

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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

**FILE** P.I. # 0007156 **OFFICE** Design Policy & Support  
CSBRG-0007-00(156)  
Banks County  
GDOT District 1 - Gainesville **DATE** 1/15/2013  
Sr 98 @ Hickory Level Creek

**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  
Jeff Baker, State Utilities Engineer  
Ken Thompson, Statewide Location Bureau Chief  
Andy Casey, State Roadway Design Engineer  
Attn: Jan Hillard, Design Group Manager  
Bayne Smith, District Engineer  
Brent Cook, District Preconstruction Engineer  
Neil Kanter, District Utilities Engineer  
Suzanne Dunn, Project Manager  
BOARD MEMBER - 10th Congressional District

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

Project Type: <u>Bridge Replacement</u>	P.I. Number: <u>0007156</u>
GDOT District: <u>1</u>	County: <u>Banks</u>
Federal Route Number: <u>N/A</u>	State Route Number: <u>98</u>

This project is the replacement of a load limited bridge on SR 98 over Hickory Level Creek, 3.5 miles southwest of Homer, Georgia. The existing bridge, constructed in 1967, has a sufficiency rating of 48.39. The construction proposes a new 130' long by 43.25' wide concrete bridge over Hickory Level Creek at the existing bridge site. Traffic will be maintained during construction utilizing an on-site detour bridge.

**Submitted for approval:**

C. Andy Cuy  
State Roadway Design Engineer

Scott Rice  
State Program Delivery Engineer

Suzanne Dunn  
GDOT Project Manager

9/27/12 (10/3/12)  
DATE

10/11/2012  
DATE

10/5/12  
DATE

**Recommendation for approval:**

GLENN BOWMAN \*TJ  
Program Control Administrator

LISA MYERS \*TJ  
State Environmental Administrator

PATRICK ALLEN \*TJ  
Project Review Engineer

State Utilities Engineer

BEN RABUN \*TJ  
District Engineer

State Bridge Design Engineer

State Transportation Financial Management Administrator

DATE 10/23/2012

DATE 10/15/2012

DATE 10/23/2012

DATE

DATE 12/27/2012

DATE

DATE

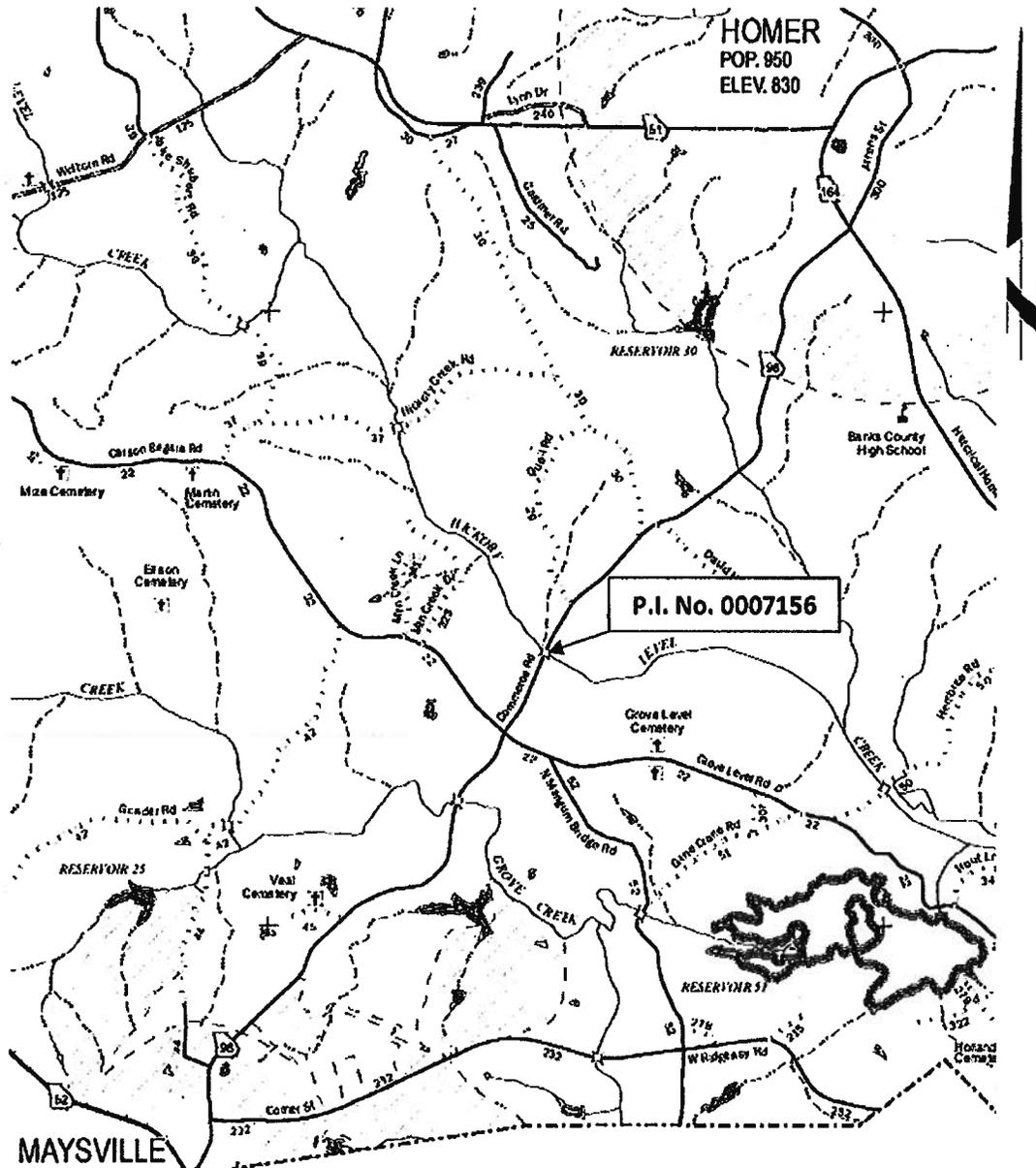
The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

CINDY VAN DYKE \*TJ  
State Transportation Planning Administrator

10/16/2012  
DATE

\* RECOMMENDATION ON FILE.

### PROJECT LOCATION



## PLANNING & BACKGROUND DATA

**Project Justification Statement:** This bridge (Structure ID 011-0013-0; SR 98 over Hickory Level Creek) was built in 1967. The bridge consists of three simple steel beam spans on concrete caps and columns and spread footing (bent 2) and pile footings (bent 3). The bridge was designed using truck configurations that weigh less than the current legal state truck weights. This bridge is currently posted. The overall condition of this bridge would be classified as satisfactory; with the deck exhibiting minor popouts and moderate scaling. No rehabilitation work performed on the deck would improve this bridge in so far as the posting of the structure is concerned. Therefore due to the structural integrity and based on design, replacement of this bridge is recommended.

**Description of the proposed project:** This project is the replacement of a load limited bridge on SR 98 over Hickory Level Creek, 3.5 miles southwest of Homer, Georgia. The existing bridge, constructed in 1967, has a sufficiency rating of 48.39. The construction proposes a new 130' long by 43.25' wide concrete bridge over Hickory Level Creek at the existing bridge site. Traffic will be maintained during construction utilizing an on-site detour bridge.

