ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 122650-
EDS00-0072-00(039)
Elbert & Madison Counties
GDOT District 1 - Gainesville
SR 72 from West City Limits of Comer to East of
Broad River in Elbert

OFFICE Design Policy & Support

DATE 3/20/2013

FROM Kim Phillips 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
Glenn Bowman, State Environmental Administrator
Cindy VanDyke, State Transportation Planning Administrator
Ben Rabun, State Bridge Engineer
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
Paul Tanner, Asst. State Transportation Data Administrator
Attn: Systems & Classification Branch
Ken Thompson, Statewide Location Bureau Chief
Andy Casey, State Roadway Design Engineer
Attn: Clay Bastian, Design Group Manager
Tamaya Huff, State Pedestrian and Bicycle Coordinator
Bayne Smith, District Engineer
Walter Taylor, District Preconstruction Engineer
Neil Kantner, District Utilities Engineer
Otis Clark, Project Manager
BOARD MEMBER - 9th Congressional District
FHWA – attn: Rodney Barry, Georgia Division Administrator

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT

Project Number: EDS00-0072-00(039)
County: Madison/Elbert
P. I. Number: 122650
Federal Route Number: N/A
State Route Number: 72

It is proposed that the median be revised from a 44-foot depressed to 24-foot raised for approximately the first 1.3 miles of the project. This reduction in median width will reduce ROW costs and impacts to the surrounding area. It is proposed to reduce the project length by approximately 0.25 miles. This reduction allows the tie in for existing SR 72 to be shifted onto PI 122100 to eliminate the need for a temporary tie in on that project.

Submitted for approval: CORRECTED 08/05/2011 MC

DATE 4/20/11 — Russell R McMurry, State Roadway Design Engineer

DATE 4/20/2011 — Bobby Hilliard, State Program Delivery Engineer

DATE 4-20-2011 — Otis Clark, Project Manager – Office of Program Delivery

Recommendation for approval:

DATE 05/24/2011 — GLENN BOWMAN* — Glenn Bowman, State Environmental Administrator

DATE 05/24/2011 — BEN RABUN* — Ben Rabun, State Bridge Design Engineer

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

DATE 5-31-11 — Cynthia VanDyke, State Transportation Planning Administrator

*RECOMMENDATION ON FILE MC

REVISED PROJECT CONCEPT REPORT

Need and Purpose: The proposed project is part of the Governor's Road Improvement Program (GRIP). It has been proposed to stim ulate the economic growth throug hout the state. In addition to econom ic growth, the proposed improvements will provide a safer and more efficient highway.

Project location: The project begins in Madison County at milepost 10.0 on SR 72 continues on new location north of the city of Comer, GA. It ends in Elbert County at milepost 0.3 on SR 72 just east of the Broad River for a project length of 9.65 miles.

Description of the approved concept: This section of the SR 72 corridor begins 850' west of the comer city limits. The roadway proceeds on new location in a northeast direction. It will parallel a power line, crossing SR 98, 500' south of the intersection of CR 327/Brickyard Road. It will continue in a northeast direction crossing CR 301/South Paoli Road just south of the Comer city limits. It will then turn to an easterly direction, crossing CR 277/New Hope Church Road 787' north of CR 302/Pine Valley Farm Road. The alignment will then intersect CR 302/Pine Valley Farm Road just west of Rocky Shoals Creek, crossing back and forth before becoming parallel to CR 294/East Paoli Road on the south side. It will then cross CR 294 just west of CR 306/Osley Mill Road, continuing in an easterly direction crossing CR 287/New Town Church Road 1590' north of the intersection of CR 294. It will then turn in a southeasterly direction crossing CR 287 at the intersection with CR 297/Noble Road. It will continue, crossing CR 287 southeast of CR 427 and then again north of the intersection of SR 72. The alignment will then tie back into SR 72 just before the Madison-Elbert County line at the Broad River. It will cross Broad River, adding a parallel bridge on the north side and continue to CR 72/Nickville Road where it will tie into the existing four lanes with a 14' flush median.

The project is proposed as a four lane divided roadway, two lanes in each direction separated by a 44' depressed median. State Bike Route 60 has been added to this project. The design speed has been reduced to 55 mph for the section of the project from the reconnection to SR 72 on the west side of Broad River, then across Broad River to the end of the project. Also, there will be a triple 9'x 6' culvert conveying Rocky Shoals Creek.

PDP Classification: Major ___X___ Minor_____

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

Functional Classification: Rural Principal Arterial

U. S. Route Number(s): N/A **State Route Number(s):** 72

Traffic (AADT) as shown in the approved concept:
Base Year: 2,250 (2000)____ Design Year: 3,500 (2020)___

Updated traffic data (AADT):
Base Year: 1,600 (2017)__ Design Year: 2,400 (2037)___

Approved Programmed/Schedule: P.E. FY 1994____ R/W: FY 2007___ Construction: FY2018_ _

VE Study Required Yes (X) No ( ) Held: March 26-29, 2007

Benefit/Cost Ratio N/A

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

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

Potential Environmental Impacts of Proposed Revision:

Environmental impacts should be reduced by the change in the footprint of this project. The reduction in length of this project is not anticipated to cause a change in environmental impacts.

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

Approved Features:	**Proposed Features:**
1. *MEDIAN WIDTH:* *Currently, a 44-foot depressed median is maintained throughout the project.* 2. *PROJECT LENGTH* *Currently, the western termini is located at the west Comer City limits, MP 9.79.*	1. *MEDIAN WIDTH:* *It is proposed that the median from the beginning of the project to approximately 1600 feet east of SR 98, MP 11.07, should be revised from a 44-foot depressed median to 24-foot raised median.* 2. *PROJECT LENGTH* *It is proposed that the project length be reduced approximately 0.25 miles, MP 10.04, to allow for the tie in for existing SR 72 to shift to PI 122100.*
Reason for Change: *To minimize the construction footprint, ROW impacts, and ROW costs it is recommended that the 44-foot depressed median proposed from the beginning of the project to 1600 feet east of SR 98 be reduced to a 24-foot raised median. If the project length is reduced, the tie in between proposed SR 72 and existing SR 72 located on PI 122650 can be shifted on to PI 122100. Transferring this tie in onto PI 122100 removes the need for a temporary tie in on that project, thus reducing the project's impact.*	

Updated Cost Estimate	
Base Construction Cost	$50,052,923.80
Engineering and Inspection	$2,502,646.19
Fuel and Liquid AC Adjustment	$3,550,060.30
Total Construction Cost	$56,105,630.29
Right-of-Way	Funding Authorized
Utilities (reimbursable)	$475,530.00
Environmental Mitigation	$1,300,000.00

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

Attachments:

1. Location Sketch
2. Cost Estimate
3. Typical Sections
4. Updated Traffic
5. HSM Analysis

Concur: N/A — Director of Engineering — Date

Approve: Melinda M Rd for Division Administrator, FHWA — 3/12/13 Date

Approve: Gl R McMurry Chief Engineer — 3/18/13 Date

LOCATION SKETCH
EDS00-0072-00(028), (039)
MADISON, ELBERT COUNTY
PI 122100,122650

Print Form

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. EDS00-0072-00(039) , Elbert, Madison **OFFICE** Program Delivery

SR 72 FM West City Limits of Comer to East of Broad River/Elbert **DATE** 2-18-13

P.I. No. 122650-

FROM Genetha Rice-Singleton, State Program Delivery Engineer

TO Lisa L. Myers, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

MNGT LET DATE 9/20/2013

PROJECT MANAGER Otis Clark

MNGT R/W DATE 6/22/2007

PROGRAMMED COST (TPro W/OUT INFLATION)		**LAST ESTIMATE UPDATE**	
CONSTRUCTION	$ 48,949,388.69	DATE	10/25/2011
RIGHT OF WAY	$ 8,200,000	DATE	11/19/2010
UTILITIES	$ NA	DATE	

REVISED COST ESTIMATES

CONSTRUCTION*	$ 56,105,630.29
RIGHT OF WAY	$ NA
UTILITIES	$ 475,530

* Costs contain 5 % Engineering and Inspection

REASON FOR COST INCREASE

Cost increase is a result of more developed plans.

Revised: March 14, 2012

CONTINGENCY SUMMARY

Construction Cost Estimate:	$ 50,052,923.80	(Base Estimate)
Engineering and Inspection:	$ 2,502,646.19	(Base Estimate x 5 %)
Total Liquid AC Adjustment	$ 3,550,060.30	(From attached worksheet)
Construction Total:	**$** 56,105,630.29	

REIMBURSABLE UTILITY COST

Utility Owner	Reimbursable Cost
City of Comer (Water)	$72,274.00
City of Comer (Sanitary Sewer)	0.00
Atlanta Gas Light Co.	$52,407.00
Georgia Power Distribution	$69,120.00
Hart EMC	$112,104.00
Charter Communications	$41,240.00
Windstream Comm. Corp.	$127,386.00

Attachments

DETAILED COST ESTIMATE

Georgia Department of Transportation

Job: 122650

JOB NUMBER *122650* **FED/STATE PROJECT NUMBER**

SPEC YEAR: *01*

DESCRIPTION: *SR 72 W OF COMER TO E OF BROAD RIVER*

ITEMS FOR JOB 122650

01 - ROADWAY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0109	201-1500	1.000	LS	$3,740,000.00000	CLEARING & GRUBBING - 360 ACRES	$3,740,000.00
0005	310-1101	247521.000	TN	$18.00000	GR AGGR BASE CRS, INCL MATL	$4,455,378.00
0010	318-3000	1000.000	TN	$14.25555	AGGR SURF CRS PFPR REPORT	$14,255.55
0014	402-1812	4500.000	TN	$70.00000	RECYL AC LEVELING,INC BM&HL	$315,000.00
0027	402-3103	10169.000	TN	$56.88504	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	$578,463.97
0015	402-3121	11014.000	TN	$69.00000	RECYL AC 25MM SP,GP1/2,BM&HL	$759,966.00
0020	402-3190	15246.000	TN	$61.00000	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	$930,006.00
0030	413-1000	14368.000	GL	$2.02160	BITUM TACK COAT	$29,046.35
0043	430-0190	321805.000	SY	$36.00000	PLN PC CONC PVMT/CL1C/ 9" TK	$11,584,980.00
0034	432-5010	485.000	SY	$5.69450	MILL ASPH CONC PVMT,VARB DEPTH	$2,761.83
0035	433-1000	220.000	SY	$165.00000	REINF CONC APPROACH SLAB	$36,300.00
0040	436-1000	36358.000	LF	$6.02802	ASPH CONC CURB - GUARDRAIL	$219,166.75
0045	441-0018	540.000	SY	$35.53488	DRIVEWAY CONCRETE, 8 IN TK	$19,188.84
0050	441-0754	665.000	SY	$46.81058	CONC MEDIAN, 7 1/2 IN	$31,129.04
0055	441-6740	10570.000	LF	$11.07995	CONC CURB & GUTTER/ 8"X30" TP7	$117,115.07
0056	446-1100	725.000	LF	$5.28186	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	$3,829.35
0057	456-2015	18.000	GLM	$513.89913	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	$9,250.18
0091	641-1100	111.000	LF	$53.07154	GUARDRAIL, TP T	$5,890.94
0090	641-1200	26898.000	LF	$12.34507	GUARDRAIL, TP W	$332,057.69
0095	641-5001	40.000	EA	$594.11420	GUARDRAIL ANCHORAGE, TP 1	$23,764.57
0100	641-5012	40.000	EA	$1,816.09631	GUARDRAIL ANCHORAGE, TP 12	$72,643.85
0105	643-0010	16000.000	LF	$4.04911	FIELD FENCE WOVEN WIRE	$64,785.76
					SUBTOTAL FOR ROADWAY:	**$23,344,979.74**

