

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0002425
BR000-0002-00(425)
Telfair County
GDOT District 5 - Jesup
US 319/US 441 Bridge Replacement @
Turnpike Creek

OFFICE Design Policy & Support

DATE February 26, 2013

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

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

Attachment

DISTRIBUTION:

Bobby Hilliard, Program Control Administrator
Genetha Rice-Singleton, State Program Delivery Engineer
Glenn Bowman, State Environmental Administrator
Cindy VanDyke, State Transportation Planning Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Mike Bolden, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Andy Casey, State Roadway Design Engineer
Attn: Anthony Odom, District Design Engineer
Karon Ivery, District Engineer
Brad Saxon, District Preconstruction Engineer
Stephen Thomas, District Utilities Engineer
Aghdas Ghazi, Project Manager
BOARD MEMBER - 8th Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT**

Project Type: Bridge Replacement P.I. Number: 0002425
 GDOT District: 5 - Jesup County: Telfair
 Federal Route Number: US 319/441 State Route Number: 31

SR 31 / US 319/441 @ TURNPIKE CREEK 5.3 MI SOUTH OF MCRAE

Submitted for approval:

<u><i>[Signature]</i></u> District Engineer	<u>12/19/2012</u> DATE
<u><i>[Signature]</i></u> State Program Delivery Engineer	<u>1/9/2013</u> DATE
<u><i>[Signature]</i></u> GDOT Project Manager	<u>1-9-13</u> DATE

Recommendation for approval:

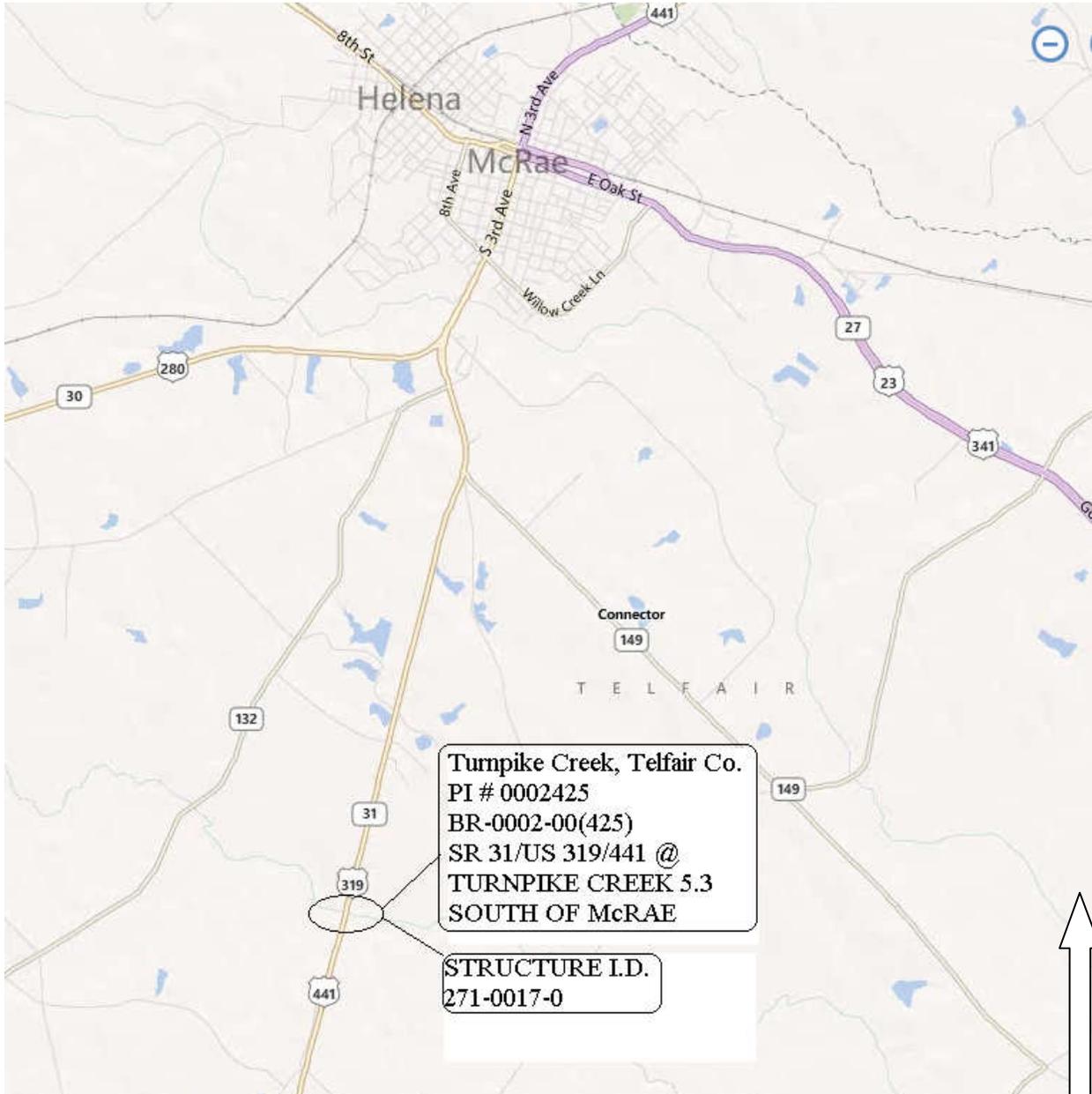
<u>Program Control Administrator</u> <u>GLENN BOWMAN*/EKP</u>	<u>1/25/2013</u> DATE
<u>State Environmental Administrator</u> <u>KATHY ZAHUL*/EKP</u>	<u>1/25/2013</u> DATE
<u>State Traffic Engineer</u> <u>LISA MYERS*/EKP</u>	<u>1/14/2013</u> DATE
<u>Project Review Engineer</u>	<u>DATE</u>
<u>State Utilities Engineer</u> <u>BEN ROBUN*/EKP</u>	<u>2/17/2013</u> DATE
<u>State Bridge Design Engineer</u>	<u>DATE</u>
<u>State Transportation Financial Management Administrator</u>	<u>DATE</u>

