

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTEROFFICE CORRESPONDENCE
LOCATION AND DESIGN REPORT

FILE P.I. No. 122066-
BRF00-002-06(050)
Hall County
SR11 @ East Fork Little River
Bridge Replacement

OFFICE Office of Program Delivery

DATE 2/5/2016

FROM Albert V. Shelby, III, State Program Delivery Engineer

Albert Shelby

TO Brent Story, P.E., State Design Policy Engineer
Attn: Dave Peters, State Conceptual Design Group Manager

SUBJECT Request for Location and Design Approval

Description and Project Proposal: The proposed project is located just north of the City of Gainesville on SR 11 / US 129 known as the Cleveland Highway. The project begins with roadway improvements approximately 100 feet north the intersection of SR 11 and Hilltop Circle and continues north to a point approximately 700 feet north of the intersection of SR 11 and Lawson Drive. The total length of the project is approximately 0.8 miles (4,023 feet). Within the project limits is the construction of a new bridge over the East Fork Little River. The bridge will be 661 feet long which is approximately 280 feet longer than the existing bridge and will be wider than the existing bridge to included shoulders across the bridge along with one travel lane in each direction. The roadway typical sections will vary from a 2-lane to 3-lane rural section with flush rural shoulders.

Concept Approval Date:

Original Concept Report Approval: October 21, 1991

Revised Concept Report Approvals: December 18, 1997; September 8, 1998; April 23, 2003;
August 20, 2008

Concept Update: Change the project concept from a widening project that includes a new 4-lane roadway and new 4-lane bridges to a bridge replacement project constructing a new 2-lane bridge over the East Fork Little River east of the existing bridge. Project includes new roadway approaches on both ends of the new bridge to connect the new bridge to the existing roadway.

Environmental Document:

Document Type: Categorical Exclusion

Approval Date:

3/11/2016 (ERP)

Temporary State Route Needed: No Yes Undetermined

Public Involvement:

- Public Information Open House Results summary:
 - A PIOH was held on February 27, 2014 at North Hall High School, 4885 Mt. Vernon Road, Gainesville, Georgia 30506. The PIOH utilized displays for the entire project from Limestone Parkway to a point south of Nopone Road. A total of 81 comments received; 19 supported the project; 10 opposed the project; 3 were uncommitted, 14 expressed conditional support. There were no comments related to the highway within the limits of this bridge replacement project. There were of 214 attendees at the PIOH. No changes have been made to this project due to the PIOH comment.

Consistency with Approved Planning: The design description as presented herein and submitted for approval is an update to the approved Concept Report.

Recommendations: The Office of Program Delivery recommends that the location and design for the project be approved and that the attached Notice be approved for advertising.

Concur: *Phil Pittel*
GDOT Director of Engineering

Approve: *Margaret B. Prickel* *3.16.16*
GDOT Chief Engineer Date

DATE OF LOCATION AND DESIGN APPROVAL: *March 21, 2016*

Attachments:

- Sketch Map
- Construction Cost Estimate
- Notice of Location and Design Approval

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 122066-

OFFICE Program Delivery

PROJECT DESCRIPTION

SR 11 @ EAST FORK LITTLE RIVER

DATE November 2, 2015

From: Albert V. Shelby, III, State Program Delivery Engineer

Kimberly Nesbitt Hagan

To: Lisa L. Myers, State Project Review Engineer

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Charles A. Robinson *CR*

MGMT LET DATE 1/15/2017

MGMT ROW DATE 7/17/2015

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ 7,172,479.10

DATE 10/14/2014

RIGHT OF WAY \$ 4,321,000.00

DATE 10/14/2014

UTILITIES \$ 121,000.00

DATE 10/14/2014

REVISED COST ESTIMATES

CONSTRUCTION* \$ 6,114,018.86

RIGHT OF WAY \$ 1,118,000.00

UTILITIES \$ 110,000.00

*Cost Contains 7 % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

There were no increases to the construction, right of way, and utility cost estimates. A 7% contingency factor was used based on the PFPR plans.

