ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 621082-
Chattooga County
GDOT District 6 - Cartersville
Widening: SR 1 from CR 329 to North of CR 325 at SR 1/US 27

OFFICE Design Policy & Support

DATE 10/24/2014

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:

Glenn Bowman, Director of Engineering
Joe Carpenter, Director of P3/Program Delivery
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery
Bobby Hilliard, Program Control Administrator
Albert Shelby, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Hiral Patel, State Environmental Administrator
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Richard Cobb, Statewide Location Bureau
DeWayne Comer, District Engineer
Michael Haithcock, District Preconstruction Engineer
Kerry Bonner, District Utilities Engineer
Kevin Bailey, Project Manager
BOARD MEMBER - 14th Congressional Districts

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT

Project Type:	Bypass	P.I. Number:	621082
GDOT District:	6	County:	Chattooga
Federal Route Number:	27	State Route Number:	1
		Project Number:	*EDS00-0027-00(095)*

Raised concrete median replaces median barrier to provide adequate sight distance and roundabouts are proposed to improve intersection level of service issues.

Submitted for approval:

C. Andy Carey — 6/30/14
GDOT Concept/Design Phase Office Head & Office — DATE

Albert Shelby — 7/9/14
State Program Delivery Engineer — DATE

@ASA Kim M. Bailey — 7/7/14
GDOT Project Manager — DATE

Recommendation for approval:

* HIRAL PATEL — 7/27/14
State Environmental Administrator — DATE

* KATHY ZAHUL — 8/22/14
State Traffic Engineer — DATE

State Bridge Design Engineer — 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).

* CINTHIA L. VANDYKE — 7/28/14
State Transportation Planning Administrator — DATE

* RECOMMENDATION(S) ON FILE

PLANNING, APPROVED CONCEPT, AND BACKGROUND

Project Justification Statement: This project originated in the late 1980s as part of the SR 1/US 27 corridor that was designated as a part of the Governor's Road Improvement Program (GRIP), with the goal of spurring economic development in Chattooga County and the cities of Summerville and Trion. Additionally, the two-lane, 0.8-mile section of SR 1/US 27 in downtown Summerville between Edmondson Drive and SR 48 bears a significant through-traffic load that intersects 11 local streets, two state highway corridors (SR 48 and SR 100/114), and one railroad grade-crossing. In 2013, the SR 1/US 27 corridor was included as part of the state's Freight Corridor Network, providing a north-south route in the western portion of the state.

In downtown Summerville, current AADT on the two-lane segment at the intersection with SR 48 is 22,100 VPD (LOS E), with 6 percent of this AADT being truck traffic; future (2038) traffic volumes on this segment are projected to be 24,000 VPD (LOS E). Current traffic on SR 1/US 27 varies from 11,500 VPD at the intersection with Gore-Sublinga Road (southern terminus) to 8,300 VPD at the intersection with Mountain View Road (northern terminus). The current level of service (LOS) ranges from D on the two-lane segment of SR 1/US 27 at Gore-Sublinga Road to an A on the four-lane segment at Mountain View Road. Future (2038) traffic volumes are projected to be 15,050 VPD on the two-lane segment at Gore-Sublinga Road (LOS D) and 15,450 VPD on the four-lane segment at Mountain View Road (LOS B).

For the three-year period from 2007 to 2009 (which is the latest data available), crash rates for the SR 1/US 27 corridor were above the statewide average for a similar functional classification of road (NHS Rural Principal Arterial).

The Office of Planning recommends that the southern terminus tie in with the existing four-lane facility located at the Gore-Sublinga Road intersection with SR 1/US 27. The northern terminus for this project is recommended to tie in with the existing four-lane divided facility located at the intersection of SR 1/US 27 and Mountain View Road.

The proposed project is needed to alleviate congestion along the SR 1/US 27 corridor by shifting through traffic away from downtown Summerville, as well as to better accommodate current and future demand due to the route's inclusion as part of the GRIP System and the state's Freight Corridor Network.

Existing conditions: The existing section of US27/SR1 that will be replaced by the proposed project consist of rural and urban sections with 2 to 5 lanes. Rural shoulders are present in most locations except near the city of Summerville where there is curb, gutter and sidewalk. Major intersections include US27/SR1 at CR 329 Gore Subligna / John Jones Road and US27/SR1 at Mountain View Road. A major gas line runs through the project. Also, there are chicken houses in the path of the proposed new location alignment.

Description of the approved concept: The approved concept proposes to reconstruct US27/SR1 from just south of CR 329 Gore Subligna / John Jones Road to approximately MP 6.0 (Mack White Gap, Chattahoochee National Forest), then northerly on new location to the approximate intersection of US27/SR1 and Mountain View Road near East Trion. The beginning typical section to the south is a four lane, 44' divided median with the new lanes on the east side. It is proposed to extend this typical section northward one-half mile, then transition to a 14.5' median with barrier for approximately one mile to MP 6.0 (Mack White Gap, Chattahoochee National Forest), then the proposed typical section will vary from a 32' - 44' depressed median for the remainder of the project. The width of the depressed median will vary in areas of high cut and fill in order to minimize construction limits. The total length of the project is 7.8 miles and the main purpose is to bypass the city of Summerville.

Federal Oversight: ☐ Full Oversight ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic as shown in the approved Concept Report: *ADT or AADT*
Open Year (1990): 7,800 Design Year (2010): 12,300

Updated Traffic: *ADT or AADT*
Open Year (2018): 14,000 Design Year (2038): 23,600

Functional Classification (Mainline): Rural Principal Arterial

VE Study anticipated: ☐ No ☐ Yes ☒ Completed – Date: 11/7/2000

PROPOSED REVISIONS

Approved Features:	**Proposed Features:**
1. Typical Sections • Two 12' lanes in each direction, 14.5' median with 2.5' wide – 2'8" (min) tall concrete barrier, and 10' outside shoulder from approximately a half mile north of CR329 Gore Subligna / John Jones Road to Mack White Gap. 2. Intersections • Two-way stop control at the proposed US27/SR1 tie-in points.	1.Typical Section • Two 12' lanes in each direction, 14.5' median with a 2.5' wide - 6" tall raised concrete median, 10' outside shoulder and side barrier from approximately a half mile north of CR329 Gore Subligna / John Jones Road to Mack White Gap. 2. Intersections • Roundabouts are proposed at the US27/SR1 tie-in points.
Reasons for change: 1. The typical section from a half mile north of CR329 Gore Subligna / John Jones Road to Mack White Gap was revised from barrier to raised median to provide adequate sight distance. 2. The proposed traffic volumes at both tie-ins did not warrant a signal and two way stop control did not provide a satisfactory LOS.	

Design Variances and/or Exceptions needed: A design variance is needed for the reduced median width.

ENVIRONMENTAL AND PERMITS

Potential environmental impacts of proposed revision: There are no anticipated additional environmental impacts associated with the proposed changes. The Office of Environmental Services is aware of the proposed changes and anticipates an environmental document approval date of September 2015.

Have proposed revisions been reviewed by environmental staff? ☐ No ☒ Yes
See the attached Revised Special Studies Request Form

Environmental responsibilities (Studies/Documents/Permits): Archaeology and history are GDOT responsibilities. Air/noise has been consulted to Atkins, and Ecology has been consulted to Ecological Solutions.

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

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

Environmental Comments and Information:

NEPA: Environmental document needs to be reevaluated, still need supplemental EA and FONSI.

Ecology: May have to resurvey due to time from last survey. One protected species was to be relocated off the required ROW at Mack White Gap.

Archeology: No additional surveys expected.

History: Resurvey in progress due to time since last survey

Air Quality: No additional modeling is required. Air approved 3/25/13.

Noise Effects: No noise impact changes.

Public Involvement: Additional public outreach is required to introduce proposed roundabouts.

PROJECT COST AND ADDITIONAL INFORMATION

Item	Estimated Cost	Date of Estimate	Funded By
Base Construction Cost:	$68,309,704	6/23/2014	
Engineering and Inspection:	$3,415,485	6/23/2014	
Construction Contingency:	$13,661,941	6/23/2014	
Liquid AC Adjustment:	$2,882,823	6/23/2014	
Total Construction Cost:	$88,269,954		GDOT
Right-of-Way:	$12,853,000	2/3/2014	GDOT
Utilities (reimbursable costs):	$11,544,917	4/1/2014	GDOT
Environmental Mitigation:	$1,272,887	2/27/2014	GDOT
TOTAL PROJECT COST:	**$113,940,758**		

Recommendation: It is the recommendation of the Office of Roadway Design that the proposed revision to the concept be approved for implementation. If you have any questions, please contact Ryan Handley at (404) 631-1658 or Clay Bastian at (404) 631-1610.

