

CSBRG-0008-00(364)
P.I. 0008364
Whitfield County

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

Project Type: Culvert Replacement P.I. Number: 0008364
GDOT District: 6 County: Whitfield
Federal Route Number: 41 State Route Number: 3

Culvert replacement on SR3/US41 @ Little Swamp Creek in Whitfield County.

Submitted for approval:

David W. Bay
Consultant Designer & Planner or GDOT Concept/Design Phase Office Head & Office
Chris O. Cam...
Office Head/District Manager
Ryan...
GDOT Project Manager

5/7/2012
DATE
5-11-2012
DATE
5-15-2012
DATE

Recommendation for approval:

* Genetha Rice-Singleton [Signature]
Program Control Administrator
* Glenn Bowman [Signature]
State Environmental Administrator (recommendation required)

4/13/2012
DATE
4/25/2012
DATE

* Lisa Myers [Signature]
Project Review Engineer
* Patrick Allen [Signature]
For State Utilities Engineer
* Ben Rabun [Signature]
State Bridge District Engineer
State Transportation Financial Management Administrator

4/11/2012
DATE
4/20/2012
DATE
4/16/2012
DATE
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).

* Cynthia VanDyke [Signature]
State Planning Administrator (recommendation required)

4/24/2012
DATE

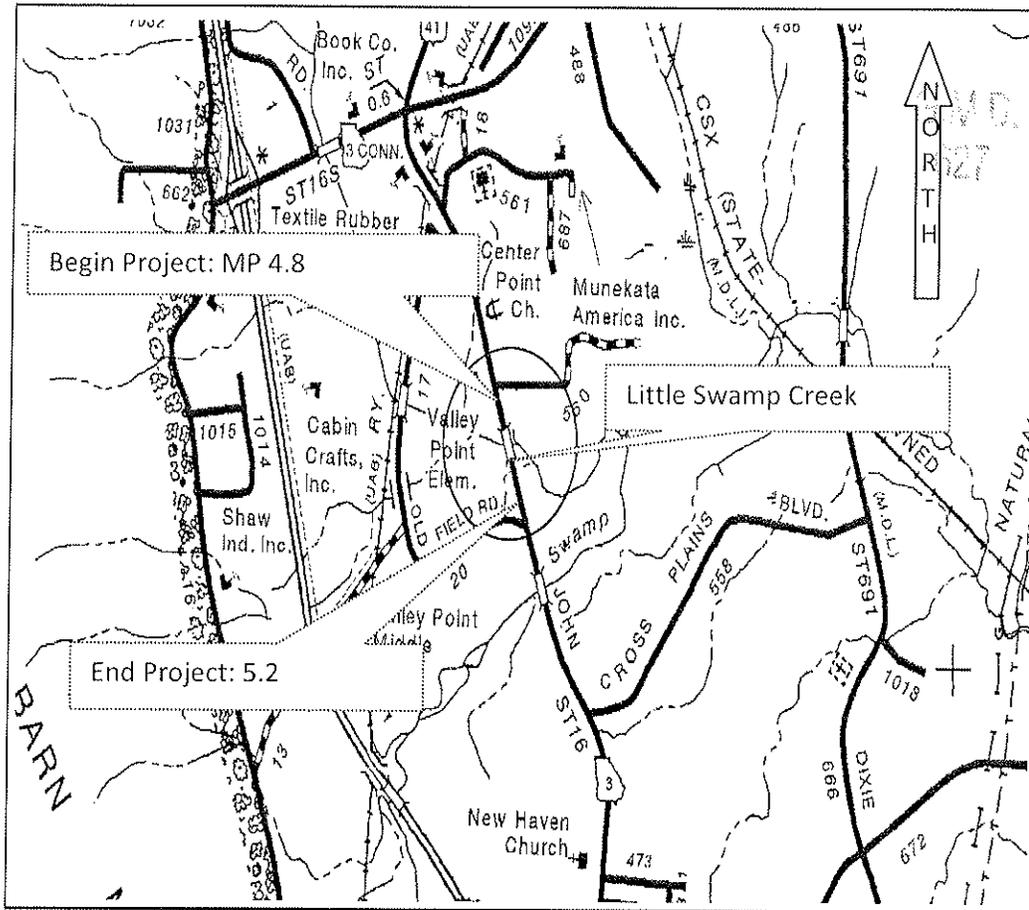
* Recommendation on file - [Signature]

PROJECT LOCATION

Location Map

Project: CSBRG-0008-00(364)

Culvert Replacement on SR3/US41 @ Little Swamp Creek in Whitfield County.



