

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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

**FILE** P.I. #0009870 **OFFICE** Design Policy & Support  
Effingham County  
GDOT District 5 - Jesup **DATE** 4/29/2015  
Roundabout - SR17 @ SR119



**FROM** *for* Brent Story, State Design Policy Engineer

**TO** SEE DISTRIBUTION

**SUBJECT** **APPROVED LOCATION & DESIGN REPORT**

Attached is the approved Location and Design Report with Notice of Location & Design Approval for the above subject project.

Attachment

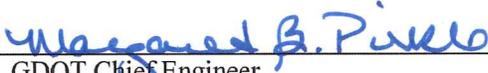
**DISTRIBUTION:**

Glenn Bowman, Director of Engineering  
Joe Carpenter, Director of P3/Program Delivery  
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery  
Albert Shelby, State Program Delivery Engineer  
Bobby Hilliard, Program Control Administrator  
Cindy VanDyke, State Transportation Planning Administrator  
Hiral Patel, State Environmental Administrator  
Andrew Heath, State Traffic Engineer  
Angela Robinson, Financial Management Administrator  
Lisa Myers, State Project Review Engineer  
Paul Tanner, Asst. State Transportation Data Administrator  
Attn: Systems & Classification Branch  
Andy Casey, State Roadway Design Engineer  
Attn: Joshua Taylor, Design Group Manager  
Richard Cobb, Location Bureau Chief  
Karon Ivery, District Engineer  
Will Murphy, District Preconstruction Engineer  
Derek Edenfield, District Planning & Programming Engineer  
Ron Nelson, Area Engineer - D5, A4  
Aghdas Ghazi, Project Manager  
BOARD MEMBER - 12th Congressional District



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

Concur:  4/23/15  
GDOT Director of Engineering Date

Approve:  4.28.15  
GDOT Chief Engineer Date

DATE OF LOCATION AND DESIGN APPROVAL:

April 29, 2015

AVS: BWS: JMB: ASG

Attachments: Sketch Map  
Construction Cost Estimate  
Notice of Location and Design Approval



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0009870

OFFICE Program Delivery

**PROJECT DESCRIPTION**

SR 17 @ SR 119

DATE October 7, 2014



From: Albert V. Shelby, State Program Delivery Engineer



To: Lisa L. Myers, State Project Review Engineer

Subject: **REVISIONS TO PROGRAMMED COSTS**

PROJECT MANAGER Aghdas Ghazi

MGMT LET DATE 5/15/2016

MGMT ROW DATE 5/15/2015

**PROGRAMMED COSTS (TPro W/OUT INFLATION)**

**LAST ESTIMATE UPDATE**

CONSTRUCTION \$ 1,580,726.98

DATE 6/10/2014

RIGHT OF WAY \$ 242,000.00

DATE 3/19/2013

UTILITIES \$ 82,500.00

DATE 6/10/2014

**REVISED COST ESTIMATES**

CONSTRUCTION\* \$ 1,724,378.96

RIGHT OF WAY \$ N/A

UTILITIES \$ N/A

\*Cost Contains 5 % Contingency

**REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:**

A more detailed cost estimate was developed from PFPR and the increase due to unit cost and contingency cost added.

## CONTINGENCY SUMMARY

<b>A. CONSTRUCTION COST ESTIMATE:</b>	\$	1,480,356.81	Base Estimate From CES	
<b>B. ENGINEERING AND INSPECTION (E &amp; I):</b>	\$	74,017.84	Base Estimate (A) x	5 %
<b>C. CONTINGENCY:</b>	\$	77,718.73	Base Estimate (A) + E & I (B) x	5 %
			<a href="#">See % Table in "Risk Based Cost Estimation" Memo</a>	
<b>D. TOTAL LIQUID AC ADJUSTMENT:</b>	\$	92,285.58	Total From Liquid AC Spreadsheet	
<b>E. CONSTRUCTION TOTAL:</b>	\$	1,724,378.96	(A + B + C + D = E)	

### REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
TOTAL	\$ -

**ATTACHMENTS:**

Detailed Cost Estimate Printout From TRAQS  
 Liquid AC Adjustment Spreadsheet

PROJ. NO. N/A  
P.I. NO. 0009870  
DATE 10/7/2014

CALL NO. 9/29/2009

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-14	\$ 3.312
DIESEL		\$ 3.718
LIQUID AC		\$ 615.00

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)				90478.8	\$	90,478.80
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	984.00		
Monthly Asphalt Cement Price month project let (APL)			\$	615.00		
<b>Total Monthly Tonnage of asphalt cement (TMT)</b>				<b>245.2</b>		

ASPHALT	Tons	%AC	AC ton
Leveling	1380	5.0%	69
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	1109	5.0%	55.45
25 mm SP	1449	5.0%	72.45
19 mm SP	966	5.0%	48.3
	<b>4904</b>		<b>245.2</b>

**BITUMINOUS TACK COAT**

Price Adjustment (PA)			\$	1,806.78	\$	1,806.78
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	984.00		
Monthly Asphalt Cement Price month project let (APL)			\$	615.00		
<b>Total Monthly Tonnage of asphalt cement (TMT)</b>				<b>4.896415051</b>		

**Bitum Tack**

Gals	gals/ton	tons
1140	232.8234	4.89641505

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)				0	\$	
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	984.00		
Monthly Asphalt Cement Price month project let (APL)			\$	615.00		
<b>Total Monthly Tonnage of asphalt cement (TMT)</b>				<b>0</b>		

**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 \$ 92,285.58**

# DETAILED COST ESTIMATE



Job: 0009870

JOB NUMBER 0009870

FED/STATE PROJECT NUMBER

SPEC YEAR: 01

DESCRIPTION: SR 17 @ SR 119

ITEMS FOR JOB 0009870

0010 - ROADWAY

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	\$150,000.00000	TRAFFIC CONTROL - 0009870	\$150,000.00
0085	210-0100	1.000	LS	\$200,000.00000	GRADING COMPLETE - 0009870	\$200,000.00
0090	310-1101	6078.000	TN	\$27.12973	GR AGGR BASE CRS, INCL MATL	\$164,894.50
0095	402-1812	1380.000	TN	\$82.62576	RECYL AC LEVELING, INC BM&HL	\$114,023.55
0104	402-3100	1109.000	TN		REC AC 9.5 MM SP, TPI, GP1 OR BL1, INCL BM&HL	
0100	402-3121	1449.000	TN	\$80.84675	RECYL AC 25MM SP, GP1/2, BM&HL	\$117,146.94
0110	402-3190	966.000	TN	\$91.16780	RECYL AC 19 MM SP, GP 1 OR 2, INC BM&HL	\$88,068.09
0115	413-1000	1140.000	GL	\$3.03497	BITUM TACK COAT	\$3,459.87
0135	430-0200	422.000	SY	\$55.00000	PLN PC CONC PVMT/CL1C/ 10" TK	\$23,210.00
0120	432-5010	3145.000	SY	\$3.13663	MILL ASPH CONC PVMT, VARB DEPTH	\$9,864.70
0125	441-0104	833.000	SY	\$40.04376	CONC SIDEWALK, 4 IN	\$33,356.45
0130	441-0748	728.000	SY	\$42.04217	CONC MEDIAN, 6 IN	\$30,606.70
0270	441-3999	314.000	LF	\$20.69920	CONCRETE V GUTTER	\$6,499.55
0139	441-5008	220.000	LF	\$11.83000	CONC HEADER CURB, 6 IN, TP 7	\$2,602.60
0145	441-5025	315.000	LF	\$25.00000	CONC HEADER CURB, 4", TP 9	\$7,875.00
0150	441-6222	3861.000	LF	\$17.12797	CONC CURB & GUTTER/ 8"X30"TP2	\$66,131.09
0155	446-1100	850.000	LF	\$5.28052	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	\$4,488.44
0160	550-1180	1269.000	LF	\$38.68461	STM DR PIPE 18", H 1-10	\$49,090.77
0165	550-1240	887.700	LF	\$44.37239	STM DR PIPE 24", H 1-10	\$39,389.37
0280	550-1300	384.600	LF	\$56.93288	STM DR PIPE 30", H 1-10	\$21,896.39
0275	550-1360	65.000	LF	\$80.66766	STM DR PIPE 36", H 1-10	\$5,243.40
0170	550-4218	2.000	EA	\$576.91792	FLARED END SECT 18 IN, ST DR	\$1,153.84
0175	550-4224	1.000	EA	\$735.18724	FLARED END SECT 24 IN, ST DR	\$735.19
0185	603-2181	50.000	SY	\$62.27422	STN DUMPED RIP RAP, TP 3, 18"	\$3,113.71
0190	603-7000	50.000	SY	\$3.93057	PLASTIC FILTER FABRIC	\$196.53
0195	634-1200	41.000	EA	\$104.42916	RIGHT OF WAY MARKERS	\$4,281.60
0225	668-1100	10.000	EA	\$2,199.66696	CATCH BASIN, GP 1	\$21,996.67
0230	668-2100	14.000	EA	\$1,914.80936	DROP INLET, GP 1	\$26,807.33
0285	668-5000	2.000	EA	\$1,832.35672	JUNCTION BOX	\$3,664.71
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$1,199,796.99</b>

