

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-0002-06(048) Hall **OFFICE:** Engineering Services
 BRF00-0002-06(049)(050)
 P.I. Nos.: 122060/122064/122066
 SR 11/US 129 Reconstruction & Bridges over **DATE:** July 30, 2009
 Chattahoochee River and East Fork Little River

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

TO: Bobby Hilliard, PE, Program Delivery Engineer
 Attn.: Steve Adewale, PE

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above projects was held March 10-13, 2009. Responses were received on July 15, 2009. 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
RIGHT OF WAY (ROW)				
ROW-1	Reduce the width of the 44 ft median to 32 ft from Sta. 270+75 to Sta. 391+84	Proposed = \$1,422,039 Actual = \$605,490	Yes	This will be done between Sta. 300+00 to Sta. 385+00.
ROW-2	Reduce the width of the 20 ft median to 16 ft between Sta. 143+00 to Sta. 153+00 and Sta. 240+00 to Sta. 252+00	Proposed = \$406,323 Actual = \$939,772	Yes	Between Sta. 110+00 and Sta. 300+00, the median will be reduced from 20 feet to 16 feet. At median openings, the left turn lane will be 11 feet wide with a 1 foot striped gutter, 2 ½ foot wide integral concrete median and 1 ½ foot gutter adjacent to the opposing travel lane.
ROW-3	Reduce the width of the inside lanes to 11 ft to save pavement and reduce ROW width	Proposed = \$826,142 Actual = \$479,428	Yes	This will be done between Sta. 110+00 and Sta. 300+00.

ROW-7 ROW-15	Adjust vertical profile from Sta. 260+00 to Sta. 360+00 and shorten the east fork Little River Bridge	Proposed = \$2,506,788 Actual = \$659,145	Yes	The urban section will be extended to Sta. 300+00. The design speed of the project will be reduced to 45 mph in this section.
ROW-12	Use a retaining wall from Sta. 186+00 to Sta. 192+00 to reduce ROW impacts	Proposed = \$565,140 Actual = \$780,896	Yes	This will be done. Three displacements will be avoided.
ROW-13	Avoid displacements at Briarwood Road between Skylark Place and Lakeland Road	Proposed = \$571,870 Actual = \$826,701	Yes	To avoid displacement at Briarwood Road requires the use of an urban section with outside curb and gutter. The savings at Briarwood Road are \$533,837. To avoid displacement between Skylark Place and Lakeland Road requires the use of a retaining wall. The savings in this area are \$292,864. The combined savings are \$826,701.
ROW-19	Use an urban section between Sta. 194+00 and Sta. 260+00	Proposed = \$1,545,943 Actual = \$2,370,186	Yes	Utilizing an urban typical section and retaining walls in this area will avoid 12 displacements.
MEDIAN (M)				
M-1	Use a grassed median in lieu of a concrete median in the 20 ft wide median area	Proposed = \$956,571 Actual = \$497,992	Yes	This will be done in conjunction with ROW-2, by removing the concrete median and utilizing a 16 ft grassed median from Sta. 110+00 to Sta. 300+00.
M-2	Use a 24 in wide curb and gutter section in lieu of a 30 in wide curb and gutter section and reduce median width to 19 ft	Proposed = \$244,577 Actual = \$147,297	Yes	Additional catch basins due to the reduced gutter spread will be required; however, there is still a net savings.

BRIDGES (B)				
B-1	Rebuild the existing superstructure of the Chattahoochee River bridge, reinforce the substructure, and use this bridge for southbound traffic; build a new bridge for northbound traffic	\$5,159,258	No	The existing substructure was designed to support a steel superstructure and rebuilding with a concrete superstructure would introduce substantially heavier loads. The positive moment in the pier cap due to factored dead and live loads based on the beam configuration proposed by this alternate is approximately 400% more than the moment capacity of the existing pier cap. According to fiber wrap manufacturing representatives, using fiber wrap systems on existing structural elements is a viable option for increasing structural capacity up to 40-50%.
B-2	Widen the existing Chattahoochee River bridge substructure to the east and rebuild the existing superstructure to achieve the required bridge width	\$7,801,573	No	The existing substructure was designed to support a steel superstructure and rebuilding with a concrete superstructure would introduce substantially heavier loads. The positive moment in the pier cap due to factored dead and live loads based on the beam configuration proposed by this alternate is approximately 385% more than the moment capacity of the existing pier cap. According to fiber wrap manufacturing representatives, using fiber wrap systems on existing structural elements is a viable option for increasing structural capacity up to 40-50%.

B-5	Reduce the outside shoulder width on both bridges from 10 ft to 8 ft	Proposed = \$1,009,800 Actual = \$4,904,550	Yes	For the Chattahoochee River bridge, the combination of reducing the shoulder width from 10 feet to 8 feet, reducing the inside lane to 11 feet, and narrowing the median to 6 feet results in a savings of \$3,528,000. For the East Fork Little river Bridge the combination of changing from two parallel bridges with 10 foot shoulders, two 12 foot lanes and a 4 foot inside shoulder to a single bridge with an 8 foot outside shoulder, two 11 foot lanes, two 12 foot lanes and a 6 foot raised median results in a savings of \$1,342,687. The total savings for both bridges is \$4,904,550.
B-6	Reduce the width of the median on the Chattahoochee bridge from 20 ft wide to 6 ft wide	Proposed = \$2,096,556 Actual = \$0	Yes	This will be done. The savings are included in B-5 above.
B-7	Use fewer bents with longer spans between bents for the Chattahoochee River bridge	\$212,844	No	The use of fewer spans would result in longer span lengths (in excess of 140 feet) which would require the use of drop-in sections if a concrete structure is used. The GDOT Office of Bridge Design does not prefer the use of concrete drop-in sections.
B-12	Use drilled piers for the bridge foundations in lieu of cofferdams with concrete seals and spread footings	Design Suggestion	Yes	Drilled piers are the preferred design and construction technique.

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

Approved:  Date: 8/6/09
 Gerald M. Ross, PE, Chief Engineer

REW/LLM

Attachments

c: Genetha Rice Singleton
Paul Liles/Bill Duvall/Bill Ingalsbe/Joe King
Stanley Hill/Steve Adewale
Randy Davis
Ken Werho
Katherine Russett
Lisa Myers
Matt Sanders

- 2) **Value Engineering Alternative No. ROW-2 - Reduce 20 feet wide median to 16 feet wide at Sta. 143+00 to Sta. 153+00 and Sta. 240+00 to Sta. 252+00. (Cost Savings = \$406,323)**

Approval of the VE Alternative No. ROW-2 is recommended.

- The AASHTO 2004 Green Book states 20 foot median widths are desirable, but widths 16 to 18 feet permit reasonably adequate arrangements (page 716). At median openings, the left turn lane will be 11 feet wide with a 1 foot striped gutter, 2.5 foot wide integral concrete median and a 1.5 foot striped gutter adjacent to the opposing travel lane. We recommend using this median width from station 110+00 to 300+00. Our calculation for the net savings due to this change is \$939,772.

- 3) **Value Engineering Alternative No. ROW-3 - Reduce pavement width by using 11 feet wide inside lanes in lieu of 12 feet wide inside lanes. (Cost Savings = \$826,142)**

Approval of the VE Alternative No. ROW-3 is recommended for the 45 mph segment of the project.