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$	5,357,331.82	Base Estimate From CES
B. ENGINEERING AND INSPECTION (E & I):	\$	267,866.59	Base Estimate (A) x 5 %
C. CONTINGENCY:	\$	393,763.89	Base Estimate (A) + E & I (B) x 7 % <u>See % Table in "Risk Based Cost Estimation" Memo</u>
D. TOTAL LIQUID AC ADJUSTMENT:	\$	95,056.56	Total From Liquid AC Spreadsheet
E. CONSTRUCTION TOTAL:	\$	6,114,018.86	(A + B + C + D = E)

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Georgia Power-Distribution	\$110,000
TOTAL	\$ 110,000.00

ATTACHMENTS:

Detailed Cost Estimate Printout From TRAQS
Liquid AC Adjustment Spreadsheet

PROJ. NO. BRF00-0002-06(050)
 P.I. NO. 122066-
 DATE 10/31/2015

CALL NO. 7/22/2014

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-15	\$ 2.155
DIESEL		\$ 2.485
LIQUID AC		\$ 429.00

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

LIQUID AC ADJUSTMENTS

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

Asphalt

Price Adjustment (PA)					93951	\$	93,951.00
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	686.40			
Monthly Asphalt Cement Price month project let (APL)			\$	429.00			
Total Monthly Tonnage of asphalt cement (TMT)					365		

ASPHALT	Tons	%AC	AC ton
Leveling	300	5.0%	15
12.5 OGFC	0	5.0%	0
12.5 mm	1400	5.0%	70
9.5 mm SP		5.0%	0
25 mm SP	2800	5.0%	140
19 mm SP	2800	5.0%	140
	7300		365

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	1,105.56	\$	1,105.56
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	686.40			
Monthly Asphalt Cement Price month project let (APL)			\$	429.00			
Total Monthly Tonnage of asphalt cement (TMT)					4.295100922		

Bitum Tack

Gals	gals/ton	tons
1000	232.8234	4.29510092

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				\$	0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	686.40			
Monthly Asphalt Cement Price month project let (APL)			\$	429.00			
Total Monthly Tonnage of asphalt cement (TMT)					0		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0

TOTAL LIQUID AC ADJUSTMENT \$ 95,056.56

DETAILED COST ESTIMATE



Job: 122066

JOB NUMBER 122066

FED/STATE PROJECT NUMBER BRF00-0002-06(050)

SPEC YEAR: 01

DESCRIPTION: SR 11 BRIDGE REPLACEMENT AT EAST FORK LITTLE RIVER

ITEMS FOR JOB 122066

001 - ROADWAY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	\$60,000.00000	TRAFFIC CONTROL - PI 122066	\$60,000.00
0010	153-1300	1.000	EA	\$81,438.57371	FIELD ENGINEERS OFFICE TP 3	\$81,438.57
0015	210-0100	1.000	LS	\$600,000.00000	GRADING COMPLETE - PI 122066	\$600,000.00
0025	310-1101	9330.000	TN	\$19.48219	GR AGGR BASE CRS, INCL MATL	\$181,768.83
0030	318-3000	200.000	TN	\$20.21373	AGGR SURF CRS	\$4,042.75
0035	402-1812	675.000	TN	\$83.92249	RECYL AC LEVELING, INC BM&HL	\$56,647.68
0040	402-3113	1855.000	TN	\$65.98000	RECYL AC 12.5MM SP, GP1/2, BM&HL	\$122,392.90
0045	402-3121	3970.000	TN	\$68.32737	RECYL AC 25MM SP, GP1/2, BM&HL	\$271,259.66
0050	402-3190	1765.000	TN	\$74.48725	RECYL AC 19 MM SP, GP 1 OR 2 ,INC BM&HL	\$131,470.00
0055	413-1000	2175.000	GL	\$3.38221	BITUM TACK COAT	\$7,356.31
0059	432-0206	675.000	SY	\$5.03869	MILL ASPH CONC PVMT/ 1.50" DEP	\$3,401.12
0060	433-1000	260.000	SY	\$156.76365	REINF CONC APPROACH SLAB	\$40,758.55
0065	441-0016	170.000	SY	\$36.92702	DRIVEWAY CONCRETE, 6 IN TK	\$6,277.59
0067	441-0018	370.000	SY	\$44.52985	DRIVEWAY CONCRETE, 8 IN TK	\$16,476.04
0068	441-4020	105.000	SY	\$38.57532	CONC VALLEY GUTTER, 6 IN	\$4,050.41
0069	441-5002	255.000	LF	\$14.75678	CONC HEADER CURB, 6", TP 2	\$3,762.98
0070	441-6216	660.000	LF	\$15.69613	CONC CURB & GUTTER/ 8"X24"TP2	\$10,359.45
0075	456-2012	2.000	GLM	\$701.99149	INTENT. RUMB. STRIPS - GRND-IN-PL (CONT)	\$1,403.98
0089	500-9999	3.000	CY	\$217.71066	CL B CONC, BASE OR PVMT WIDEN	\$653.13
0090	634-1200	19.000	EA	\$114.52012	RIGHT OF WAY MARKERS	\$2,175.88
0094	641-1100	90.000	LF	\$57.67620	GUARDRAIL, TP T	\$5,190.86
0095	641-1200	2400.000	LF	\$17.81737	GUARDRAIL, TP W	\$42,761.69
0100	641-5001	5.000	EA	\$842.86621	GUARDRAIL ANCHORAGE, TP 1	\$4,214.33
0105	641-5012	5.000	EA	\$1,969.14128	GUARDRAIL ANCHORAGE, TP 12	\$9,845.71
SUBTOTAL FOR ROADWAY:						\$1,667,708.42

