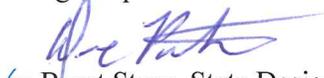


**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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

**FILE** P.I. # 0012887 **OFFICE** Design Policy & Support  
Grady County  
GDOT District 4 - Tifton **DATE** 3/20/2015  
SR 112 @ Sapp Creek  
Bridge Replacement

**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:**

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  
Ben Rabun, State Bridge Engineer  
Andrew Heath, 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  
Richard Cobb, Statewide Location Bureau Chief  
Sandy Griffin, District Design Engineer  
Chad Hartley, District Engineer  
Brent Thomas, District Preconstruction Engineer  
Tim Warren, District Utilities Engineer  
Sonja Thompson, Project Manager  
BOARD MEMBER - 2nd Congressional District

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

Project Type:	<u>Bridge Replacement</u>	P.I. Number:	<u>0012887</u>
GDOT District:	<u>4</u>	County:	<u>Grady</u>
Federal Route Number:	<u>N/A</u>	State Route Number:	<u>SR 112</u>
	Project Number:		<u>N/A</u>

**Bridge Replacement: SR 112 @ Sapp Creek**

**Submitted for approval:**

<u><i>Albert Shelby</i></u> GDOT Concept/Design Phase Office Head & Office	<u>12-18-14</u> Date
<u><i>Albert Shelby</i></u>	<u>1-16-15</u> Date
<u><i>Sara Thompson</i></u> State Program Delivery Engineer	<u>12-18-14</u> Date
<u><i>Sara Thompson</i></u> GDOT Project Manager	<u>12-18-14</u> Date

**Recommendation for approval:**

<u><i>Hiral Patel / KLP</i></u> State Environmental Administrator	<u>2-6-15</u> Date
<u><i>Ken Werho / KLP</i></u> For State Traffic Engineer	<u>1-22-15</u> Date
<u><i>Lisa Myers / KLP</i></u> Project Review Engineer	<u>1-21-15</u> Date
<u><i>Nicholas Fields / KLP</i></u> For State Utilities Engineer	<u>1-22-15</u> Date
<u><i>Ben Rabun / KLP</i></u> District Engineer	<u>12-18-14</u> Date
<u><i>Ben Rabun / KLP</i></u> State Bridge Engineer	<u>1-22-15</u> Date

~~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).~~

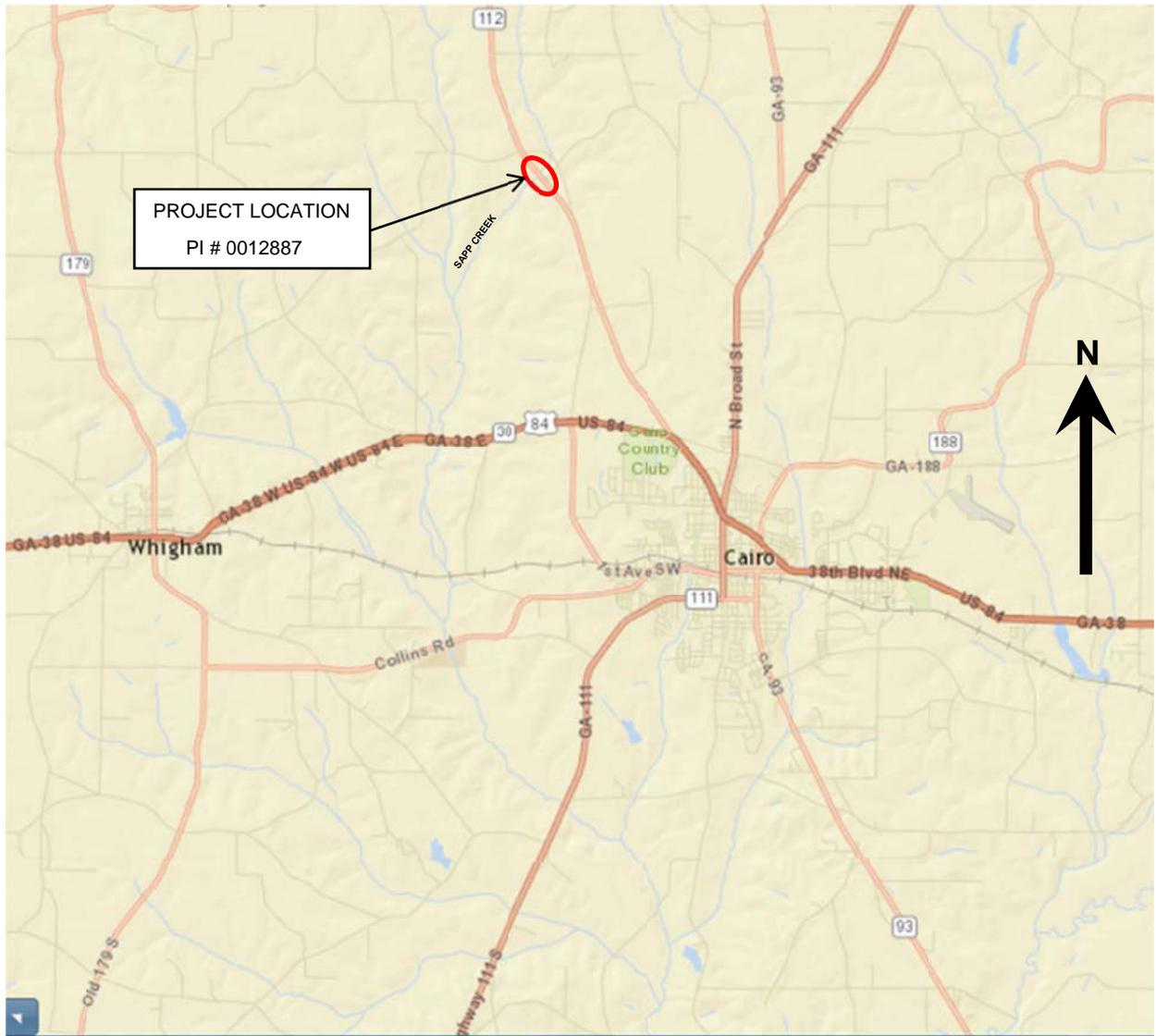
<u><i>Cynthia D. Vause</i></u> State Transportation Planning Administrator	<u>1-26-15</u> Date
---	------------------------

→ This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is in the State Transportation Improvement Program (STIP)

*\* Recommendation on file*

County: Grady

### PROJECT LOCATION MAP



County: Grady

## PLANNING AND BACKGROUND

### Project Justification Statement:

This bridge is being replaced due to the construction of a lake by Grady County which will overtop the structure. The bridge on SR 112 over Sapp Creek, Structure ID 131-0028-0, was built in 1950. The bridge consists of three spans of steel beams on concrete caps and steel piles. This bridge was designed using an H-15 vehicle, which is below the current design standards. The overall condition of this bridge would be classified as fair. The deck is in fair condition with concrete cracking and efflorescence. The superstructure is in fair condition due to the deck separating from the beams during certain loading conditions. This separation will accelerate the deterioration of the deck. The substructure is in fair condition with some minor concrete cracking noted in the abutments.

**Existing conditions:** This project is located approximately 5 miles northwest of Cairo, Georgia on SR 112 at Sapp Creek. The existing bridge is 81' x 30' with one 11' travel lane in each direction. The approaches consist of one 11' travel lane in each direction, 4' grass shoulders and open ditches.

### Other projects in the area:

1. M004802; Resurface and Maintenance on SR 112 From SR 38 to Mitchell County Line.
2. Grady County's "Tired Creek Recreational Lake"

**MPO:** N/A - Project not in MPO

**TIP #:** if applicable

**TIA Regional Commission:** Southwest Georgia RC

RC Project ID (if TIA project) N/A

**Congressional District(s):** 2

**Federal Oversight:**  PoDI  Exempt  State Funded  Other

**Projected Traffic:** ADT or AADT

Current Year (2013): 2550 Open Year (2018): 2750

Design Year (2038): 3700

Traffic Projections Performed by: GDOT Office of Planning

**Functional Classification (Mainline):** Rural Minor Arterial

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

Warrants met:  None  Bicycle  Pedestrian  Transit

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

### Pavement Evaluation and Recommendations

Preliminary Pavement Evaluation Summary Report Required?  No  Yes

Preliminary Pavement Type Selection Report Required?  No  Yes

Feasible Pavement Alternatives:  HMA  PCC  HMA & PCC

## DESIGN AND STRUCTURAL

**Description of the proposed project:** The project is the replacement of the existing bridge on SR 112 at Sapp Creek approximately 5 miles northwest of Cairo, GA. The current bridge will be replaced with a wider bridge at a higher elevation to meet the requirements of the proposed pool-elevation of Grady County's Recreational Lake. The approaches will consist of two-12 ft. travel lanes, 10 ft. shoulders with 4

County: Grady

ft. paved and open ditches. Traffic will be maintained with an Off-Site Detour. This project is located in the 16th Land District, Land Lot 118 and GMD 753.

**Major Structures:**

Structure	Existing	Proposed
ID # 131-0028-0 Sr 112 @ Sapp Creek	81' x 30' Concrete Bridge, two-11 ft. travel lanes with 1 ft. shoulders. Sufficiency Rating = 64.70	140' x 44' reinforced concrete bridge with two-12' travel lanes and 8' shoulders.
Retaining walls	N/A	N/A
Other	N/A	N/A

**Mainline Design Features:** SR 112/Rural Minor Arterial

Feature	Existing	Standard*	Proposed
<b>Typical Section</b>			
- Number of Lanes	2	2	2
- Lane Width(s)	11'	12'	12'
- Median Width & Type	None	N/A	N/A
- Outside Shoulder or Border Area Width	4	10' (4' paved)	10' (4' paved)
- Outside Shoulder Slope	6%	6%	6%
- Inside Shoulder Width	None	N/A	N/A
- Sidewalks	None	N/A	N/A
- Auxiliary Lanes	None	N/A	N/A
- Bike Lanes	None	N/A	N/A
Posted Speed	55 mph		
Design Speed	55 mph		55 mph
Min Horizontal Curve Radius	N/A	960'	N/A
Maximum Superelevation Rate	8%	8%	NC
Maximum Grade	2.27%	5%	1.9%
Access Control	By Permit	By Permit	By Permit
Design Vehicle	HL-93	HL-93	HL-93
Pavement Type	Asphalt approaches. Concrete bridge deck.	Asphalt approaches. Concrete bridge deck.	Asphalt approaches. Concrete bridge deck.

