

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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

**FILE** P.I. # 621595-  
STP00-0065-03(056)  
Pickens County  
GDOT District 6 - Cartersville  
Passing Lane - SR53 from CR50/Four Mile Church  
Road to East of CR46/Wilkie Road

**OFFICE** Design Policy & Support

**DATE** 6/3/2016

**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:**

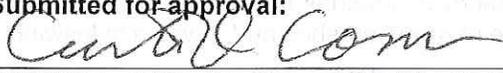
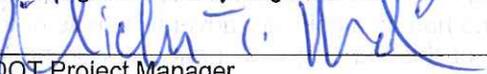
Hiral Patel, Director of Engineering  
Joe Carpenter, Director of P3/Program Delivery  
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery  
Albert Shelby, State Program Delivery Engineer  
Darryl VanMeter, State Innovative Delivery Engineer  
Bobby Hilliard, Program Control Administrator  
Cindy VanDyke, State Transportation Planning Administrator  
Eric Duff, State Environmental Administrator  
Andrew Heath, State Traffic Engineer  
Angela Robinson, Financial Management Administrator  
Lisa Myers, State Project Review Engineer  
Charles "Chuck" Hasty, State Materials Engineer  
Lee Upkins, State Utilities Engineer  
Paul Tanner, State Transportation Data Administrator  
Attn: Systems & Classification Branch  
Richard Cobb, Statewide Location Bureau Chief  
Andy Casey, State Roadway Design Engineer  
Attn: David Ray, District Design Engineer  
DeWayne Comer, District Engineer  
David Acree, District Preconstruction Engineer  
Jun Birnkammer, District Utilities Engineer  
Micheal Word, Project Manager  
BOARD MEMBER - 9th Congressional District

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

Project Type: <u>Passing Lane</u>	P.I. Number: <u>621595</u>
GDOT District: <u>6</u>	County: <u>Pickens</u>
Federal Route Number: <u>N/A</u>	State Route Number: <u>53</u>
Project Number: <u>STP00-0065-03(056)</u>	

*Beginning of Project has changed from station 1387+17 to 1391+00 in order to remove CR 50 from project. End of project has changed from station 1450+26.35 to 1457+00 in order to increase sight distance for CR 46 by realigning side road and raising SR 53 vertical alignment from station 1450+25 to 1456+75. A right turn lane for CR 46 has been added.*

**Submitted for approval:**

<u></u>	<u>4-20-16</u>
GDOT Concept/Design Phase Office Head & Office	Date
<u></u>	<u>4/29/16</u>
State Program Delivery Engineer	Date
<u></u>	<u>4-29-16</u>
GDOT Project Manager	Date

**Recommendation for approval:**

<u>Eric Duff*</u>	<u>05/05/2016</u>
State Environmental Administrator	Date
<u>Christopher Raymond*</u>	<u>05/10/2016</u>
<i>for</i> State Traffic Engineer	Date

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

<u>Cynthia VanDyke*</u>	<u>05/11/2016</u>
State Transportation Planning Administrator	Date

\* - Recommendation on file

## PLANNING, APPROVED CONCEPT, AND BACKGROUND

**Project Justification Statement:** The proposed project was programmed in 1999 at the request of the Director of Planning and Programming. The entire project lies within Pickens County and is in the FY 2013-2016 STIP. This project is located along SR 53 east of the City of Jasper and west of the Dawson County line. Currently SR 53 in the area of the project is a two lane route that is functionally classified as a rural principal arterial and is not listed as a designated bike route in the Statewide Bicycle Plan.

Design traffic is not currently available, therefore based upon existing traffic information obtained from the GDOT State Traffic and Report Statistics (STARS) program, the 2012 Average Annual Daily Traffic (AADT) on SR 53 along the project corridor is 3,780 AADT. The corridor currently operates at a Level of Service (LOS) B. Assuming a 1.5% annual growth rate, the future year (2037) daily traffic volumes on this route are projected to increase to approximately 5,480 (LOS C). LOS C is considered an acceptable level-of-service (LOS), which is outlined as a performance measure in the current Statewide Transportation Plan.

Analysis of the latest available crash data (2007-2009) for this section of SR 53 indicated that the crash rate exceeded the statewide average for all three years (2007-2009) and the injury rate exceeded all three years for similarly functionally classified facilities. The SR 53 facility did not exceed the statewide average for fatality rate in any of the three years reviewed. There were a total of 27 crashes from 2007 to 2009 with 5 being angles crashes, 18 were not a collision with a vehicle, 3 were rear end crashes and 1 was a sideswipe.