002 - DRAINAGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0153	500-3800	3.700	CY	\$927.89511	CL A CONC, INCL REINF STEEL	\$3,433.21
0125	550-1180	356.000	LF	\$40.53252	STM DR PIPE 18", H 1-10	\$14,429.58
0120	550-1302	126.000	LF	\$45.89000	STM DR PIPE 30", H 15-20	\$5,782.14
0124	550-1422	86.000	LF	\$92.08000	STM DR PIPE 42", H 15-20	\$7,918.88
0137	550-2180	48.000	LF	\$30.56722	SIDE DR PIPE 18", H 1-10	\$1,467.23
0142	550-2181	56.000	LF	\$28.86000	SIDE DR PIPE 18", H 10-15	\$1,616.16
0158	550-4118	6.000	EA	\$349.11569	FLARED END SECT 18 IN, SIDE DR	\$2,094.69
0162	550-4218	2.000	EA	\$638.37468	FLARED END SECT 18 IN, ST DR	\$1,276.75
0163	603-2180	185.000	SY	\$29.85162	STN DUMPED RIP RAP, TP 3, 12"	\$5,522.55
0168	603-7000	185.000	SY	\$3.97253	PLASTIC FILTER FABRIC	\$734.92
0143	668-1100	2.000	EA	\$2,310.35510	CATCH BASIN, GP 1	\$4,620.71
0148	668-4300	1.000	EA	\$1,933.40722	STORM SEW MANHOLE, TP 1	\$1,933.41
0172	668-4311	7.000	LF	\$196.47620	ST SEW MANHOLE, TP 1, A DEP, CL 1	\$1,375.33
SUBTOTAL FOR DRAINAGE:						\$52,205.56

DETAILED COST ESTIMATE



Job: 122066

003 - EROSION CONTROL - PERMANENT

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0173	163-0240	80.000	TN	\$220.50701	MULCH	\$17,640.56
0178	441-0204	925.000	SY	\$32.65117	PLAIN CONC DITCH PAVING, 4 IN	\$30,202.33
0183	700-6910	6.000	AC	\$837.40298	PERMANENT GRASSING	\$5,024.42
0188	700-7000	18.000	TN	\$109.63036	AGRICULTURAL LIME	\$1,973.35
0193	700-8000	4.000	TN	\$639.38704	FERTILIZER MIXED GRADE	\$2,557.55
0198	700-8100	300.000	LB	\$2.36739	FERTILIZER NITROGEN CONTENT	\$710.22
0202	711-0300	3850.000	SY	\$3.94000	TURF REINFORCING MATTING, TP 3	\$15,169.00
SUBTOTAL FOR EROSION CONTROL - PERMANENT:						\$73,277.43