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

**MPO:**  N/A  MPO - Choose  
MPO Project TIP #

**Regional Commission:**  N/A  RC – Georgia Mountains RC  
RC Project ID #

**Congressional District(s):** 10

**Projected Traffic: ADT**

Current Year (2011): 1450      Open Year (2017): 1700      Design Year (2037): 2550

**Functional Classification (Mainline):** Rural Major Collector

Is this project on a designated bike route?  No  YES

Is this project located on a pedestrian plan?  No  YES

Is this project located on or part of a transit network?  No  YES

## CONTEXT SENSITIVE SOLUTIONS

**Issues of Concern:** N/A

**Context Sensitive Solutions:** N/A

### DESIGN AND STRUCTURAL DATA

**Mainline Design Features:**

Roadway Name/Identification: SR 98/Rural Major Collector

Feature	Existing	Standard*	Proposed
<b>Typical Section</b>			
- Number of Lanes	2	2	2
- Lane Width(s)	10.5'	12'	12'
- Median Width & Type	N/A	N/A	N/A
- Outside Shoulder Width & Type	4.5' Rural	10' Rural	10' Rural
- Outside Shoulder Slope	8.33%	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	50 mph	55 mph	55 mph
Min Horizontal Curve Radius	1060'	1060'	1060'
Superelevation Rate	4%	6%	6%
Grade	4.4%	<7%	<7%
Access Control	By Permit	By Permit	By Permit
Right-of-Way Width	100'	120'	120'
Maximum Grade – Crossroad	N/A	N/A	N/A
Design Vehicle	SU	SU	SU

\*According to current GDOT design policy if applicable

**Major Structures:**

Structure	Existing	Proposed
011-0013-0	The existing Bridge is 126' long with two 13' lanes and 3.125' barriers on each side with a sufficiency rating of 48.39.	The proposed bridge is 130' long with two 12' lanes, 8' shoulders and 1.625' barriers on each side.
Retaining walls	N/A	N/A
Other	N/A	N/A

Major Interchanges/Intersections: N/A

Utility Involvements: Georgia Power; Windstream Communications

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

SUE Required:  Yes  No

Railroad Involvement: N/A

**Right-of-Way:**

Required Right-of-Way anticipated:  YES  NO  Undetermined  
 Easements anticipated:  Temporary  Permanent  Utility  Other

Anticipated number of impacted parcels: 5  
 Anticipated number of displacements (Total): 0  
     Businesses: 0  
     Residences: 0  
     Other: 0

Location and Design approval:  Not Required  Required

Off-site Detours Anticipated:  No  Yes  Undetermined

Transportation Management Plan Anticipated:  YES  NO

**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 - Median Opening Spacing	DP&S	<input type="checkbox"/>		<input checked="" 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	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Safety Edge	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

VE Study anticipated:  No  Yes  Completed – Date:

**ENVIRONMENTAL DATA**

**Anticipated Environmental Document:**

GEPA:  NEPA:  Categorical Exclusion  EA/FONSI  EIS

**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

**Environmental Permits/Variations/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 type="checkbox"/>	<input type="checkbox"/>	TBD
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. FEMA	<input type="checkbox"/>	<input checked="" 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 – Date:

**NEPA/GEPA:** Because there may be minor impacts to an historic resource, a *de minimis* impact is expected under Section 4f for minor ROW acquisition to a corner of the property near the creek. No hazardous waste or USTs are expected in the project area. No significant land use changes, impacts to environmental justice populations, or impacts to the economic or social environments are anticipated. The project is limited in scope as an in-kind bridge replacement that will not add capacity, and impacts to most resources, if any, are expected to be minor.

**Ecology:** An ecology resource survey has been conducted. Habitat is present for Sandbar Shiner (*Notropis scepticus*) in Hickory Level Creek; an aquatic survey was conducted. Suitable habitat was found for the sandbar shiner; however, no shiners were collected during the surveys. Informal Section 7 of the Endangered Species Act is anticipated. In addition to Hickory Level Creek, there are three streams located within 200 feet west of the existing roadway. Should infrastructure or additional cut or fills need to be placed more than 35 feet from the existing structure on the west side, impacts to streams may occur. Indiana bat habitat is present within the project corridor and an acoustic survey (and possibly netting) is recommended.

**History:** One resource in APE. Resource boundary abuts bridge location, but structures are located several hundred feet from the bridge. Resource (and the buildings) is located on the east side of SR

98 directly across from Quail Rd. Possible effects to this resource. If unavoidable, the impacts are likely to be minor.

**Archeology:** unknown, not begun. Surveys will begin once design data is received.

**Air & Noise:** No Effects Anticipated documents (i.e. write-offs) will be completed.

**Public Involvement:** Public detour and/or PIOH are not anticipated. No citizen committees or groups are expected to be involved due to the nature of the project (minimal impacts). No additional public outreach expected to be needed.

**Major stakeholders:** Traveling public, nearby landowners

## CONSTRUCTION

**Issues potentially affecting constructability/construction schedule:** An on-site detour bridge is proposed. An off-site detour would be 13+ miles of paved roads. A shorter off-site detour would be on unimproved or dirt roads. Additionally, an off-site detour would significantly disrupt schools, a fire station, and chicken farms.

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

## PROJECT RESPONSIBILITIES

### Project Activities:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT Roadway Design Office
Design	GDOT Roadway Design Office
Right-of-Way Acquisition	GDOT District 1 ROW Office
Utility Relocation	Utility Owners
Letting to Contract	GDOT Bidding Administration Office
Construction Supervision	GDOT District 1 Construction Office
Providing Material Pits	Contractor
Providing Detours	
Environmental Studies, Documents, & Permits	Mulkey Engineers & Consultants
Environmental Mitigation	GDOT Environmental Services Office
Construction Inspection & Materials Testing	GDOT Materials and Research Office

**Lighting required:**  No  Yes

**Initial Concept Meeting:** N/A

**Concept Meeting:** 08/16/12 – Reviewed Project Justification Statement and Project Description; Discussed detour options; Discussed environmental and utility information. See attached minutes.

**Other projects in the area:** P.I. Number 0007157, Banks County – SR 323 at Grove Creek, 6.5 miles west of Homer, and P.I. Number 0007158, Banks County – SR 63 @ Middle Fork Broad River

**Other coordination to date:** 11/21/11 – Scoping Meeting for P.I. Numbers 0007156, 0007157 and 0007158; Discussed potential detour options. See attached minutes. 04/11/12 – Environmental Kick-off Meeting for P.I. Numbers 0007156, 0007157 and 0007158; Discussed the basic start-up of the project. See attached minutes.

**Project Cost Estimate and Funding Responsibilities:**

	Breakdown of PE	ROW	Utility	CST*	Environmental Mitigation	Total Cost
By Whom	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$322,135.82	\$310,000.00	\$97,500.00	\$1,424,791.34	\$0.00	\$2,154,427.16
Date of Estimate	5/6/2009	7/17/2012	5/21/2012	11/2/2012		

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

**ALTERNATIVES DISCUSSION**

**Alternative selection:**

<b>Preferred Alternative:</b> Replacement of bridge with a 130' long by 43.25' wide structurally sufficient bridge with an on-site detour bridge.			
<b>Estimated Property Impacts:</b>	5	<b>Estimated Total Cost:</b>	\$2,154,427.16
<b>Estimated ROW Cost:</b>	\$310,000.00	<b>Estimated CST Time:</b>	24 months
<b>Rationale:</b> This alternative was selected due to the use of an on-site detour bridge which would prevent the need for an off-site detour and therefore a Road User Cost of \$1,120,000 would not be incurred. Additionally, an on-site detour bridge would not significantly disrupt schools, a fire station, or chicken farms.			

<b>Alternative 1:</b> Replacement of bridge with a 130' long by 43.25' wide structurally sufficient bridge with an off-site detour.			
<b>Estimated Property Impacts:</b>	5	<b>Estimated Total Cost:</b>	\$1,785,427.16
<b>Estimated ROW Cost:</b>	\$214,000.00	<b>Estimated CST Time:</b>	12 months
<b>Rationale:</b> This alternative was not selected due to the length of the off-site detour and the associated Road User Cost of \$1,120,000. An off-site detour of 15+ miles of state routes, 13+ miles of paved roads, or a shorter route of unimproved or dirt roads would be used. Additionally, this off-site detour would significantly disrupt schools, a fire station, and chicken farms.			

<b>No-Build Alternative:</b> Existing 126' long by 32.25' wide load limited bridge would remain in place.			
<b>Estimated Property Impacts:</b>	0	<b>Estimated Total Cost:</b>	\$0.00
<b>Estimated ROW Cost:</b>	\$0.00	<b>Estimated CST Time:</b>	0 months
<b>Rationale:</b> This alternative was not selected due to the existing bridge not meeting current state legal truck weights. The existing bridge would continue to be posted and the sufficiency rating would continue to decrease.			