The eastern project limit for PI 621595 is currently at Steve Tate Road, where there is some small commercial development, and the western terminus is currently at Old Mill White Road. In this section there is some rolling terrain and only minimum passing opportunities. The section of roadway east of Old Mill White Road provides access to several marble/processing facilities and passing lanes are already provided in this section of SR 53. At these locations the project has independent utility and has no significant adverse effects on the operational conditions of SR 53 corridor beyond the boundaries of this passing lane project. This project addresses immediate operational needs along SR 53.

A need exists to lessen crash frequency and severity within the project corridor. Final determination of logical termini will be determined as the Office of Environmental Services develops the environmental document.

**Existing conditions:** Roadway consists of two 12-ft. lanes with 60 ft. right of way. No major intersections or utilities in area.

**Description of the approved concept:** *Eastbound passing lane from milepost 26.27 to 27.47.*

**Federal Oversight:**     PoDI             Exempt             State Funded             Other

**Projected Traffic as shown in the approved Concept Report:** ADT  
Open Year (2018): 2,525            Design Year (2038): 3,125

**Updated Traffic *N/A***            24 HR T: *N/A*  
Open Year (2020): *N/A*            Design Year (2040): *N/A*

**Functional Classification (Mainline):** *Rural Principal Arterial*

**VE Study anticipated:**             No             Yes             Completed – Date:

## PROPOSED REVISIONS

Approved Features:	Proposed Features:
<ul style="list-style-type: none"><li><b>Project Termini:</b> One site from (MP 26.27) near CR 50/Four Mile Church Rd. to (MP 27.47) west of CR 46/Wilkie Rd.</li></ul>	<ul style="list-style-type: none"><li><b>Project Termini:</b> One site from (MP 26.34) east of CR 50/Four Mile Church Rd. to (MP 27.61) east of CR 46/Wilkie Rd.</li></ul>
<b>Reason(s) for change:</b> Beginning project limits changed to eliminate CR 50 from project. End project limits changed to realign CR 46 and raise SR 53 profile from station 1450+25 to 1456+75 to improve sight distance for CR 46. The end of project limits change is due to several public comments requesting the change.	

Design Variances and/or Exceptions needed: *None*

## ENVIRONMENTAL AND PERMITS

Potential environmental impacts of proposed revision: *No anticipated environmental effects. Project schedule may be affected by ecology re-evaluation.*

Have proposed revisions been reviewed by environmental staff?  No  Yes

Environmental responsibilities (Studies/Documents/Permits): *GDOT*

### 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:** *No*

**Ecology:** *A study to assess bat population has been requested.*

**Archeology:** *No archeology impacts have been identified.*

**History:** *Historic resources have been identified on parcel 2, right of way will not be required due to project beginning location change.*

**Air Quality:** *Not required*

**Noise Effects:** *Not required*

**Public Involvement:** *No*

### PROJECT COST AND ADDITIONAL INFORMATION

Item	Estimated Cost	Date of Estimate	Funded By
Base Construction Cost	\$2,444,890.00	4/5/2016	GDOT
Engineering and Inspection:	\$122,245.00	4/5/2016	GDOT
Contingencies:	\$122,245.00	4/5/2016	GDOT
Liquid AC Adjustment:	\$197,475.00	4/5/2016	GDOT
<b>Total Construction Cost:</b>	<b>\$2,886,855.00</b>	<b>4/5/2016</b>	<b>GDOT</b>
Right-of-Way	\$2,018,000.00	1/13/2014	GDOT
Utilities (reimbursable costs)	\$210,000.00	1/10/2014	GDOT
Environmental Mitigation:	None		
<b>TOTAL PROJECT COST:</b>	<b>\$5,114,855.00</b>		