- AASHTO 2004 Green Book, page 312 states an 11-foot lane is acceptable in urban areas where right of way or development is a constraint. We recommend using the 11-foot lane from station 110+00 to 300+00 be used on the inside lane. Our calculation for the net savings due to this change is \$479,428.

- 4) **Value Engineering Alternative No. ROW-7 & 15 - Revise the vertical alignment to reduce the East Fork Little River bridge length and balance cuts and fills. (Cost Savings = \$2,506,788)**

Approval of the VE Alternative No. ROW-7&15 is recommended.

- To utilize a 6 percent grade which will reduce the construction cost, the design speed for this section of the project will need to be reduced to 45 mph. A 6 percent grade and 45 mph design speed is consistent with AASHTO's Policy on Geometric Design of Highways and Streets 2004, page 446, Exhibit 7-2. We recommend this change which extends the urban section up to station 300+00. Our calculation for the net savings due to the change in earthwork cost is \$659,145.

- 5) **Value Engineering Alternative No. ROW-12 - Use retaining walls to reduce right of way impacts. (Cost Savings = \$565,140)**

Approval of the VE Alternative No. ROW-12 is recommended.

- This avoids 3 displacements. Our calculation for the net savings is \$780,896.

6) Value Engineering Alternative No. ROW-13 - Avoid displacements at Briarwood Road and between Skylark Place and Lakeland Road. (Cost Savings = \$571,870)

Approval of the VE Alternative No. ROW-13 is recommended.

- To avoid displacement at Briarwood requires using an urban section with outside curb and gutter. Our calculation for the net savings at Briarwood Road is \$533,837. To avoid displacement between Skylark Place and Lakeland Road requires a retaining wall. Our calculation for the net savings between Skylark Place and Lakeland Road is \$292,864. A combined net savings of \$826,701

7) Value Engineering Alternative No. ROW-19 Use urban typical section between Sta. 194+00 and 260+00. (Cost Savings = \$1,545,943)

Approval of the VE Alternative No. ROW-19 is recommended.

- Utilizing an urban typical section and retaining walls between stations 194+00 and 260+00 avoids 12 displacements. Our calculation for the net savings is \$2,370,186.

8) Value Engineering Alternative No. M-1 - Use a grass median in lieu of concrete median in the 20-ft wide median area. (Cost Savings = \$956,571)

Approval of the VE Alternative No. M-1 is recommended.

- Based on the recommendation of ROW-2, removing the concrete median and utilizing a grassed median for a 16-foot wide median from station 110+00 to 300+00 has a net savings of \$497,992.

9) Value Engineering Alternative No. M-2 - Use an 18-inch wide gutter pan in lieu of 24 inch gutter. (Cost Savings = \$244,607)

Approval of the VE Alternative No. M-2 is recommended.

- This requires additional catch basin due to the gutter spread reaching the maximum spread sooner, but it still is a savings. Our calculations for the net savings \$147,297.

10) Value Engineering Alternative No. B-1 Rebuild the existing superstructure of the Chattahoochee River Bridge, reinforce the substructure and use this bridge for southbound traffic and build a new bridge for the northbound traffic. (Cost Savings = \$7,801,573)

Approval of the VE Alternative No. B-1 is not recommended.

- The existing substructure was designed to support a steel superstructure, and rebuilding with a concrete superstructure would introduce substantially heavier loads. The positive moment in the pier cap due to factored dead and live loads based on the beam

configuration given for Alternative B-1 is approximately 400% more than the moment capacity of the existing pier cap. According to fiber wrap manufacturing representatives, using fiber wrap systems on existing structural elements is a viable option for increasing structural capacity up to approximately 40-50%.

11) Value Engineering Alternative No. B-2 Widen the existing Chattahoochee River Bridge to the east by adding to the existing substructure, raising the top of the existing substructure and constructing a new deck over the entire width of the bridge. (Cost Savings = \$7,801,573)

Approval of the VE Alternative No. B-2 is not recommended.

- The existing substructure was designed to support a steel superstructure, and rebuilding it with a concrete superstructure would introduce substantially heavier loads. The positive moment in the pier cap due to factored dead and live loads based on the beam configuration shown for Alternative B-2 on sheet 2 of the VE study is approximately 385% more than the moment capacity of the existing pier cap. According to fiber wrap manufacturing representatives (per attached FRP strengthening info email), using fiber wrap systems on existing structural elements is a viable option for increasing structural capacity up to approximately 50%.

12) Value Engineering Alternative No. B-5 Reduce the outside shoulder width on both bridges from 10-ft wide to 8 ft wide. (Cost Savings = \$1,009,800)

Approval of the VE Alternative No. B-5 is recommended.

- This alternate is consistent with current GDOT policy per TOPPS 4265-10 revised July 2008.
- For the Chattahoochee River Bridge, the combination of reducing the shoulder width from 10 feet to 8 feet, reducing the inside lane to 11 feet and narrowing the median from 20 feet to 6 feet is a net savings of \$3,528,000. For the East Fork Little River Bridge, the combination of changing from two parallel bridges with 10 foot shoulders, 2 - 12 foot lanes and a 4 foot inside shoulder to one bridge with 8 foot outside shoulder, 2 – 11 foot lanes, 2 – 12 foot lane and a 6 foot raised median is a net savings of \$1,342,687. The total net savings for both bridges is \$4,904,550.

13) Value Engineering Alternative No. B-6 Reduce the median width on the Chattahoochee River Bridge from 20 ft wide to 6 ft wide. (Cost Savings = \$2,096,556)

Approval of the VE Alternative No. B-6 is recommended.

- Decreasing the bridge width by 14 ft. provides a significant reduction in the total bridge cost.

14) Value Engineering Alternative No. B-7 Use fewer bents with longer spans for the Chattahoochee River Bridge. (Cost Savings = \$212,844)

Approval of the VE Alternative No. B-7 is not recommended.

- The use of fewer spans would result in longer spans lengths (in excess of 140') which would require the use of drop-in sections if a concrete superstructure is used. The GDOT Office of Bridge and Structural Design prefers to not use concrete drop-in sections.

15) Value Engineering Alternative No. B-12 Use drilled piers in lieu of a cofferdam with seal concrete and a cast-in-place concrete footing for the bridge for the bridge bents. (No cost savings noted)

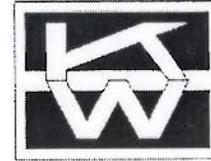
Approval of the VE Alternative No. B-12 is recommended.

- Drilled piers are the preferred design and construction technique.

