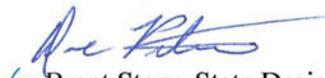


ORIGINAL TO GENERAL FILES

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. #0007169 **OFFICE** Design Policy & Support
CSBRG-0007-00(169)
GDOT District 1 - Gainesville
Dawson County **DATE** July 7, 2011
SR 136 Etowah River 5.7 MI East of Dawsonville

FROM  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:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Todd McDuffie, District Engineer
Robert Mahoney, District Preconstruction Engineer
Allen Ferguson, District Utilities Engineer
Laura Dixon, District Environmentalist
Hiral Patel, Project Manager
BOARD MEMBER - 9th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

PROJECT CONCEPT REPORT
Project Number: CSBG-0007-00(169)
County: Dawson
P. I. Number: 0007169
Federal Route Number: N/A
State Route Number: 136

**SR 136 @ Etowah River 5.7 MI East of Dawsonville
Bridge Replacement**
(Note: Project Location Map on Following Page)

Submitted for approval:

DATE 3/30/11

DATE 4/5/2011

DATE 4/05/2011

Neil W. Kanton
Design Phase Office Head
Bobby Hubbard
Office Head (Project Manager's Office)
Neal Kite
Project Manager

Recommendation for approval:

DATE 5-17-11

DATE 4-26-11

DATE 4-7-11

DATE 4-5-11

DATE _____

DATE 4-11-11

DATE 6-2-11

DATE _____

Genetha Rice-Singleton * / KLP
Program Control Administrator
Glenn Bowman * / KLP
State Environmental Administrator
Kathy Zahul * / KLP
State Traffic Engineer
Ron Wishon * / KLP
Project Review Engineer
Allen Ferguson * / KLP
State Utilities Engineer
District Engineer / District Utilities Engineer
Ben Rabun * / KLP
State Bridge Design Engineer
State Transportation Financial Management Administrator

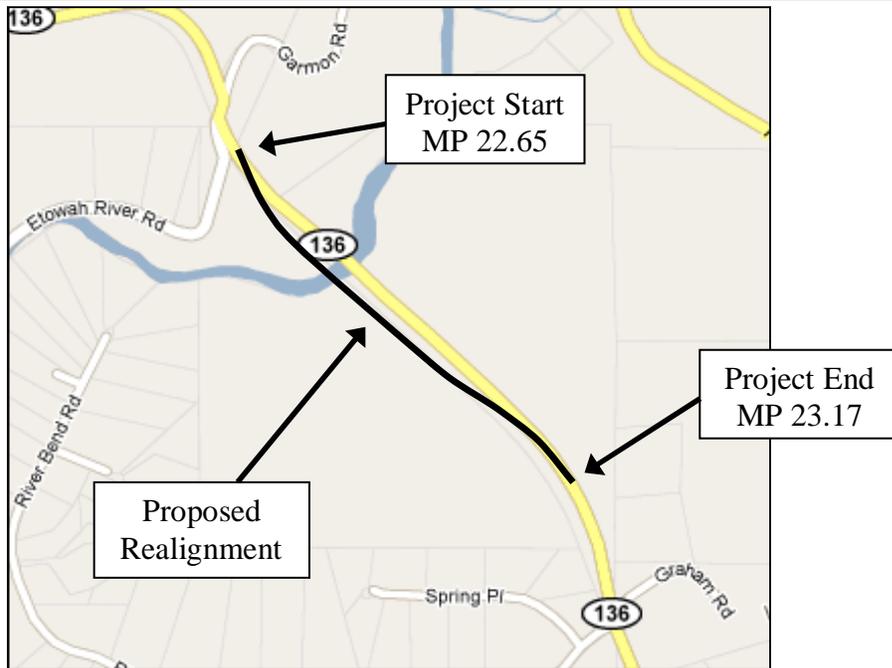
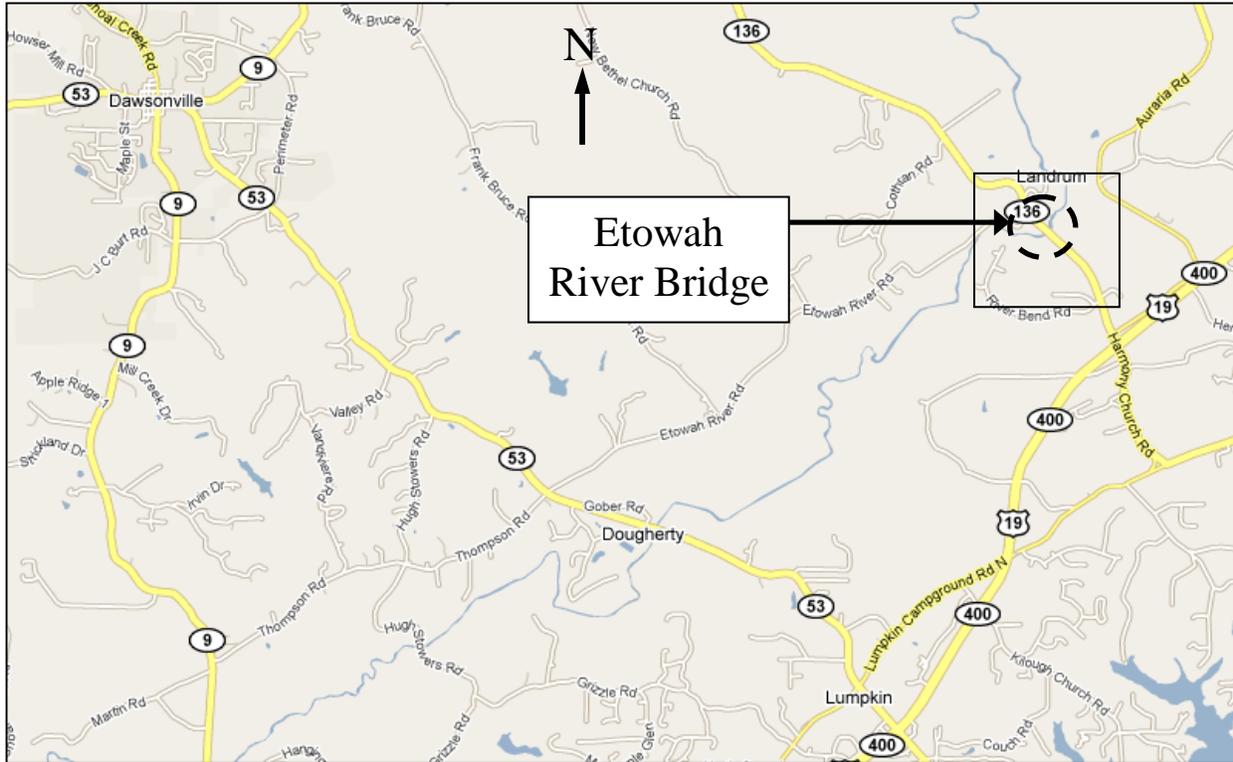
The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 4-11-11