\*According to current GDOT design policy if applicable

**Major Interchanges/Intersections:** None

**Lighting required:**  No  Yes

**Off-site Detours Anticipated:**  No  Undetermined  Yes

The Off-site detour is proposed north along SR 93 from Cairo to Pelham then west along SR 65 to SR 112. Total detour distance is 23.3 miles. The normal travel distance along SR 112 is 18.3 miles which requires through traffic along the state route detour to travel an additional 5 miles. Using an Off-site detour will shorten the construction time by approximately 6 months.

**Transportation Management Plan [TMP] Required:**  No  Yes

If Yes: Project classified as:  Non-Significant  Significant

TMP Components Anticipated:  TTC  TO  PI

County: Grady

**Design Exceptions to FHWA/AASHTO controlling criteria anticipated:**

<b>FHWA/AASHTO Controlling Criteria</b>	<b>No</b>	<b>Undeter- mined</b>	<b>Yes</b>	<b>Appvl Date (if applicable)</b>
1. Design Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Lane Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Shoulder Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Bridge Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Horizontal Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Superelevation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Vertical Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Grade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Stopping Sight Distance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Cross Slope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Vertical Clearance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Lateral Offset to Obstruction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Bridge Structural Capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Design Variances to GDOT Standard Criteria anticipated:**

<b>GDOT Standard Criteria</b>	<b>Reviewi ng Office</b>	<b>No</b>	<b>Undeter- mined</b>	<b>Yes</b>	<b>Appvl Date (if applicable)</b>
1. Access Control/Median Openings	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Intersection Sight Distance	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Intersection Skew Angle	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Lateral Offset to Obstruction	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Rumble Strips	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Safety Edge	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Median Usage	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Roundabout Illumination Levels	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Complete Streets	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. ADA & PROWAG	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. GDOT Construction Standards	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. GDOT Drainage Manual	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. GDOT Bridge & Structural Manual	Bridges	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**VE Study anticipated:**       No       Yes       Completed – Date:

**UTILITY AND PROPERTY**

**Temporary State Route needed:**       No       Yes       Undetermined

**Railroad Involvement:** None

**Utility Involvements:**

Grady EMC  
Windstream Communications

**SUE Required:**       No       Yes       Undetermined

County: Grady

**Public Interest Determination Policy and Procedure recommended?**  No  Yes

**Right-of-Way (ROW):** Existing width: 100 ft.-150 ft. Proposed width: 110 ft. - 210 ft.  
 Required Right-of-Way anticipated:  None  Yes  Undetermined  
 Easements anticipated:  None  Temporary  Permanent  Utility  Other

Anticipated total number of impacted parcels: 2  
 Displacements anticipated: Businesses: 0  
 Residences: 0  
 Other: 0  
 Total Displacements: 0

**Location and Design approval:**  Not Required  Required

**CONTEXT SENSITIVE SOLUTIONS**

Issues of Concern: None

Context Sensitive Solutions Proposed: None

**ENVIRONMENTAL & PERMITS**

Anticipated Environmental Document:

GEPA:  NEPA:  CE  EA/FONSI  EIS

**MS4 Permit Compliance – Is the project located in a MS4 area?**  No  Yes

**Environmental Permits/Variations/Commitments/Coordination anticipated:**

Permit/ Variance/ Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	x		
2. Forest Service/Corps Land	x		
3. CWA Section 404 Permit		x	
4. Tennessee Valley Authority Permit	x		
5. Buffer Variance			To be determined
6. Coastal Zone Management Coordination	x		
7. NPDES		x	
8. FEMA			To be determined
9. Cemetery Permit	x		
10. Other Permits	x		
11. Other Commitments		x	SP 107.23.G for Migratory Birds
12. Other Coordination			To be determined

**Is a PAR required?**  No  Yes  Completed – Date:

**Environmental Comments and Information:**

**NEPA/GEPA:**

- Expecting a CE, no Section 4(f) – except possibly de minimis. Aiming to have approved CE by mid March 2015. Local approval of the off site detour will be a consideration for this approval.

**Ecology:**

- Seasonal survey for gopher tortoise/indigo snake may be required. Impact to waters and NW 404 permit and mitigation expect. Buffer variance unlikely but possible.

County: Grady

**History:**

- No adverse impacts are anticipated.

**Archeology:**

- No adverse impacts are anticipated.

**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

**Noise Effects:**

- No adverse impacts are anticipated.

**Public Involvement:**

- Detour Open House scheduled for January 20<sup>th</sup>, 2015. Some controversy expected.

**Major stakeholders:**

- Public and local officials, related to the potential off site detour.

**CONSTRUCTION**

**Issues potentially affecting constructability/construction schedule:** Grady County will be completing the dam for their recreational lake project prior to construction. If the lake fills prior to or during construction it could cause delays and higher construction cost.

**Early Completion Incentives recommended for consideration:**  No  Yes

**COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS**

**Initial Concept Meeting:** None

**Concept Meeting:** Concept Meeting was held on 11/20/2014 at the District 4 Assembly Room in Tifton, GA. (See attached minutes)

**Other coordination to date:** Team Meeting held October 22, 2014. (Summary of Team Meeting is attached)

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT
Design	GDOT
Right-of-Way Acquisition	Grady County
Utility Relocation	GDOT
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	GDOT
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

County: Grady

**Project Cost Estimate Summary and Funding Responsibilities:**

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
Funded By	GDOT	Grady County	Utility Owners	GDOT	GDOT	
\$ Amount	\$200,000.00	\$65,000.00	\$0.00	\$1,924,159.41	\$64,000.00	\$2,253,159.41
Date of Estimate	3/8/14	10/24/2014	12/8/2014	12/8/2014	9/25/2014	

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

**ALTERNATIVES DISCUSSION**

Alternative selection:

*KLP*  
*\$2,253,159.41*

<b>Preferred Alternative:</b> Replace bridge at existing location with traffic maintained on Off-Site detour.			
<b>Estimated Property Impacts:</b>	<b>1</b>	<b>Estimated Total Cost:</b>	<b>\$1,924,159.41</b>
<b>Estimated ROW Cost:</b>	<b>\$65,000.00</b>	<b>Estimated CST Time:</b>	<b>12 Months</b>
<b>Rationale:</b> This alternative addresses the need and purpose of the project with the least amount of impacts to property and ESA's. Due to Grady County's recreational lake being constructed, the proposed bridge replacement needs to be completed as soon as possible and having an Off-Site detour will reduce construction time by approximately 6 months.			

<b>No-Build Alternative:</b>			
<b>Estimated Property Impacts:</b>	<b>0</b>	<b>Estimated Total Cost:</b>	<b>\$0.00</b>
<b>Estimated ROW Cost:</b>	<b>\$0.00</b>	<b>Estimated CST Time:</b>	<b>0 Months</b>
<b>Rationale:</b> The No-Build Alternative will not address the purpose of the project which is to replace the bridge at a higher elevation to allow for the new reservoir.			

<b>Alternative 1:</b> Replace bridge at existing location and maintain traffic on an On-Site detour.			
<b>Estimated Property Impacts:</b>	<b>3</b>	<b>Estimated Total Cost:</b>	<b>\$2,574,225.17</b>
<b>Estimated ROW Cost:</b>	<b>\$128,700.00</b>	<b>Estimated CST Time:</b>	<b>18 Months</b>
<b>Rationale:</b> Due to the construction of Grady County's dam and recreational lake, the bridge needs to be constructed as soon as possible. Using an On-Site detour will increase the construction time by approximately 6 months and cause some or all of the construction to take place after the reservoir is filled. There are several local roadways that local traffic can utilize to reduce travel time. The proposed off-site detour is 23.3 miles along the State Route System. Through traffic traveling from Cairo to Camilla will only travel an additional 3 miles using the proposed detour along SR 93.			