# DETAILED COST ESTIMATE



Job: 0009870

## 0020 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0010	163-0232	1.000	AC	\$660.06863	TEMPORARY GRASSING	\$660.07
0015	163-0240	20.000	TN	\$287.36699	MULCH	\$5,747.34
0020	163-0300	2.000	EA	\$1,494.15410	CONSTRUCTION EXIT	\$2,988.31
0025	163-0527	5.000	EA	\$345.96487	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	\$1,729.82
0030	163-0528	500.000	LF	\$3.60239	CONSTR AND REM FAB CK DAM -TP C SLT FN	\$1,801.20
0035	163-0529	400.000	LF	\$3.85184	CNST/REM TEMP SED BAR OR BLD STRW CK DM	\$1,540.74
0040	165-0010	8888.000	LF	\$0.31627	MAINT OF TEMP SILT FENCE, TP A	\$2,811.01
0045	165-0030	4352.000	LF	\$0.59661	MAINT OF TEMP SILT FENCE, TP C	\$2,596.45
0050	165-0041	550.000	LF	\$0.89994	MAINT OF CHECK DAMS - ALL TYPES	\$494.97
0055	165-0071	400.000	LF	\$1.33418	MAINT OF SEDIMENT BARRIER - BALED STRAW	\$533.67
0060	165-0101	2.000	EA	\$595.61949	MAINT OF CONST EXIT	\$1,191.24
0065	167-1000	2.000	EA	\$472.35672	WATER QUALITY MONITORING AND SAMPLING	\$944.71
0070	167-1500	12.000	MO	\$525.58965	WATER QUALITY INSPECTIONS	\$6,307.08
0075	171-0010	8888.000	LF	\$1.95266	TEMPORARY SILT FENCE, TYPE A	\$17,355.24
0080	171-0030	4352.000	LF	\$3.21012	TEMPORARY SILT FENCE, TYPE C	\$13,970.44
0240	700-6910	1.000	AC	\$914.76586	PERMANENT GRASSING	\$914.77
0245	700-7000	3.000	TN	\$83.14284	AGRICULTURAL LIME	\$249.43
0250	700-8000	1.000	TN	\$617.40685	FERTILIZER MIXED GRADE	\$617.41
0255	700-8100	50.000	LB	\$3.78284	FERTILIZER NITROGEN CONTENT	\$189.14
0265	716-2000	1280.000	SY	\$1.60829	EROSION CONTROL MATS, SLOPES	\$2,058.61
<b>SUBTOTAL FOR EROSION CONTROL:</b>						<b>\$64,701.65</b>