(Attachments provided for clarification and support of our responses)

Alternative Cost Analysis
SR11/US129 Widening/Relocation

PI #: 122060
Date: 7/17/2009
Performed By: RNA
Checked By: RDG



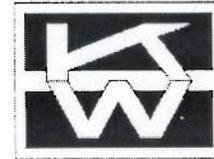
Value Engineering Alternatives Summary of Savings

Alternate No.		Net Savings
ROW-1	\$	605,490.55
ROW-2	\$	939,772.22
ROW-3	\$	479,428.23
ROW-7&15	\$	659,145.49
ROW-12	\$	780,896.80
ROW-13	\$	826,701.52
ROW-19	\$	2,370,186.25
M-1	\$	497,992.29
M-2	\$	147,297.56
B-1	\$	-
B-2	\$	-
B-5	\$	4,904,550.00
B-6		incl in B-5
B-7	\$	-
B-12	\$	-
Total Savings	\$	12,211,460.91

**Alternative Cost Analysis
SR11/US129 Widening/Relocation**

**PI #: 122060
Date: 6/26/2009**

**Performed By: RNA
Checked By: RDG**



**Value Engineering Alternative
ROW-1**

Reduce depressed median width from 44 feet to 32 feet (STA 300+00 to 385+00)

Earthwork				
44-ft median	From CAICE:		Embankment:	361362 CY
			Excavation:	681900 CY
			*Shrinkage Factor:	0.25
	* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)			
	"Swell on Fill" Method:	embank/(1.0-shrinkage factor):	481816	CY
		swelled embank - excav	-200084	CY
		Waste	-200084	CY
	Unclass Excav	Volume	Unit	Price Total
		681900	CY	\$2.47 \$1,684,293.00
				Total \$1,684,293.00
32-ft median	From CAICE:		Embankment:	335588 CY
			Excavation:	647385 CY
			*Shrinkage Factor:	0.25
	* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)			
	"Swell on Fill" Method:	embank/(1.0-shrinkage factor):	447451	CY
		swelled embank - excav	-199934	CY
		Waste	-199934	CY
	Unclass Excav	Volume	Unit	Price Total
		647385	CY	\$2.47 \$1,599,040.95
				Total \$1,599,040.95
				Savings \$85,252.05

Fuel Price Adjustment	
Excav 681900-647385CY=34515 CY Savings	Savings \$42,419.50

Right-of-Way	
Save 12' of R/W width times length (8500') equals:	102,000 SF
Value of Land:	\$1.35 \$/SF
Acquisition Cost Factor	3.47
	Savings: \$477,819.00

Total Savings **\$605,490.55**

Alternative Cost Analysis
 SR11/US129 Widening/Relocation

PI #: 122060
 Date: 7/17/2009
 Performed By: RNA
 Checked By: RDG



Value Engineering Alternative
 ROW-2

Reduce median width from 20' to 16' from STA 110+00 to 300+00 (12' Lanes, Rural Shoulder)

Earthwork				
20-ft median	From CAiCE:	Embankment:	483905 CY	
		Excavation:	419258 CY	
		*Shrinkage Factor:	0.25	
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)				
	"Swell on Fill" Method:	excav*(1.0-shrinkage factor):	314443.5 CY	
		embank - shrink excav	169461.5 CY	
		Borrow	225949 cy	
	Volume	Price	Unit	Total
Unclass Excav	419258	\$2.47	CY	\$1,035,567.26
Borrow Excav	225949	\$2.98	CY	\$673,327.03
			Total	\$1,708,894.29
16-ft median	From CAiCE:	Embankment:	394789 CY	
		Excavation:	468735 CY	
		*Shrinkage Factor:	0.25	
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)				
	"Swell on Fill" Method:	excav*(1.0-shrinkage factor):	351551.25 CY	
		embank - shrink excav	43237.75 CY	
		Borrow	57650 cy	
	Volume	Price	Unit	Total
Unclass Excav	468735	\$2.47	CY	\$1,157,775.45
Borrow Excav	57650	\$2.98	CY	\$171,797.99
			Total	\$1,329,573.44
			Savings	\$379,320.84

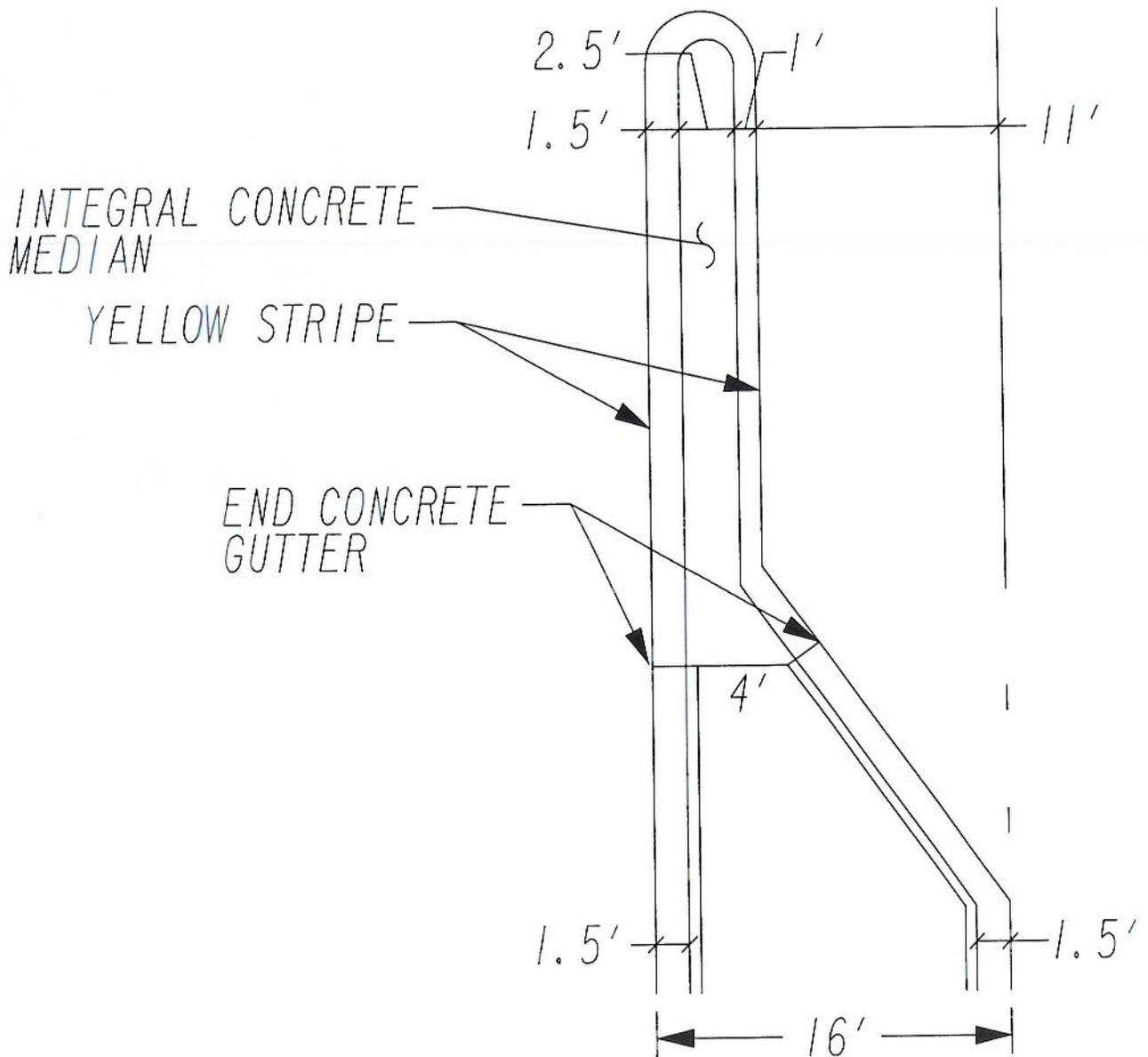
Fuel Price Adjustment			
Unclass Excav	468735-419258CY=49477 CY Cost	20-ft median	\$792,970.05
Borrow Excav	225949-57650 CY=168299 CY Savings	16-ft median	\$646,935.85
		Savings	\$146,034.20