**Attachments:**

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
  - a. Construction including Engineering and Inspection
  - b. Completed Fuel & Asphalt Price Adjustment forms
  - c. Right-of-Way
  - d. Utilities
4. Crash summaries
5. Traffic volumes
6. Road User Cost Report
7. Bridge inventory
8. Minutes of Concept meeting
9. Scoping Meeting Minutes and Environmental Kick-off Meeting Minutes

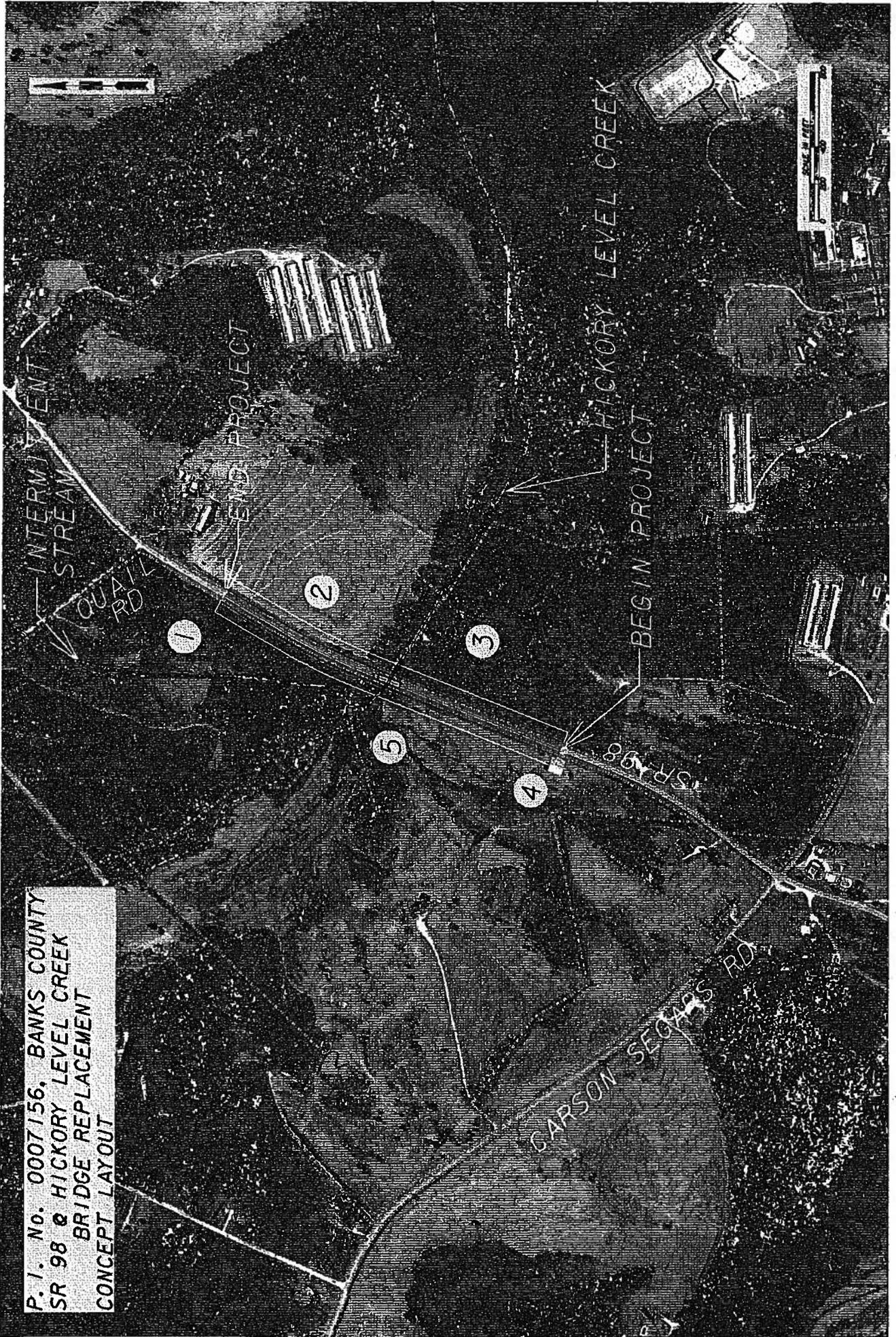
**APPROVALS**

Concur:                     N/A                      
Director of Engineering

Approve:                     [Signature]                      
Chief Engineer

                    11/14/13                      
Date

P. I. No. 0007156, BANKS COUNTY  
SR 98 & HICKORY LEVEL CREEK  
BRIDGE REPLACEMENT  
CONCEPT LAYOUT





# DETAILED COST ESTIMATE



Job: 0007156

JOB NUMBER: 0007156

FED/STATE PROJECT NUMBER

SPEC YEAR: 01

DESCRIPTION: SR 98 @ HICKORY LEVEL CREEK

## ITEMS FOR JOB 0007156

### 0010 - ROADWAY ITEMS

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	\$75,000.00000	TRAFFIC CONTROL - CSBRG-0007-00(156)	\$75,000.00
0010	153-1300	1.000	EA	\$77,815.22833	FIELD ENGINEERS OFFICE TP 3	\$77,815.23
0015	210-0100	1.000	LS	\$150,000.00000	GRADING COMPLETE - CSBRG-0007-00(156)	\$150,000.00
0020	310-1101	2970.000	TN	\$17.84110	GR AGGR BASE CRS, INCL MATL	\$52,988.07
0025	402-3103	380.000	TN	\$76.07489	REC AC 9.5 MM SP,TP11,GP2, INCL BM & H L	\$28,528.46
0035	402-3121	2040.000	TN	\$60.60898	RECYL AC 25MM SP,GP1/2,BM&HL	\$123,842.32
0030	402-3190	580.000	TN	\$69.05211	RECYL AC 18 MM SP,GP 1 OR 2 ,INC BM&HL	\$40,740.74
0040	413-1000	800.000	GL	\$2.89577	BITUM TACK COAT	\$2,168.82
0044	432-5010	250.000	SY	\$9.03902	MILL ASPH CONC PVMT,VARB DEPTH	\$2,259.76
0045	433-1000	276.000	SY	\$126.23114	REINF CONC APPROACH SLAB	\$34,713.58
0050	458-2016	1.000	GLM	\$5,608.47326	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	\$5,608.47
0054	620-0100	1000.000	LF	\$24.46031	TEMP BARRIER, METHOD NO. 1	\$24,460.31
0055	634-1200	20.000	EA	\$84.80242	RIGHT OF WAY MARKERS	\$1,696.05
0060	841-1100	200.000	LF	\$51.09781	GUARDRAIL, TP T	\$10,219.58
0065	841-1200	1000.000	LF	\$18.00027	GUARDRAIL, TP W	\$18,000.27
0070	841-5001	2.000	EA	\$581.19111	GUARDRAIL ANCHORAGE, TP 1	\$1,162.38
0075	841-5012	2.000	EA	\$1,820.62647	GUARDRAIL ANCHORAGE, TP 12	\$3,641.25
0080	843-8200	1000.000	LF	\$1.76068	BARRIER FENCE (ORANGE), 4 FT	\$1,760.68
<b>SUBTOTAL FOR ROADWAY ITEMS:</b>						<b>\$662,613.73</b>

### 0020 - PERM EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0085	167-1000	1.000	EA	\$810.70939	WATER QUALITY MONITORING AND SAMPLING	\$810.71
0090	167-1500	18.000	MO	\$509.70471	WATER QUALITY INSPECTIONS	\$9,174.68
0095	700-8910	1.000	AC	\$605.92593	PERMANENT GRASSING	\$605.93
0100	700-7090	4.000	TN	\$67.37288	AGRICULTURAL LIME	\$269.49
0105	700-8000	1.000	TN	\$438.86186	FERTILIZER MIXED GRADE	\$438.86
0110	700-8100	69.000	LB	\$2.67911	FERTILIZER NITROGEN CONTENT	\$184.86
<b>SUBTOTAL FOR PERM EROSION CONTROL:</b>						<b>\$11,284.53</b>

### 0030 - TEMP EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0115	163-0232	1.000	AC	\$400.62500	TEMPORARY GRASSING	\$400.63
0120	163-0240	7.000	TN	\$300.42897	MULCH	\$2,103.00
0114	163-0300	1.000	EA	\$1,100.43984	CONSTRUCTION EXIT	\$1,100.44
0125	185-0030	1000.000	LF	\$0.83972	MAINT OF TEMP SILT FENCE, TP C	\$839.72
0113	185-0101	1.000	EA	\$680.13868	MAINT OF CONST EXIT	\$680.14
0130	171-0030	2000.000	LF	\$3.26035	TEMPORARY SILT FENCE, TYPE C	\$6,520.70
0135	718-2000	700.000	SY	\$1.07895	EROSION CONTROL MATS, SLOPES	\$755.87
<b>SUBTOTAL FOR TEMP EROSION CONTROL:</b>						<b>\$12,400.80</b>