Attachments:

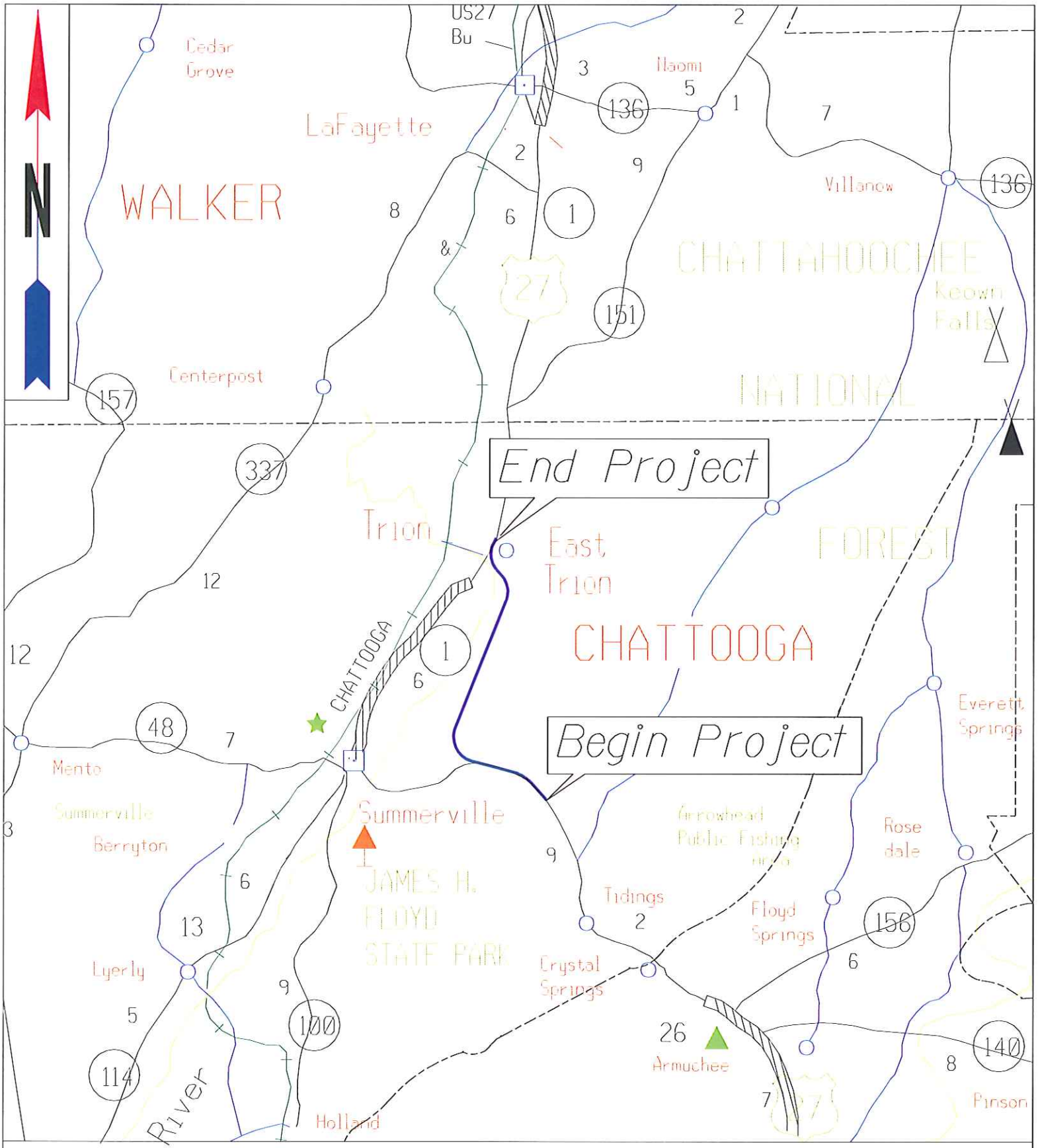
1. Location Map
2. Typical Section
3. Traffic Diagrams
4. Cost Estimates
5. Roundabout Peer Review (1st page of report only), Layouts and letter of local support

CAC:TRH:CCB:mrh

APPROVALS

Concur: _____
Director of Engineering

Approve: _____ 10/20/14
Chief Engineer Date



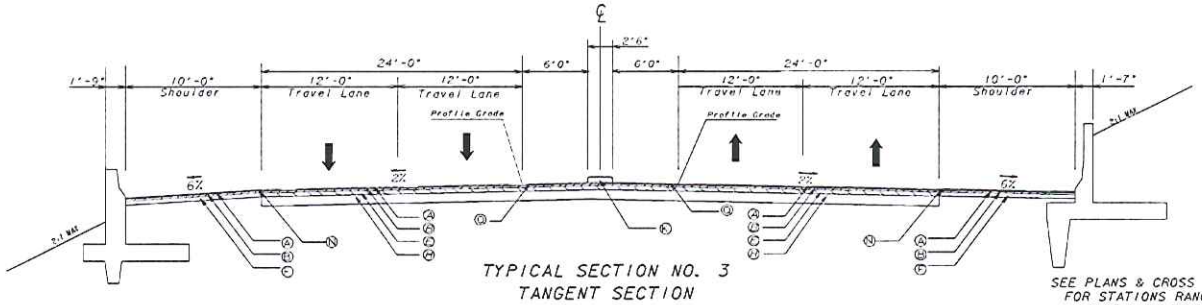
US 27 / SR 1
SUMMERVILLE BYPASS
EDS00-0027-00(095)
CHATTOOGA COUNTY

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	(DSGN-0027-001095)		

SLOPE CONTROLS		
SLOPE	CUT*	FILL
4:1	0'-10'	0'-10'
2:1	10'+	10'+

*HEIGHT IS MEASURED FROM SHOULDER BREAK POINT TO PROPOSED DITCH ELEVATION.

*ALL DITCH BACK SLOPES TO BE 2:1 MAX.

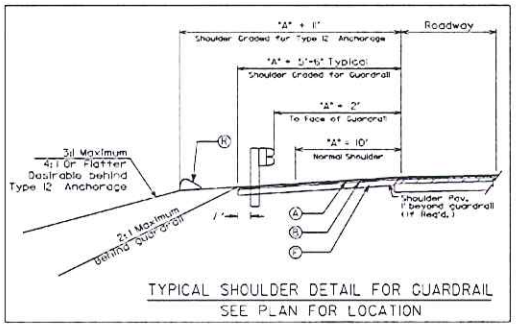


SEE PLANS & CROSS SECTIONS FOR STATIONS RANGE FOR SIDE BARRIER TYPES

TYPICAL SECTION NO. 3
TANGENT SECTION
SUMMERVILLE BYPASS

STA. 109+50 TO STA. 170+00.00

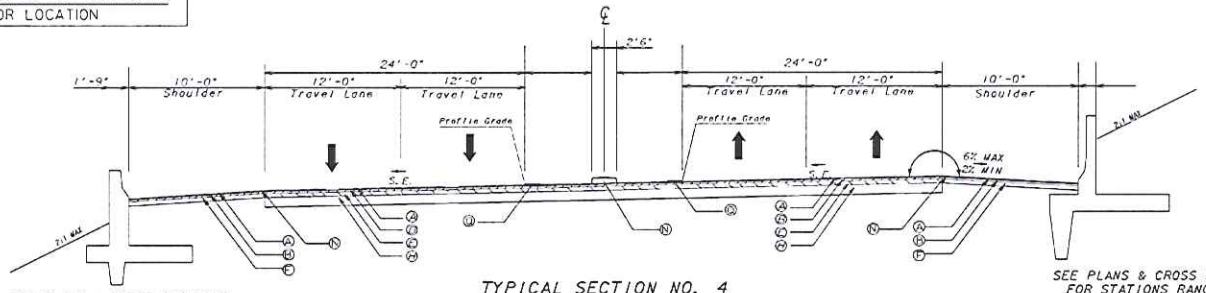
SEE PLANS & CROSS SECTIONS FOR STATIONS RANGE FOR SIDE BARRIER TYPES



TYPICAL SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION

REQUIRED PAVEMENT

- (A) RECYC ASPH CONC. 12.5mm SUPERPAVE MIX. 165LBS/ SY
- (B) RECYC ASPH CONC. 19 mm SUPERPAVE MIX. 220LBS/ SY
- (C) RECYC ASPH CONC. 25 mm SUPERPAVE MIX. 660 LBS/ SY
- (F) GRADED AGGREGATE BASE. 6 IN.
- (H) GRADED AGGREGATE BASE. 12"
- (K) CONCRETE MEDIAN. 6 IN
- (M) 8" X 30" CONC. CURB & GUTTER. GA STD. 9032B. TYPE 7
- (N) MILLED RUMBLE STRIPS - SKIP
- (O) MILLED RUMBLE STRIPS - CONTINUOUS
- (R) ASPHALTIC CONCRETE CURB