Concrete Median, excluding median breaks and bridges				
	Area	Price	Unit	Total
20-ft median (8860' x 20)/9	19689	\$32.91	SY	\$647,964.99
16-ft median (8860' x 16)/9	15751	\$32.91	SY	\$518,365.41
			Savings	\$129,599.58

Right-of-Way		
Save 4' of RW width times length (15,200') equals:	60,800 SF	
Value of Land:	\$1.35 \$/SF	
Acquisition Cost Factor	3.47	
	Savings	\$284,817.60

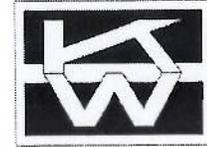
Total Savings \$939,772.22

ROW-2 LEFT TURN LANE DETAIL



Alternative Cost Analysis
SR11/US129 Widening/Relocation

PI #: 122060
Date: 6/26/2009
Performed By: RNA
Checked By: RDG



Value Engineering Alternative
ROW-3

Reduce inside lanes from 12' to 11' (STA 110+00 to 300+00)

Asphalt		Area (SY)	Tons	Unit	Price	Total
Full Depth. 11400' Total Length (STA 110+00 to 162+00, 171+00 to 272+00, 278+00 to 300+00) (11400'x2')+(6100'x1')/9=3211	1.5" 12.5mm	3211	265	TN	\$74.31	\$19,692.15
	2" 19mm	3211	353	TN	\$67.77	\$23,922.81
	7" 25mm	3211	1236	TN	\$59.47	\$73,504.92
	12" GAB	3211		SY	\$22.88	\$73,467.68
Overlay-2 Lanes, 6100' Total Length (STA 126+00 to 149+00, 190+00 to 228+00) (6100'x1')/9=678	1.5" 12.5mm	678	56	TN	\$74.31	\$4,161.36
	2" 19mm	678	75	TN	\$67.77	\$5,082.75
	1.5" Milling	678		SY	\$1.60	\$1,084.80
Savings						\$200,916.47

Earthwork		Volume	Unit	Price	Total
Rural Shoulders, 16' median					
12' Lanes					
From CAiCE:	Embankment:	394789	CY		
	Excavation:	468735	CY		
	*Shrinkage Factor:	0.25			
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)					
"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):	351551.25	CY		
	embank - shrink excav	43237.75	CY		
	Swelled Borrow	57650	CY		
	Unclass Excav	468735	CY	\$2.47	\$1,157,775.45
	Borrow Excav	57650	CY	\$2.98	\$171,797.99
				Total	\$1,329,573.44
11' Inside Lanes					
From CAiCE:	Embankment:	386112	CY		
	Excavation:	459691	CY		
	*Shrinkage Factor:	0.25			
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)					
"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):	344768.25	CY		
	embank - shrink excav	41343.75	CY		
	Swelled Borrow	55125	CY		
	Unclass Excav	459691	CY	\$2.47	\$1,135,436.77
	Borrow Excav	55125	CY	\$2.98	\$164,272.50
				Total	\$1,299,709.27

	Net Savings	\$29,864.17
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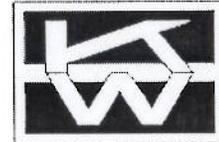
Fuel Price Adjustment		
Asphalt Total 1985 TN Savings		
Unicass Excav 468735-459691CY=9044 CY savings		
Borrow Excav 57650-55125CY=2525 CY Savings		
	Savings	\$84,690.09

Right-of-Way		
	Save 2' of R/W width times length (17,500') equals:	SF 35,000
		Value of Land: \$/SF \$1.35
		Acquisition Cost Factor 3.47
		Savings \$163,957.50

Total Savings	\$479,428.23
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Alternative Cost Analysis
 SR11/US129 Widening/Relocation

PI #: 122060
 Date: 6/26/2009
 Performed By: RNA
 Checked By: RDG



Value Engineering Alternative
 ROW-7&15

Revise profile to reduce East Fork Little River bridge length and balance cuts and fills, STA 252+00 to 300+00

Earthwork							
16' Median, 11' Inside Lanes, Rural Shoulders							
5% Grade	From CAICE:	Embankment:	266301	CY			
		Excavation:	119499	CY			
		*Shrinkage Factor:	0.25				
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)							
"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):		89624.25	CY			
	embank - shrink excav		176676.75	CY			
	Swelled Borrow		235569	CY			
		Volume			Unit	Price	Total
	Unclass Excav	119499			CY	\$2.47	\$295,162.53
	Borrow Excav	235569			CY	\$2.98	\$701,995.62
	Fuel Price Adjustment						\$436,384.43
					Total		\$1,433,542.58
6% Grade							
	From CAICE:	Embankment:	154832	CY			
		Excavation:	185341	CY			
		*Shrinkage Factor:	0.25				
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)							
"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):		139005.75	CY			
	embank - shrink excav		15826.25	CY			
	Swelled Borrow		21102	CY			
		Volume			Unit	Price	Total
	Unclass Excav	185341			CY	\$2.47	\$457,792.27
	Borrow Excav	21102			CY	\$2.98	\$62,882.97
	Fuel Price Adjustment						\$253,721.85
					Total		\$774,397.09
					Net Savings		\$659,145.49



**Value Engineering Alternative
ROW-12**

Use retaining walls to reduce ROW impacts (STA 186+00 to 192+50 RT)

Earthwork		16' Median, 11' Inside Lanes, Urban Shoulders							
No Wall	From CAICE:	Embankment:	41673 CY						
		Excavation:	403 CY						
		*Shrinkage Factor:	0.25						
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)									
	"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):	302.25 CY						
		embank - shrink excav	41370.75 CY						
		Swelled Borrow	55161 CY						
		Volume	403	Unit	Price	Total			
		Unclass Excav	403	CY	\$2.47	\$995.41			
		Borrow Excav	55161	CY	\$2.98	\$164,379.78			
		Fuel Price Adjustment				\$68,289.07			
				Total		\$233,664.26			
With Wall	From CAICE:	Embankment:	39179 CY						
		Excavation:	230 CY						
		*Shrinkage Factor:	0.25						
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)									
	"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):	172.5 CY						
		embank - shrink excav	39006.5 CY						
		Swelled Borrow	52009 CY						
		Volume	230	Unit	Price	Total			
		Unclass Excav	230	CY	\$2.47	\$568.10			
		Borrow Excav	52009	CY	\$2.98	\$154,985.83			
		Fuel Price Adjustment				\$64,202.59			
				Total		\$219,756.52			
							Savings		\$13,907.74

MSE Wall	Area (SF)	Max Height (FT)	Unit Price	Length (LF)	Coping Unit Price	Total
Wall needed from STA 185+50 to 192+50	5292	20.2	\$42.83	560	\$68.86	\$265,217.96
					Cost	\$265,217.96

Property Acquisition Avoided Using Wall						Total
Total Acquisition Cost equals 3.47 times the total acreage value plus displacement cost from Conceptual Stage Study Report						Acquisition Cost
Property Location	Displacement Cost	Property Cost (\$/AC)	Acreage			
188+00 RT	\$179,257.00	\$58,806.00	0.78			\$781,186.11
189+00 RT	\$30,000.00	\$58,806.00	0.67			\$240,818.07
192+00 RT	\$0.00	\$58,806.00	0.05			\$10,202.84
				Savings		\$1,032,207.02
				Total Savings		\$780,896.80