### 0040 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0140	838-1020	5.000	SF	\$16.21698	HWY SGN,TP1MAT,REFL SH TP3	\$81.08
0145	838-1033	18.000	SF	\$21.38124	HWY SIGNS, TP1MAT,REFL SH TP 9	\$384.86
0150	838-2070	43.000	LF	\$8.34401	GALV STEEL POSTS, TP 7	\$358.78
0155	853-1501	2000.000	LF	\$0.47993	THERMO SOLID TRAF ST 5 IN, WHI	\$959.86
0160	853-1502	2000.000	LF	\$0.44049	THERMO SOLID TRAF ST, 5 IN YEL	\$880.98
0165	854-1001	30.000	EA	\$5.23216	RAISED PVMT MARKERS TP 1	\$156.96
0170	857-1054	400.000	LF	\$4.49285	PRF PL SD PVMT MKG,5",WH,TP PB	\$1,797.18
0175	857-8054	400.000	LF	\$4.71358	PRF PL SD PVMT MKG,5",YW,TP PB	\$1,885.42
<b>SUBTOTAL FOR SIGNING AND MARKING:</b>						<b>\$6,505.13</b>

# DETAILED COST ESTIMATE



**Job: 0007168**

**0050 - BRIDGE**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0185	541-0001	1.000	LS	\$96,000.00000	DETOUR BRIDGE - 24' X 100'	\$96,000.00
0180	543-8000	1.000	LS	\$477,913.00000	CONSTR OF BRIDGE COMPLETE - 43.25' X 130'	\$477,913.00
<b>SUBTOTAL FOR BRIDGE:</b>						<b>\$573,913.00</b>

**TOTALS FOR JOB 0007168**

ITEMS COST:	\$1,286,716.88
COST GROUP COST:	\$0.00
ESTIMATED COST:	\$1,286,716.88
CONTINGENCY PERCENT:	0.00
ENGINEERING AND INSPECTION:	0.06
ESTIMATED COST WITH CONTINGENCY AND E&I:	\$1,319,552.84

**PROJ. NO.** CSBRG-0007-00(156)  
**P.I. NO.** 0007156  
**DATE** 8/24/2012

CALL NO.

**INDEX (TYPE)**      **DATE**      **INDEX**  
 REG. UNLEADED      Sep-12      \$ 3.836  
 DIESEL                      \$ 4.068  
 LIQUID AC                      \$ 576.00

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

**LIQUID AC ADJUSTMENTS**

PA=[(APM-APL)/APL]\*TMTXAPL

**Asphalt**  
 Price Adjustment (PA)      52012.8      \$  
 Monthly Asphalt Cement Price month placed (APM)      921.60  
 Monthly Asphalt Cement Price month project let (APL)      576.00  
**Total Monthly Tonnage of asphalt cement (TMT)**      150.5

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	380	5.0%	19
25 mm SP	2040	5.0%	102
19 mm SP	590	5.0%	29.5
	<b>3010</b>		<b>150.5</b>

**BITUMINOUS TACK COAT**

Price Adjustment (PA)      1,187.51      \$  
 Monthly Asphalt Cement Price month placed (APM)      921.60  
 Monthly Asphalt Cement Price month project let (APL)      576.00  
**Total Monthly Tonnage of asphalt cement (TMT)**      3.436080738

**Bitum Tack**  
 Gals      gals/ton      tons  
 800      232.8234      3.43608074

**PROJ. NO.** CSBRG-0007-00(156)  
**P.I. NO.** 0007156  
**DATE** 8/24/2012

**CALL NO.**

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA) \$ 0  
 Monthly Asphalt Cement Price month placed (APM) \$ 921.60  
 Monthly Asphalt Cement Price month project let (APL) \$ 576.00  
 Total Monthly Tonnage of asphalt cement (TMT) 0

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

**TOTAL LIQUID AC ADJUSTMENT** \$ 53,200.31

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

Date: 7/17/2012 Project: Bridge Replacement  
 Revised: County: Banks County  
 PI: 0007156

Description: SR 98 @ Hickory Level Creek  
 Project Termini: SR 98 @ Hickory Level Creek

Parcels: 5 Existing ROW: Varies  
 Required ROW: Varies

Land and Improvements \$207,537.00

*Proximity Damage \$0.00*

*Consequential Damage \$0.00*

*Cost to Cures \$0.00*

*Trade Fixtures \$0.00*

*Improvements \$110,000.00*

Valuation Services \$6,000.00

Legal Services \$40,875.00

Relocation \$10,000.00

Demolition \$0.00

Administrative \$45,000.00

TOTAL ESTIMATED COSTS \$309,412.00

**TOTAL ESTIMATED COSTS (ROUNDED) \$310,000.00**

Preparation Credits	Hours	Signature

Prepared By: *John Reynolds* CG#: 286999 07/17/2012  
 Approved By: *John Reynolds* CG#: 286999 07/17/2012

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** CSBRG-0007-00(166) Banks Co. **OFFICE** Gainesville  
P.I. No. 0007166  
SR 98 @ Hickory Level Creek **DATE** May 21, 2012

**FROM**  Allen Ferguson  
District Utilities Engineer

**TO** Suzanne Dunn, Project Manager

**SUBJECT** PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for the subject project.

<b>FACILITY OWNER</b>	<b>NON-REIMBURSABLE</b>	<b>REIMBURSABLE</b>
Georgia Power Co.	\$60,000.00	\$80,000.00
Windstream Communications	\$46,000.00	\$ 17,500.00
<b>Totals</b>	<b>\$106,000.00</b>	<b>\$97,500.00</b>

If you have any questions, please contact Allen Ferguson at 770-532-5510.

RAF

C: Jeff Baker, State Utilities Engineer  
Angie Robinson, Office of Financial Management  
Rob Mabry, Area Engineer  
File

## Crash Summaries

Historical crash data was obtained for the latest available 3 years (2007-2009) for SR 98. Within approximately 0.2 miles north and south of the bridge over Hickory Level Creek, there was 1 crash. The crash on SR 98 was an angle collision located 0.16 miles south of the bridge and involved a vehicle turning left and a vehicle passing.

Crash rates were calculated for SR 98 and were compared to statewide averages of state highways with the same functional class. SR 98 is classified as a Rural Major Collector. The crash data and comparison for SR 98 crash rates with the statewide averages are summarized in Table 1 below. The historical crash data indicates that no crashes occurred in 2007 and 2008. In 2009, 1 crash and 2 injuries occurred. The data shows that the overall crash rate and injury rate in 2009 exceed the statewide averages. No fatalities occurred during the three year period.

Year	No. of			Crashes		Injuries		Fatalities	
	Crashes	Injuries	Fatalities	Rate	Statewide Average	Rate	Statewide Average	Rate	Statewide Average
2007	0	0	0	0	203	0	109	0	3.55
2008	0	0	0	0	194	0	100	0	3.39
2009	1	2	0	433	191	866	99	0	2.72
Total	1	2	0						

\*Rates are per 100 Million Vehicle Miles

A detailed analysis of the crash and the accident rate calculation for years 2007, 2008, and 2009 are included in the next pages.

P.I. Number: 0007156 Banks County, SR 98 @ Hickory Level Creek  
 Crash Data for SR 98

Accident No	Date	Time	County	Route Type	Route	Mileage	Intersecting Rt Type	Intersecting Rt	Ramp Section	Injuries	Fatalities	Collision	Location of Impact	Harmful Event	Light	Surface	DirVeh1	DirVeh2	MinVeh1	MinVeh2	
1900234	4/10/2009	8:48 PM	Banks	State Route	008800	2.98			3	2	0	Angle	On Roadway	Motor Vehicle In Motion	Lighted	Wet	E	E			Turning Left Passing

ACCIDENT RATE CALCULATION for year(s) 2007,2008,2009

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2007	Banks	1	009800	2.60	3.00	1,630	0.40	652

Total Vehicle Miles: 652	Total Accidents: 0	Accident Rate: 0
Average ADT: 1,630	Total Injuries: 0	Injury Rate: 0
Length in Miles: 0.40	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2008	Banks	1	009800	2.60	3.00	1,630	0.40	652

Total Vehicle Miles: 652	Total Accidents: 0	Accident Rate: 0
Average ADT: 1,630	Total Injuries: 0	Injury Rate: 0
Length in Miles: 0.40	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2009	Banks	1	009800	2.60	3.00	1,581	0.40	632

Total Vehicle Miles: 632	Total Accidents: 1	Accident Rate: 433
Average ADT: 1,581	Total Injuries: 2	Injury Rate: 866
Length in Miles: 0.40	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

**Department of Transportation  
State of Georgia**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE** CSBRG-0007-00(156), Banks County      **OFFICE** Planning  
P.I. # 0007156  
**DATE** November 4, 2011

**FROM** Cindy VanDyke, State Transportation Planning Administrator

**TO** Bobby Hilliard, P.E., State Program Delivery Engineer  
Attention: Suzanne Dunn

**SUBJECT** Traffic Link Volume for S.R. 98 @ Hickory Level Creek.

Traffic Link Volume for the above project is attached below.

