

ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0004732
STP00-0004-00(732)
GDOT District 2 - Tennille
Columbia County
Roundabout: SR 47 @ SR 223

OFFICE Design Policy & Support

DATE December 20, 2011

FROM  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:

Genetha Rice-Singleton, Program Control Administrator
Ron Wishon, State Project Review Engineer
Phil Copeland, State Right-of-Way Administrator
Glenn Bowman, State Environmental Administrator
Bobby Hilliard, State Program Delivery Engineer
Kathy Zahul, State Traffic Engineer
Cindy VanDyke, State Transportation Planning Administrator
Ken Thompson, Location Bureau Chief
Angela Robinson, Financial Management Administrator
Andy Casey, State Roadway Design Engineer
Michael Keene, Area Engineer - D2, A4
Vonda Everett, District Planning & Programming Engineer
Jamie Lindsey, District Preconstruction Engineer
Jimmy Smith, District Engineer
George Brewer, Project Manager
BOARD MEMBER - 10th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0004-00(732) Columbia County
PI No: 0004732
Roundabout at SR 47 and SR 223

OFFICE Program Delivery
DATE November 29, 2011

FROM:  Bobby Hilliard, PE, State Program Delivery Engineer

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

SUBJECT **Request for Location and Design Approval**

Description and Project Proposal: The proposed project will construct a roundabout at the intersection of SR 47 and SR 223 in the 128th and 129th GMD 3.91 miles north of the city of Harlem in Columbia County. The length of the proposed project is approximately 0.36 miles beginning at ML 17.30 on SR 47 and extending to ML 17.48 and beginning at ML 5.25 on SR 223 and extending to ML 5.43. The proposed typical section will consist of two 11' lanes transitioning to 15' lanes with 12' sidewalks and curb and gutter and splitter islands on all approaches. The single lane roundabout will include a 22' truck apron with a non-mountable central island. Lighting will also be included in the project.

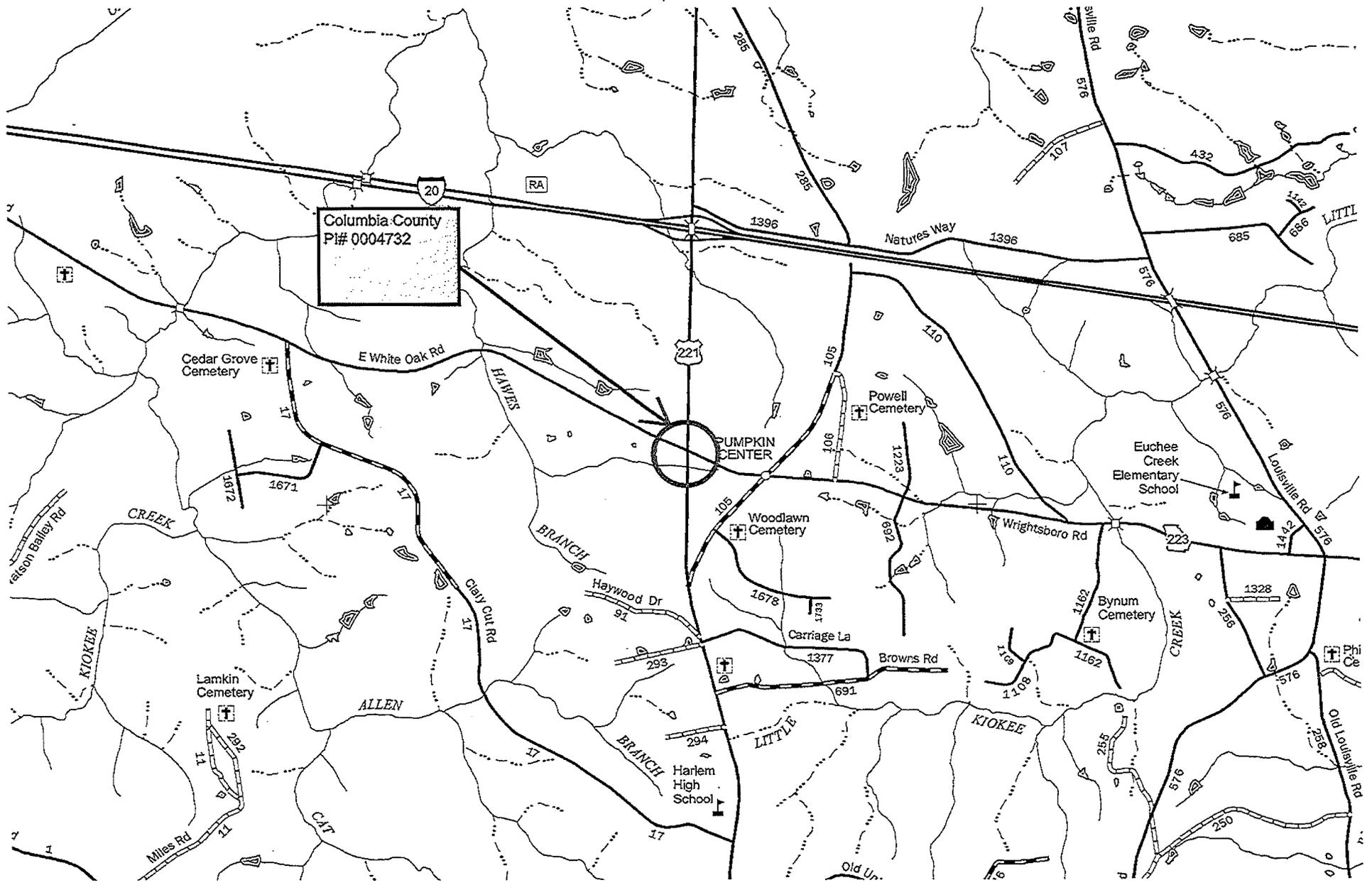
Concept Approval Date: The original concept was approved March 11, 2002 proposing left and right turn lanes and a stop and go traffic signal. The concept was revised to construct a roundabout on December 15, 2010.

