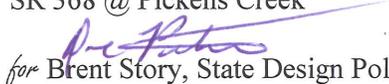


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. #0009863 **OFFICE** Design Policy & Support
GDOT District 1 - Gainesville
Elbert County **DATE** July 31, 2012
SR 368 @ Pickens Creek

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

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

Attachment

DISTRIBUTION:

Bobby Hilliard, Program Control Administrator
Genetha Rice-Singleton, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Lisa Myers, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Bayne Smith, District Engineer
Brent Cook, District Preconstruction Engineer
Jason Dykes, Asst. District Utilities Engineer
Otis Clark, Project Manager
BOARD MEMBER - 10th Congressional District

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

Project Type: Bridge Replacement
 GDOT District: 1
 Federal Route Number: N/A

P.I. Number: 0009863
 County: Elbert
 State Route Number: 368

This project proposes replacing the existing bridge on SR 368 at Pickens Creek in Elbert County.

Submitted for approval:

<i>W. Allen</i>	<i>MAY 3, 2012</i>
Heath and Lineback Engineers	DATE
<i>Bobby Halbard</i>	<i>5-7-2012</i>
Office Head	DATE
<i>Stollub</i>	<i>MAY 7, 2012</i>
GDOT Project Manager	DATE

Recommendation for approval:

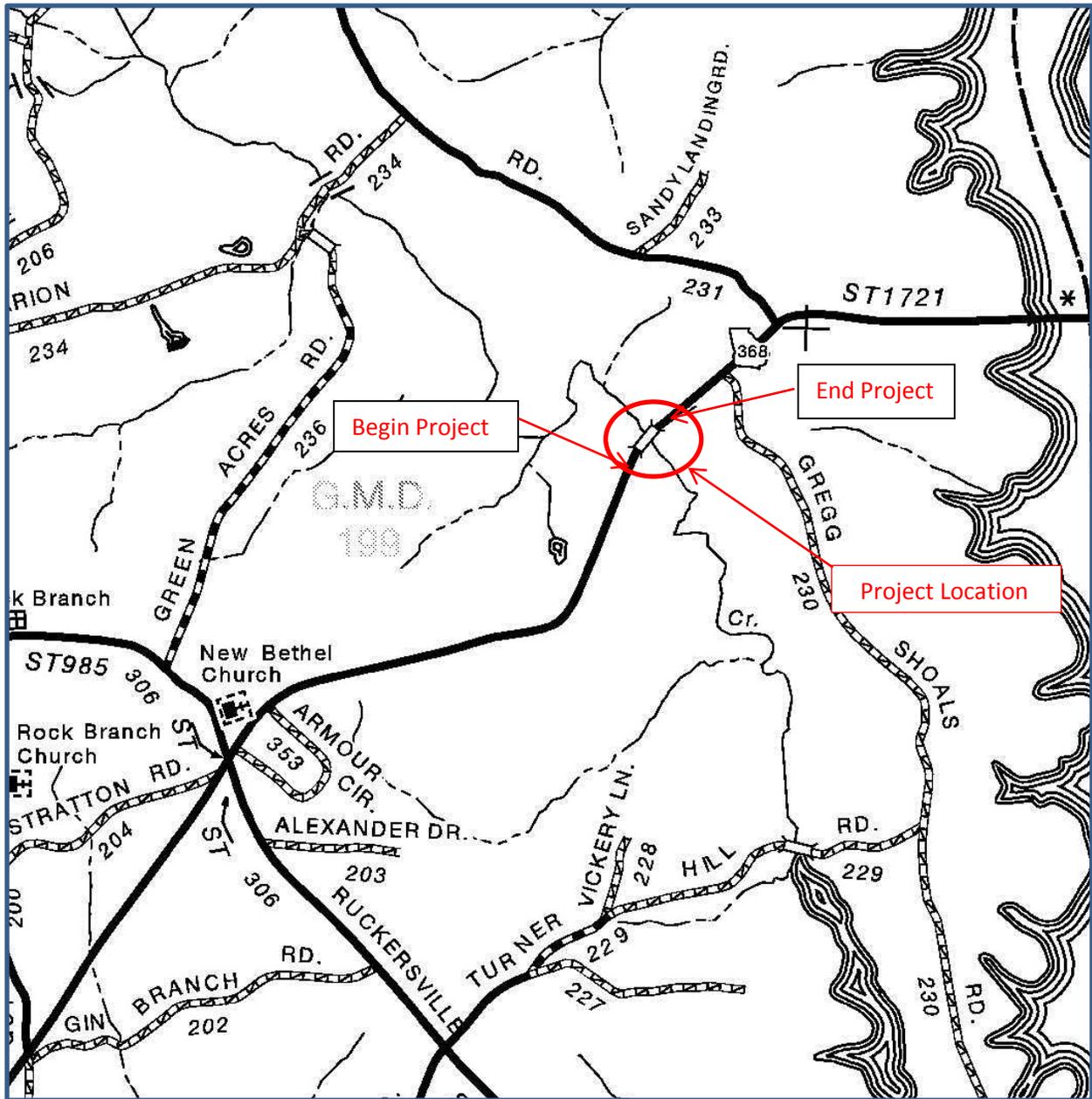
Program Control Administrator <i>GLENN BOWMAN *T.S.</i>	DATE <i>5/21/2012</i>
State Environmental Administrator	DATE
<i>KATHY ZAHUL *T.S.</i>	<i>5/16/2012</i>
State Traffic Engineer	DATE
Project Review Engineer <i>PATRICK ALLEN *T.S.</i>	DATE <i>5/18/2012</i>
State Utilities Engineer	DATE
District Engineer <i>BEN RABUN *T.S.</i>	DATE <i>5/25/2012</i>
State Bridge Design Engineer	DATE
State Transportation Financial Management Administrator	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).

<i>Cynthia L. Vangre</i>	<i>5-16-12</i>
State Transportation Planning Administrator	DATE

** RECOMMENDATION ON FILE.*

PROJECT LOCATION



**SR 368 AT PICKENS CREEK BRIDGE REPLACEMENT
P.I. NO.: 0009863, ELBERT COUNTY**

PLANNING & BACKGROUND DATA

Project Justification Statement: This bridge (Structure ID 105-0018-0; SR 368 over Pickens Creek) was built in 1941. The bridge consists of five spans of steel beams on timber caps and timber piles. This bridge was designed using a truck configuration that weighs less than the current state legal truck weights. This structure has a temporary repair that without the bridge would require posting. The overall condition of this bridge would be classified as poor. The deck is in poor condition due to advanced concrete cracking and deterioration. The superstructure is in poor condition due to advanced section loss in the steel beams. The substructure is in poor condition due to advanced deterioration of the timber elements. Due to the structural integrity, based on the design and that the bridge substructure is temporarily shored, replacement of the bridge is recommended.

Description of the proposed project: The project proposes to replace the existing two lane bridge over Pickens Creek in Elbert County by utilizing an off-site detour. The project is located approximately 13 miles northeast of Elberton and is approximately 0.25 miles in length. The design speed is 55 mph and the typical section consists of two 12 ft. lanes with 6 ft. shoulders (2 ft. paved and 4 ft. grassed). The existing right of way width is 80'.

Federal Oversight: Full Oversight Exempt State Funded Other

MPO: N/A MPO

Regional Commission: N/A Northeast Georgia RC

Congressional District(s): 10

Projected Traffic ADT:

Current Year (2011): 670 Open Year (2016): 705 Design Year (2036): 860

Functional Classification (Mainline): Rural Minor Arterial

Is this project on a designated bike route? No YES

Is this project located on a pedestrian plan? No YES

Is this project located on or part of a transit network? No YES

DESIGN AND STRUCTURAL DATA

Mainline Design Features: SR 368 over Pickens Creek

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2
- Lane Width(s)	12	12	12
- Median Width & Type	-	-	-
- Outside Shoulder Width & Type	5' grass	2' Paved, 4' Grassed	2' Paved, 4' Grassed
- Outside Shoulder Slope		6%	6%
- Inside Shoulder Width & Type	-	-	-
- Sidewalks	-	-	-
- Auxiliary Lanes	-	-	-
- Bike Lanes	-	-	-
Posted Speed	55 mph		55 mph
Design Speed	30 mph	55 mph	55 mph
Min Horizontal Curve Radius	1400'	1060 ft	1400 ft
Superelevation Rate		6%	6%
Grade		5%	5%
Access Control	By Permit	By Permit	By Permit
Right-of-Way Width	80'	-	130'
Maximum Grade – Crossroad	-	-	-
Design Vehicle	-	WB-40	WB-40

*According to current GDOT design policy if applicable

Major Structures:

Structure	Existing	Proposed
ID #105-0018-0 SR 386 over Pickens Creek	The existing bridge was constructed in 1941 and has a sufficiency rating of 22.55. The bridge is 100' long with a deck width of 27.30'.	The proposed bridge is a 110 ft. single span Bulb-Tee 63 inch pre-stressed concrete bridge. The proposed bridge will have a deck width of 36 ft.