Alternative Cost Analysis
SR11/US129 Widening/Relocation

PI #: 122060
Date: 6/26/2009
Performed By: RNA
Checked By: RDG



Value Engineering Alternative
ROW-13

Avoid displacement at Briarwood Road by using curb & gutter & retaining wall (Sta. 135+00 to 139+00 LT)
Avoid displacement at Skylark Place (Sta. 233+00 to 234+50 LT)

STA 135+00 to 139+00 LT Part A

Earthwork		Embankment:	635 CY	Unit	Price	Total
16' Median, 11' Inside Lanes, Left Rural Shoulder		Excavation:	5348 CY			
From CAICE:		*Shrinkage Factor:	0.25			
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)						
"Shrink on Cut" Method:		excav*(1.0-shrinkage factor):	4011 CY			
		embank - shrink excav	-3376 CY			
		Waste	-4501 CY			
		Volume	5348	CY	\$2.47	\$13,209.56
	Unclass Excav			CY	\$2.98	\$0.00
	Borrow Excav					
				Total		\$13,209.56
16' Median, 11' Inside Lanes, Left Urban Shoulder						
From CAICE:		Embankment:	1075 CY			
		Excavation:	1857 CY			
		*Shrinkage Factor:	0.25			
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)						
"Shrink on Cut" Method:		excav*(1.0-shrinkage factor):	1392.75 CY			
		embank - shrink excav	-317.75 CY			
		Waste	-424 CY			
		Volume	1857	CY	\$2.47	\$4,586.79
	Unclass Excav			CY	\$2.98	\$0.00
	Borrow Excav		0			
				Total		\$4,586.79
Net Savings						\$8,622.77

Fuel Price Adjustment

Unclass Excav 5348-1857CY=3491 CY Savings

Savings \$4,290.50

Urban Shoulder

	Quantity	Unit	Unit Price	Total
Curb and Gutter	400	LF	\$15.79	\$6,316.00
Catch Basin	4	EA	\$2,481.45	\$9,925.80
24" RCP	400	LF	\$43.32	\$17,328.00
Rural Shoulder, Asph	-260	SY	\$40.00	-\$10,400.00
Rural Shoulder, GAB	-260	SY	\$22.88	-\$5,948.80
Cost				\$17,221.00

Property Acquisition Avoided

Total Acquisition Cost equals
3.47 times the total acreage
value plus displacement cost

Property Location	Displacement	Property Cost (\$/AC)	Acreage	Total Acquisition Cost
135+00 LT		\$58,806.00	0.05	\$10,202.84
136+00 LT		\$58,806.00	0.08	\$16,324.55
137+50 LT		\$58,806.00	0.04	\$8,162.27
138+50 LT	\$144,500.00	\$58,806.00	0.01	\$503,455.57

Savings \$538,145.23

Part A Total Savings \$533,837.50

STA 233+00 to 234+50 LT Part B

Earthwork					
16' Median, 11' Inside Lanes, Urban Shoulders					
No Wall	From CAiCE:	Embankment:	3166 CY		
		Excavation:	602 CY		
		*Shrinkage Factor:	0.25		
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)					
"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):		451.5 CY		
	embank - shrink excav		2714.5 CY		
	Swelled Borrow		3619 CY		
		Volume		Unit	Price
	Unclass Excav	602		CY	\$2.47
	Borrow Excav	3619		CY	\$2.98
				Total	\$12,272.55
With Wall	From CAiCE:	Embankment:	2064 CY		
		Excavation:	493 CY		
		*Shrinkage Factor:	0.25		
* Shrinkage Factor obtained from GDOT Office of Materials and Research QC/QA manual (page 4.5.25)					
"Shrink on Cut" Method:	excav*(1.0-shrinkage factor):		369.75 CY		
	embank - shrink excav		1694.25 CY		
	Swelled Borrow		2259 CY		
		Volume		Unit	Price
	Unclass Excav	493		CY	\$2.47
	Borrow Excav	2259		CY	\$2.98
				Total	\$7,949.53
Net Savings					\$4,323.02

Fuel Price Adjustment

Unclass Excav 602-493CY=109 CY Savings	
Borrow Excav 3619-2259CY=1360 CY Savings	
	Savings \$1,805.43

MSE Wall

Wall needed from STA 232+50 to 235+00						
	Area (SF)	Max Height (FT)	Unit Price	Length (LF)	Coping Unit Price	Total
	2625	15.6	\$42.83	250	\$68.86	\$129,643.75
					\$0.00	
					Cost	\$129,643.75

Property Acquisition versus Wall Cost

	Property Location	Property Displacement	Property Cost (\$/AC)	Acreeage	Total Acquisition Cost
Total Acquisition Cost equals 3.47 times the total acreage value plus displacement cost	234+00 LT	\$100,000.00	\$58,806.00	0.34	\$416,379.32
					Savings \$416,379.32

Part B Total Savings \$292,864.02

ROW-13 Total Savings \$826,701.52

250+00 to 252+00 RT	2740	2834	94	\$98.00	F	\$2.47	\$330.18
257+00 to 260+00 RT	8483	7887	-596	-\$620.00	C	\$2.47	-\$2,092.12
						Cost	\$43,100.19

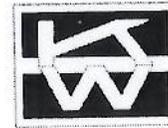
MSE Wall and Gravity Wall (excluding walls calculated in ROW-12 and ROW-13)							
Wall	Area (SF)	Volume (CY)	Max Height (FT)	Unit Price	Length (LF)	Coping Unit Price	Total
180+50 to 184+50 RT	4975		17.8	\$42.83	400	\$68.86	\$240,623.25
202+50 to 205+00 LT		10	2.6	\$518.90	250		\$5,189.00
222+50 to 224+50 LT	1160		8.8	\$42.00	200	\$68.86	\$62,492.00
225+50 to 227+50 LT	805		8.2	\$42.00	200	\$68.86	\$47,582.00
232+50 to 235+50 RT	1100		7.1	\$42.00	250	\$68.86	\$63,415.00
250+00 to 252+00 RT		20	5.6	\$518.90	200		\$10,378.00
257+00 to 260+00 RT	2910		15.3	\$42.83	300	\$68.86	\$145,293.30
						Cost	\$574,972.55

Property Acquisition Avoided with Walls						
Potential Displacement Location	Number of Displacements	Displacement Cost	Property Cost (\$/AC)	Acres	Total Acquisition Cost	Total Acquisition Cost
182+00 RT	1	\$200,000.00	\$58,806.00	0.38	\$771,541.59	\$771,541.59
184+00 RT	1	\$140,000.00	\$58,806.00	0.25	\$536,814.21	\$536,814.21
203+00 LT	4	N/A*	\$58,806.00	0.05		
223+00 LT	1	\$115,000.00	\$58,806.00	0.30	\$460,267.05	\$460,267.05
227+00 LT	1	\$110,000.00	\$58,806.00	0.37	\$457,201.02	\$457,201.02
234+00 LT	1	\$100,000.00	\$58,806.00	0.34	\$416,379.32	\$416,379.32
251+00 RT	1	\$150,000.00	\$58,806.00	0.27	\$575,595.34	\$575,595.34
257+00 RT	2	N/A*	\$58,806.00			
*Value of Business not available						Savings \$3,217,798.53

Total Net Savings \$2,370,186.25

Alternative Cost Analysis
SR11/US129 Widening/Relocation

PI #: 122060
 Date: 6/25/2009
 Performed By: RNA
 Checked By: RDG



Value Engineering Alternative

M-1

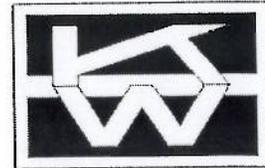
Use grassed median in lieu of concrete median in the 20-ft wide median area.