SEE PLANS & CROSS SECTIONS FOR STATIONS RANGE FOR SIDE BARRIER TYPES

TYPICAL SECTION NO. 4
SUPERELEVATED SECTION
SUMMERVILLE BYPASS

SEE PLANS FOR SUPERELEVATION RANGES & RATES

SEE PLANS & CROSS SECTIONS FOR STATIONS RANGE FOR SIDE BARRIER TYPES

NOT TO SCALE

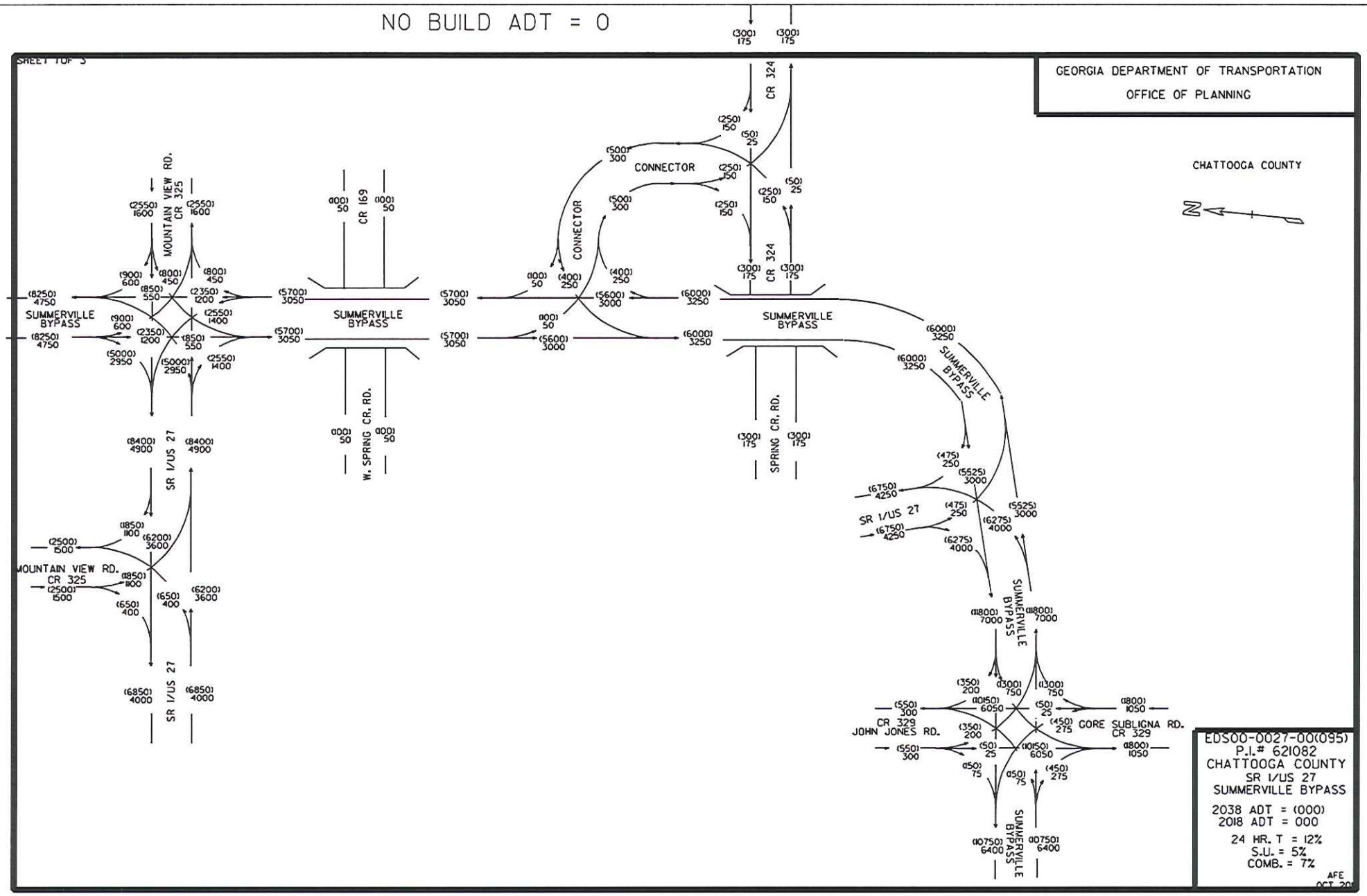
REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
	OFFICE: ROADWAY DESIGN
	US27/SR1 SUMMERVILLE BYPASS TYPICAL SECTIONS
	DRAWING NO. 5-002

NO BUILD ADT = 0

SHEET 1 OF 3

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

CHATTOOGA COUNTY



EDS00-0027-00(095)
P.I.# 621082
CHATTOOGA COUNTY
SR 1/US 27
SUMMERVILLE BYPASS

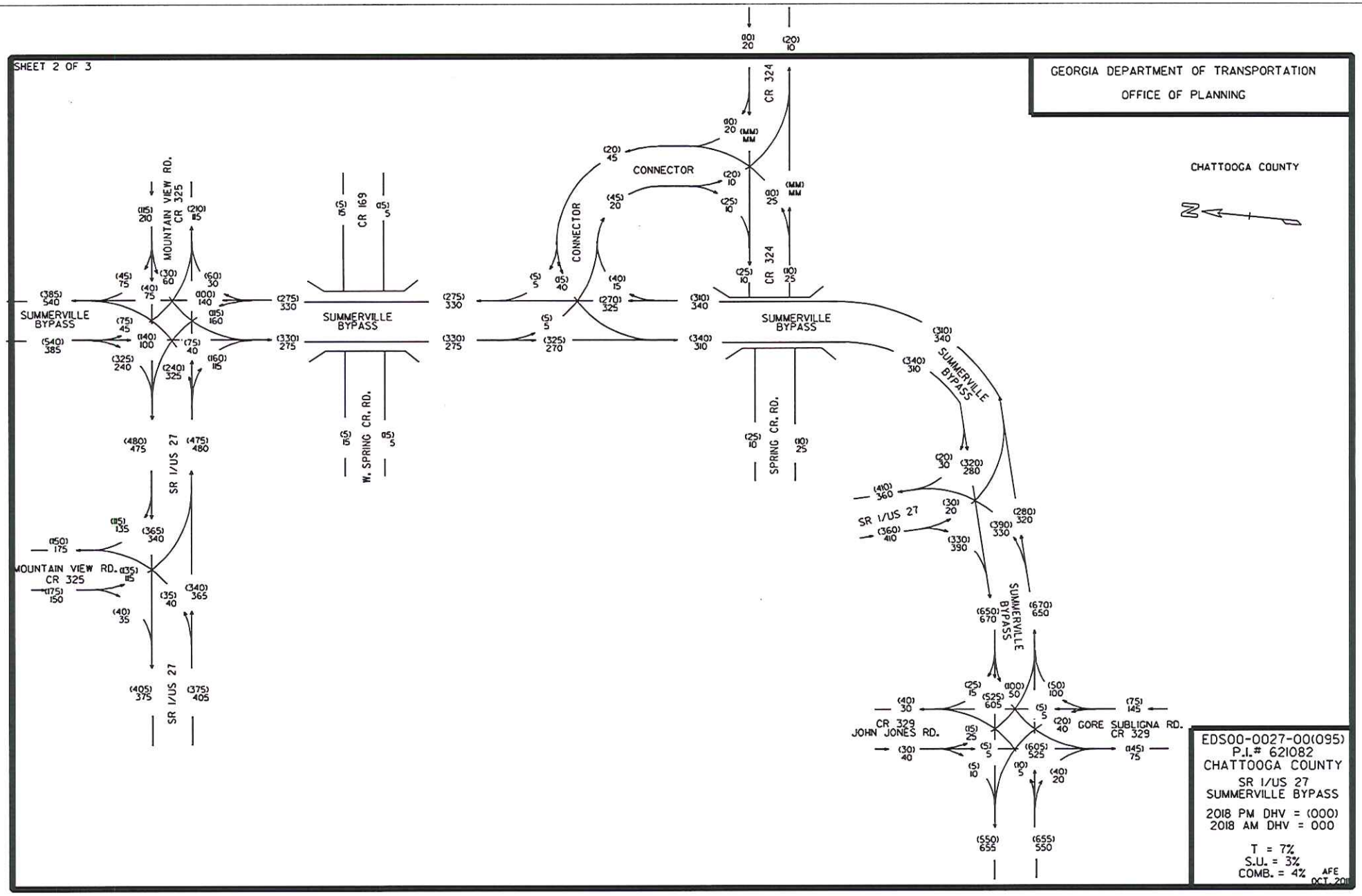
2038 ADT = (000)
2018 ADT = 000

24 HR. T = 12%
S.U. = 5%
COMB. = 7%

AFE
OCT 20

SHEET 2 OF 3

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00-0027-00(095)
P.I.# 621082
CHATTOOGA COUNTY
SR 1/US 27
SUMMERVILLE BYPASS