Major Interchanges/Intersections: N/A

Utility Involvements:

1. Overhead Electric – Hart EMC
2. Telephone attached to bridge and buried at approaches – AT&T

Public Interest Determination Policy and Procedure recommended (Utilities)? YES NO

SUE Required: Yes No

Railroad Involvement: N/A

Right-of-Way:

Required Right-of-Way anticipated: YES NO Undetermined
 Easements anticipated: Temporary Permanent Utility Other

Anticipated number of impacted parcels: 4
 Anticipated number of displacements (Total): 0
 Businesses: 0
 Residences: 0
 Other: 0

Location and Design approval: Not Required Required

Off-site Detours Anticipated: No Yes Undetermined

Transportation Management Plan Anticipated: YES NO

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	YES	NO	Undetermined
1. Design Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Lane Width	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Shoulder Width	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Bridge Width	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Horizontal Alignment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Superelevation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Vertical Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Grade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Stopping Sight Distance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Cross Slope	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Vertical Clearance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Lateral Offset to Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Bridge Structural Capacity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Design Variances to GDOT standard criteria anticipated:

GDOT Standard Criteria	Reviewing Office			
		YES	NO	Undetermined
1. Access Control - Median Opening Spacing	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Median Usage & Width	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Intersection Skew Angle	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Intersection Sight Distance	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Bike & Pedestrian Accommodations	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. GDOT Drainage Manual	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

8. Georgia Standard Drawings	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Roundabout Illumination - (if applicable)	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Rumble Strips/Safety Edge	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VE Study anticipated: No Yes

ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA: NEPA: Categorical Exclusion EA/FONSI EIS

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

Environmental Permits/Variations/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	YES	NO	Remarks
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Notice of Intent
8. FEMA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Other Commitments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. Other Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	South Carolina for State Route Detour

Is a PAR required? No Yes

NEPA/GEPA: A NEPA Categorical Exclusion is anticipated for this project.

Ecology: An Ecology Assessment is underway. An aquatic survey based on correspondence with GADNR.

History: A historic resource survey report has been prepared and submitted. No resources have been recommended eligible; however, SHPO concurrence on these recommendations has not yet been obtained.

Archeology: An archaeological survey has not been conducted at this time. Archeology field work will begin after concept approval.

Air & Noise:

Noise: This project does not require a noise study or abatement of highway noise impacts. A Type III noise screening assessment will be prepared.

Air: An air assessment will be required. No CO modeling will be required due to project type.

Public Involvement: A detour meeting is anticipated

Major stakeholders: Traveling public

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: None to date.

Early Completion Incentives recommended for consideration: No Yes

PROJECT RESPONSIBILITIES

Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Office of Program Delivery
Design	Office of Program Delivery
Right-of-Way Acquisition	District 1 Right of Way Office
Utility Relocation	Utility Companies
Letting to Contract	Office of Bidding Administration
Construction Supervision	District 1
Providing Material Pits	Contractor
Providing Detours	District 1/Contractor
Environmental Studies, Documents, and Permits	Office of Environmental Services
Environmental Mitigation	Office of Environmental Services
Construction Inspection & Materials Testing	District 1

Lighting required: No Yes

Initial Concept Meeting: N/A

Concept Meeting: A Concept Team Meeting was held on March 16, 2012. See attachments for meeting minutes.

Other projects in the area:

1. P.I. No.: 122290, SR 17/SR 545 Reconstruction from NW of Elberton to CR 309/Deep Creek Road. The project length is 3.16 miles.
2. P.I. No.: 122630, SR 72/SR 550 Reconstruction from SR 17 to CR 41/CR 245. The project length is 7.02 miles.

Other coordination to date: None.

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Utility	CST*	Environmental Mitigation	Total Cost
By Whom	GADOT	GADOT District 1 Right of Way Office	GADOT District 1 Utility Office	GADOT	GADOT	
\$ Amount	726,743.95	109,000	70,000	970,862	0	1,8 6,605.95
Date of Estimate	6/29/2011	6/28/2012	2/8/2012	3/21/2012	3/19/2012	

*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION

Alternative selection:

Preferred Alternate: Minimum Vertical Improvement - This alternate replaces the bridge along the existing alignment with a 110' long bridge. The proposed profile is approximately 5' higher in elevation compared to existing. This facilitates placing the low point of the road off of the bridge and matching the calculated vertical curve of the existing bridge plans (attached). Traffic utilizes an off-site detour during construction of the bridge. A wall will be required to avoid linear steam impacts due to roadway fill. Design exceptions are required for the maximum vertical grade (5%) which is currently 7.3% approaching the bridge and the existing substandard vertical sag curve, which meets approximately 30 mph design speed.			
Estimated Property Impacts:	None	Estimated Total Cost:	\$1,8
Estimated ROW Cost:	\$109,000	Estimated CST Time:	6 months
Rationale: This alternate was selected for the following reasons: 1. Significantly lower construction cost and duration, 2. The substandard bridge would be replaced, 3. Approval for design exception for substandard vertical is expected since no accidents are reported at the site in the past five years and the traffic ADT is low.			

No-Build Alternative: <i>This alternate keeps the substandard bridge and roadway in place but requires future maintenance cost and load restrictions.</i>			
Estimated Property Impacts:	None	Estimated Total Cost:	None
Estimated ROW Cost:	None	Estimated CST Time:	None
Rationale: <i>This alternate was not selected due to the substandard bridge. The bridge has a sufficiency rating of 26.46.</i>			

Alternative 1: Offset Bridge/Roadway - This alternate replaces the existing bridge with a 145' long bridge 70' north of the existing bridge. The offset was made to the north in order to avoid longitudinal impacts to a stream adjacent to the roadway on the south side. Traffic is maintained on the existing bridge during construction of the proposed bridge. This alternate brings the substandard vertical curve up to design requirements.			
Estimated Property Impacts:	None	Estimated Total Cost:	\$2,281,467
Estimated ROW Cost:	163,000	Estimated CST Time:	12 months
Rationale: This alternate was not selected due to the high construction cost and duration.			

Alternative 2: Off-Site Detour - This alternate replaces the existing bridge in the existing location with a 145' long bridge and improves the substandard vertical sag curve to satisfy 55 mph design speed. Traffic utilizes an off-site detour during construction of the proposed bridge.			
Estimated Property Impacts:	None	Estimated Total Cost:	\$2,243,756
Estimated ROW Cost:	\$163,000	Estimated CST Time:	12 months
Rationale: This alternate was not selected due to the high construction cost and duration.			

Alternative 3: On-Site Detour - This alternate replaces the existing bridge in the existing location with a 145' long bridge and improves the substandard vertical sag curve to satisfy 55 mph design speed. A detour roadway and bridge is constructed to maintain traffic during construction of the proposed bridge and roadway.			
Estimated Property Impacts:	None	Estimated Total Cost:	\$2,837,214
Estimated ROW Cost:	\$182,000	Estimated CST Time:	18 months
Rationale: This alternate was not selected due to the high cost associated with the detour roadway and bridge.			

Alternative 4: Culvert Option - This alternate replaces the existing bridge with a 140 long 4 barrel 10'x10' box culvert in the existing location and improves the substandard vertical sag curve to satisfy 55 mph design speed. Traffic utilizes an off-site detour during construction of the proposed culvert.			
Estimated Property Impacts:	None	Estimated Total Cost:	\$2,419,589
Estimated ROW Cost:	\$114,000	Estimated CST Time:	8 months
Rationale: This alternate was not selected for the following reasons: 1. The high cost associated with the culvert, 2. The increased environmental impacts to Pickens Creek due to the culvert.			