02 - EARTHWORK

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0110	205-0001	1634305.000	CY	$11.62000	UNCLASS EXCAV	$18,990,624.10
0115	206-0002	1.000	CY	$4.00000	BORROW EXCAV, INCL MATL SHOULD BE A WASTE JOB	$4.00
0116	207-0203	1060.000	CY	$35.04294	FOUND BKFILL MATL, TP II	$37,145.52
0117	207-2003	480.000	CY	$50.00000	IMPERF TRENCH BKFILL MATL TP 3 PFPR REPORT	$24,000.00
					SUBTOTAL FOR EARTHWORK:	**$19,051,773.62**

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: 122650

03 - DRAINAGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0130	441-0301	47.000	EA	$1,839.97778	CONC SPILLWAY, TP 1	$86,478.96
0135	441-0302	13.000	EA	$2,139.72832	CONC SPILLWAY, TP 2	$27,816.47
0140	441-0303	3.000	EA	$1,773.15376	CONC SPILLWAY, TP 3	$5,319.46
0145	441-0304	2.000	EA	$1,800.00000	CONC SPILLWAY, TP 4	$3,600.00
0150	500-3101	2870.000	CY	$431.01647	CLASS A CONCRETE	$1,237,017.27
0155	500-3200	130.000	CY	$200.00000	CL B CONC	$26,000.00
0160	511-1000	363755.000	LB	$0.75000	BAR REINF STEEL	$272,816.25
0165	550-1180	6390.000	LF	$27.39458	STM DR PIPE 18",H 1-10	$175,051.37
0273	550-1180	525.000	LF	$30.43798	STM DR PIPE 18",H 1-10 TEMPORARY FOR STAGING	$15,979.94
0166	550-1181	405.000	LF	$31.66012	STM DR PIPE 18",H 10-15	$12,822.35
0167	550-1183	202.000	LF	$34.91674	STM DR PIPE 18",H 20-25	$7,053.18
0170	550-1240	527.000	LF	$34.98789	STM DR PIPE 24",H 1-10	$18,438.62
0274	550-1240	175.000	LF	$36.78534	STM DR PIPE 24",H 1-10 TEMPORARY FOR STAGINS	$6,437.43
0175	550-1241	210.000	LF	$36.51440	STM DR PIPE 24",H 10-15	$7,668.02
0176	550-1242	160.000	LF	$36.66313	STM DR PIPE 24",H 15-20	$5,866.10
0180	550-1300	1071.000	LF	$42.22520	STM DR PIPE 30",H 1-10	$45,223.19
0185	550-1301	196.000	LF	$46.42399	STM DR PIPE 30",H 10-15	$9,099.10
0186	550-1302	189.000	LF	$73.56736	STM DR PIPE 30",H 15-20	$13,904.23
0190	550-1360	646.000	LF	$54.01807	STM DR PIPE 36",H 1-10	$34,895.67
0200	550-1363	696.000	LF	$60.00000	STM DR PIPE 36",H 20-25	$41,760.00
0205	550-1482	186.000	LF	$86.93632	STM DR PIPE 48",H 15-20	$16,170.16
0215	550-2180	1833.000	LF	$21.79233	SIDE DR PIPE 18",H 1-10	$39,945.34
0216	550-2240	925.000	LF	$21.49926	SIDE DR PIPE 24",H 1-10	$19,886.82
0217	550-2420	550.000	LF	$51.94190	SIDE DR PIPE 42",H 1-10	$28,568.05
0220	550-3330	2.000	EA	$985.99333	SAFETY END SECTION 30",STD,4:1	$1,971.99
0225	550-3336	4.000	EA	$1,800.00000	SAFETY END SECTION 36",STD,4:1	$7,200.00
0235	550-4218	202.000	EA	$431.77591	FLARED END SECT 18 IN, ST DR	$87,218.73
0240	550-4224	64.000	EA	$534.90198	FLARED END SECT 24 IN, ST DR	$34,233.73
0245	550-4230	13.000	EA	$637.75795	FLARED END SECT 30 IN, ST DR	$8,290.85
0250	550-4236	9.000	EA	$942.09492	FLARED END SECT 36 IN, ST DR	$8,478.85
0255	550-4242	12.000	EA	$1,364.57343	FLARED END SECT 42 IN, ST DR	$16,374.88
0260	576-1015	2540.000	LF	$22.13654	SLOPE DRAIN PIPE, 15 IN	$56,226.81
0275	610-5825	2.000	EA	$1,700.00000	REM CONC CLVT WINGWALL	$3,400.00
0276	610-9230	1.000	LS	$8,900.00000	REM CLVT, CONCRETE, STA - SR 72 - 426+00	$8,900.00
0280	668-1100	4.000	EA	$2,025.85026	CATCH BASIN, GP 1	$8,103.40
0281	668-1110	9.000	LF	$167.88280	CATCH BASIN, GP 1, ADDL DEPTH	$1,510.95
0282	668-2100	95.000	EA	$1,688.35500	DROP INLET, GP 1	$160,393.73
0283	668-2200	65.000	EA	$2,580.77403	DROP INLET, GP 2	$167,750.31
					SUBTOTAL FOR DRAINAGE:	**$2,727,872.21**

04 - STAGING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0285	150-5010	4.000	EA	$9,406.95652	TRAF CTRL,PORTABLE IMPACT ATTN	$37,627.83
0290	620-0100	1220.000	LF	$23.45120	TEMP BARRIER, METHOD NO. 1	$28,610.46
					SUBTOTAL FOR STAGING:	**$66,238.29**

05 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0670	163-0232	141.000	AC	$600.00000	TEMPORARY GRASSING	$84,600.00
0675	163-0240	4889.000	TN	$202.00764	MULCH	$987,615.35
0680	163-0300	25.000	EA	$1,021.06034	CONSTRUCTION EXIT	$25,526.51
0690	163-0520	10150.000	LF	$9.91613	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	$100,648.72
0710	163-0528	85000.000	LF	$2.39195	CONSTR AND REM FAB CK DAM -TP C SLT FN	$203,315.75
0330	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 1 - SR 72 - 240+50	$6,010.26
0335	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 2 - SR 72 - 255+50	$6,010.26
0340	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 3 - SR 72 - 276+70	$6,010.26
0345	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 4 - SR 72 - 325+50	$6,010.26
0350	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 5 - SR 72 - 364+80	$6,010.26
0355	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 6 - SR 72 - 421+20	$6,010.26

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: 122650

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0360	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 7 - SR 72 - 430+00	$6,010.26
0365	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 8 - SR 72 - 462+50	$6,010.26
0380	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 11 - SR 72 - 592+00	$6,010.26
0385	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 12 - SR 72 - 660+00	$6,010.26
0390	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 13 - SR 72 - 686+00	$6,010.26
0395	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 14 - SR 72 - 694+40	$6,010.26
0400	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 15 - SR 72 - 246+50	$6,010.26
0410	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 17 - SR 72 - 324+50	$6,010.26
0415	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 18 - SR 72 - 346+50	$6,010.26
0420	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 19 - SR 72 - 362+50	$6,010.26
0430	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 21 - SR 72 - 411+40	$6,010.26
0440	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 23 - SR 72 - 511+00	$6,010.26
0445	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 24 - SR 72 - 551+00	$6,010.26
0460	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 27 - SR 72 - 634+10	$6,010.26
0465	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 28 - SR 72 - 682+60	$6,010.26
0470	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 29 - SR 72 - 691+00	$6,010.26
0475	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 30 - COMER PAOLI RD - 923+50	$6,010.26
0480	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 31 - RIVER/NOBLE RD - 1800+60	$6,010.26
0490	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 33 - RIVER RD - 34+00	$6,010.26
0495	163-0531	1.000	EA	$6,010.26113	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- BASIN 34 - SR 72 BUS E - 10+40	$6,010.26
0712	163-0541	90.000	EA	$278.07684	CONSTR & REM ROCK FILTER DAMS	$25,026.92
0715	163-0550	100.000	EA	$119.51874	CONS & REM INLET SEDIMENT TRAP	$11,951.87
0720	165-0010	12500.000	LF	$0.44663	MAINT OF TEMP SILT FENCE, TP A	$5,582.88
0725	165-0030	33000.000	LF	$0.47536	MAINT OF TEMP SILT FENCE, TP C	$15,686.88
0730	165-0041	51000.000	LF	$0.60975	MAINT OF CHECK DAMS - ALL TYPES	$31,097.25
0500	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 1 - SR 72 - 240+50	$971.65
0505	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 2 - SR 72 - 255+50	$971.65
0510	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 3 - SR 72 - 276+70	$971.65
0515	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 4 - SR 72 - 325+50	$971.65
0520	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 5 - SR 72 - 364+80	$971.65
0525	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 6 - SR 72 - 421+20	$971.65
0530	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 7 - SR 72 - 430+00	$971.65
0535	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 8 - SR 72 - 462+50	$971.65
0550	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 11 - SR 72 - 592+00	$971.65
0555	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 12 - SR 72 - 660+00	$971.65
0560	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 13 - SR 72 - 686+00	$971.65
0565	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 14 - SR 72 - 694+40	$971.65
0570	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 15 - SR 72 - 246+50	$971.65
0580	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 17 - SR 72 - 324+50	$971.65
0585	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 18 - SR 72 - 346+50	$971.65
0590	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 19 - SR 72 - 362+50	$971.65
0600	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 21 - SR 72 - 411+40	$971.65
0610	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 23 - SR 72 - 511+00	$971.65
0615	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 24 - SR 72 - 551+00	$971.65

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: 122650

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0630	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 27 - SR 72 - 634+10	$971.65
0635	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 28 - SR 72 - 682+60	$971.65
0640	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 29 - SR 72 - 691+00	$971.65
0645	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 30 - COMER PAOLI RD - 923+50	$971.65
0650	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 31 - RIVER/NOBLE RD - 1800+60	$971.65
0660	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 33 - RIVER RD - 34+00	$971.65
0665	165-0060	1.000	EA	$971.65477	MAINT OF TEMP SEDIMENT BASIN,STA NO - BASIN 34 - SR 72 BUS E - 10+40	$971.65
0745	165-0101	25.000	EA	$356.56535	MAINT OF CONST EXIT	$8,914.13
0750	165-0105	100.000	EA	$46.33453	MAINT OF INLET SEDIMENT TRAP	$4,633.45
0752	165-0110	90.000	EA	$125.59273	MAINT OF ROCK FILTER DAM	$11,303.35
0755	167-1000	3.000	EA	$500.00000	WATER QUALITY MONITORING AND SAMPLING	$1,500.00
0760	167-1500	36.000	MO	$1,000.00000	WATER QUALITY INSPECTIONS	$36,000.00
0775	171-0010	12500.000	LF	$1.37267	TEMPORARY SILT FENCE, TYPE A	$17,158.38
0780	171-0030	33600.000	LF	$2.52570	TEMPORARY SILT FENCE, TYPE C	$83,348.10
0785	603-2024	165.000	SY	$39.06663	STN DUMPED RIP RAP, TP 1, 24"	$6,445.99
0790	603-2036	141.000	SY	$55.71482	STN DUMPED RIP RAP, TP 1, 36"	$7,855.79
0795	603-2180	700.000	SY	$23.66025	STN DUMPED RIP RAP, TP 3, 12"	$16,562.18
0800	603-2181	495.000	SY	$27.68079	STN DUMPED RIP RAP, TP 3, 18"	$13,701.99
0805	603-2182	220.000	SY	$34.17069	STN DUMPED RIP RAP, TP 3, 24"	$7,517.55
0809	603-7000	1725.000	SY	$3.27821	PLASTIC FILTER FABRIC	$5,654.91
0810	700-6910	282.000	AC	$1,000.00000	PERMANENT GRASSING	$282,000.00
0815	700-7000	1130.000	TN	$19.50901	AGRICULTURAL LIME	$22,045.18
0825	700-8000	536.000	TN	$423.21914	FERTILIZER MIXED GRADE	$226,845.46
0830	700-8100	14100.000	LB	$1.62697	FERTILIZER NITROGEN CONTENT	$22,940.28
0850	716-2000	217000.000	SY	$0.65582	EROSION CONTROL MATS, SLOPES	$142,312.94
					SUBTOTAL FOR EROSION CONTROL:	**$2,589,321.47**