2018 PM DHV = (000)
2018 AM DHV = 000

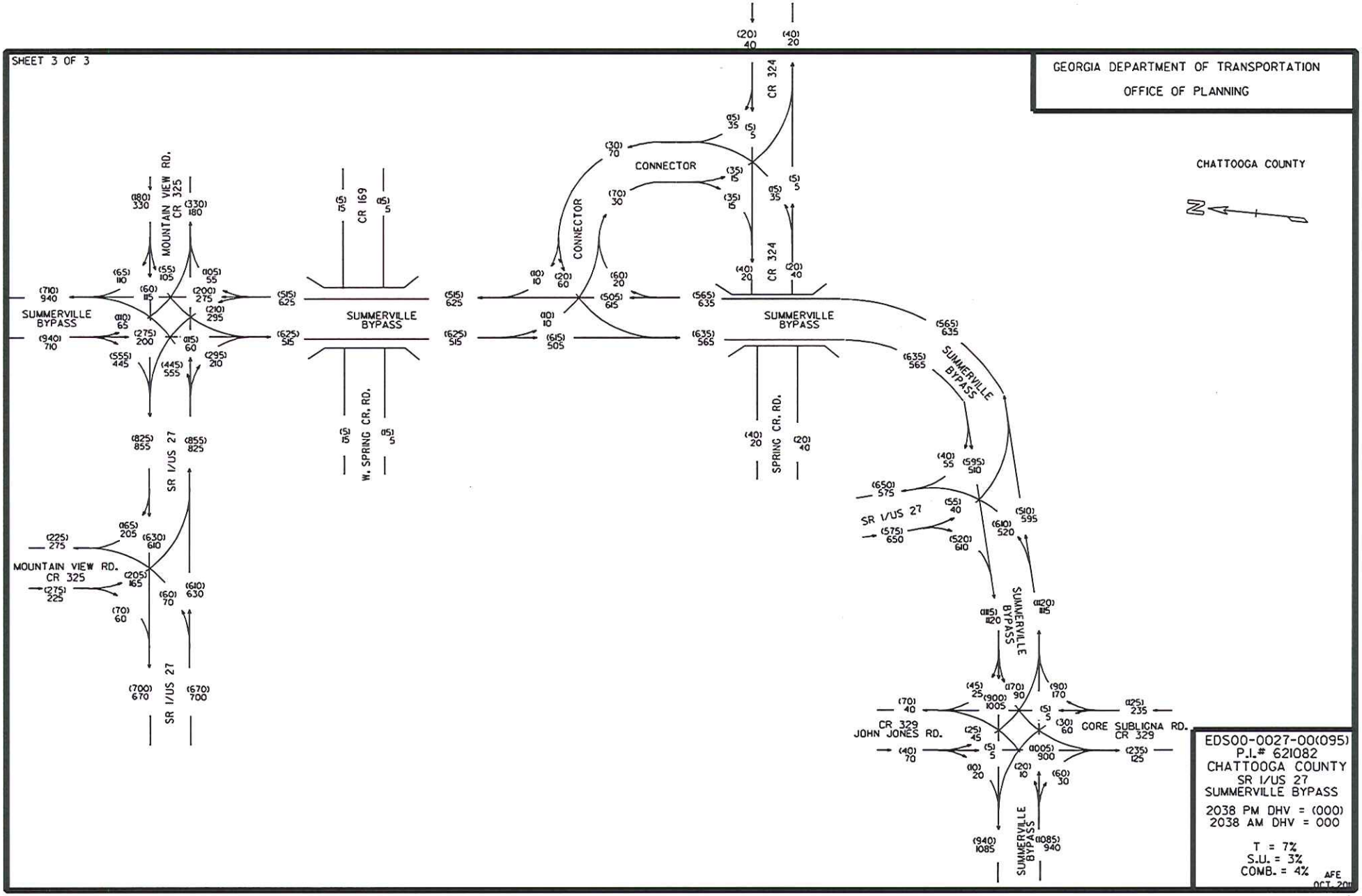
T = 7%
S.U. = 3%
COMB. = 4%

AFE
OCT. 2011

SHEET 3 OF 3

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

CHATTOOGA COUNTY



EDS00-0027-00(095)
P.I.# 621082
CHATTOOGA COUNTY
SR 1/US 27
SUMMERVILLE BYPASS

2038 PM DHV = (000)
2038 AM DHV = 000

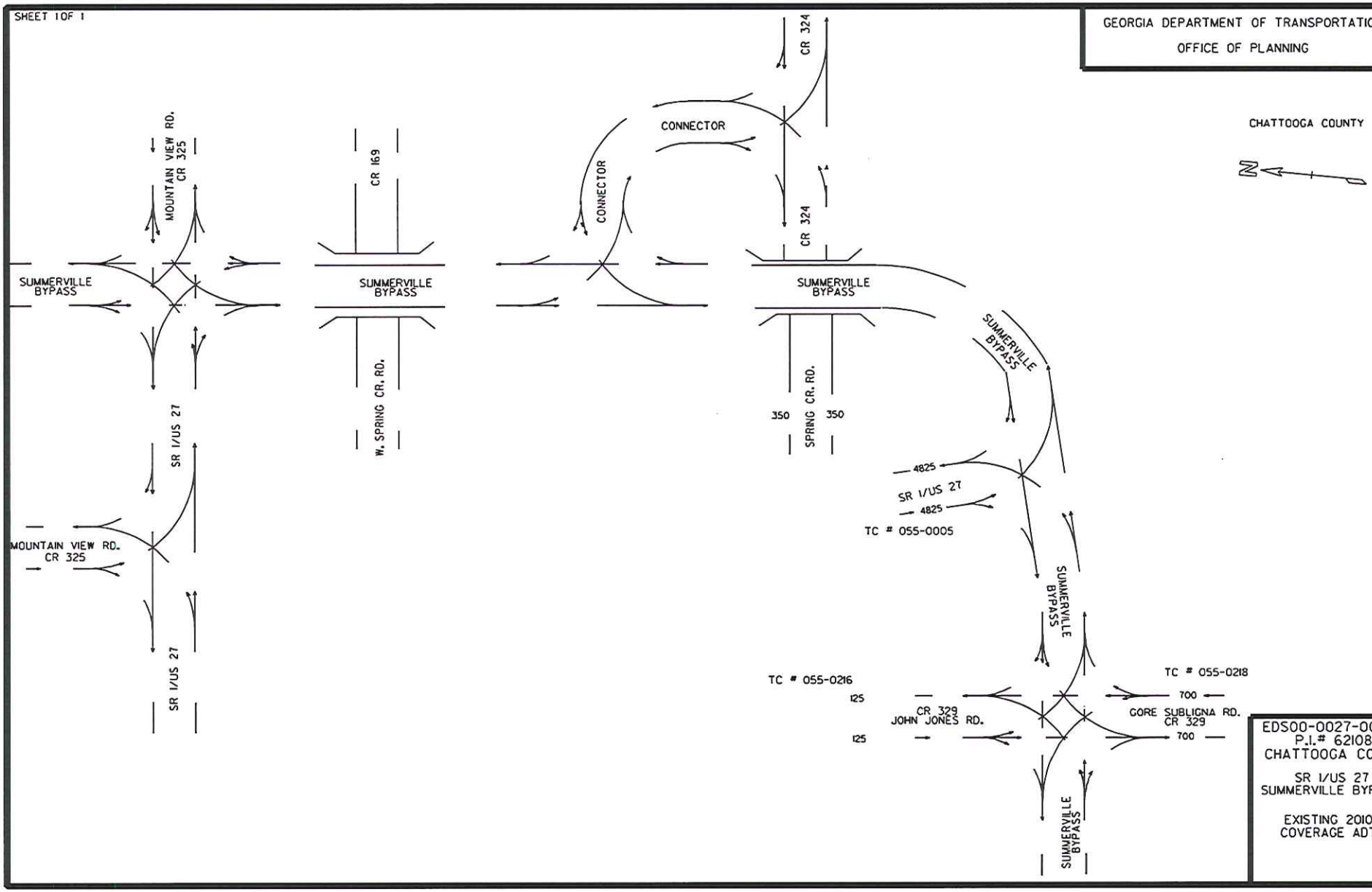
T = 7%
S.U. = 3%
COMB. = 4%

AFE
OCT. 20

SHEET 1 OF 1

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

CHATTOOGA COUNTY



EDS00-0027-00(095)
P.I.# 621082
CHATTOOGA COUNTY

SR 1/US 27
SUMMERVILLE BYPASS

EXISTING 2010
COVERAGE ADT

AFE
OCT. 20

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 621082

JOB NUMBER *621082* **FED/STATE PROJECT NUMBER** *EDS00-0027-00(095)*

SPEC YEAR: *01*

DESCRIPTION: *SR 1/US27/SUMMERVILLE BYPASS*
CHATTOOGA COUNTY

ITEMS FOR JOB 621082

0010 - ROADWAY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	$632,000.00000	TRAFFIC CONTROL - EDS00-0027-00(095)	$632,000.00
0010	153-1300	1.000	EA	$147,000.00000	FIELD ENGINEERS OFFICE TP 3	$147,000.00
0015	201-1500	1.000	LS	$4,300,000.00000	CLEARING & GRUBBING - EDS00-0027-00(095)	$4,300,000.00
0020	205-0001	1838537.000	CY	$7.73000	UNCLASS EXCAV	$14,211,891.01
0025	225-4345	361487.000	SY	$3.10000	S-LIME TRT/ROADBED/CL C/9"	$1,120,609.70
0030	310-1101	208498.000	TN	$15.79892	GR AGGR BASE CRS, INCL MATL	$3,294,043.22
0035	318-3000	800.000	TN	$18.81680	AGGR SURF CRS	$15,053.44
0040	402-1812	34.000	TN	$77.50188	RECYL AC LEVELING,INC BM&HL	$2,635.06
0045	402-3121	92898.000	TN	$51.57168	RECYL AC 25MM SP,GP1/2,BM&HL	$4,790,905.93
0050	402-3130	30992.000	TN	$59.44474	RECYL AC 12.5MM SP,GP2,BM&HL	$1,842,311.38
0055	402-3190	41322.000	TN	$52.94117	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	$2,187,635.03
0060	413-1000	52753.000	GL	$2.25000	BITUM TACK COAT	$118,694.25
0065	432-5010	18823.000	SY	$1.96064	MILL ASPH CONC PVMT,VARB DEPTH	$36,905.13
0070	433-1000	1067.000	SY	$128.74791	REINF CONC APPROACH SLAB	$137,374.02
0075	436-1000	14172.000	LF	$5.34929	ASPH CONC CURB - BEHIND GUARDRAIL	$75,810.14
0076	439-0022	779.000	SY	$62.51000	PLN PC CONC PVMT CL3 10" THK	$48,695.29
0080	441-0016	972.000	SY	$31.78016	DRIVEWAY CONCRETE, 6 IN TK	$30,890.32
0081	441-0754	11981.000	SY	$39.80233	CONC MEDIAN, 7 1/2 IN	$476,871.72
0082	441-5003	772.000	LF	$16.77667	CONC HEADER CURB, 8", TP 3	$12,951.59
0083	441-5010	879.000	LF	$16.37000	CONC HDR CURB, 6 IN, TP 9	$14,389.23
0084	441-6740	18937.000	LF	$10.74812	CONC CURB & GUTTER/ 8"X30" TP7	$203,537.15
0085	446-2118	14117.000	LF	$3.93527	HIGH STR PVMT REINF FABRIC, 18 IN WIDTH	$55,554.21
0090	456-2015	16.000	GLM	$676.35914	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	$10,821.75