PLANNING & BACKGROUND DATA

Project Justification Statement: The project is located on SR3/US41 at milepost 5/Little Swamp Creek in Whitfield County. The culvert (Structure ID 313-0006-0) was constructed in 1927 and consists of (3)10ft x 9ft barrels which are 32ft0 in length. The culvert is exhibiting numerous cracks in the walls, roof, and parapet headwalls. At six foot intervals along the entire culvert length, all 3 barrels show large settlement cracks. Also, numerous cracks are noted throughout the culvert.

Currently the culvert has a sufficiency rating of 43.23. Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. Therefore, this project will replace the existing culvert with a structurally adequate culvert. Replacement of this functionally obsolete structure is recommended.

The local road is a designated school bus route and there is a local school that is near the proposed construction site. The estimated length of time for the detour to be used should be 2-3 months while school is out for the summer.

The project originated from Bridge Maintenance, due to the sufficiency rating of the culvert

Begin Project : MP 4.8 End Project :MP 5.2

Description of the proposed project: The project is for the replacement of a structurally deficient culvert on S.R.3/ U.S 41 in Whitfield County.

Federal Oversight: Full Oversight Exempt State Funded Other

MPO: N/A MPO - Dalton

Regional Commission: N/A RC – Northwest Georgia RC
RC Project ID # 0008364

Congressional District(s): 9

Projected Traffic AADT:

Current Year (2011) = 8,700 Open Year (2015) = 9,300 Design Year (2035) = 11,400
DHV (2011) = 1130 DHV (2015) = 1210 2035 DHV = 1485
K = 13% D = 70% T = 13% S.U.T = 5.5% COMB. T = 7.5%
24 HOUR T = 13% S.U. = 7.5% COMB = 5.5%

Functional Classification (Mainline): ~~Urban~~ Minor Arterial

most Rural

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

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: Little Swamp Creek, U.S.41/S.R.3 Historic,
Valley Point Middle School

Context Sensitive Solutions: Undetermined

DESIGN AND STRUCTURAL DATA

Mainline Design Features: *S.R.3/U.S.41*

Feature	Existing	Standard*	Proposed
Typical Section			
Number of Lanes	2	2	2
Lane Width(s)	12ft	12ft	12ft
Median Width & Type	N/A	N/A	N/A
Outside Shoulder Width	10 ft	10 ft	10 ft
Outside Shoulder Slope	1:1/2:1	2:1/4:1	2:1/4:1
Inside Shoulder Width	N/A	N/A	N/A
Posted Speed	55		55
Design Speed	55	55	55
Maximum Vertical Grade	6 %	6 %	6 %
Right-of-Way Width	60	N/A	60-120
Design Vehicle	WB-40-Bus	WB-40-Bus	WB-40-Bus

*According to current GDOT design policy if applicable

Major Structures:

Structure	Existing	Proposed
115-0036-0 Serial#313-0006-0	Triple 10ft x 9ft x 32 Concrete Culvert Culvert Suff. Rating- 43.23	Replace 115-0036-0 (4-10 ft x 10 ft x 81ft with 2 ft buried) Concrete culvert.

Major Interchanges/Intersections: I-75 Exits North at South Dalton Bypass and South at
Carbondale Road.

Utility Involvements:

Natural Gas: Atlanta Gas Light Company

Cable: Charter Communications

Electric Distribution: Dalton Utilities

Natural Gas: Dalton Utilities

Sewer: Dalton Utilities

Telecommunications: Dalton Utilities

Water: Dalton Utilities

Electrical Distribution: Georgia Power Company

Electrical Distribution: North Georgia EMC

Telecom: Windstream Communications (f/k/a Alltel)

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:	7
Anticipated number of displacements (Total):	0
Businesses:	3
Residences:	4
Other:	0

Location and Design approval: Not Required Required

Off-site Detours Anticipated: No Yes Undetermined

An offsite detour will be routed to I-75 from S.R.3/U.S.41 at Connector 3 Exit to Carbondale RD Exit in Whitfield County. The detour will be in place only during the summer months when local schools are not in session.

Transportation Management Plan Anticipated: YES NO

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	YES	Appvl Date (if applicable)	NO	Undetermined
Design Speed	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lane Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shoulder Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bridge Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horizontal Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Superelevation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vertical Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grade	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stopping Sight Distance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cross Slope	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vertical Clearance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lateral Offset to Obstruction	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	Appvl Date (if applicable)	NO	Undetermined
Access Control Median Opening Spacing	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Median Usage & Width	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Intersection Skew Angle	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Intersection Sight Distance	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bike & Pedestrian Accommodations	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
GDOT Drainage Manual	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Georgia Standard Drawings	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roundabout Illumination (if applicable)	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
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
U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Buffer Variance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FEMA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other Permits	<input type="checkbox"/>	<input type="checkbox"/>	
Other Commitments	<input type="checkbox"/>	<input type="checkbox"/>	
Other Coordination	<input type="checkbox"/>	<input type="checkbox"/>	

Is a PAR required? No Yes

NEPA/GEPA:

Categorical Exclusion anticipated, pending completion and approval of special studies.