**Comments:** One accident was reported within the proposed project limits. (See attached report)

**LIST OF ATTACHMENTS/SUPPORTING DATA**

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:

County: Grady

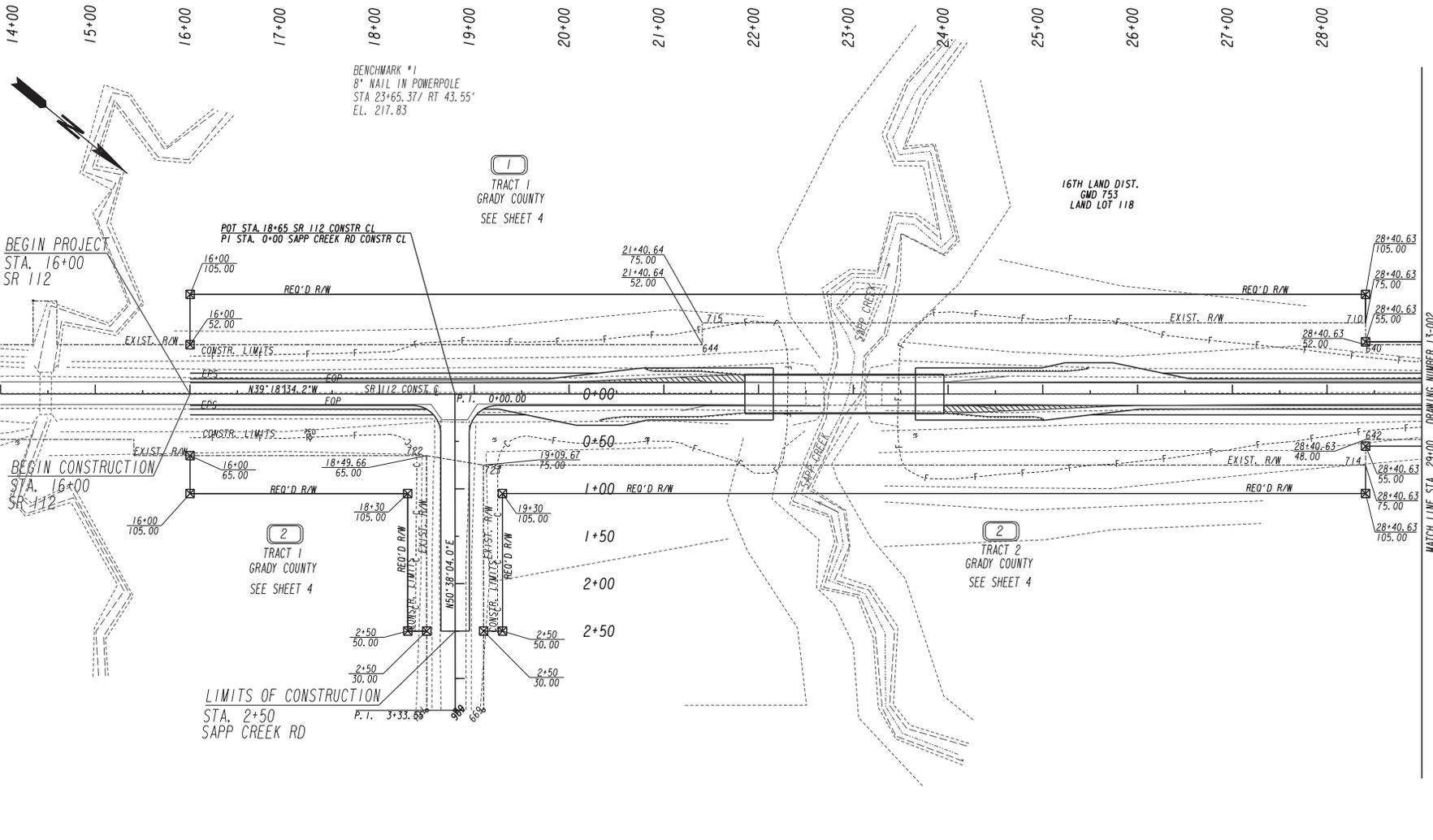
- a. Construction including Engineering and Inspection
  - b. Completed Liquid AC Cost Adjustment forms
  - c. Right-of-Way
  - d. Utilities
  - e. Environmental Mitigation
- 4. Crash summaries
  - 5. Traffic diagrams
  - 6. S I & A Report
  - 7. Pavement studies
  - 8. Minutes of Concept meeting w/sign-in-sheet
  - 9. Minutes/Summary of October 22 Team Meeting
  - 10. Detour Map
  - 11. Layout of proposed Recreational Lake

## APPROVALS

Concur:   
Director of Engineering

Approve:   
Chief Engineer

3.16.15  
Date



PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTRUCTION OF SLOPES  
 EASEMENT FOR CONSTRUCTION OF DRIVES  
 OPEN LANES OF TRAFFIC

BEGIN LIMIT OF ACCESS.....BLA  
 END LIMIT OF ACCESS.....ELA  
 LIMIT OF ACCESS  
 REQ'D R/W & LIMIT OF ACCESS

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 OF  
 TRANSPORTATION



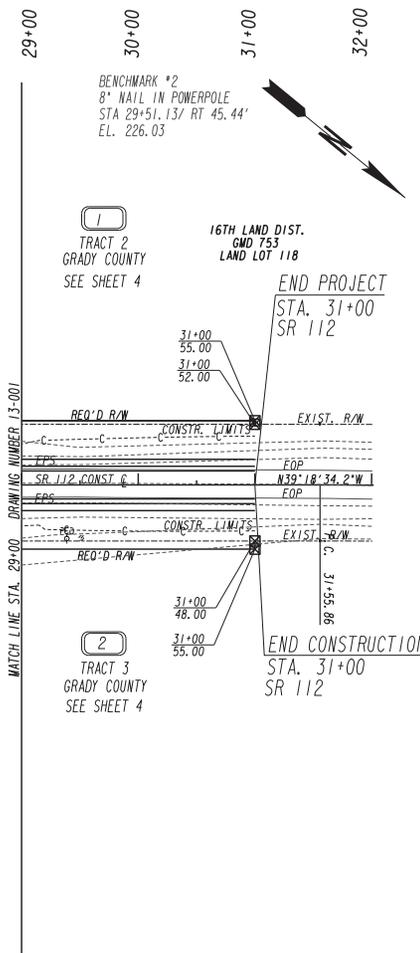
REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: DISTRICT 4 DESIGN  
**MAINLINE PLAN**

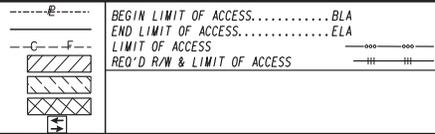
SR 112 @ SAPP CREEK

DRAWING NO.  
**13-001**

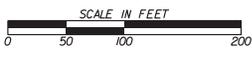
MATCH LINE STA. 29+00 DRAWING NUMBER 13-002



PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTR  
 & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTR OF SLOPES  
 EASEMENT FOR CONSTR OF DRIVES  
 OPEN LANES OF TRAFFIC

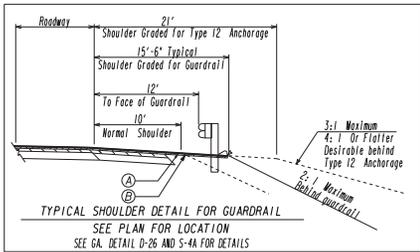


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REVISION DATES	

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: DISTRICT 4 DESIGN  
**MAINLINE PLAN**  
 SR 112 @ SAPP CREEK  
 DRAWING NO. 13-002



SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	—	0-10'
2:1	ALL	OVER 10'

- (A) 135 LBS/SQ YD RECYCLED ASPH CONC 9.5 WW SUPERPAVE, TYPE 11, BLEND 1, INCL BITUM MATL & H LINE
- (B) 220 LBS/SQ YD RECYCLED ASPH CONC 19 WW SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LINE
- (C) 550 LBS/SQ YD RECYCLED ASPH CONC 25 WW SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LINE
- (D) GR AGGR BASE CRS, 8 INCH, INCL MATL

**ALLOWABLE RANGES TABLE**  
 FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO "BEST FIT" EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

SECTION WITH GRANES 0.5% OR GREATER		SECTION WITH GRANES LESS THAN 0.5%	
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM	0.0098 FT/FT - MINIMUM	0.0090 FT/FT - DESIRABLE
0.0098 FT/FT - DESIRABLE	0.0200 FT/FT - MAXIMUM	0.0200 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM

**A. NORMAL CROWN**

**B. SUPERELEVATION RATE**  
 S.E. RATE DOWN ON PLANS OR SE RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

**C. SUPERELEVATION TRANSITION LENGTH** (LENGTH FROM FLAT POINT TO FULL SE)  

RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM 1:150	0.6%
DESIRABLE 1:200	0.5%
MAXIMUM 1:300	0.3%

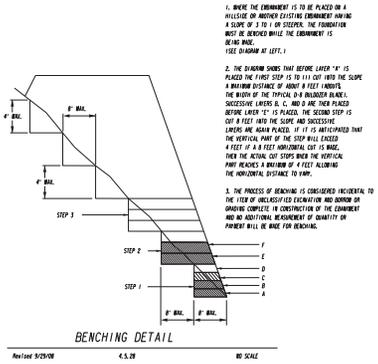
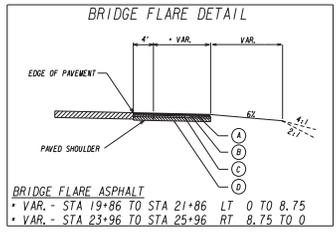
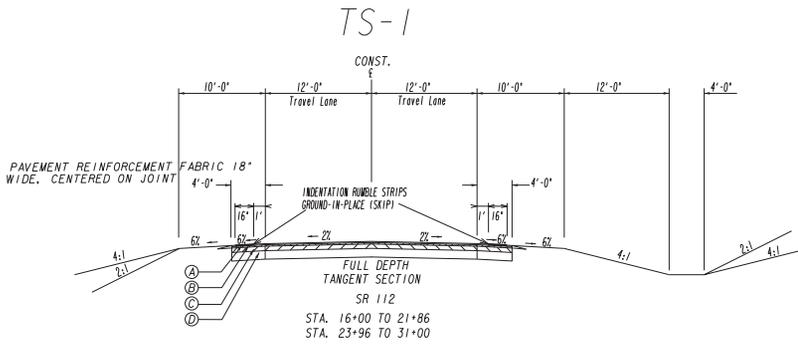
 LENGTH SHALL BE SET TO AVOID CREATING A FLAT OUTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

**D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES**  
 SIDE OF TRANSITION INSIDE CURVE - MAXIMUM  
 SIDE OF TRANSITION INSIDE CURVE - DESIRABLE  
 SIDE OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPER-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

**E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION**  
 SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH 1/4 FEET EQUAL TO THE SPEED DESIGN (VIA MPH).

