been studied. He commented that Alternate 2 was the suggested alternate and why the other alternates are recommended for elimination.

Mr. Mahoney asked why the preferred alternate called for a by-pass of the community of Murrayville.

Mr. Holmberg commented that the preliminary environmental/historical study suggested that the community of Murrayville has extensive historic properties and that even a minimal typical section could not be constructed through the existing SR 60 corridor without significant right-of-way impacts to historic properties. Structures are located immediately adjacent to the right-of-way and 4-lane section with no median would likely alter the character of the community. Heather Colston commented that further investigations indicated that the historic area was not as extensive as previously indicated, but that there were potential resources that warrant a possible by-pass of Murrayville.

Mark discussed the preferred concept layout of the project. The layout showed a alignment shift to the west at the beginning of the project. Robert Mahoney noted that the alignment would impact the Riverwalk development near the intersection of SR 60 and SR 136, which is currently under construction.

Robert Mahoney asked if SR 136 would be realigned. Mark stated that the current intersection of SR 60 and SR 136 was signalized and aligned with an intersection on the opposite side of SR 60, and therefore the intersection would not be realigned.

Mr. Holmberg stated that the crossing of Squirrel Creek at Lake Lanier would most likely require a bridge instead of extending the existing box culvert.

Discussion of the proposed alignment continued with the comment that Wahoo Rd and the entrance to the Squirrel Creek Meadows subdivision be aligned to create a common intersection with a median opening. It was noted that side roads in general should be examined for realignment if a common intersection could be created.

A general comment was made regarding the high number of new subdivisions and other developments being constructed or proposed along the roadway, and that staging during construction could affect these sites. It was recommended that coordination with developers and the county planning departments take place to minimize possible future impacts.

Mr. Holmberg discussed the installation of a traffic signal at the intersection of Elrod Rd. as recommended by the traffic study. Mr. Edmondson commented that the traffic study recommends the signal be installed at the intersection with Lee Rd. He further commented that he had discussed with Wolverton and Associates about moving the signal to Elrod Rd. because of the impacts to Northlake Baptist Church of Gainesville that would be a result of meeting speed design on Lee Rd.

Mark continued his comments on the concept layouts by pointing out the location of the proposed east bypass of the community of Murrayville and the addition of a signal at the intersection with SR 115. A comment was made that the road was no longer SR 115, and it was now called Old Dahlonega Highway.

It was requested that the existing intersection of SR 60 and Old Dahlonega Highway be studied to determine if the intersection skew angle could be improved as part of the project.

Mr. Holmberg discussed the realignment of Yellow Creek Rd. and how the "old" SR 60 would be relocated to tie-in to the realigned Yellow Creek Rd. It was requested that the existing intersection of SR 60 and Yellow Creek Rd be realigned to improve the skew angle.

Mr. Edmondson brought up the possibility of closing the intersection of SR 60 and Fritts Rd. and placing the traffic on to Yellow Creek Rd. Mr. Edmondson stated that there are two possible historic resources on both sides of Fritts Rd at the intersection of SR 60, and that upgrading the road would impact one or both of the resources. Ms. Colston noted that one of the resources had been eliminated during fieldwork as a resource eligible for listing in the National Register.

Mr. Holmberg discussed the proposed alignment shift of SR 60 near Martins Ford Rd / Pony Lake Rd. He commented that there is an existing church and cemetery at this intersection and that their location would make it difficult to construct the road along the existing alignment. Furthermore, he pointed out that there are more possible historic/environmental resources just north of this intersection. He explained that the proposed alignment would shift to the east and then would tie back into the existing roadway approximately 3000 ft to the north. Ms Colston added that there may be a boundary adjustment to one of the historic resources in the area.

Robert Mahoney requested that Martins Ford Rd and Pony Lake Rd be realigned to create a common intersection.

Mr. Holmberg explained that the traffic study recommended a signal be installed at the intersection of SR 60 and Seven Mile Rd., and that Brandy Mountain Rd would be realigned to tie into Seven Mile Rd. He also stated that the proposed alignment would improve existing substandard horizontal curves in this area.

A question was asked if Red Oak Rd had been evaluated for a signal. It was further stated that Red Oak Rd received heavy truck traffic associated with quarries and a concrete plant and that future development along the road may require a signal at this intersection. Another question was raised as to why Red Oak Rd intersection was being redesigned since an earlier project relocated the intersection to improve sight distance along SR 60. Mr. Edmondson responded that the geometry of the intersection would be evaluated to determine if the existing alignment could remain as is. It was noted that Red Oak Flats Road serves as a “cut through” route to SR 115.

Mr. Holmberg finished his discussion of the concept layout addressing the intersection of SR 60 and SR 400. He stated that the lane configuration of the intersection along with utility resources and existing streams would require that the typical section be adjusted such that the median width would be reduced to accommodate the aforementioned difficulties. He also stated that a right turn lane would be added to SR 400(north).

The meeting was then opened to comments from the attendees.

A concern was noted regarding impacts to the Fieldale plant’s property with a bypass around Murrayville. Fieldale may want to expand in the future and they need the existing fields for the spray field area.

Matt Tarver with the City of Gainesville stated that the 6” water line along SR 60 was going to be upgraded in size as part of this project. Matt also noted that the 16” force main may be relocated.

Brandon Kirby requested that an open graded asphalt mix be used on the project all the way to SR 400 due truck traffic coming from the Fieldale plant.

Otis Clark requested that median openings be developed for the Concept Meeting.

A comment was made that GDOT had been contacted by residents of the subdivision located just to the north of Squirrel Creek. They were concerned about the driveway entrance to their neighborhood. The draft Concept shows a right turn lane and no significant impacts expected to this access point. The entrance is close to the bridge, but it appears that it can be accommodated.

Eddy Harris noted that Martin Ford Road in Lumpkin County is growing and that there is a 400+ residential development planned behind the Home Depot at SR 400.

Jeff Jaques noted that a Georgia Power transmission line is located near the Fieldale plant south of Murrayville.