Cynthia S. Nungesser
State Transportation Planning Administrator

* Recommendation on file

Project Concept Report, Page 1 of 6
Project Number: CSBRG-0007-00(169)
P. I. Number: 0007169
County: Dawson



Project Location Map
Bridge Replacement on SR 136 at Etowah River
Dawson County

Project Concept Report, Page 2 of 6
Project Number: CSBRG-0007-00(169)
P. I. Number: 0007169
County: Dawson

Need and Purpose

This Bridge (Structure ID 085-0018-0) was built in 1965 and consists of 4 steel beam spans. The substructure consists of a concrete cap on concrete columns with spread footings (1 bent); also a concrete cap on steel piles (4 bents). The bridge was designed with typical loading of H15-44 specifications and has a calculated carrying capacity of less than HS-20. This bridge currently is posted and has a Sufficiency Rating of 47.62. The deck shows transverse cracking in all spans, in conjunction with moderate scaling and spalls in spans 2 and 5 with exposed rebar. The beams are showing minor to moderate deflection. The substructure is in good condition; however the steel piles are HP 10 x 42. These piles are one of the main factors pertaining to the posting of this bridge. Replacement of this functionally obsolete bridge is recommended.

Description of the proposed project: The proposed project will be to build a new bridge downstream (south) of the current bridge, realign the roadway to the new bridge, and remove the existing bridge. The proposed project length is 2,734 ft which extends approximately 1,110 ft North-West and 1,500 ft South-East from MP 22.65 to MP 23.17 with the bridge being approximately 200 ft long. It is located in Dawson County about 5.7 miles east of Dawsonville. The relocated bridge is the minimum required 50 ft offset of the existing bridge (Centerline to Centerline) and the roadway segments on either side have minor curvature change for a seamless tie-in to the existing. By realigning the road we negate the costs of constructing a detour bridge which saves roughly \$500,000. The downstream (south) side was chosen as the preferred alternative because the construction cost was shown to be roughly \$600,000 less in earthwork and \$100,000 less in right of way than the upstream alternative. The road and bridge will continue to be a rural two lane, 55 mph corridor.

Is the project located in a PM 2.5 Non-attainment area? _____ Yes X No

Is this project located in an Ozone Non-attainment area? _____ Yes X No

PDP Classification: Major _____ Minor X

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

Functional Classification: Rural Major Collector

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

State Route Number(s): 136

Traffic (AADT):

Current Year: (2011) – 3,750

Base Year (2016) – 4,250

Design Year: (2036) – 7,000

Existing design features:

- Typical Section: Two (2) 12-foot lanes
2' Paved Shoulder
- Posted speed: 55 mph
- Minimum radius for curve: 825'
- Maximum super-elevation rate for curve: 6% +/-
- Maximum grade: 8%
- Width of right-of-way: Varies 50' (+/-) to 145' (+/-)
- Major structures: Etowah River Bridge
Structure ID: 085-0018-0
196 ft long by 25.9 ft roadway width
Sufficiency Rating: 47.62
- Major interchanges or intersections along the project: N/A
- Project extends along State Route 136 for 0.518 miles (MP 22.65 to MP 23.17).

Proposed Design Features:

Mainline Alignment

- Proposed typical Section(s): Two (2) 12-foot lanes
4' Paved Shoulder
6' Earth Shoulder
- Proposed Design Speed Mainline: 55 mph
- Proposed Maximum grade Mainline: 8%
- Maximum grade allowable: 9%
- Proposed Maximum grade Side Street: N/A
- Maximum grade allowable: N/A
- Proposed Maximum grade Driveway: N/A
- Proposed Minimum radius of curve: 1273 ft
- Minimum radius allowable: 1060 ft
- Maximum allowable super elevation rate: 6%
- Proposed maximum super elevation rate: 5%
- Right-of-Way
 - Width: Varies 50' (+/-) to 215' (+/-)
 - Easements: Temporary (X), Permanent (X), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 8 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Structures:
 - Bridges: 240 ft long, 40 ft wide , 2-Lane, Sufficiency Rating: 100
 - Retaining walls: None
- Major intersections, interchanges, median openings and signal locations: None

Project Number: CSBRG-0007-00(169)

P. I. Number: 0007169

County: Dawson

- Transportation Management Plan Anticipated: Yes () No (X)

- Design Exceptions to controlling criteria anticipated:

	<u>Yes</u>	<u>No</u>	<u>Undetermined</u>
1. DESIGN SPEED:	()	(X)	()
2. LANE WIDTH:	()	(X)	()
3. SHOULDER WIDTH:	()	(X)	()
4. BRIDGE WIDTH:	()	(X)	()
5. HORIZONTAL ALIGNMENT:	()	(X)	()
6. SUPER ELEVATION:	()	(X)	()
7. VERTICAL ALIGNMENT:	()	(X)	()
8. GRADE:	()	(X)	()
9. STOPPING SIGHT DISTANCE:	()	(X)	()
10. CROSS SLOPE:	()	(X)	()
11. VERTICAL CLEARANCE:	()	(X)	()
12. LATERAL OFFSET TO OBSTRUCTION:	()	(X)	()
13. BRIDGE STRUCTURAL CAPACITY	()	(X)	()