06 - MISCELLANEOUS

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0294	150-1000	1.000	LS	$427,000.00000	TRAFFIC CONTROL - EDS00-0072-00(039)	$427,000.00
0300	153-1300	1.000	EA	$63,538.32073	FIELD ENGINEERS OFFICE TP 3	$63,538.32
0305	634-1200	525.000	EA	$81.24367	RIGHT OF WAY MARKERS	$42,652.93
0310	635-1000	120.000	LF	$71.91190	BARRICADES	$8,629.43
0315	643-8200	850.000	LF	$1.57571	BARRIER FENCE (ORANGE), 4 FT	$1,339.35
					SUBTOTAL FOR MISCELLANEOUS:	**$543,160.03**

08 - BRIDGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0855	500-0100	2216.000	SY	$3.94591	GROOVED CONCRETE	$8,744.14
0860	500-1006	1.000	LS	$410,000.00000	SUPERSTR CONCRETE, CL AA, BR NO - 681.6 CY	$410,000.00
0865	500-2100	1096.000	LF	$38.05594	CONCRETE BARRIER	$41,709.31
0870	500-3002	253.000	CY	$536.38976	CL AA CONCRETE	$135,706.61
0875	507-9002	499.000	LF	$88.45117	PSC BEAMS,AASHTO TP II, BR NO- BR NO - 1	$44,137.13
0880	507-9003	2233.000	LF	$91.97322	PSC BEAMS,AASHTO TP III,BR NO- BR NO - 1	$205,376.20
0885	511-1000	46708.000	LB	$0.63742	BAR REINF STEEL	$29,772.61
0890	511-3000	1.000	LS	$121,000.00000	SUPERSTR REINF STEEL, BR NO - 165317 LBS	$121,000.00
0895	520-0353	14.000	EA	$148.04689	H-PILE POINTS, HP 12 X 53	$2,072.66
0900	520-1125	250.000	LF	$43.72952	PIL-IN-PL,STEEL H,HP 12 X 53	$10,932.38
0905	520-4125	1.000	EA	$0.98964	LOAD TEST, STEEL H, HP 12 X 53	$0.99
0910	524-0010	376.000	LF	$794.47753	DRILLED CAISSON - 60 IN	$298,723.55
0915	603-2024	2000.000	SY	$37.78694	STN DUMPED RIP RAP, TP 1, 24"	$75,573.88
0920	603-7000	2000.000	SY	$3.25211	PLASTIC FILTER FABRIC	$6,504.22
					SUBTOTAL FOR BRIDGE:	**$1,390,253.68**

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: 122650

09 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0995	636-1020	226.000	SF	$13.02669	HWY SGN,TP1MAT,REFL SH TP3	$2,944.03
1000	636-1029	598.000	SF	$11.98481	HWY SGN,TP2 MATL,REFL SH TP 3	$7,166.92
1005	636-1033	912.250	SF	$17.49011	HWY SIGNS, TP1MAT,REFL SH TP 9	$15,955.35
1010	636-1041	759.500	SF	$24.78525	HWY SIGNS,TP 2MAT,REFL SH TP 9	$18,824.40
1015	636-2070	1988.000	LF	$6.44561	GALV STEEL POSTS, TP 7	$12,813.87
1020	636-2080	998.000	LF	$8.69351	GALV STEEL POSTS, TP 8	$8,676.12
1025	636-2090	288.000	LF	$7.33259	GALV STEEL POSTS, TP 9	$2,111.79
1030	636-3010	88.000	EA	$472.22219	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	$41,555.55
1035	653-0120	88.000	EA	$65.72025	THERM PVMT MARK, ARROW, TP 2	$5,783.38
1040	653-0170	14.000	EA	$85.48219	THERM PVMT MARK, ARROW, TP 7	$1,196.75
1055	653-1704	315.000	LF	$3.57083	THERM SOLID TRAF STRIPE,24",WH	$1,124.81
1045	653-2501	31.000	LM	$1,600.00000	THERMO SOLID TRAF ST, 5 IN, WH	$49,600.00
1050	653-2502	26.000	LM	$1,600.00000	THERMO SOLID TRAF ST, 5 IN YE	$41,600.00
1060	653-4501	28.000	GLM	$1,000.00000	THERMO SKIP TRAF ST, 5 IN, WHI	$28,000.00
1065	653-6004	6464.000	SY	$2.57558	THERM TRAF STRIPING, WHITE	$16,648.55
1070	653-6006	256.000	SY	$3.02238	THERM TRAF STRIPING, YELLOW	$773.73
1075	654-1001	200.000	EA	$3.40022	RAISED PVMT MARKERS TP 1	$680.04
1080	654-1003	2050.000	EA	$2.82119	RAISED PVMT MARKERS TP 3	$5,783.44
1085	657-1054	554.000	LF	$4.31775	PRF PL SD PVMT MKG,5",WH,TP PB	$2,392.03
1090	657-6054	554.000	LF	$4.58582	PRF PL SD PVMT MKG,5",YW,TP PB	$2,540.54
1095	657-8054	554.000	GLF	$2.12174	PRF PL SK PVMT MKG,5",YE,TP PB	$1,175.44
					SUBTOTAL FOR SIGNING AND MARKING:	**$267,346.74**

10 - TRAFFIC SIGNAL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
1100	639-4004	4.000	EA	$4,244.50540	STRAIN POLE, TP IV	$16,978.02
1105	647-1000	1.000	LS	$55,000.00000	TRAF SIGNAL INSTALLATION NO - SIGNAL 1	$55,000.00
					SUBTOTAL FOR TRAFFIC SIGNAL:	**$71,978.02**

TOTALS FOR JOB 122650

ITEMS COST:	**$50,052,923.80**
COST GROUP COST:	**$0.00**
ESTIMATED COST:	**$50,052,923.80**
CONTINGENCY PERCENT:	**0.00**
ENGINEERING AND INSPECTION:	**0.00**
ESTIMATED COST WITH CONTINGENCY AND E&I:	**$50,052,923.80**

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.	EDS00-0072-00(039)	CALL NO.
P.I. NO.	122650-	
DATE	1/25/2013	

INDEX (TYPE)	**DATE**	**INDEX**
REG. UNLEADED	Jan-13	$ 3.278
DIESEL		$ 3.938
LIQUID AC		$ 567.00

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)				**3433128.3**	**$ 3,433,128.30**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	907.20	
Monthly Asphalt Cement Price month project let (APL)			$	567.00	
Total Monthly Tonnage of asphalt cement (TMT)				10091.5	

ASPHALT	**Tons**	**%AC**	**AC ton**
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm	38845	5.0%	1942.25
9.5 mm SP		5.0%	0
25 mm SP	111705	5.0%	5585.25
19 mm SP	51280	5.0%	2564
	201830		**10091.5**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$**	**116,932.00**	**$ 116,932.00**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	907.20	
Monthly Asphalt Cement Price month project let (APL)			$	567.00	
Total Monthly Tonnage of asphalt cement (TMT)				343.7154513	

Bitum Tack Gals	gals/ton	tons
80025	232.8234	343.715451

PROJ. NO.	EDS00-0072-00(039)		CALL NO.
P.I. NO.	122650-		
DATE	1/25/2013		

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	907.20	
Monthly Asphalt Cement Price month project let (APL)			$	567.00	
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	**$**	**3,550,060.30**

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS00-0072-00(039) Elbert/Madison Co.
P.I. No. 122650
SR 72 Fm W. of Comer to E. of Broad River

OFFICE Gainesville

DATE January 28, 2013

FROM Neil Kantner NAK
District Utilities Engineer

TO Otis Clarke, Project Manager

SUBJECT PRELIMINARY UTILITY COST (ESTIMATE UPDATE)

As requested by your office, we are furnishing you with an Updated Preliminary Utility Cost estimate for the subject project.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
City of Comer (Water)	$ 79,186.00	$ 72,274.00
City of Comer (Sanitary Sewer)	$ 74,437.00	$ 0.00
Atlanta Gas Light Co.	$ 77,189.00	$ 52,407.00
Georgia Power – Distribution	$250,020.00	$ 69,120.00
Hart EMC	$ 35,316.00	$112,104.00
Charter Communications	$ 6,955.00	$ 41,240.00
Windstream Comm. Corp.	$ 99,688.00	$127,386.00
TOTAL	**$622,791.00**	**$474,530.00**

The Reimbursable cost could potentially increase from $474,530 to $628,153 if Utility Aid is provided for the City of Comer.

If you have any questions, please contact Neil Kantner at 770-532-5510.

NAK

C: Jeff Baker, State Utilities Engineer
Tony Voyles, Area Engineer
File

Taylor, Walter

From: Clark, Otis
Sent: Tuesday, May 10, 2011 3:04 PM
To: Bastian, Clay; Taylor, Walter; Eagleton, Dylan L.
Subject: FW: 122100 & 122650 Concept Reports

Please see the mitigation cost below.

From: Westberry, Lisa
Sent: Tuesday, May 10, 2011 12:13 PM
To: Meyers, Sharilyn; Clark, Otis
Cc: Williams, Rich
Subject: RE: 122100 & 122650 Concept Reports

Otis and Sharilyn,

The estimated mitigation costs for **PI 122100** is **$250,000** and the estimated costs for **PI 122650** is **$1,300,000**. If you need anything else, please let me know.

Thanks, Lisa

-----Original Message-----
From: Meyers, Sharilyn
Sent: Monday, May 09, 2011 8:47 AM
To: Westberry, Lisa
Subject: FW: 122100 & 122650 Concept Reports

fyi

Sharilyn Meyers
Ecology Team Leader
Office of Environmental Services
600 W. Peachtree Street, 16th Floor
Atlanta, GA 30308
(404) 631-1594 phone
(404) 631-1916 fax

-----Original Message-----
From: David Smith [mailto:davidsmith@ecologicalsolutions.net]
Sent: Thursday, May 05, 2011 9:58 AM
To: Meyers, Sharilyn
Subject: RE: 122100 & 122650 Concept Reports

The mitigation breakdown per PI number is as follows.

PI 122100
Stream mitigation credits required 2300.40
Wetland mitigation credits required 0.33

PI 122650

Stream mitigation credits required 12,422.50
Wetland mitigation credits required 12.94

I realize that these stream mitigation numbers don't add up to the total I provided earlier and I apologize for the mis-type. The total stream mitigation should be 14,722.9 credits not the 14,772.9 credits I put previously.