Environmental Document Type, Approval Date, & any Reevaluations The CE was approved November 9, 2011.

Public Involvement:

Public Information Open House Results:

- The Public Hearing was held on March 9, 2010 at Harlem High School in Columbia County. The comments were generally opposed to the project.
- The total number of comments was 32.
- There were 21 comments opposed to the project, mostly related to the cost and concerns about the roundabout design. There were 2 uncommitted comments pertaining to whether spending the funds is justified. There were 6 conditional comments suggesting that turn lanes and a traffic signal would be a better solution.
- There were 48 attendees from the public and 3 officials present.
- Several meetings were held after the PIOH with GDOT and Columbia County officials to determine an acceptable project design.



NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. STP00-0004-00(732), Columbia County P. I. No. 0004732

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 approval is December 20, 2011.

The proposed project will construct a roundabout at the intersection of SR 47 and SR 223 in the 128th and 129th GMD, 3.91 miles north of the city of Harlem in Columbia County. The length of the proposed project is approximately 0.36 miles beginning at ML 17.30 on SR 47 and extending to ML 17.48 and beginning at ML 5.25 on SR 223 and extending to ML 5.43. The proposed typical section will consist of two 11' lanes transitioning to 15' lanes with 12' sidewalks and curb and gutter and splitter islands on all approaches. The single lane roundabout will include a 22' truck apron with a non-mountable central island. Lighting will also be included in the project.

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:

Mike Keene
mkeene@dot.ga.gov
4260 Frontage Rd
Augusta, Georgia 30909
(706) 855-3466

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:

Bobby Hilliard, PE
Office of Program Delivery
bhilliard@dot.ga.gov
Georgia Department of Transportation
Office of Program Delivery
600 West Peachtree Street, N.W., 25th Floor
Atlanta, Georgia 30308
404-631-1122

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.

DETAILED COST ESTIMATE

Job: 0004732

JOB NUMBER: 0004732

FED/STATE PROJECT NUMBER STP00-0004-00(732)