Alternative 5: Staged Bridge - This alternate stage constructs the proposed 145' bridge in the current location. This alternate requires temporary shoring. The stage construction of the bridge is complicated due to the change in grade from the existing roadway to the proposed and the limited			
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work area. As a result it is estimated that the construction time of the bridge is doubled. There is also the added cost for a signal to maintain traffic to one lane during the bridge construction.

Estimated Property Impacts:	None	Estimated Total Cost:	\$2,796,833
Estimated ROW Cost:	\$136,000	Estimated CST Time:	18 months

Rationale: This alternate was not selected due to the high construction cost associated with stage constructing the bridge.

Alternate 6: Match Existing Profile – This alternate replaces the bridge along the existing alignment with a 110’ long bridge. Traffic utilizes an off-site detour during construction of the bridge. The existing roadway profile is maintained and the existing pavement is utilized. A wall will be required to avoid linear steam impacts due to roadway fill associated with shoulder improvements to place guardrail. Design exceptions are required for the maximum vertical grade (5%) which is currently 7.6% approaching the bridge and the existing substandard vertical sag curve, which meets approximately 25 mph design speed.

Estimated Property Impacts:	None	Estimated Total Cost:	\$1,705,852
Estimated ROW Cost:	\$109,000	Estimated CST Time:	6 months

Rationale: This alternate was not selected since the low point of the sag vertical curve is located on the bridge.

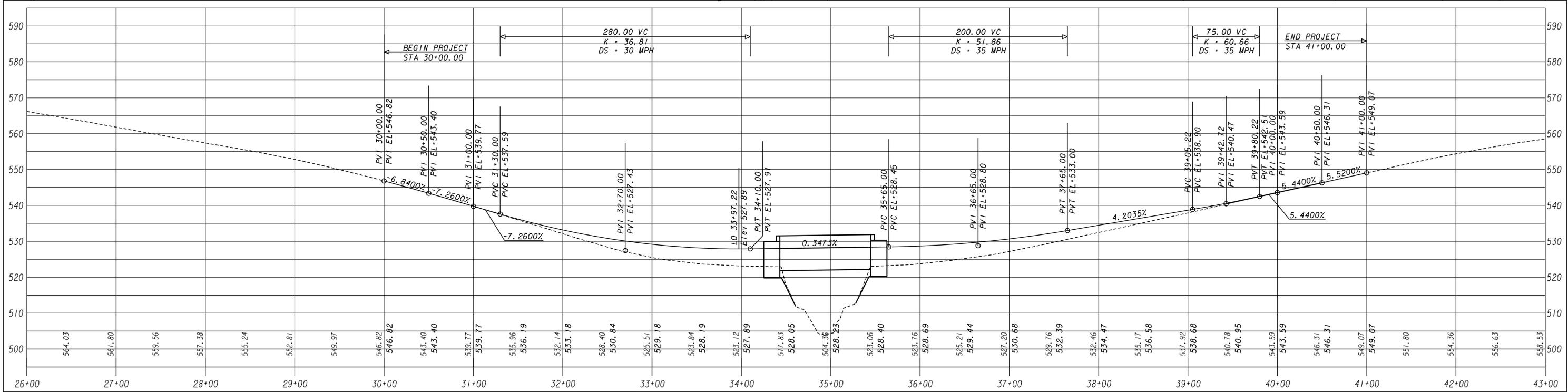
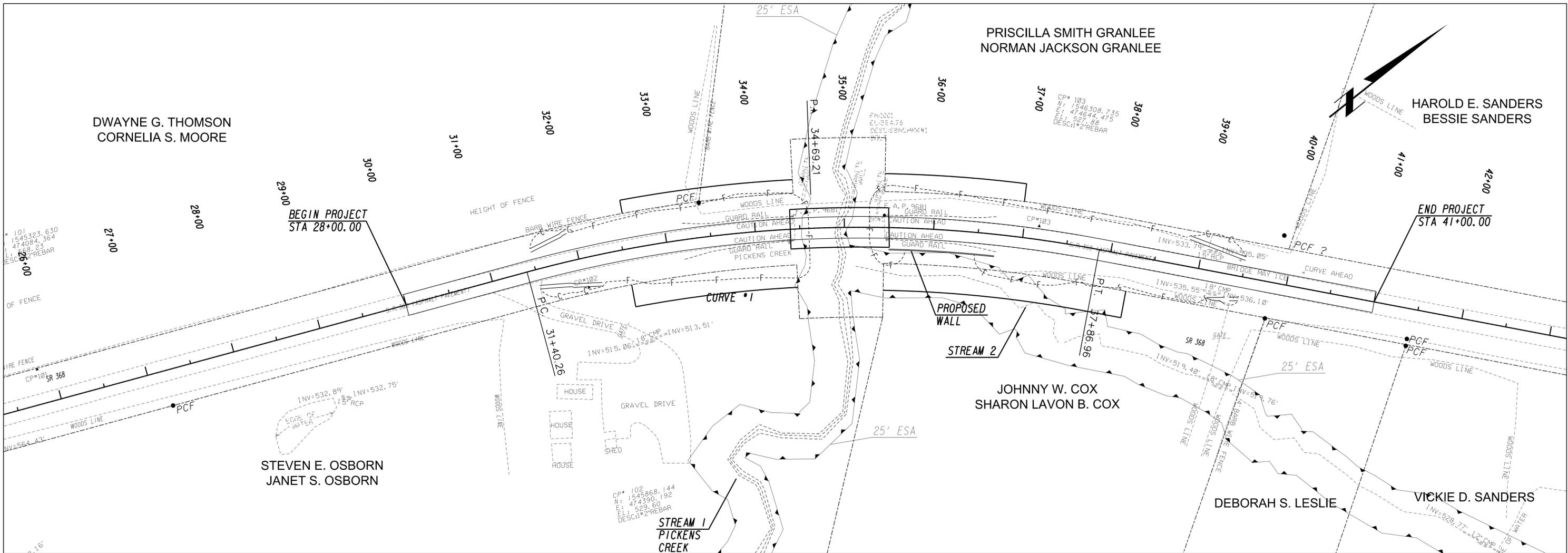
Attachments:

1. Concept Layout
2. Roadway Typical section
3. Bridge Typical section
4. Detailed Cost Estimate:
 - a. Construction including Engineering and Inspection
 - b. Completed Liquid AC Adjustment forms
 - c. Right-of-Way
 - d. Utilities
 - e. Environmental Mitigation
5. Existing Bridge Plan
6. Bridge inventory
7. Minutes of Concept Team meeting
8. Traffic Data
9. Detour Maps