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

<u>CINDY VANDYKE</u> State Transportation Planning Administrator	<u>1/11/2013</u> DATE
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** - RECOMMENDATION ON FILE*

PROJECT LOCATION



PLANNING & BACKGROUND DATA

Project Justification Statement: This bridge (Structure ID: 271-0017-0; SR 31 over Turnpike Creek) was built in 1950. The bridge consists of seven spans of steel beams on concrete caps and steel piles. This bridge was designed using a truck configuration that weighs less than the current state legal truck weights. This bridge is posted. The overall condition of this bridge would be classified as good to satisfactory; with the deck and superstructure members exhibiting some minor deterioration considered to be satisfactory. The substructure has some minor corrosion. No rehabilitation work performed on the structure components would improve this bridge in so far as the posting of the structure is concerned. Due to the structural integrity based on the design, replacement of this bridge is recommended.

Description of the proposed project: This project is approximately 0.20 miles in length and is located on SR 31 in Telfair County, 5.3 miles S of McRae, Georgia. This section of SR 31 is classified as Rural Principal Arterial. The 2010 Average Daily Traffic (ADT) was 2400 vehicles per day. The projected ADT is 2700 vehicles per day in 2017 and 3400 vehicles per day in the design year of 2037. Truck traffic is 14% of the traffic volume. No accidents were reported at the bridge from 1/1/2009 to 12/31/2011.

The bridge (Structure ID 271-0017-0) has a sufficiency rating of 44.59. The structure is located at road inventory milepost 14.75. The bridge deck is 32 feet wide and 189 feet in length.

The logic for establishing the termini is due to replacing the bridge and reworking the shoulders and slope to accommodate guardrail. The structure has substandard load capacity. The new bridge will be constructed on a new alignment parallel to the existing bridge. The current bridge location will eventually have a bridge built as the twin of two bridges needed for the forthcoming widening of US 441 from CR 240 to the South McRae Bypass, PI 522530-, that is in Long Range to be built. The project will begin approximately 1200' feet south and approximately 1200' north of existing bridge ends. Traffic will be maintained by using the current bridge until the new bridge has been completed. The project proposes to satisfy the Project Justification Statement by replacing the bridge to alleviate substandard load capacity and deck geometry while upgrading the shoulders and guardrail.

Federal Oversight: Full Oversight Exempt State Funded Other

MPO: N/A MPO - Choose an item.
MPO Project TIP #

Regional Commission: RC – Heart of Georgia RC RC Project ID #

Congressional District(s): 8

Projected Traffic ADT:

Current Year (2010): 2400 Open Year (2017): 2700 Design Year (2037): 3400
Traffic Projections Performed by: GDOT

Functional Classification (Mainline): Rural Principal Arterial

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? No Yes

Is this project on a designated Bike Route, Pedestrian Plan, or Transit Network?

None Bike Route Pedestrian Plan Transit Network

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: There are no potential impacts that have been identified.

DESIGN AND STRUCTURAL DATA

Mainline Design Features: *SR 31/US 319/441*

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2
- Lane Width(s)	12 ft	11-12 ft	12 ft
- Median Width & Type	N/A	N/A	N/A
- Outside Shoulder Width & Type	6' grass/2' paved	8'grass/2' paved	8' grass/2' paved
- Outside Shoulder Slope	4 to 1	6%	6%
- Inside Shoulder Width & Type	N/A	N/A	N/A
- Sidewalks	N/A	N/A	N/A
- Auxiliary Lanes	N/A	N/A	N/A
- Bike Lanes	N/A	N/A	N/A
Posted Speed	55 mph		55 mph
Design Speed	55 mph	45-75 mph	55 mph
Min Horizontal Curve Radius	N/A	643 - 2500"	1060"
Superelevation Rate	N/A	MAX 6%	UNKNOWN
Grade	5%	MAX 6%	UNKNOWN
Access Control	N/A	N/A	N/A
Right-of-Way Width	100'	Varies	Varies
Maximum Grade – Crossroad	N/A	N/A	N/A
Design Vehicle	SU	SU	SU
<i>Additional Items as needed</i>	N/A	N/A	N/A

*According to current GDOT design policy if applicable

Major Structures:

Structure	Existing	Proposed
271-0017-0	Bridge roadway is two 12 ft lanes with 1 ft shoulders. Bridge deck is 189' long X32' wide and 200' ROW. Sufficiency rating of 44.59.	Two 12 ft lanes with 8 ft shoulders. Bridge deck is 189' long X 43'3" wide.

Major Interchanges/Intersections: N/A

Utility Involvements:

Telephone Windstream
 Power Little Ocmulgee EMC
 River Gauge United States Geological Survey

Public Interest Determination Policy and Procedure recommended (Utilities)? YES NO

SUE Required: Yes No

Railroad Involvement: N/A

Complete Streets - Bicycle, Pedestrian, and/or Transit Warrants:

Warrants met: None Bicycle Pedestrian Transit

Right-of-Way:

Required Right-of-Way anticipated: YES NO Undetermined

Easements anticipated: None Temporary Permanent Utility Other

Anticipated number of impacted parcels:	4
Displacements anticipated:	Total: 0
	Businesses: 0
	Residences: 0
	Other: 0

Transportation Management Plan [TMP] Required: No Yes

If Yes: Project classified as: Non-Significant Significant

TMP Components Anticipated: TTC TO PI

Location and Design approval: Not Required Required

Off-site Detours Anticipated: No Yes Undetermined

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	YES	Appvl Date (if applicable)	NO	Undetermined
1. Design Speed	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Lane Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Shoulder Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Bridge Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Horizontal Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Superelevation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Vertical Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