SPEC YEAR: 01

DESCRIPTION: SR 47 @ SR 223

ITEMS FOR JOB 0004732

0010 - ROADWAY

Item Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	160-1000	1,000	LS	\$50,700.00	TRAFFIC CONTROL - STP00-0004-00(732)	\$50,700.00
0009	163-1300	1,000	EA	\$83,410.45	FIELD ENGINEERS OFFICE TP 3	\$83,410.45
0014	207-0203	34,000	CY	\$52.40	FOUND BK FILL MATL, TP II	\$1,781.74
0010	210-0100	1,000	LS	\$244,300.00	GRADING COMPLETE - STP00-0004-00(732)	\$244,300.00
0015	310-1101	6175,000	TN	\$21.20	GR AGGR BASE CRS, INCL MATL	\$130,910.00
0019	310-5080	750,000	SY	\$12.31	GR AGGR BS CRS 8IN INCL MATL	\$9,229.05
0025	402-3121	1650,000	TN	\$58.77	RECYL AC 25MM SP, GP1/2, BM&HL	\$91,448.12
0020	402-3130	813,000	TN	\$81.25	RECYL AC 12.5MM SP, GP2, BM&HL	\$66,053.88
0030	402-3190	888,000	TN	\$58.52	RECYL AC 19 MM SP, GP 1 OR 2, JNC BM&HL	\$51,865.76
0035	413-1000	740,000	GL	\$3.22	BITUM TACK COAT	\$2,380.01
0255	432-5010	2517,000	SY	\$3.84	MILL ASPH CONC PVMT, VARB DEPTH	\$9,929.31
0064	439-0050	750,000	SY	\$75.00	PLN PC CONC PVMT CL HES 9" THK	\$56,250.00
0039	441-0104	339,000	SY	\$45.32	CONC SIDEWALK, 4 IN	\$15,362.34
0040	441-0301	4,000	EA	\$1,711.33	CONC SPILLWAY, TP 1	\$6,845.32
0045	441-0754	137,000	SY	\$45.71	CONC MEDIAN, 7 1/2 IN	\$6,261.75
0050	441-4030	325,000	SY	\$42.10	CONC VALLEY GUTTER, 8 IN	\$13,681.43
0055	441-5008	239,000	LF	\$12.35	CONC HEADER CURB, 6 IN, TP 7	\$2,951.36
0059	441-5025	377,000	LF	\$10.50	CONC HEADER CURB, 4", TP 9	\$3,958.50
0060	441-6222	1491,000	LF	\$19.32	CONC CURB & GUTTER/ 8"X30"TP2	\$28,807.76
0270	446-1100	2222,000	LF	\$5.48	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	\$12,179.00
0250	456-2015	0,356	GLM	\$971.06	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	\$345.70
0085	500-3101	35,000	CY	\$546.78	CLASS A CONCRETE	\$19,684.10
0069	500-9999	68,000	CY	\$174.10	CL B CONC, BASE OR PVMT WIDEN	\$11,838.88
0070	511-1000	2548,000	LB	\$1.01	BAR REINF STEEL	\$2,550.52
0080	550-1240	201,000	LF	\$44.76	STM DR PIPE 24", H 1-10	\$8,997.16
0085	550-4224	4,000	EA	\$705.55	FLARED END SECT 24 IN, ST DR	\$2,822.22
0090	610-9099	1,000	LS	\$5,000.00	REM WINGWALLS/PARAPETS, STA - 10+73.19 SR47	\$5,000.00
0095	632-0003	4,000	EA	\$11,372.11	CHANGEABLE MESS SIGN, PORT, TP 3	\$45,488.42
0100	634-1200	28,000	EA	\$97.52	RIGHT OF WAY MARKERS	\$2,535.41
0105	688-1100	5,000	EA	\$2,520.66	CATCH BASIN, GP 1	\$12,603.29
0110	688-2100	6,000	EA	\$2,103.44	DROP INLET, GP 1	\$12,620.63
0115	688-4300	4,000	EA	\$1,984.95	STORM SEW MANHOLE, TP 1	\$7,859.80
SUBTOTAL FOR ROADWAY:						\$1,020,759.61

0020 - TEMP EROSION CONTROL

Item Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0124	163-0240	35,000	TN	\$226.48	MULCH	\$7,891.72
0150	163-0300	1,000	EA	\$1,383.87	CONSTRUCTION EXIT	\$1,383.87
0166	165-0010	170,000	LF	\$0.90	MAINT OF TEMP SILT FENCE, TP A	\$152.48
0167	165-0030	2200,000	LF	\$0.94	MAINT OF TEMP SILT FENCE, TP C	\$2,076.84
0165	165-0101	1,000	EA	\$427.24	MAINT OF CONST EXIT	\$427.24
0240	167-1000	1,000	EA	\$555.12	WATER QUALITY MONITORING AND SAMPLING	\$555.12
0245	167-1500	18,000	MO	\$882.90	WATER QUALITY INSPECTIONS	\$15,892.19
0168	171-0010	170,000	LF	\$2.43	TEMPORARY SILT FENCE, TYPE A	\$413.83
0169	171-0030	2200,000	LF	\$3.35	TEMPORARY SILT FENCE, TYPE C	\$7,380.14
SUBTOTAL FOR TEMP EROSION CONTROL:						\$36,173.43