8860 feet long (median openings excluded), 16-ft Median (from STA 110+00 to 162+00, 171+00 to 272+00, 278+00 to 300+00)				
	Area	Unit	Price	Total
16-ft Concrete Median	15751	SY	\$32.91	\$518,365.41
Maintaince of grass median	Length	Unit	Mowing Frequency (EA/Yr)	Total
	1.7	MI	\$223.00	\$758.20 Per Year
Inflation @ 3% per year			Total Cost over 20 years	\$20,373.12

Net difference	\$497,992.29
-----------------------	---------------------

**Alternative Cost Analysis
SR11/US129 Widening/Relocation**

**PI #: 122060
Date: 6/25/2009
Performed By: RNA
Checked By: RDG**



Value Engineering Alternative

M-2

Use 18" gutter pan in lieu of 24" gutter along urban section STA 176+00 to 265+00

24" Gutter Pan		
	Max gutter spread	8 FT
	Distance to reach gutter capacity (at average 1.6% grade)	722 LF
	Number of structures required	26 EA
	Price per Catch Basin, GP 1	\$2,430.00 EA
	Total	\$63,180.00
	Curb and Gutter, 8x30" Type 2	\$14.96 \$/LF
	Curb and Gutter, 8x30" Type 7	\$13.12 \$/LF
	Length	17,800 LF
	Total	\$499,824.00
Total Cost		\$563,004.00

18" Gutter Pan		
	Max gutter spread	7.5 FT
	Distance to reach gutter capacity (at average 1.6% grade)	543 LF
	Number of structures required	34 EA
	Price per Catch Basin, GP 1	\$2,430.00 EA
	Total	\$82,620.00
	Curb and Gutter, 8x24" Type 2	\$11.96 \$/LF
	Curb and Gutter, 8x24" Type 7	\$9.57 \$/LF
	Length	17,800 LF
	Total	\$383,234.00
	GAB saved	0.5 FT
	Length	35,600 LF
	Area	-1,978 SY
	Price, 12"	\$22.88 \$/SY
	Fuel Price Adjustment	\$4,896.00
	Total	-\$50,147.56
Total Cost		\$415,706.44

Total Net Savings \$147,297.56

VALUE ENGINEERING ALTERNATIVE B-2

Rick Gurney

From: Chaudhry, Tahir [ChaudhryT@pbworld.com]
Sent: Friday, June 12, 2009 3:21 PM
To: Rick Gurney
Subject: FW: FRP Strengthening - general limitations

Rick,

In response to strengthening limitations for existing concrete members using fiber wraps please see the email below.

Thank you

Tahir Chaudhry
PB - Atlanta

From: Shaun Loeding PE [mailto:shaun@fibrwrapconstruction.com]
Sent: Friday, June 12, 2009 3:13 PM
To: Chaudhry, Tahir
Subject: FRP Strengthening - general limitations

Tahir -

My name is Shaun Loeding - I am structural engineer working for Fibrwrap Construction SE, LLC out of Atlanta. Fibrwrap Construction is a pioneer and industry leader in the design and installation of fiber-reinforced polymer (FRP) strengthening systems as applied to existing structural elements. We have just celebrated our 20 year anniversary in this specialized industry.

In regards to strengthening existing concrete members, there are some engineering issues concerning "how much" capacity may be added to a member (note: capacity and strengthening pertain to concepts involving shear and flexure). In general, FRP may designed and installed to realistically add up to 50% increased capacity to a member. This is a general guideline but it is based on the following concrete engineering limitations and concepts:

- 1. Deflection.** If there is load added to a structure that requires a 50% capacity upgrade to a structural member, deflection must be checked and scrutinized for that particular member. With this load increase, the concrete section will be "cracked" and thus have a very low stiffness compared to the initial uncracked section. Code restrictions on the elements must be checked in regards to deflection and the uncracked section. Also, FRP reinforcement will not add any sufficient stiffness to the cracked or uncracked member, regardless of the element dimensions, stiffness, etc. FRP reinforcement is a thin, low-profile reinforcement in nature and it has a very low inherent stiffness quality when added to concrete members.
- 2. Over-reinforcing.** Every concrete member has a limitation regarding tensile reinforcement. Adding tensile reinforcement (in the form of conventional steel rebar or FRP) does not necessarily add capacity at a consistent rate in regards to flexure. Eventually, the concrete compressive strength governs the capacity. If there is an abundant amount of tensile reinforcement in a member, the member failure mode will be governed by the concrete compressive strain and thus the strains in the tensile reinforcement will be limited. This will thus limit the amount of tensile strength activated in the member and limit the overall capacity. This is a common concept when attempting to increase the flexural capacity of a member by more than 50% by simply adding tensile reinforcement.

VALUE ENGINEERING ALTERNATIVE B-2

3. Ductility. With large loads, it is vital to have the proper ductility designed in a member. Although concrete members are ductile by design, sufficient high ductility is required when considering higher loading conditions. FRP materials are not ductile by nature (FRP materials are linear-elastic) and will not add sufficient ductility to concrete flexural members.

Please review the items above and contact me with any questions.

Sincerely,

Shaun Loeding, PE

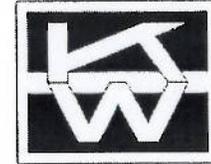
Fibrwrap Construction SE, LLC
PO Box 8656
Atlanta, GA 31106-0656
Phone: 404-371-4033
Fax: 404-371-4032
Cell: 612-382-8860
www.fibrwrapconstruction.com

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**Alternative Cost Analysis
SR11/US129 Widening/Relocation**

PI #: 122060
Date: 6/25/2009

Performed By: RNA
Checked By: RDG



Value Engineering Alternative

B-5&6

Reduce outside shoulder on both bridges from 10' to 8'
Reduce Median Width from 20' to 6'

Chattahoochee River Bridge	
10' Shoulders, 12' Lanes, 20' Median	
Length	840 FT
Width	91.25 FT
Cost per SF	\$210.00
Total	\$16,096,500.00
8' Shoulders, 11' Inside Lanes, 6' Median	
Length	840 FT
Width	71.25 FT
Cost per SF	\$210.00
Total	\$12,568,500.00
Savings	\$3,528,000.00

East Fork Little River Bridge	
2 Parallel Bridges, 4' Inside Shoulders, 10' Outside Shoulders, 12' Lanes	
Bridge 1	
Length	603 FT
Width	41.25 FT
Cost per SF	\$210.00
Total	\$5,223,487.50
Bridge 2	
Length	670 FT
Width	41.25 FT
Cost per SF	\$210.00
Total	\$5,803,875.00
Total Two Bridges	\$11,027,362.50
1 Bridge, 8' Shoulders, 11' Inside Lanes, 6' Median	
Length	645 FT
Width	71.25 FT
Cost per SF	\$210.00
Total	\$9,650,812.50
Savings	\$1,376,550.00

Total Savings \$4,904,550.00

PRECONSTRUCTION STATUS REPORT FOR PI:122060-,122064-,122066-

PROJ ID: 122060- SR 11/US 129/CLEVELAND HWY FM LIMESTONE RD TO S OF NOPONE RD
COUNTY: Hall MPO: Gainesville
LENGTH (MI): 5.40 **TIP #:** GH-020
PROJ NO.: STP00-0002-06(048) **MODEL YR:** 2015
PROJ MGR: Adewale, Steve **TYPE WORK:** Widening
AOHD Initials: SSH **CONCEPT:** ADD 4R(MED 20)
OFFICE: Program Delivery **PROG TYPE:** Reconstruction/Rehabilitation
CONSULTANT: Turnkey Consultant, (Contract with GDOT) **Prov. for ITS:** N
SPONSOR: GDOT **BOND PROJ.:**
DESIGN FIRM: Keck & Wood, Inc.