8. Grade	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Stopping Sight Distance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Cross Slope	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Vertical Clearance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Lateral Offset to Obstruction	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Bridge Structural Capacity	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Design Variances to GDOT standard criteria anticipated:

GDOT Standard Criteria	Reviewing Office	YES	Appvl Date (if applicable)	NO	Undetermined
1. Access Control	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Median Usage & Width	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Intersection Skew Angle	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Intersection Sight Distance	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Bike & Pedestrian Accommodations	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. GDOT Drainage Manual	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Georgia Standard Drawings	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Roundabout Illumination	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Rumble Strips/Safety Edge	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

VE Study anticipated: No Yes Completed

ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA: NEPA: CE PCE

Project Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes

Is the project located in an Ozone Non-attainment area? No Yes

Is a Carbon Monoxide hotspot analysis required? No Yes

MS4 Compliance – Is the project located in an MS4 area? No Yes

NEPA/GEPA Comments & Information: N/A

Environmental Permits/Variances/Commitments/Coordination anticipated:

Permit/ Variance/ Commitment/ Coordination Anticipated	YES	NO	Remarks
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Other Commitments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. Other Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Is a PAR required? No Yes Completed

Air & Noise: Air and noise assessment and reports will determine if mitigation measures are needed.

Public Involvement: None Anticipated.

Major stakeholders: Traveling public.

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: None.

Early Completion Incentives recommended for consideration: No Yes

PROJECT RESPONSIBILITIES

Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT District 5
Design	GDOT District 5
Right-of-Way Acquisition	GDOT
Utility Relocation	Utility Companies
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	GDOT
Environmental Studies, Documents, and Permits	GDOT

Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

Lighting required: No Yes

Initial Concept Meeting: N/A

Concept Meeting: Concept meeting held September 13, 2012, minutes will be attached.

Other projects in the area: PI 522530-, SE 31/US 441 FROM CR 240 TO S. McRAE BYPASS.

Other coordination to date: None.

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Utility	CST*	Environmental Mitigation	Total Cost
By Whom	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$102,000	\$359,000	\$101,250	\$2,532,273	\$140,000	\$3,234,523
Date of Estimate	12/22/2011	5/17/2012	7/5/2012	2/7/2013	4/26/2012	

*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION

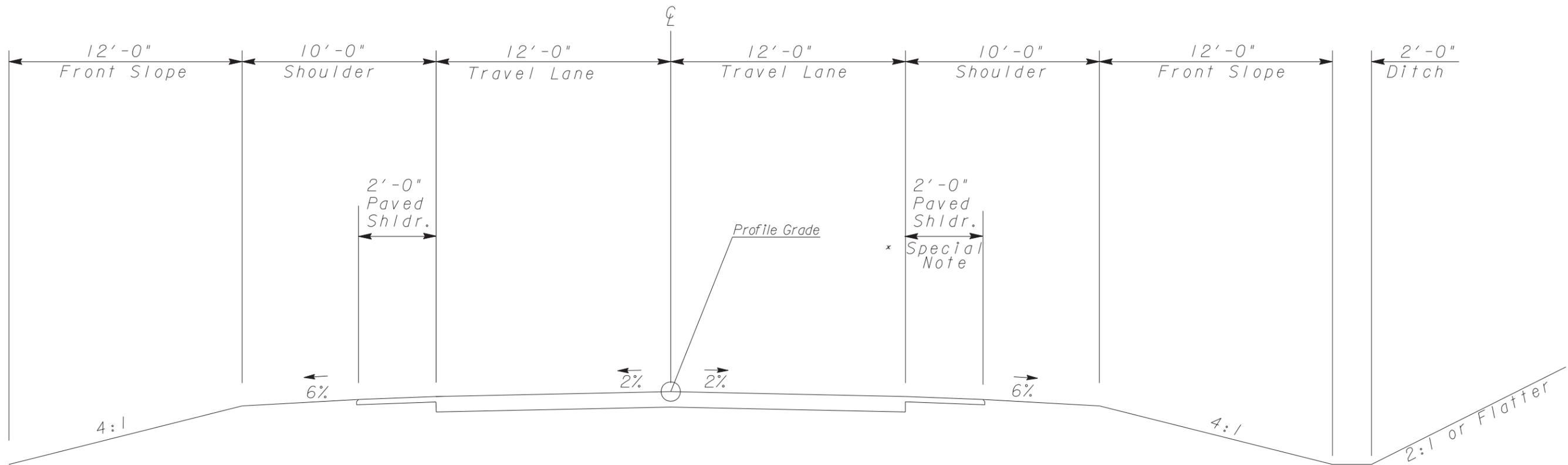
Alternative selection:

Preferred Alternative: Build a new bridge SE and parallel to the current bridge.			
Estimated Property Impacts:	4	Estimated Total Cost:	\$3,234,523
Estimated ROW Cost:	\$359,000	Estimated CST Time:	24 mon
Rationale: This appears to be the most logical alternative due to this being a bridge that will be used as one of the two bridges over Turnpike Creek for the widening of US 441 from CR 240 to the South McRae Bypass, PI 522530-, that is currently in Long Range for construction. At the present, it is not the least expensive but it will save the state in the long run and this is an important thoroughfare and would cause untimely delays and safety concerns with detours that replacing the bridge in the existing location would incur, allowing the Georgia to maintain its economic competitiveness.			