Ecology:

[01/03/12] 12/15/11 - ISSR for archaeology and history sent to OES; 11/07/11 - No suitable T&E plant habitat. Aquatic survey complete. Expect draft aquatic and eco resource survey reports by late November/mid December. Need detailed design information/plans to complete the remaining tasks Resource surveys are complete, draft survey reports in progress.

Wetland impacts and Section 404 permit are anticipated.

Informal Section 7 consultation is anticipated. No protected species were found during aquatic survey of Little Swamp Creek, but the creek includes marginally suitable habitat for federal and state protected fish and mussels. Also, the confluence with Swamp Creek, which is a GDNR High Priority Stream, is approximately 0.4 mile downstream of the SR 3/US 41 bridge over Little Swamp, and several of the listed species are known to occur in Swamp Creek.

History:

Keeping History In-House.

Archeology:

Keeping Archeology In-House. (Plan to survey in April 2012)

Air & Noise:

Type III Noise Screening Assessment and Air Assessment are in progress. No impacts anticipated.

Public Involvement:

Since the project will be closing the roadway, public involvement (a PIOH) should be required.

Major stakeholders:

At least four homeowners, school and Utility companies.

Peer Review required: No Yes

CONSTRUCTION

Issues potentially affecting constructability/construction schedule.

The contractor should only close the roadway and have the detour in place during the summer months when school is not in session.

Early Completion Incentives recommended for consideration: No Yes

PROJECT RESPONSIBILITIES

Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT - District 6
Design	GDOT - District 6
Right-of-Way Acquisition	GDOT - District 6
Utility Relocation	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT - District 6
Providing Material Pits	GDOT - Contractor
Providing Detours	GDOT- District 6
Environmental Studies, Documents, and Permits	GDOT - District 6/Atlanta
Environmental Mitigation	GDOT – District 6/Atlanta
Construction Inspection & Materials Testing	GDOT- District 6

Lighting required: No Yes

Initial Concept Meeting: Held on December 6, 2011 at 10:00 A.M. in the District Six Office Conference Room. 500 Joe Frank Harris Parkway, Cartersville GA. 30120. Please see attached minutes.

Other projects in the area:

CSNHS-0007-00(897), P.I. 0007897, I-75 from S.R.156 to Carbondale Road, managed by Mike Haithcock, Anticipated Let Date: LR
 IMSTP-0075-03(208), P.I.610890, I-75 Interchange @ Carbondale Road, managed by Kimberly Nesbitt, Anticipated Let Date: 11/2013
 STP000-0001-06(046), P.I.632670, S.R.3 from S.R.136/Gordon to S.R.3 Conn/Whitfield, managed by Jeremy Busby, Anticipated Let Date: LR

Other coordination to date: N/A

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	Utility	CST*	Env. Mitigation	Total Cost
Latest Cost	\$645,637.84	\$206,000.00	\$67,484.00	\$1,097,000.00	unknown	\$2,016,121.84
Federal Match	\$516,510.27	\$164,800	\$53,987.20	\$905,259.68	unknown	\$1,640,557.15
State Match	\$129,127.57	\$41,200	\$13,496.80	\$226,314.92	unknown	\$410,139.29
Date of Estimate (Approved)	2008	2012	Unknown	2006	unknown	
Date of Estimate (Proposed)	2008	2012	Unknown	2012	unknown	

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

Comments:

Attachments:

1. Typical sections
2. Detour Map
3. Layout Sheet
4. Minutes of Concept meeting
5. Cost Estimates:
 - o Programmed Cost Estimate
 - o Detailed Cost Estimate
 - o Right-of-Way
 - o Utilities
6. Pavement studies
7. Traffic Data

APPROVALS

*

Concur:

Bill R. McMurry
Director of Engineering

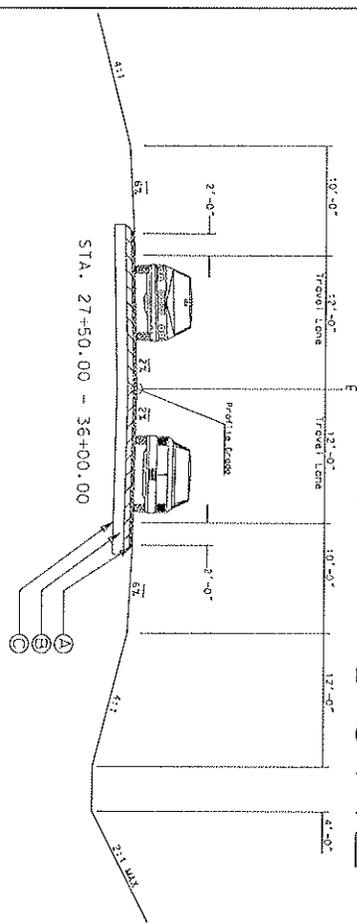
Approve:

Dee M. Pen
Chief Engineer

6-1-12
Date

* Design should minimize reconstruction of existing pavement as much as possible & consider overlay where possible.