APPROVALS

Concur:  7/23/12
 Director of Engineering Date

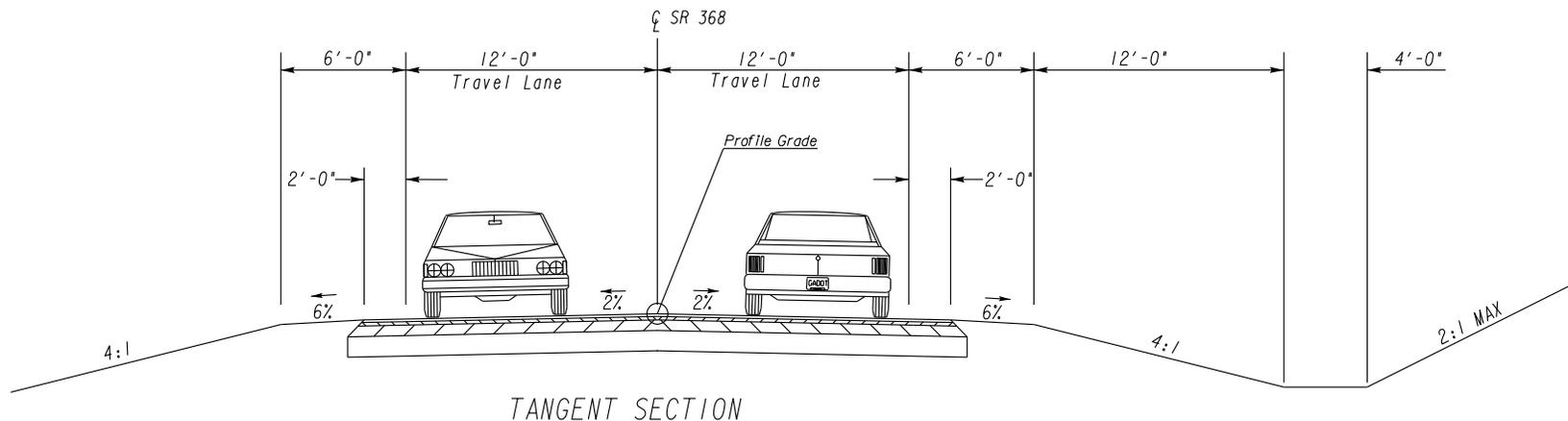
Approve:  7/26/12
 Chief Engineer Date



SR 368 AT PICKENS CREEK
 MINIMUM VERTICAL IMPROVEMENTS
 ALIGNMENT & PROFILE ALTERNATE

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

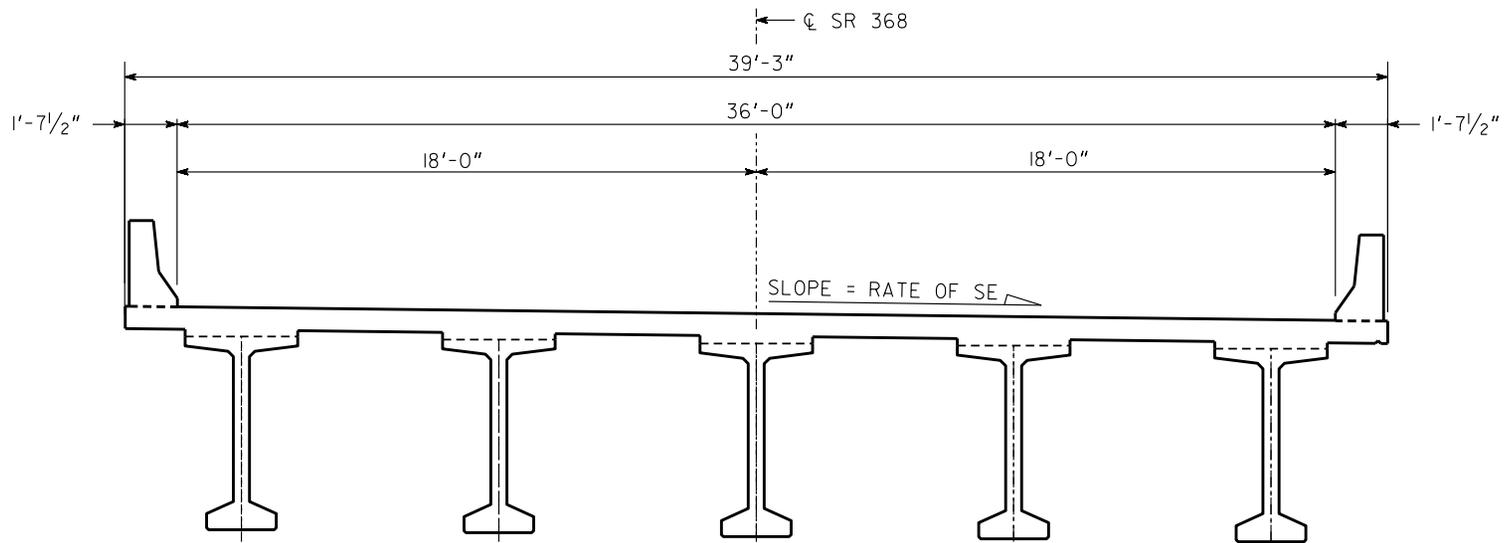
HL Heath & Lineback Engineers
 INCORPORATED
 2390 CANTON ROAD, BUILDING 200
 MARIETTA, GEORGIA 30066-5393
 (770)424-1668



SR 368 AT PICKENS CREEK
 PROPOSED TYPICAL SECTION

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

HL Heath & Linebeck Engineers
(INCORPORATED)
 5900 CANTON ROAD, BUILDING 200
 MARLETTA, GEORGIA 30067-5352
 (770) 424-1888



BRIDGE SECTION

SR 368 AT PICKENS CREEK
PROPOSED BRIDGE SECTION

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

HL Heath & Linebeck Engineers
 INCORPORATED
 5900 CANTON ROAD, BUILDING 200
 MARIETTA, GEORGIA 30067-5352
 (770) 424-1888

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. , **OFFICE**
 DATE

P.I. No.

FROM

TO Ronald E. Wishon, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER

MNGT LET DATE

MNGT R/W DATE

PROGRAMMED COST (TPro W/OUT INFLATION)

CONSTRUCTION \$

RIGHT OF WAY \$

UTILITIES \$

LAST ESTIMATE UPDATE

DATE

DATE

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

The cost estimate was revised to reflect the revised alternate for minimum vertical improvements.

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ <input type="text" value="898,802"/>	(Base Estimate)
Engineering and Inspection:	\$ <input type="text" value="44,940"/>	(Base Estimate x <input type="text" value="5"/> %)
Total Liquid AC Adjustment	\$ <input type="text" value="27,120"/>	(From attached worksheet)
Construction Total:	\$ <input type="text" value="970,862"/>	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

<input type="text"/>	<input type="text"/>

Attachments

Untitled
STATE HIGHWAY AGENCY

DATE : 06/29/2012
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0009863 SPEC YEAR: 01
DESCRIPTION: SR 368 AT PICKENS CREEK

ITEMS FOR JOB 0009863

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - 0009863	1.000	25000.00	25000.00
0010	163-0232		AC	TEMPORARY GRASSING	1.000	323.79	323.79
0015	163-0240		TN	MULCH	25.000	240.15	6003.75
0020	163-0300		EA	CONSTRUCTION EXIT	2.000	1061.88	2123.77
0025	163-0520		LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	150.000	11.85	1777.50
0030	163-0527		EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	10.000	187.77	1877.70
0035	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	1100.000	0.80	880.00
0040	165-0101		EA	MAINT OF CONST EXIT	2.000	480.86	961.73
0045	167-1000		EA	WATER QUALITY MONITORING AND SAMPLING	2.000	341.93	683.88
0050	167-1500		MO	WATER QUALITY INSPECTIONS	6.000	394.76	2368.57
0055	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	2800.000	2.72	7616.00
0065	210-0100		LS	GRADING COMPLETE - 0009863	1.000	55000.00	55000.00
0070	310-1101		TN	GR AGGR BASE CRS, INCL MATL	2310.000	17.37	40124.70
0075	318-3000		TN	AGGR SURF CRS	50.000	17.63	881.64
0080	402-3103		TN	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	231.000	73.37	16948.47
0085	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	565.000	69.43	39227.95
0090	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	376.000	72.60	27297.60
0095	413-1000		GL	BITUM TACK COAT	411.000	3.31	1360.41
0100	433-1000		SY	REINF CONC APPROACH SLAB	290.000	136.91	39704.38
0105	436-1000		LF	ASPH CONC CURB - 0009863	1000.000	9.56	9564.17
0110	603-2024		SY	STN DUMPED RIP RAP, TP 1, 24"	500.000	33.82	16911.43
0115	603-7000		SY	PLASTIC FILTER FABRIC	500.000	3.55	1775.69
0120	634-1200		EA	RIGHT OF WAY MARKERS	12.000	109.39	1312.68
0125	641-1100		LF	GUARDRAIL, TP T	83.000	55.32	4591.96
0130	641-1200		LF	GUARDRAIL, TP W	1000.000	16.10	16103.25
0135	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	2.000	593.33	1186.67
0140	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	2.000	1728.05	3456.11
0145	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	200.000	1.60	320.73
0150	636-1033		SF	HWY SIGNS, TP1MAT,REFL SH TP 9	10.000	20.50	205.00
0155	636-2070		LF	GALV STEEL POSTS, TP 7	15.000	8.57	128.55
0160	652-5451		LF	SOLID TRAF STRIPE, 5 IN, WHITE	2200.000	0.27	594.00
0165	652-5452		LF	SOLID TRAF STRIPE, 5 IN, YELLO	2200.000	0.08	176.00
0170	654-1001		EA	RAISED PVMT MARKERS TP 1	54.000	5.26	284.19
0175	540-1101		LS	REM OF EX BR, STA NO - 0009863	1.000	50000.00	50000.00
0180	543-9000		LS	CONSTR OF BRIDGE COMPLETE - 0009863	1.000	410463.00	410463.00
0185	700-6910		AC	PERMANENT GRASSING	2.000	513.40	1026.81
0190	700-7000		TN	AGRICULTURAL LIME	5.000	82.07	410.35
0195	700-8000		TN	FERTILIZER MIXED GRADE	2.000	505.69	1011.39
0200	700-8100		LB	FERTILIZER NITROGEN CONTENT	100.000	1.78	178.00