0095	621-4020	1500.000	LF	$362.55000	CONCRETE SIDE BARRIER, TY 2	$543,825.00
0096	621-4021	1150.000	LF	$362.55333	CONCRETE SIDE BARRIER, TY 2A	$416,936.33
0097	621-4022	750.000	LF	$517.31333	CONCRETE SIDE BARRIER, TY 2B	$387,985.00
0098	621-4023	120.000	LF	$517.31000	CONCRETE SIDE BARRIER, TY 2C	$62,077.20
0100	628-0100	1.000	LS	$22,350,000.00000	PERMANENT SOIL-NAILED WALL EDS00-0027-00(095)	$22,350,000.00
0105	641-1100	166.000	LF	$46.72071	GUARDRAIL, TP T	$7,755.64
0110	641-1200	14172.000	LF	$13.14998	GUARDRAIL, TP W	$186,361.52
0115	641-5001	25.000	EA	$600.00000	GUARDRAIL ANCHORAGE, TP 1	$15,000.00
0120	641-5012	25.000	EA	$1,791.20909	GUARDRAIL ANCHORAGE, TP 12	$44,780.23
					SUBTOTAL FOR ROADWAY:	**$57,781,300.49**

0020 - BRIDGES

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0134	001-0000	58090.000	$	$100.00000	MISC ITEMS BRIDGES - 58,090 SF X $100/SF	$5,809,000.00
					SUBTOTAL FOR BRIDGES:	**$5,809,000.00**

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 621082

0030 - DRAINAGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0135	207-0203	105.000	CY	$154.12164	FOUND BKFILL MATL, TP II	$16,182.77
0140	500-3101	3609.000	CY	$378.75992	CLASS A CONCRETE	$1,366,944.55
0145	511-1000	378345.000	LB	$0.48425	BAR REINF STEEL	$183,213.57
0150	550-1182	4084.000	LF	$29.21667	STM DR PIPE 18",H 15-20	$119,320.88
0155	550-1242	1387.000	LF	$42.29686	STM DR PIPE 24",H 15-20	$58,665.74
0160	550-1301	1832.000	LF	$47.33475	STM DR PIPE 30",H 10-15	$86,717.26
0165	550-1362	2475.000	LF	$55.68000	STM DR PIPE 36",H 15-20	$137,808.00
0170	550-1421	761.000	LF	$92.50000	STM DR PIPE 42",H 10-15	$70,392.50
0175	550-1482	832.000	LF	$108.95000	STM DR PIPE 48",H 15-20	$90,646.40
0180	550-3324	3.000	EA	$505.93500	SAFETY END SECTION 24",STD,4:1	$1,517.81
0185	550-3330	5.000	EA	$1,621.13417	SAFETY END SECTION 30",STD,4:1	$8,105.67
0190	550-3336	9.000	EA	$1,560.33333	SAFETY END SECTION 36",STD,4:1	$14,043.00
0195	550-4218	75.000	EA	$462.32121	FLARED END SECT 18 IN, ST DR	$34,674.09
0200	550-4224	9.000	EA	$495.55000	FLARED END SECT 24 IN, ST DR	$4,459.95
0205	550-4230	5.000	EA	$572.01000	FLARED END SECT 30 IN, ST DR	$2,860.05
0210	550-4236	6.000	EA	$905.12533	FLARED END SECT 36 IN, ST DR	$5,430.75
0215	550-4242	4.000	EA	$956.76667	FLARED END SECT 42 IN, ST DR	$3,827.07
0220	550-4248	4.000	EA	$1,927.65000	FLARED END SECT 48 IN, ST DR	$7,710.60
0225	572-1000	6300.000	LF	$20.00000	SLOPE UNDERDRAINS	$126,000.00
0230	573-2004	6500.000	LF	$34.11000	UNDDR PIPE INCL DRAIN AGGR 4"	$221,715.00
0235	603-2024	7256.000	SY	$41.34005	STN DUMPED RIP RAP, TP 1, 24"	$299,963.40
0240	668-2100	153.000	EA	$1,680.64678	DROP INLET, GP 1	$257,138.96
0245	668-6000	2.000	EA	$1,519.33167	SPRING BOX	$3,038.66
					SUBTOTAL FOR DRAINAGE:	**$3,120,376.68**