TYPICAL SECTION



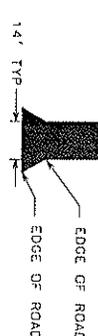
SLOPE CONTROLS	
SLOPE	CUT FILL
4:1	0-10'
2:1	ALL OVER 10'

S.R.3/U.S.41 @ Little Swamp Creek

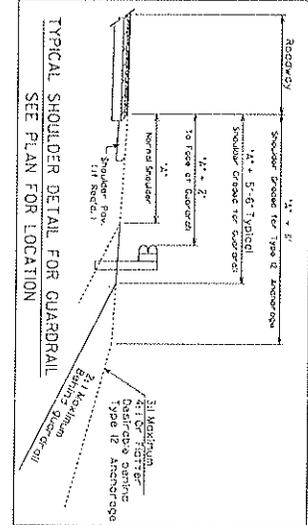
- (A) RECYCLED ASPHALTIC CONCRETE 12.5mm SUPERPAVE, GP 2 ONLY, INCL BITUM. MAT'L & H LIME (165 LBS/SY)
- (B) RECYCLED ASPHALTIC CONCRETE 19mm SUPERPAVE, GP 1 OR 2 ONLY, INCL BITUM. MAT'L & H LIME (220 LBS/SY), DESIGN LEVEL "A"
- (C) GRADED AGGREGATE BASE, INCL MAT'L, 110 INCHES

ASPHALTIC DRIVES: RECYC ASPH CONC SUPERPAVE 12.5mm, GP 2 ONLY, INCL BITUM MAT'L & H LIME (165 LBS/SY)
 GRADED AGGREGATE BASE COURSE, INCL MAT'L 6"
 CONCRETE DRIVES: DRIVEWAY CONC. - 6"

PAVE ALL DRIVES TO R/W OR TIE POINT
 WHICHEVER IS FURTHER FROM THE NORMAL
 EDGE OF PAVEMENT.
 ASPHALT & CONCRETE DRIVES
 ARE NOT TO BE PAVED TO PROVIDE
 A SHOULDER TIE-IN



NOTE: ALL DRIVES ARE ASPHALT UNLESS NOTED OTHERWISE



GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION



REVISION	DATE	DESCRIPTION

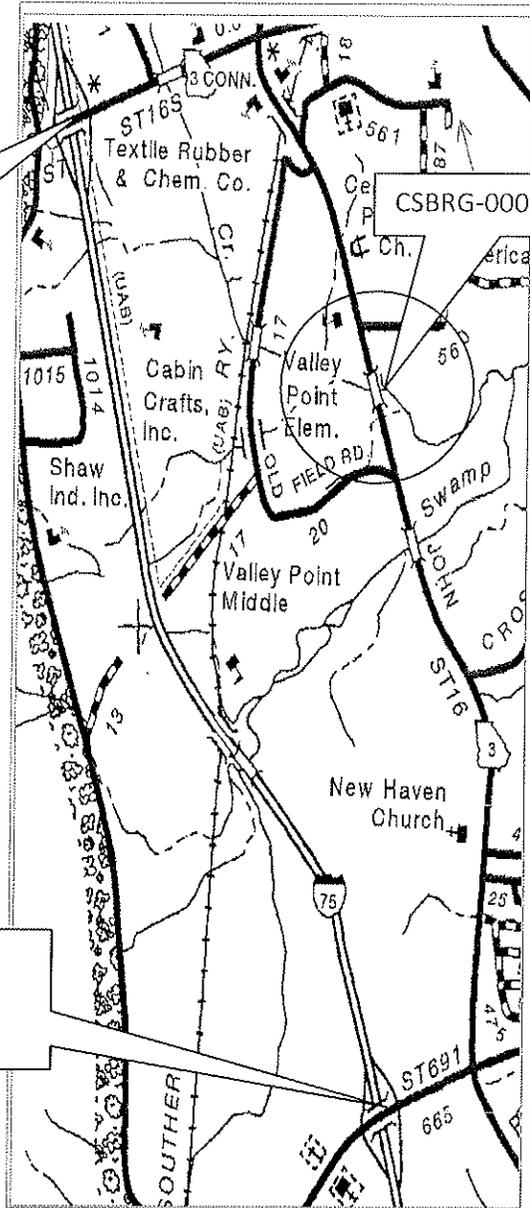
STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE: DISTRICT 6 ROAD DESIGN
 PROJECT: CSBR0-0008-00(584)
 COUNTY: WHITFIELD
 CURB REPLACEMENT ON
 S.R.3/U.S.41 AT LITTLE SWAMP CREEK

DESIGNED BY: [Name]
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

DETOUR Map

Project: CSBRG-0008-00(364)

S.R.3 to be closed during construction. Detour is diverted around the project from the South Dalton Bypass exit and I-75 to the Carbondale Road exit.



Detour Route
I-75 @ S.R.3 & South Dalton Bypass

Detour Route
I-75 @ S.R.3 & Carbondale Road

Concept Team Meeting Minutes

BY: Ryan Fernandez, GDOT Project Manager

DATE: December 6, 2011, 10:00 am, District 6 Office, Cartersville, GA

SUBJECT: SR 3 / US 41 @ Little Swamp Creek

ATTENDEES:

Ryan Fernandez	GDOT Project Mgr	404-631-1162	rfernandez@dot.ga.gov
Steve Malinak	GDOT D6 Design	770-387-3626	smalinak@dot.ga.gov
Jason Hightower	GDOT D6 Design	770-387-3626	jhightower@dot.ga.gov
Greg Hood	GDOT D6 Planning	770-387-3654	ghood@dot.ga.gov
Dee Corson	GDOT D6 Traffic Ops	770-387-3637	dcorson@dot.ga.gov
Kerry Bonner	GDOT D6 Utilities	770-387-3614	kbonner@dot.ga.gov
Daniel Monteith	GDOT D6 Utilities	770-387-3615	dmonteith@dot.ga.gov
Galen Barrow	GDOT D6 Env.	770-387-3685	gbarrow@dot.ga.gov
David Ray	GDOT D6 Design	770-387-3622	dray@dot.ga.gov
DeWayne Comer	GDOT D6 Asst. D.E.	770-387-3619	dcomer@dot.ga.gov
Rick Pendley	Charter	423-593-9584	rick.pendley@chartercom.com
Nathan Shadwick	Charter	706-463-8163	nathan.shadwick@chartecom.com
Daniel Hales	NGEMC	706-581-6630	dhales@ngemc.com
Brain Towers	NGEMC	706-259-3394	btowers@ngemc.com

- Jason started with a description of the project as follows:
 - Need and Purpose of the project is to replace the structurally deficient culvert located on SR 3/US 41 over Little Swamp Creek in Whitfield County.
 - The culvert was constructed in 1927 and consists of 3 – 10' x 9' barrels which are 32' in length.
 - The current sufficiency rating of the culvert is 43.23.
- Jason listed all the projects in or near the limits of this corridor:
 - PI: 000797, I-75 from SR 156 to Carbondale Road, Anticipated Let Date: LR
 - PI: 610890, I-75 Interchange @ Carbondale Road, Anticipated Let Date: 2013
 - PI: 632670, SR 3 from 136/Gordon to SR 3 Conn/Whitfield, Anticipated Let Date: LR
- Steve stated that an off-site detour will be in place during construction and utilize I-75 for the truck traffic. The locals will be able to use the county roads which will not be labeled by GDOT.
- DeWayne stated that the detour can only be in place during the summer months when the local schools are not in session.
- DeWayne stated that there needs to be coordination with the timing of the detour and the project at I-75 and Carbondale as to not have them at the same time.
- Steve stated that a full drainage / hydrology study will need to be completed to determine the sizing of the proposed culvert. Steve stated that an arched culvert may be recommended.
- DeWayne stated that if an arched culvert was recommended it would need approval from the Bridge Office.
- DeWayne stated that a Task Order may be implemented for the full drainage / hydrology study and report.
- DeWayne stated that the TVA needed to be contacted to determine if they will have any involvement.
- Galen stated that the environmental studies have started and Wilbur Smith is under a Task Order for those activities.
- Galen stated that Wilbur Smith needs the limits of the project to be identified in order to fully schedule their remaining activities.
- Galen stated a PIOH will need to be held for the proposed detour.
- Jason stated that the proposed alignment is to raise the existing grade approximately 1 foot, and the total project length was roughly 900 feet.
- Kerry stated the utilities are located on poles approximately 25 feet off the right of way. Once preliminary plans are available they will be sent to each utility company.
- The utility involvements are:
 - North Georgia EMC – electric
 - Dalton Utilities – electric, gas, sewer, and water
 - Windstream – telecommunications
 - Charter – cable TV
- Jason stated that there are approximately 7 parcels that will be affected for right of way
- DeWayne stated this project will not require a VE study
- DeWayne stated a variance needs to be considered to eliminate the need for the culvert to be designed for a bike path
- Jason stated the proposed typical section will be for a two lane road for 55 mph with guardrails.
- The Concept Team agreed that the new form will be used for the Concept Report.
- The meeting was adjourned.

1 % Construction Contingencies

** Costs contain

0 % Contingency

REASON FOR COST INCREASE

The reason for cost increase is due to cost of fuel. Another factor is the cost of materials increasing since the last cost estimate. This report is only an estimate.

CONTINGENCY SUMMARY

Construction Cost Estimate	\$1,031,599.51	(Base Estimate)
Engineering and Inspection	\$51,579.98	5 %
Construction Contingency	\$10,316.00	1 % (Based on Project Improvement Type in Tpr
Total Liquid AC Adjustment	\$3,306.05	

Construction Total \$1,097,000.00

Utility Cost Estimate \$67,484.00

Utility Total \$67,500.00

REIMBURSABLE UTILITY COST

Utility Owner
Windstream Comm.
Dalton Utilities (Gas)

Reimbursable Costs

Dalton Utilities (Water)
Dalton Utilities (Sewer)
Dalton Utilities (Electrical)
Dalton Utilities (Telecom)
Charter Communications
North Georgia EMC

\$67,484.00

c: Genetha Rice-Singleton, Assistant Director of Preconstruction
Angela Whitworth, Financial Management Administrator

PROJ. NO.	CSBRG-0008-00(364)
P.I. NO.	0008364
DATE	4/4/2012

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Mar-12	\$ 3.481
DIESEL		\$ 3.796
LIQUID AC		\$ 604.00

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

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)-0.05]xTMTxAPL

Asphalt

Price Adjustment (PA)			\$	3,264.86	\$	3,264.86
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	125%	\$	1,359.00		
Monthly Asphalt Cement Price month project let (APL)			\$	604.00		
Total Monthly Tonnage of asphalt cement (TMT)				4.5045		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm	20.79	5.0%	1.0395
9.5 mm SP		5.0%	0
25 mm SP	55.44	5.0%	2.772
19 mm SP	13.86	5.0%	0.693
	90.09		4.5045

BITUMINOUS TACK COAT

Price Adjustment (PA)			\$	41.19	\$	41.19
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	125%	\$	1,359.00		
Monthly Asphalt Cement Price month project let (APL)			\$	604.00		
Total Monthly Tonnage of asphalt cement (TMT)				0.056824185		