## 0030 - SIGNS AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0200	636-1033	100.000	SF	\$17.60359	HWY SIGNS, TP1MAT,REFL SH TP 9	\$1,760.36
0205	636-2070	250.000	LF	\$5.51070	GALV STEEL POSTS, TP 7	\$1,377.68
0300	652-5801	1329.000	LF	\$1.94000	SOLID TRAF STRIPE, 8 IN, WHITE	\$2,578.26
0295	653-0130	4.000	EA	\$94.89731	THERM PVMT MARK, ARROW, TP 3	\$379.59
0290	653-0296	4.000	EA	\$96.12000	THERMO PVMT MARKING,WORD,TP 15	\$384.48
0210	653-1501	7914.000	LF	\$0.48922	THERMO SOLID TRAF ST 5 IN, WHI	\$3,871.69
0215	653-1502	8700.000	LF	\$0.48340	THERMO SOLID TRAF ST, 5 IN YEL	\$4,205.58
0305	653-6004	53.000	SY	\$4.22230	THERM TRAF STRIPING, WHITE	\$223.78
0310	653-6006	174.000	SY	\$3.60987	THERM TRAF STRIPING, YELLOW	\$628.12
0220	654-1001	108.000	EA	\$4.15396	RAISED PVMT MARKERS TP 1	\$448.63
<b>SUBTOTAL FOR SIGNS AND MARKING:</b>						<b>\$15,858.17</b>

## 0040 - LIGHTING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0235	682-8030	1.000	LS	\$200,000.00000	LIGHTING SYSTEM	\$200,000.00
<b>SUBTOTAL FOR LIGHTING:</b>						<b>\$200,000.00</b>

**TOTALS FOR JOB 0009870**

## DETAILED COST ESTIMATE



Job: 0009870

ITEMS COST:	\$1,480,356.81
COST GROUP COST:	\$0.00
ESTIMATED COST:	\$1,480,356.81
CONTINGENCY PERCENT:	0.05
ENGINEERING AND INSPECTION:	0.05
ESTIMATED COST WITH CONTINGENCY AND E&I:	\$1,628,392.49

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No.  OFFICE

**PROJECT DESCRIPTION**

DATE

*JMB*

From:



To: Lisa L. Myers, State Project Review Engineer

Subject: **REVISIONS TO PROGRAMMED COSTS**

PROJECT MANAGER

MGMT LET DATE

MGMT ROW DATE

**PROGRAMMED COSTS (TPro W/OUT INFLATION)**

**LAST ESTIMATE UPDATE**

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

**REVISED COST ESTIMATES**

CONSTRUCTION\* \$

RIGHT OF WAY \$

UTILITIES \$

\*Cost Contains  % Contingency

**REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:**

## CONTINGENCY SUMMARY

<b>A. CONSTRUCTION COST ESTIMATE:</b>	\$ <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; background-color: yellow;"></span>	Base Estimate From CES
<b>B. ENGINEERING AND INSPECTION (E &amp; I):</b>	\$ <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; text-align: center;">-</span>	Base Estimate (A) x <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; text-align: center; vertical-align: middle;">5</span> %
<b>C. CONTINGENCY:</b>	\$ <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; text-align: center;">-</span>	Base Estimate (A) + E & I (B) x <span style="border: 1px solid black; display: inline-block; width: 20px; height: 20px; text-align: center; vertical-align: middle;">5</span> % <a href="#">See % Table in "Risk Based Cost Estimation" Memo</a>
<b>D. TOTAL LIQUID AC ADJUSTMENT:</b>	\$ <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; background-color: yellow;"></span>	Total From Liquid AC Spreadsheet
<b>E. CONSTRUCTION TOTAL:</b>	\$ <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; text-align: center;">-</span>	(A + B + C + D = E)

## REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
<b>TOTAL</b>	\$ <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; text-align: center;">-</span>

**ATTACHMENTS:**

Detailed ROW Cost Estimate Printout

PROJ. NO. N/A  
 P.I. NO. 0009870  
 DATE 10/9/2014

CALL NO.