0040 - PERMANENT EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0250	163-0240	860.000	TN	$161.89256	MULCH	$139,227.60
0255	700-6910	287.000	AC	$598.18492	PERMANENT GRASSING	$171,679.07
0260	700-7000	860.000	TN	$48.18198	AGRICULTURAL LIME	$41,436.50
0265	700-7010	717.000	GL	$14.98593	LIQUID LIME	$10,744.91
0270	700-8000	287.000	TN	$446.38690	FERTILIZER MIXED GRADE	$128,113.04
0275	700-8100	43007.000	LB	$1.94550	FERTILIZER NITROGEN CONTENT	$83,670.12
					SUBTOTAL FOR PERMANENT EROSION CONTROL:	**$574,871.24**

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 621082

0050 - TEMPORARY EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0314	001-0000	70910.000	$	$0.79000	MISC ITEMS MAINTENANCE OF TEMP SILT FENCE, TYP C	$56,018.90
0280	163-0232	143.000	AC	$175.00000	TEMPORARY GRASSING	$25,025.00
0285	163-0240	430.000	TN	$174.27386	MULCH	$74,937.76
0290	163-0300	4.000	EA	$1,433.33333	CONSTRUCTION EXIT	$5,733.33
0295	163-0501	410.000	EA	$567.43007	CONSTR AND REMOVE SILT CONTROL GATE,TP 1	$232,646.33
0300	163-0503	40.000	EA	$347.32616	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	$13,893.05
0305	163-0523	420.000	EA	$144.07000	CONSTR AND REM TEMP DCH CK - TP C SLT FN	$60,509.40
0310	163-0550	570.000	EA	$135.46503	CONS & REM INLET SEDIMENT TRAP	$77,215.07
0315	165-0040	420.000	EA	$55.80000	MAINT OF EROSION CTRL CHKDAMS/DITCH CHKS	$23,436.00
0320	165-0085	410.000	EA	$169.22621	MAINT OF SILT CONTROL GATE, TP 1	$69,382.75
0325	165-0087	40.000	EA	$99.24329	MAINT OF SILT CONTROL GATE, TP 3	$3,969.73
0330	165-0101	4.000	EA	$577.66667	MAINT OF CONST EXIT	$2,310.67
0335	165-0105	570.000	EA	$49.22749	MAINT OF INLET SEDIMENT TRAP	$28,059.67
0340	167-1000	3.000	EA	$244.27342	WATER QUALITY MONITORING AND SAMPLING	$732.82
0345	167-1500	108.000	MO	$216.66667	WATER QUALITY INSPECTIONS	$23,400.00
0350	171-0030	70910.000	LF	$2.42812	TEMPORARY SILT FENCE, TYPE C	$172,177.99
					SUBTOTAL FOR TEMPORARY EROSION CONTROL:	**$869,448.47**

0060 - SIGNING & MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0355	636-1020	682.000	SF	$12.56468	HWY SGN,TP1MAT,REFL SH TP3	$8,569.11
0360	636-1029	183.000	SF	$13.77681	HWY SGN,TP2 MATL,REFL SH TP 3	$2,521.16
0365	636-1033	501.000	SF	$18.26715	HWY SIGNS, TP1MAT,REFL SH TP 9	$9,151.84
0370	636-1041	120.000	SF	$24.82285	HWY SIGNS,TP 2MAT,REFL SH TP 9	$2,978.74
0374	636-2070	955.000	LF	$7.10122	GALV STEEL POSTS, TP 7	$6,781.67
0375	636-2080	499.000	LF	$9.17568	GALV STEEL POSTS, TP 8	$4,578.66
0376	636-2090	171.000	LF	$7.74510	GALV STEEL POSTS, TP 9	$1,324.41
0424	653-0110	4.000	EA	$67.28770	THERM PVMT MARK, ARROW, TP 1	$269.15
0425	653-0120	41.000	EA	$65.53934	THERM PVMT MARK, ARROW, TP 2	$2,687.11
0426	653-0130	17.000	EA	$79.49852	THERM PVMT MARK, ARROW, TP 3	$1,351.47
0427	653-0170	37.000	EA	$82.12046	THERM PVMT MARK, ARROW, TP 7	$3,038.46
0380	653-1501	95246.000	LF	$0.30043	THERMO SOLID TRAF ST 5 IN, WHI	$28,614.76
0385	653-1502	99655.000	LF	$0.24038	THERMO SOLID TRAF ST, 5 IN YEL	$23,955.07
0390	653-1704	48.000	LF	$4.58038	THERM SOLID TRAF STRIPE,24",WH	$219.86
0400	653-3501	92869.000	GLF	$0.14579	THERMO SKIP TRAF ST, 5 IN, WHI	$13,539.37
0404	653-3502	841.000	GLF	$0.23047	THERMO SKIP TRAF ST, 5 IN, YEL	$193.83
0405	653-6004	9527.000	SY	$2.68997	THERM TRAF STRIPING, WHITE	$25,627.34
0410	653-6006	44.000	SY	$3.29939	THERM TRAF STRIPING, YELLOW	$145.17
0420	654-1001	40.000	EA	$4.03643	RAISED PVMT MARKERS TP 1	$161.46
0415	654-1003	1200.000	EA	$2.96687	RAISED PVMT MARKERS TP 3	$3,560.24
0430	657-1054	1600.000	LF	$3.60537	PRF PL SD PVMT MKG,5",WH,TP PB	$5,768.59
0435	657-3054	1600.000	GLF	$2.35976	PRF PL SK PVMT MKG,5",WH,TP PB	$3,775.62
0440	657-6054	1600.000	LF	$3.68380	PRF PL SD PVMT MKG,5",YW,TP PB	$5,894.08
					SUBTOTAL FOR SIGNING & MARKING:	**$154,707.17**

TOTALS FOR JOB 621082

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 621082

ITEMS COST:	$68,309,704.05
COST GROUP COST:	$0.00
ESTIMATED COST:	$68,309,704.05
CONTINGENCY PERCENT:	0.00
ENGINEERING AND INSPECTION:	0.00
ESTIMATED COST WITH CONTINGENCY AND E&I:	$68,309,704.05

CONFIDENTIALITY NOTICE: This document may contain confidential and/or privileged information. Any unauthorized duplication, disclosure, distribution/ retransmission or taking of any action in reliance upon the material in this document is strictly forbidden.

PROJ. NO.: EDS00-0027-00(095)
P.I. NO. 621082-
DATE: 6/23/2014

Base Construction Cost		$	68,309,704
E & I	5%	$	3,415,485
Construction Contingency	20%	$	13,661,941
Subtotal Construction Cost		$	85,387,130
Liquid AC Adjustment (50 % cap)		$	2,882,823
Total Construction Cost		$	88,269,954

PROJ. NO.	EDS00-0027-00(095)	CALL NO.
P.I. NO.	621082-	
DATE	6/23/2014	

INDEX (TYPE)	**DATE**	**INDEX**
REG. UNLEADED	Jun-14	$ 3.665
DIESEL		$ 3.916
LIQUID AC		$ 566.00

Link to Fuel and AC Index:
http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)			**2805877.08**	**$ 2,805,877.08**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 905.60	
Monthly Asphalt Cement Price month project let (APL)			$ 566.00	
Total Monthly Tonnage of asphalt cement (TMT)			8262.3	

ASPHALT	**Tons**	**%AC**	**AC ton**
Leveling	34	5.0%	1.7
12.5 OGFC		5.0%	0
12.5 mm SP	30992	5.0%	1549.6
9.5 mm SP		5.0%	0
25 mm SP	92898	5.0%	4644.9
19 mm SP	41322	5.0%	2066.1
	165246		**8262.3**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$ 76,946.38**	**$ 76,946.38**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 905.60	
Monthly Asphalt Cement Price month project let (APL)			$ 566.00	
Total Monthly Tonnage of asphalt cement (TMT)			226.5794589	

Bitum Tack Gals	gals/ton	tons
52753	232.8234	226.5795

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)			**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$ 905.60	
Monthly Asphalt Cement Price month project let (APL)			$ 566.00	
Total Monthly Tonnage of asphalt cement (TMT)			0	

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT **$ 2,882,823.46**

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 2/3/2014 Project: EDS-0027-00(95)
Revised: County: Chattooga
PI: 621082
Description: SR 1/US 27 and CR 329/ Gore-Subligna Road
Project Termini: Summerville Bypass

Existing ROW: Varies
Parcels: 85 Required ROW: Varies

Land and Improvements		$10,417,500.00
Proximity Damage	*$50,000.00*	
Consequential Damage	*$15,000.00*	
Cost to Cures	*$0.00*	
Trade Fixtures	*$0.00*	
Improvements	*$3,755,000.00*	
Valuation Services		$152,500.00
Legal Services		$544,875.00
Relocation		$720,000.00
Demolition		$265,500.00
Administrative		$752,500.00
TOTAL ESTIMATED COSTS		$12,852,875.00
TOTAL ESTIMATED COSTS (ROUNDED)		***$12,853,000.00***