INSTALL PAVEMENT EDGE (SAFETY EDGE) TREATMENT  
 FROM STA 16+00 TO STA 22+16 LT AND RT  
 FROM STA 23+66 TO STA 31+00 LT AND RT  
 SEE CONSTRUCTION DETAIL P-7



1. WHERE THE EMBANKMENT IS TO BE PLACED ON A HILLSIDE OR ANOTHER EXISTING EMBANKMENT HAVING A SLOPE OF 3 TO 1 OR STEEPER, THE FOUNDATION MUST BE REVEALED WHILE THE EMBANKMENT IS BEING BUILT. (SEE DIAGRAM AT LEFT.)
2. THE EMBANKMENT SHALL BE PLACED LAYER "A" IS PLACED THE FIRST STEP IS TO 1/4" OUT INTO THE SLOPE A MINIMUM DISTANCE OF ABOUT 8 FEET ABOVE THE WIDTH OF THE TYPICAL 8' BENCHING. SUBSEQUENT LAYERS B, C, AND D ARE THEN PLACED BEFORE LAYER "A" IS PLACED. THE SECOND STEP IS CUT 8 FEET INTO THE SLOPE AND SUBSEQUENT LAYERS ARE AGAIN PLACED. IF IT IS ANTICIPATED THAT THE VERTICAL PART OF THE STEP WILL EXCEED 4 FEET, A 4 FEET VERTICAL CUT IS MADE, THEN THE ACTUAL CUT STEPS OVER THE VERTICAL PART PROVIDES A MINIMUM 4 FEET BENCHING. THE HORIZONTAL DISTANCE TO BENCH.
3. THE PROCESS OF BENCHING IS CONSIDERED INCIDENTAL TO THE FILL OF UNDESIGNATED EMBANKMENT AND BENCHING IS COMPLETE. IN CONSTRUCTION OF THE EMBANKMENT WHEN AN ADDITIONAL AMOUNT OF QUANTITY OF PAVEMENT WILL BE MADE FOR BENCHING.

**GEORGIA**  
 DEPARTMENT  
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 TRANSPORTATION

NOT TO SCALE

REVISION DATES

STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION  
 OFFICE: DISTRICT 4 DESIGN  
 TYPICAL SECTIONS

DRAWING NO.  
 05-001

# DETAILED COST ESTIMATE



**Job: 0012887**

**JOB NUMBER** 0012887

**FED/STATE PROJECT NUMBER**

**SPEC YEAR:** 13

**DESCRIPTION:** BRIDGE REPLACEMENT OVER SAPP CREEK  
GRADY CO.

**ITEMS FOR JOB 0012887**

**001 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0010	150-1000	1.000	LS	\$50,000.00000	TRAFFIC CONTROL - 0012887	\$50,000.00
0015	210-0100	1.000	LS	\$437,586.70000	GRADING COMPLETE - 0012887	\$437,586.70
0020	310-5080	5800.000	SY	\$15.50000	GR AGGR BS CRS 8IN INCL MATL	\$89,900.00
0025	402-3103	507.000	TN	\$125.00000	REC AC 9.5 MM SP,TPII,GP2, INCL BM & H L	\$63,375.00
0035	402-3121	957.000	TN	\$91.50000	RECYL AC 25MM SP,GP1/2,BM&HL	\$87,565.50
0030	402-3190	833.000	TN	\$95.00000	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	\$79,135.00
0040	413-1000	825.000	GL	\$5.00000	BITUM TACK COAT	\$4,125.00
0045	433-1000	310.000	SY	\$175.00000	REINF CONC APPROACH SLAB	\$54,250.00
0050	441-0301	4.000	EA	\$1,750.00000	CONC SPILLWAY, TP 1	\$7,000.00
0055	500-3101	2.000	CY	\$750.00000	CLASS A CONCRETE	\$1,500.00
0060	576-1018	240.000	LF	\$35.00000	SLOPE DRAIN PIPE, 18 IN	\$8,400.00
0065	634-1200	18.000	EA	\$115.00000	RIGHT OF WAY MARKERS	\$2,070.00
0070	641-1100	84.000	LF	\$75.00000	GUARDRAIL, TP T	\$6,300.00
0075	641-1200	469.000	LF	\$20.52620	GUARDRAIL, TP W	\$9,626.79
0080	641-5001	2.000	EA	\$900.00000	GUARDRAIL ANCHORAGE, TP 1	\$1,800.00
0085	641-5012	2.000	EA	\$2,225.00000	GUARDRAIL ANCHORAGE, TP 12	\$4,450.00
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$907,083.99</b>

**002 - TEMP EROSION**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0125	163-0232	4.000	AC	\$600.00000	TEMPORARY GRASSING	\$2,400.00
0130	163-0240	64.000	TN	\$250.00000	MULCH	\$16,000.00
0135	163-0300	3.000	EA	\$1,200.00000	CONSTRUCTION EXIT	\$3,600.00
0140	163-0520	240.000	LF	\$15.00000	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	\$3,600.00
0165	163-0528	870.000	LF	\$5.00000	CONSTR AND REM FAB CK DAM -TP C SLT FN	\$4,350.00
0240	163-0541	6.000	EA	\$710.00000	CONSTR & REM ROCK FILTER DAMS	\$4,260.00
0145	163-0550	4.000	EA	\$200.00000	CONS & REM INLET SEDIMENT TRAP	\$800.00
0150	165-0030	3165.000	LF	\$1.00000	MAINT OF TEMP SILT FENCE, TP C	\$3,165.00
0170	165-0041	435.000	LF	\$2.50000	MAINT OF CHECK DAMS - ALL TYPES	\$1,087.50
0155	165-0101	3.000	EA	\$700.00000	MAINT OF CONST EXIT	\$2,100.00
0160	165-0105	4.000	EA	\$110.00000	MAINT OF INLET SEDIMENT TRAP	\$440.00
0245	165-0110	6.000	EA	\$250.00000	MAINT OF ROCK FILTER DAM	\$1,500.00
0180	167-1000	2.000	EA	\$500.00000	WATER QUALITY MONITORING AND SAMPLING	\$1,000.00
0185	167-1500	12.000	MO	\$500.00000	WATER QUALITY INSPECTIONS	\$6,000.00
0175	171-0030	6330.000	LF	\$3.50000	TEMPORARY SILT FENCE, TYPE C	\$22,155.00
<b>SUBTOTAL FOR TEMP EROSION:</b>						<b>\$72,457.50</b>

# DETAILED COST ESTIMATE



**Job: 0012887**

## 003 - PERM EROSION

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0090	700-6910	4.000	AC	\$1,000.00000	PERMANENT GRASSING	\$4,000.00
0095	700-7000	12.000	TN	\$65.00000	AGRICULTURAL LIME	\$780.00
0100	700-8000	4.000	TN	\$550.00000	FERTILIZER MIXED GRADE	\$2,200.00
0105	700-8100	200.000	LB	\$3.63000	FERTILIZER NITROGEN CONTENT	\$726.00
<b>SUBTOTAL FOR PERM EROSION:</b>						<b>\$7,706.00</b>

## 004 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0190	636-1033	41.000	SF	\$22.00000	HWY SIGNS, TP1MAT,REFL SH TP 9	\$902.00
0195	636-2070	65.000	LF	\$8.00000	GALV STEEL POSTS, TP 7	\$520.00
0200	652-5451	3130.000	LF	\$0.45000	SOLID TRAF STRIPE, 5 IN, WHITE	\$1,408.50
0205	652-5452	2300.000	LF	\$0.48000	SOLID TRAF STRIPE, 5 IN, YELLO	\$1,104.00
0210	652-6502	562.000	GLF	\$0.45000	SKIP TRAF STRIPE, 5 IN, YELLOW	\$252.90
0225	653-1704	14.000	LF	\$5.00000	THERM SOLID TRAF STRIPE,24,WH	\$70.00
0215	654-1001	34.000	EA	\$3.00000	RAISED PVMT MARKERS TP 1	\$102.00
0230	654-1002	8.000	EA	\$3.00000	RAISED PVMT MARKERS TP 2	\$24.00
0220	657-1085	280.000	LF	\$6.00000	PRF PL SD PVT MKG,8,B/W,TP PB	\$1,680.00
0235	657-6085	280.000	LF	\$6.00000	PRF PL SD PVMT MKG,8,B/Y,TPPB	\$1,680.00
<b>SUBTOTAL FOR SIGNING AND MARKING:</b>						<b>\$7,743.40</b>

## 005 - BRIDGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0250	540-1101	1.000	LS	\$65,610.00000	REM OF EX BR, STA NO - 0012887	\$65,610.00
0255	543-9000	1.000	LS	\$553,385.00000	CONSTR OF BRIDGE COMPLETE - 0012887	\$553,385.00
<b>SUBTOTAL FOR BRIDGE:</b>						<b>\$618,995.00</b>

### TOTALS FOR JOB 0012887

<b>ITEMS COST:</b>	<b>\$1,613,985.89</b>
<b>COST GROUP COST:</b>	<b>\$0.00</b>
<b>ESTIMATED COST:</b>	<b>\$1,613,985.89</b>
<b>CONTINGENCY PERCENT:</b>	<b>10%</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>5%</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$1,890,121.89</b>

PROJ. NO.

[Redacted]

CALL NO.

9/29/2009

P.I. NO.

0012887

DATE

12/8/2014

INDEX (TYPE)

REG. UNLEADED  
DIESEL  
LIQUID AC

DATE	INDEX
Dec-14	\$ 2.687
	\$ 3.437
	\$ 575.00

Link to Fuel and AC Index:

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)-0.05]xTMTxAPL

Asphalt

Price Adjustment (PA)				<b>33019.375</b>	\$	<b>33,019.38</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	50%	\$	862.50		
Monthly Asphalt Cement Price month project let (APL)			\$	575.00		
Total Monthly Tonnage of asphalt cement (TMT)				114.85		

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	507	5.0%	25.35
25 mm SP	957	5.0%	47.85
19 mm SP	833	5.0%	41.65
	<b>2297</b>		<b>114.85</b>

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	<b>1,018.74</b>	\$	<b>1,018.74</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	50%	\$	862.50			
Monthly Asphalt Cement Price month project let (APL)			\$	575.00			
Total Monthly Tonnage of asphalt cement (TMT)				3.543458261			

Bitum Tack

Gals	gals/ton	tons
825	232.8234	3.54345826

PROJ. NO.