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

**Comments:**

**Attachments:**

1. Sketch map
2. Cost Estimate(s)

### APPROVALS

Concur:   
Director of Engineering

Approve:   
Chief Engineer

6.1.16  
Date



# DETAILED COST ESTIMATE



**Job: 621595PSLN**

**JOB NUMBER:** 621595PSLN

**FED/STATE PROJECT NUMBER:** STP00-0065-03(056)

**SPEC YEAR:** 01

**DESCRIPTION:** SR 53 PASSING LANE  
PICKENS CO. MP 26.27 TO 27.47

**ITEMS FOR JOB 621595PSLN**

**1 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0009	150-1000	1.000	LS	\$50,000.00000	TRAFFIC CONTROL - STP00-0065-03(056)	\$50,000.00
0010	150-5010	10.000	EA	\$8,075.08741	TRAF CTRL,PORTABLE IMPACT ATTN	\$80,750.87
0015	153-1300	1.000	EA	\$67,072.98295	FIELD ENGINEERS OFFICE TP 3	\$67,072.98
0020	210-0100	1.000	LS	\$75,000.00000	GRADING COMPLETE - STP00-0065-03(056)	\$75,000.00
0025	310-1101	20770.000	TN	\$16.01301	GR AGGR BASE CRS, INCL MATL	\$332,590.22
0030	318-3000	50.000	TN	\$21.15375	AGGR SURF CRS	\$1,057.69
0035	402-1812	2505.000	TN	\$69.02399	RECYL AC LEVELING,INC BM&HL	\$172,905.09
0040	402-3121	7895.000	TN	\$58.92610	RECYL AC 25MM SP,GP1/2,BM&HL	\$465,221.56
0045	402-3130	3880.000	TN	\$68.78022	RECYL AC 12.5MM SP,GP2,BM&HL	\$266,867.25
0050	402-3190	3970.000	TN	\$62.56893	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	\$248,398.65
0055	413-1000	3190.000	GL	\$2.02105	BITUM TACK COAT	\$6,447.15
0520	432-0205	12000.000	SY	\$2.40315	MILL ASPH CONC PVMT/ 1.25" DEP	\$28,837.80
0604	441-0016	770.000	SY	\$33.23029	DRIVEWAY CONCRETE, 6 IN TK	\$25,587.32
0614	441-5002	20.000	LF	\$18.84604	CONC HEADER CURB, 6", TP 2	\$376.92
0095	444-1000	20.000	LF	\$5.55940	SAWED JTS IN EXIST PVMTS - PCC	\$111.19
0100	446-1100	9200.000	LF	\$2.59487	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	\$23,872.80
0119	500-3201	11.000	CY	\$485.88000	CL B CONC, RET WALL	\$5,344.68
0120	500-9999	5.000	CY	\$184.94142	CL B CONC,BASE OR PVMT WIDEN	\$924.71
0225	573-2006	8000.000	LF	\$11.21862	UNDDR PIPE INCL DRAIN AGGR 6"	\$89,748.96
0125	600-0001	24.000	CY	\$238.30125	FLOWABLE FILL	\$5,719.23
0129	615-1000	158.000	LF	\$73.41282	JACK OR BORE PIPE - 36" DIA, 0.625" THK	\$11,599.23
0130	615-1000	150.000	LF	\$74.11206	JACK OR BORE PIPE - 30" DIA, 0.625" THK	\$11,116.81
0624	620-0200	100.000	LF	\$63.14384	TEMP BARRIER, METHOD NO. 2	\$6,314.38
0275	621-4023	100.000	LF	\$628.14164	CONCRETE SIDE BARRIER, TY 2C	\$62,814.16
0320	634-1200	50.000	EA	\$108.17234	RIGHT OF WAY MARKERS	\$5,408.62
0143	641-1100	26.000	LF	\$74.23200	GUARDRAIL, TP T	\$1,930.03
0140	641-1200	2573.000	LF	\$15.35869	GUARDRAIL, TP W	\$39,517.91
0145	641-5001	9.000	EA	\$624.79643	GUARDRAIL ANCHORAGE, TP 1	\$5,623.17
0144	641-5012	9.000	EA	\$1,762.19030	GUARDRAIL ANCHORAGE, TP 12	\$15,859.71
0559	643-8200	180.000	LF	\$1.49304	BARRIER FENCE (ORANGE), 4 FT	\$268.75
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$2,107,287.84</b>