Preparation Credits	Hours	Signature

Prepared By: Dedrione Alexander CG#: 286999 02/05/2014
Approved By: Dedrione Alexander CG#: 286999 02/05/2014

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS00-0027-00(095); Chattooga County
Summerville Bypass
P. I. No. 621082-

OFFICE Cartersville

DATE April 1, 2014

FROM Kerry D. Bonner
District Utilities Engineer

TO Albert Shelby, Office of Program Delivery
ATTN Kevin Bailey, Project Manager

SUBJECT UPDATED UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with an Updated Utility Cost estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
Atlanta Gas Light Co.		$ 8,695,792.00
*Chattooga Co. Water District No. 1	$ 289,692.00	
North Georgia EMC	$ 12,019.00	$ 103,568.00
Charter Communications	$ 23,735.00	
*City of Summerville	$ 22,049.00	$ 105,463.00
Georgia Power Distribution		$ 1,483,185.00
Georgia Power Transmission		$ 886,909.00
*Town of Trion	$ 141,433.00	
Windstream Communications	$ 259,009.00	
Totals	$ 747,937.00	$11,544,917.00

The total preliminary utility cost for the above project is $12,292,854.00

*The reimbursement amount could increase to $11,998,091.00 if Chattooga County Water District No. 1, City of Summerville, and Town of Trion were to apply for utility assistance for the relocation of their facilities.

If you have any questions, please contact Jennifer Deems at 678-721-5323.

KDB/jd

C: Mike Bolden, State Utilities Engineer
File/Estimating Book

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 621082, Chattooga County

OFFICE Environmental Services

DATE February 27, 2014

Glenn Bowman

FROM Glenn Bowman, P.E., State Environmental Administrator

TO Kevin Bailey, Project Manager

SUBJECT Preliminary Mitigation Cost Estimate

As requested by your office, we are furnishing you with a preliminary cost estimate for the subject project. This project will replace widen and reconstruct US 27/SR 1 from CR 329 to CR 325 near Summerville, Georgia. After reviewing the concept and based on the latest information on the number of wetland and stream credits that will be required, the estimated mitigation cost for these impacts are $1,272,887.00.

DISCLAIMER: This information is based on the current project alignment and project impacts. Changes in impacts that might require more or fewer would change the estimated costs provided above.

If you have any questions or need additional information, please contact Lisa Westberry (404) 631-1772 of our office.

GB/HDC/lmw

cc: Michael Handley
General File

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
225 E Robinson Street, Suite 450, Orlando, FL 32801 P 407.540.0555 F 407.540.0550

TECHNICAL MEMORANDUM

Summerville Bypass at SR 1-US 27 (ROUNDABOUT 1)

Roundabout Peer Review

Date: September 21, 2010 Project #: 10956.2

To: Georgia Department of Transportation

From: Justin Bansen and Lee Rodegerdts, P.E.

Kittelson & Associates, Inc. (KAI) has reviewed the conceptual roundabout design and supporting documentation for the roundabout proposed near the southern end of the Summerville Bypass at SR 1-US 27 near Summerville in Chattooga County, Georgia. KAI identified potential capacity concerns with the use of a single-lane roundabout for the 2035 design year. We believe the roundabout should be modified to provide two through lanes consistent with the basic number of lanes on the Summerville Bypass. In addition, design modifications are needed to better accommodate WB-67 design vehicles for all movements through the roundabout.

LANE NUMBERS AND ARRANGEMENTS

The operations analysis prepared by the Georgia Department of Transportation (GDOT) was reviewed to verify whether the lane configurations will provide acceptable design-year traffic operations. Given that the Summerville Bypass will be constructed as a four-lane roadway, KAI recommends that GDOT consider modifying the roundabout to be designed as a multilane configuration in the opening year to provide two through lanes north-south through the roundabout. This configuration promotes basic lane continuity along the Summerville Bypass and helps to increase the entry capacity along the northbound and southbound approaches.

Based upon KAI's review of the GDOT operations analysis, it also appears that a single-lane entry on the southbound approach will operate with a v/c ratio greater than 1.0 during the 2035 p.m. peak hour based upon the NCHRP Report 572 capacity methodology. This further supports the use of a multilane configuration with two entering and exiting lanes along the Summerville Bypass. The eastbound SR 1-US 27 approach would have one roundabout entry and exit lane for opening year, with the design allowing for the future addition of a yield controlled right-turn bypass lane to handle the heavy projected right-turn demand. Conceptual sketch illustrations of a multilane roundabout design (with and without an eastbound bypass lane) are provided in Figures 1 and 2 respectively.

The following additional observations were made related to the operational analysis and proposed lane configurations:

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
225 E Robinson Street, Suite 450, Orlando, FL 32801 P 407.540.0555 F 407.540.0550

TECHNICAL MEMORANDUM

Summerville Bypass at SR 1-US 27 (ROUNDABOUT 2)

Roundabout Peer Review

Date: September 21, 2010 Project #: 10956.2

To: Georgia Department of Transportation

From: Justin Bansen, Lee Rodegerdts P.E., Brian Ray, P.E., and Shing Tsoi

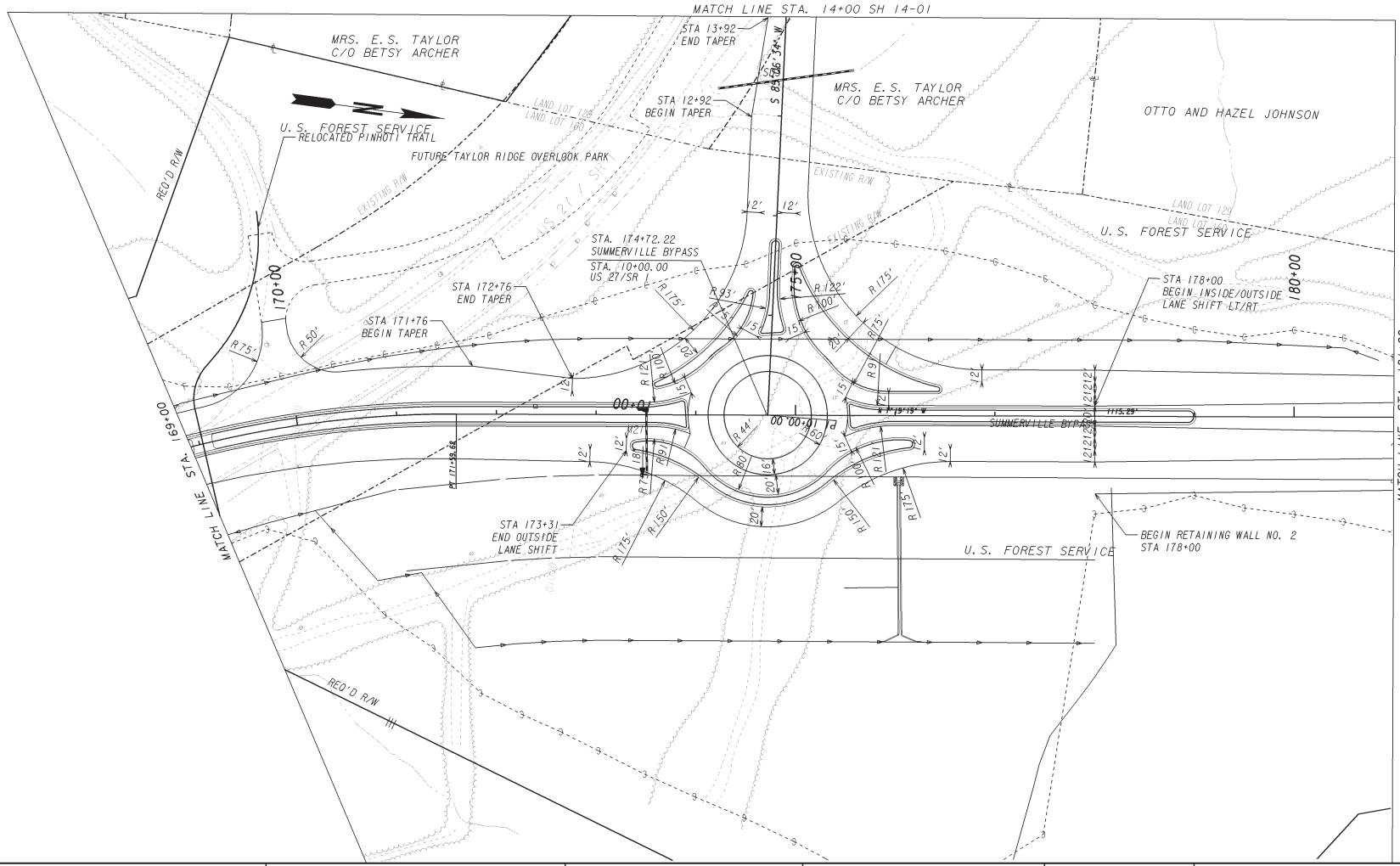
Kittelson & Associates, Inc. (KAI) has reviewed the conceptual roundabout design and supporting documentation for the roundabout proposed at the northern terminus of the Summerville Bypass at SR 1-US 27 near Summerville in Chattooga County. KAI identified several areas of the design that we believe to be undesirable and should be given further consideration. These include a lack of capacity for the 2035 design year and undersized roundabout design given the suburban/rural environment. We believe the roundabout should be modified to provide two through lanes consistent with the basic number of lanes on Summerville Bypass. In addition, the design should be modified to include speed management elements to support speed reduction from 65 mph to 25 mph. The following sections summarize our observations in more detail.