[Redacted]

CALL NO.

9/29/2009

P.I. NO.

0012887

DATE

12/8/2014

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)						<b>0</b>	<b>\$</b>	<b>-</b>
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	50%	\$	862.50			
Monthly Asphalt Cement Price month project let (APL)				\$	575.00			
Total Monthly Tonnage of asphalt cement (TMT)					0			

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

<b>TOTAL LIQUID AC ADJUSTMENT</b>	<b>\$</b>	<b>34,038.12</b>
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GEORGIA DEPARTMENT OF TRANSPORTATION  
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 10/6/2014 Project: 0012887  
 Revised: 10/24/2014 County: Grady  
 PI: 0012887

Description: Bridge Replacement  
 Project Termini: Bridge Replacement

Existing ROW: Varies  
 Required ROW: Varies  
 Parcels: 2

Land and Improvements \_\_\_\_\_ \$0.00

<i>Proximity Damage</i>	<i>\$0.00</i>
<i>Consequential Damage</i>	<i>\$0.00</i>
<i>Cost to Cures</i>	<i>\$0.00</i>
<i>Trade Fixtures</i>	<i>\$0.00</i>
<i>Improvements</i>	<i>\$0.00</i>

Valuation Services \_\_\_\_\_ \$0.00

Legal Services \_\_\_\_\_ \$38,850.00

Relocation \_\_\_\_\_ \$4,000.00

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

Administrative \_\_\_\_\_ \$21,500.00

TOTAL ESTIMATED COSTS \_\_\_\_\_ \$64,350.00

**TOTAL ESTIMATED COSTS (ROUNDED) \_\_\_\_\_ \$65,000.00**

Preparation Credits	Hours	Signature

Prepared By: Dashone Alexander CG#: 10/24/2014 (DATE)

Approved By: Dashone Alexander CG#: 10/24/2014 (DATE)

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE**

Project No: N/A  
County Grady  
P.I. # 0012887

OFFICE: Tifton  
DATE: December 8, 2014

Description: **SR# 112 AT SAPP CREEK BRIDGE REPLACEMENT**

 FROM Tim Warren, P.E., District Utilities Engineer

TO Sonja Thompson, Project Manager

**SUBJECT UTILITY COST ESTIMATE**

A review of utilities located on the above referenced project has been conducted based on the latest available plans. Listed below is a breakdown of the anticipated reimbursable and non-reimbursable cost.

<u>Utility Owner</u>	<u>Reimbursable</u>	<u>Non-Reimbursable</u>	<u>Estimate Based on</u>
Grady EMC	\$0.00	\$30,000.00	Preliminary info from Utility
Windstream Communications	\$0.00	\$5,000.00	Site Visit / Available Drawings
<b>Total</b>	<b>\$ 0.00</b>	<b>\$35,000.00</b>	

**\*\* Indicates Potential Utility Aid Request from Local Gov't**

Estimate is based on the best available information at the current stage, unforeseen prior rights information may be provided by the Utility Company at a later date that could cause some non-reimbursable costs to shift to the reimbursable cost column.

If additional information is needed, please contact me at (229) 386-3288.

c: Nick Fields, State Utilities Office  
Lee Upkins, State Utilities Office  
Jun Birnkammer, State Utilities Office  
Brent Thomas, District Preconstruction Engineer

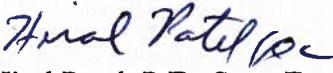
**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P.I. #0012887 **OFFICE** Environmental Services

**DATE** September 25, 2014

**FROM**   
Hiral Patel, P.E., State Environmental Administrator

**TO** Sonja Thompson, Project Manager

**SUBJECT** Preliminary Mitigation Cost Estimate

As requested by your office, we are furnishing you with a preliminary cost estimate for the subject project. This project will replace the bridge on S.R. 112 over Sapp Creek in Grady County. After reviewing the information provided, the proposed project could have the potential to impact jurisdictional waters of the U.S. In addition, mitigation credits could be required. The preliminary estimate cost for the credits is \$64,000.

**DISCLAIMER: The information provided is based solely on a desktop review of the information available. Once the ecology survey has been conducted a more detailed and accurate cost be estimated.**

If you have any questions or need additional information, please contact Lisa Westberry (404) 631-1772 of our office.

HP/HDC/lmw

cc: General File



# STATE OF GEORGIA TRAFFIC CRASH REPORT

Georgia State Patrol  
Georgia Department of Public Safety  
P.O. Box 1456  
Atlanta, Georgia 30371-1456

Crash Number <b>C000197295-01</b>	Reporting Agency <b>GEORGIA DEPARTMENT OF PUBLIC SAFETY</b>	Reporting Agency Case Number	Reporting Agency CAD Number <b>GSPG13CAD047798</b>
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### CRASH IDENTIFIERS

County of Crash <b>GRADY</b>	City or Place of Crash <input type="checkbox"/> City Limits	Crash Date/Time <b>10/06/2013 08:00 AM</b>	Reported Date/Time <b>10/06/2013 08:01 AM</b>	Dispatched Date/Time <b>10/06/2013 08:02 AM</b>
On Scene Date/Time <b>10/06/2013 08:23 AM</b>	Cleared Scene Date/Time <b>10/06/2013 08:45 AM</b>	Complete Date/Time <b>10/07/2013 11:50 AM</b>	Reason (if Investigation Not Complete)	Source of Information <b>LAW ENFORCEMENT AGENCY</b>

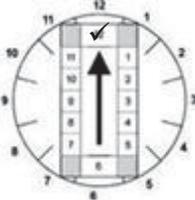
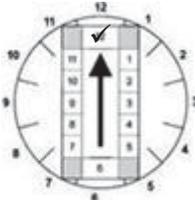
### ROADWAY INFORMATION

Roadway Description for Location of Occurrence <b>GA 112</b>		Distance to City or Place of Crash	Latitude <b>N 30 56 47.92</b>	Longitude <b>W 84 14 42.86</b>
Intersecting Roadway Description for Location of Occurrence		Distance / Direction from Crash Location	<input checked="" type="checkbox"/> Roadway Blocked	Roadway Cleared Date/Time <b>10/06/2013 8:44:46 AM</b>
Part of National Highway System <b>NO</b>	Roadway Functional Class Type <b>RURAL</b>	Roadway Functional Class Detail <b>MINOR ARTERIAL</b>		
Type of Shoulder <b>UNPAVED</b>	Roadway Lighting <b>NO LIGHTING</b>	Roadway Bikeway Facility <b>NONE</b>	Signed Bicycle Route <b>NOT APPLICABLE</b>	
Traffic Control Type at Intersection <b>NO CONTROL</b>	Mainline Number of Lanes at Intersection	Side Road Number of Lanes at Intersection		

### CRASH INFORMATION

Light Condition <b>DAYLIGHT</b>	Weather Condition <b>CLEAR</b>	Roadway Surface Condition <b>DRY</b>	<input type="checkbox"/> Crash Pictures Taken							
First Harmful Event Type <b>COLLISION WITH FIXED OBJECT</b>		First Harmful Event Detail <b>GUARDRAIL FACE</b>								
Total Counts	Vehicles <b>1</b>	CMV <b>0</b>	Motorists <b>1</b>	Non-Motorists <b>0</b>	Injured <b>0</b>	Fatalities <b>0</b>	Witnesses <b>0</b>	Other Persons <b>0</b>	Businesses <b>0</b>	Violations <b>1</b>
First Harmful Event's Relation to Junction <b>NON-JUNCTION</b>		Is First Harmful Event within Interchange Area <b>NO</b>		Type of Intersection <b>NOT AT INTERSECTION</b>						
Contributing Circumstances: Environment <b>NONE</b>		Contributing Circumstances: Environment <b>NONE</b>		Contributing Circumstances: Environment <b>NONE</b>						
Contributing Circumstances: Road <b>NONE</b>		Contributing Circumstances: Road <b>NONE</b>		Contributing Circumstances: Road <b>NONE</b>						
School Bus Related <b>NO</b>		Work Zone Related <b>NO</b>		Crash Location in Work Zone						