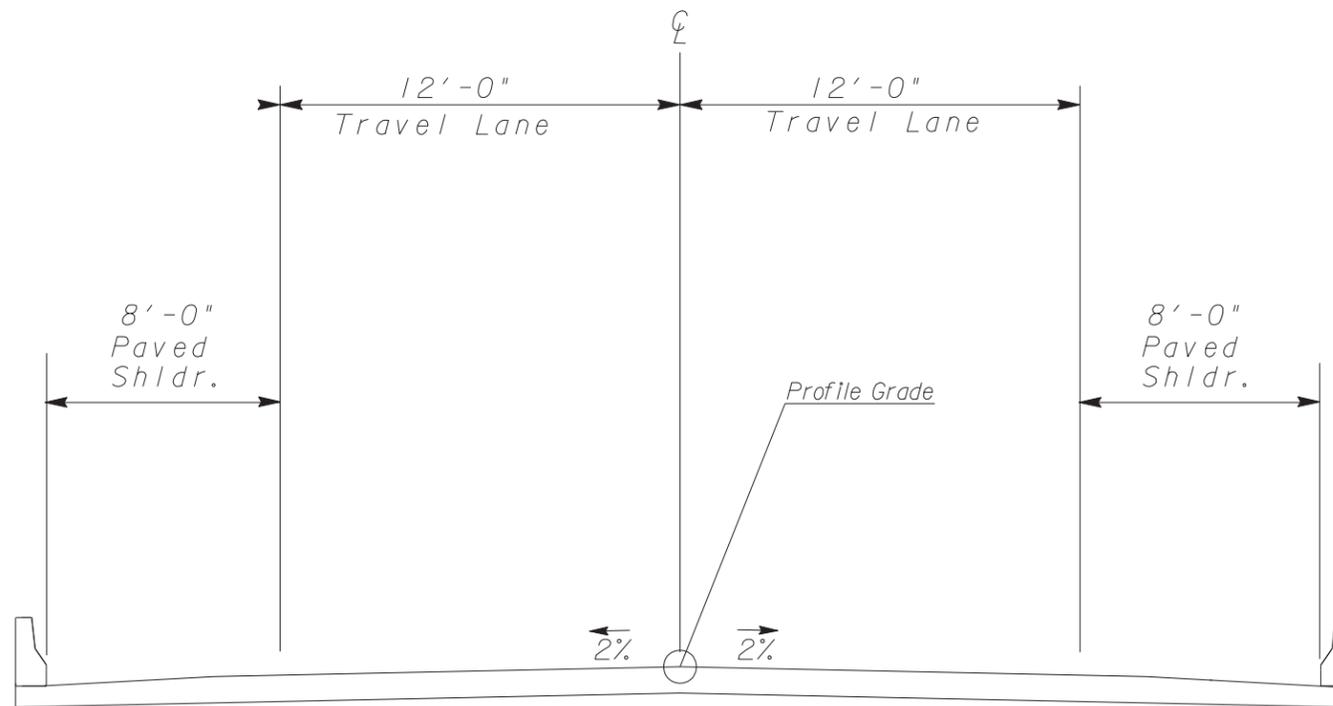
No-Build Alternative: <i>description</i>			
Estimated Property Impacts:	0	Estimated Total Cost:	0
Estimated ROW Cost:	0	Estimated CST Time:	0
Rationale: Not replacing the bridge would create maintenance, safety, and operational cost concerns.			

Alternative 1: Close the road and replace bridge in place, using an offsite detour.			
Estimated Property Impacts:	4	Estimated Total Cost:	\$1,779,022
Estimated ROW Cost:	\$135,000	Estimated CST Time:	6 mon
Rationale: This is an important thoroughfare and would cause untimely delays and safety concerns with drivers driving rapid and erratic due to unanticipated detours.			

PROPOSED ROADWAY TYPICAL SECTION



PROPOSED BRIDGE TYPICAL SECTION



			REVISION DATES			STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: ROADWAY DESIGN		
						TYPICAL SECTIONS		
						SR 31/US 441/319 TURNPIKE CRK 5.3 M. STH. OF MCRAE		
						DRAWING No.		

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BR000-0002-00(425), Telfair County **OFFICE** Planning
P.I. # 0002425
DATE December 21, 2011

FROM Cindy VanDyke, State Transportation Planning Administrator

TO Bobby Hilliard, P.E., State Program Delivery Engineer
Attention: Ryan Fernandez

SUBJECT Traffic Link Volume for S.R. 31/U.S. 319/441 @ Turnpike Creek 5.3 MI S of
McRae.

Traffic Link Volume for the above project is attached below:

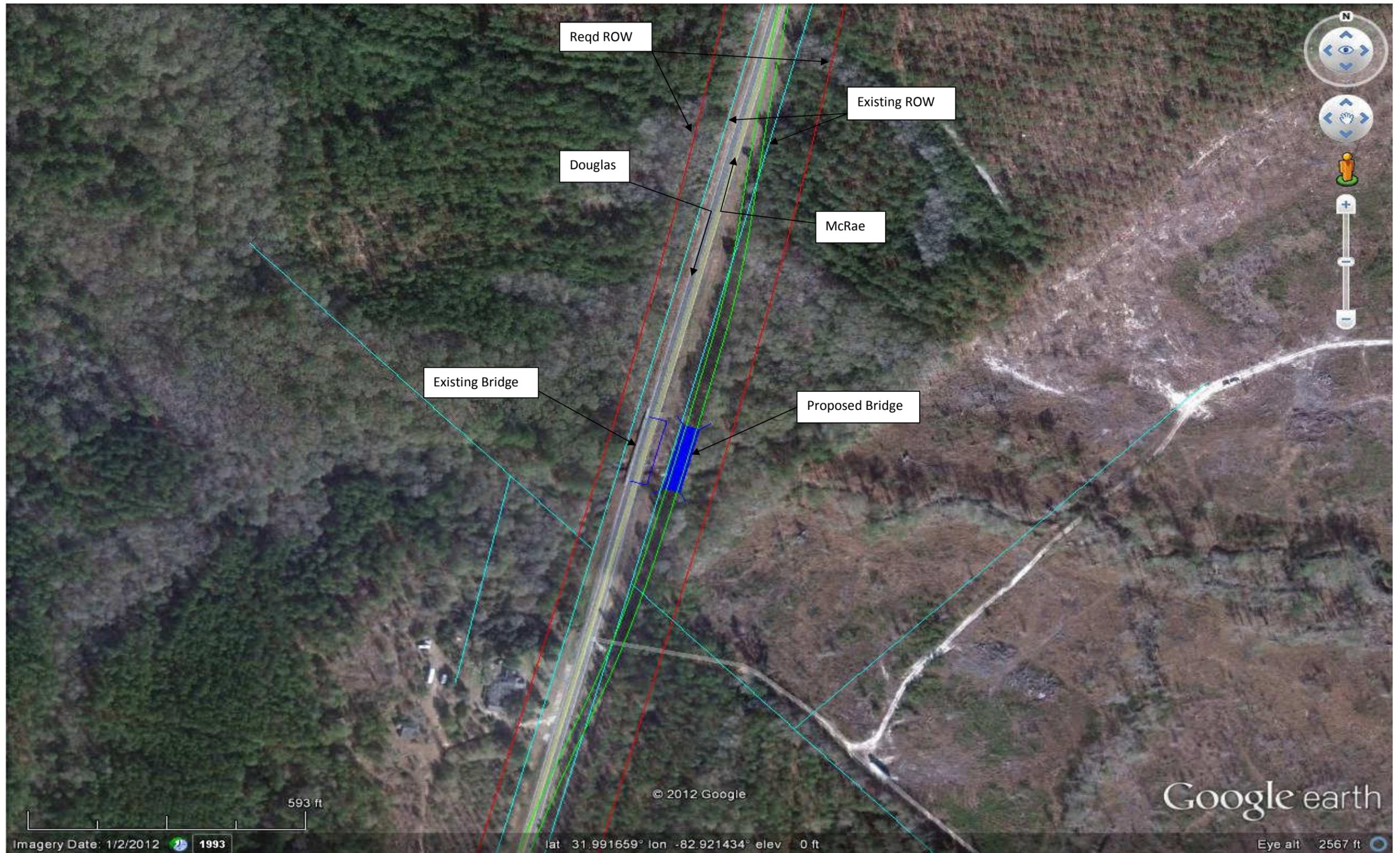
Traffic Count # 113
BUILD = NO BUILD

2010 ADT = 2400
2017 ADT = 2700
2037 ADT = 3400
2010 DHV = 195
2017 DHV = 215
2037 DHV = 275
D = 60%
K = 8%
T = 14%
S.U. = 6.5%
COMB. = 7.5%
24 HR. T. = 20%
S.U. = 8.5%
COMB. = 11.5%

If you have any questions concerning this information please contact
Abby Ebodaghe at (404) 631-1923.

PI # 0002425 Telfair County SR31 NOT TO SCALE

CURVE DATA: MIN CURVE RADIUS = 1060' MAX: SUPERELEVATION = 6%



STATE HIGHWAY AGENCY

DATE : 02/07/2013

PAGE : 1

NEW ALIGNMENT
JOB ESTIMATE REPORT

JOB NUMBER : 0002425 SPEC YEAR: 01
DESCRIPTION: SR 31/US 319/441 @ TURNPIKE CRK 5.3 S OF MCRAE

COST GROUPS FOR JOB 0002425

COST GROUP	DESCRIPTION	QUANTITY	PRICE	AMOUNT	ACTIVE?
ASPH	ASPHALT (TN)				N
BASE	BASE/AGGREGATE (TN)				N
DRNGPCTO	DRAINAGE (PERCENT OF JOB)	7013.109	3.49000	24475.75	Y
EROC	EROSION CONTROL (SY)	70500.000	1.50889	106376.75	Y
GDRL	GUARDRAIL/BARRIER (LF)	600.000	42.31339	25388.03	Y
MISCPCTO	MISCELLANEOUS (PERCENT OF JOB)	7013.109	0.13000	911.70	Y
RPMK	RAISED PAVEMENT MARKING	160.000	5.57019	891.23	Y
SIGNPCTO	SIGNS (PERCENT OF JOB)	7013.109	0.19000	1332.49	Y
TRFT	TRAFFIC CONTROL-TEMPORARY (LS)	1.000	232000.00000	232000.00	Y
SRTS	STATE ROUTE TRAFFIC STRIPE	3.000	1744.99064	5234.97	Y
ERTHCY	EARTHWORK (CY)	55000.000	5.54000	304700.00	Y
ACTIVE COST GROUP TOTAL				701310.92	
INFLATED COST GROUP TOTAL				701310.92	

ITEMS FOR JOB 0002425

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0010	543-9000		LS	CONSTR OF BRIDGE COMPLETE - 189*43. 25*90	1.000	735172.20	735172.20
0015	540-1102		LS	REM OF EX BR, BR NO - 189*32*45	1.000	272160.00	272160.00
0060	413-1000		GL	BITUM TACK COAT	1550.000	3.31	5135.94
0065	402-1812		TN	RECYL AC LEVELING,INC BM&HL	100.000	85.75	8575.98
0075	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	3450.000	72.83	251288.69
0080	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	1400.000	84.05	117673.68
0085	310-5080		SY	GR AGGR BS CRS 8IN INCL MATL	12500.000	12.00	150069.38
0090	402-3100		TN	REC AC 9.5 MM SP,TPI,GP1ORBL1,INCL BM&HL	900.000	81.90	73716.50
ITEM TOTAL							1613792.35
INFLATED ITEM TOTAL							1613792.35

TOTALS FOR JOB 0002425

ESTIMATED COST:	2315103.30
CONTINGENCY PERCENT (0.0):	0.00
ESTIMATED TOTAL:	2315103.30

PROJ. NO.: BR-0002-00(425)

P.I. NO. 0002425

DATE: 2/7/2013

Base Construction Cost		\$	2,315,103.30
E & I	5%	\$	115,755.17
Construction Contingency	0	\$	-
Subtotal Construction Cost		\$	<u>2,430,858.47</u>
Liquid AC Adjustment (50 % cap)		\$	<u>101,414.36</u>
Total Construction Cost		\$	<u>2,532,272.83</u>