Revised Project Concept Report page 50
Project Number: STP00-0198-01(020)
P. I. Number: 132610
County: Hall

The Area engineers noted that the area below the existing bridge located on SR 400 at SR 60 is currently used by local rafting/tubing outfitters as an access point for the river. Both the County and the Corps of Engineers have asked them to stop using the location. There is a permanent launch planned on SR 60 at Home Depot.

Brandon Kirby mentioned that the asphalt in Murrayville is poor along existing SR 60. Should the community be bypassed, it was recommended that "old" SR 60 be reconstructed and include GAB. This work could likely be performed under Maintenance 107 rather than as part of this project

It was noted that there are 5 major projects in the area, and that the District has often had findings of streams after the project has been let. They would like to eliminate "after the fact" findings of environmental resources that affect the project. Long Branch Creek was identified as a concern.

From: Rabun, Ben

Sent: Friday, June 29, 2012 4:31 PM

To: Clark, Otis; Simpson, Jim; Peters, Dave

Cc: Bennett, Clayton; Schwartz, Kevin

Subject: RE: PI # 132610- Hall County - Revised Concept Report for you review

After receiving the results of Clayton's analysis, I talked with Otis about the proposed project.

I recommend that the culvert be replaced due to the following:

1. Primarily due to age and condition. This structure is reaching the end of its useful life and any further deterioration will result in it be structurally deficient.
2. Staging to replace the existing culvert can be more readily accomplished (maintain 2 lanes now vs. 4 lanes in the future).
3. It is proposed to raise the grade over this culvert; which would therefore result in the culvert be subjected to additional overburden loads. Grade change would also make future replacement staging more difficult.

Please let me know if you need any additional information.

Ben Rabun, P.E.

State Bridge Engineer

GA D.O.T.

One Georgia Center, Suite 24

600 West Peachtree Street, N.W.

Atlanta, GA 30308

(404) 631-1985

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P. I. No. 132610 OFFICE: Environmental/Location
DATE: June 15, 2007

FROM Harvey D. Keeper, State Environmental/Location Engineer

TO Distribution Below

SUBJECT PUBLIC INFORMATION OPEN HOUSE SYNOPSIS

PROJECT No. & COUNTIES: STP00-0198-01(020), Hall & Lumpkin

PROJECT DESCRIPTION: State Route (SR) 60 Improvements from SR 136/Price Road to SR 400, Alternative 1 widens along the existing alignment, Alternative 2 bypasses Murrayville to the east, and Alternative 3 bypasses Murrayville to the west.

DATE: May 31, 2007 from 5:00 p.m. to 7:00 p.m.

NUMBER IN ATTENDANCE: 362

FOR: 19

CONDITIONAL: 20

UNCOMMITTED: 8

AGAINST: 18

SUPPORT ALTERNATIVE 1: 27

SUPPORT ALTERNATIVE 2: 14

SUPPORT ALTERNATIVE 3: 11

OFFICIALS IN ATTENDANCE: 3, see attached

ADDITIONAL COMMENTS: 10 respondents did not indicate whether he or she support the project, and 23 respondents did not indicate support for either bypass alternative or widening along the existing roadway.

PREPARED BY: Heather Colston, Mulkey Engineers & Consultants
On behalf of Paul Condit, GDOT OEL

TELEPHONE No.: (678) 795-3605



2030 Long Range Transportation Plan Update

Project Name SR 60/Thompson Bridge Road - SR 136/Price Road to Hall County Line	GHMPO No. GH-038	GDOT No. 132610
	County Hall	City Gainesville
Local Rd. Name Thompson Bridge Road	GDOT District 1	Cong. District 10
US/State Rd. Name State Route 60	Map ID 38	RDC GMRDC

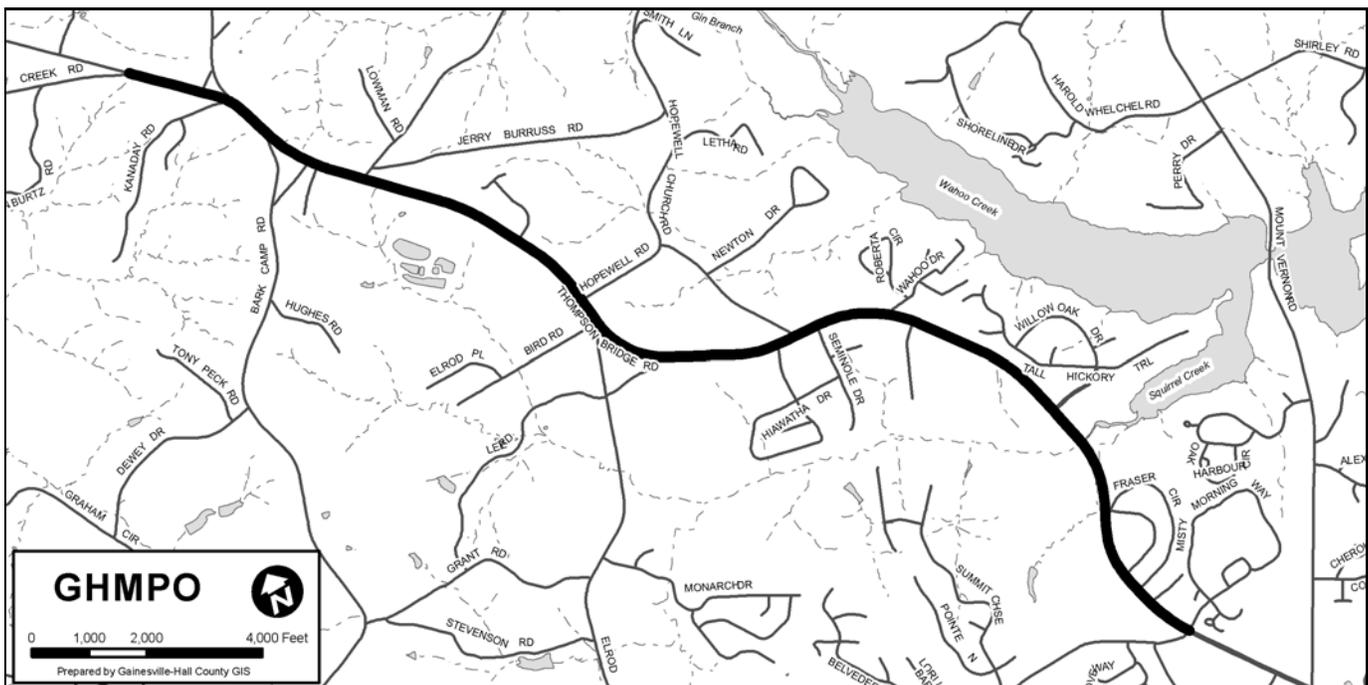
Project Description
 The widening from two to four lanes of SR 60/Thompson Bridge Road from SR 136/Price Road to Hall Co. Line.