Untitled
STATE HIGHWAY AGENCY

DATE : 06/29/2012
PAGE : 2

JOB ESTIMATE REPORT

0205	716-2000	SY	EROSION CONTROL MATS, SLOPES	1000.000	0.94	940.00
0210	627-1010	SF	MSE WALL FACE, 10 - 20 FT HT, WALL NO - 0009863	2400.000	45.00	108000.00

ITEM TOTAL						898801.82
INFLATED ITEM TOTAL						898801.82
TOTALS FOR JOB 0009863						

ESTIMATED COST:						898801.82
CONTINGENCY PERCENT (0.0):						0.00
ESTIMATED TOTAL:						898801.82

PROJ. SR 368 over Pickens Creek - Min. Vertical Improvement
P.I. NO. 0009863
DATE June, 2012

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Jun-12	\$ 3.345
DIESEL		\$ 3.808
LIQUID AC		\$ 633.00

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

LIQUID AC ADJUSTMENTS

$PA = \left(\frac{APM - APL}{APL} \right) \times TMT \times APL$

Asphalt

Price Adjustment (PA)				23205.78	\$	23,205.78
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	1,012.80		
Monthly Asphalt Cement Price month project let (APL)			\$	633.00		
Total Monthly Tonnage of asphalt cement (TMT)				61.1		

ASPHALT	Tons	%AC	AC ton
Leveling	50	5.0%	2.5
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	231	5.0%	11.55
25 mm SP	565	5.0%	28.25
19 mm SP	376	5.0%	18.8
	1222		61.1

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	670.46	\$	670.46
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	1,012.80			
Monthly Asphalt Cement Price month project let (APL)			\$	633.00			
Total Monthly Tonnage of asphalt cement (TMT)				1.765286479			

Bitum Tack

Gals	gals/ton	tons
411	232.8234	1.76528648

PROJ.	SR 368 over Pickens Creek - Min. Vertical Improvement	CALL NO.
P.I. NO.	0009863	
DATE	June, 2012	

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				3242.983308	\$	3,242.98
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$ 1,012.80		
Monthly Asphalt Cement Price month project let (APL)				\$ 633.00		
Total Monthly Tonnage of asphalt cement (TMT)				8.538660633		

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	2800	0.71	1988	232.8234	8.538660633
					8.538660633

TOTAL LIQUID AC ADJUSTMENT					\$	27,119.22
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**GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 6/28/2012 Project: 0009863
 Revised: County: Elbert County Vert Imprv Alt
 PI: 0009863

Description: SR 368 @ Pickens Count
 Project Termini: SR 368 @ Pickens Count

Existing ROW: Varies
 Required ROW: Varies
 Parcels: 4

Land and Improvements _____ \$21,000.00

Proximity Damage \$0.00

Consequential Damage \$0.00

Cost to Cures \$0.00

Trade Fixtures \$0.00

Improvements \$10,000.00

Valuation Services _____ \$4,000.00

Legal Services _____ \$40,200.00

Relocation _____ \$8,000.00

Demolition _____ \$0.00

Administrative _____ \$35,500.00

TOTAL ESTIMATED COSTS _____ \$108,700.00

TOTAL ESTIMATED COSTS (ROUNDED) _____ \$109,000.00

Preparation Credits	Hours	Signature

Prepared By: Lashone Alexander CG#: 256999 06/28/2012
 Approved By: Dalsha Alexander CG#: 256999 06/28/2012

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

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE Project No. 0009863 Elbert Co.
 P.I. No. 0009863
 SR 368 @ Pickens Creek

OFFICE Gainesville

DATE February 8, 2012

FROM 
 Allen Ferguson
 District Utilities Engineer

TO Otis Clark, Project Manager

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for the subject project.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
AT&T	\$78,500.00	\$ 0.00
Hart EMC	\$11,500.00	\$70,000.00
Totals	\$89,500.00	\$70,000.00

If you have any questions, please contact Allen Ferguson at 770-532-5510.

RAF

C: Jeff Baker, State Utilities Engineer (email only)
 Angie Robinson, Office of Financial Management (email only)
 Todd Wood, Area Engineer (email only)
 File

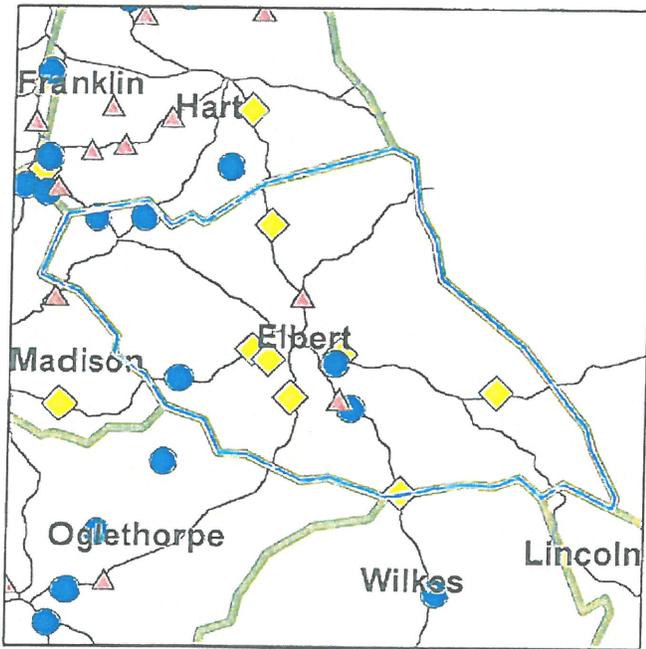


GEORGIA

TRAFFIC SAFETY FACTS

Elbert County

2007-2009 Fatal Crashes



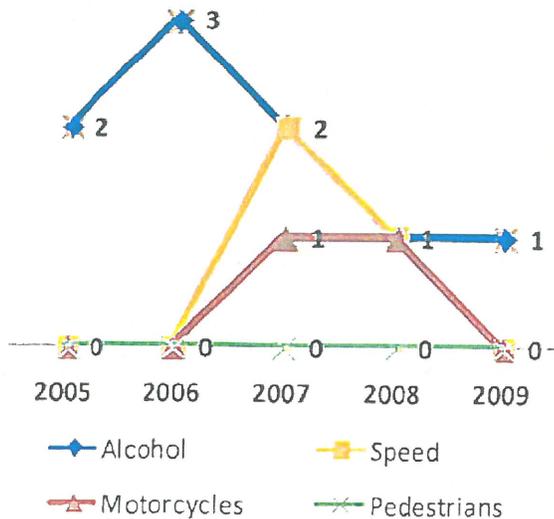
County Trends 2005-2009

	2005	2006	2007	2008	2009
Fatalities	5	10	8	6	2
Injuries	197	177	196	178	158
Crashes	409	424	448	394	405

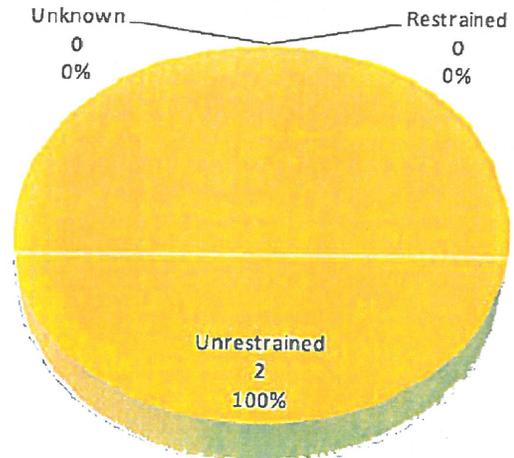
The map shows the location of county fatal crashes from 2007-2009. Only 1,097 out of 1,172 fatal crashes that occurred in 2009 were located in the state of Georgia. Please note there can be more than one fatality per fatal crash.