004 - EROSION CONTROL - TEMPORARY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0203	163-0232	3.000	AC	\$364.72651	TEMPORARY GRASSING	\$1,094.18
0208	163-0300	4.000	EA	\$1,317.56200	CONSTRUCTION EXIT	\$5,270.25
0212	163-0503	13.000	EA	\$387.54822	CONSTR AND REMOVE SILT CONTROL GATE, TP 3	\$5,038.13
0217	163-0529	60.000	LF	\$4.41978	CNST/REM TEMP SED BAR OR BLD STRW CK DM	\$265.19
0218	163-0531	1.000	EA	\$9,964.63067	CONSTR & REM SEDIMENT BASIN, TP 1, STA NO- SEDIMENT BASIN 1	\$9,964.63
0221	163-0541	90.000	EA	\$408.18495	CONSTR & REM ROCK FILTER DAMS	\$36,736.65
0222	163-0542	13.000	EA	\$445.75263	CONSTR & REM STONE FILTER RING	\$5,794.78
0227	163-0550	3.000	EA	\$154.14012	CONS & REM INLET SEDIMENT TRAP	\$462.42
0232	165-0030	5300.000	LF	\$0.56689	MAINT OF TEMP SILT FENCE, TP C	\$3,004.52
0237	165-0060	1.000	EA	\$1,351.72487	MAINT OF TEMP SEDIMENT BASIN, STA NO -	\$1,351.72
0242	165-0071	60.000	LF	\$1.77285	MAINT OF SEDIMENT BARRIER - BALED STRAW	\$106.37
0246	165-0087	13.000	EA	\$49.98019	MAINT OF SILT CONTROL GATE, TP 3	\$649.74
0247	165-0101	4.000	EA	\$468.28609	MAINT OF CONST EXIT	\$1,873.14
0252	165-0105	3.000	EA	\$42.41441	MAINT OF INLET SEDIMENT TRAP	\$127.24
0257	165-0110	90.000	EA	\$107.04715	MAINT OF ROCK FILTER DAM	\$9,634.24
0262	165-0111	13.000	EA	\$140.71693	MAINT OF STONE FILTER RING	\$1,829.32
0267	167-1000	3.000	EA	\$207.60000	WATER QUALITY MONITORING AND SAMPLING	\$622.80
0272	167-1500	18.000	MO	\$489.82523	WATER QUALITY INSPECTIONS	\$8,816.85
0277	171-0030	10610.000	LF	\$2.82086	TEMPORARY SILT FENCE, TYPE C	\$29,929.32
0282	643-8200	1711.000	LF	\$1.31614	BARRIER FENCE (ORANGE), 4 FT	\$2,251.92
0287	716-2000	20860.000	SY	\$0.92297	EROSION CONTROL MATS, SLOPES	\$19,253.15
SUBTOTAL FOR EROSION CONTROL - TEMPORARY:						\$144,076.56

005 - BRIDGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0292	500-0100	2373.000	SY	\$6.22628	GROOVED CONCRETE	\$14,774.96
0297	500-1006	852.000	LS	\$627.00000	SUPERSTR CONCRETE, CL AA, BR NO - 1	\$534,204.00
0302	500-2100	1124.000	LF	\$44.72220	CONCRETE BARRIER	\$50,267.75
0307	500-3101	362.000	CY	\$434.31727	CLASS A CONCRETE	\$157,222.85
0312	507-9032	3934.000	LF	\$248.10000	PSC BEAMS, AASHTO, BULB TEE, 72"	\$976,025.40
0317	511-1000	39438.000	LB	\$0.97334	BAR REINF STEEL	\$38,386.58
0322	511-3000	200220.000	LS	\$0.80000	SUPERSTR REINF STEEL, BR NO - 1	\$160,176.00
0327	520-0353	20.000	EA	\$132.18000	H-PILE POINTS, HP 12 X 53	\$2,643.60
0332	520-1125	300.000	LF	\$53.08643	PIL-IN-PL, STEEL H, HP 12 X 53	\$15,925.93
0337	520-4125	2.000	EA	\$0.78480	LOAD TEST, STEEL H, HP 12 X 53	\$1.57
0342	520-5000	100.000	LF	\$170.56774	PILOT HOLES	\$17,056.77
0347	524-0010	162.000	LF	\$1,676.03709	DRILLED CAISSON - 72 IN	\$271,518.01
0352	524-0300	1.000	EA	\$170,000.00000	LOAD TEST, CAISSON - 72 IN	\$170,000.00
0357	540-1101	1.000	LS	\$561,150.00000	REM OF EX BR, STA NO - 273+04	\$561,150.00
SUBTOTAL FOR BRIDGE:						\$2,969,353.42