Thanks,
David

-----Original Message-----
From: Meyers, Sharilyn [mailto:SMeyers@dot.ga.gov]
Sent: Tuesday, May 03, 2011 9:01 AM
To: David Smith
Subject: RE: 122100 & 122650 Concept Reports

Yes please provide the mitigation by PI. I'm not sure what this is for since we will be applying for one permit but this is what she needs.

Sharilyn Meyers
Ecology Team Leader
Office of Environmental Services
600 W. Peachtree Street, 16th Floor
Atlanta, GA 30308
(404) 631-1594 phone
(404) 631-1916 fax

-----Original Message-----
From: David Smith [mailto:davidsmith@ecologicalsolutions.net]
Sent: Tuesday, May 03, 2011 8:55 AM
To: Meyers, Sharilyn
Subject: RE: 122100 & 122650 Concept Reports

Sharilyn:

The ecology report addendum that was prepared for this project included both PI 122100 and 122650. The impacts were not separated by PI number so the mitigation amounts cover both projects. The mitigation required is:

14,772.9 stream credits
13.27 wetland credits

We are still working on some avoidance and minimization so these numbers may change slightly.

Do you need to have the mitigation broken down by PI number? We can do that, it would just take a little time to separate the impacts into each PI and then run the SOP calculations on each section.

Thanks,
David

-----Original Message-----
From: Meyers, Sharilyn [mailto:SMeyers@dot.ga.gov]
Sent: Friday, April 29, 2011 7:59 AM
To: David Smith
Subject: FW: 122100 & 122650 Concept Reports

David,

Please see Rich's email below.

Sharilyn Meyers
Ecology Team Leader
Office of Environmental Services
600 W. Peachtree Street, 16th Floor
Atlanta, GA 30308
(404) 631-1594 phone
(404) 631-1916 fax

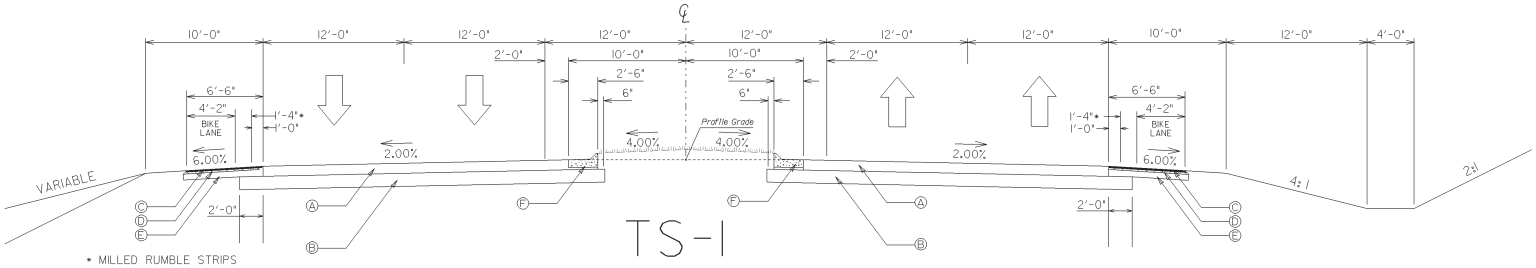
-----Original Message-----
From: Williams, Rich
Sent: Friday, April 29, 2011 7:16 AM
To: Meyers, Sharilyn
Subject: 122100 & 122650 Concept Reports

Hey,

If you provide Lisa with the number of credits required for each project, she can give an estimated cost of mitigation.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

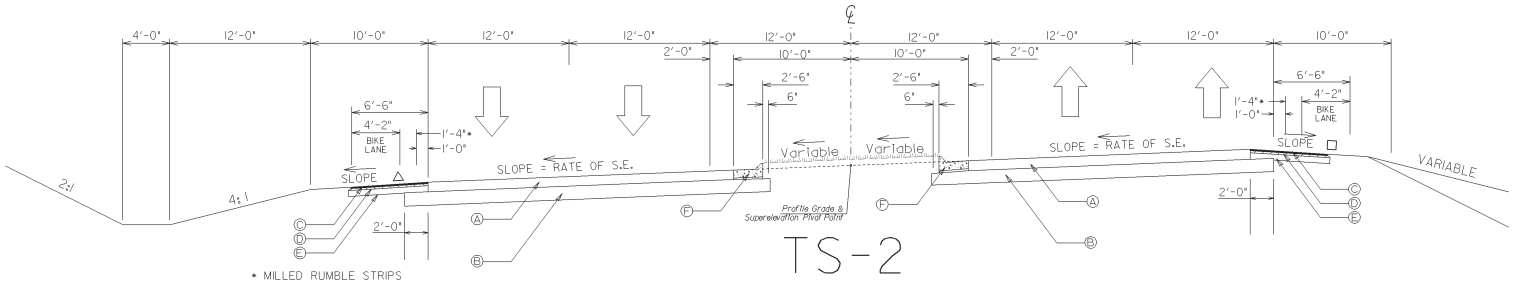
TYPICAL SECTIONS
SR 72/COMER BYPASS



TS-1

TANGENT SECTION

APPLIES TO STA 245+50.00 TO 299+50.00



TS-2

SUPERELEVATION SECTION

SEE PLANS FOR SUPERELEVATED SECTION AND GUARDRAIL LOCATIONS

SLOPE CONTROLS		
SLOPE	CUT	FILL
6:1		0-10'
2:1*	ALL	OVER 10'

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3% USE 5%
S.E. RATE OF 4% USE 4%
S.E. RATE OF 5% USE 3%
S.E. RATE OF 7% USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

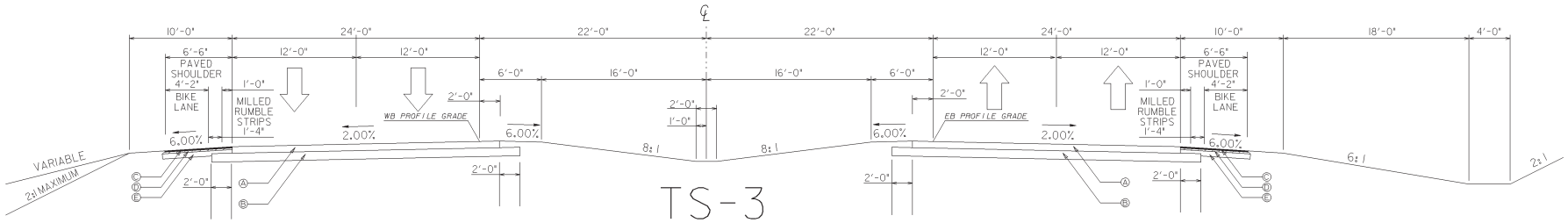
DESIGN SPEED = 55 MPH
REQUIRED PAVEMENT

Ⓐ PLAIN PORTLAND CEMENT WITH 1.5 IN DIAMETER DOWEL BARS, 9 IN
Ⓑ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓒ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135#/SY
Ⓓ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220#/SY
Ⓔ GRADED AGGREGATE BASE CRS, 6", INCL MATL
Ⓕ CONC CURB & GUTTER, 6 IN X 24 IN, TP 7

NOT TO SCALE

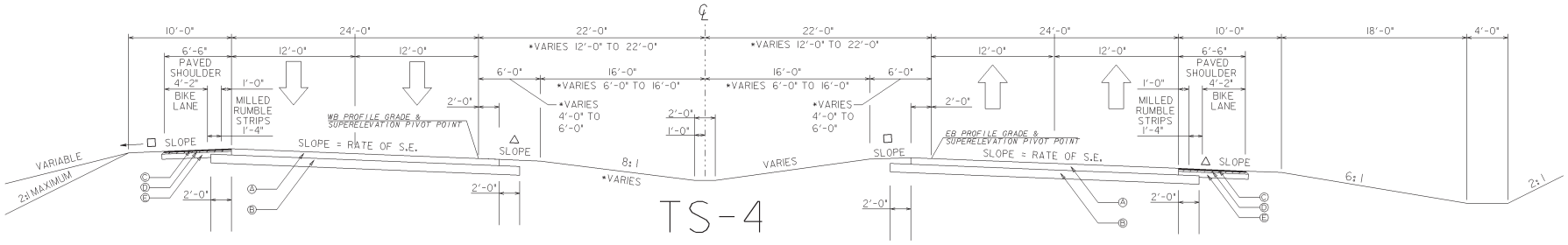
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SR 72/COMER BYPASS



TS-3
TANGENT SECTION

APPLIES TO STA 299+50.00 TO 698+58.10



TS-4
SUPERELEVATION SECTION

SEE PLANS FOR SUPERELEVATED SECTION AND GUARDRAIL LOCATIONS

SLOPE CONTROLS		
SLOPE	CUT	FILL
6:1		0-10'
2:1*	ALL	OVER 10'

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
- S.E. RATE OF 2% OR LESS USE 6%
- S.E. RATE OF 3%, USE 5%
- S.E. RATE OF 4%, USE 4%
- S.E. RATE OF 5%, USE 3%
- S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

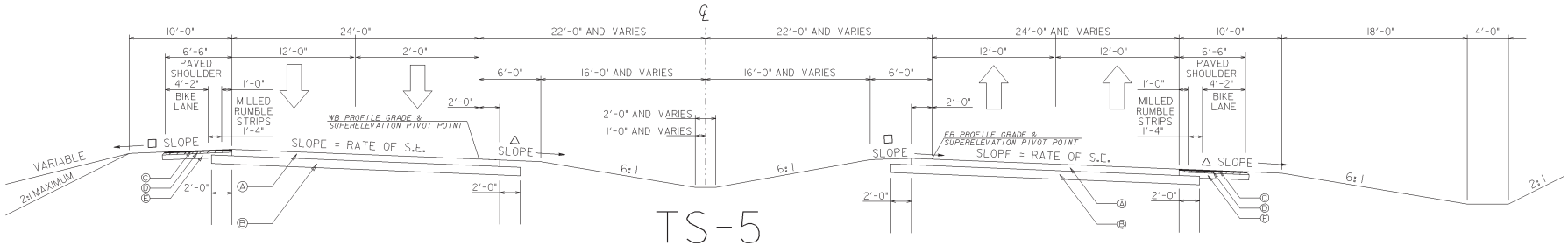
DESIGN SPEED - 65 MPH
REQUIRED PAVEMENT

Ⓐ PLAIN PORTLAND CEMENT WITH 1.5 IN DIAMETER DOWEL BARS, 9 IN
Ⓑ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓒ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY
Ⓓ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY
Ⓔ GRADED AGGREGATE BASE CRS, 6", INCL MATL

NOT TO SCALE

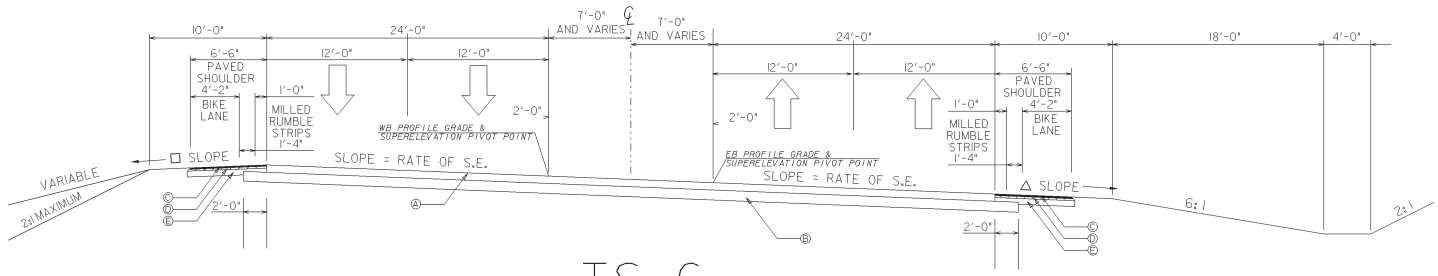
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SR 72/COMER BYPASS