- ▲ 2009
- 2008
- ◆ 2007
- Highways
- County Border

Fatality Types

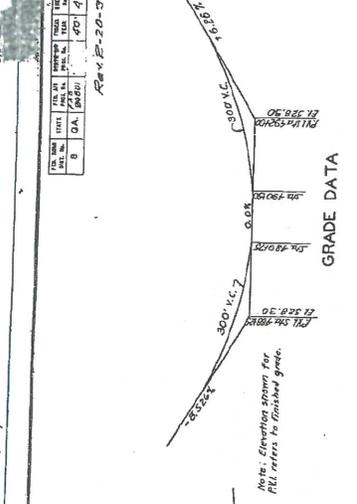


2009 Fatality by Restraint Use

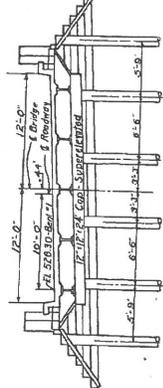


Passenger Vehicles Include Light (P/U) Trucks & Passenger Cars

DATE	BY	CHKD	APP'D
8/20/30	J.A.	J.A.	J.A.
8/20/30	J.A.	J.A.	J.A.
8/20/30	J.A.	J.A.	J.A.

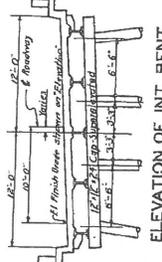


GRADE DATA



ELEVATION OF END BENT

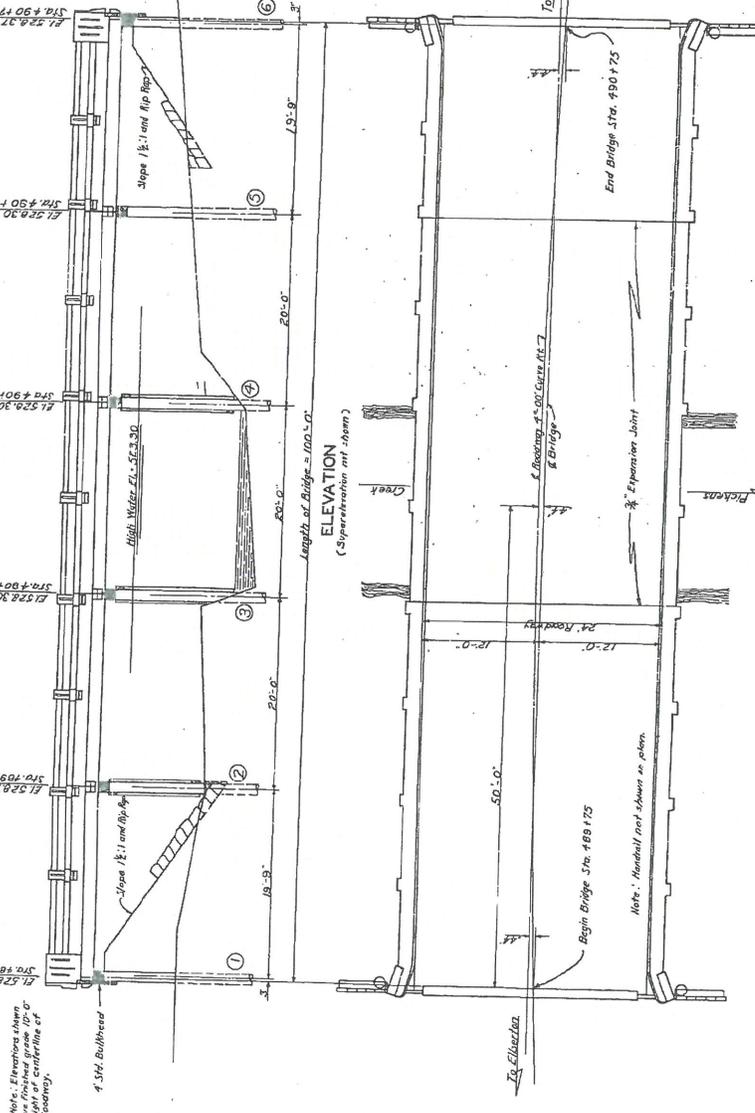
Note: Elevation shown for finished grade. All refers to finished grade.



ELEVATION OF INT. BENT

Scale: 1"=1'-0"

Sketch showing modification of Plates A, B, and C.



PLAN

SUMMARY OF QUANTITIES

- 70 Cu. Yds. Class II Concrete
- 14,700 Lbs. Bar Reinforcing Steel
- 2,800 Lbs. Galv. Steel (22 Gms)
- 900 Lin. Ft. Timber Piles - Treated 16 Lbs.
- 1,400 Sq. Yds. Plain Riprap
- 0.184 Acres Clearing and Grubbing
- 1 Lump Removal of Existing Structure
- 2 Each Test Piles

DESIGN DATA

- Drainage Area = 3.23 Acres
- Area of opening under High Water = 300 Sq. Ft.

GENERAL NOTES

- Specifications Georgia Standards
- For other General Notes see Georgia Std. No. 38+6

BRIDGE CONSISTS OF

- 5-20' J. Beam Spans
- 2-Timber End Bents (Co. 84, 38+6)
- 4-Timber Int. Bents (Modified)
- 2-Timber Bulkheads (Modified)
- Single bearing on Bents 2, 3 and 4

Special Note: Superstructure to be 0.05' per Ft.omit Crown in Raising Surfaces.

STATE HIGHWAY BOARD OF GEORGIA
BRIDGE DEPARTMENT
BRIDGE OVER PICKENS CREEK
STA. 489+75 TO STA. 490+75
ELBERT CO. F.A.S. 96B(1)
FEBRUARY 1930
SCALE: 1/4"=1'-0" UNLESS NOTED
DRAWN: J.E.L. CHECKED: J.E.L. APPROVED: J.E.L.
THROD: J.E.L. REVISED: C.A.H.

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:105-0018-0

Elbert

SUFF. RATING: 22.55

Location & Geography				Signs & Attachments	
Structure ID:	105-0018-0	*104 Highway System:	0	225 Expansion Joint Type:	02
200 Bridge Information:	06	*26 Functional Classification:	06	242 Deck Drains:	1
*6A Feature Int:	PICKENS CREEK	*204 Federal Route Type:	F No: 01721	243 Parapet Location:	0
*6B Critical Bridge:	0	105 Federal Lands Highway:	0	Height:	0
*7A Route No Carried:	SR00368	*110 Truck Route:	0	Width:	0
*7B Facility Carried:	SR 368	2006 School Bus Route:	1	238 Curb Height:	1
9 Location:	6 MI N OF RUCKERSVILLE	217 Benchmark Elevation:	0000.00	Curb Material:	1
2 Dot District:	1	218 Datum:	0	239 Handrail:	11
207 Year Photo:	2011	*19 Bypass Length:	06	*240 Medium Barrier Rail:	0
*91 Inspection Frequency:	06 Date: 11/04/2011	*20 Toll:	3	241 Bridge Median Height:	0
92A Fract Crit Insp Freq:	0 Date: 02/01/1901	*21 Maintanance:	01	* Bridge Median Width:	0
92B Underwater Insp Freq:	0 Date: 02/01/1901	*22 Owner:	01	230 Guardrail Loc. Dir. Rear:	3
92C Other Spc. Insp Freq:	0 Date: 02/01/1901	*31 Design Load:	2	Fwrd:	3
* 4 Place Code:	00000	37 Historical Significance:	5	Oppo. Dir. Rear:	0
*5 Inventory Route(O/U):	1	205 Congressional District:	10	Oppo. Fwrd:	0
Type:	3	27 Year Constructed:	1941	244 Aproach Slab:	0
Designation:	1	106 Year Reonstrcted:	0000	224 Retaining Wall:	0
Number:	00368	33 Bridge Medium:	0	233Posted Speed Limit:	55
Direction:	0	34 Skew:	00	236 Warning Sign:	1.00
*16 Latitude:	34 14.9272 HMMS Prefix:SR	35 Structure Flared:	0	234 Delineator:	1.00
*17 Longtitude:	82 -46.0687 HMMS Suffix:00 MP:9.35	38 Navigation Control:	0	235 Hazzard Boards:	1
98 Border Bridge:	000%Shared:00	213 Special Steel Design:	0	237 Utilities Gas:	00
99 ID Number:	0000000000000000	267 Type of Paint:	1	Water:	00
*100 STRAHNET:	0	*42 Type of Service On:	1	Electric:	00
12 Base Highway Network:	1	Type of Service Under:	5	Telephone:	22
13A LRS Inventory Route:	1051036800	214 Movable Bridge:	0	Sewer:	00
13B Sub Inventory Route:	0	203 Type Bridge:	C	247 Lighting Street:	0
101 parallel Structure:	N	259 Pile Encasement:	0	Navigation:	0
*102 Direction of Traffic:	2	*43 Structure Type Main:	4 02	Aerial:	0
*264 Road Inventory Mile Post:	009.38	45 No.Spans Main:	005	*248 County Continuity No.:	00
*208 Inspection Area:	1 Initials: EFP	44 Structure Type Appr:	0 00		
Engineer's Initials:	sgm	46 No Spans Appr:	0000		
* Location ID No:	105-00368D-009.35N	226 Bridge Curve Horz	1 Vert: 0		
		111 pier Protection:	0		
		107 Deck Structure Type:	1		
		108 Wearing Structure Type:	1		
		Membrane Type:	0		
		Deck Protection:	8		