# DETAILED COST ESTIMATE



**Job: 621595PSLN**

## 2 - DRAINAGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0525	500-3200	5.000	CY	\$575.85778	CL B CONC	\$2,879.29
0115	500-3800	7.000	CY	\$899.78687	CL A CONC, INCL REINF STEEL	\$6,298.51
0530	511-1000	65.000	LB	\$0.95512	BAR REINF STEEL	\$62.08
0155	550-1180	396.000	LF	\$31.61530	STM DR PIPE 18",H 1-10	\$12,519.66
0160	550-1240	296.000	LF	\$38.28594	STM DR PIPE 24",H 1-10	\$11,332.64
0190	550-2180	444.000	LF	\$26.88247	SIDE DR PIPE 18",H 1-10	\$11,935.82
0200	550-3418	19.000	EA	\$494.17352	SAFETY END SECTION 18",SD,4:1	\$9,389.30
0199	550-3618	19.000	EA	\$578.28765	SAFETY END SECTION 18",SD,6:1	\$10,987.47
0205	550-4218	9.000	EA	\$492.34863	FLARED END SECT 18 IN, ST DR	\$4,431.14
0210	550-4224	3.000	EA	\$549.53274	FLARED END SECT 24 IN, ST DR	\$1,648.60
0535	603-6006	3.000	SY	\$132.01856	SAND-CEMENT BAG RIP RAP, 6 IN	\$396.06
<b>SUBTOTAL FOR DRAINAGE:</b>						<b>\$71,880.57</b>

## 4 - SIGNING & MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0619	636-1036	42.000	SF	\$1.00000	HWY SIGNS, TP1 MATL,REFL SH, TP 11	\$42.00
0319	636-2070	78.000	LF	\$8.92223	GALV STEEL POSTS, TP 7	\$695.93
0330	653-1704	24.000	LF	\$4.29044	THERM SOLID TRAF STRIPE,24",WH	\$102.97
0335	653-1804	240.000	LF	\$1.77868	THERM SOLID TRAF STRIPE, 8",WH	\$426.88
0340	653-2501	3.000	LM	\$1,281.94223	THERMO SOLID TRAF ST, 5 IN, WH	\$3,845.83
0345	653-2502	3.000	LM	\$1,281.20341	THERMO SOLID TRAF ST, 5 IN YE	\$3,843.61
0350	653-4501	1.000	GLM	\$785.52219	THERMO SKIP TRAF ST, 5 IN, WHI	\$785.52
0360	653-6006	300.000	SY	\$2.98184	THERM TRAF STRIPING, YELLOW	\$894.55
0365	654-1001	160.000	EA	\$3.91122	RAISED PVMT MARKERS TP 1	\$625.80
0609	654-1003	160.000	EA	\$3.85971	RAISED PVMT MARKERS TP 3	\$617.55
<b>SUBTOTAL FOR SIGNING &amp; MARKING:</b>						<b>\$11,880.64</b>

# DETAILED COST ESTIMATE



**Job: 621595PSLN**

## 5 - TEMPORARY EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0375	163-0232	7.000	AC	\$202.22452	TEMPORARY GRASSING	\$1,415.57
0380	163-0240	215.000	TN	\$267.72767	MULCH	\$57,561.45
0385	163-0300	4.000	EA	\$1,376.56980	CONSTRUCTION EXIT	\$5,506.28
0540	163-0503	15.000	EA	\$348.82467	CONSTR AND REMOVE SILT CONTROL GATE, TP 3	\$5,232.37
0390	163-0520	3100.000	LF	\$10.88180	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	\$33,733.58
0395	163-0527	300.000	EA	\$173.70921	CNST/REM RIP RAP CKDM, STN P RIPRAP/SN BG	\$52,112.76
0389	163-0529	1660.000	LF	\$3.01223	CNST/REM TEMP SED BAR OR BLD STRW CK DM	\$5,000.30
0579	163-0541	4.000	EA	\$363.54229	CONSTR & REM ROCK FILTER DAMS	\$1,454.17
0569	163-0542	4.000	EA	\$771.00917	CONSTR & REM STONE FILTER RING	\$3,084.04
0544	163-0550	4.000	EA	\$129.04886	CONS & REM INLET SEDIMENT TRAP	\$516.20
0420	165-0030	2000.000	LF	\$0.83941	MAINT OF TEMP SILT FENCE, TP C	\$1,678.82
0394	165-0041	3000.000	LF	\$0.89231	MAINT OF CHECK DAMS - ALL TYPES	\$2,676.93
0435	165-0071	830.000	LF	\$0.98265	MAINT OF SEDIMENT BARRIER - BALED STRAW	\$815.60
0554	165-0087	15.000	EA	\$113.94596	MAINT OF SILT CONTROL GATE, TP 3	\$1,709.19
0440	165-0101	8.000	EA	\$488.53341	MAINT OF CONST EXIT	\$3,908.27
0549	165-0105	4.000	EA	\$51.63617	MAINT OF INLET SEDIMENT TRAP	\$206.54
0584	165-0110	4.000	EA	\$152.17224	MAINT OF ROCK FILTER DAM	\$608.69
0574	165-0111	4.000	EA	\$123.37368	MAINT OF STONE FILTER RING	\$493.49
0450	167-1000	2.000	EA	\$460.67246	WATER QUALITY MONITORING AND SAMPLING	\$921.34
0455	167-1500	18.000	MO	\$304.13659	WATER QUALITY INSPECTIONS	\$5,474.46
0460	171-0030	4000.000	LF	\$2.42628	TEMPORARY SILT FENCE, TYPE C	\$9,705.12
<b>SUBTOTAL FOR TEMPORARY EROSION CONTROL:</b>						<b>\$193,815.17</b>