### VEHICLE V01

<input checked="" type="checkbox"/> V01	Motor Vehicle Type <b>MOTOR VEHICLE IN TRANSPORT</b>	State <b>GA</b>	License Number <b>BGU4233</b>	Registration Expires <b>08/23/2014</b>	<input type="checkbox"/> Permanent Registration	VIN <b>4T1BF28B94U373203</b>
Year <b>2004</b>	Make <b>TOYOTA</b>	Model <b>AVALON U.S. XL</b>	Style <b>4S</b>	Color <b>BLK</b>	Body Type Category <b>PASSENGER CAR</b>	
Special Function of Motor Vehicle in Transport <b>NO SPECIAL FUNCTION</b>		Emergency Motor Vehicle Use <b>NO</b>		Type of Bus Use <b>NOT A BUS</b>		
Owner First Name <b>TAMMY</b>	Owner Middle Name <b>M</b>	Owner Last Name <b>CALHOUN</b>	Owner Suffix	Owner Business (if not Person)		
Address <b>760 LIME SINK RD</b>		Address Other		City <b>WHIGHAM</b>	State <b>GA</b>	Zip Code <b>39897-2403</b>
Owner Phone Number	Owner Phone Number (other)	Insurance Company <b>NATIONAL SECURITY GROUP</b>		Insurance Policy Number <b>974535</b>		
Vehicle Removal <b>TOWED DUE TO DISABLING DAMAGE</b>		Vehicle Towed By <b>ROYCES</b>		Wrecker Selection Method <b>ROTATION</b>		
Direction of Travel Before Crash <b>NORTHBOUND</b>	Speed: Estimated <b>55</b>	Posted	Roadway Type <b>UNDIVIDED HIGHWAY</b>	Total Lanes <b>2</b>	Roadway Horizontal Alignment <b>STRAIGHT</b>	Roadway Grade <b>LEVEL</b>
Trafficway Description <b>TWO-WAY NOT DIVIDED</b>		Traffic Control Device Type <b>NO CONTROLS</b>		Working Properly		
Roadway Description for Vehicle Travel <b>GA 112</b>		Vehicle Maneuver Action (by this vehicle) <b>MOVEMENTS ESSENTIALLY STRAIGHT AHEAD</b>		Hit & Run (by this vehicle) <b>NO DID NOT LEAVE SCENE</b>		Damage Extent (for this vehicle) <b>DISABLING DAMAGE</b>
1st Sequence of Events Type (this vehicle) <b>COLLISION WITH FIXED OBJECT</b>		1st Sequence of Events Detail (this vehicle) <b>GUARDRAIL FACE</b>				
2nd Sequence of Events Type (this vehicle) <b>UNKNOWN</b>		2nd Sequence of Events Detail (this vehicle)				
3rd Sequence of Events Type (this vehicle) <b>UNKNOWN</b>		3rd Sequence of Events Detail (this vehicle)				
4th Sequence of Events Type (this vehicle) <b>UNKNOWN</b>		4th Sequence of Events Detail (this vehicle)				
Most Harmful Event Type (this vehicle) <b>COLLISION WITH FIXED OBJECT</b>		Most Harmful Event Detail (this vehicle) <b>GUARDRAIL FACE</b>				
Contributing Circumstances 1 (this vehicle) <b>NONE</b>		Contributing Circumstances 2 (this vehicle) <b>NONE</b>				
Area of Initial Impact <input type="checkbox"/> Non Collision <input type="checkbox"/> Top <input type="checkbox"/> Undercarriage <input type="checkbox"/> Unknown				Most Damaged Area <input type="checkbox"/> Non Collision <input type="checkbox"/> Top <input type="checkbox"/> Undercarriage <input type="checkbox"/> Unknown		
Occupant Type <b>DRIVER</b>	Person Name (First Middle Last Suffix) <b>TAMMY M CALHOUN</b>		Injury Status <b>NO INJURY(O)</b>			

### DRIVER V01

<input checked="" type="checkbox"/> Person Type <b>DRIVER</b>	NM#	Vehicle# <b>V01</b>	Person Type Detail			
First Name <b>TAMMY</b>	Middle Name <b>M</b>	Last Name <b>CALHOUN</b>	Suffix	Date of Birth <b>08/23/1960</b>	Age <b>53</b>	Sex <b>F</b>

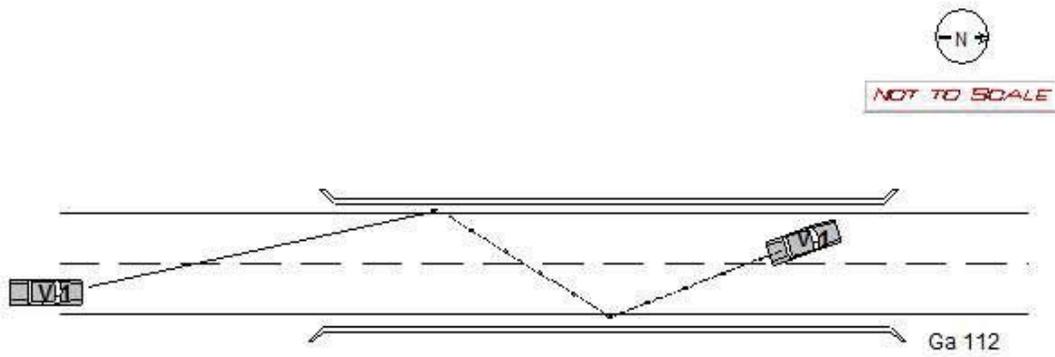
Crash Number <b>C000197295-01</b>		Reporting Agency <b>GEORGIA DEPARTMENT OF PUBLIC SAFETY</b>			Reporting Agency Case Number		Reporting Agency CAD Number <b>GSPG13CAD047798</b>		
Address <b>760 LIME SINK RD</b>			Address Other			City <b>WHIGHAM</b>		State <b>GA</b>	Zip Code <b>39897</b>
Phone Number		Phone Number (other)		Condition at Time of Crash <b>APPARENTLY NORMAL</b>					
Driver License Number <b>055288524</b>		Class <b>C</b>	Expires <b>12/20/2013</b>	State <b>GA</b>	Jurisdiction <b>02</b>	Type <b>NON-CDL DRIVER'S LICENSE</b>	Status <b>VALID LICENSE</b>		
Drivers License Restrictions 1 <b>NONE</b>			Drivers License Restrictions 2 <b>NONE</b>			Drivers License Restrictions 3 <b>NONE</b>			
Driver Distracted By <b>NOT DISTRACTED</b>					Driver Vision Obstructions <b>VISION NOT OBSCURED</b>				
Driver Actions at Time of Crash 1 (based on judgement of investigation officer) <b>FAILED TO KEEP IN PROPER LANE</b>					Driver Actions at Time of Crash 2 (based on judgement of investigation officer) <b>NO CONTRIBUTING ACTION</b>				
Driver Actions at Time of Crash 3 (based on judgement of investigation officer) <b>NO CONTRIBUTING ACTION</b>					Driver Actions at Time of Crash 4 (based on judgement of investigation officer) <b>NO CONTRIBUTING ACTION</b>				
Motor Vehicle Seating Position: Row <b>FRONT</b>		Motor Vehicle Seating Position: Seat <b>LEFT</b>		Motor Vehicle Seating Position: Other <b>NOT APPLICABLE</b>			<input type="checkbox"/> Seating Position Unknown		
Restraint Systems <b>SHOULDER AND LAP BELT USED</b>					Helmet Use				
Air Bag Deployed <b>NOT DEPLOYED</b>					Ejection <b>NOT EJECTED</b>				
Trapped Extrication <b>NOT TRAPPED</b>									
Injury Severity Level Type <b>NO INJURY(O)</b>			Injury Severity Level Detail				Primary or Most Obvious of Body Area Injured During Crash		
Law Enforcement Suspected Alcohol Use <b>NO</b>		Alcohol Test Type		Alcohol Tested <b>TEST NOT GIVEN</b>		Alcohol Test Result		BAC	
Law Enforcement Suspected Drug Use <b>NO</b>		Drug Test Type		Drug Tested <b>TEST NOT GIVEN</b>		Drug Test Result			
Violation Type Issued <b>UNIFORM TRAFFIC CITATION</b>		Number <b>E01334286</b>		Violation Description <b>40-6-48 FAILURE TO MAINTAIN LANE</b>					

**NARRATIVE: C000197295**

Vehicle 1 was northbound on Ga 112. The driver lost control of vehicle 1 and struck the west guardrail with its front. Vehicle 1 then traveled to the east side of the road, then struck the east guardrail before coming to final rest in the southbound lane of Ga 112. Scene was recorded on DVD 599-019-2013.

REPORTING OFFICER				APPROVING OFFICER (SUPERVISOR)			
Reporting Officer Name <b>CULPEPPER, T.J.</b>		Signature 		Approving Officer Name <b>PEEPLES III, T. A.</b>		Signature 	
ID Number <b>0599</b>	Rank <b>SERGEANT</b>			ID Number <b>0161</b>	Rank <b>SFC</b>		
Org / Unit <b>G-12</b>				Org / Unit <b>G-12</b>			

DIAGRAM OF ACCIDENT



# Department of Transportation State of Georgia

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## INTERDEPARTMENT CORRESPONDENCE

**FILE** Grady County **OFFICE** Planning  
P.I. # 0012887  
**DATE** July 23, 2014

**FROM** Cynthia L. VanDyke, State Transportation Planning Administrator

**TO** Albert Shelby, State Program Delivery Engineer  
**Attention:** Sonja Thompson

**SUBJECT** **Estimated** Traffic Assignments for SR 112 @ Sapp Creek.

We are furnishing estimated traffic assignments for the above project as follows:

	<b>BUILD = NO BUILD</b>
	TC # 131-0263
2013 AADT	2550
2018 AADT	2750
2038 AADT	3700
2013 DHV	230
2018 DHV	250
2038 DHV	335
D	60%
K	9%
T	8.25%
S.U.	3.0%
COMB.	5.25%
24 HR. T.	10.25%
S.U.	4.0%
COMB.	6.25%

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

CLV/AFE

## Traffic Projections/Forecasting Summary Sheet

P.I. # 0012887

Grady County

**Year the counts** were taken from 2013 coverage

### Growth Factors

#### ***Growth for Build = No Build***

Existing Year to Base Year 1.5%

Base Year to Design Year 1.5%

K = 9%

D = 60%

### Assumptions

- Computed a 15-year historical trend.



# Bridge Inventory Data Listing

## Parameters: Bridge Serial Num

Structure ID: 131-0028-0

131 - Grady

SUFF. RATING: 64.70

### Location & Geography

Structure ID: 131-0028-0

200 Bridge Information: 06

\*6A Feature Int: SAPP CREEK

\*6B Critical Bridge: SR00112

\*7A Route No Carried: SR 112-PELHAM ROAD

\*7B Facility Carried: APP 5 MI N OF CAIRO

9 Location: District 4

2 Dot District: 2012

207 Year Photo: 24

\*91 Inspection Frequency: Date: 05/05/2014

92A Fract Crit Insp Freq: 0

92B Underwater Insp Freq: 00

92C Other Spc. Insp Freq: 00

\*4 Place Code: 00000

\*5 Inventory Route(O/U): 1

Type: 3 - State

Designation: 1 - Mainline

Number: 00112

Direction: 0 - Not applicable

\*16 Latitude: 30.0000- 56.8017 HMMS Prefix: SR

\*17 Longitude: 84.0000- 14.7137 HMMS Suffix: 00

MP: 3.59

98 Border Bridge: % Shared: 00

99 ID Number: 0000000000000000

\*100 STRAHNET: 0 - The Feature is not a STRAHNET route.