Improvement Type Widening **Regionally Significant** Yes **Capacity Adding** Yes **Funding Source** GDOT

Project Intent
 This widening will allow for greater access to the northwest of the county and into Lumkin County.

Project Termini	Length (miles) 4.00
From SR 136/Price Road To Hall Co. Line	Exist. Lanes 2 Future Lanes 4
Bike / Ped. Bike lanes recommended	Exist. Vol. 12,648 (2003) Design Vol. 25,800 (2030)
Connectivity Widening of SR 136/Price Road	
Network Year 2025	Open to Traffic Date 2021

STATUS	PHASE	SOURCE	LOCAL	STATE	FEDERAL	OTHER	TOTAL
Auth.	Pre-Engineering		\$0	\$1,260,230	\$5,040,923	\$0	\$6,301,153
2009	Right-of-Way	L200	\$0	\$760,400	\$3,041,600	\$0	\$3,802,000
LR	Construction	L200	\$0	\$7,544,200	\$30,176,800	\$0	\$37,721,000
		TOTAL	\$0	\$9,564,830	\$38,259,323	\$0	\$47,824,153



**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-0198-01(020) Hall **OFFICE:** Engineering Services
P.I. No.: 132610
SR 60 from SR 136 to CR 158 **DATE:** August 24, 2011

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

TO: Bobby K. Hilliard, PE, State Program Delivery Engineer
Attn.: Otis Clark

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held June 20-23, 2011. Responses were received on August 24, 2011. 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.

ALT #	Description	Potential Savings/LCC	Implement	Comments
R-1	Eliminate construction of the proposed 780 ft bridge over Squirrel Creek, lower the proposed grade from Sta. 59+00 to Sta. 75+00 and extend the existing triple 10 ft x 9 ft culverts	\$4,115,890	Yes	This will be done.
R-2	Revise the horizontal and vertical alignment between Sta. 28+00 and Sta. 48+00 to reduce the earthwork and ROW impacts	\$1,808,726	Yes	This will be done. A Design Exception will be required to increase the vertical grade to 9%.
R-3.0	End SR 60 construction 1500 ft past the intersection of Yellow Creek Road in lieu of 3350 ft past the intersection	Proposed = \$1,197,788 Actual = \$1,183,004	Yes, with modifications	This will be done. The taper to the existing roadway will end at Sta. 284+00 in order to avoid impacts to a historic property.

R-3.1	Eliminate curb and gutter, closed drainage system, median and sidewalk in the transition area from Sta. 284+00 to the end of the project at Sta. 297+50	Proposed = \$227,193 Actual = \$151,462	Yes, with modifications	This will be done from Sta. 275+00 to the end of the project at Sta. 284+00.
R-3.2	Realign the proposed roadway from Sta. 265+00 to Sta. 294+00 to stay on the existing roadway section without shifting west	\$750,000	No	This will not be done. Because R-3.0 and R-3.1 will be implemented, R-3.2 cannot be done.
R-5	Reduce ROW width from 150 ft to 100 ft for entire length of roadway	\$5,647,228	Yes	This will be done. Easements for construction and maintenance of slopes will be required where the construction limits footprint is wider than 100 ft.
R-7	Eliminate proposed retaining wall #1 located from Sta. 48+04 Lt. to Sta. 52+09	\$207,315	Yes	This will be done, pending environmental acceptance at PAR meeting.
R-9	Construct roundabout at Old Dahlonga Highway and Kanady Road	\$49,440	No	After further review of the proposed roundabout, an additional cost of \$123,000 would be incurred in order to construct the roundabout. See attachments 1 and 2.
R-10	Install corrugated median for TS#2 from Sta. 48+50 to Sta. 60+50 and Sta. 158+85 to Sta. 173+50	\$13,905	Yes, with modifications	This will be done from Sta. 53+00 to Sta. 68+50. A 12 ft flush median will be used for the other locations.
R-13	Construct project with 5-lane section (12 ft flush median) in lieu of 4-lane divided with 20 ft raised median	Cost Increase (\$-467,859)	Yes, with modifications	This will be done except from Sta. 53+00 to Sta. 67+00 at Squirrel Creel. A 4 ft corrugated median will be used at that location.
R-14	Redesign to maintain existing alignment from Sta. 100+00 to Sta. 124+00 and Sta. 208+00 to Sta. 234+00, and at Sta. 265+00	\$1,000,000	Yes	This will be done.
R-16	Construct sidewalk on only one side instead of both sides of roadway	\$321,353	No	Since this is a route to the elementary school, sidewalks are required on both sides of SR 60.

R-21	Eliminate proposed retaining wall #2 located from Sta. 54+42 Lt. to Sta. 57+45	\$155,103	Yes	This will be done, pending environmental acceptance at PAR meeting.
R-22	Eliminate realignment of side roads: Jerry Burress Rd.; Wahoo Rd.; Old Dahlonga Hwy. and Kanady Rd.; Hopewell Rd.; Bark Camp Rd.; Elrod Rd.; and Yellow Creek Rd.	Proposed = \$1,367,420 Actual = \$1,106,853	Yes	This will be done at all locations except Yellow Creek Road. Yellow Creek Road will be realigned due to the existing skew.
R-23	Eliminate profile change on side roads intersecting SR 60 at Twin Oaks Lane, Marlow Road and Seminole Drive	Proposed = \$792,419 Actual = \$524,059	Yes	This will be done at all locations except Twin Oaks Lane. The profile for Twin Oaks Lane will remain unchanged.