PROJ. NO.	BR-0002-00(425)
P.I. NO.	0002425
DATE	2/7/2013

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Feb-13	\$ 3.463
DIESEL		\$ 3.981
LIQUID AC		\$ 565.00

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)				99157.5	\$	99,157.50
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	904.00		
Monthly Asphalt Cement Price month project let (APL)			\$	565.00		
Total Monthly Tonnage of asphalt cement (TMT)				292.5		

ASPHALT	Tons	%AC	AC ton
Leveling	100	5.0%	5
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	900	5.0%	45
25 mm SP	3450	5.0%	172.5
19 mm SP	1400	5.0%	70
	5850		292.5

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	2,256.86	\$	2,256.86
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	904.00			
Monthly Asphalt Cement Price month project let (APL)			\$	565.00			
Total Monthly Tonnage of asphalt cement (TMT)							6.657406429

Bitum Tack		
Gals	gals/ton	tons
1550	232.8234	6.65740643

PROJ. NO.

BR-0002-00(425)

CALL NO.

P.I. NO.

0002425

DATE

2/7/2013

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					0	\$	-
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$	904.00		
Monthly Asphalt Cement Price month project let (APL)				\$	565.00		
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						\$	101,414.36
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DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE: BR000-0002-00(425) TELFAIR
PI # 0002425

OFFICE: Utilities

DATE: July 5, 2012

FROM: Stephen Thomas, District Utilities Engineer

TO: Brent Mosley, Project Manager

ATTENTION: James Sapp, District 5 Design

SUBJECT: Utility Cost Estimate- SR 31/US 319/441 @ TURNPIKE CREEK 5.3 MI S OF MCRAE

Per a request received April 13, 2012, a review of the preliminary plans was made by this office and the following utilities were found to be located within the project limits:

Telephone	Windstream
Power	Little Ocmulgee EMC
River Gauge	United States Geological Survey

This project consists of the replacement of the existing bridge on SR 31/US 319/441 Telfair County at Turnpike Creek.

All existing facilities appear to be off existing R/W except the river gauge, which is there by permit.

This estimate is based upon review of preliminary plans and DGN files only.

TELEPHONE

The existing telecommunication facilities that may be in conflict belong to **Windstream**.

Windstream facilities are located in the following locations;

Continued.....

FILE: BR000-0002-00(425) TELFAIR, PI # 0002425 continued

From STA 845+00 to STA 870+50 **Windstream** has 2,550 LF of buried phone cable and pedestals, which at this time appear to be off existing R/W, and is reimbursable to them. The estimated cost to them is \$38,250.00 if they need to relocate.

These are the known facilities belonging to **Windstream**. The estimated reimbursable cost amounts to \$38,250.00.

POWER

The existing power facilities that may be in conflict on this project belong to **Little Ocmulgee EMC**.

Little Ocmulgee EMC facilities are located in the following locations:

From STA 845+00 to STA 870+50, **Little Ocmulgee EMC** has 2,550 LF of 3 phase aerial distribution with 7 poles, which at this time appear to be off existing R/W and is reimbursable to them. The estimated cost to them is \$63,000.00 if they need to relocate.

The estimated cost to **Little Ocmulgee EMC** is \$63,000.00.

These are the known facilities belonging to **Little Ocmulgee EMC** in this project; the estimated reimbursable cost is \$63,000.00.

RIVER GAUGE

The existing river gauge that may be in conflict on this project belong to **United States Geological Survey**.

United States Geological Survey facilities are located in the following location:

At STA 857+00, **United States Geological Survey** has a river gauge mounted on the east side of the existing bridge and is not reimbursable to them since it there by permit. The estimated cost to them is \$15,000.00 if they need to relocate.

The estimated cost to **United States Geological Survey** is \$15,000.00.

These are the known facilities belonging to **United States Geological Survey** in this project. The estimated non-reimbursable cost is \$15,000.00.

Continued.....

FILE: BR000-0002-00(425) TELFAIR, PI # 0002425 continued

The total estimated non-reimbursable cost for this project is \$15,000.00.

The total estimated reimbursable cost for this project is \$101,250.00.

The total estimated non-reimbursable and reimbursable cost for this project is \$116,250.00.

If there are any questions please contact John Royal at jroyal@dot.ga.gov or (912) 427-5859.

Copy:

Angie Robinson, Office of Financial Management (via e-mail)

Patrick Allen, Utilities Preconstruction Engineer (via e-mail)

Vahid Munshi, Utilities Preconstruction Engineer (via e-mail)

District Office files

Utility Office Files

Sapp, James

From: Westberry, Lisa
Sent: Thursday, April 26, 2012 9:48 AM
To: Sapp, James
Cc: Odom, Dennis
Subject: RE: 0002425 Environmental Mitigation
Attachments: 0002425.pdf

Good morning James,

The project is located on US 441 over Turnpike Creek in Telfair County. I reviewed the NWI mapping and based on the brief project description I could find, wetlands would be impacted by the proposed project and mitigation would be required. The project would require approximately 24 wetland credits based on the information provided. The estimated costs for these credits will be \$140,000.

DISCLAIMER: This information is solely based on a desk top review of the information available. Only after a field reconnaissance can project impacts be determined and the exact number of credits required for mitigation calculated.

If you have any questions, please don't hesitate to ask.

Thank you,
Lisa Westberry
Georgia Department of Transportation
600 West Peachtree Street, NW, Atlanta, GA 30308
404-631-1772

From: Sapp, James
Sent: Tuesday, April 24, 2012 4:13 PM
To: Westberry, Lisa
Cc: Odom, Dennis
Subject: 0002425 Environmental Mitigation

Ms. Westberry,

Good afternoon. I hope your day has gone well. It has been a wonderful day here after the chilly morning passed.

Anyway, I am trying to do a concept on a bridge replacement. This time it is in Telfair Co. Would there be Environmental Mitigation required for this project and how much it would cost? I have attached directions to the bridge and screen shots of the surrounding area.