12 Base Highway Network: 1

13A LRS Inventory Route: 1311011200

13B Sub Inventory Route: 0.00

\*101 Parallel Structure: N. No parallel structure exists

\*102 Direction of Traffic: 2 - Two Way

\*264 Road Inventory Mile Post: 003.61

\*208 Inspection Area: Area 11

Engineer's Initials: etg

\* Location ID No: 131-00112D-003.59N

### Signs & Attachments

225 Expansion Joint Type: 02 - Open or sealed concrete joint (silicone sealant)

242 Deck Drains: 1 - Open Scuppers.

243 Parapet Location: 0 - None present.

Height: 0.00

Width: 0.00

238 Curb Height: 1

Curb Material: 1 - Concrete.

239 Handrail: 1 - Concrete.

\*240 Median Barrier Rail: 0 - None.

241 Bridge Median Height: 0

\* Bridge Median Width: 0

230 Guardrail Loc. Dir. Rear: 3 - Both sides.

Fwd: 3 - Both sides.

Oppo. Dir. Rear: 0 - None.

Oppo. Fwd: 0 - None.

244 Approach Slab: 0 - None.

224 Retaining Wall: 0 - None.

233 Posted Speed Limit: 55

236 Warning Sign: 1.00

234 Delineator: 1.00

235 Hazard Boards: 1

237 Utilities Gas: 00 - Not Applicable

Water: 00 - Not Applicable

Electric: 00 - Not Applicable

Telephone: 00 - Not Applicable

Sewer: 00 - Not Applicable

247 Lighting Street: 0

Navigation: 0

Aerial: 0 - Not

\*248 County Continuity No.: 00

\*104 Highway System: 0 - Bridge does not carry a route on the NHS.

\*26 Functional Classification: 6 - Rural - Minor Arterial

\*204 Federal Route Type: F - Primary. No: 00721

105 Federal Lands Highway: 0 - Not applicable

\*110 Truck Route: 0

206 School Bus Route: 1

217 Benchmark Elevation: 0200.00

218 Datum: 1 - Assumed

\*19 Bypass Length: 6

\*20 Toll: 3 - On a Free Road or Non-Highway

\*21 Maintenance: 01 - State Highway Agency.

\*22 Owner: 01 - State Highway Agency.

\*31 Design Load: 2 - H 15

37 Historical Significance: 5 - Not eligible for the National Register of Historic Places

205 Congressional District: 2 - TWO

27 Year Constructed: 1950

106 Year Reconstructed: 0

33 Bridge Median: 0 - None

34 Skew: 0

35 Structure Flared: No

38 Navigation Control: 0 - Navigation is not controlled by an Agency

213 Special Steel Design: 0 - Not applicable or other

267 Type of Paint: 2 - Non-Lead Oil Alkyd System (System IV).

\*42 Type of Service On: 1 - Highway

Type of Service Under: 5 - Waterway

214 Movable Bridge: 0

203 Type Bridge: E - Steel p - N. Steel-Co M. Steel - O. Concrete

259 Pile Encasement: 1

\*43 Structure Type Main: 4 - Steel (Continuous) 2 - Stringer/Multi-Beam or Girder

45 No Spans Main: 3

44 Structure Type Appr: 0 - Other 0 - Other

46 No Spans Appr: 0

226 Bridge Curve Horz 0 Vert: 0.00

111 Pier Protection N - Navigation Control item coded 0, or Feature not a waterway

107 Deck Structure Type:

108 Wearing Structure Type:

Membrane Type:

Deck Protection:



# Bridge Inventory Data Listing

Processed Date: 11/24/2014

Parameters: Bridge Serial Num

## Structure ID: 131-0028-0

### Programming Data

ER-9  
 201 Project No: 1980 Year: 2011  
 4- Plans in Infomage.  
 249 Prop Proj No: STP-BRF-072-1 (9)  
 250 Approval Status: 0000  
 251 PI Number: 431800-  
 252 Contract Date: 02/01/2005  
 260 Seismic No: 00000  
 75 Type Work: 34- Widening  
 94 Bridge Imp. Cost: \$316  
 95 Roadway Imp. Cost: \$32  
 96 Total Imp Cost: \$475  
 76 Imp Length: 292  
 97 Imp Year: 2013  
 114 Future ADT: 2985 Year: 2031

### Hydraulic Data

215 Waterway Data:  
 High Water Elev: 0195.0 Year: 1979  
 Flood Elev: 0000.0 Freq: 00  
 Avg Streambed Elev: 0181.3  
 Drainage Area: 00000  
 Area of Opening: 000482  
 113 Scour Critical U. No Load Rating: no scour critical data entered.  
 216 Water Depth: 01.0 Br. Height: 13.2  
 222 Slope Protection: 6  
 221 Spur Dikes Rear 0 Fwd: 0  
 219 Fender System 0- None.  
 220 Dolphin:  
 223 Culvert Cover: 000  
 Type: 0- Not Applicable  
 No. Barrels: 0  
 Width: 0.00 Height: 0  
 Length: 0 Apron: 0  
 \*265 U/W Insp. Area 0 Diver: ZZZ  
 \*Location ID No: 131-00112D-003.59N

1- Work to be done by contract with deck  
 210 No. Tracks On: 00 Under: 00  
 \*48 Max. Span Length: 27  
 \*49 Structure Length: 81  
 51 Br. Rwdy. Width: 23.90  
 52 Deck Width: 30.00  
 \*47 Tot. Horiz. Cl: 24  
 50 Curb / Sidewalk Width: 2.00 / 2.00  
 32 Approach Rdwy. Width: 20  
 \*229 Shoulder Width:  
 Rear Lt: 4.00 Type: Grass Rt: 4  
 Fwd. Lt: 4.00 Type: Grass Rt: 4  
 Pavement Width:  
 Rear: 20.00 Type: 2- Asphalt.  
 20.00 Type: 2- Asphalt.  
 Intersection Rear: 0 Fwd: 0  
 36 Safety Features Br. Rail: 2- Inspected feature meets acceptable construction date standards.  
 Transition: 2- Inspected feature meets acceptable construction date standards.  
 App. G. Rail: 2- Inspected feature meets acceptable construction date standards.  
 App. Rail End: 2- Inspected feature meets acceptable construction date standards.  
 53 Minimum Cl. Over: 99'99"  
 Under: N- Feature not a highway or railroad. 0.00  
 \*228 Minimum Vertical Cl  
 Act. Odm Dir: 99' 99"  
 Oppo. Dir: 99' 99"  
 Posted Odm. Dir: 00' 00"  
 Oppo. Dir: 00'00 "  
 55 Lateral Undercl. Rt: N- Feature not a highway or railroad. 0.00  
 56 Lateral Undercl. Lt: 0.00  
 \*10 Max Min Vert Cl: 99' 99" Dir: 0  
 39 Nav Vert Cl: 000 Horiz: 0  
 116 Nav Vert Cl Closed: 000  
 245 Deck Thickness Main Deck Thick Approach: 7.00  
 246 Overlay Thickness: 0.00  
 212 Year Last Painted: Sup: 1990 Sub: 1990

Measurements:  
 65 Inventory Rating Method: 2- Allowable Stress (AS)  
 63 Operating Rating Method: 2- Allowable Stress (AS)  
 66 Inventory Type: 2 - HS loading. Rating: 23  
 64 Operating Type: 2 - HS loading. Rating: 39  
 231 Calculated Loads:  
 H-Modified: 20 0  
 HS-Modified: 25 0  
 Type 3: 26 0  
 Type 3s2: 40 0  
 Timber: 35 0  
 Piggyback: 40 0  
 261 H Inventory Rating: 15  
 262 H Operating Rating: 24  
 67 Structural Evaluation:  
 58 Deck Condition: 5 - Fair Condition  
 59 Superstructure Condition: 5 - Fair Condition  
 \*227 Collision Damage:  
 60A Substructure Condition: 5 - Fair Condition  
 60B Scour Condition: 6 - Satisfactory Condition  
 60C Underwater Condition: N - Not Applicable  
 71 Waterway Adequacy: 8-Equal to present desirable criteria.  
 61 Channel Protection Cond.: 7  
 68 Deck Geometry:  
 69 UnderCir. HorzVert:  
 72 Appr. Alignment: 8-No reduction of vehicle operating speed required.  
 62 Culvert: N - Not Applicable  
 Posting Data  
 70 Bridge Posting Required: 5. Equal to or above legal loads  
 41 Struct Open, Posted, CL: A. Open, no restriction  
 \*103 Temporary Structure: 0  
 232 Posted Loads  
 H-Modified: 00  
 HS-Modified: 00  
 Type 3: 00  
 Type 3s2: 00  
 Timber: 00  
 Piggyback: 00  
 253 Notification Date: 02/01/1901  
 258 Fed Notify Date: 02/01/1901

Proposed Flexible Full Depth Pavement Structure				
Course	Material	Thickness (inches)	Structural Coefficient	Structural Value
Course 1	9.5 mm Type II Superpave	1.25	0.4400	0.55
Course 2	19 mm Superpave	2.00	0.4400	0.88
Course 3	25 mm Superpave	1.25	0.4400	0.55
		1.75	0.3000	0.53
Course 4	Graded Aggregate Base	8.00	0.1600	1.28
<b>Required SN</b>	3.79	<b>Proposed pavement is 0.23% Underdesigned</b>		<b>Proposed SN</b> 3.79