**Traffic Count # 149 (2011 COUNTS)  
BUILD = NO BUILD**

2011 ADT = 1450  
2017 ADT = 1700  
2037 ADT = 2550  
2011 DHV = 175  
2017 DHV = 205  
2037 DHV = 305  
D = 60%  
K = 12%  
T = 13%  
S.U. = 13%  
COMB. = 0%  
24 HR. T. = 9.5%  
S.U. = 8.5%  
COMB. = 1%

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROADWAY DESIGN**

**Road User Cost Report  
for  
CSBRG-0007-00(156) Banks County  
Bridge Replacement on SR 98 over Hickory Level  
Creek**

**P.I. Number 0007156**

**December 5, 2012**



**P.I. No. 0007156**

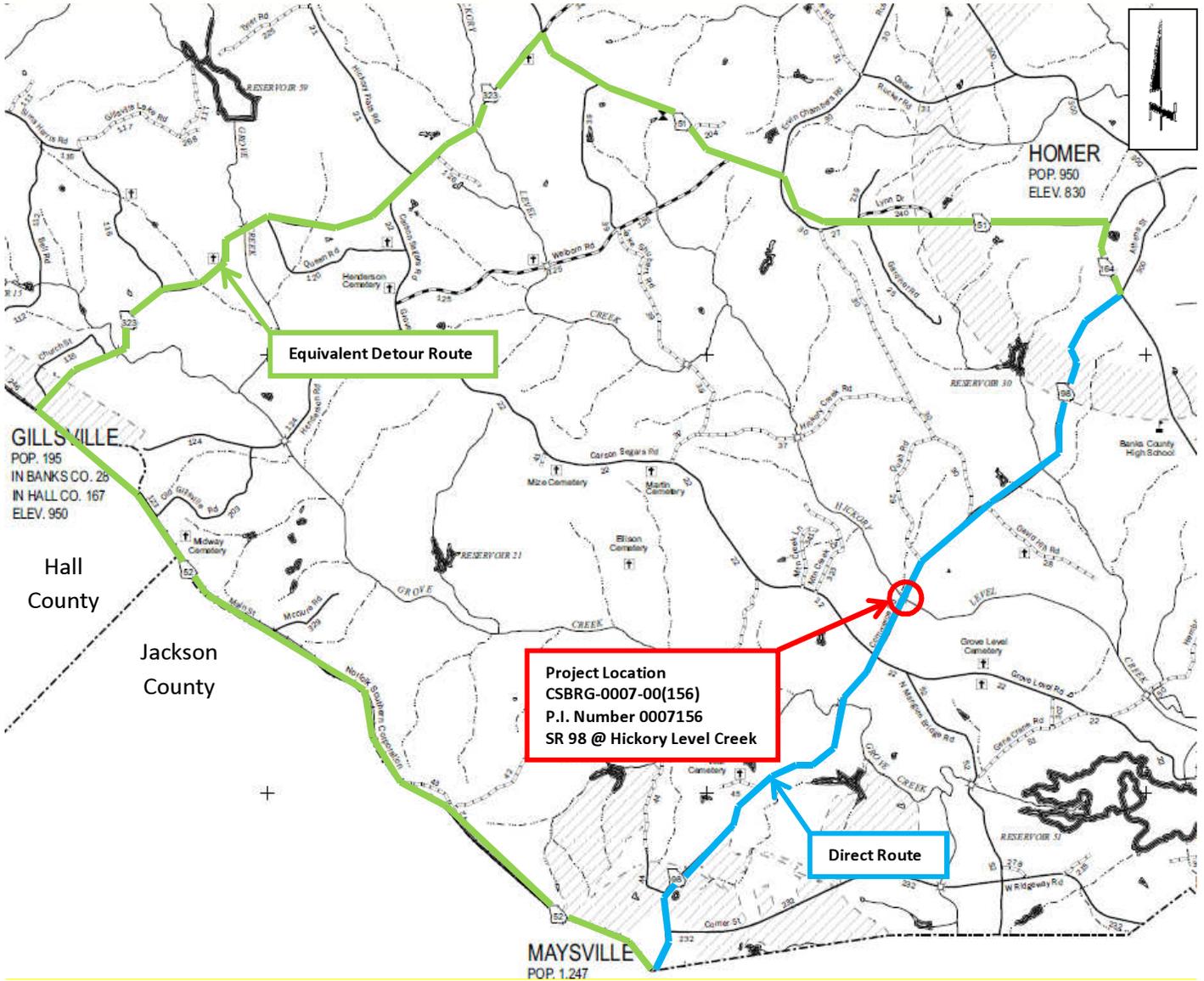
**Project Description:**

This project is the replacement of a load limited bridge on SR 98 over Hickory Level Creek, 3.5 miles southwest of Homer, Georgia. The existing bridge, constructed in 1967, has a sufficiency rating of 48.39. The construction proposes a new 130' long by 43.25' wide concrete bridge over Hickory Level Creek at the existing bridge site. Traffic will be maintained during construction utilizing an on-site detour bridge.

**Justification Statement:**

This bridge (Structure ID 011-0013-0; SR 98 over Hickory Level Creek) was built in 1967. The bridge consists of three simple steel beam spans on concrete caps and columns and spread footing (bent 2) and pile footings (bent 3). The bridge was designed using truck configurations that weigh less than the current legal state truck weights. This bridge is currently posted. The overall condition of this bridge would be classified as satisfactory; with the deck exhibiting minor popouts and moderate scaling. No rehabilitation work performed on the deck would improve this bridge in so far as the posting of the structure is concerned. Therefore due to the structural integrity and based on design, replacement of this bridge is recommended.

**Figure 2: Comparative Routes for Road User Cost (RUC) Calculations**



**Table 1: Summary of Calculated Road User Cost (RUC)**

Roadway Closure	Duration	% Traffic that Detours	Vehicles Affected	Added Time	Total RUC
	months	%	ea	hr	\$
Bridge over Hickory Level Creek	12	50	850	0.18	<b>\$1,120,000</b>