## 6 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0465	603-2180	620.000	SY	\$30.40987	STN DUMPED RIP RAP, TP 3, 12"	\$18,854.12
0470	603-7000	620.000	SY	\$3.71402	PLASTIC FILTER FABRIC	\$2,302.69
0475	700-6910	13.000	AC	\$565.48004	PERMANENT GRASSING	\$7,351.24
0480	700-7000	32.000	TN	\$71.53061	AGRICULTURAL LIME	\$2,288.98
0485	700-8000	11.000	TN	\$408.09612	FERTILIZER MIXED GRADE	\$4,489.06
0490	700-8100	530.000	LB	\$1.71722	FERTILIZER NITROGEN CONTENT	\$910.13
0504	700-9300	10.000	SY	\$5.23855	SOD	\$52.39
0589	710-9000	810.000	SY	\$4.00802	PERM SOIL REINFORCING MAT	\$3,246.50
0594	713-0300	850.000	SY	\$2.05719	COCONUT FIBER BLANKET, WTRWAYS	\$1,748.61
0510	716-2000	22000.000	SY	\$0.85373	EROSION CONTROL MATS, SLOPES	\$18,782.06
<b>SUBTOTAL FOR EROSION CONTROL:</b>						<b>\$60,025.78</b>

### TOTALS FOR JOB 621595PSLN

<b>ITEMS COST:</b>	<b>\$2,444,890.00</b>
<b>COST GROUP COST:</b>	<b>\$0.00</b>
<b>ESTIMATED COST:</b>	<b>\$2,444,890.00</b>
<b>CONTINGENCY PERCENT:</b>	<b>0.05</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>0.05</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$2,689,379.00</b>

**PROJ. NO.**

STP00-0065-03(056)

CALL NO.

**P.I. NO.**

621595

**DATE**

4/5/2016

**INDEX (TYPE)**

Link to Fuel and AC Index:

**REG. UNLEADED**

Apr-16 \$ 2.037

**DIESEL**

\$ 2.120

**LIQUID AC**

\$ 336.00

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>**LIQUID AC ADJUSTMENTS****PA=(((APM-APL)/APL)xTMTxAPL****Asphalt**Price Adjustment (PA) **183960**

Monthly Asphalt Cement Price month placed (APM) \$ 537.60

Monthly Asphalt Cement Price month project let (APL) \$ 336.00

**Total Monthly Tonnage of asphalt cement (TMT) 912.5**\$ **183,960.00**

Max. Cap 60%

**ASPHALT**

	Tons	%AC	AC ton
Leveling	2505	5.0%	125.25
12.5 OGFC	0	5.0%	0
12.5 mm	3880	5.0%	194
9.5 mm SP	0	5.0%	0
25 mm SP	7895	5.0%	394.75
19 mm SP	3970	5.0%	198.5
	<b>18250</b>		<b>912.5</b>

**BITUMINOUS TACK COAT**Price Adjustment (PA) \$ **2,762.20**

Monthly Asphalt Cement Price month placed (APM) \$ 537.60

Monthly Asphalt Cement Price month project let (APL) \$ 336.00

**Total Monthly Tonnage of asphalt cement (TMT) 13.70137194**\$ **2,762.20**

Max. Cap 60%

**Bitum Tack**

Gals	gals/ton	tons
<b>3190</b>	232.8234	13.7013719