- Design Exceptions: N/A
- Design Variances: N/A
- Environmental concerns: Potential Location For Aquatic Species (ie Etowah Darter)
Stream Impacts
Potential IP
- Anticipated Level of Environmental Analysis:
 - Are Time Savings Procedures appropriate? Yes (X), No (),
 - Categorical Exclusion (X),
 - Enviro Assessment/Finding of No Significant Impact anticipated (FONSI) (),
 - Enviro Impact Statement (EIS) ().
- Utility involvements:
 - Windstream Communications
- Public Interest Determination Policy and Procedure Required? Yes (), No (X)
- VE Study Anticipated Yes () No (X)
- Benefit/Cost Ratio: N/A

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST	MITIGATION
By Whom	GDOT	GDOT	GDOT	GDOT	GDOT
\$ Amount	\$266,200.00	\$257,900	\$0	\$3,360,051.45	\$253,000

**CST Cost includes: Construction, Engineering and Inspection, Fuel Cost Adjustment, and Asphalt Cement Cost Adjustment*

Project responsibilities:

- Design: GDOT – District 1
- Right-of-Way Acquisition: GDOT – District 1
- Right-of-Way funding (real property) GDOT
- Relocation of Utilities: GDOT – District 1
- Letting to contract: GDOT

Project Concept Report, Page 5 of 6
Project Number: CSBRG-0007-00(169)
P. I. Number: 0007169
County: Dawson

- Supervision of construction: GDOT – District 1
- Providing material pits: GDOT / Contractor
- Providing detours: GDOT – District 1
- Environmental Studies/Documents/Permits GDOT – District 1
- Environmental Mitigation GDOT – District 1

Coordination

- Initial Concept Meeting date and brief summary. Attach minutes
- Concept meeting date and brief summary: Attach minutes
- P A R meetings, dates and results: TBD
- FEMA, USCG, and/or TVA: N/A
- Public involvement: N/A
- Railroads: N/A
- Local Government Commitments: N/A
- Other projects in the area: N/A
- Railroads: N/A
- Peer Review documentation: N/A

Scheduling – Responsible Parties’ Estimate

- Time to complete the environmental process: Begin: June ’10 End: Dec ’12
- Time to complete preliminary construction plans: Begin: May ’11 End: June ’12
- Time to complete right-of-way plans: Begin: July ’12 End: Oct ’12
- Time to complete the Section 404 Permit: Begin: Jan ’13 End: June ’13
- Time to complete final construction plans: Begin: Sept ’12 End: July ’13
- Time to complete to purchase right-of-way: Begin: Dec ’12 End: June ’14

Other alternates considered:

Detour Traffic and Reconstruct In-Place: This alternative was considered due to not having to construct any temporary detour bridge or additional pavement for a re-alignment. However the nearest detour available using SR 53 is approximately 17.5 miles in length and the detour would need to be in place for an extended period for the bridge to be constructed. Due to the excessive length of the detour and necessary duration of the detour it was not considered feasible.

Existing Alignment with Detour Bridge on Upstream Side: This alternative was considered due to the appearance of more favorable cut-vs.-fill earthwork condition of the large cut of the hill to the East with the large fill depression in the North-East. Further analysis showed that the cut was approximately four times as much as the fill and increased the earthwork costs by about \$600,000 more than the downstream option.

Existing Alignment with Detour Bridge on Downstream Side: This alternative was considered because of the Bridge and Structures Design Policy Manual recommendation that temporary bridges be located downstream of the proposed structure. This is to ensure the

Project Concept Report, Page 6 of 6
Project Number: CSBRG-0007-00(169)
P. I. Number: 0007169
County: Dawson

stability of the existing/proposed bridge in the event the temporary detour bridge fails during a design flood. Of the detour options this alignment is more favorable; however with the \$500,000 cost of a detour bridge alone, having to build only one permanent bridge was more economical.

Realign new Bridge and Roadway on Upstream Side: By realigning the roadway to the north we eliminate the need for a temporary detour bridge and the savings offsets the costs of the additional right of way, earthwork, and pavement of a permanent alignment. This alternative was considered due to the appearance of more favorable cut-vs.-fill earthwork condition of the large cut of the hill to the East with the large fill depression in the North-East. Further analysis showed that the cut was approximately four times as much as the fill and increased the earthwork costs by about \$600,000 more than the downstream option.

No-Build: This alternative would not address the need and purpose.

Comments: (none)

Attachments:

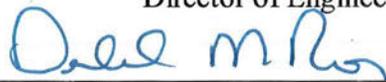
1. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection.
 - b. CES Estimate.
 - c. Completed Fuel & Asphalt Price Adjustment forms.
 - d. Right-of-Way.
 - e. Utilities.
 - f. Environmental Mitigation (EPD, etc)
2. Typical sections.
3. Traffic diagrams.
4. Bridge inventory.
5. Minutes of Initial Concept Team Meeting.
6. Minutes of Concept Team Meeting.