LANE NUMBERS AND ARRANGEMENTS

The operations analysis prepared by the Georgia Department of Transportation (GDOT) was reviewed to verify whether the lane configurations will provide acceptable design-year traffic operations. The KAI review identified several errors in the input of the traffic volumes into the GDOT analysis spreadsheet. In the a.m. peak hour analysis, the p.m. volumes were mistakenly used for some movements including the EB through and SB left. In the p.m. peak hour analysis, incorrect values were used for the southbound left, westbound through, northbound left, and eastbound through movements. In addition, no analysis was performed on the yield-controlled northbound to eastbound bypass lane.

KAI updated the analysis with the correct volumes and identified that a single-lane roundabout with right-turn bypass lanes is forecast to operate over capacity on the northbound and eastbound approaches (south and west legs) during the 2035 design year. Based upon the NCHRP Report 572 capacity methodology, the northbound approach is estimated to have a volume-to-capacity (v/c) ratio of 1.4 during the weekday a.m. peak hour and near 1.00 in the weekday p.m. peak. The eastbound approach is also estimated to have a v/c near 1.0 in the weekday a.m. and p.m. peak hours.

Mon Jun 21 14:32:02 2010 tlrobinson	Mon Jun 21 14:32:02 2010 \\Gdot-dsn1\GOCFG\resources\Gdot2007_Kip.TBL	M:\621082\2.08 DGN\00 CURRENT DGN files\621082CP10.dgn	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
			CHATTOOGA	EDS00-0027-00(095)		



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	R/W AND LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

GEORGIA
DEPARTMENT OF TRANSPORTATION

SCALE IN FEET
0 50 100 200

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROAD DESIGN

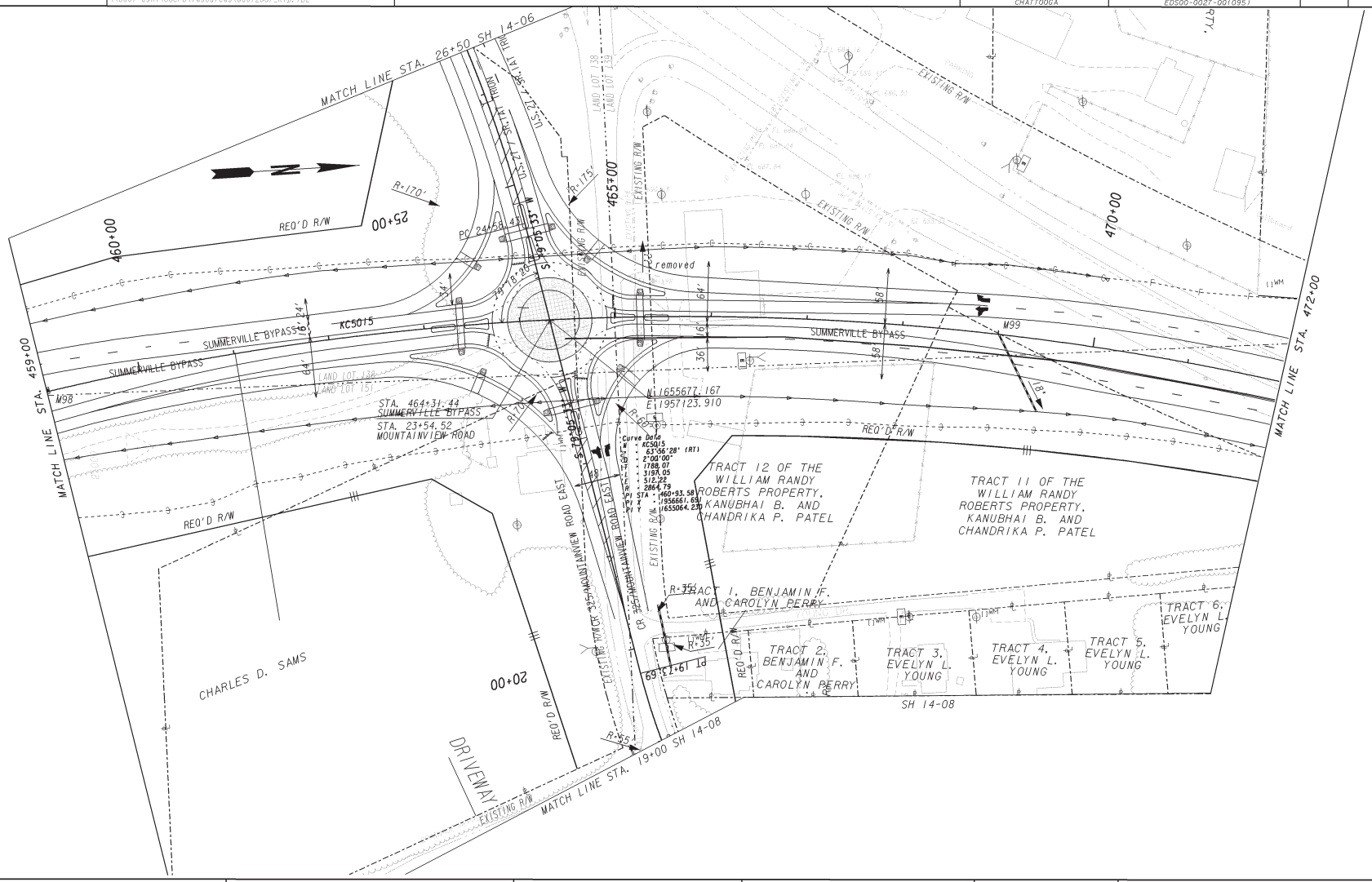
MAINLINE PLAN

US27/SR1 SUMMERVILLE BYPASS

DRAWING NO. 13-10

Mon Jun 21 14:30:15 2010 Mon Jun 21 14:30:15 2010 \\Gdot-dsn1\GOCFG\resources\Gdot2007_Kip.TBL M:\621082\2.08 DGN\00 CURRENT DGN files\621082CP33.dgn

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
CHATTOOGA	EDS00-0027-00(095)		



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	R/W AND LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

GEORGIA
DEPARTMENT OF TRANSPORTATION

SCALE IN FEET
0 50 100 200

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROAD DESIGN

MAINLINE PLAN

US27/SR1 SUMMERVILLE BYPASS

DRAWING NO. 13-33

COMMISSIONER OF CHATTOOGA COUNTY

Post Office Box 211 Summerville, Georgia 30747
Telephone (706) 857-0700
Fax (706) 857-0742

September 15, 2011

Mr. Scott MacLean
Office of Design Policy & Support
Georgia Department of Transportation
One Georgia Center
600 West Peachtree Street, NW
Atlanta, GA 30308
VIA FACSIMILE 404-631-1949

RECEIVED
SEP 15 2011
DESIGN POLICY & SUPPORT

Reference: Lighting required for 2 roundabout intersections;
GDOT Project EDS00-0027-00(095) P.I. No. 621082; Chattooga County

Dear Mr. MacLean:

This is in reference to the letter we received from Mr. Brent Story dated August 17, 2011, on the above referenced project.

Chattooga County is committed to sharing in the cost for the installed lighting system. We will fund the energy, operation and maintenance costs of the installed lighting systems.

If you should need any additional information, please let us know.

Sincerely,

Jason Winters
Sole Commissioner

mt

cc: Mr. Brent A. Story
Mr. Kent Sager
Mr. Jeff Lewis