DETAILED COST ESTIMATE

Job: 0004732

0030 - SIGNING & MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0170	636-1020	27.000	SF	\$16.51	HWY SIGN, TP1MAT, REFL SH TP3	\$445.70
0174	636-1033	52.000	SF	\$21.72	HWY SIGNS, TP1MAT, REFL SH TP 9	\$1,129.46
0176	636-2070	182.000	LF	\$9.64	GALV STEEL POSTS, TP 7	\$1,754.89
0180	653-0120	3.000	EA	\$75.15	THERM PVMT MARK, ARROW, TP 2	\$225.45
0185	653-0296	5.000	EA	\$253.52	THERMO PVMT MARKING, WORD, TP 15	\$1,267.61
0190	653-1601	3360.000	LF	\$0.48	THERMO SOLID TRAF ST 5 IN, WHI	\$1,623.75
0195	653-1602	1690.000	LF	\$0.48	THERMO SOLID TRAF ST, 5 IN YEL	\$777.86
0200	653-1804	175.000	LF	\$2.00	THERM SOLID TRAF STRIPE, 6", WH CROSSWALK STRIPING	\$350.03
0205	653-6004	217.000	SY	\$3.10	THERM TRAF STRIPING, WHITE	\$673.45
0210	653-6006	179.000	SY	\$3.19	THERM TRAF STRIPING, YELLOW	\$570.46
SUBTOTAL FOR SIGNING & MARKING:						\$8,810.28

0040 - PERM EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0120	163-0240	9.000	TN	\$263.80	MULCH	\$2,374.97
0265	603-2180	60.000	SY	\$42.22	STN DUMPED RIP RAP, TP 3, 12"	\$2,533.35
0260	603-7000	60.000	SY	\$4.31	PLASTIC FILTER FABRIC	\$268.48
0125	700-6910	3.000	AC	\$825.05	PERMANENT GRASSING	\$1,875.16
0130	700-7000	9.000	TN	\$47.63	AGRICULTURAL LIME	\$428.65
0140	700-8000	2.000	TN	\$484.42	FERTILIZER MIXED GRADE	\$968.84
0145	700-8100	150.000	LB	\$2.81	FERTILIZER NITROGEN CONTENT	\$421.52
SUBTOTAL FOR PERM EROSION CONTROL:						\$8,860.95

0050 - LANDSCAPING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0215	700-9300	2000.000	SY	\$3.83	SOD	\$7,666.16
0220	702-0105	3.000	EA	\$306.83	BETULA NIGRA - HERITAGE-RIVER BIRCH	\$920.50
0225	702-0330	215.000	EA	\$13.63	HEMEROCALLIS SPECIES - BUTTERED POPCORN-DAYLILY	\$2,929.78
0230	702-0471	72.000	EA	\$140.00	ILEX VOMITORIA NANA -	\$10,080.00
0235	702-0542	9.000	EA	\$103.60	LAGERSTROEMIA INDICA - ACOMA-DWARF CRAPEMYRTLE	\$932.41
SUBTOTAL FOR LANDSCAPING:						\$22,728.85

TOTALS FOR JOB 0004732

ITEMS COST:	\$1,097,342.12
COST GROUP COST:	\$0.00
ESTIMATED COST:	\$1,097,342.12
CONTINGENCY PERCENT:	0.00
ENGINEERING AND INSPECTION:	0.05
ESTIMATED COST WITH CONTINGENCY AND E&I:	\$1,152,209.23

PROJ. NO. STP00-0004-00(732)
P.I. NO. 0004732
DATE 11/08/11

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Nov-11	\$ 3.353
DIESEL		\$ 3.847
LIQUID AC		\$ 558.00

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

LIQUID AC ADJUSTMENTS

$PA = \left(\frac{APM - APL}{APL} \right) \times TMT \times APL$

Asphalt

Price Adjustment (PA)				54522.18	\$	54,522.18
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	892.80		
Monthly Asphalt Cement Price month project let (APL)			\$	558.00		
Total Monthly Tonnage of asphalt cement (TMT)				162.85		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm	813	5.0%	40.65
9.5 mm SP		5.0%	0
25 mm SP	1556	5.0%	77.8
19 mm SP	888	5.0%	44.4
	3257		162.85

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$ 1,064.12	\$	1,064.12
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	892.80		
Monthly Asphalt Cement Price month project let (APL)			\$	558.00		
Total Monthly Tonnage of asphalt cement (TMT)				3.178374682		

Bitum Tack

Gals	gals/ton	tons
740	232.8234	3.17837468

PROJ. NO.

STP00-0004-00(732)

CALL NO.

P.I. NO.

0004732

DATE

11/08/11

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					0	\$	
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$	892.80		
Monthly Asphalt Cement Price month project let (APL)				\$	558.00		
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	\$	55,586.30
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