**Table 2: Summary of Laneage and Relative Traffic Volumes by Roadway Segment**

Segment	Segment Description					Laneage	Traffic Volumes - 2011			
	County	Mile Post at Beginning of Segment	Mile Post at Ending of Segment	Segment Length	Location at Beginning of Segment	No. of Lanes	Traffic ADT (two way)	Posted Speed	Traffic ADT per lane	Travel Time
		mile	mile	mile		each	vpd	mph	vpd/lane	hr/veh
Direct Route	Banks	0.00	0.41	0.41	SR 98 @ SR 164	2	1370	35	685	0.012
	Banks	0.41	0.63	0.22	Speed Change	2	1370	45	685	0.005
	Banks	0.63	0.90	0.27	Speed Change	2	1370	55	685	0.005
	Banks	0.90	3.26	2.36	Exit Homer City Limits	2	1370	55	685	0.043
	Banks	3.26	5.38	2.12	CR 22	2	1210	55	605	0.039
	Banks	5.38	5.65	0.27	Enter Maysville City Limits	2	1210	45	605	0.006
	Banks	5.65	5.91	0.26	Speed Change	2	1210	35	605	0.007
	Banks	5.91	5.93	0.02	CR 23	2	2270	35	1135	0.001
	Banks	5.93	6.19	0.26	Speed Change	2	2270	25	1135	0.010
	Banks	6.19	6.23	0.04	Lane Change	3	2270	25	757	0.002
Banks	6.23	6.23	0.00	SR 98 @ SR 52	3	2270	25	757	0.000	
<b>Travel Length w/out Detour (mile)</b>				<b>6.23</b>	<b>Travel Time w/out Detour (hr/veh)</b>				<b>0.13</b>	
Equivalent Detour Route	Banks	5.14	5.14	0.00	SR 52 @ SR 98	2	3120	35	1560	0.000
	Banks	4.87	5.14	0.27	Speed Change	2	3120	35	1560	0.008
	Banks	4.36	4.87	0.51	Speed Change	2	3120	45	1560	0.011
	Banks	4.34	4.36	0.02	Exit Maysville City Limits	2	3120	55	1560	0.000
	Banks	3.37	4.34	0.97	CR 42	2	3120	55	1560	0.018
	Banks	0.37	3.37	3.00	Enter Gillsville City Limits	2	2930	55	1465	0.055
	Banks	0.00	0.37	0.37	Exit Banks County	2	2930	55	1465	0.007
	Hall	25.44	25.44	0.00	Enter Hall County	2	2650	55	1325	0.000
	Hall	25.35	25.44	0.09	Speed Change	2	2650	55	1325	0.002
	Hall	24.99	25.35	0.36	Speed Change	2	2650	45	1325	0.008
	Hall	24.65	24.99	0.34	Speed Change	2	2650	35	1325	0.010
	Hall	24.50	24.65	0.15	SR 52 @ SR 323	2	2650	45	1325	0.003
	Hall	9.29	9.31	0.02	SR 323 @ SR 52	2	1270	45	635	0.000
	Hall	9.31	9.31	0.00	Exit Hall County	2	1270	45	635	0.000
	Banks	0.00	0.23	0.23	Enter Banks County	2	940	45	470	0.005
	Banks	0.23	0.27	0.04	Speed Change	2	940	55	470	0.001
	Banks	0.27	3.18	2.91	Exit Gillsville City Limits	2	940	55	470	0.053
	Banks	3.18	4.79	1.61	CR 22	2	1010	55	505	0.029
	Banks	4.79	4.79	0.00	SR 323 @ SR 51	2	1010	55	505	0.000
	Banks	6.08	9.26	3.18	SR 51 @ SR 323	2	2950	55	1475	0.058
	Banks	9.26	9.32	0.06	Enter Homer City Limits	2	2950	55	1475	0.001
	Banks	9.32	9.76	0.44	CR 24	2	3400	55	1700	0.008
	Banks	9.76	10.07	0.31	Speed Change	2	3400	45	1700	0.007
Banks	10.07	10.58	0.51	Speed Change	2	3400	35	1700	0.015	
Banks	10.58	10.58	0.00	SR 51 @ SR 164	2	3400	35	1700	0.000	
Banks	0.00	0.55	0.55	SR 164 @ SR 51	2	6700	45	3350	0.012	
Banks	0.55	0.55	0.00	SR 164 @ SR 98	2	6700	45	3350	0.000	
<b>Travel Length with Detour (mile)</b>				<b>15.94</b>	<b>Travel Time with Detour (hr/veh)</b>				<b>0.31</b>	
<b>Added Travel Length (mile)</b>				<b>9.71</b>	<b>Added Travel Time (hr/veh)</b>				<b>0.18</b>	

Note: Assume that Detour Route segments will not exceed capacity when added traffic volume is in place during time of construction.

**Table 3:** Circuity (Detour) Delay

Travel Length without Detour	Travel Length with Detour	Add Travel Length	Travel Time without Detour	Travel Time with Detour	Added Travel Time to Travel Detour
mile	mile	mile	hr/veh	hr/veh	hr/veh
6.23	15.94	9.71	0.13	0.31	0.18

**Table 4:** Escalation Factors

Cost Factors	1970 CPI-U <sup>1</sup>	Current CPI-U <sup>2</sup>	Escalation Factor
Idling & VOC (transportation)	37.5	220	5.87
Time Value (all items)	38.8	231	5.95

<sup>1</sup> From NCHRP Report 133 as indicated in NJ DOT Road User Cost Manual.

<sup>2</sup> As reported from Bureau of Labor Statistics for October 2012 "transportation" and "all items" categories.

**Table 5:** Cost Rates

Vehicle Class	1970 <sup>1</sup>			Current		
	Time Value Cost Rate	Idling Cost Rate <sup>2</sup>	VOC Cost Rate <sup>2</sup>	Time Value Cost Rate	Idling Cost Rate	VOC Cost Rate
	\$/veh-hr	\$/veh-hr	\$/mile	\$/veh-hr	\$/veh-hr	\$/mile
Car	3.00	0.1819	0.06	17.86	1.07	0.35
Truck	5.00	0.2092	0.12	29.77	1.23	0.70

<sup>1</sup> From NCHRP Report 133 as indicated in NJ DOT Road User Cost Manual.

<sup>2</sup> Average of SU and Combination truck values from NCHRP Report 133 as stated in the NJ DOT Road User Cost Manual.

**Table 6: Road User Cost Summary**

Cost Component	Vehicle Class	Percent Class (%)	Total Vehicles (#)	Added Travel Length (mile/veh)	Added Time (hr/veh)	Cost Rate (\$/veh-hr, \$/mile)	Road User Cost (\$/user)	Total Road User Cost (\$/day)	
Queue Delay (Added Time)	CAR	90.5	0		0.00	17.86	0	0	
	TRUCK	9.5	0		0.00	29.77	0	0	
Queue Idling VOC (Added Cost)	CAR	90.5	0		0.00	1.07	0	0	
	TRUCK	9.5	0		0.00	1.23	0	0	
Work Zone Delay (Added Time)	CAR	90.5	0		0.00	17.86	0	0	
	TRUCK	9.5	0		0.00	29.77	0	0	
Circuitry Delay (Added Time)	CAR	90.5	850		0.18	17.86	3.2	2488	
	TRUCK	9.5	850		0.18	29.77	5.4	435	
Circuitry VOC (Added Cost)	CAR	90.5	850	9.71		0.35	3.4	2629	
	TRUCK	9.5	850	9.71		0.70	6.8	552	
<b>Total Vehicles that Travel Queue:</b>			0					<b>Daily Road User Cost</b>	\$6,105
<b>Total Vehicles that Travel Work Zone:</b>			0					<b>Calculated Road User Cost (CRUC)<sup>2</sup></b>	\$3,052
<b>Total Vehicles that Travel Detour<sup>1</sup>:</b>			850					<b>Number of Work Zone Days</b>	365
<b>Percent Passenger Cars:</b>			90.5					<b>Total Road User Cost</b>	<b>\$1,114,101</b>
<b>Percent Trucks<sup>1</sup>:</b>			9.5					<b>Total Road User Cost</b>	<b>\$1,120,000</b>

<sup>1</sup>Traffic ADT and 24 hour truck percentage from report provided by State Transportation Planning Administrator, Traffic Link Volume for S.R. 98 @ Hickory Level Creek, dated 11-04-2011. Assumed 50% of traffic would use alternate route other than detour.

<sup>2</sup>Calculated Road User Cost (CRUC) is calculated by multiplying the Daily Road User Cost by a 50% reduction factor that is used to accommodate for variations in traffic data, roadway capacities, and cost rates as stated in the NJ DOT Road User Cost Manual.