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:105-0018-0

Programming Data		Measurements:				
201 Project No:	S-96-B (1)	*29ADT	000640	Year:2010	65 Inventory Rating Method:	2
202 Plans Available:	4	109%Trucks:	17		63 Operating Rating Method:	2
249 Prop Proj No:	0009863	* 28 Lanes On:	02	Under:00	66 Inventory Type:	2 Rating: 00
250 Approval Status:	0000	210 No. Tracks On:	00	Under:00	64 Operating Type:	2 Rating: 00
251 PI Number:	0009863	* 48 Max. Span Length	0020		231 Calculated Loads:	
252 Contract Date:	02/01/1901	* 49 Structure Length:	100		H-Modified:	20 0
260 Seismic No:	00000	51 Br. Rwdy. Width	23.60		HS-Modified:	25 0
75 Type Work:	31 1	52 Deck Width:	27.30		Type 3:	24 0
94 Bridge Imp. Cost:	\$110	* 47 Tot. Horiz. Cl:	24		Type 3s2:	40 0
95 Roadway Imp. Cost:	174	50 Curb / Sidewalk Width	0.00 / 0.00		Timber:	35 0
96 Total Imp Cost:	331	32 Approach Rdwy. Width	024		Piggyback:	40 0
76 Imp Length:	001420	*229 Shoulder Width:			261 H Inventory Rating:	15
97 Imp Year:	1990	Rear Lt:	5.00	Type:8 Rt:5.00	262 H Operating Rating	22
114Furure ADT:	000960 Year:2030	Fwd. Lt:	5.00	Type:8 Rt:5.00	67 Structural Evaluation:	2
Hydraulic Data		Permanent Width:			58 Deck Condition:	4
215Waterway Data:		Rear:	23.80	Type:8	59 Superstructure Condition:	4
High Water Elev:	0000.0 Year:1900		24.10	Type:2	* 227 Collision Damage:	0
Flood Elev:	0000.0 Freq:00	Interaction Rear:	0	Fwd: 0	60A Substructure Condition:	4
Avg Streambed Elev:	0000.0	36Safety Features Br. Rail:	2		60B Scour Condition:	6
Drainage Area:	00006	Transition:	2		60C Underwater Condition	N
Area of Opening:	000500	App. G. Rail:	2		71 Waterway Adequacy:	8
113 Scour Critical	U	App. Rail End:	1		61 Channel Protection Cond.:	6
216Water Depth:	00.4 Br.Height:21.0	53 Minimum Cl. Over:	99' 99 "		68 Deck Geometry:	4
222Slope Protection:	1	Under:			69 UnderClr. Horz/Vert:	N
221Slope Protection	0 Fwd:0	*228 Minimum Vertical Cl			72 Appr. Alignment:	6
219Fender System	0	Act. Odm Dir.:	99' 99"		62 Culvert:	N
220Dolphin:	0	Oppo. Dir:	99' 99"		Posting Data	
223Current Cover:	000	Posted Odm. Dir:	00' 00"		70 Bridge Posting Required	5
Type:	0	Oppo. Dir:	00' 00"		41 Struct Open, Posted, CL:	D
No. Barrels:	0	55 Lateral Undercl. Rt:	N 0 0		* 103 Temporary Structure:	T
* Width:	0.00 Height:0.00	56 Lateral Undercl. Lt:	0.00		232 Posted Loads	
* Length:	0 Apron:0	*10 Max Min Vert Cl:	99' 99" Dir:0		H-Modified:	00
265 U/W Insp. Area	0 Diver:ZZZ	39 Nav Vert Cl:	000 Horiz:0000		HS-Modified:	00
Location ID No:	105-00368D-009.35N	116 Nav Vert Cl Closed:	000		Type 3:	00
		245 Deck Thickness Main Deck Thick Approach:	7.50		Type 3s2:	00
		246 Overlay Thickness:	0.00		Timber:	00
		212 Year Last Painted:	Sup:1985Sub:0000		Piggyback	00
					253 Notification Date:	02/01/1901
					258 Fed Notify Date:	2/1/1901 12:00:00AM



Heath & Lineback Engineers

I N C O R P O R A T E D

2390 Canton Road, Building 200 • MARIETTA, GEORGIA 30066-5393

e-mail: hle@heath-lineback.com

770.424.1668 • (FAX) 770.424.2907

Memo

To: Otis Clark

From: Rudolph Frampton

CC: Phil Ravotti, Allen Krivsky

Date: March 16, 2012

**Re: Project P.I. No.: 0009863, Elbert County
SR 368 over Pickens Creek
Concept Team Meeting Minutes**

This was a Concept Team Meeting arranged to review the concept report. The following was discussed:

- ❖ The nursery could potentially lose business due to the off-site detour.
- ❖ Off-site detour would impact emergency services and school traffic however school buses and emergency vehicles could probably use local roads which will need to be verified. The closest fire station is on Rock Branch Road. Bob Thomas, Elbert County Administrator, stated that fire responders are available from both sides of the project.
- ❖ An agreement will be needed with South Carolina for the off-site detour.
- ❖ The Environmentalist is of the opinion that the off-site detour will get resistance from the public due to the detour length. The District office does not expect major resistance from the locals since paved local roads are available for use by the local residents.
- ❖ The detour utilizing state routes should be the official detour due to truck traffic but the locals could utilize the county roads.
- ❖ Steel from the existing bridge may be salvaged depending on the results of the salvageable material investigation by the maintenance office. Elbert County may be interested in salvaging the beams.
- ❖ CE time frame is expected to be 12 months.

- ❖ A public hearing will be held by June of 2012. A potential location is the Fire Station at 2870 Rock Branch Road.
- ❖ The project is scheduled to be let in April of 2015.
- ❖ Right of way acquisition is to start in June of 2013. There are 7 parcels.
- ❖ State Representative McCollum has a farm on the project site.
- ❖ Mitigation cost for the studied alternates have not been received.

Action Items:

1. Request will be made to GADOT maintenance office to determine if steel is salvageable.
2. GADOT District Office to verify if school buses and emergency vehicles can use local roads.
3. GADOT to arrange a Detour Meeting.
4. HLE to finalize concept report.
5. HLE to obtain mitigation cost for the studied alternates.

Attendees:

Otis Clark – GADOT OPD

Robert Mahoney – District 1

Brent Cook – District 1

Jason Dykes – GADOT Utilities

Bob Thomas – Elbert County

Carla Benton Hooks – GADOT OES

Allen Krivsky – Heath and Lineback

Rudolph Frampton – Heath and Lineback

Phil Ravotti – Heath and Lineback

Technical Memo



Stantec

To: Abbe Ebodaghe
GDOT Office of Planning
File: Project Number 0009863
Elbert County

From: Randall Parker PE PTOE AICP
Stantec Consulting Services
Date: March 8, 2012