DETAILED COST ESTIMATE



Job: 122066

006 - SIGNING & MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0361	610-6515	2.000	EA	\$116.80193	REM HIGHWAY SIGN, STD	\$233.60
0362	611-5360	2.000	EA	\$133.58398	RESET HIGHWAY SIGN	\$267.17
0367	636-1020	53.000	SF	\$14.14815	HWY SGN,TP1MAT,REFL SH TP3	\$749.85
0372	636-1033	152.060	SF	\$17.94839	HWY SIGNS, TP1MAT,REFL SH TP 9	\$2,729.23
0377	636-1036	14.920	SF	\$23.55000	HWY SIGNS, TP1 MATL,REFL SH, TP 11	\$351.37
0382	636-2070	477.000	LF	\$7.38892	GALV STEEL POSTS, TP 7	\$3,524.51
0387	636-2080	34.000	LF	\$9.84439	GALV STEEL POSTS, TP 8	\$334.71
0392	636-3010	2.000	EA	\$523.10860	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	\$1,046.22
0397	652-9001	4140.000	SY	\$1.80241	TRAFFIC STRIPE, WHITE	\$7,461.98
0402	652-9002	600.000	SY	\$1.79794	TRAFFIC STRIPE, YELLOW	\$1,078.76
0407	653-0120	12.000	EA	\$81.88297	THERM PVMT MARK, ARROW, TP 2	\$982.60
0412	653-1501	8220.000	LF	\$0.54753	THERMO SOLID TRAF ST 5 IN, WHI	\$4,500.70
0417	653-1502	5000.000	LF	\$0.54323	THERMO SOLID TRAF ST, 5 IN YEL	\$2,716.15
0422	653-1704	40.000	LF	\$6.23334	THERM SOLID TRAF STRIPE,24",WH	\$249.33
0427	653-3501	250.000	GLF	\$0.54904	THERMO SKIP TRAF ST, 5 IN, WHI	\$137.26
0432	653-3502	1160.000	GLF	\$0.32379	THERMO SKIP TRAF ST, 5 IN, YEL	\$375.60
0442	654-1001	264.000	EA	\$4.35380	RAISED PVMT MARKERS TP 1	\$1,149.40
0437	654-1003	25.000	EA	\$5.53273	RAISED PVMT MARKERS TP 3	\$138.32
0447	657-1085	1310.000	LF	\$6.71518	PRF PL SD PVT MKG,8",B/W,TP PB	\$8,796.89
0452	657-6085	1310.000	LF	\$6.32579	PRF PL SD PVMT MKG,8",B/Y,TPPB	\$8,286.78
SUBTOTAL FOR SIGNING & MARKING:						\$45,110.43

COST GROUP FOR JOB 122066

LINE NUMBER	UNIT	CALCULATION RULE	QUANTITY	PRICE	COST GROUP ID	DESCRIPTION	AMOUNT
00000001	LS	NORM	1.000	\$400,000.00	UDEF	BRIDGE USACOE SPECIAL PROVISIONS	\$400,000.00
00000002	LS	NORM	1.000	\$5,600.00	UDEF	BRIDGE REINFORCED ELASTOMERIC PADS	\$5,600.00
SUBTOTAL:							\$405,600.00

TOTALS FOR JOB 122066

ITEMS COST:	\$4,951,731.82
COST GROUP COST:	\$405,600.00
ESTIMATED COST:	\$5,357,331.82
CONTINGENCY PERCENT:	0.00
ENGINEERING AND INSPECTION:	0.00
ESTIMATED COST WITH CONTINGENCY AND E&I:	\$5,357,331.82

**NOTICE OF LOCATION AND DESIGN APPROVAL
PROJECT NUMBER BRF00-002-06(050), HALL COUNTY
P. I. NUMBER 122066-**

Notice is hereby given in compliance with Georgia Code 22-2-109 and 32-3-5 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location and design approval is: March 21, 2016

The project is located in Land Lots 139, 140, 141, 144, 145 and 146 in the 10th Land Districts, Hall County. The proposed project is located just north of the City of Gainesville on SR 11 / US 129 known as the Cleveland Highway.

The project begins with roadway improvements approximately 100 feet north the intersection of SR 11 and Hilltop Circle and continues north to a point approximately 700 feet north of the intersection of SR 11 and Lawson Drive. The total length of the project is approximately 0.8 miles (4,023 feet). Within the project limits is the construction of a new bridge over the East Fork Little River. The bridge will be 661 feet long which is approximately 280 feet longer than the existing bridge and will be wider than the existing bridge to included shoulders across the bridge along with one travel lane in each direction. The roadway typical sections will vary from a 2-lane to 3-lane rural section with flush rural shoulders.

Drawings or maps or plats of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Scott Frederick, District 1, Area 1 Engineer
sfrederick@dot.ga.gov
2594 Gillsville Highway
Gainesville, GA 30507
(770) 535-5759

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

Albert V. Shelby III, State Program Delivery Engineer
Office of Program Delivery
Attn: Charles A. Robinson
chrobinson@dot.ga.gov
One Georgia Center
600 West Peachtree Street, Floor 25
Atlanta, GA 30308
(404) 631-1439

Any written request or communication in reference to this project or notice SHOULD include the Project and P. I. Numbers as noted at the top of this notice.