9/29/2009

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-14	\$ 3.312
DIESEL		\$ 3.718
LIQUID AC		\$ 615.00

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)				0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	984.00		
Monthly Asphalt Cement Price month project let (APL)			\$	615.00		
Total Monthly Tonnage of asphalt cement (TMT)				0		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP		5.0%	0
25 mm SP		5.0%	0
19 mm SP		5.0%	0
	0		0

**BITUMINOUS TACK COAT**

Price Adjustment (PA)				-	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	984.00		
Monthly Asphalt Cement Price month project let (APL)			\$	615.00		
Total Monthly Tonnage of asphalt cement (TMT)				0		

**Bitum Tack**

Gals	gals/ton	tons
	232.8234	0

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)				0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	984.00		
Monthly Asphalt Cement Price month project let (APL)			\$	615.00		
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
					0

**TOTAL LIQUID AC ADJUSTMENT**

\$ -

**GEORGIA DEPARTMENT OF TRANSPORTATION  
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 9/18/2014 Project: Effingham County Roundabout  
 Revised: County: Effingham  
 PI: 0009870

Description: Roundabout SR 17 @ SR 119  
 Project Termini: Widening/Reconstruction of SR 119

Existing ROW: Varies  
 Required ROW: Varies  
 Parcels: 6

Land and Improvements \_\_\_\_\_ \$120,000.00

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$50,000.00

Valuation Services \_\_\_\_\_ \$22,500.00

Legal Services \_\_\_\_\_ \$41,550.00

Relocation \_\_\_\_\_ \$12,000.00

Demolition \_\_\_\_\_ \$0.00

Administrative \_\_\_\_\_ \$62,000.00

TOTAL ESTIMATED COSTS \_\_\_\_\_ \$258,050.00

**TOTAL ESTIMATED COSTS (ROUNDED) \_\_\_\_\_ \$259,000.00**

Preparation Credits	Hours	Signature

Prepared By: Dashone Alexander CG#: 286999 09/22/2014 (ATE)  
 Approved By: Dashone Alexander CG#: 286999 09/22/2014 (TE)

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

**NOTICE OF LOCATION AND DESIGN APPROVAL**  
**Effingham County**  
**P.I. No. 0009870**

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: April 29, 2015

This project proposes to construct a roundabout at the intersection of SR 17 and SR 119, which is located in the City of Guyton in Effingham County, Georgia. The project lies entirely within Georgia Militia District 10. The intersection of W. Central Boulevard and SR 119, which is located approximately 100-ft. west of the intersection of SR 119 and SR 17, will be removed to facilitate the roundabout. A cul-de-sac will be placed on the existing northbound approach of W. Central Boulevard, while the southbound approach will be removed. The proposed project length is approximately 0.32 miles. The purpose of the project is to improve the operation of the existing intersection of SR 17 and SR 119 while reducing the frequency and severity of crashes at the intersection.

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:

W. Ron Nelson, Jr.  
ronelson@dot.ga.gov  
17213 U.S. Hwy 301 North  
Statesboro, Georgia 30458  
912-871-1103

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, State Program Delivery Engineer  
Georgia Department of Transportation  
Office of Program Delivery 25<sup>th</sup> Floor  
600 West Peachtree Street NW  
Atlanta, Georgia 30308  
[ashelby@dot.ga.gov](mailto:ashelby@dot.ga.gov)  
404-631-1758

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.