Concur:



Director of Engineering

Approve:



Chief Engineer

Date: July 7, 2011

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)

LAST ESTIMATE UPDATE

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ 2,799,719.61	(Base Estimate)
Engineering and Inspection:	\$ 139,985.98	(Base Estimate x 5 %)
Total Fuel Adjustment	\$ 250,248.94	(From attached worksheet)
Total Liquid AC Adjustment	\$ 170,096.92	(From attached worksheet)
Construction Total:	\$ 3,360,051.45	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

Windstream Communications

0

Attachments

c: Genetha Rice-Singleton, State Program Control Administrator

DETAILED COST ESTIMATE

JOB NUMBER: 0007169_DSGN1

FED/STATE PROJECT NUMBER CSBRG-0007-00(169)

SPEC YEAR: 01

ENGINEERING AND INSPECTION:

DESCRIPTION: ESTIMATE FOR BRIDGE REPLACEMENT ON S.R. 136
BRIDGE OVER ETOWAH RIVER 5.7 MI EAST OF DAWSONVILLE

ITEMS FOR JOB 0007169_DSGN1

0010 - ROADWAY

LINE	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	\$15,000.00	TRAFFIC CONTROL - TRAFFIC CTRL	\$15,000.00
0010	153-1300	1.000	EA	\$67,184.84	FIELD ENGINEERS OFFICE TP 3	\$67,184.84
0015	210-0100	1.000	LS	\$697,500.00	GRADING COMPLETE - GRADING COMPLETE	\$697,500.00
0020	433-1000	320.000	SY	\$147.99	REINF CONC APPROACH SLAB	\$47,355.79
0025	620-0200	9000.000	LF	\$35.55	TEMP BARRIER, METHOD NO. 2	\$319,962.87
0030	634-1200	30.000	EA	\$112.53	RIGHT OF WAY MARKERS	\$3,375.96
0035	641-1100	83.000	LF	\$58.74	GUARDRAIL, TP T	\$4,875.57
0040	641-1200	2000.000	LF	\$15.49	GUARDRAIL, TP W	\$30,988.12
0045	641-5001	4.000	EA	\$684.10	GUARDRAIL ANCHORAGE, TP 1	\$2,736.40
0050	641-5012	4.000	EA	\$1,815.71	GUARDRAIL ANCHORAGE, TP 12	\$7,262.84
Total for ROADWAY						\$1,196,242.39

0020 - PAVEMENT

LINE	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0055	310-1101	5800.000	TN	\$20.72	GR AGGR BASE CRS, INCL MATL	\$120,176.00
0075	402-3103	600.000	TN	\$70.12	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	\$42,072.49
0060	402-3121	3000.000	TN	\$59.75	RECYL AC 25MM SP,GP1/2,BM&HL	\$179,236.02
0070	402-3190	1000.000	TN	\$63.61	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	\$63,607.76
0080	413-1000	100.000	GL	\$2.55	BITUM TACK COAT	\$254.60
Total for PAVEMENT						\$405,346.87

0030 - SIGNING & MARKING

LINE	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0085	653-1501	2800.000	LF	\$0.53	THERMO SOLID TRAF ST 5 IN, WHI	\$1,494.39
0090	653-1502	2800.000	LF	\$0.49	THERMO SOLID TRAF ST, 5 IN YEL	\$1,377.54
0095	654-1001	57.000	EA	\$4.85	RAISED PVMT MARKERS TP 1	\$276.49
Total for SIGNING & MARKING						\$3,148.42

0040 - BRIDGE REPLACEMENT

LINE	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0100	540-1102	1.000	LS	\$177,680.00	REM OF EX BR, BR NO - REMOVAL OF BRIDGE	\$177,680.00
0110	543-9000	1.000	LS	\$960,000.00	CONSTR OF BRIDGE COMPLETE - CONSTR OF BRIDGE	\$960,000.00
Total for BRIDGE REPLACEMENT						\$1,137,680.00

0050 - EROSION CONTROL

LINE	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0115	163-0232	3.000	AC	\$334.83	TEMPORARY GRASSING	\$1,004.48
0120	163-0240	6.000	TN	\$280.69	MULCH	\$1,684.17
0125	163-0300	2.000	EA	\$1,187.76	CONSTRUCTION EXIT	\$2,375.52
0130	163-0530	210.000	LF	\$4.00	CONSTR AND REMOVE BALED STRW EROSION CHK	\$840.00
0135	165-0030	9000.000	LF	\$0.72	MAINT OF TEMP SILT FENCE, TP C	\$6,510.51
0140	165-0050	210.000	LF	\$1.72	MAINT OF SILT RETENTION BARRIER	\$361.11
0145	165-0070	210.000	LF	\$1.50	MAINT OF BALED STRAW EROSION CHECK	\$315.00
0150	165-0101	2.000	EA	\$607.75	MAINT OF CONST EXIT	\$1,215.50

DETAILED COST ESTIMATE

LINE	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0155	167-1000	1.000	EA	\$232.45	WATER QUALITY MONITORING AND SAMPLING	\$232.45
0160	167-1500	18.000	MO	\$362.50	WATER QUALITY INSPECTIONS	\$6,525.00
0165	170-1000	240.000	LF	\$11.03	FLOAT SILT RETENTION BARRIER	\$2,647.20
0170	171-0030	9000.000	LF	\$2.57	TEMPORARY SILT FENCE, TYPE C	\$23,166.09
0190	700-6910	2.000	AC	\$569.04	PERMANENT GRASSING	\$1,138.08
0195	700-7000	6.000	TN	\$72.68	AGRICULTURAL LIME	\$436.11
0200	700-7010	6.000	GL	\$21.40	LIQUID LIME	\$128.39
0205	700-8000	2.000	TN	\$446.32	FERTILIZER MIXED GRADE	\$892.65
0210	700-8100	84.000	LB	\$2.19	FERTILIZER NITROGEN CONTENT	\$183.65
0215	716-2000	8400.000	SY	\$0.91	EROSION CONTROL MATS, SLOPES	\$7,646.02
Total for EROSION CONTROL						\$57,301.93

GRAND TOTAL FOR JOB 0007169_DSGN1 \$2,799,719.61

TOTALS FOR JOB 0007169_DSGN1

ESTIMATED COST:	\$2,799,719.61
CONTINGENCY PERCENT (0.0):	0.00
ENGINEERING AND INSPECTION (0.0):	0.00
ESTIMATED TOTAL:	\$2,799,719.61

Special Provision, Section 109-Measurement and Payment
FUEL PRICE ADJUSTMENT (*ENGLISH 125% MAX*)

ENTER FPL DIESEL	3.923
ENTER FPM DIESEL	8.827

ENTER FPL UNLEADED	3.664
ENTER FPM UNLEADED	8.244

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)	28263.980	0.29	8196.55	0.15	4239.60	
Excavations paid as specified by Sections 206 (CUBIC YARD)	57392.840	0.29	16643.92	0.15	8608.93	
GAB paid as specified by the ton under Section 310 (TON)	4354.000	0.29	1262.66	0.24	1044.96	
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)	4600.000	2.90	13340.00	0.71	3266.00	
PCC Pavement paid as specified by the square yard under Section 430 (SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
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Stru Steel <u>Plan Quantity</u> (LB) Section 501				8.00		1.50		
Stru Steel <u>Plan Quantity</u> (LB) Section 501				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
Stru Reinf <u>Plan Quantity</u> (LB) Section 511				8.00		1.50		
Stru Reinf <u>Plan Quantity</u> (LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Drilled Caisson,____ (LF) Section 524				8.00		1.50		
Drilled Caisson,____ (LF) Section 524				8.00		1.50		
Drilled Caisson,____ (LF) Section 524				8.00		1.50		
Pile Encasement,____(LF) Section 547				8.00		1.50		
Pile Encasement,____(LF) Section 547				8.00		1.50		

SUM QF DIESEL=	39443.14	SUM QF UNLEADED=	17159.48
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DIESEL PRICE ADJUSTMENT(\$)	\$177,945.74
UNLEADED PRICE ADJUSTMENT(\$)	\$72,303.20

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

ENTER APL

ENTER APM

125.00%	INCREASE ADJUSTMENT
----------------	----------------------------

Use this side for Asphalt Emulsion Only		
L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)
TMT =		<input style="width: 100px;" type="text"/>
REMARKS:		

Use this side for Asphalt Cement Only		
L.I.N.	TYPE	TACK (GALLONS)
413-1000	PG 58-22	100
TMT =		<input style="width: 100px;" type="text" value="0.4295"/>
REMARKS:		

MONTHLY PRICE ADJUSTMENT(\$)	\$316.46
-------------------------------------	-----------------

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT (*ENGLISH 125% MAX*)

DIESEL PRICE ADJUSTMENT(\$) \$177,945.74

UNLEADED PRICE ADJUSTMENT(\$) \$72,303.20

ASPHALT CEMENT PRICE ADJUSTMENT (*BITUMINOUS TACK COAT 125% MAX*) \$316.46

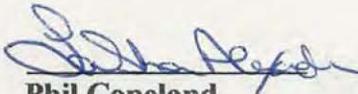
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT *125% MAX* \$169,464.00

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(*Surface Treatment 125% MAX*) \$316.46

REMARKS:	
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TOTAL ADJUSTMENTS	\$420,345.87
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Preliminary Right of Way Cost Estimate



Phil Copeland
 Right of Way Administrator
 By: LaShone B. Alexander

Date: September 28, 2010

Project: CSBRG-0007-00(169) Dawson 1

P.L Number: 0007169

Existing/Required R/W: Varies/Varies

No. Parcels: 5

Project Termini: Etowah River Bridge replacement on SR 136 in Dawson county

Project Description: Etowah River Bridge replacement on SR 136 in Dawson county

Land:

Agricultural	2.867 acre @ \$ 23,000/acre	\$ 65,941
Residential	0.277 acre @ \$ 47,000/acre	\$ 13,019
		<u>\$ 78,960</u>

Improvements : misc. site improvements \$ 25,000

Relocation: Commercial (0) \$25,000 = \$
 Residential (0) \$40,000 = _____
 \$

Damage : Proximity \$
 Consequential \$
 Cost to Cure \$

Net Cost \$ 103960

Net Cost		\$ 103960
Scheduling Contingency	55 %	57178
Adm/Court Cost	60 %	<u>96682</u>
		\$ 257,820

Total Cost \$ 257,900

Note: The Market Appreciation (40%) is not included in the updated Preliminary Cost Estimate.

Patel, Hiral

From: Dixon, Laura
Sent: Monday, May 23, 2011 5:30 PM
To: Patel, Hiral
Cc: Aaron Caldwell
Subject: ballpark mitigation estimate

For the Dawson 0007169 project, the breakdown is as follows:

3982.6 stream credits needed X \$63.50 per credit=\$252,895.10
Estimate= \$253,000

Laura Dixon

District Environmentalist
District 1-Gainesville
2505 Athens Highway SE
Gainesville, GA 30507
770-532-5582

ALLOWABLE RANGES TABLE

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

A. NORMAL CROWN

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

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

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

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

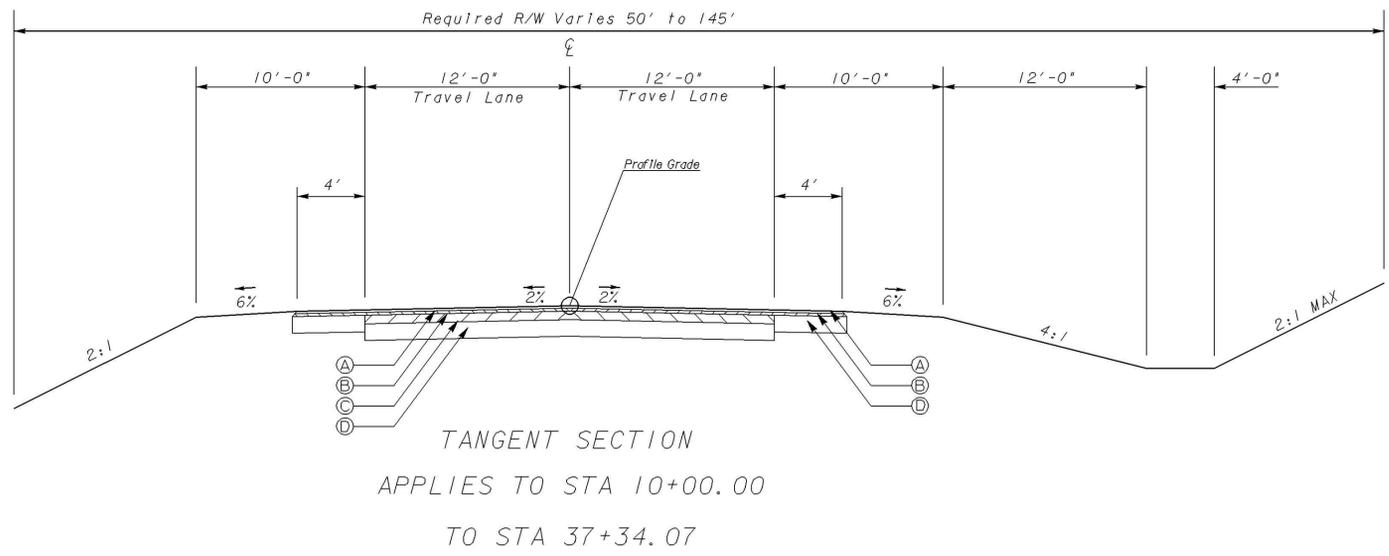
LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

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

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

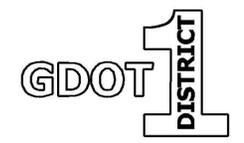
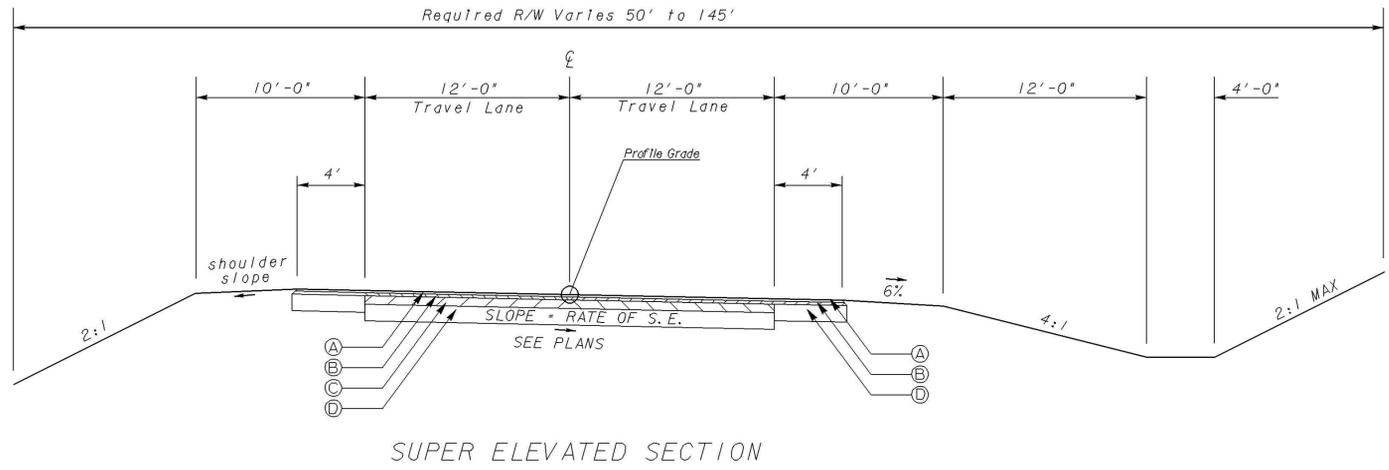
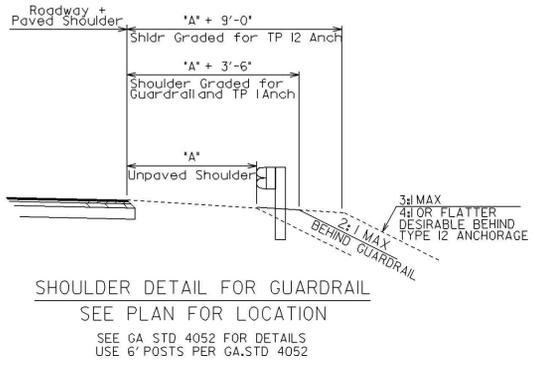
E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).



S. E. RATE	shoulder slope
2.0% OR 3.0%	4.0%
4.0% OR 5.0%	2.0%
6.0% OR 7.0%	1.0%
8.0% +	0.0%

- Ⓐ 9.5 mm SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL AND H LIME, 135 LB/SY
- Ⓑ 19 mm SUPERPAVE, GP 1 OR II, INCL BITUM MATL AND H LIME, 220 LB/SY
- Ⓒ 25 mm SUPERPAVE, GP 1 OR II, INCL BITUM MATL AND H LIME, 880 LB/SY
- Ⓓ GRADED AGGREGATE BASE COURSE, INCL MATL, 12 IN

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



NOTE: NOT TO SCALE

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: DISTRICT ONE DESIGN
	TYPICAL SECTIONS
	SR 136 @ ETOWAH RIVER
	DRAWING No. 5-01

Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:085-0018-0

Dawson

SUFF. RATING: 47.62

Location & Geography

Structure ID: 085-0018-0
 200 Bridge Information: 06
 *6A Feature Int: ETOWAH RIVER
 *6B Critical Bridge: 0
 *7A Route No Carried: SR00136
 *7B Facility Carried: SR 136
 9 Location: 5.7 MI E OF DAWSONVILLE
 2 Dot District: 1
 207 Year Photo: 2009
 *91 Inspection Frequency: 24 Date: 08/03/2009
 92A Fract Crit Insp Freq: 0 Date: 02/01/1901
 92B Underwater Insp Freq: 2 Date: 11/01/2010
 92C Other Spc. Insp Freq: 0 Date: 02/01/1901
 * 4 Place Code: 00000
 *5 Inventory Route(O/U): 1
 Type: 3
 Designation: 1
 Number: 00136
 Direction: 0
 *16 Latitude: 34 -24.5453 HMMS Prefix:SR
 *17 Longitude: 84 -01.1967 HMMS Suffix:00 MP:23.00
 98 Border Bridge: 000%Shared:00
 99 ID Number: 0000000000000000
 *100 STRAHNET: 0
 12 Base Highway Network: 1
 13A LRS Inventory Route: 851013600
 13B Sub Inventory Route: 0
 101 parallel Structure: N
 *102 Direction of Traffic: 2
 *264 Road Inventory Mile Post: 023.09
 *208 Inspection Area: 1 Initials: EFP
 Engineer's Initials: sgm
 * Location ID No: 085-00136D-023.00E

*104 Highway System: 0
 *26 Functional Classification: 07
 *204 Federal Route Type: S No: 01756
 105 Federal Lands Highway: 0
 *110 Truck Route: 0
 2006 School Bus Route: 1
 217 Benchmark Elevation: 0000.00
 218 Datum: 0
 *19 Bypass Length: 05
 *20 Toll: 3
 *21 Maintenance: 01
 *22 Owner: 01
 *31 Design Load: 2
 37 Historical Significance: 5
 205 Congressional District: 09
 27 Year Constructed: 1965
 106 Year Reconstructed: 0000
 33 Bridge Medium: 0
 34 Skew: 00
 35 Structure Flared: 0
 38 Navigation Control: 0
 213 Special Steel Design: 0
 267 Type of Paint: 5
 *42 Type of Service On: 1
 Type of Service Under: 5
 214 Movable Bridge: 0
 203 Type Bridge: 0
 259 Pile Encasement 3
 *43 Structure Type Main: 3 02
 45 No.Spans Main: 004
 44 Structure Type Appr: 0 00
 46 No Spans Appr: 0000
 226 Bridge Curve Horz 0 Vert: 1
 111 pier Protection 0
 107 Deck Structure Type: 1
 108 Wearing Structure Type: 1
 Membrane Type: 0
 Deck Protection: 8

Signs & Attachments

225 Expansion Joint Type: 02
 242 Deck Drains: 1
 243 Parapet Location: 0
 Height: 0
 Width: 0
 238 Curb Height: 1
 Curb Material: 1
 239 Handrail 11
 *240 Medium Barrier Rail: 0
 241 Bridge Median Height: 0
 * Bridge Median Width: 0
 230 Guardrail Loc. Dir. Rear: 3
 Fwr: 3
 Oppo. Dir. Rear: 0
 Oppo. Fwr: 0
 244 Approach Slab 3
 224 Retaining Wall: 0
 233 Posted Speed Limit: 55
 236 Warning Sign: 1.00
 234 Delineator: 1.00
 235 Hazzard Boards: 1
 237 Utilities Gas: 00
 Water: 00
 Electric: 00
 Telephone: 00
 Sewer: 00
 247 Lighting Street: 0
 Navigation: 0
 Aerial: 0
 *248 County Continuity No.: 00



Processed Date:6/8/2011

Bridge Inventory Data Listing

Parameters: Bridge Serial Num

Structure ID:085-0018-0

Programming Data		Measurements:				
201 Project No:	S-1756 (1)	*29ADT	003010	Year:2007	65 Inventory Rating Method:	1
202 Plans Available:	4	109%Trucks:	0		63 Operating Rating Method:	1
249 Prop Proj No:	CSBRG-0007-00(169)	* 28 Lanes On:	02	Under:00	66 Inventory Type:	2 Rating: 14
250 Approval Status:	0000	210 No. Tracks On:	00	Under:00	64 Operating Type:	2 Rating: 14
251 PI Number:	0007169	* 48 Max. Span Length	0049		231 Calculated Loads:	
252 Contract Date:	02/01/1901	* 49 Structure Length:	196		H-Modified:	21 1
260 Seismic No:	00007	51 Br. Rwdy. Width	25.90		HS-Modified:	25 1
75 Type Work:	34 1	52 Deck Width:	31.90		Type 3:	23 1
94 Bridge Imp. Cost:	\$147	* 47 Tot. Horiz. Cl:	26		Type 3s2:	32 1
95 Roadway Imp. Cost:	230	50 Curb / Sidewalk Width	2.00 / 2.00		Timber:	27 1
96 Total Imp Cost:	480	32 Approach Rdwy. Width	026		Piggyback:	40 0
76 Imp Length:	001516	*229 Shoulder Width:			261 H Inventory Rating:	13
97 Imp Year:	1990	Rear Lt:	2.50	Type:2 Rt:2.50	262 H Operating Rating	22
114 Future ADT:	004515	Fwd. Lt:	2.10	Type:2 Rt:2.60	67 Structural Evaluation:	4
		Permanent Width:			58 Deck Condition:	6
		Rear:	22.20	Type:2	59 Superstructure Condition:	6
			21.20	Type:2	* 227 Collision Damage:	0
		Intersaction Rear:	0	Fwd: 0	60A Substructure Condition:	6
		36 Safety Features Br. Rail:	2		60B Scour Condition:	8
		Transition:	2		60C Underwater Condition	7
		App. G. Rail:	2		71 Waterway Adequacy:	9
		App. Rail End:	2		61 Channel Protection Cond.:	7
		53 Minimum Cl. Over:	99' 99 "		68 Deck Geometry:	2
		Under:			69 UnderClr. Horz/Vert:	N
		*228 Minimum Vertical Cl			72 Appr. Alignment:	7
		Act. Odm Dir.:	99' 99"		62 Culvert:	N
		Oppo. Dir:	99' 99"		Posting Data	
		Posted Odm. Dir:	00' 00"		70 Bridge Posting Required	2
		Oppo. Dir:	00' 00"		41 Struct Open, Posted, CL:	P
		55 Lateral Undercl. Rt:	N 0 0		* 103 Temporary Structure:	0
		56 Lateral Undercl. Lt:	0.00		232 Posted Loads	
		*10 Max Min Vert Cl:	99' 99" Dir:0		H-Modified:	21
		39 Nav Vert Cl:	000 Horiz:0000		HS-Modified:	25
		116 Nav Vert Cl Closed:	000		Type 3:	23
		245 Deck Thickness Main	7.00		Type 3s2:	32
		Deck Thick Approach:	0.00		Timber:	27
		246 Overlay Thickness:	0.00		Piggyback	00
		212 Year Last Painted:	Sup:1996Sub:1996		253 Notification Date:	02/01/1901
					258 Fed Notify Date:	2/1/1901 12:00:00AM

INITIAL CONCEPT TEAM MEETING MINUTES
February 23, 2010
SR 136 @ Etowah River 5.7 Mi East of Dawsonville
Bridge Replacement Project
P.I. 0007169

Location/Time:

GDOT - District 1 Office, 10:00 AM

Attendees:

Colin Houppermans – GDOT, District 1 Design, Project PM: (770) 718-5011
Neil Kantner – GDOT, District 1 Design
Larry Robinson – Windstream
Nathaniel O’Kelley – GDOT, District 1 Utilities
Corey Guthrie – Dawson County Public Works
Steve Gafford – GDOT, Utilities Liaison Eng.
David Headley – Dawson County Public Works
Brent Cook – GDOT, District 1 Traffic Ops
Cory Payne – GDOT, District 1 Right of Way
Kim Coley – GDOT, District 1 Environmental

Meeting Minutes:

1. Introductions
 - a. Neil introduced himself as the District Design Engineer and Colin as the GDOT PM and designer for this project.
 - b. It was pointed out that this was an initial concept team meeting and that a concept team meeting would follow at a later undetermined date.
2. Concept Report Review
 - a. The Need and Purpose of the project was reviewed.
 - b. Concept report was reviewed page-by-page
 - c. Comments noted include:
 - i. Number of Right of Way parcels for this project is currently unknown without a chosen alignment, but the maximum looks to be 5 parcels.
 - ii. Only one parcel has a structure near the project, a residential home. It is far enough from the roadway that the structure will not be adversely affected.
 - iii. The bridge is located at the bottom of a sag curve that does not meet current GDOT Standards and Specifications for a profile. In order to meet current GDOT Standards and Specifications the roadway at the bridge would need to be raised 12 to 14 ft.
 - iv. A more favorable profile option was to get a design variance and raise the profile only a few feet, how far depending on the results of a bridge hydrology study. With the bridge hydrology study not yet started, it’s difficult to choose a vertical profile at this time.
 - v. If an on-site detour is provided then a PIOH meeting would not be required.
 - vi. Right of Way funding is currently proposed in Fiscal Year 2011, it appears likely that the right of way funds should be shifted to Fiscal Year 2012.
 - vii. Construction funding is currently proposed in Fiscal Year 2014, its possible the construction funds could be brought forward to Fiscal Year 2013.
 - viii. The known utility at the site, Windstream Telephone, has aerial telephone cables downstream of the existing bridge. If a downstream bridge is chosen then relocation will be needed.
 - ix. The five current design options were presented; an off-site detour, a temporary detour bridge either upstream or downstream of the existing, and a realignment of the roadway either upstream or downstream of the existing.
 - x. The impacts of the different alignment options were discussed, but a final alignment could not be determined at this time without additional bridge and environmental information.
 - xi. The county advised that they did not want the off-site detour option.
 - xii. An intersection project at the nearby SR 53 and SR 400 intersection may have a similar construction timeframe and could adversely impact any off-site detour option.

The meeting was adjourned at approximately 11:15 AM.

CONCEPT TEAM MEETING MINUTES
December 14, 2010
SR 136 @ Etowah River in Dawson County
P.I. 0007169

Location/Time:

GDOT - District 1 Office
9:00 AM

Attendees:

Colin Houppermans – GDOT, District 1
Nathaniel O’Kelley – GDOT, District 1
Aaron Caldwell – Mulkey
Neil Kantner – GDOT, District 1
Bruce Nicholson – KCI
Jason Dykes – GDOT
Derek Wade – GDOT
Derek Wade – GDOT
Laura Dixon – GDOT
Brent Cook – GDOT, District 1
Todd Sumption – GDOT, District 1
David Headley – Dawson County
Corey Guthrie – Dawson County

Meeting Minutes:

1. Introductions
 - 1) Introductions were made from those in attendance
2. Project Need & Purpose and Background
 - 1) Colin presented the Need & Purpose of the project
 - 2) Colin presented the proposed design with graphics describing the location, horizontal and vertical geometry, the design typical section, and conditions considered as part of the concept development.
 - 3) Other alternatives were reviewed
 - i. An offsite detour was not feasible due to the excessive length of the detour route of over 15 miles.
 - ii. Other alignments were considered both with and without a detour bridge and were determined to have increased cost without comparable benefits.
3. Concept Report Review
 - 1) The Concept report was reviewed page-by-page
 - 2) Concept report comments included:
 - i. Cover sheet was of an old format
 - ii. N&P should note that the bridge is structurally deficient
 - iii. Maximum grade allowable is 9% along the mainline
 - iv. Potential environmental concerns are the Etowah Darter, Stream Impacts
 - v. Early coordination has already been completed
4. Project Comments
 - 1) Recommend using concrete beams for ease of maintenance and eliminate the need for steel beam painting
 - 2) Noted a 48” cross drain pipe that will need extending or replacing
 - 3) Check for the need to prepare a PAR for the project

- 4) Utility Risk Assessment will need to be done (anticipating low risk/minimal impacts result)
 - 5) Will any intermediate repairs be needed until the bridge is built?
 - 6) Can the stream bank at the existing bridge be recovered to offset the stream bank disturbance at the new bridge location?
 - 7) At pavement tie-ins make the GAB or 25 mm layers lower than existing pavement to ensure positive drainage during construction.
 - 8) Is there any salvageable material from the existing bridge?
 - 9) The Runoff Limits Manual from the Etowah Habitat Conservation Plan (Sept '07) will need to be followed
5. Misc Comments/Questions
- 1) David Headley asked if the County could obtain a copy of the bridge hydraulics analysis once complete
 - 2) David Headley asked if the intersection on the west side of the bridge with the local road was going to be improved due to the poor skew angle

Meeting was adjourned at 10:00 A.M.

If there are any clarifications or questions regarding these minutes, please advise Colin Houppermans at (770) 718-5011.