MGMT LET DATE: 10/15/2013
MGMT ROW DATE: 03/15/2011
SCHED LET DATE: 10/14/2013
WHO LETS?: GDOT Let
LET WITH: 122064-,
 122066-

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS				Date Auth		
						Activity	Approved	Proposed	Cost		Fund	Status
		Concept Development	10/14/1991	2/9/2007	100	PE	1992	1992	5,861,744.07	33E	AUTHORIZED	3/25/1992
		Concept Meeting	3/10/2007	3/10/2007	100	ROW	LR	LR	89,907,466.59	L200	PRECST	
		PM Submit Concept Report	3/6/1991	3/6/1991	100	ROW	2000	2000	646,700.00	RZ	AUTHORIZED	
		Receive Preconstruction Concept Approval	3/26/1991	3/26/1991	100	ROW	2000	2000	646,700.00	RZ	AUTHORIZED	
		Management Concept Approval Complete	10/14/1991	10/21/1991	100	UTIL	NONE	LR	1,034,348.09	L200	PRECST	
		Revise or Re-validate Approved Concept	8/1/2008	9/12/2008	100	CST	LR	LR	61,308,335.96	L200	PRECST	
	8/25/2009	Value Engineering Study	1/5/2007		85							
		Public Information Open House Held	11/29/2007	11/29/2007	100							
	9/24/2009	Environmental Approval	8/16/2006		19							
	9/23/2010	Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0							
7/30/2010		Mapping	5/21/2007	6/9/2007	100							
		Field Surveys/SDE	5/14/2007	6/9/2007	100							
	11/4/2010	Preliminary Plans	5/9/2007		7							
	8/20/2009	Preliminary Bridge Design	4/24/1998		68	PE Cost Est Amt:			5,861,744.07			
		Underground Storage Tanks			100	ROW Cost Est Amt:			45,704,397.00			
		404 Permit Obtainment			0	ROW Cost Est Amt:			646,700.00			
5/3/2010	2/4/2011	PFPR Inspection	9/7/2008	3/31/2008	0	Utility Cost Est Amt			635,000.00			
12/3/2010	12/6/2010	R/W Plans Preparation			0	CST Cost Est Amt			37,638,000.00			
2/15/2011	5/23/2011	R/W Plans Final Approval			0							
5/24/2011	6/24/2011	L & D Approval			0							
1/26/2011	1/28/2011	R/W Acquisition			0							
6/27/2011	3/20/2013	Stake R/W			0							
9/22/2011	10/5/2011	Soil Survey			0							
8/14/2009	4/27/2010	Bridge Foundation Investigation			0							
8/14/2009	7/13/2010	Final Design			0							
2/7/2011	3/4/2013	Final Bridge Plans Preparation			0							
9/6/2011	12/24/2012	PFPR Inspection			0							
5/14/2013	5/15/2013	Submit PFPR Responses (OES)			0							
5/29/2013	6/11/2013				0							

STIP AMOUNTS		Activity	Cost	Fund
PE Cost Est Amt:	5,861,744.07	PE	0.00	33E
ROW Cost Est Amt:	45,704,397.00	ROW	0.00	RZ
Utility Cost Est Amt:	646,700.00	ROW	0.00	L200
CST Cost Est Amt:	635,000.00	UTIL	0.00	L200
	37,638,000.00	CST	0.00	L200

District Comments

NEED FV02R & FV04CST. 9-2-2000. w/122064. 8/6/02. Need (48)(49) before (50)(51)(55)(21). 2/17/03.
 BRIDGE REQUIRED
 SHISA: KECK & WOOD(TURNKEY), NTP issued for Prel.DE
 EAI/NotAppl/NotOnSchedR/Wp 23.09 Dollar
 HALL SGN UTIL 12-91(GAINESVILLE REF DO UTIL-9-19-00)RESCISSION LETTER SENT TO GAINESVILLE & HALL 11-4-05.
 #1P"C"-10-23-97/#2/CNL.T=2-19-98/#3 11-05/#4 3-06/1625 1-07/#6 9-08
 Advance Acq
 NO
Programming: SEND PLANS FOR REVIEW WHEN PEPR IS SCHED\$+
ROW: OGD SUE:TR2.CH1; NEED 2ND SUBMISSION PLANS 08/12/08
Railroad: RECS/REHAB(WIDENING)C=M(BKG/S(FAY/DX)PHOTOS/CONTROL TRANS
Traffic Op:
Utility:
EMG:

Prel. Parcel CT:	1	Total Parcel in ROW System:	2	Cond. Filed:	0	Acquired by:	DOT	DEEDS CT:	2
Under Review:	0	Options - Pending:	0	Relocations:	1	Acquisition MGR:			
Released:	2	Condemnations- Pend:	0	Acquired:	2	RAW Cert Date:			

PRECONSTRUCTION STATUS REPORT FOR PI:122060-,122064-,122066-,122066-

PROJ ID : 122064- Hall
COUNTY : 0.16
LENGHTH (MI) : BRF00-0002-06(049)
PROJ NO.: Adewale, Steve
PROJ MGR: SSH
AOHD Initials: Program Delivery
OFFICE : Turnkey Consultant, (Contract with GDOT)
CONSULTANT: GDOT
SPONSOR : Keck & Wood, Inc.
DESIGN FIRM:

SR 11 @ CHATTAHOOCHEE RIVER
MPO: Gainesville
TIP #: GH-029
MODEL YR : 2015
TYPE WORK: Bridges
CONCEPT: BRIDGE
PROG TYPE: Replacement
Prov. for ITS: N
BOND PROJ.:

MGMT LET DATE : 10/15/2013
MGMT ROW DATE : 03/15/2011
SCHED LET DATE : 10/14/2013
WHO LETS?: GDOT Let
LET WITH : 122060-,
 122066-