Bitum Tack		
Gals	gals/ton	tons
13.23	232.8234	0.056824185

TOTAL LIQUID AC ADJUSTMENT \$ **3,306.05**

STATE HIGHWAY AGENCY

DATE : 04/04/2012

PAGE : 1

JOB DETAIL ESTIMATE

JOB NUMBER : 0008364 SPEC YEAR: 01
 DESCRIPTION: CULVERT REPLACEMENT ON S.R.3/U.S.41 @ LITTLE SWAMP CREEK

ITEMS FOR JOB 0008364

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0001	150-1000	LS		TRAFFIC CONTROL - CSBRG-0008-00(364)	1.000	20000.00	20000.00
0003	207-0203	CY		FOUND BK FILL MATL, TP II	6.000	63.58	381.53
0004	210-0100	LS		GRADING COMPLETE - CSBRG-0008-00(364)	1.000	178010.00	178010.00
0005	310-1101	TN		GR AGGR BASE CRS, INCL MATL	2163.000	19.69	42606.08
0007	402-3141	TN		RECYL AC 12.5 MM SP, GP 1 OR 2, INCL BM	188.000	73.58	13833.04
0008	402-3190	TN		RECYL AC 19 MM SP, GP 1 OR 2, INC BM&HL	307.000	79.18	24309.39
0009	402-3121	TN		RECYL AC 25MM SP, GP1/2, BM&HL	461.000	71.15	32801.08
0010	413-1000	GL		BITUM TACK COAT	195.000	2.65	517.41
0011	500-3101	CY		CLASS A CONCRETE	643.000	285.02	183271.18
0012	511-1000	LB		BAR REINF STEEL	93472.000	0.73	68670.14
0013	603-7000	SY		PLASTIC FILTER FABRIC	35.000	4.40	154.28
0014	165-0041	LF		MAINT OF CHECK DAMS - ALL TYPES	700.000	1.16	817.17
0019	163-0527	EA		CNST/REM RIP RAP CKDM, STN P RIPRAP/SN	14.000	235.26	3293.68
0024	603-2012	SY		STN DUMPED RIP RAP, TP 1, 12"	35.000	58.00	2030.00
				STA.32+00 ~ 35+50			
0029	610-9099	LS		REM WINGWALLS/PARAPETS, STA - STA. 30+10, STA. 30+20.00, STA.30+30	1.000	4716.98	4716.98
0034	641-1200	LF		GUARDRAIL, TP W	600.000	17.46	10477.39
0039	641-5001	EA		GUARDRAIL ANCHORAGE, TP 1	2.000	713.16	1426.32
0044	641-5012	EA		GUARDRAIL ANCHORAGE, TP 12	2.000	1868.35	3736.70
0049	206-0002	CY		BORROW EXCAV, INCL MATL	17878.680	7.77	138920.56
0054	402-3121	TN		RECYL AC 25MM SP, GP1/2, BM&HL	460.670	71.15	32779.15
0059	634-1200	EA		RIGHT OF WAY MARKERS	22.000	113.59	2499.05
0064	654-1001	EA		RAISED PVMT MARKERS TP 1	11.000	5.17	56.93
0069	441-0016	SY		DRIVEWAY CONCRETE, 6 IN TK	7418.892	29.29	217350.39
0074	165-0101	EA		MAINT OF CONST EXIT	2.000	691.59	1383.19
0079	163-0300	EA		CONSTRUCTION EXIT	2.000	1077.35	2154.71
0084	163-0529	LF		CNST/REM TEMP SED BAR OR BLD STRW CK DM	910.000	3.14	2866.40
0089	163-0232	AC		TEMPORARY GRASSING	2.000	389.92	779.84
0094	715-2200	SY		BITUM TRTD ROVING, WATERWAYS	35.000	1.21	42.61
0099	163-0240	TN		MULCH	28.000	301.81	8450.84
0104	165-0030	LF		MAINT OF TEMP SILT FENCE, TP C	910.000	0.93	852.23
0109	167-1000	EA		WATER QUALITY MONITORING AND SAMPLING	18.000	557.16	10028.90
0114	167-1500	MO		WATER QUALITY INSPECTIONS	18.000	322.16	5798.90
0119	171-0030	LF		TEMPORARY SILT FENCE, TYPE C	910.000	2.87	2618.93
0129	165-0071	LF		MAINT OF SEDIMENT BARRIER - BALED STRAW	910.000	0.96	880.76
0139	719-1000	EA		SILT FILTER BAG	4.000	430.05	1720.23
0144	700-6910	AC		PERMANENT GRASSING	2.000	924.02	1848.05
0149	700-7000	TN		AGRICULTURAL LIME	5.000	102.42	512.14

0154	700-8000	TN	FERTILIZER MIXED GRADE	2.000	358.19	716.39
0159	700-8100	LB	FERTILIZER NITROGEN CONTENT	100.000	2.16	216.23
0164	716-2000	SY	EROSION CONTROL MATS, SLOPES	5057.000	0.92	4685.92
0169	636-1020	SF	HWY SGN,TP1MAT,REFL SH TP3	72.000	13.67	984.85
0174	636-5100	EA	MILEPOST SIGNS	2.000	177.70	355.41
0179	636-2070	LF	GALV STEEL POSTS, TP 7	52.000	8.63	449.15
0184	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	1700.000	0.47	811.99
0189	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	1700.000	0.46	783.39

ITEM TOTAL- 1,031,599.51

INFLATED ITEM TOTAL- 1,031,599.51

TOTALS FOR JOB 0008364

ESTIMATED COST: 1,031,599.51

CONTINGENCY PERCENT: 0.00

ESTIMATED TOTAL: 1031599.51

**Department of Transportation
State of Georgia**

Interdepartmental Correspondence

FILE R/W Cost Estimate **OFFICE** Atlanta
DATE January 30, 2012
FROM Phil Copeland, Right of Way Administrator
LaShone Alexander, Right of Way Cost Estimator
TO Pam Digsby, RW Team Manager
SUBJECT Preliminary Right of Way Cost Estimate

Project: CSBRG-0008-00(364) Whitfield County

P.I. No.: 0008364

Description: SR3 US 1 @ Little Swamp Creek Culvert Replacement Project

As per your request, attached is a copy of the approved Preliminary Right of Way Cost Estimates on the above referenced projects.

If you have any questions, please contact LaShone Alexander at

One Georgia Center 600 West Parkway Street, NW Atlanta, GA 30308,

Right of Way Office at (478) 553-1569 or (478) 232-4045.

PC:LA

Attachments

c: File

c: All Attendees

Date: 1/24/2012

Project: CSBRG-0008-00(364)

Revised:

County: Whitfield

PI: 0008364

Description: Bridge Culvert Replacement on SR 3/US 41 at Little Swamp Creek
Project Termini: 27+50 -36+00

Parcels: 7

Existing ROW: 60'
Required ROW: 120'

Land and Improvements

\$39,052.50

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$0.00

Valuation Services \$8,500.00

Legal Services \$79,725.00

Relocation \$14,000.00

Demolition \$0.00

Administrative \$64,000.00

TOTAL ESTIMATED COSTS \$205,277.50

TOTAL ESTIMATED COSTS (ROUNDED) \$206,000.00

Preparation Credits	Hours			Signature

Prepared By : _____ CG#: _____ (DATE) _____

Approved By : _____ CG#: _____ (DATE) _____

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

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 1/24/2012 Project: CSBRG-0008-00(364)
 Revised: County: Whitfield
 PI: 8364