TS-5
SUPERELEVATION SECTION

APPLIES TO STA 698+58.10 TO 702+73.79



TS-6
SUPERELEVATION SECTION

APPLIES TO STA 702+73.79 TO 711+00.00

SLOPE CONTROLS		
SLOPE	CUT	FILL
6:1		0-10'
2:1*	ALL	OVER 10'

DESIGN SPEED = 55 MPH
REQUIRED PAVEMENT

Ⓐ PLAIN PORTLAND CEMENT WITH 1.5 IN DIAMETER DOWEL BARS, 9 IN
Ⓑ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓒ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY
Ⓓ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY
Ⓔ GRADED AGGREGATE BASE CRS, 6", INCL MATL

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3%, USE 5%
S.E. RATE OF 4%, USE 4%
S.E. RATE OF 5%, USE 3%
S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

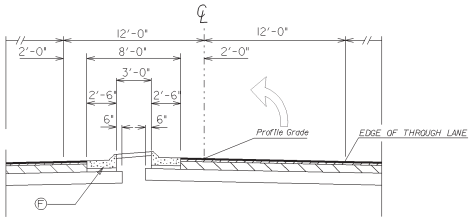
NOT TO SCALE

SH 5-3 OF 9

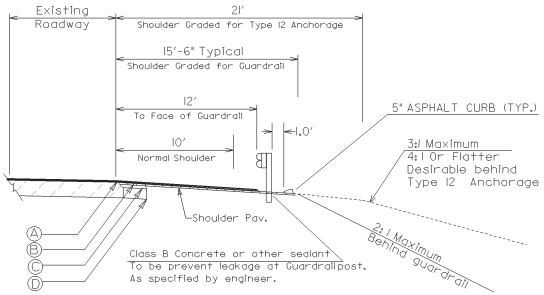
Kip
Kip8000
Kip8000
prf

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

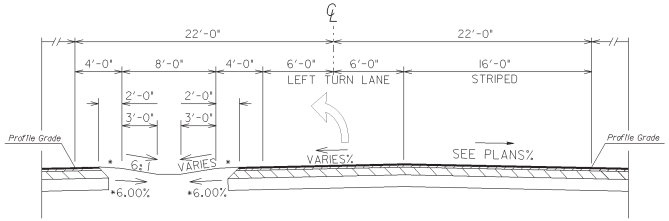
TYPICAL SECTIONS
SR 72/COMER BYPASS



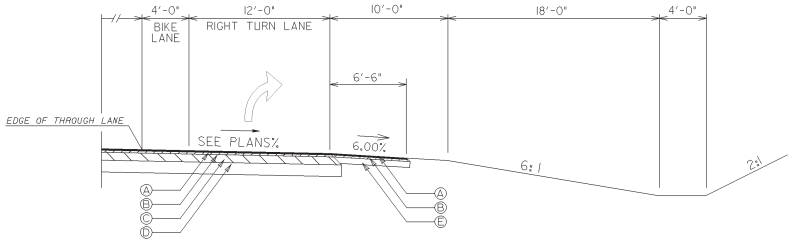
TYPICAL TYPE C MEDIAN CROSS OVER DETAIL
SEE PLAN FOR LOCATION



TYPICAL SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION



TYPICAL TYPE B MEDIAN CROSS OVER DETAIL
SEE PLAN FOR LOCATION



TYPICAL RIGHT TURN LANE DETAIL
SEE PLAN FOR LOCATION

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO "BEST FIT" EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A. NORMAL CROWN

SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES LESS THAN 0.5%
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM
0.0208 FT/FT - DESIRABLE	0.0208 FT/FT - DESIRABLE
0.0250 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM

B. SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR SE RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

C. SUPERELEVATION TRANSITION LENGTH (LENGTH FROM FLAT POINT TO FULL SE)

	RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM	1:150	0.67%
DESIRABLE	1:200	0.50%
MAXIMUM	1:300	0.33%

LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).

REQUIRED PAVEMENT

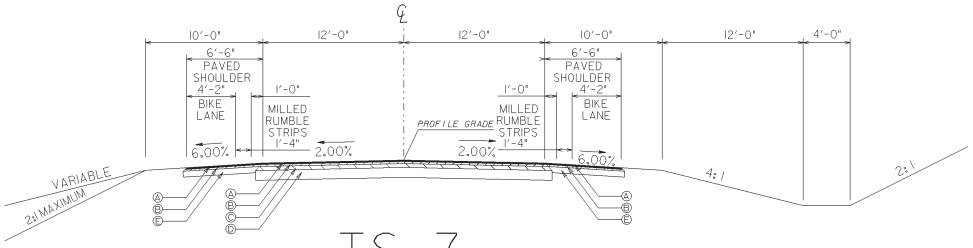
Ⓐ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE 11, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY
Ⓑ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY
Ⓒ RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330*/SY
Ⓓ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓔ GRADED AGGREGATE BASE CRS, 6" , INCL MATL
Ⓕ RECYCLED ASPHALTIC CONCRETE LEVELING, INCLUDING BITUMINOUS MATERIAL & H LIME - AS REQUIRED

NOT TO SCALE

sign **sign** **sign** **sign**

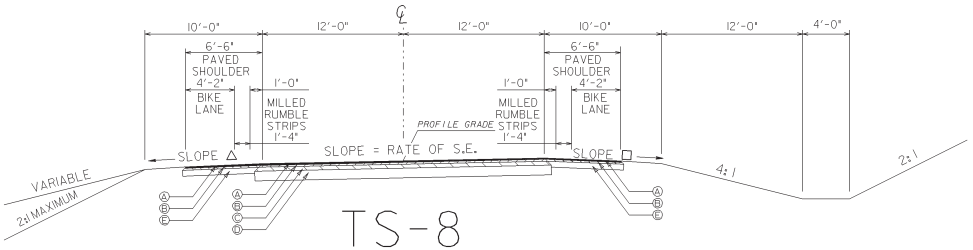
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SIDE ROADS



TS-7
TANGENT SECTION

APPLIES TO SR 72 BUSINESS E



TS-8
SUPERELEVATION SECTION

SEE PLANS FOR SUPERELEVATED SECTION AND GUARDRAIL LOCATIONS

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

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3%, USE 5%
S.E. RATE OF 4%, USE 4%
S.E. RATE OF 5%, USE 3%
S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

REQUIRED PAVEMENT

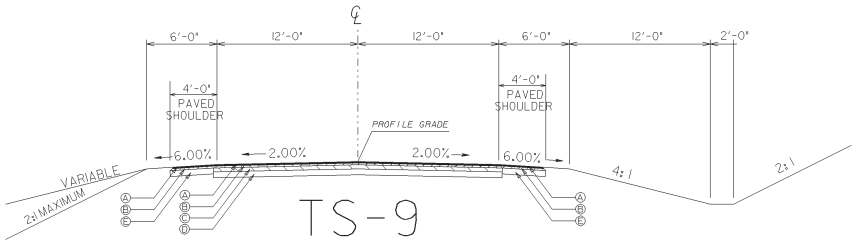
Ⓐ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY
Ⓑ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY
Ⓒ RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330*/SY
Ⓓ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓔ GRADED AGGREGATE BASE CRS, 6", INCL MATL
Ⓕ RECYCLED ASPHALTIC CONCRETE LEVELING, INCLUDING BITUMINOUS MATERIAL & H LIME - AS REQUIRED

NOT TO SCALE

SH 5-5 OF 9

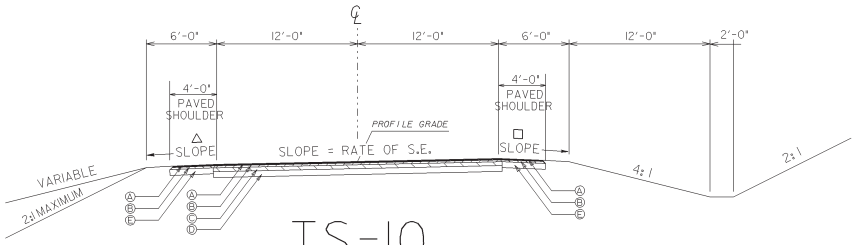
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SIDE ROADS



TS-9
TANGENT SECTION

APPLIES TO SR 98



TS-10
SUPERELEVATION SECTION

SEE PLANS FOR SUPERELEVATED SECTION AND GUARDRAIL LOCATIONS

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

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3%, USE 5%
S.E. RATE OF 4%, USE 4%
S.E. RATE OF 5%, USE 3%
S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

REQUIRED PAVEMENT

Ⓐ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY
Ⓑ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY
Ⓒ RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330*/SY
Ⓓ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓔ RECYCLED ASPHALTIC CONCRETE LEVELING, INCLUDING BITUMINOUS MATERIAL & H LIME - AS REQUIRED

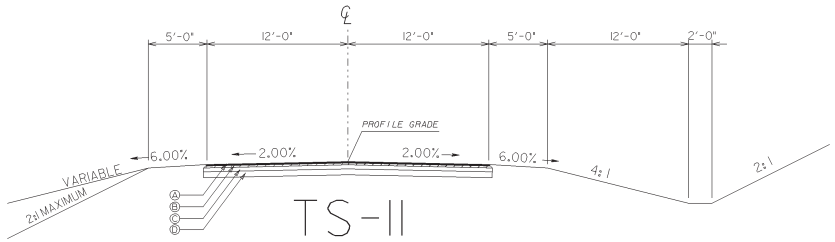
NOT TO SCALE

sign
cover
rprntb
prf

7/14/2011 2:18:51 PM \\GDOT-DSN1\GOPLOT\QCF\GO_Klp8000.qcf ruzzell M:\122650\Design\Prfs\122650101_7.prf

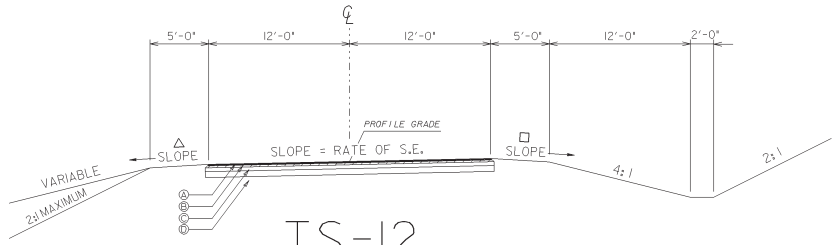
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SIDE ROADS



TS-11
TANGENT SECTION

APPLIES TO BRICKYARD RD (CR 327)
COMER PAOLI RD (CR 301)
EXISTING COMER PAOLI RD
NEW HOPE CHURCH RD (CR 277)
PAOLI RD CONNECTOR
NICKVILLE (CR 79)



TS-12
SUPERELEVATION SECTION

SEE PLANS FOR SUPERELEVATED SECTION AND GUARDRAIL LOCATIONS

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

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3%, USE 5%
S.E. RATE OF 4%, USE 4%
S.E. RATE OF 5%, USE 3%
S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

REQUIRED PAVEMENT

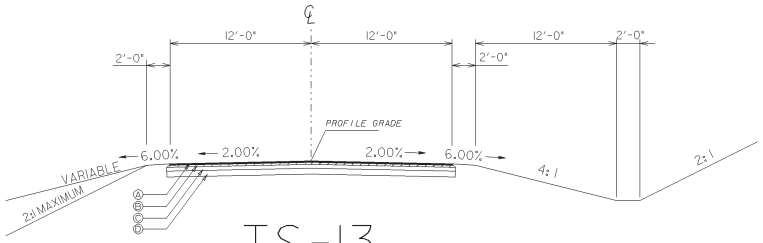
Ⓐ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY
Ⓑ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY
Ⓒ RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330*/SY
Ⓓ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓔ RECYCLED ASPHALTIC CONCRETE LEVELING, INCLUDING BITUMINOUS MATERIAL & H LIME - AS REQUIRED

NOT TO SCALE

7/14/2011 2:18:51 PM \\GDOT-DSN1\GOPLOT\QCF\GO_Klp8000.qcf ruzzell M:\122650\Design\Prfs\122650101_7.prf

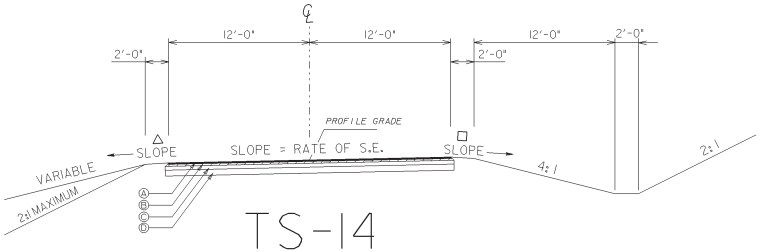
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SIDE ROADS



TS-13
TANGENT SECTION

APPLIES TO BRICKYARD RD (CR 327)
PINE VALLEY FARM RD (CR 302)
PINE VALLEY FARM ACCESS RD
DUCKWORTH BROWN RD (CR 304)
OSLEY MILL RD (CR 306)
RIVER RD (CR 287) (ALL)
HARDWOOD LN (CR 427)



TS-14
SUPERELEVATION SECTION

SEE PLANS FOR SUPERELEVATED SECTION AND GUARDRAIL LOCATIONS

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

△ *SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER*

□ *SLOPE AS FOLLOWS:*
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3%, USE 5%
S.E. RATE OF 4%, USE 4%
S.E. RATE OF 5%, USE 3%
S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

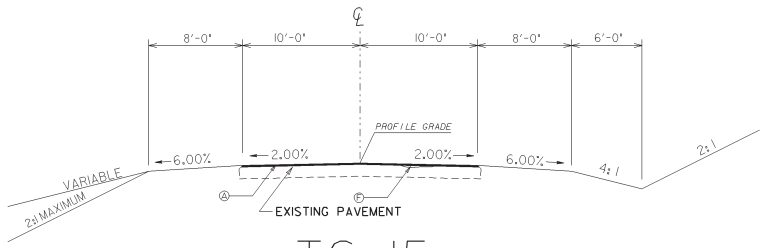
REQUIRED PAVEMENT

Ⓐ *RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY*
Ⓑ *RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY*
Ⓒ *RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330*/SY*
Ⓓ *GRADED AGGREGATE BASE CRS, 10", INCL MATL*
Ⓕ *RECYCLED ASPHALTIC CONCRETE LEVELING, INCLUDING BITUMINOUS MATERIAL & H LIME - AS REQUIRED*

NOT TO SCALE

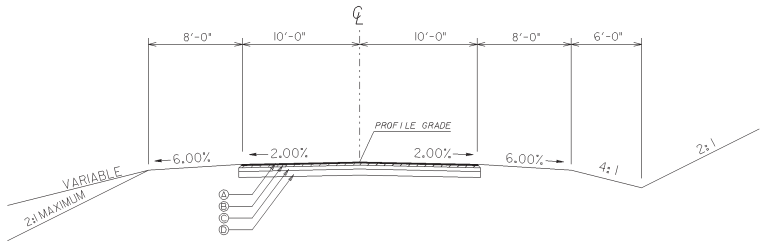
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	EDS-72(39)		

TYPICAL SECTIONS
SIDE ROADS



TS-15
OVERLAY SECTION

APPLIES TO RIVER BEND DR - STA 19+50.00 TO 20+70.00



TS-16
FULL DEPTH PAVEMENT SECTION

APPLIES TO RIVER BEND DR - STA 10+00.00 TO 19+50.00

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

*REQUIRES GUARDRAIL

△ SLOPE 6.00% OR RATE OF S.E. WHICHEVER IS GREATER

□ SLOPE AS FOLLOWS:
S.E. RATE OF 2% OR LESS USE 6%
S.E. RATE OF 3%, USE 5%
S.E. RATE OF 4%, USE 4%
S.E. RATE OF 5%, USE 3%
S.E. RATE OF 7%, USE 1%

ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 8%

REQUIRED PAVEMENT

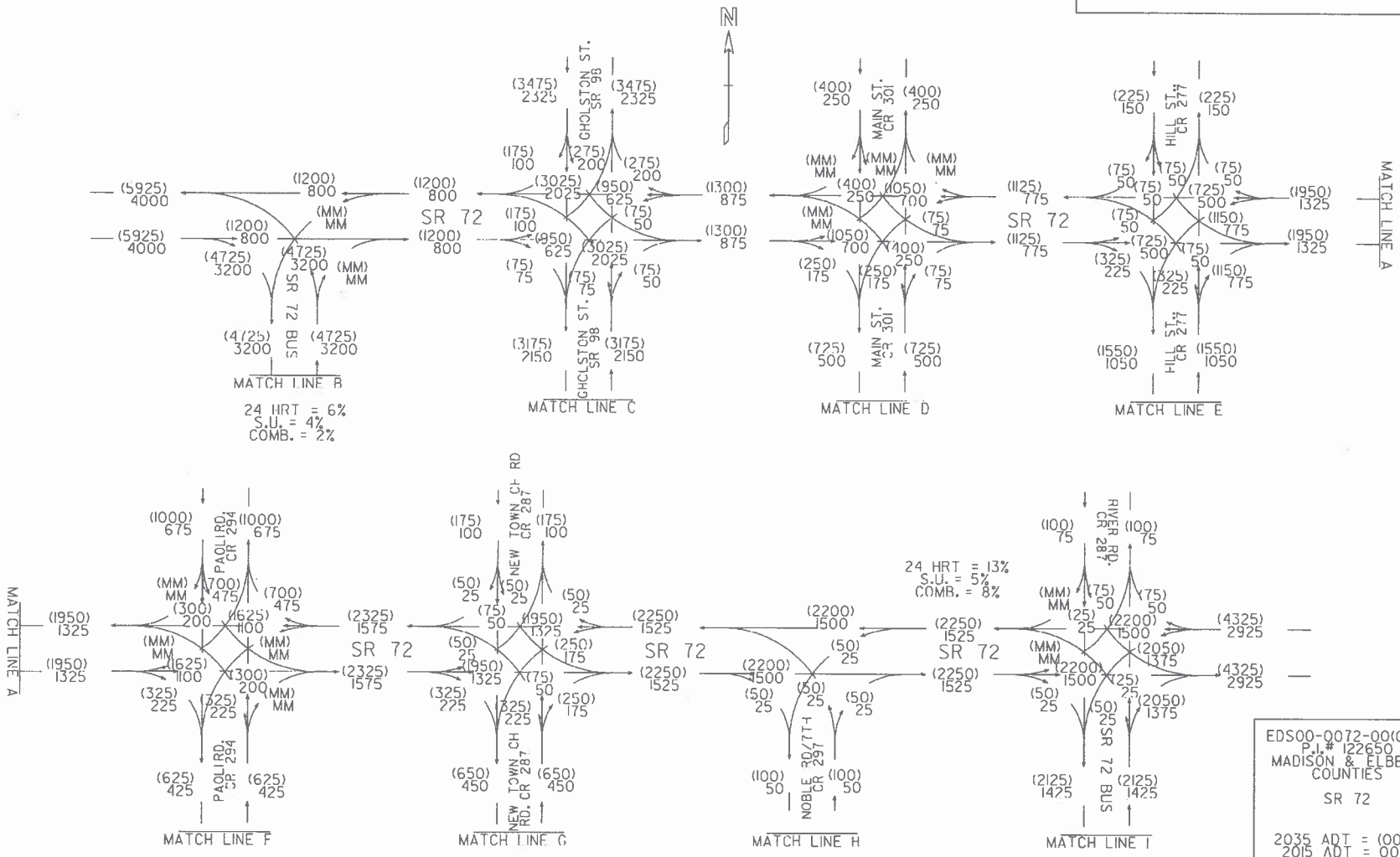
Ⓐ RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME - 135#/SY
Ⓑ RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220#/SY
Ⓒ RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330#/SY
Ⓓ GRADED AGGREGATE BASE CRS, 10", INCL MATL
Ⓕ RECYCLED ASPHALTIC CONCRETE LEVELING, INCLUDING BITUMINOUS MATERIAL & H LIME - AS REQUIRED

NOT TO SCALE

SHEET 1 OF 4

MADISON/ELBERT COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00-0072-00(039)
P.I.# 122650
MADISON & ELBERT COUNTIES

SR 72

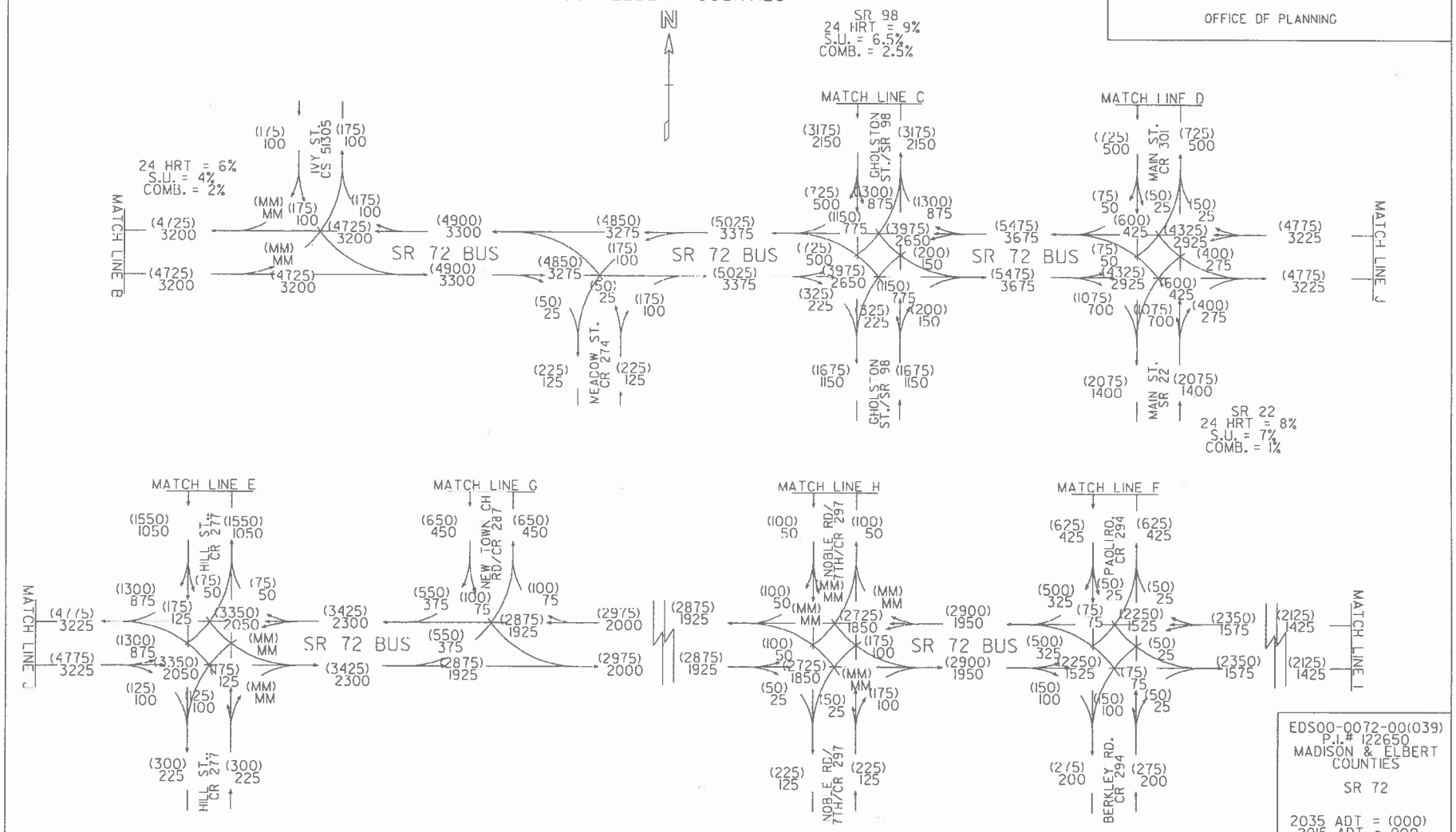
2035 ADT = (000)
2015 ADT = 000

AFE
09/10

SHEET 2 OF 4

MADISON/ELBERT COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00-0072-00(039)
P.I.# 122650
MADISON & ELBERT COUNTIES