DOT DIST: 1
CONG. DIST: 9
BIKE: N
MEASURE: E
NEEDS SCORE: 05
BRIDGE SUFF: 54.91

SCHED START	SCHED FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS				
						Activity	Approved	Proposed	Status	
7/30/2010		Concept Development	10/14/1991	2/9/2007	100	PE	1992	1992	Q10	3/3/1992
		Concept Meeting	3/10/2007	3/10/2007	100	CST	LR	LR	L1C0	PRECST
		PM Submit Concept Report	3/6/1991	3/6/1991	100					
		Receive Preconstruction Concept Approval	3/26/1991	3/26/1991	100					
		Management Concept Approval Complete	10/14/1991	10/21/1991	100					
		Revise or Re-validate Approved Concept	8/1/2008	9/12/2008	100					
	8/25/2009	Value Engineering Study	1/5/2007		85					
	9/24/2009	Public Information Open House Held	11/29/2007	11/29/2007	100					
	9/23/2010	Environmental Approval	8/16/2006		19					
		Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0					
		Mapping	5/21/2007	6/9/2007	100					
		Field Surveys/SDE	5/14/2007	6/9/2007	100					
	11/4/2010	Preliminary Plans	5/9/2007		7					
	8/20/2009	Preliminary Bridge Design	9/7/2008		68	PE	10,283,000.00	10,283,000.00	PE	Q10
	12/17/2009	Underground Storage Tanks	3/27/2008		50	CST	16,749,923.45	16,749,923.45	CST	L1C0
	2/4/2011	404 Permit Obtainment			0					
	12/6/2010	PFPR Inspection			0					
	5/23/2011	R/W Plans Preparation			0					
	6/24/2011	R/W Plans Final Approval			0					
	1/26/2011	L & D Approval			0					
	6/27/2011	R/W Acquisition			0					
	10/5/2011	Stake R/W			0					
	8/14/2009	Soil Survey			0					
	8/14/2009	Bridge Foundation Investigation			0					
	2/7/2011	Final Design			0					
	9/6/2011	Final Bridge Plans Preparation			0					
	5/14/2013	PFPR Inspection			0					
	5/29/2013	Submit PFPR Responses (OES)			0					

District Comments

W/122060, 5/10/95, NEED FY04CST 9-2-2000. Need (48)(49) before (50)(51)(55)(21), 2/17/03.

Bridge: STB 11/12/02 CONSUL-PTG
Design: SHISA: KECK & WOOD(TURNKEY), PIOH scheduled - 11/29/07
EIS: EA/NotAppl/NotOnSched/RW/Russett(12-4-08)
LGPA: HALL-SGN UTL 12-9 |GAINESVILLE REF DO UTL-9-19-00|RESCISSION LETTER SENT TO GAINESVILLE & HALL 11-4-05.

Planning: ROW IS UNDER 122060/ROADWAY PROJECT
Programmming: #1 11-05/#2 3-06
Railroad: NO
Traffic Op: SEND PLANS FOR REVIEW WHEN PFPR IS SCHED\$
Utility: NEED 1ST SUBMISSION PLANS 02/11/03
EMG: BRIDGE REPLACEMENT

PE Cost Est Amt: 10,283,000.00
Date: 9/12/2008
CST Cost Est Amt: 16,749,923.45

Activity **Cost** **Fund**
 PE 0.00 Q10
 CST 0.00 L1C0

Acquired by: N/R
Acquisition MGR:
R/W Cert Date:

Cond. Filed:
Relocations:
Acquired:

DEEDS CT:

PRECONSTRUCTION STATUS REPORT FOR PI:122060-,122064-,122066-

PROJ ID : 122066- Hall **SR 11 @ EAST FORK LITTLE RIVER** **MGMT LET DATE :** 10/15/2013
COUNTY : 0.07 **MPO:** Gainesville **MGMT ROW DATE :** 03/15/2011
LENGTH (MD) : BRF00-0002-06(050) **TIP #:** GH-030
PROJ NO.: Adewale, Steve **MODEL YR :** 2015 **SCHED LET DATE :** 10/14/2013
PROJ MGR: SSH **TYPE WORK:** Bridges **WHO LETS? :** GDOT Let
AOHD Initials: Program Delivery **CONCEPT:** BRIDGE **LET WITH :** 122060-,
OFFICE : Turnkey Consultant, (Contract with GDOT) **PROV. TYPE:** Replacement 122064-
CONSULTANT: GDOT **BOND PROJ. :** N
SPONSOR : Keck & Wood, Inc.

SCHEDULE		TASKS		ACTUAL		PROGRAMMED FUNDS		STIP AMOUNTS			
START	FINISH	START	FINISH	START	FINISH	ACTIVITY	APPROVED	PROPOSED	STATUS	FUND	DATE AUTH
7/30/2010		Concept Development	10/14/1991	2/9/2007	100	PE	1992	1992	AUTHORIZED	Q10	3/31/1992
		Concept Meeting	3/10/2007	3/10/2007	100	CST	LR	LR	PRECST	L1C0	
		PM Submit Concept Report	3/6/1991	3/6/1991	100						
		Receive Preconstruction Concept Approval	3/26/1991	3/26/1991	100						
		Management Concept Approval Complete	10/14/1991	10/21/1991	100						
		Revise or Re-validate Approved Concept	8/1/2008	9/12/2008	100						
	8/25/2009	Value Engineering Study	1/5/2007		85						
	9/24/2009	Public Information Open House Held	11/29/2007	11/29/2007	100						
	9/23/2010	Environmental Approval	8/16/2006		19						
		Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0						
		Mapping	5/21/2007	6/9/2007	100						
		Field Surveys/SDE	5/14/2007	6/9/2007	100						
	11/4/2010	Preliminary Plans	5/9/2007		7						
	8/20/2009	Preliminary Bridge Design	9/7/2008		68	PE				Q10	
	12/17/2009	Underground Storage Tanks	3/27/2008		50	CST				L1C0	
	2/4/2011	404 Permit Obtainment			0						
	12/6/2010	PFPR Inspection			0						
	5/23/2011	R/W Plans Preparation			0						
5/24/2011	6/24/2011	R/W Plans Final Approval			0						
1/26/2011	1/28/2011	L & D Approval			0						
6/27/2011	3/20/2013	R/W Acquisition			0						
9/22/2011	10/5/2011	Stake R/W			0						
8/14/2009	4/27/2010	Soil Survey			0						
8/14/2009	7/13/2010	Bridge Foundation Investigation			0						
2/7/2011	3/4/2013	Final Design			0						
9/6/2011	12/24/2012	Final Bridge Plans Preparation			0						
5/14/2013	5/15/2013	FPFR Inspection			0						
5/29/2013	6/11/2013	Submit FPFR Responses (OES)			0						

ACTIVITY **APPROVED** **PROPOSED** **STATUS** **FUND** **DATE AUTH**
 PE 1992 1992 AUTHORIZED Q10 3/31/1992
 CST LR LR PRECST L1C0

PE Cost Est Amt: 7,336,000.00 **Date:** 9/12/2008
CST Cost Est Amt: **Date:**

District Comments
 W/122060, 5/10/95, NEED F'04CST 9-2-2000, Need (48)(49) before (50)(51)(55)(21), 2/17/03.
 STB 11/12/02 CONSUL-PTG
 SHISA: KECK & WOOD(TURNKEY), PIOH scheduled - 11/29/07
 EA/NotAppl/NotOnSchedR/W/Russett(12-4-08)
 HALL SGN UTL 12-91(GAINESVILLE REF UTL 9-19-00)RESCISSON LETTER SENT TO GAINESVILLE
 & HALL 11-4-05
 #1 11-05#2 3-06
 NO
 SEND PLANS FOR REVIEW WHEN PFPR IS SCHED/\$
 NEED 1ST SUBMISSION PLANS 02/11/03
 BRIDGE REPLACEMENT

Acquired by: N/R
Acquisition MGR:
R/W Cert Date: