ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0001216
BR000-0001-00(216)
Appling & Toombs Counties
US 1/SR 4 Bridges over the Altamaha River, Altamaha River Overflow, and Williams Creek

OFFICE Design Policy & Support

DATE October 21, 2010

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED REVISED CONCEPT REPORT**

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

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Adminstrator
Ron Wishon, State Project Review Engineer
Glenn Bowman, State Environmental Administrator
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Kathy Zahul, State Traffic Engineer
Angela Alexander, State Transportation Planning Administrator
Ben Rabun, State Bridge Administrator
Bobby Hilliard, State Program Delivery Engineer
Angela Robinson, Financial Management Administrator
Jeff Baker, State Utilities Engineer
Karon Ivery, District 5 Utilities Engineer
Brad Saxon, District 5 Preconstruction Engineer
Glenn Durrence, District 5 Engineer
Michelle Wright, Project Manager
BOARD MEMBERS - 1st & 12th Congressional Districts

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

REVISED PROJECT CONCEPT REPORT

Project Number: BR000-0001-00(216)
County: Appling and Toombs
P. I. Number: 0001216
Federal Route Number: U.S. 1
State Route Number: S.R. 4

Changes and reasons for changes:

The condition of the existing bridge resulted in the need for a stand-alone bridge project that would construct a replacement bridge prior to the EDS-545(23) project. As a result the concept typical section changed from a four lane typical to a two lane typical. This resulted in the roadway and bridge typical sections being changed as well as the project length to account for the stand alone bridge project.

Submitted for approval:

DATE 7/30/10 — Heath and Linebeck Engineers

DATE 8/17/2010 — Bobby Hilliard, Office Head

DATE 8-16-10 — Michelle Wright, Project Manager

Recommendation for approval:

DATE 8/30/10 — GLENN BOWMAN/EKP* — State Environmental Administrator

DATE 8/30/10 — PAUL LILES/EKP* — State Bridge Design Engineer

*-RECOMMENDATION ON FILE

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

DATE 9/7/10 — Angela I. Alexander, State Transportation Planning Administrator

* This project is located on the 2005 Heart of Georgia – Altamaha Regional Development Center Bicycle and Pedestrian Plan (US 1 from Swainsboro to Baxley is a bike route).

REVISED PROJECT CONCEPT REPORT

PROJECT NO. BR000-0001-00(216)
APPLING & TOOMBS COUNTIES
PI NO.: 0001216

Need and Purpose:

Background

Bridge project BR000-0001-00(216) will replace the functionally inadequate bridges on US 1/SR 4 over Altamaha River, Overflow 1 and Williams Creek. The project site is located approximately 10 miles north of the City of Baxley in Appling and Toombs Counties. The project begins at mile post 20.6 in Appling County and ends at mile post 1.8 in Toombs County, for a total project length of 2.5 miles.

The bridge sufficiency ratings for the Altamaha River, Overflow 1 and Williams Creek bridges are 32.50, 26.45, and 26.45 respectively. The condition of the Altamaha River Bridge and the fact that it is a pin and hanger bridge are the driving forces for replacement on this project. The Overflow 1 and Williams Creek bridges qualify for replacement due to the bridges proximity to the Altamaha River Bridge and their sufficiency ratings being less than 50.

Replacing these bridges will bring them up to current design standards.

Projects in the Area

Project Numbers	Description	Programming
EDS00-0545-00(023), P.I.# 522200	US1/SR4 widening and reconstruction from Plant Hatch to SR 56 (Project BR000-0001-00(216) is within the limits of this GRIP project)	PE — 2002 ROW — LR CST — LR
EDS00-0545-00(028), P.I.# 522300	US1/SR4 widening and reconstruction from Bacon County line to north of SR 15 (GRIP project)	PE — 2002 ROW — 2005 CST — 2010

Crash data

The prominent types of accidents along US 1/SR 4 in the vicinity of the project are not accidents with other vehicles. The following tables show the accident statistics, in comparison with the statewide average, for the state route. Approximately 0.8 miles of the project is in Appling County and approximately 1.7 miles is in Toombs County.

S1/SR4-Rural Principal Arterial (Appling County, mile log 18.00 to mile log 21.13)

	2006		2007		2008	
	US 1/SR 4	State	US 1/SR 4	State	US 1/SR 4	State
Accidents	4		12		7	
Accident Rate	**75**	**301**	**86**	**300**	**50**	**281**
Injuries	5		2		1	
Injury Rate	94	117	14	114	7	106
Fatalities	1		0		0	
Fatality Rate	18.82	1.50	0	1.46	0	1.39

US1/SR4-Rural Principal Arterial (Toombs County, mile log 0.00 to mile log 2.00)

	2006		2007		2008	
	US 1/SR 4	State	US 1/SR 4	State	US 1/SR 4	State
Accidents	3		2		2	
Accident Rate	**90**	**301**	**61**	**300**	**61**	**281**
Injuries	3		1		2	
Injury Rate	90	117	30	114	61	106
Fatalities	0		0		0	
Fatality Rate	0	1.50	0	1.46	0	1.39

Type of Accident Summary:

The following table indicates the type of accidents along the identified segments of the subject area for the three years of 2006, 2007, and 2008:

Type of Accident 2006/2007/2008	US 1 /SR 4 Appling (mile log 18.00 to mile log 21.13)	US 1 /SR 4 Toombs (mile log 0.00 to mile log 2.00)	Percent	On Roadway	Off Roadway
Rear End	5	0	16.67%	5	0
Angle	2	0	6.67%	2	0
Side Swipe	0	0	0%	0	0
Head On	0	1	3.33%	1	0
Not a Collision w/a Vehicle	16	6	73.33%	17	5
Sub-total	23	7	100%	25	5

Need and Purpose

The need and purpose of the proposed improvements is to replace the three functionally and structurally obsolete bridges on US 1/SR 4 over Altamaha River, Overflow 1 and Williams Creek.

Project Location:
The proposed project is located along U.S.1/S.R.4 beginning at mile post 20.55 in Appling County and ending at milepost 1.78 in Toombs County. The total length of the project is 2.5 miles. The proposed project is located at the Appling/Toombs County line and Altamaha River.

Description of the approved concept:
The approved concept for BR-0001-00(216) in Appling and Toombs Counties proposes to replace and demolish the existing bridges over the Altamaha River, Altamaha River Overflow, and Williams Creek. All bridges are within the project limits of EDS-545(23). To accommodate the proposed typical section of EDS-545(23), new parallel bridge structures would be constructed along with the EDS-545(23) project.

The approved concept for EDS-545(23) in Appling and Toombs Counties is proposed to widen and reconstruct U.S.1/S.R.4 from Plant Hatch in Appling County to SR 56 in Toombs County. From the beginning of the project, US 1 would be widened on the east side to have four lanes with a 32 ft grassed median to just south of SR 147. From that point the median would transition into a 44 ft grassed median to the end of the project. The widening would continue on the east side to just north of Cobb Creek then would extend northward to new location. The alignment would roughly parallel US 1 to the east and tie into SR 56 approximately 0.3 miles east of US 1. This intersection would be the ending terminus of the project and the beginning terminus for EDS-545(24). Existing right of way along US 1/SR 4 varies from 184 feet to 253 feet. The speed is 65 mph, and access would be by permit except for the new location where access would be partially controlled.

PDP Classification: Major X Minor_____

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

Functional Classification: Rural Principal Arterial

U. S. Route Number(s): 1 **State Route Number(s):** 4

Traffic (AADT) as shown in the approved concept:
Opening Year: (2008) - 5500 Design Year: (2028) - 8000

Updated Traffic Data (AADT):
Opening Year: (2012) - 5900 Design Year: (2032) - 10350

Approved Programmed/Schedule:
P.E. FY 2002 R/W: LR Construction: LR

VE Study Required Yes (X) No ( )

Benefit/Cost Ratio N/A (Bridge replacement due to bridge structure deficiency)

Is the project located in an Ozone Non-Attainment area? _____ Yes X No

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

Approved features:

- The approved concept report for the GRIP project EDS-545(23) included the bridge replacement project BR-0001-00(216).
- The approved roadway typical section is four 12 foot travel lanes separated with a 32 foot grassed median. The outside shoulder is 10 foot wide with 6.5 feet paved and 3.5 feet grassed and the inside shoulder is 6 foot wide with 2 foot paved shoulders and 4 foot grassed.
- The approved bridge typical section is two 12 foot lanes with a 4 foot inside shoulder and a 10 foot outside shoulder. The approved bridge lengths would not change.
- The project termini for BR-0001-00(216) were located at the southern and northern limits of the bridges.

Proposed features:

- Due to the condition of the existing bridge, the BR-0001-00(216) project needs to be separated from the EDS-545(23) project. This is so that the existing bridge can be replaced prior to the EDS-545(23) project.
- The roadway typical section needs to be revised because only two lanes will be constructed with the reconstructed bridges. The 6.5 foot paved outside shoulder is replaced with a 4.0 foot full depth paved shoulder. Also the 6 foot wide inside shoulder with 2 foot paved becomes a 10 foot outside shoulder with a 4 foot full depth paved shoulder. The paved shoulders were changed to 4 foot full depth due to a VE Implementation.
- The bridge typical section needs to be revised for a two lane roadway with two 12 foot lanes and 8 foot shoulders on both sides.
- The project termini need to be revised to establish a stand-alone bridge replacement project. The proposed project termini to be approved are at mile post 20.6 in Appling County for the begin project and mile post 1.8 in Toombs County for the end of the project.

Reasons for changes:

The condition of the existing bridge resulted in the need for a stand-alone bridge project that would construct a replacement bridge prior to the EDS-545(23) project. As a result the concept typical section changed from a four lane typical to a two lane typical. This resulted in the roadway and bridge typical sections being changed as well as the project length to account for the stand alone bridge project.

Potential Environmental Impacts of Proposed Revision:

This revision is required due to the separation of the smaller BR-0001-00(216) bridge project from the larger EDS-545(23) project. Since the approved concept report covered the entire area of the proposed project, no change is expected to the environmental effects. Since a CE (Categorical Exclusion) document will be prepared rather than an EA (Environmental assessment) document, the environmental schedule is expected to be improved.

- **Have Proposed Revisions Been Reviewed by Environmental Staff (X) YES ( ) NO**
- **Environmental Responsibilities (Studies/Documents/Permits): GDOT**

Revised cost estimates:

- Construction
  - Base Construction Cost
    $21,859,742.79
  - Engineering and Inspection
    $1,092,987.14
  - Fuel & Asphalt Adjustment
    $763,439.67
  - Total Construction Cost (with N0 construction contingencies)
    $23,716,169.60
- Right-of-Way
  $612,000.00
- Utilities (Reimbursable)
  $330,000.00
- Utility Contingencies
  $99,000.00

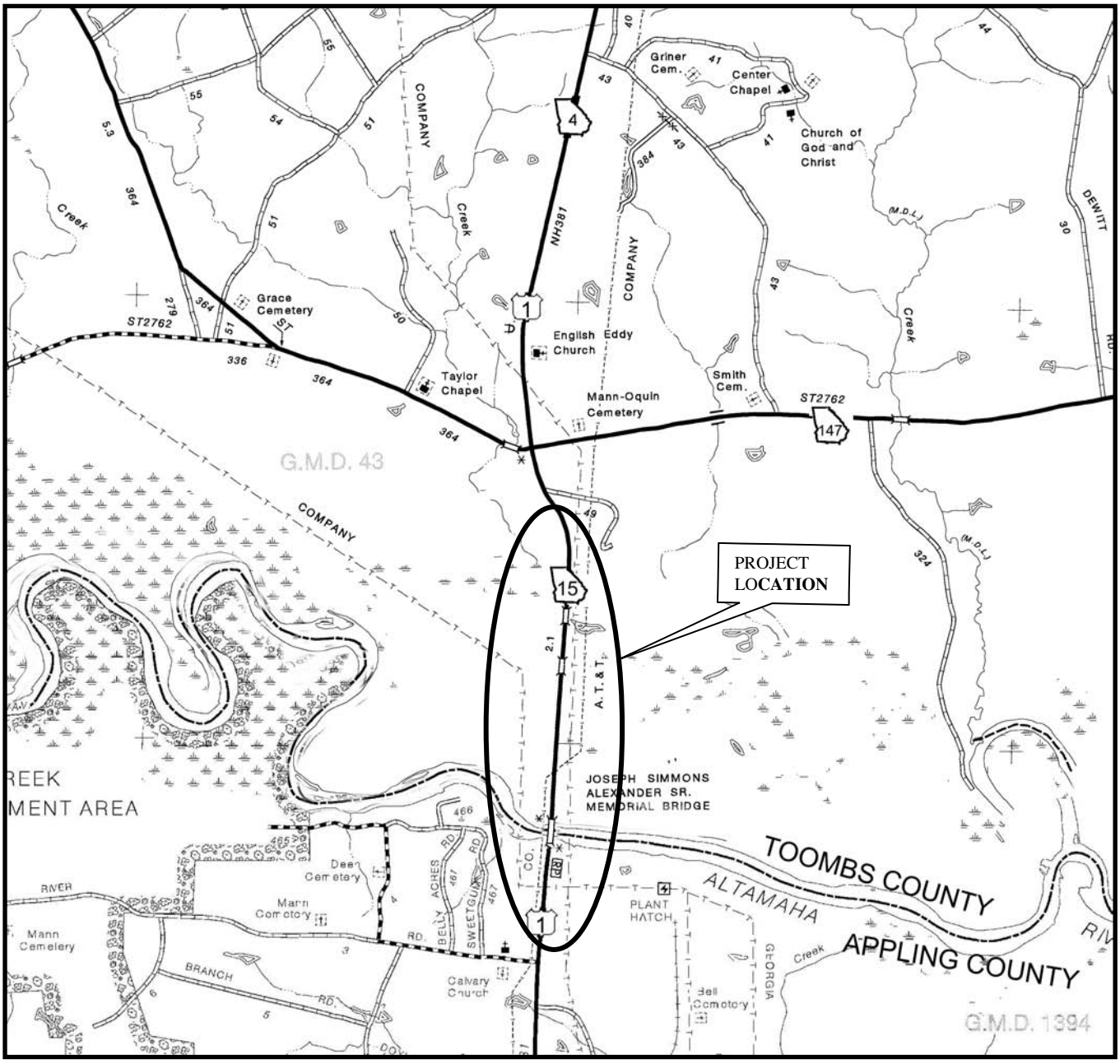
Recommendation: It is recommended that the proposed revision to the concept be approved for implementation.

Attachments:

1. Location map
2. Cost Estimates
3. Roadway Typical Section
4. Bridge Typical Section
5. Bridge Inventory Data Listings
6. Design Traffic
7. VE Study Implementation Letter

Concur: _____
Director of Engineering

Approve: _____ **Date:** 10/15/10
Chief Engineer



Location Map

US I/SR 4 BRIDGE REPLACEMENT
BR000-0001-00(216) APPLING/TOOMBS COUNTIES

Print Form

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. **BR000-0001-00(216)** **Appling & Toombs** **OFFICE** GDOT,OPD

U.S.1/S.R.4 Over Altamaha River **DATE** 10-06-2010

P.I. No. **00001216**

FROM **Bobby Hilliard, P.E., State Program Delivery Engineer**

TO Ronald E. Wishon, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

MNGT LET DATE **June 2011**

PROJECT MANAGER Michelle Wright

MNGT R/W DATE **March 2010**

PROGRAMMED COST (TPro W/OUT INFLATION) **LAST ESTIMATE UPDATE**

CONSTRUCTION	$ 41,597,082.09	DATE	**1-27-2005**
RIGHT OF WAY	$ 141,000.00	DATE	**9-26-2005**
UTILITIES	$ N/A	DATE	N/A

REVISED COST ESTIMATES

CONSTRUCTION*	$ 23,716,169.60	
RIGHT OF WAY	$ 612,000.00	
UTILITIES**	$ 429,000.00	

* Costs contain 5 % Engineering and Inspection and **0** % Construction Contingencies.

** Costs contain 30 % Utility contingency.

REASON FOR COST DECREASE

The programmed value for construction includes both the EDS and the BR projects. This project was previously combined with project EDS-545(23). The revised value represents the BR project only.

CONTINGENCY SUMMARY

Construction Cost Estimate:	$ 21,859,742.79	(Base Estimate)
Engineering and Inspection:	$ 1,092,987.14	(Base Estimate x 5 %)
Construction Contingency:	$ 0	(Base Estimate x 0 %)

(The Construction Contingency is based on the Project Improvement Type in TPro.)

Total Fuel Adjustment	$ 374,772.97	(From attached worksheet)
Total Liquid AC Adjustment	$ 388,666.70	(From attached worksheet)
Construction Total:	**$** 23,716,169.60	
Utility Cost Estimate:	$ 330,000.00	
Utility Contingency:	$ 99,000.00	30 %
Utility Total:	**$** 429,000.00	

REIMBURSABLE UTILITY COST

Utility Owner	Reimbursable Cost
Level 3 Communications (Telecom)	**$30,000.00**
Georgia Power Co. (Trans)	**$300,000.00**

Attachments

c: Genetha Rice-Singleton, State Program Control Administrator

Date 10/7/2010

P.I. Number 1216 County Appling & Toombs

Project Number BR000-0001-00(216)

Special Provision, Section 109-Measurement and Payment

FUEL PRICE ADJUSTMENT (*ENGLISH 125% MAX)*

ENTER FPL DIESEL	2.06
ENTER FPM DIESEL	4.635

ENTER FPL UNLEADED	1.82
ENTER FPM UNLEADED	4.095

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)**		0.29		0.15		
Excavations paid as specified by Sections 206 **(CUBIC YARD)**		0.29		0.15		
GAB paid as specified by the ton under Section 310 **(TON)**	22200.000	0.29	6438.00	0.24	5328.00	
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)**	17200.000	2.90	49880.00	0.71	12212.00	
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	500.00	26.12	13.0600	8.00	104.48	1.50	19.59	
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500	1500.00	364.10	546.1500	8.00	4369.20	1.50	819.23	
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500	5000.00	632.88	3164.4000	8.00	25315.20	1.50	4746.60	
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	8160.00	42.10	343.5360	8.00	2748.29	1.50	515.30	

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS

Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams_____ (LF) Section 507	3475.00	168.38	585.1205	8.00	4680.96	1.50	877.68	
PSC Beams_____ (LF) Section 507	2560.00	102.84	263.2704	8.00	2106.16	1.50	394.91	
PSC Beams_____ (LF) Section 507	13275.00	102.56	1361.4840	8.00	10891.87	1.50	2042.23	
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511	1507000.00	0.63	949.4100	8.00	7595.28	1.50	1424.12	
Piling___inch (LF) Section 520	18000.00	113.17	2037.0600	8.00	16296.48	1.50	3055.59	
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=	**130425.93**	**SUM QF UNLEADED=**	**31435.24**

DIESEL PRICE ADJUSTMENT($)	**$308,979.02**
UNLEADED PRICE ADJUSTMENT($)	**$65,793.95**

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

APPLICABLE TO CONTRACTS/PROJECTS CONTAINING THE 413 SPECIFICATION, SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

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

ENTER APL 374 **ENTER APM** 841.5

125.00%	INCREASE ADJUSTMENT

L.I.N.	TYPE	TACK (GALLONS)	TACK (TONS)	REMARKS
413-1000	PG 58-22	1400	6.0131	

TMT = 6.0131

PRICE ADJUSTMENT($)	$2,698.70

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

ENTER APL 374 **ENTER APM** 841.5

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

125.00%	INCREASE ADJUSTMENT

L.I.N. / Spec Number	MIX TYPE	HMA	JMF AC%	AC	REMARKS
402-3121	25 mm SP	10000	5.00	500.00	
402-3130	12.5 mm SP	3100	5.00	155.00	
402-3190	19 mm SP	4100	5.00	205.00	
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			TMT =	860.00	

PRICE ADJUSTMENT($)	$385,968.00

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 374 ENTER APM 841.5

125.00%	INCREASE ADJUSTMENT

Use this side for Asphalt Emulsion Only

L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)

TMT =

REMARKS:

Use this side for Asphalt Cement Only

L.I.N.	TYPE	TACK (GALLONS)

TMT =

REMARKS:

MONTHLY PRICE ADJUSTMENT($)	

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

DIESEL PRICE ADJUSTMENT($) $308,979.02

UNLEADED PRICE ADJUSTMENT($) $65,793.95

ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX) $2,698.70

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX $385,968.00

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

REMARKS:

TOTAL ADJUSTMENTS	$763,439.67

DWM 10/08

Estimate Report for file "BR000-0001-00(216)_9-7-2010"

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	100,000.00	TRAFFIC CONTROL -BR000-0001-00(216)	100,000.00
150-5000	60	EA	490.00	TRAFFIC CONTROL, TEMPORARY SAND LOADED ATTENUATOR MODULE	29,400.00
153-1300	1	EA	66221.17	FIELD ENGINEERS OFFICE TP 3	66,221.17
201-1500	1	LS	100,800.00	CLEARING & GRUBBING -	100,800.00
205-0001	2000	CY	3.18	UNCLASS EXCAV	6,360.00
208-0100	73000	CY	4.60	IN PLACE EMBANKMENT	335,800.00
318-3000	1800	TN	17.12	AGGR SURF CRS	30,816.00
456-2015	3	GLM	988.60	INDENTATION RUMBLE STRIPS - GROUND-INPLACE (SKIP)	2,965.80
620-0200	5600	LF	26.27	TEMPORARY BARRIER, METHOD NO. 2	147,112.00
634-1200	280	EA	85.92	RIGHT OF WAY MARKERS	24,057.60
641-1100	250	LF	42.45	GUARDRAIL, TP T	10,612.50
641-1200	3500	LF	14.56	GUARDRAIL, TP W	50,960.00
641-5001	4	EA	636.40	GUARDRAIL ANCHORAGE, TP 1	2,545.60
641-5012	5	EA	2,275.34	GUARDRAIL ANCHORAGE, TP 12	11,376.70
				Section Sub Total:	**$919,027.37**

Section Required Pavement

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-1101	22200	TN	14.96	GR AGGR BASE CRS, INCL MATL	332,112.00
402-1811	800	TN	58.49	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL	46,792.00
402-3190	4100	TN	57.93	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	237,513.00
402-3130	3100	TN	59.93	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	185,783.00
402-3121	10000	TN	53.81	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	538,100.00
413-1000	1400	GL	1.72	BITUM TACK COAT	2,408.00
433-1000	980	SY	136.24	REINF CONC APPROACH SLAB	133,515.20
				Section Sub Total:	**$1,476,223.20**

Section Drainage Quantities

Item Number	Quantity	Units	Unit Price	Item Description	Cost
550-1180	800	LF	29.26	STORM DRAIN PIPE, 18 IN, H 1-10	23,408.00
550-1181	70	LF	60.18	STORM DRAIN PIPE, 18 IN, H 10-15	4,212.60
550-1360	120	LF	49.37	STORM DRAIN PIPE, 36 IN, H 1-10	5,924.40
550-2180	450	LF	22.41	SIDE DRAIN PIPE, 18 IN, H 1-10	10,084.50
550-2240	110	LF	28.62	SIDE DRAIN PIPE, 24 IN, H 1-10	3,148.20
550-2360	150	LF	46.36	SIDE DRAIN PIPE, 36 IN, H 1-10	6,954.00
550-4118	10	EA	446.73	FLARED END SECTION 18 IN, SIDE DRAIN	4,467.30
550-4124	8	EA	480.42	FLARED END SECTION 24 IN, SIDE DRAIN	3,843.36
550-4136	8	EA	780.32	FLARED END SECTION 36 IN, SIDE DRAIN	6,242.56
550-4218	6	EA	451.98	FLARED END SECTION 18 IN, STORM DRAIN	2,711.88
550-4236	4	EA	934.90	FLARED END SECTION 36 IN, STORM DRAIN	3,739.60
				Section Sub Total:	**$74,736.40**

Section Traffic Signs and Marking

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	220	SF	13.46	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	2,961.20
636-1033	250	SF	18.19	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 9	4,547.50
636-2070	100	LF	6.94	GALV STEEL POSTS, TP 7	694.00
652-5451	26000	LF	0.15	SOLID TRAFFIC STRIPE, 5 IN, WHITE	3,900.00
652-5452	3100	LF	0.12	SOLID TRAFFIC STRIPE, 5 IN, YELLOW	372.00
653-1501	33000	LF	0.31	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	10,230.00
653-1502	110000	LF	0.32	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	35,200.00
653-3501	1200	GLF	0.22	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	264.00
653-3502	12000	GLF	0.26	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	3,120.00

654-1001	300	EA	2.95	RAISED PVMT MARKERS TP 1	885.00
654-1003	70	EA	3.34	RAISED PVMT MARKERS TP 3	233.80
				Section Sub Total:	**$62,407.50**

Section Erosion Protection					
Item Number	**Quantity**	**Units**	**Unit Price**	**Item Description**	**Cost**
163-0232	10	AC	296.36	TEMPORARY GRASSING	2,963.60
163-0240	250	TN	144.95	MULCH	36,237.50
163-0300	5	EA	922.26	CONSTRUCTION EXIT	4,611.30
163-0503	1	EA	387.96	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	387.96
163-0520	550	LF	12.10	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	6,655.00
163-0527	20	EA	172.35	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS	3,447.00
163-0529	1500	LF	2.73	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	4,095.00
163-0550	15	EA	142.47	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	2,137.05
165-0010	460	LF	0.43	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	197.80
165-0020	600	LF	2.10	MAINTENANCE OF TEMPORARY SILT FENCE, TP B	1,260.00
165-0030	3300	LF	0.68	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	2,244.00
165-0041	10	LF	1.81	MAINTENANCE OF CHECK DAMS - ALL TYPES	18.10
165-0050	550	LF	2.49	MAINTENANCE OF SILT RETENTION BARRIER	1,369.50
165-0071	800	LF	0.94	MAINTENANCE OF SEDIMENT BARRIER - BALED STRAW	752.00
165-0101	5	EA	441.53	MAINTENANCE OF CONSTRUCTION EXIT	2,207.65
167-1000	2	EA	412.56	WATER QUALITY MONITORING AND SAMPLING	825.12
167-1500	12	MO	511.37	WATER QUALITY INSPECTIONS	6,136.44
170-1000	550	LF	9.79	FLOATING SILT RETENTION BARRIER	5,384.50
171-0010	500	LF	1.32	TEMPORARY SILT FENCE, TYPE A	660.00
171-0020	600	LF	1.16	TEMPORARY SILT FENCE, TYPE B	696.00
171-0030	6000	LF	2.84	TEMPORARY SILT FENCE, TYPE C	17,040.00
603-2182	100	SY	32.16	STN DUMPED RIP RAP, TP 3, 24 IN	3,216.00
700-6910	20	AC	669.77	PERMANENT GRASSING	13,395.40
700-7000	120	TN	52.05	AGRICULTURAL LIME	6,246.00
700-8000	30	TN	400.18	FERTILIZER MIXED GRADE	12,005.40
700-8100	1200	LB	2.24	FERTILIZER NITROGEN CONTENT	2,688.00
715-2200	2700	SY	1.36	BITUMINOUS TREATED ROVING, WATERWAYS	3,672.00
716-2000	25000	SY	0.94	EROSION CONTROL MATS, SLOPES	23,500.00
				Section Sub Total:	**$164,048.32**

Section BRIDGE					
Item Number	**Quantity**	**Units**	**Unit Price**	**Item Description**	**Cost**
540-1101	1	LS	1,500,000.00	REMOVAL OF EXISTING BRIDGES	1,500,000.00
543-1100	1	LS	17,663,300.00	CONSTR OF BRIDGES	17,663,300.00
				Section Sub Total:	**$19,163,300.00**

Subtotal Construction Cost **$21,859,742.79**

Rudolph Frampton

From: Rudolph Frampton
Sent: Monday, February 08, 2010 4:22 PM
To: 'Murphy, Robert'
Cc: William Allen Krivsky
Subject: US1/SR4 over Altamaha River - Bridge cost

Robert,

We have checked over the bridge cost used in the estimate and the following revision.

We think that the 140 and 85 foot spans over the river will cost approximately $100.00/sf and the rest of the spans would cost approximately $80.00/sf. That results in the following cost:

1. Altamaha River Bridge = 1380' x 43.25'x$100/sf + 2700' x 43.25' x $80.00/sf = $15,310,500.00
2. Overflow Bridge = 300' x 43.25' x $80/sf = $1,038,000.00
3. Williams Creek Bridge = 380' x 43.25' x $80/sf = $1,314,800.00

Therefore the total cost for the three bridges needs to be $17,663,300.00.

Please forward this information to the VE team.

Also, we will be updating the cost estimate to reflect this change and will send you a revised cost estimate tomorrow.

Thank you.

Rudolph

Rudolph Frampton PE, Heath & Lineback Engineers, Inc.
2390 Canton Road, Building 200
Marietta, GA 30066-5393
Voice: 770.424.1668
Direct: 678.569.2469
Fax: 770.424.2907
rframpton@heath-lineback.com
www.heath-lineback.com

Preliminary Right of Way Cost Estimate

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

Date: November 12, 2009
Project: BR000-0001-00(26) Appling/Toombs County UPDATE **P.I. Number:** 0001216
Existing/Required R/W: Varies/Varies **No. Parcels:** 3
Project Termini : SR4/US 1 @ Altamaha River; Overflow & Williams Creek
Project Description: SR4/US 1 @ Altamaha River; Overflow & Williams Creek

Land:	Agricultural R/W: 18.8 Acres @ $9,000/Acre	$	169,200
	Agricultural Easement: 1.6 Acres @ $9,000/Acre x 50%	$	14,400
Improvements :	misc. site improvements	$	63,000
	Fencing		
Relocation:	Commercial (0)		
	Residential (0)	$	0
Damage :	Proximity (0)	$	.00
	Cost to Cure (0)		
	Net Cost	$	246,600.00

Net Cost		$	246,600.00
Scheduling Contingency	55 %		135,630.00
Adm/Court Cost	60 %		229,338.00
		$	611,568.00

Total Cost $612,000

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-545 (23) Toombs – Appling County.
P.I. No. 522220, 0001216

OFFICE Jesup

DATE December 1, 2009

FROM Karon Ivery
District Utilities Engineer

TO Robert Murphy
Office of Program Delivery

ATTN Rudolph Frampton (Heath & Lineback Engr.)

SUBJECT PRELIMINARY UTILITY COST (ESTIMATE)

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

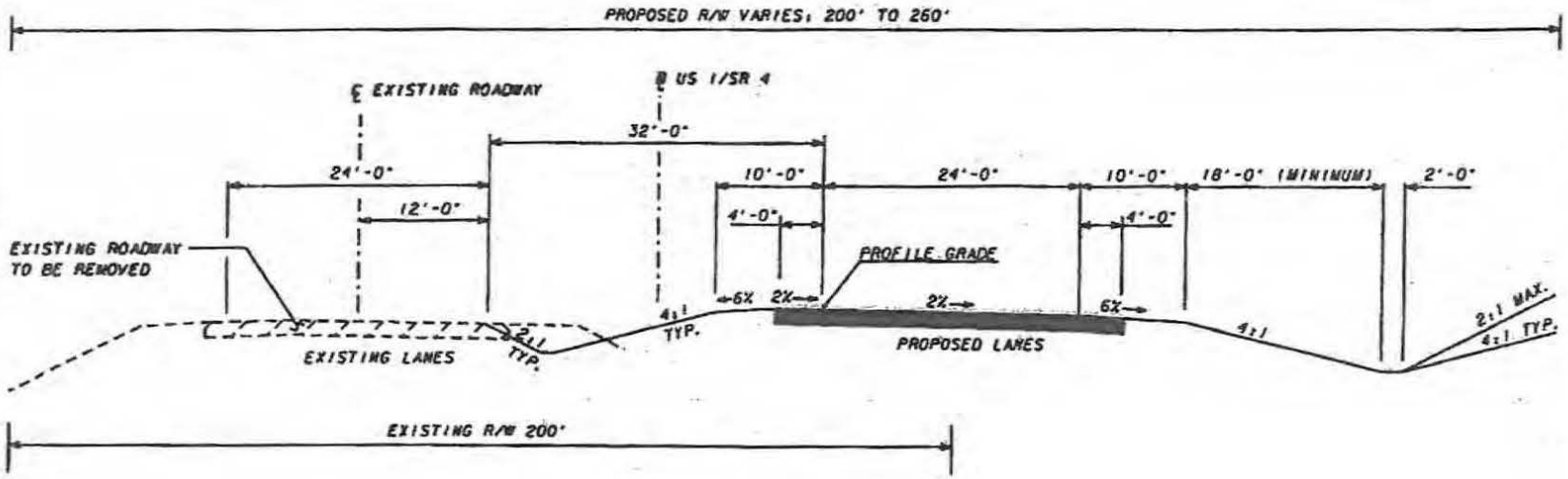
FACILITY OWNER	NON – REIMBURSABLE	REIMBURSABLE
Altamaha EMC (Power)	$85,000.00	$0.00
Satilla EMC (Power)	$25,000.00	$0.00
Level 3 Communications (Telecom)	$0.00	$30,000.00
Georgia Power Co. (Trans)	$0.00	$300,000.00
Georgia Power Co. (Dist.)	$250,000.00	$0.00
Georgia Transmission Corp.	$0.00	$0.00
BellSouth (AT&T)	$160,000.00	$0.00
Williams Communication (Telecom)	$0.00	$0.00
Totals	$520,000.00	$330,000.00
30% Utilities Contingency:		$99,000.00
Total Reimbursement Cost:		$429,000.00

Total Preliminary Utility Cost Estimate $949,000.00
Total reimbursable cost for the above project is $429,000.00

If you have any questions, please contact Paul Williams at (912)427-5779.

KLI/pow

C: Jeff Baker, State Utilities Engineer;
Angela Whitworth, Office of Financial Management;
Bryan Czech, Area Engineer
Eddie Holsey, Area Engineer
File

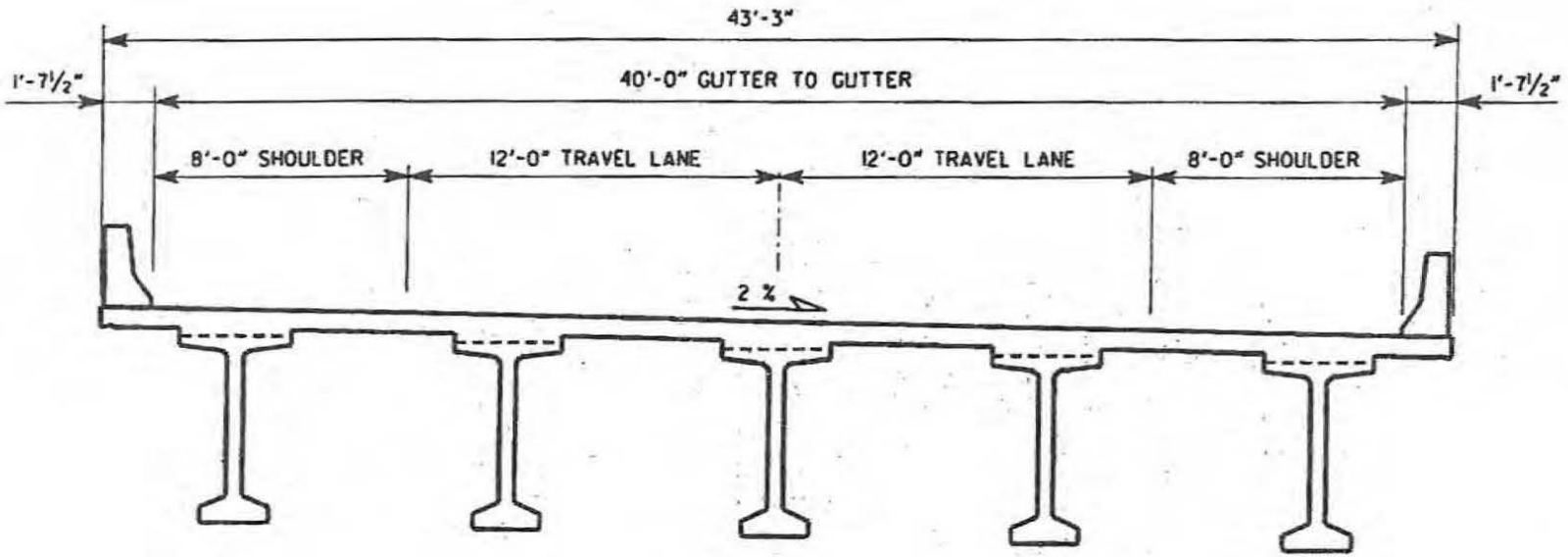


TYPICAL CROSS SECTION - 2 LANE RURAL

US 1/SR 4 BRIDGE REPLACEMENT

BR000-0001-00(216) APPLING/TOOMBS COUNTIES

NOT TO SCALE



BRIDGE TYPICAL CROSS SECTION

US 1/SR 4 BRIDGE REPLACEMENT
BR000-0001-001216) APPLING/TOOMBS COUNTIES

NOT TO SCALE

Processed Date:9/29/2010

Bridge Inventory Data Listing

Parameters: Bridge Serial Num

Structure ID:001-0011-0 **Appling** **SUFF. RATING:** 32.50

Location & Geography

Structure ID:	001-0011-0
200 Brdge Information:	06
*6A Feature Int:	ALTAMAHA RIVER
*6B Critical Bridge:	0
*7A Route No Carried:	SR00004
*7B Facility Carried:	US 1
9 Location:	10 MI N OF BAXLEY
2 Dot District:	5
207 Year Photo:	2010
*91 Inspection Frequency:	24 Date: 01/20/2009
92A Fract Crit Insp Freq:	1 Date: 02/03/2010
92B Underwater Insp Freq:	1 Date: 11/27/2007
92C Other Spc. Insp Freq:	2 Date: 01/20/2009
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	2
Designation:	1
Number:	00001
Direction:	0
*16 Latitude:	31 - 56.6658 HMMS Prefix:SR
*17 Longtitude:	82 - 21.254 HMMS Suffix:00 MP:21.18
98 Border Bridge:	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0
12 Base Highway Network:	1
13A LRS Inventory Route:	11000400
13B Sub Inventory Route:	0
101 parellel Structure:	N
*102 Direction of Traffic:	2
*264 Road Inventory Mile Post:	021.36
*208 Inspection Area:	5 Initials: EFP
Engineer's Initials:	sgm
* Location ID No:	001-00004D-021.18N

*104 Highway System:	1
*26 Functional Classification:	02
*204 Federal Route Type:	F No: 00381
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	1
217 Benchmark Elevation:	0124.20
218 Datum:	2
*19 Bypass Length:	16
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	4
37 Historical Significance:	5
205 Congressional District:	01
27 Year Constructed:	1948
106 Year Reconsrtucted:	1969
33 Bridge Medium:	0
34 Skew:	00
35 Structure Flared:	0
38 Navigation Control:	0
213 Special Steel Design:	5
267 Type of Paint:	4
*42 Type of Service On:	1
Type of Service Under:	5
214 Movable Bridge:	0
203 Type Bridge:	O
259 Pile Encasement	3
*43 Structure Type Main:	4 03
45 No.Spans Main:	005
44 Structure Type Appr:	1 04
46 No Spans Appr:	0094
226 Bridge Curve Horz	0 Vert: 1
111 pier Protection	0
107 Deck Structure Type:	1
108 Wearing Structure Type:	1
Membrane Type:	8
Deck Protection:	8

Signs & Attachments

225 Expansion Joint Type:	01
242 Deck Drains:	1
243 Parapet Location:	0
Height:	0
Width:	0
238 Curb Height:	1
Curb Material:	1
239 Handrail	1 1
*240 Medium Barrier Rail:	0
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	3
Fwrd:	3
Oppo. Dir. Rear:	0
Oppo. Fwrd:	0
244 Aproach Slab	3
224 Retaining Wall:	0
233Posted Speed Limit:	55
236 Warning Sign:	0.00
234 Delineator:	1.00
235 Hazzard Boards:	1
237 Utilities Gas:	00
Water:	00
Electric:	00
Telephone:	34
Sewer:	00
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	04

Bridge Inventory Data Listing

Structure ID:001-0011-0

Programming Data

201 Project No:	F-038-1 (10)(12)
202 Plans Available:	4
249 Prop Proj No:	BR000-0001-00(216)
250 Approval Status:	0000
251 PI Number:	0001216
252 Contract Date:	02/01/2010
260 Seismic No:	00000
75 Type Work:	34 1
94 Bridge Imp: Cost:	$7,847
95 Roadway Imp. Cost:	582
96 Total Imp Cost:	10371
76 Imp Length:	004293
97 Imp Year:	0000
114Furure ADT:	007545 Year:2027

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0047.4
Drainage Area:	11800
Area of Opening:	066600
113 Scour Critical	5
216Water Depth:	10.3 Br.Height:60.1
222Slope Protection:	6
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	1
223Current Cover:	000
Type:	0
No. Barrels:	0
* Width:	0.00 Height:0.00
* Length:	0 Apron:0
265 U/W Insp. Area	2 Diver:RMO
Location ID No:	001-00004D-021.18N

Measurements:

*29ADT	005030 Year:2007
109%Trucks:	0
* 28 Lanes On:	02 Under:00
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	0150
* 49 Structure Length:	4081
51 Br. Rwdy. Width	28.00
52 Deck Width:	33.40
* 47 Tot. Horiz. Cl:	28
50 Curb / Sidewalk Width	2.00 / 2.00
32 Approach Rdwy. Width	028
*229 Shoulder Width:	
Rear Lt:	2.00 Type:2 Rt:2.00
Fwd. Lt:	2.00 Type:2 Rt:2.50
Permanent Width:	
Rear:	24.00 Type:2
	24.30 Type:2
Intersaction Rear:	0 Fwd: 0
36Safety Features Br. Rail:	2
Transition:	2
App. G. Rail:	1
App. Rail End:	2
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir::	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	N 0 0
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main Deck Thick Approach:	7.50 7.50
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:1983Sub:0000

65 Inventory Rating Mathod:	2
63 Operating Rating Method:	2
66 Inventory Type:	2 Rating: 27
64 Operating Type:	2 Rating: 27
231Calculated Loads:	
H-Modified:	20 0
HS-Modified:	25 0
Type 3:	24 0
Type 3s2:	23 0
Timber:	35 0
Piggyback:	40 0
261 H Inventory Rating:	18
262 H Operating Rating	29
67 Structural Evaluation:	4
58 Deck Condition:	5
59 Superstructure Condition:	4
* 227 Collision Damage:	0
60A Substructure Condition:	5
60B Scour Condition:	6
60C Underwater Condition	5
71 Waterway Adequacy:	8
61 Channel Protection Cond.:	7
68 Deck Geometry:	4
69 UnderClr. Horz/Vert:	N
72 Appr. Alignment:	8
62 Culvert:	N

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

Processed Date:9/29/2010

Bridge Inventory Data Listing

Parameters: Bridge Serial Num

Structure ID:279-0001-0 **Toombs** **SUFF. RATING:** 26.45

Location & Geography

Structure ID:	279-0001-0
200 Brdge Information:	06
*6A Feature Int:	ALTAMAHA RIVER O/F
*6B Critical Bridge:	0
*7A Route No Carried:	SR00004
*7B Facility Carried:	US 1- SR 15
9 Location:	17 MI S OF LYONS
2 Dot District:	5
207 Year Photo:	2009
*91 Inspection Frequency:	24 Date: 08/19/2009
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	2
Designation:	1
Number:	00001
Direction:	0
*16 Latitude:	31 - 57.172 HMMS Prefix:SR
*17 Longtitude:	82 - 21.2043 HMMS Suffix:00 MP:0.90
98 Border Bridge:	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0
12 Base Highway Network:	1
13A LRS Inventory Route:	2791000400
13B Sub Inventory Route:	0
101 parellel Structure:	N
*102 Direction of Traffic:	2
*264 Road Inventory Mile Post:	000.90
*208 Inspection Area:	5 Initials: EFP
Engineer's Initials:	sgm
* Location ID No:	279-00004D-000.90N

*104 Highway System:	1
*26 Functional Classification:	02
*204 Federal Route Type:	F No: 00381
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	0
217 Benchmark Elevation:	0098.65
218 Datum:	2
*19 Bypass Length:	36
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	4
37 Historical Significance:	5
205 Congressional District:	12
27 Year Constructed:	1947
106 Year Reconsrtucted:	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:	0
*42 Type of Service On:	1
Type of Service Under:	9
214 Movable Bridge:	0
203 Type Bridge:	D
259 Pile Encasement	3
*43 Structure Type Main:	1 04
45 No.Spans Main:	009
44 Structure Type Appr:	0 00
46 No Spans Appr:	0000
226 Bridge Curve Horz	0 Vert: 0
111 pier Protection	0
107 Deck Structure Type:	1
108 Wearing Structure Type:	1
Membrane Type:	8
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	1 1
*240 Medium Barrier Rail:	0
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	3
Fwrd:	3
Oppo. Dir. Rear:	0
Oppo. Fwrd:	0
244 Aproach Slab	3
224 Retaining Wall:	0
233Posted 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:	22
Sewer:	00
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	05

Bridge Inventory Data Listing

Structure ID:279-0001-0

Programming Data

201 Project No:	SNFA 427-6 CT.1&2
202 Plans Available:	4
249 Prop Proj No:	BR-0001-00 (216)
250 Approval Status:	0000
251 PI Number:	0001216
252 Contract Date:	02/01/2011
260 Seismic No:	00000
75 Type Work:	34 1
94 Bridge Imp: Cost:	$253
95 Roadway Imp. Cost:	57
96 Total Imp Cost:	437
76 Imp Length:	000501
97 Imp Year:	1990
114Furure ADT:	006780 Year:2027

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000000
113 Scour Critical	U
216Water Depth:	00.0 Br.Height:26.4
222Slope Protection:	6
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	0
223Current Cover:	000
Type:	0
No. Barrels:	0
* Width:	0.00 Height:0.00
* Length:	0 Apron:0
265 U/W Insp. Area	0 Diver:ZZZ
Location ID No:	279-00004D-000.90N

Measurements:

*29ADT	004520 Year:2007
109%Trucks:	0
* 28 Lanes On:	02 Under:00
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	0033
* 49 Structure Length:	290
51 Br. Rwdy. Width	27.80
52 Deck Width:	34.00
* 47 Tot. Horiz. Cl:	28
50 Curb / Sidewalk Width	2.00 / 2.00
32 Approach Rdwy. Width	028
*229 Shoulder Width:	
Rear Lt:	2.00 Type:2 Rt:2.00
Fwd. Lt:	2.00 Type:2 Rt:2.00
Permanent Width:	
Rear:	24.00 Type:2
	24.00 Type:3
Intersaction Rear:	0 Fwd: 0
36Safety Features Br. Rail:	2
Transition:	2
App. G. Rail:	2
App. Rail End:	2
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir::	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	N 0 0
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	6.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:0000Sub:0000

65 Inventory Rating Mathod:	1
63 Operating Rating Method:	1
66 Inventory Type:	2 Rating: 24
64 Operating Type:	2 Rating: 24
231Calculated Loads:	
H-Modified:	21 0
HS-Modified:	28 0
Type 3:	22 0
Type 3s2:	30 0
Timber:	31 0
Piggyback:	40 0
261 H Inventory Rating:	18
262 H Operating Rating	31
67 Structural Evaluation:	4
58 Deck Condition:	5
59 Superstructure Condition:	4
* 227 Collision Damage:	0
60A Substructure Condition:	5
60B Scour Condition:	8
60C Underwater Condition	N
71 Waterway Adequacy:	8
61 Channel Protection Cond.:	8
68 Deck Geometry:	3
69 UnderClr. Horz/Vert:	N
72 Appr. Alignment:	7
62 Culvert:	N

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

Processed Date:9/29/2010

Bridge Inventory Data Listing

Parameters: Bridge Serial Num

Structure ID:279-0002-0 **Toombs** **SUFF. RATING:** 26.45

Location & Geography

Structure ID:	279-0002-0
200 Brdge Information:	06
*6A Feature Int:	WILLIAMS CREEK
*6B Critical Bridge:	0
*7A Route No Carried:	SR00004
*7B Facility Carried:	US 1- SR 15
9 Location:	16 MI S OF LYONS
2 Dot District:	5
207 Year Photo:	2009
*91 Inspection Frequency:	24 Date: 08/19/2009
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	2
Designation:	1
Number:	00001
Direction:	0
*16 Latitude:	31 - 57.3793 HMMS Prefix:SR
*17 Longtitude:	82 - 21.1988 HMMS Suffix:00 MP:1.13
98 Border Bridge:	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0
12 Base Highway Network:	1
13A LRS Inventory Route:	2791000400
13B Sub Inventory Route:	0
101 parellel Structure:	N
*102 Direction of Traffic:	2
*264 Road Inventory Mile Post:	001.14
*208 Inspection Area:	5 Initials: EFP
Engineer's Initials:	sgm
* Location ID No:	279-00004D-001.13N

*104 Highway System:	1
*26 Functional Classification:	02
*204 Federal Route Type:	F No: 00381
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	0
217 Benchmark Elevation:	0098.63
218 Datum:	2
*19 Bypass Length:	36
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	4
37 Historical Significance:	5
205 Congressional District:	12
27 Year Constructed:	1947
106 Year Reconsrtucted:	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:	0
*42 Type of Service On:	1
Type of Service Under:	5
214 Movable Bridge:	0
203 Type Bridge:	D
259 Pile Encasement	3
*43 Structure Type Main:	1 04
45 No.Spans Main:	011
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:	8
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	1 1
*240 Medium Barrier Rail:	0
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	3
Fwrd:	3
Oppo. Dir. Rear:	0
Oppo. Fwrd:	0
244 Aproach Slab	3
224 Retaining Wall:	0
233Posted 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:	22
Sewer:	00
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	05

Bridge Inventory Data Listing

Structure ID:279-0002-0

Programming Data

201 Project No:	SNF 427 (6)
202 Plans Available:	4
249 Prop Proj No:	BR-0001-00 (216)
250 Approval Status:	0000
251 PI Number:	0001216
252 Contract Date:	02/01/2011
260 Seismic No:	00000
75 Type Work:	34 1
94 Bridge Imp: Cost:	$309
95 Roadway Imp. Cost:	62
96 Total Imp Cost:	525
76 Imp Length:	000565
97 Imp Year:	1990
114Furure ADT:	006780 Year:2027

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000000
113 Scour Critical	U
216Water Depth:	0.5 Br.Height:20.4
222Slope Protection:	6
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	0
223Current Cover:	000
Type:	0
No. Barrels:	0
* Width:	0.00 Height:0.00
* Length:	0 Apron:0
265 U/W Insp. Area	0 Diver:ZZZ
Location ID No:	279-00004D-001.13N

Measurements:

*29ADT	004520 Year:2007
109%Trucks:	0
* 28 Lanes On:	02 Under:00
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	0033
* 49 Structure Length:	354
51 Br. Rwdy. Width	27.80
52 Deck Width:	34.00
* 47 Tot. Horiz. Cl:	28
50 Curb / Sidewalk Width	2.00 / 2.00
32 Approach Rdwy. Width	028
*229 Shoulder Width:	
Rear Lt:	2.00 Type:2 Rt:2.00
Fwd. Lt:	2.00 Type:2 Rt:2.00
Permanent Width:	
Rear:	24.00 Type:2
	24.00 Type:3
Intersaction Rear:	0 Fwd: 0
36Safety Features Br. Rail:	2
Transition:	2
App. G. Rail:	2
App. Rail End:	2
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir::	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	N 0 0
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	6.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:0000Sub:0000

65 Inventory Rating Mathod:	1
63 Operating Rating Method:	1
66 Inventory Type:	2 Rating: 24
64 Operating Type:	2 Rating: 24
231Calculated Loads:	
H-Modified:	21 0
HS-Modified:	28 0
Type 3:	22 0
Type 3s2:	36 0
Timber:	31 0
Piggyback:	40 0
261 H Inventory Rating:	18
262 H Operating Rating	31
67 Structural Evaluation:	4
58 Deck Condition:	5
59 Superstructure Condition:	4
* 227 Collision Damage:	0
60A Substructure Condition:	5
60B Scour Condition:	8
60C Underwater Condition	N
71 Waterway Adequacy:	8
61 Channel Protection Cond.:	7
68 Deck Geometry:	3
69 UnderClr. Horz/Vert:	N
72 Appr. Alignment:	8
62 Culvert:	N

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BR-0001-00(216) Appling/Toombs
P.I. 0001216

OFFICE Environment/ Location

DATE December 9, 2008

FROM Glenn Bowman, P.E., State Environmental/ Location Engineer

TO Brent Story, P.E., State Consultant Design Engineer
Attn: Tom Cox

SUBJECT SR 4/US 1 @ Altamaha River; Overflow & Williams Creek

We are furnishing estimated traffic assignments for the above project as follows:

TC # 001-0118

2007 ADT = 5050
2012 ADT = 5900
2032 ADT = 10350
K = 9%
D = 50%
T = 16.5%
24 HR T = 18.5%
S.U. = 6.5%
COMB. = 12%

If you have any questions concerning this information please contact Rhonda Niles at (404) 631-1924.

GSB:RFN

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: BR000-0001-00(216) Appling Toombs
P.I. No.: 0001216
SR 4/US 1 @ Altamaha River

OFFICE: Engineering Services

DATE: May 5, 2010

FROM: Ronald E. Wishon, State Project Review Engineer REW

TO: Bobby K. Hilliard, PE, State Program Delivery Engineer
Attn.: Robert Murphy

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held February 8-11, 2010. Responses were received on May 5, 2010. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
GENERAL CONCEPTS (G)				
G-5	Reduce the amount of ROW being purchased between Sta. 47+50 and Sta. 86+00 and use a 20 ft temporary easement instead	$98,208	Yes	This will be done.
SECTION (S)				
S-1	Use a 10 ft wide shoulder with 4 ft paved section in lieu of 6 ½ ft paved section	$80,072	No	S-1 no longer applies since S-5 will be done.
S-3	Revise the pavement section on the boat access road and use surface treatment in lieu of 1 ½ in thick asphalt with GAB	$9,994	No	Surface treatment is best applied to existing gravel/dirt roads that have been compacted over many years. As this access road will be placed on new fill, the surface treatment will need a stronger base course for support. The proposed savings would be quickly negated by maintenance and repair.

S-5	Use 10 ft wide shoulder with a 4 ft wide full depth paved section in lieu of thinner 6.5 ft wide paved section	$76,738	Yes	This will be done.
S-6	Use 11 ft wide travel lanes with 10 ft wide shoulders and 4 ft wide full depth paved shoulder section in lieu of 12 ft wide lanes with 6 ½ ft wide paved thinner section	$365,627	No	The roadway carries 16.5% truck traffic which makes 12 foot lanes appropriate, especially while the roadway is functioning as a two lane section with two-way traffic.
S-8	Do not demolish the existing pavement and bridge after the new parallel road is complete. Demo cost would be saved in this phase, deferred, but added to the future four lane project.	$500,000	No	Deferring this cost will result in higher removal cost in the future as a result of inflation. There would also be interim costs to inspect and maintain the structures that are a liability to the State.
PROFILE (P)				
P-1	Change the profile slope from 0% to a minimum of 0.25% from Sta. 63+84 to Sta. 113+16 to improve drainage	Design Suggestion	No	Adequate drainage is provided by the roadway cross slope. In order to maintain a minimum 0.25% slope and provide adequate freeboard at the bridges, the profile would have to "roll". This cannot be achieved without creating low points on Bridge No. 1. Creating low points where water is concentrated over a few weep holes is an undesirable situation. If the weep holes clog, the water spread is more severe.
BRIDGE #1 (B1) ALTAMAHA RIVER				
B1-1	Reduce the bridge gutter to gutter width from 40 ft to 36 ft by using 6 ft wide shoulders in lieu of 8 ft shoulders	$389,400	No	Since this bridge will initially function as a two-way travel way, and the future widening project is uncertain, the 8 foot shoulders are necessary for a 4000 foot long structure. The 8 foot shoulders provide a refuge for disabled vehicles as well as an area for emergency access.

BRIDGE #2 (B2) OVERFLOW 1				
B2-1	Reduce the bridge gutter to gutter width from 40 ft to 36 ft by using 6 ft wide shoulders in lieu of 8 ft shoulders	$26,400	No	Since this bridge will initially function as a two-way travel way, and the future widening project is uncertain, the 8 foot shoulders are necessary for a 4000 foot long structure. The 8 foot shoulders provide a refuge for disabled vehicles as well as an area for emergency access.
B2-4	Re-run the hydraulics program to evaluate the possibility of eliminating Bridge #2 and replacing it with an embankment roadway section	$892,431	No	While the initial response was to try to implement this recommendation, further study determined that a guidebank of 300 feet would be required. Additional ROW would be required, and additional wetland and stream impacts would require permitting. OES also identified Stream 10 under the overflow bridge.
BRIDGE #3 (B3) WILLIAMS CREEK				
B3-1	Reduce the bridge gutter to gutter width from 40 ft to 36 ft by using 6 ft wide shoulders in lieu of 8 ft shoulders	$33,440	No	Since this bridge will initially function as a two-way travel way, and the future widening project is uncertain, the 8 foot shoulders are necessary for a 4000 foot long structure. The 8 foot shoulders provide a refuge for disabled vehicles as well as an area for emergency access.
B3-4	Re-run the hydraulics program to evaluate the possibility of eliminating Bridge #3 and replacing it with an embankment roadway section	$1,187,467	No	Williams Creek is an established creek, not an intermittent or perennial stream. OES identified Stream 15 at Sta. 110+00 to 113+00. Replacing the existing bridge with embankment would require additional stream mitigation and would be very difficult to permit.

Please note, the Project Manager's responses contained a response to S-4. The VE Team presented S-4 during the presentation on the last day of the VE Study; however, it was not included in the final report. The anticipated cost savings were in fact an additional cost and the recommendation did not add any value to the project. S-4 has not been included in the implementation letter.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved: _____ **Date:** 12/6/10
Gerald M. Ross, PE, Chief Engineer

REW/LLM
Attachments
c: Ben Buchan
Bobby Hilliard/Mike Haithcock/Robert Murphy
Paul Liles/Bill Duvall/Bill Ingalsbe/Judy Meisner
Amber Phillips
Will Murphy/Brad Saxon/Teresa Scott
Nabil Raad
Marco Trigueros
Eugene Utsalo
Lisa Myers
Matt Sanders