# Bridge Inventory Data Listing



Structure ID: 011-0019-0

Location & Geography

BUFILE: RATINGS: 48.39

Barcode

Structure ID:	200 Bridge Information	011-0019-0	104 Highway System	0	Signs & Attachments	02
*9A Feature In:	HICKORY LEVEL CREEK		*204 Federal Route Type:	07	232 Signage Joint Type	1
*9B Critical Bridge:			*110 State Route	0	242 Deck Drain:	0
*7A Route No Carried:			2006 School Bus Route	1	Height	0
*7B Facility Carried:			217 Benchmark Surveys	0000.00	Width	0
*9 Location:	3.5 MI SW OF HOMER		218 Distance	0	238 Curb Height	1
*2 Det/Divide:			*19 Bypass Length	05	Deck Material	1
*07 Year Photo:			*20 Toll:	3	239 Handrail	11
*91 Inspection Frequency:	24 Date: 10/08/2011		*21 Measurements	01	*240 Median Barrier Rail:	0
*2A Fract Crk Insp Freq:	0 Date: 02/01/1901		*22 Drives:	01	241 Bridge Median Height:	0
*2B Underwater Insp Freq:	0 Date: 02/01/1901		*23 Drives:	2	Bridge Median Width:	0
*2C Other Spa. Insp Freq:	0 Date: 02/01/1901		*24 Retained Signalment	0	250 Guardrail Loc. Dk. Rest. Fwd:	3
*4 Miss Code:	00000		205 Conventional Disinfec	10	Oppo. Dk. Rest:	0
*5 Inventory Route (OU):	1		*27 Year Constructed:	1887	Oppo. Fwd:	0
Type:	3		104 Year Reconstructed:	0000	244 Approach Slab	3
Designation:	1		23 Bridge Median:	0	224 Retaining Wall:	0
Number:	00088		34 Storm	00	229 Perched Spand Limb:	58
Division:	0		35 Structure Flank:	0	256 Wearing Strc:	1.00
*16 Jurisdiction:	84 17.4576 HMMMS FRBCSR		38 Navigation Control:	0	284 Culvert:	1.00
*17 Length (ft):	83 -31.8180 HMMMS SubCCO MP-2.85		219 Special Steel Design:	0	285 Hazard Barrels:	1
RR Review Bridge:	0076 Shores:000		257 Type of Public:	5	237 Utilities Gas:	00
99 ID Number:	0000000000000000		*43 Type of Service On:	1	Water:	00
*100 STRAUSDEN:	0		Type of Service Under:	5	Electric:	00
12 Show Highway Network:	1		214 Memorial Bridge:	0	Telephone:	00
13 ALR Inventory Route:	111008900		203 Type Bridge:	0	Signs:	00
18 Sub Inventory Route:	0		259 Pile Encasement:	3	247 Lighting Street:	0
101 partial Structure:	N		*48 Structure Type Main:	3 02	Navigation:	0
*102 Direction of Travel:	2		45 No. Spans Main:	003	Avial:	0
*264 Road Inventory Mile Post:	002.81		44 Structure Type Appr:	0 00	*248 County Continuity No.:	00
*208 Inspection Area:	1		49 No Spans Appr:	0000		
Engineer's Initial:	SP		228 Bridge Curve Horiz	0 Feet 0		
Location ID No:	011-000980-002.85E		111 pier Protection:	0		
			107 Deck Structure Type:	1		
			108 Wearing Structure Type:	1		
			Membrane Type:	0		
			Deck Protection:	8		

Processed Date: 4/11/2012

Parameters: Bridge Serial Num.

# Bridge Inventory Data Listing



Structure ID: 011-0019-D

Project Information		Inventory Method	
Project No.	Year	Method	Count
201 Project No.	001440	Inventory Method	1
272 Files Available	Year: 2010	Operating Rubing Method	2
230 Approval Status	7	Operating Rubing	18
251 #1 Number	02	Operating Rubing	18
253 Contact Date	00	Operating Rubing	18
269 Balance No.	0042	Operating Rubing	18
75 Type Work	138	Operating Rubing	18
94 Bridge Log: Chn.	2810	Operating Rubing	18
97 Ready Way Imp. Cont.	28	Operating Rubing	18
96 Total Imp. Cont.	1,70 / 1,70	Operating Rubing	18
76 Imp. Length	000	Operating Rubing	18
97 Imp. Year	000	Operating Rubing	18
114 New ADT	8,00 Type: 8 R155.00	Operating Rubing	18
	5.80 Type: 8 R143.00	Operating Rubing	18
<b>Bylink Data</b>			
215 Waerway Dist.	23.40 Type: 8	Operating Rubing	18
High Water Elev.	23.50 Type: 2	Operating Rubing	18
Flood Elev.	0 Feet 0	Operating Rubing	18
Avg Streambed Elev.	0 Feet 0	Operating Rubing	18
Drainage Area	0.00	Operating Rubing	18
Area of Opening	0.00	Operating Rubing	18
118 Sensor Offset	0.00	Operating Rubing	18
216 Water Depth	0.00	Operating Rubing	18
223 Slope Protection	0.00	Operating Rubing	18
221 Slope Protection	0.00	Operating Rubing	18
219 Pender System	0.00	Operating Rubing	18
220 Pender System	0.00	Operating Rubing	18
222 Current Cover	0.00	Operating Rubing	18
Type	0.00	Operating Rubing	18
No. Bents	0.00	Operating Rubing	18
Width	0.00	Operating Rubing	18
Length	0.00	Operating Rubing	18
245 UNW Imp. Area	0.00	Operating Rubing	18
Location ID No.	011-00098D-002.893	Operating Rubing	18

File Location: CF Conventional/BIIMS

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Page 2 of 2

## Meeting Minutes

**BY:** Suzanne Dunn  
**DATE:** August 16, 2012  
**SUBJECT:** Draft Concept Report Review PI#0007156, Banks County

### ATTENDEES:

Suzanne Dunn	GDOT Program Delivery	Jason Dykes	GDOT D1 Utilities
Jan Hilliard	GDOT Roadway Design	Rob Mabry	GDOT D1 Area Engineer
Tori Brinkley	GDOT Roadway Design	Heather Perrin	Mulkey- NEPA Lead
Derek Lindsay	GDOT Eng. Services	<b>Conference Call:</b>	
Lisa Deaton	GDOT D1 Environmental	Ben Rabun	GDOT Bridge Design

---

This meeting is being held to review the Draft Concept Report for the bridge replacement project located on SR 98 @ Hickory Level Creek in Banks County.

- TBrinkley presented the Draft Concept Report, reviewing the Project Justification Statement and the Description of the proposed project.
- BRabun advised that this bridge is not structurally deficient, just load limited.
- Roadway Design is recommending an on-site detour as the off-site detour options are 13.4 and 14 miles.
- It is projected that there would be impacts to 5 parcels with no displacements.
- HPerrin presented the environmental information collected so far;
  - The creek branches off on the west side to 3 tributaries.
  - There will be either a nationwide or individual permit required depending on the acreage impacted. An individual permit would add 3-6 months to the schedule.
  - Habitat for one endangered species is present. The survey will be this month to see if the species is present. This survey will define what type of Section 7 will be required.
  - Parcel #2 has a historic resource, however it is located far enough from the bridge site that there should not be an impact.
  - This site is outside the attainment areas so Mulkey does not predict any air/noise issues.
  - Archeology has not begun yet as the site survey has not yet been performed.
  - This project is located inside the boundary for the Indiana Bat.
  - A CB is anticipated.

- JDykes stated that the only utilities present are Windstream and Georgia Power, which are located on the east side of the existing bridge. The telecommunications are underground.
- There are no utilities attached to the existing bridge requiring relocation.
- JDykes stated that the GDOT utilities office will ensure that the power and telecommunications will be relocated outside of the impact footprint to ensure that there will be no conflicts with the crane installing the temporary bridge which will be located to the east of the existing bridge.
- JDykes stated that this project does not qualify for PID.
- This project will not require a PIOH or Public Detour meeting.
- BRabun stated that he would like to see documentation of the off-site detour option, even if it is not the preferred option.
- D1 stated that this road has a lot of truck traffic and chicken farms that would be significantly disrupted if there was an off-site detour.
- BRabun stated that the hydraulic study will start in December.
- BRabun stated that the temporary bridge cost estimate of \$96,000 was reasonable.
- The temporary detour bridge design was discussed. JHilliard thought that the bridge could only be designed for 10 mph under the posted 55 mph, however BRabun stated the design speed can be for as low as 25 mph.

Please review these meeting minutes and advise of any inaccuracies or additions that you require to be documented. Please respond by Friday, August <sup>31st</sup>, 2012 or it will be assumed the minutes are accurate as distributed.

## Meeting Minutes- Rev 1

BY: Suzanne Dunn  
DATE: November 21, 2011  
SUBJECT: Scoping Meeting for PI#0007156, 0007157 and 0007158, Banks County

### ATTENDEES:

Suzanne Dunn	Program Delivery	District One By Video:	
Russell McMurry	Engineering	Kim Coley	D1- Planning / Env. Services
Ken Thompson	State Location Bureau	Lisa Deaton	D1- Environmental Services
Jeff Fletcher	State Location Bureau	Robert Mahoney	D1- Preconstruction
Jan Hilliard	Roadway Design		
Tori Brinkley	Roadway Design		
Teresa Lannon	Roadway Design		
Albert Welch	Roadway Design		
Brent Story	Design Policy & Support		
Andy Casey	Roadway Design		
Darrell Richardson	Roadway Design		
Ben Rabun	Bridge Design		

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This meeting was being held to discuss the scoping of three bridges in Banks County, it was agreed to discuss each bridge individually.