Reference: Traffic Assignments for SR 368 Pickens Creek Bridge Replacement

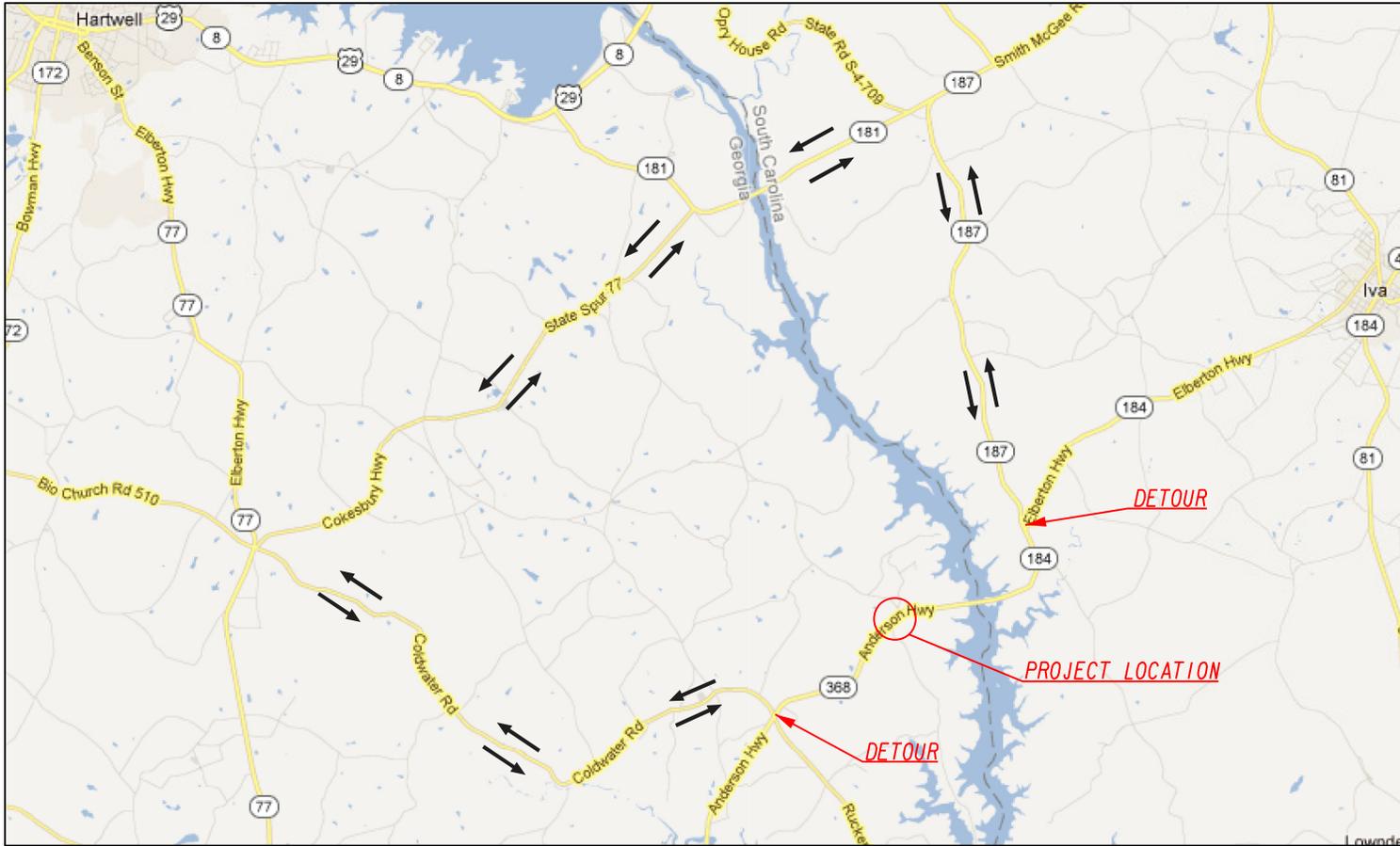
Below, please find the estimated Traffic Assignments for the above referenced project:

Existing 2011 Daily Volume = 670
Existing 2011 DHV = 60
No Build 2016 Base Year ADT = 705
Build 2016 Base Year ADT = 705
No Build 2036 Design Year ADT = 860
Build 2036 Design Year ADT = 860
No Build 2016 Base Year DHV = 63
Build 2016 Base Year DHV = 63
No Build 2036 Design Year DHV = 77
Build 2036 Design Year DHV = 77
Directional Factor D = 0.50 (or 50%)
Peak hour K Factor = 8.9%
Peak Hour truck percentage = 16.7%
Peak hour Single Units Truck = 16.7%
Peak Hour Combination Truck = 0%
24 Hour Truck percentage = 16.4%
Single Unit = 16.4%
Combination = 0%

Note, since the current average daily counted bi-directional volume of 670 is the same as the GDOT reported AADT volumes for 2005 & 2006, a 1% annual increase was used to calculate the future volumes.

If there are any questions, please contact me at Stantec Consulting Services
770.813.0882.

One Team. Infinite Solutions.



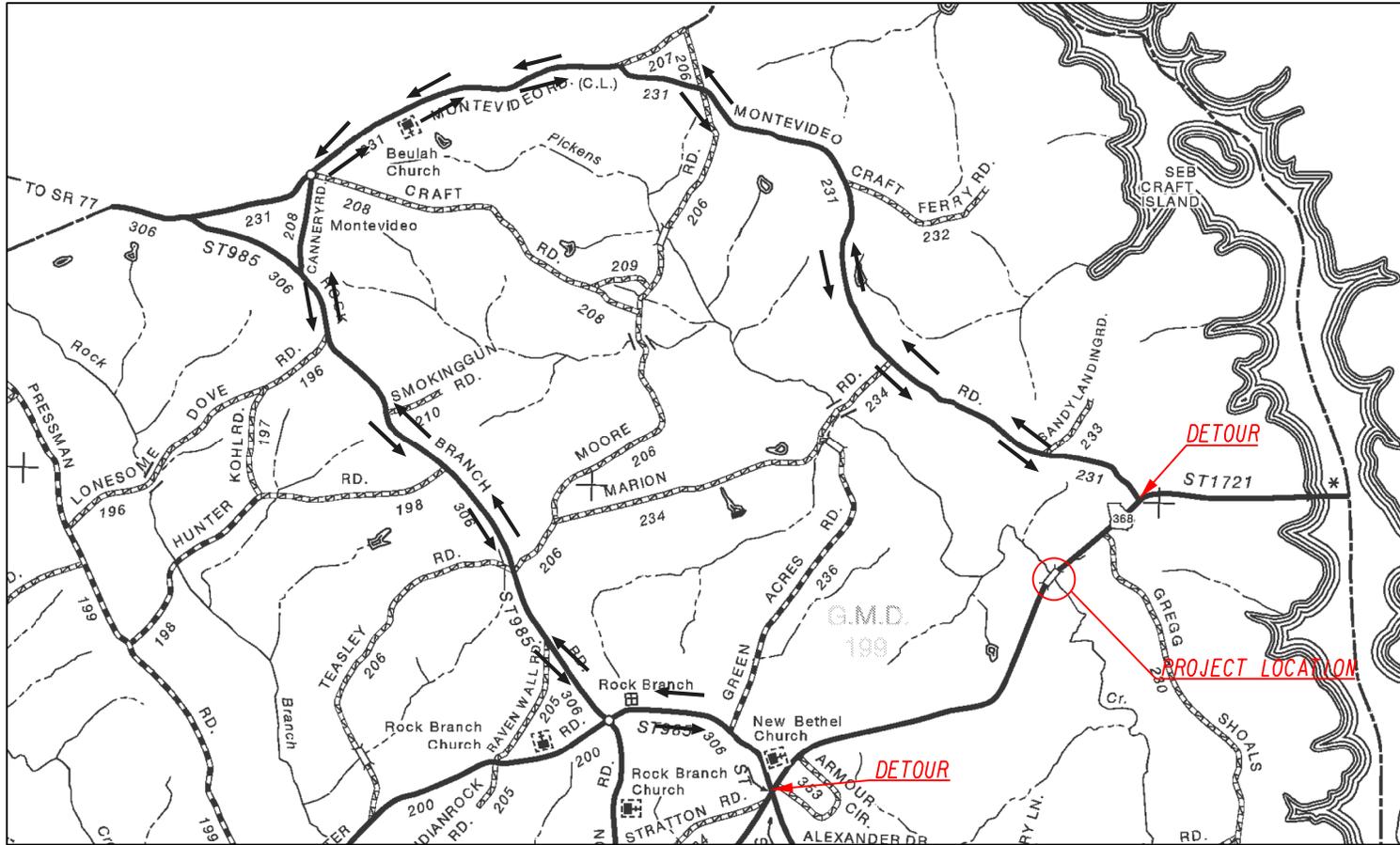
Detour Length = 23.6 Miles

State Route Detour Map

SR 368 AT PICKENS CREEK

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

HEATH & LINDBECK ENGINEERS
INCORPORATED
2780 EASTON ROAD, SUITE 100, 300
WALTON, GEORGIA 30080-5393
(770) 424-7888



Detour Length = 8.10 Miles

Potential County Road Detour Map

SR 368 AT PICKENS CREEK

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

H&L Heath & Lineback Engineers
INCORPORATED
2700 CANTON ROAD, SUITE 100
WADSWORTH, GEORGIA 30066-3393
(770) 424-7888