SR 72

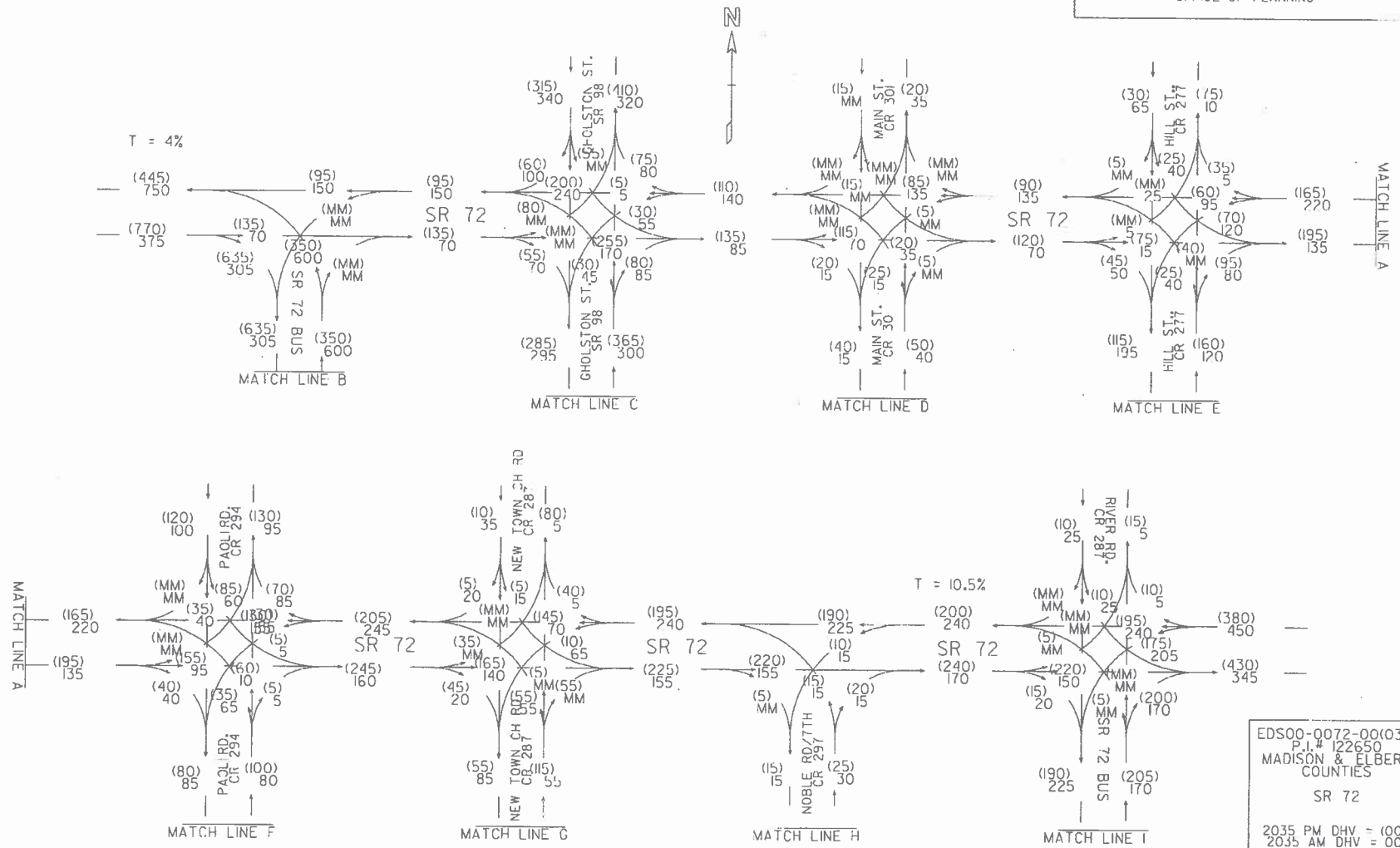
2035 ADT = (000)
2015 ADT = 000

AFE
09/10

SHEET 3 OF 4

MADISON/ELBERT COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00-0072-00(039)
P.I.# 122650
MADISON & ELBERT COUNTIES

SR 72

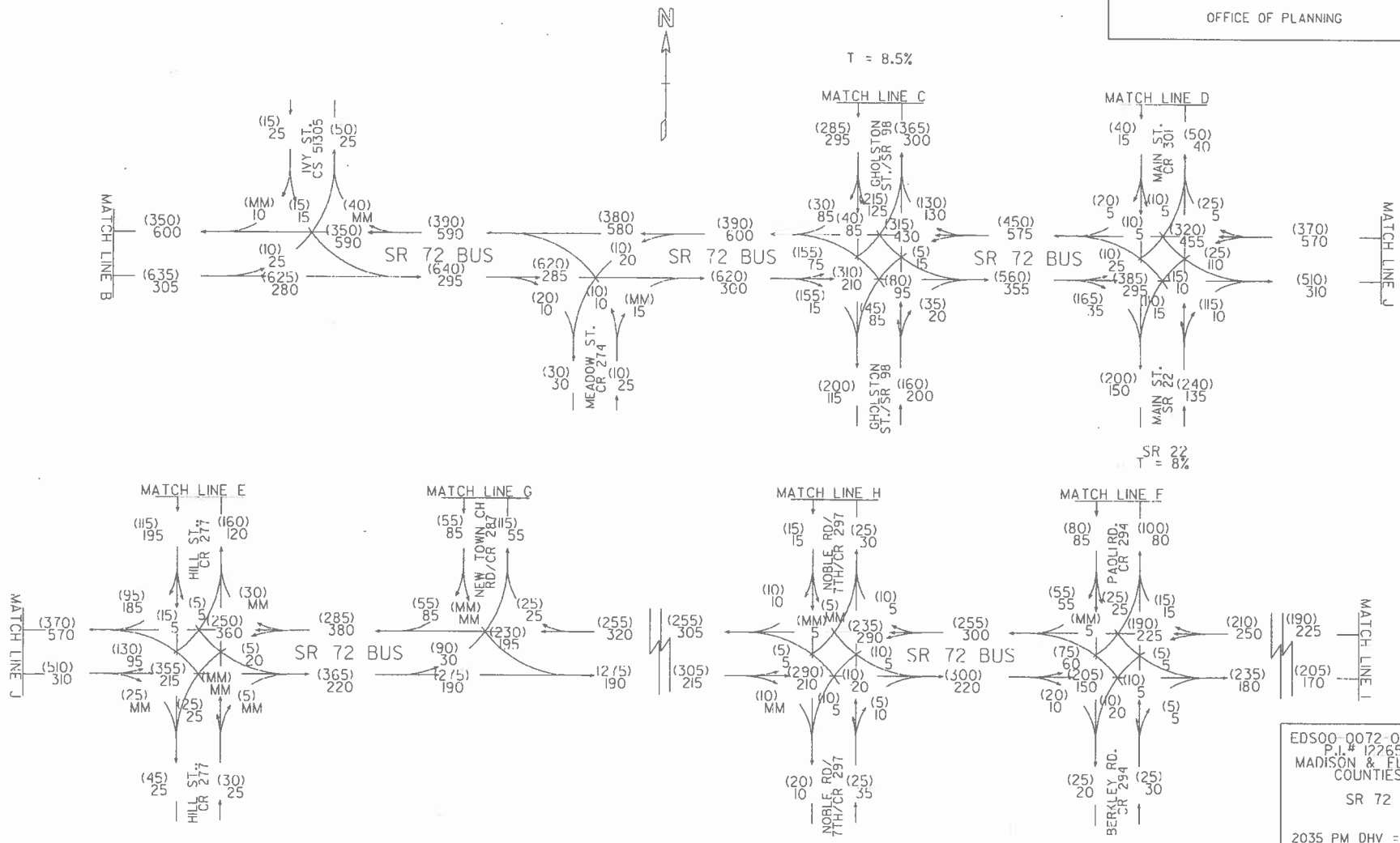
2035 PM DHV = (000)
2035 AM DHV = 000

AFE
09/10

SHEET 4 OF 4

MADISON/ELBERT COUNTIFS

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00-0072-00(039)
P.I.# 122650
MADISON & ELBERT COUNTIES