### Bridge PI# 0007156:

- It was previously decided that Design will be performed in house. This bridge is assigned to Jan Hilliard's group.
- Design showed two potential detour options, one approximately 14 miles heading North and one approximately 13 miles heading south. Neither include dirt roads.
- The 2011 ADT is 1450.
- The existing road and bridge alignment is very straight, so it would be preferred not to build the replacement bridge offset from the existing as this would cause the new alignment to have a kink in it.
- Design will look at the impact of a detour on school buses and emergency vehicles.
- Survey stated that the project would require the standard bridge survey of 1000 feet each direction from the end of the existing bridge and 500 feet up and down stream.
- There is also a stream parallel to the NW side which will have to be considered.
- The current ROW budget is \$23,000, if an onsite temporary bridge is built the ROW budget will need to increase.
- District stated that parcels close to the bridge may have driveway access issues.
- Environmental Services plans to have the work completed by Task Order.
- Environmental stated that Ecology was probably their highest risk component.

- A public meeting would need to be held if a detour is used, otherwise no PIOH would be required.
- It appears from photographs and the Bridge Inventory Data Listing sheet that there are no utilities attached to the bridge. This will be confirmed with site visit.
- It was agreed that if a long detour is required, that it would be best to try to schedule the bridge closure to coincide with the school summer holiday as much as possible to minimize the impact on the school buses.

**Bridge PI# 0007157:**

- It was previously decided that Design will be performed in house. This bridge is assigned to Fletcher Miller's group.
- The design group was not represented at this meeting.
- Ben Rabun discussed the current condition of the bridge and the fact that there is no cost effective way to renovate a bridge of this type.
- The 2010 ADT is 1000.
- This bridge is located on a large sweeping curve, therefore a parallel alignment may be appropriate for this bridge. (To the west)
- No potential detour routes were discussed.
- An offsite detour will be investigated.
- There is a landfill located near this bridge, so it has truck traffic.
- Environmental Services plans to have the work completed by Task Order.

**Bridge PI# 0007158:**

- It was previously decided that Design will be performed in house. This bridge is assigned to Albert Welch's group.
- Ben Rabun discussed the current condition of the bridge and the fact that this bridge has a concrete T-Beam design means there is no cost effective way to renovate the bridge.
- The 2010 ADT is 1500.
- No potential detour routes were discussed.
- An offsite detour will be investigated, although the area appears very rural and has the potential for limited routes available.
- This bridge may require a change in the curve, which would then require a larger survey area, more design work and a larger ROW budget.
- It appears from photographs that there are no utilities attached to this bridge. This will be confirmed with a site visit.
- From the photographs it appears as if there is more potential for environmental issues on this project than the other two.
- This bridge may be impacted by hydraulic issues and may need to be longer than the other two.

**All Three Bridges:**

- The current baseline schedule template is yet accurate for dates. The schedule start will depend on Design start availability.
- Survey asked if there was a priority as all three surveys will be completed in sequence and they need to know if one of the three needs to be completed first. They gave a preliminary estimate of the last survey being completed by October of 2012.
- Ben Rabun stated that structurally, none of the bridges required priority over the others.
- Russell stated that the SME's needed to remember to state their available start time in their man-hour estimates. It is permissible to have a gap in the schedule.
- Russell stated that if the SME's do not have the availability to work within a 2016 Let Date that they should recommend the work be contracted to a consultant.
- The Right of Way on all three projects should each take 8-12 months.
- The PE funds should be approved and available shortly as internal approvals are complete and request has been forwarded to FHWA.
- Suzanne will send the Cost Estimate template to Russell for distribution to the attendees.

## Meeting Minutes

BY: Suzanne Dunn  
DATE: April 11, 2012  
SUBJECT: Environmental Kick-off Meeting for PI#0007156, 0007157 and 0007158,  
Banks County

### ATTENDEES:

Suzanne Dunn	GDOT Program Delivery	District One By Video:
Jan Hilliard	GDOT Rdway Design- 7156	Kim Coley GDOT Planning/Env. Services
Tori Brinkley	GDOT Rdway Design- 7156	Lisa Deaton GDOT Environmental Services
Fletcher Miller	GDOT Rdway Design- 7157	
Albert Welch	GDOT Rdway Design- 7158	
Amos Jenkins	GDOT Rdway Design- 7158	
Ted Cashin	GDOT Bridge Design	
Britt Hennessey	Mulkey	
Aaron Caldwell	Mulkey	
Heather Perrin	Mulkey- 7156, 7157	
Mark Ray	Mulkey- 7158	

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This meeting was being held to introduce the Design and Environmental teams to each other and discuss the basic start-up of the three projects, it was agreed to discuss each bridge individually.

Suzanne Dunn is the GDOT Project Manager for all three projects and Lisa Deaton is the GDOT District Environmentalist for all three projects.

Britt Hennessey is the Mulkey Contract Manager for all three projects and Aaron Caldwell from Mulkey is the overall Project Liaison for all three projects.

### Bridge PI# 0007156:

- The GDOT Roadway Design Team for this bridge is Jan Hilliard and Tori Brinkley, the Mulkey Environmentalist will be Heather Perrin.
- This bridge will be replaced using an on-site detour.
- The temporary on-site detour bridge will most likely be placed on the East side of SR98.
- Design is planning on keeping the same centerline for the new bridge.
- Mulkey can start the Ecology and History surveys now.
- Mulkey will require the site survey with the existing bridge location and approximate temporary bridge location before they can complete the Archeology study.
- There is a farm house north of the bridge on SR98 at Quail Road that may be historical.
- Tori will provide Mulkey with the GDOT Bridge Inventory Sheet.

- Heather asked for clarification on the schedule as the Concept Approval (03000) is shown as occurring before the PIOH (09300), 10/10/12 vs. 11/22/12. Suzanne will confirm that the PIOH Activity label should actually be for a Detour Open House (if an off-site detour is used), and that a PIOH is not required for a bridge replacement. Confirmation; per initial meeting minutes from 11/21/11 meeting, no PIOH will be required, and if no off-site detour, then no detour meeting is required either.

**Bridge PI# 0007157:**

- The GDOT Roadway Designer for this bridge will be Fletcher Miller, the Mulkey Environmentalist will be Heather Perrin.
- This bridge will be replaced using an on-site detour.
- The temporary on-site detour bridge will most likely be located to the Northwest side of SR323, as there is a stream running parallel to the roadway on the Southeast side of SR323.
- Design is planning on keeping the same centerline for the new bridge.
- Mulkey can start the Ecology and History surveys now.
- Mulkey will require the site survey with the existing bridge location and approximate temporary bridge location before they can complete the Archeology study.
- Mulkey stated that the reservoir north of the bridge location is far enough away it should not have any environmental impact.
- The bridge was built in 1952 so Mulkey will investigate whether it has a historical designation.
- The stream located to the Southeast of SR323 (parallel) creates the potential for wetlands on this project.

**Bridge PI# 0007158:**

- The GDOT Roadway Designer for this bridge will be Albert "Butch" Welch, the Mulkey Environmentalist will be Mark Ray.
- This bridge will be replaced using an off-site detour.
- The preliminary detour route using all State Routes would require the detour to be 19 miles long. Due to this length, GDOT will need to investigate whether it is more appropriate to designate a shorter detour route on local roads and go through the process of having these roads designated as Temporary State Routes for the duration of the project.
- Due to the length of the detour it was also noted that the local Volunteer Fire Services must be consulted to ensure they have acceptable alternate routes.
- Roadway Design will attempt to keep the same centerline for the new bridge, however it may not be possible on this project.

- The site survey for this project has extended limits as there is a culvert just north of the stream crossing and there are also high voltage power lines crossing SR63 just north of the bridge as well.
- Mulkey can start the Ecology and History surveys now.
- Mulkey will require the site survey with the existing bridge location and approximate new bridge location before they can complete the Archeology study.
- The aerial photographs for this project show that there are wetlands and flood plains near the bridge location which will need to be considered.
- As this bridge will most likely be more complicated than the other two, Britt asked whether Mulkey has the Public Meeting/Public Involvement scope for this project. District One stated that Mulkey did not.

**All Three Bridges:**

- The official baseline Schedule in Artemis was not yet available for distribution. Suzanne will distribute when it becomes available.
- Mulkey asked who is responsible for the UST scope. District One stated that GDOT District One will complete the UST scope.
- Mulkey stated that they are able to work on all three projects simultaneously.
- Suzanne will confirm the site survey schedule and distribute as soon as possible.

Please review these meeting minutes and advise of any inaccuracies or additions that you require to be documented. Please respond by Friday, April 27<sup>th</sup>, 2012 or it will be assumed the minutes are accurate as distributed.