Description: Bridge Culvert Replacement on SR 3/US 41 at Little Swamp Creek
 Project Termin:

Parcels: 7 Existing ROW:
 Required ROW:

Land and Improvements \$39,052.50

Proximity Damage \$0.00

Consequential Damage \$0.00

Cost to Cure \$0.00

Trade Features \$0.00

Improvements \$0.00

Valuation Services \$8,500.00

Legal Services \$79,725.00

Relocation \$14,000.00

Demolition \$0.00

Administrative \$64,000.00

TOTAL ESTIMATED COSTS \$205,277.50

TOTAL ESTIMATED COSTS (ROUNDED) *\$206,000.00*

Preparation Credits	Hours	Signature

Prepared By: Kim Dinal CG#: 6559 (DATE) 1/24/12
 Approved By: Debra Reynolds CG#: 2818999 (DATE) 1/30/12

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE CSBRG-0008-00(364); Whitfield Co. OFFICE Cartersville
SR 3 @ Little Swamp Creek
P.I. No. 0008364 DATE February 28, 2012

FROM  Kerry D. Bonner
District Utilities Engineer

TO Bobby Hilliard, P.E., Office of Program Delivery
ATTN Ryan Fernandez, Project Manager

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

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

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
Windstream Comm.	\$ 50,000.00	
Dalton Utilities (Gas)	\$ 10,000.00	
Dalton Utilities (Water)	\$ 52,820.00	
Dalton Utilities (Sewer)	\$ 10,000.00	
Dalton Utilities (Electrical)	\$ 10,000.00	
Dalton Utilities (Telcom)	\$ 10,000.00	
Charter Communications	\$ 50,000.00	
North Georgia EMC		\$ 67,484.00
Totals	\$192,820.00	\$ 67,484.00

Total Preliminary Utility Cost Estimate \$260,304.00.

If you have any questions, please contact Jennifer Deems at 770-387-3616.

KDB/jd

C: Jeff Baker, P. E., State Utilities Engineer (via e-mail)
File/Estimating Book

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: CSBRG-0008-00(364) County: Whitfield
 P.I. no.: 0008364
 Description: Culvert replacement @ Little Swamp Creek

Traffic Data (NOTE: AADTs are one-way)
 24-hour Truck Percentage: 13.00%
 AADT initial year of design period: 9,300 vpd (2015)
 AADT final year of design period: 11,400 vpd (2035)
 Mean AADT (one-way): 10,350 vpd

Design Loading
 Mean AADT LDF Trucks 18-K ESAL Total Daily Loads
 10,350 * 1.00 * 0.130 * 1.50 = 2,019

Total predicted design period loading = 2019 * 20 * 365 = 14,738,700

Design Data
 Terminal Serviceability Index: 2.50
 Soil Support: 2.00
 Regional Factor: 2.00

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness Inches	Thickness (mm)	Structural Coefficient	Structural Value
9.5 mm Superpave	0.25	(6)	0.44	0.11
19 mm Superpave	2.00	(51)	0.44	0.88
25 mm Superpave	2.25	(57)	0.44	0.99
	4.75	(121)	0.30	1.43
Graded Aggregate Base	12.00	(305)	0.16	1.92
Required SN = 7.12			Proposed SN = 5.33	

>>> Proposed pavement is 25.1% Underdesigned <<<

Remarks:

Prepared by Jason Hightower January 17, 2012
 Design Engineer I Date

Recommended _____
 Office Head Date

Approved _____
 State Pavement Engineer Date

NO BUILD ADT = BUILD ADT
Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE CSBRG-0008-00(364), Whitfield County
P.I. # 0008364

OFFICE Planning
DATE May 10, 2011

FROM Cindy VanDyke, State Transportation Planning Administrator

TO Bobby K. Hilliard, P.E., State Program Delivery Engineer

Attention: Ryan Fernandez

SUBJECT : Traffic Assignment for S.R. 3/U.S. 41 @ Little Swamp Creek.

We are furnishing estimated Traffic Assignment for the above project is as follows:

2011 AADT = 8700
2015 AADT = 9300
2035 AADT = 11400
2011 DHV = 1130
2015 DHV = 1210
2035 DHV = 1485
K = 13%
D = 70%
T. = 13%
S.U. T = 5.5%
COMB. T = 7.5%
24 HOUR T = 13%
S.U. = 7.5%
COMB. = 5.5%

If you have any questions concerning this information please contact Leslie Woods at (404) 631-1773 or Kunle Adebola (404) 631-1959.