<b>Design Remarks</b>					
<b>Terminal Serviceability Index</b>	2.50	<b>Regional Factor</b>	1.40	<b>Multiple Unit ESAL</b>	1.50
		<b>User Defined 18-KIP ESAL</b>	1.08	<b>Calculated 18-KIP ESAL</b>	1.07
<b>Non-Standard Value Comment</b>					

**Prepared By** \_\_\_\_\_ 12/8/2014 11:53 AM  
**Dennis L. Cook** **Date**

**Recommended By** \_\_\_\_\_  
**State Roadway Design Engineer** **Date**

**Approved By** \_\_\_\_\_  
**State Pavement Engineer** **Date**



# *Meeting Minutes*

## **SR 112 @ Sapp Creek Grady County P.I. No. 0012887**

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**Date:** November 20, 2014

**Location/Time:** GDOT District 4 Office / 10:00 a.m. – 11:00 a.m.

**Attendees:**

Sonja Thompson	GDOT – Program Delivery
Adam Smith	GDOT – Program Delivery
Joe Sheffield	GDOT – District 4 Engineer
Darlene Taylor	State Representative
T.D. David	Grady County Chairman
Carlos Tobar	Grady County Administrator
Shane Pridgen	GDOT – District 4 Planning
Sandy Griffin	GDOT – District 4 Design Engineer
Dennis Cook	GDOT – District 4 Designer
Brent Thomas	GDOT – District 4 Preconstruction Engineer
Donna Garrison	GDOT – Engineering Services Design Review
Darin Purvis	GDOT – Engineering Services Liaison
Van Mason	GDOT – District 4 Traffic Engineer
Tim Warren	GDOT – District 4 Utilities Engineer
Aneece Louaked	GDOT – District 4 Utilities
Glenn Hestor	Grady EMC
Robert Hudson	Grady EMC
Nita Birmingham	GDOT – District 4 Communications Officer
Sam Pugh	GDOT – NEPA Team Leader
Ben Rabun	GDOT – State Bridge Engineer

**Minutes By:** Sonja Thompson

**The following items were discussed at the meeting:**

1. Sonja Thompson, the GDOT Project Manager, started the meeting with introductions and an overview of the project.
2. Ms. Thompson then turned the meeting over to Sandy Griffin, the District Design Engineer.

3. Mr. Griffin went through the draft Concept Report including the justification, existing conditions and proposed conditions.
4. Mr. Griffin discussed the proposed off-site detour with a total distance of 23.3 miles and the normal travel distance of 18.3 miles. The off-site detour would shorten the construction time by approximately six (6) months.
5. After the project overview, the Concept Report was reviewed for comments.
6. The following offices offered a discussion:
  - a. Planning – A question was raised if a temporary State Route would be needed for the County Road that ties into the project. It was determined that since the County owned the property on both sides of the road, a temporary State Route would not be needed for the project.
  - b. Environmental – History, Air & Noise and Archaeology are clear at this time. Ecology will require a Special Provision for the migratory birds but there are no other species at this time. Sam Pugh, NEPA Team Leader has scheduled the PIOH for 01/20/2015.
  - c. Utilities – Windstream has 200 pair underground. EMC is on the east side of the project located on poles. The 2<sup>nd</sup> submission Utility Plans were sent/given to the utility companies today. A green sheet will be needed for the utility companies prior to them submitting their location information back to the District.
  - d. Right of Way – After environmental approval, the right of way can be acquired.
  - e. Traffic Operations – It was determined that the striping on the bridge needed to be skip striping.
  - f. Bridge – The hydrology report has been approved. Due to the type of bridge structure, it was pointed out that there is no way to attach any utilities to the bridge if requested.
  - g. Construction – No one from the construction office was available. The placement of the work bridge will need to be determined to see if any environmental concerns need to be addressed.

**Attachments:** Concept Team Meeting Sign-in Sheet



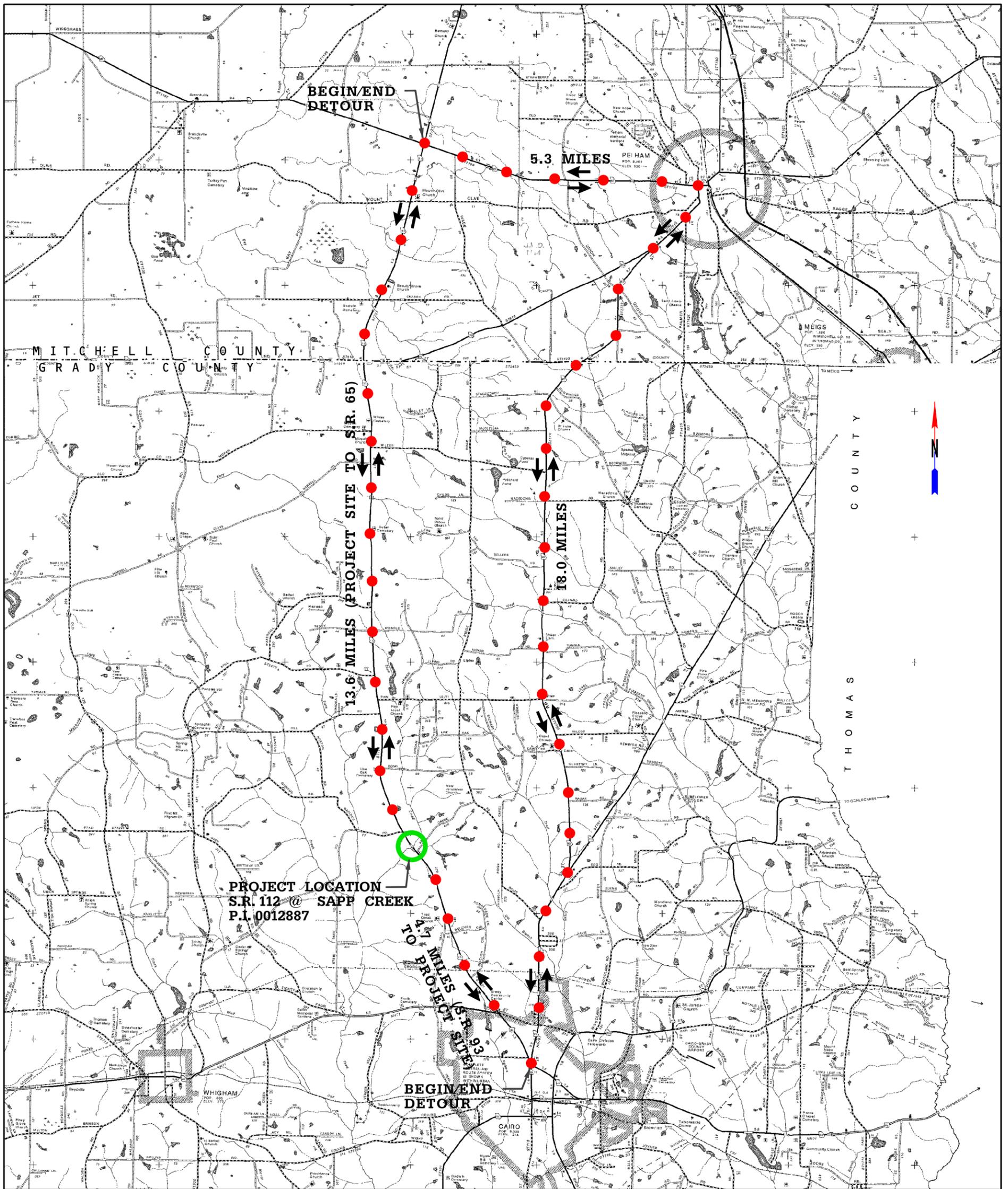
*PI# 0012887*  
*SR 112 @ Sapp Creek, Grady County*  
*Summary of Team Meeting*  
*October 22, 2014*

- A target let date of July 2015 is to be used to develop the schedule for the project. Environmental issues could shift the date (the final schedule will be established by November 15<sup>th</sup>).
- The following portion of the roadway plans are completed:
  - plan and profile
  - cross section
  - construction limits
- Concept report is being prepared and meeting to be scheduled mid-November.
- A review of the environmental document that Grady County provided to GDOT will be reviewed to see if GDOT could supplemental onto Grady County's document.
- Environmental surveys to be completed by December 15, 2014 using in-house personnel.
- Environmental Assessment of Effect and concurrence to be submitted by mid-March with an approved environmental document by April 2015.
- Environmental permits and buffer variances to be started on immediately.
- Detour Open House to be held in January 2015.
- Bridge hydrology will be completed mid-December 2014. Once the hydrology completed, we will explore accelerated bridge construction methods.
- Since Grady County owns the right of way that is needed to build the bridge, it will be a quick claim deed process. Right of Way acquisition will take two to three months to process.

**Action Items:**

- Schedule returned by October 31, 2014 with revised changes from SME's with a target let date of July 2015.
- Follow up meeting with Grady County to discuss the detour.
- Final schedule by November 15, 2014.
- Scheduling of Concept Team meeting for November.

# DETOUR MAP



**PROJECT LOCATION**  
**S.R. 112 @ SAPP CREEK**  
**P.I. 0012887**

**13.6 MILES (PROJECT SITE TO S.R. 65)**

**5.3 MILES**

**18.0 MILES**

**10.4 MILES (PROJECT SITE TO S.R. 93)**

**BRIDGE REPLACEMENT**

**S.R. 112 @ SAPP CREEK**

**P.I. 0012887**

**TOTAL DETOUR LENGTH**

**23.3 MILES**



**Figure 21**  
**Tired Creek Mitigation Site**  
**Mitigation Map**  
 Grady County, Georgia

Eco-South, Inc.



Environmental Consultants

DOQQ: cairo\_north\_nw, cairo\_north\_sw, whigham\_ne & whigham\_se.sid. 1999



6,250      3,125      0      6,250 Feet