SR 72

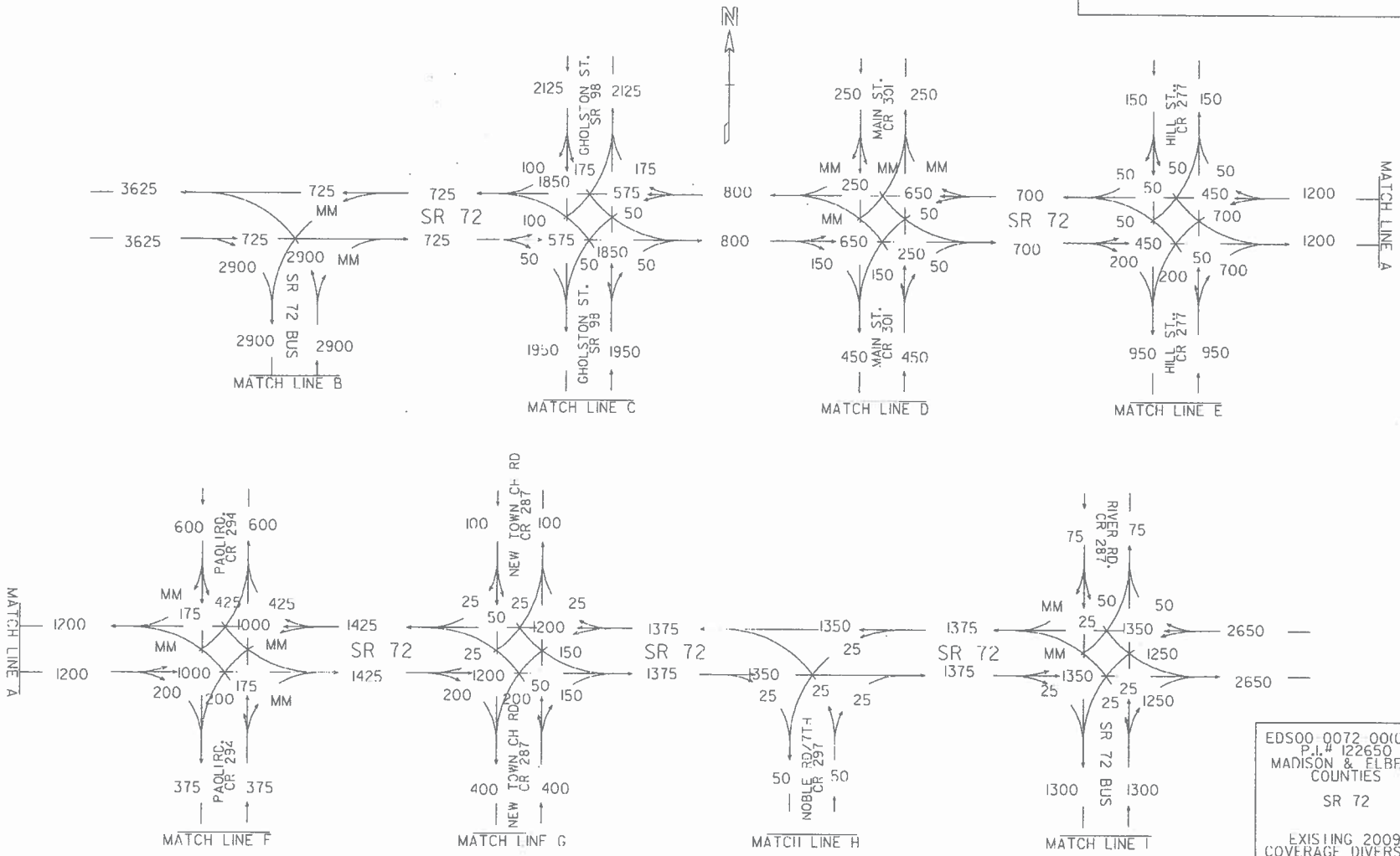
2035 PM DHV = (000)
2035 AM DHV = 000

AFE 09/10

SHEET 1 OF 2

MADISON/ELBERT COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00 0072 00(039)
P.I.# 122650
MADISON & ELBERT COUNTIES

SR 72

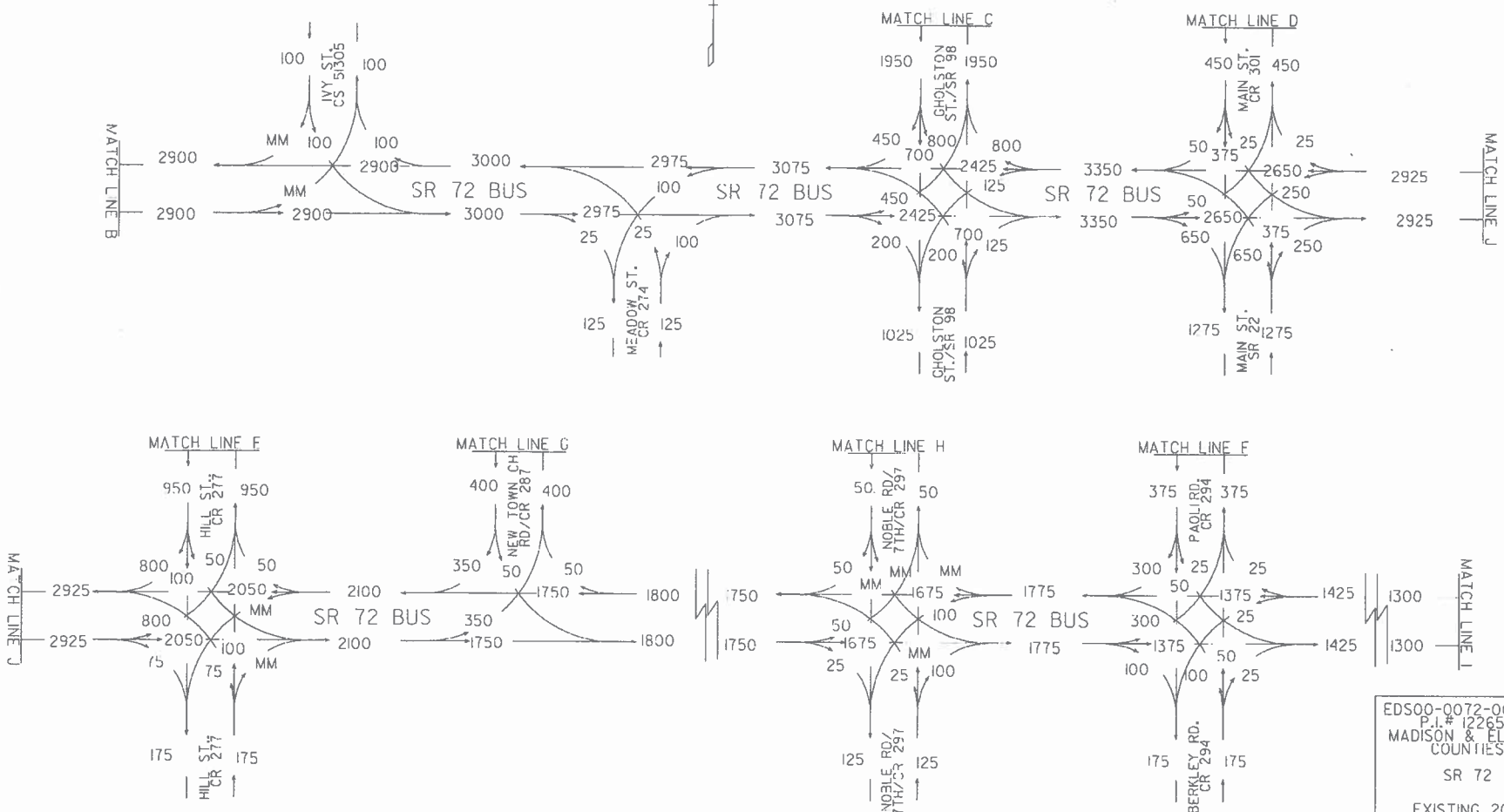
EXISTING 2009
COVERAGE DIVERSION
W/ BYPASS

AFE
09/10

SHEET 2 OF 2

MADISON/ELBERT COUNTIES

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING



EDS00-0072-00(039)
P.I. # 122650
MADISON & ELBERT COUNTIES

SR 72

EXISTING 2009
COVERAGE DIVERSION
W/ BYPASS

AFE
09/10

HIGHWAY SAFETY MANUAL (HSM) ANALYSIS for REVISED CONCEPT REPORT

This Revised Concept Report includes an HSM predicted average crash frequency analysis for the design year ADT using the Manual's Predictive Method. The HSM uses AADT with the Predictive Method while this analysis uses ADT since AADT is typically not available for GDOT projects. The Predictive Method analysis is based on Safety Performance Functions (SPF) for individual roadway segments and intersections that provide the crash frequency. The HSM often provides information on crash frequency distribution by collision type and severity. Crash severities include Fatality, Incapacitating Injury, Non-Incapacitating Injury, Possible Injury and Property Damage Only. Some SPFs include HSM Crash Modification Factors (CMF) that adjust the predicted SPF crash frequency to account for difference between HSM base conditions that the function is based on and project specific conditions such as geometric design features. The HSM includes local calibration factors to further refine predicted average crash frequency. These local calibration factors have not yet been developed for GDOT.

Two Predictive Method analysis comparisons of the proposed Revised Concept design to the currently Approved Concept are provided below. These analyses only cover the portion of the project with the proposed decrease in the median width requiring the proposed revised concept. One analysis provides the Total predicted average crash frequency which includes all crash severities. The second analysis is Fatal & Injury which includes all crash severities except Property Damage Only.

Project Roadway Segment and Intersection Types analyzed

Roadway Segment				Intersection	
ID #	**Type**	**Sta. Begin**	**Sta. End**	**ID #**	**Type**
1	4-Lane Divided Rural	245+00	283+50	1	4 Leg Minor Rd Stop Control-Rural Multilane
2	4-Lane Divided Rural	283+50	299+75		
3	4-Lane Divided Rural	299+75	302+52		

The single intersection within the portion of the project where the revised concept proposes to reduce the current approved concept median was not analyzed since median width has no effect on HSM intersection analyses. There is not an intersection between segments 2 and 3. These two are separate segments required by the HSM to correctly model the change in median width for the proposed revised concept in this area.

This project is defined by the HSM as a rural multilane divided roadway. The HSM predictive method analysis for the 1.06-mile section of this project where it is proposed to reduce the median width from 44-ft. (depressed median) to 24-ft. (raised median) predicts 0.243 Total crashes for the 2035 design year of which 0.154 are predicted to be Fatal & Injury crashes. This compares to a HSM prediction of 0.235 Total crashes of which 0.149 are predicted to be Fatal & Injury crashes for the current approved concept.

HSM Predictive Method for Rural Multi-Lane (4-Lane) Divided Roadway Segments – Total Crashes

Segment			Roadway Segment Base Crash Frequency (total crashes/year)	Lane Width	Right Shoulder Width	Median Width	Lighting	Automated Speed Enforcement	Predicted Average Crash Frequency for Roadway Segment (total crashes/year)
ID #	Length (miles)	Analysis Condition	$N_{spf\ rd}$	CMF_{1rd}	CMF_{2rd}	CMF_{3rd}	CMF_{4rd}	CMF_{5rd}	$N_{predicted\ rs}$
1	0.7292	Approved	0.149	1.00	1.04	0.99	1.00	1.00	0.153
		Proposed	0.149	1.00	1.04	1.02	1.00	1.00	0.158
2	0.3078	Approved	0.068	1.00	1.04	0.99	1.00	1.00	0.070
		Proposed	0.068	1.00	1.04	1.02	1.00	1.00	0.073
3	0.0525	Approved	0.012	1.00	1.04	0.99	1.00	1.00	0.012
		Proposed	0.012	1.00	1.04	1.00	1.00	1.00	0.012
Total		Approved	0.229						0.235
		Proposed	0.229						0.243

HSM Predictive Method for Rural Multi-Lane (4-Lane) Divided Roadway Segments – Fatal & Injury Crashes

Segment			Roadway Segment Base Crash Frequency (fatal & injury crashes/year)	Lane Width	Right Shoulder Width	Median Width	Lighting	Automated Speed Enforcement	Predicted Average Crash Frequency for Roadway Segment (fatal & injury crashes/year)
ID #	Length (miles)	Analysis Condition	$N_{spf\ rd}$	CMF_{1rd}	CMF_{2rd}	CMF_{3rd}	CMF_{4rd}	CMF_{5rd}	$N_{predicted\ rs}$
1	0.7292	Approved	0.094	1.00	1.04	0.99	1.00	1.00	0.097
		Proposed	0.094	1.00	1.04	1.02	1.00	1.00	0.100
2	0.3078	Approved	0.043	1.00	1.04	0.99	1.00	1.00	0.044
		Proposed	0.043	1.00	1.04	1.02	1.00	1.00	0.046
3	0.0525	Approved	0.007	1.00	1.04	0.99	1.00	1.00	0.008
		Proposed	0.007	1.00	1.04	1.00	1.00	1.00	0.008
Total		Approved	0.144						0.149
		Proposed	0.144						0.154