[600 West Peachtree St NW Atlanta, GA](#)

1. Head north on West Peachtree St NW toward North Avenue NW 292 ft
2. Take the 1st left onto North Avenue NW 430 ft
3. Turn left onto Spring St NW 0.3 mi
4. Slight left to merge onto I-75 S/I-85 S 6.1 mi
5. Slight left onto I-75 S 77.6 mi

6. Take exit 165 on the left to merge onto I-16 E toward Jim L Gillis Hwy/Savannah 50.6 mi
7. Take exit 51 for US-319/US-441 toward Dublin/Mc Rae 0.2 mi
8. Turn right onto GA-31 S/US-319 S/US-441 S 35.7 mi



U.S. Fish and Wildlife Service

National Wetlands Inventory

0002425

Apr 26, 2012



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

Riparian

- Herbaceous
- Forested/Shrub

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



Bridge Inventory Data Listing

Parameters: Bridge Serial Num

Structure ID: 271-0017-0

Telfair

SUFF. RATING: 44.59

Location & Geography

Structure ID:	271-0017-0	*104 Highway System:	1	Signs & Attachments	
200 Bridge Information:	06	*26 Functional Classification:	02	225 Expansion Joint Type:	02
*5A Feature Int:	TURNPIKE CREEK	*204 Federal Route Type:	F No: 00232	242 Deck Drains:	1
*5B Critical Bridge:	0	105 Federal Lands Highway:	0	243 Parapet Location:	0
*7A Route No Carried:	SR00031	*110 Truck Route:	0	Height:	0
*7B Facility Carried:	US 319/ SR 31	2006 School Bus Route:	1	Width:	0
9 Location:	5.3 MI S OF MCRAE	217 Benchmark Elevation:	0190.58	238 Curb Height:	1
2 Dot District:	5	218 Datum:	2	Curb Material:	1
207 Year Photo:	2011	*19 Bypass Length:	03	239 Handrail:	11
*91 Inspection Frequency:	24 Date: 02/10/2011	*20 Toll:	3	*240 Medium Barrier Rail:	0
*2A Fract Crit Insp Freq:	0 Date: 02/01/1901	*21 Maintenance:	01	241 Bridge Median Height:	0
*2B Underwater Insp Freq:	0 Date: 02/01/1901	*22 Owner:	01	* Bridge Median Width:	0
*2C Other Spc. Insp Freq:	0 Date: 02/01/1901	*31 Design Load:	2	230 Guardrail Loc. Dir. Rear:	3
*4 Place Code:	00000	37 Historical Significance:	5	Fwd:	3
*5 Inventory Route(O/U):	1	205 Congressional District:	01	Oppo. Dir. Rear:	0
Type:	2	27 Year Constructed:	1950	Oppo. Fwd:	0
Designation:	1	106 Year Reconstructed:	0000	244 Approach Slab:	3
Number:	00319	33 Bridge Medium:	0	224 Retaining Wall:	0
Direction:	0	34 Skew:	00	233 Posted Speed Limit:	55
*16 Latitude:	31 59.4915 HMMS Prefix:SR	35 Structure Flared:	0	236 Warning Sign:	0.00
*17 Longitude:	82 -55.3068 HMMS Suffix:00 MP:14.71	38 Navigation Control:	0	234 Delineator:	1.00
58 Border Bridge:	00% Shared:00	213 Special Steel Design:	0	235 Hazzard Boards:	1
99 ID Number:	0000000000000000	267 Type of Paint:	2	237 Utilities Gas:	00
*100 STRAHNET:	0	*42 Type of Service On:	1	Water:	00
12 Base Highway Network:	1	Type of Service Under:	5	Electric:	00
13A LRS Inventory Route:	2711003100	214 Movable Bridge:	0	Telephone:	00
13B Sub Inventory Route:	0	203 Type Bridge:	E	Sewer:	00
101 parallel Structure:	N	259 Pile Encasement:	2	247 Lighting Street:	0
*102 Direction of Traffic:	2	*43 Structure Type Main:	4 02	Navigation:	0
*264 Road Inventory Mile Post:	014.75	45 No Spans Main:	007	Aerial:	0
*208 Inspection Area:	5 Initials: EFP	44 Structure Type Appr:	0 00	*248 County Continuity No.:	00
Engineer's Initials:	kww	46 No Spans Appr:	0000		
* Location ID No:	271-00031D-014.71N	226 Bridge Curve Horiz	0 Vert: 0		
		111 pier Protection	0		
		107 Deck Structure Type:	1		
		108 Wearing Structure Type:	6		
		Membrane Type:	0		
		Deck Protection:	8		



Bridge Inventory Data Listing

Processed Date: 4/19/2012

Parameters: Bridge Serial Num

Structure ID: 271-0017-0

Programming Data

F-075-2 (1)
 201 Project No:
 202 Plans Available:
 249 Prop Proj No:
 250 Approval Status:
 251 PI Number:
 252 Contract Date:
 260 Seismic No:
 75 Type Work:
 94 Bridge Imp. Cost:
 95 Roadway Imp. Cost:
 96 Total Imp Cost:
 76 Imp Length:
 97 Imp Year:
 114 Future ADT:
 00000
 02/01/2011
 00000
 34 1
 \$184
 50
 320
 000400
 1990
 004350 Year: 2030

Hydraulic Data

215 Waterway Data:
 High Water Elev:
 Flood Elev:
 Avg Streambed Elev:
 Drainage Area:
 Area of Opening:
 113 Scour Critical
 216 Water Depth:
 222 Slope Protection:
 221 Slope Protection
 219 Fender System
 220 Dolphin:
 223 Current Cover:
 00000.0 Year: 1900
 0182.0 Freq: 0
 0174.6
 000000
 000000
 U
 4 Br Height: 11
 6
 0 Fwd: 0
 0
 0
 000

Measurements:

*29 ADT
 109% Trucks:
 *28 Lanes Or:
 210 No. Tracks On:
 *48 Max. Span Length
 *49 Structure Length:
 51 Br. Rwdy. Width
 52 Deck Width:
 *47 Tot. Horiz. Cl:
 50 Curb / Sidewalk Width
 32 Approach Rdwy. Width
 *229 Shoulder Width:
 Rear Lt:
 Fwd. Lt:
 Permanent Width:
 Rear:
 Intersection Rear:
 36 Safety Features Br. Rail:
 Transition:
 App. G. Rail:
 App. Rail End:
 53 Minimum Cl. Over:
 Under:
 *228 Minimum Vertical Cl
 Act. Odm Dir:
 Oppo. Dir:
 Posted Odm Dir:
 Oppo. Dir:
 55 Lateral Undercl. Rt:
 56 Lateral Undercl. Lt:
 *10 Max Min Vert Cl:
 39 Nav Vert Cl:
 116 Nav Vert Cl Closed:
 245 Deck Thickness Main
 Deck Thick Approach:
 246 Overlay Thickness:
 212 Year Last Painted:
 002900 Year: 2007
 0
 02 Under: 00
 00 Under: 00
 0027
 189
 25.70
 32.00
 26
 2.00 / 2.00
 28
 2.00 Type: 2 Rt: 2.00
 2.00 Type: 2 Rt: 2.00
 24.00 Type: 2
 24.00 Type: 2
 0 Fwd: 0
 2
 2
 2
 99' 99" *
 99' 99"
 99' 99"
 00' 00"
 00' 00"
 N 0 0
 0.00
 99' 99" Dir: 0
 000 Horiz: 0000
 000
 7.00
 0.00
 2.00
 Sup: 1998 Sub: 1999

65 Inventory Rating Method: 1
 63 Operating Rating Method: 1
 66 Inventory Type: 2 Rating: 13
 64 Operating Type: 2 Rating: 13
 231 Calculated Loads:
 H-Modified: 15 1
 HS-Modific: 25 0
 Type 3: 27 1
 Type 3s2: 40 0
 Timber: 31 1
 Piggyback: 40 0
 261 H Inventory Rating: 10
 262 H Operating Rating: 15
 67 Structural Evaluation: 2
 58 Deck Condition: 6
 59 Superstructure Condition: 6
 * 227 Collision Damage: 0
 60A Substructure Condition: 7
 60B Scour Condition: 7
 60C Underwater Condition: N
 71 Waterway Adequacy: 6
 61 Channel Protection Cond.: 6
 68 Deck Geometry: 2
 69 UnderCir. HorizVert: N
 72 Appr. Alignment: 7
 62 Culvert: N
Posting Data
 70 Bridge Posting Required: 3
 41 Struct Open, Posted, CL: P
 * 103 Temporary Structure: T
 232 Posted Loads
 H-Modified: 15
 HS-Modified: 00
 Type 3: 27
 Type 3s2: 00
 Timber: 31
 Piggyback: 00
 253 Notification Date: 02/01/1901
 258 Fed Notify Date: 2/1/1901 12:00:00AM

Concept Team Meeting Minutes

BY: Ryan Fernandez, GDOT Project Manager

DATE: September 13, 2012, 1:30 pm, District 5 Office, Jesup, GA

SUBJECT: SR 31 / US 319/441 @ Turnpike Creek 5.3 MI South of McRae

ATTENDEES:

Ryan Fernandez	Project Manager	404-631-1162
Dennis Odom	D5 Design Engineer	912-427-5716
Brad Saxon	D5 Preconstruction Engineer	912-427-5715
Travis Dent	D5 Design Phase Leader	912-427-5616
James Sapp	D5 Design Engineer	912-427-5770
John Royal	D5 Utility Engineer	912-427-5859
Keith Coney	Little Ocmulgee EMC	912-968-7171
Steve Price	D5 Environmentalist	912-427-5756
Leslie Ogden	D5 Utility	912-427-5779
Maggie Yoder	D5 Planning and Programming	912-427-5788
Myra Deen	D5 Area 1 Construction Engineer	912-424-9198

-
- Ryan started the meeting by going around the room for introductions
 - Ryan stated the baseline project schedule has a Right of Way date as 1/14/2015 and the Let date is 2/27/2015
 - The project assignments have been determined
 - The Design will be done by the District 5 Design Office
 - The Environmental document will be completed utilizing the District Environmental Task Order
 - The project justification statement has been completed by the Bridge Office and Dennis Odom stated the following
 - The existing bridge was built in 1950 and has a structural rating of 44.59.
 - The existing bridge was designed using a truck configuration that is less than the current legal truck weights and the bridge is currently posted.
 - The new bridge will be constructed on new alignment parallel to the existing bridge.
 - Traffic will be maintained by using the current bridge until the new bridge has been completed.
 - Dennis stated the other project that is in the area is PI 522530 – SR 31 / US 441 from county road 240 to South McRae Bypass. This project is currently scheduled in long range.
 - The project has been determined to not be on the state bicycle path.
 - The environmental document is anticipated to be a Categorical Exclusion (CE) and will utilize the District Task Order.
 - The environmental resources that could be affected are as follows
 - Wetlands
 - Endangered Species
 - Potential historic properties and archaeological sites
 - Potential hazardous waste sites

- The project will not have a PIOH, unless a parallel bridge is not constructed and an off-site detour will be utilized.
- The Right of Way for this project has been assumed to be 10 parcels or less at this point.
- Brad stated that the existing Right of Way needs to be verified. The existing right of way may vary from 100 to 200 feet.
- Brad stated the design needs to be for a 32 foot median and the vehicle is a WB 6-7
- The utility involvements are:
 - Little Ocmulgee EMC – electric
 - Windstream – telecommunications
 - United States Geological Survey
- Ryan stated this project will not require a VE study at this point
- The Concept Team agreed that the new form will be used for the Concept Report.
- The meeting was adjourned.

cc: All Attendees