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

Approved:  Date: 8/26/11
 Gerald M. Ross, PE, Chief Engineer

REW/LLM
 Attachments

- c: Russell McMurry
- Bobby Hilliard/Stanley Hill/Otis Clark
- Sam Pugh
- James Harry
- Randall Davis
- Ken Werho
- Lisa Myers
- Matt Sanders

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE **STP00-0198-01(020), Hall County** **OFFICE** Program Delivery
Widening and Reconstruction of SR 60 from SR 136 to Yellow Creek Rd.
P.I. No. 132610

FROM Bobby Hilliard, P.E., State Program Delivery Engineer **DATE** August 24, 2011

TO Ronald E. Wishon, State Project Review Engineer
Attn.: Lisa Myers

SUBJECT **Response to Value Engineering Study Alternatives**

Attached are the responses for the Value Engineering Study. This office concurs with the responses.

If you have any questions or require further information please call Otis Clark at (404) 631-1577.

BKH: SH: OC

c: Russell McMurry



Heath & Lineback Engineers, Inc.

2390 CANTON ROAD-BUILDING 200-MARIETTA, GEORGIA 30066-5393

e-mail: hle@heath-lineback.com

(770) 424-1668-Fax (770) 424-2907

R-1.0: Eliminate construction the proposed 780' bridge over Squirrel Creek, lower the proposed grade from STA. 59+00 to 75+00, extend the existing triple 10'x9' culverts, complete PAR if necessary.

VE Team Savings: \$4,115,890

Yes, will implement.

R-2.0: Revise the horizontal and vertical alignment of the proposed SR60 between STA. 28+00 and 48+00 to reduce the earthwork and reduce the ROW impacts.

VE Team Savings: \$1,808,726

Yes, will implement. However, a design exception will be required to increase the vertical grade to 9.00%.

R-3.0: End SR60 construction 1500 feet past the intersection of yellow creek road in lieu of going 3350 feet past the intersection.(The intersection is the logical termini for the project.)

VE Team Savings: \$1,197,788

Yes, will implement. However, taper to existing will end at STA. 284+00 to avoid impact to a historic property.

Revised saving: \$1,183,004

R-3.1: Eliminate curb and gutter, close drainage system, median and sidewalk in transition area from STA. 284+00 to the end of project at STA. 297+50 (1350 LF)

VE Team Savings: \$227,193

Revised saving: \$151,462

Yes, will implement. However, station range will be from STA. 275+00 to STA. 284+00.

R-3.2: Realign the proposed roadway from STA. 265+00 to STA. 294+00 to stay on the existing roadway section without shifting west.

VE Team Savings: \$750,000

No, will not implement. Because we are implementing R-3.0 and taper to existing road will end at STA. 284+00. Therefore this item cannot be implemented.

R-5.0: Reduce ROW width from 150' to 100' for entire length of project.

VE Team Savings: \$5,647,228

Yes, we will implement. However, easements for construction and maintenance of slopes and drainage will be required. Construction limits footprint is wider than 100'.

Heath & Lineback Engineers, Inc.

R-7.0: Eliminate proposed retaining wall #1 located from STA. 48+04 left to STA. 52+09 left on SR60.

VE Team Savings: \$207,315

Yes, will implement. Pending environmental acceptance at PAR meeting.

R-9.0: Construct a roundabout at Old Dahlonga Highway and Kanady Road.

VE Team Savings: \$49,440

No, will not implement due to an additional cost of \$123,000 for the proposed roundabout based on our calculations. See attachments 1 and 2.

R-10.0: Install corrugated median for typical section #2 limits from STA 48+50 to STA 60+50 and STA 158+85 to STA 173+50.

VE Team Savings: \$13,905

Yes, will implement. However, station range will be from STA. 53+00 to STA. 68+50. 12-foot flush median will be used for other locations.

R-13.0: Construct project with 5-lane flush 12' median in lieu of 4-lane divided with 20 foot raised median.

VE Team Savings: \$467,859

Yes, will implement, with an exception from STA. 53+00 to STA. 67+00 at squirrel Creek where 4' corrugated median will be used.

R-14.0: Redesign to keep new construction on existing roadway alignment STA. 100+00 to STA. 124+00, and STA. 208+00 to STA 234+00 and STA 265+00.

VE Team Savings: \$1,000,000

Yes, will implement.

R-16.0: Construct sidewalk on only one side instead both sides of roadway.

VE Team Savings: \$321,353

No, will not implement because routes to elementary school are required from both sides of SR 60.

R-21.0: Eliminate proposed retaining wall #2 located from STA. 54+42 left to STA. 57+45 left on SR60.

VE Team Savings: \$155,103

Yes, will implement. Pending environmental acceptance at PAR meeting.

Heath & Lineback Engineers, Inc.

R-22.0: Eliminate realignment of side roads: Jerry Burress Rd, Wahoo Rd, Old Dahlenega HWY, and Kanady Rd.; Hopewell Rd.; Bark Camp Rd.; Elrod Rd.; Yellow Creek Rd.
VE Team Savings: \$1,367,420

Yes will implement. However, Yellow Creek Road will realign due to skew.
Revised saving: \$1,106,853

R-23.0: Eliminate profile change on side roads intersecting SR 60 at Twin Oaks lane, Marlow Road, Seminole Drive.
VE Team Savings: \$792,419

Yes, will implement. However, Twin Oaks Lane profile will remain unchanged.
Revised saving: \$524,059

Attachment 1

Project No.: STP00-0198-01(020)

PI: 132610

Proposal No.: R-9.0

Roundabout Option						
	Unit	QTY	Unit Cost	Total Cost	Remarks	
New Traffic Signal	EA	0	0	0		
Curb, Gutter & Sidewalk	LF	880	50	44,000		
Concrete Apron	SY	970	30	29,100	144' Inside circle Diameter with 5' Apron	
Concrete Raised Median	SY	760	22	16,720	Islands	
144'Diameter Roundabout with landscape	SY	1	100,000	100,000	A=3.14*67^2/9	
Pavement (Entire intersection)	SY	3,791	70	265,370		
R/W +Scheduling Conten.+Adm/Court Cost	SF	29,421	3.94	115,919	Based on approved RW Cost Estimate	
Relocation+Scheduling Conten.+Adm/Court Cost	EA	1	166,000	166,000	Based on approved RW Cost Estimate	
Total=				737,109		

Original Design						
	Unit	QTY	Unit Cost	Total Cost	Remarks	
New Traffic Signal	EA	1	125,000	125,000		
Curb, Gutter & Sidewalk	LF	400	50	20,000		
Concrete Apron	SF	0	0	0		
Concrete Raised Median	SY	0	0	0		
144'Diameter Roundabout with landscape	SY	0	0	0		
Pavement (Entire Intersection)	SY	5,606	70	392,420	Based on approved RW Cost Estimate	
R/W +Scheduling Conten.+Adm/Court Cost	SF	19,392	4	76,404		
Relocation+Scheduling Conten.+Adm/Court Cost	EA	0		0		
Total=				613,824		

PRECONSTRUCTION STATUS REPORT FOR PI:132610-

PROJ ID: 132610- SR 60 FM SR 136 TO CR 158/YELLOW CREEK RD IN MURRAYVILLE
 COUNTY: Hall
 LENGTH (MI): 4.31
 PROJ NO.: STP00-0198-01(020)
 PROJ MGR: Clark, Otis
 AOHJ Initials: SSH
 OFFICE: Program Delivery
 CONSULTANT: Consultant Design (DOT contract)
 SPONSOR: GDOT
 DESIGN FIRM: Heath & Lineback Engineers, Inc.
 MPO: Gainesville
 TIP #: GH-038
 MODEL YR: 2015
 TYPE WORK: Widening
 CONCEPT: ADD 4R
 PROG TYPE: Reconstruction/Rehabilitation
 Prov. for ITS: N
 BOND PROJ :
 PRIORITY CODE:
 DOT DIST: 1
 CONG. DIST: 9
 BIKE: N
 MEASURE: M
 NEEDS SCORE: 5
 BRIDGE SUFF:
 MGMT LET DATE: 10/15/2015
 BASELINE LET DATE: 06/15/2013
 SCHED LET DATE: 10/20/2015
 WHO LETS?: GDOT Let
 LET WITH:

BASE START	BASE FINISH	LATE START	LATE FINISH	TRIALS	ACTUAL START	ACTUAL FINISH	%	Activity	Approved	Proposed	Cost	Fund	Status	Date Auth
5/25/2012	7/19/2012	10/7/2011		Concept Development	6/11/1997	10/10/1997	100	PE	1997	1997	6,343,154.08	Q24	AUTHORIZED	1/13/1997
5/20/2011	6/9/2011			PM Submit Concept Report	4/13/2000	4/13/2000	100	ROW	2012	2013	4,281,669.51	L200	PRECST	
6/13/2011	7/15/2011	9/12/2011		Concept Report Review and Comments	9/2/1997	9/2/1997	100	CST	2017	2017	63,166,617.72	L200	PRECST	
7/19/2011	2/25/2013	10/18/2011		Management Concept Approval Complete	9/17/1997	10/10/1997	100							
4/22/2011	9/1/2011	9/9/2011		Revise or Re-validate Approved Concept	1/15/2007	1/15/2007	25							
10/29/2014	4/14/2015	1/28/2015		Value Engineering Study	3/10/2011	5/31/2007	83							
3/26/2013	3/26/2013	6/25/2013		Public Information Open House Held	5/31/2007	5/31/2007	100							
1/30/2013	3/12/2013	5/17/2013		Environmental Approval	8/15/2007	8/15/2007	25							
3/13/2013	4/23/2013	6/12/2013		Pub Hear Held/Comm Resp (EAF/ONSI, GEPA)	12/26/2008	1/15/2009	100							
5/22/2013	6/18/2013	8/21/2013		Mapping			0							
9/25/2013	10/8/2013	12/25/2013		Field Surveys/SDE			0							
10/25/2011	6/12/2012	1/24/2012		Preliminary Plans			0							
5/7/2013	2/17/2014	8/6/2013		Underground Storage Tanks			0							
3/18/2014	3/18/2014	6/17/2014		404 Permit Obtainment			0							
3/26/2014	4/8/2014	6/25/2014		PFPR Inspection			0							
				R/W Plans Preparation			0							
				R/W Plans Final Approval			0							
				I & D Approval			0							
				R/W Authorization			0							
				Stake R/W			0							
				Soil Survey			0							
				Final Design			0							
				FFPR Inspection			0							
				Submit FFPR Responses (OES)			0							

PDD: MAINT TOOK CARE OF IMMEDIATE NEED. 8/6/98
 Bridge: NO BRIDGE REQUIRED
 Design: CONCEPT VAL/PLANNING REVIEWING LOGICAL TERMINI ISSUES
 EIS: DEAN/Not App'd/OnSched/Pugh(1.6.11)
 LGPA: RFO HALL DO UTIL 3-96/GAINESVILLE REF DO UTIL 9-19-00/RESCISSION LETTER SENT TO GAINESVILLE & HALL 11-4-05.

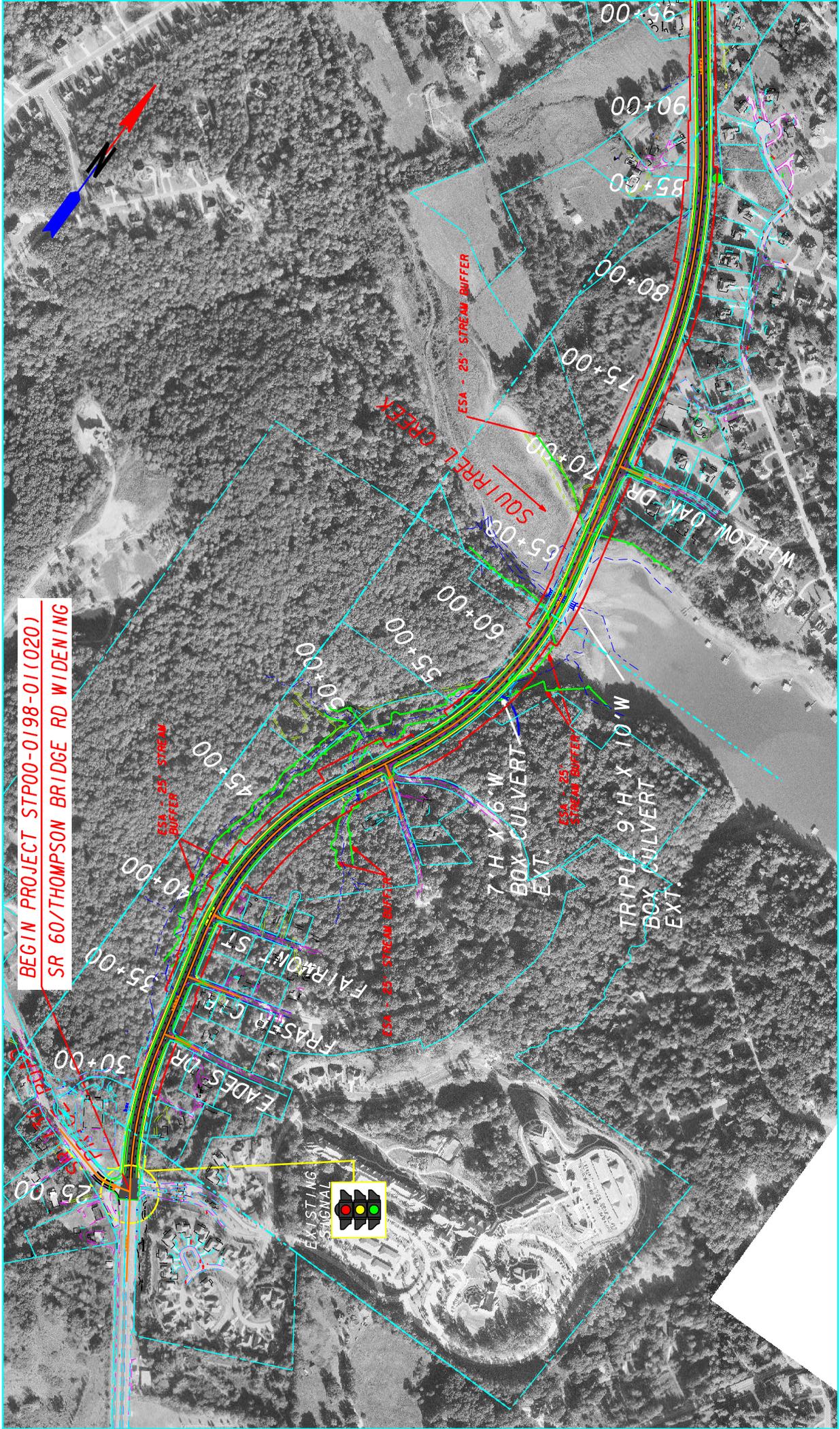
Location: RW STIP AMENDMENT #15 6-2010
 Prog. Develop: WILL NOT QUALIFY FOR 33P/PRZ/P=2-25-97/#1 1-6-98#2 8-00-#3 3-2011
 ROW: R/W funding drawdown 4/22/09 (FJV)
 Traffic Op: RJC REVW/D S/M PLANS TO DIST 10-21-98 S-4
 Utility: OCD SUE TRK C4
 Engr Services: VE Scheduled June 20-23, 2011
 EMG: RECS/REHAB(WIDENING)/FLY 6398-05,C=MS/D AS PER CHUCK HASTY

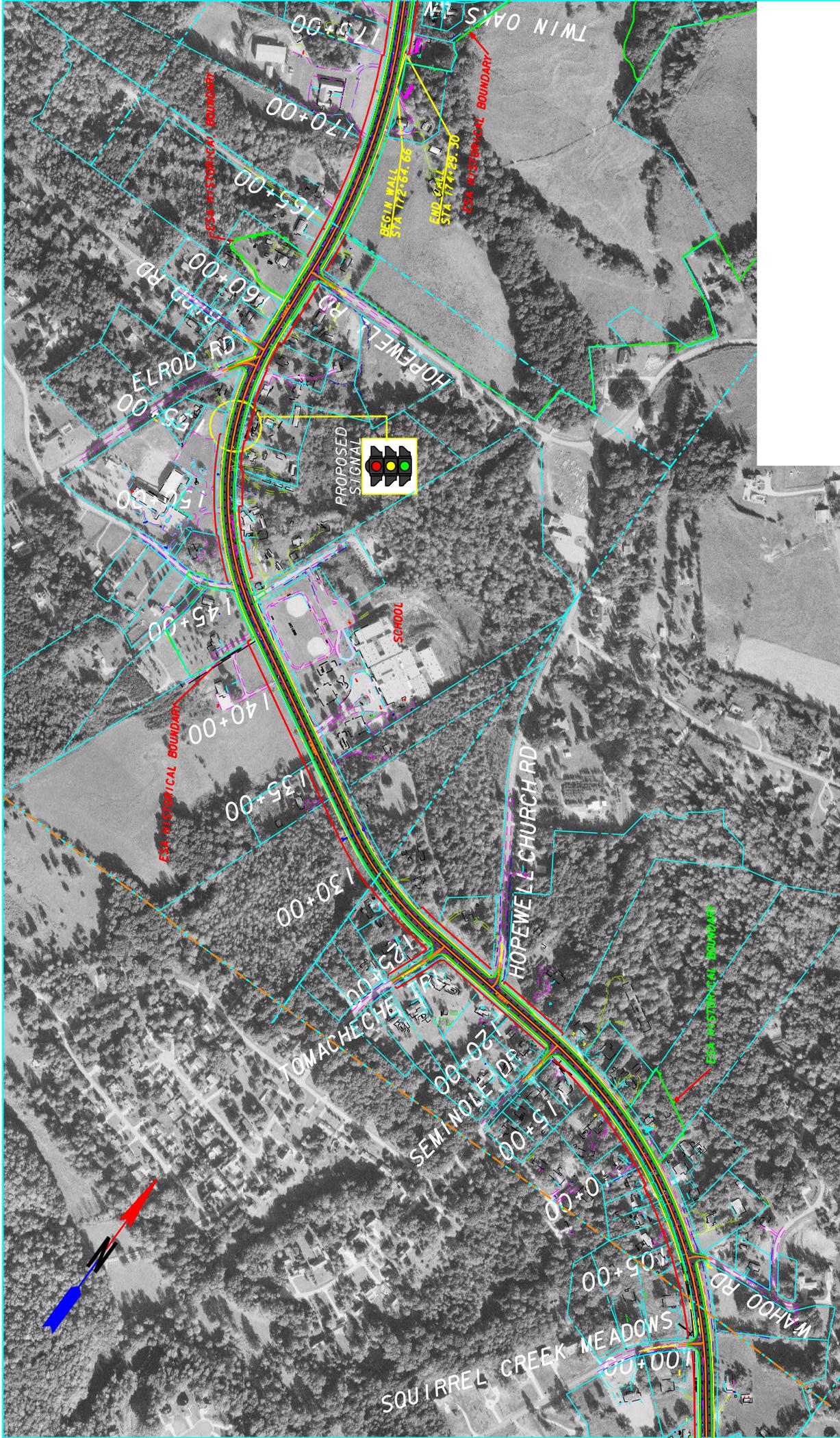
Prel. Parcel CT: 134 Total Parcel in ROW System: Contd. Filed:
 Under Review: Options - Pending: Relocations:
 Released: Condemnations- Pend: Acquired:

District Comments: SCHEDULE Update needed. ROW FY14, LET FY17- Resolving Logical Termini Issues
 Acquired by: DOT
 Acquisition MGR:
 R/W Cert Date:

DEEDS CT:

BEGIN PROJECT STP00-0198-01(020)
SR 60/THOMPSON BRIDGE RD WIDENING





TWIN OAKS LN

175+00

170+00

165+00

160+00

155+00

150+00

145+00

140+00

135+00

130+00

125+00

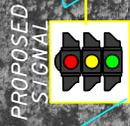
120+00

115+00

110+00

105+00

100+00



PROPOSED SIGNAL

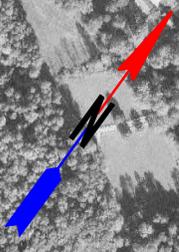
BEGIN WALL STA 172+64.85

END WALL STA 177+29.30

EX-HISTORICAL BOUNDARY

EX-HISTORICAL BOUNDARY

EX-HISTORICAL BOUNDARY



TOMACHECHE TRL

SEM NOBLE DR

115+00

110+00

105+00

WAHOO RD

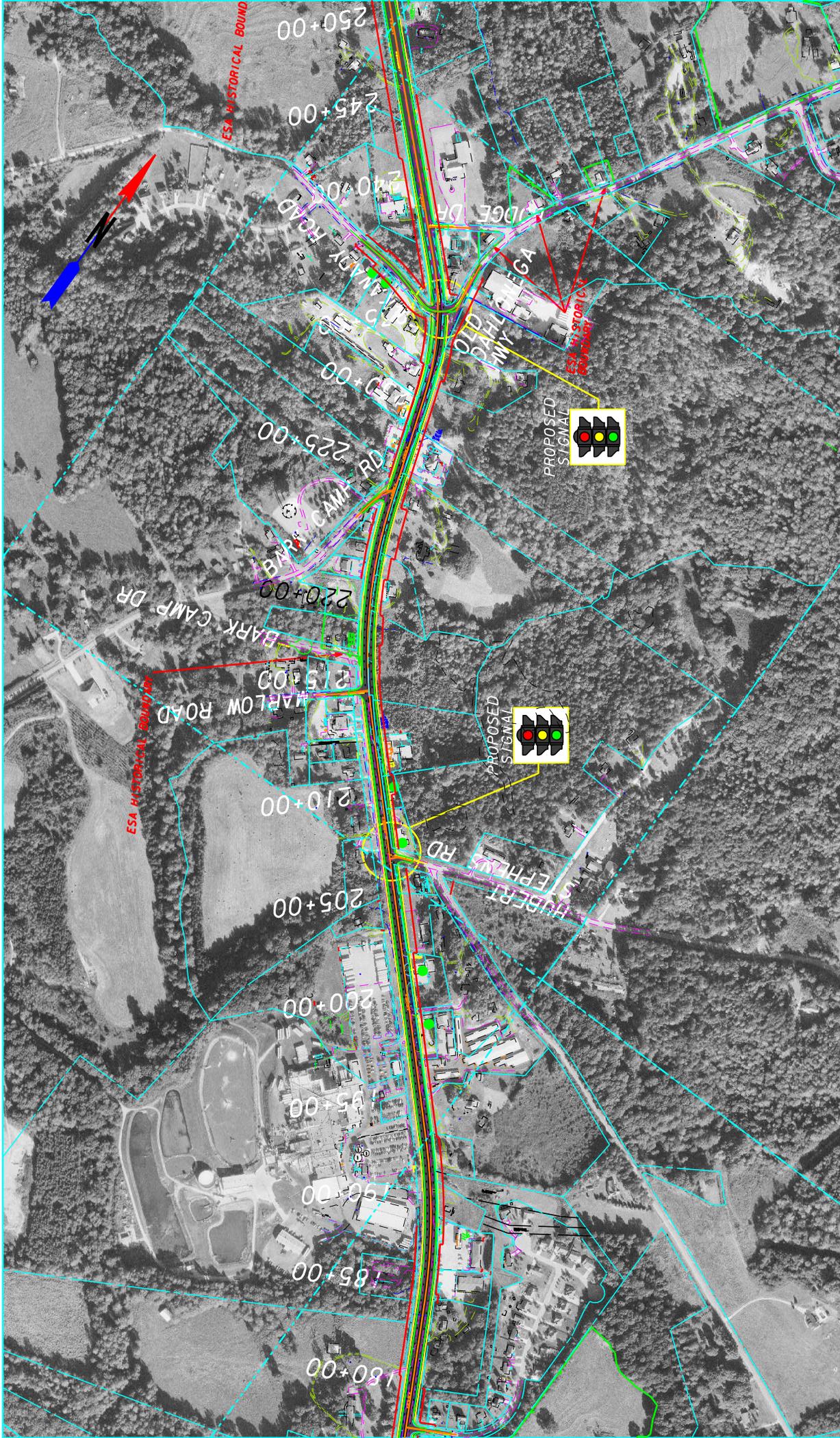
SQUIRREL CREEK MEADOWS

HOPEWELL CHURCH RD

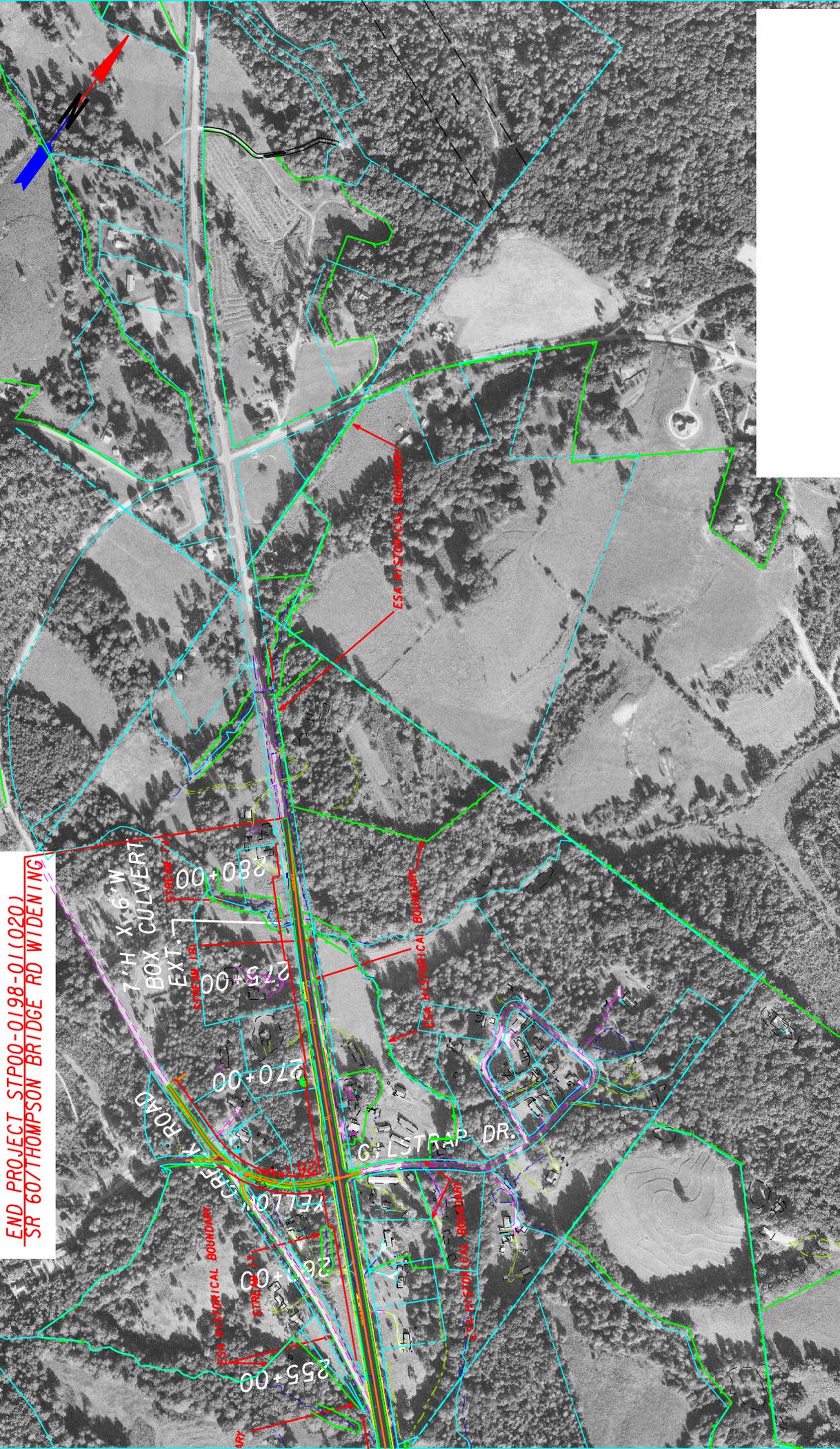
HOPEWELL RD

ELROD RD

BIRD RD



END PROJECT STP00-0198-01(020)
SR 607 THOMPSON BRIDGE RD WIDENING



7'-H X 6'-W
BOX CULVERT
EXT.

CREEK ROAD

GULF TRAP DR.

280+00

275+00

270+00

265+00

260+00

255+00

250+00

245+00

240+00

235+00

230+00

225+00

220+00

215+00

210+00

205+00

ES&P HISTORICAL BOUNDARY

ES&P HISTORICAL BOUNDARY

ES&P HISTORICAL BOUNDARY

ES&P PHYSICAL BOUNDARY

