

ORIGINAL TO GENERAL FILES

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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

**FILE** P.I. #322285-  
BRF00-0153-01(024)  
GDOT District 3 - Thomaston  
Macon County  
SR 90 Bridge Replacement @ CSX  
Railroad

**OFFICE** Design Policy & Support

**DATE** April 12, 2012

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

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED REVISED CONCEPT REPORT

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

Attachment

**DISTRIBUTION:**

Genetha Rice-Singleton, Program Control Administrator  
Bobby Hilliard, State Program Delivery Engineer  
Cindy VanDyke, State Transportation Planning Administrator  
Angela Robinson, Financial Management Administrator  
Glenn Bowman, State Environmental Administrator  
Ben Rabun, State Bridge Engineer  
Kathy Zahul, State Traffic Engineer  
Georgene Geary, State Materials & Research Engineer  
Lisa Myers, State Project Review Engineer  
Jeff Baker, State Utilities Engineer  
Ken Thompson, Statewide Location Bureau Chief  
Michael Henry, Systems & Classification Branch Chief  
David Millen, District Engineer  
Bill Rountree, District Preconstruction Engineer  
Kerry Gore, District Utilities Engineer  
Sue Anne Decker, Project Manager  
BOARD MEMBER - 2nd Congressional District

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

Project Type: <u>Bridge Replacement</u>	P.I. Number: <u>322285-</u>
GDOT District: <u>3</u>	County: <u>Macon</u>
Federal Route Number: <u>NA</u>	State Route Number: <u>90</u>

*This revision to the approved concept proposes to build a parallel bridge to the south of the current bridge, realign SR 90, and remove the existing bridge.*

**Submitted for approval:**

<u>Bobby Hulford</u> Office Head (GDOT Project Manager's Office)	<u>3-20-2012</u> DATE
<u>Sue Anne Decker</u> GDOT Project Manager	<u>3/14/2012</u> DATE

**Recommendation for approval:**

<u>GLENN BOWMAN*/EKP</u> State Environmental Administrator (recommendation required)	<u>3/30/2012</u> DATE
<u>BEN RABUN*/EKP</u> State Bridge Design Engineer	<u>3/30/2012</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>Cynthia L. Vayppie</u> State Transportation Planning Administrator (recommendation required)	<u>3-21-12</u> DATE
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*\* - RECOMMENDATION ON FILE*

## PLANNING, APPROVED CONCEPT, & BACKGROUND DATA

**Project Justification Statement:** *This bridge (Structure ID 193-0019-0; SR 90 over CSX Railroad) was built in 1937. The bridge consists of eight spans of steel girders on timber caps and timber piles. This bridge was designed using a truck configuration that weighs less than the current state legal truck weights. The overall condition of this bridge would be classified as poor to fair. The deck is in poor condition due to advanced concrete cracking and spalling. The superstructure is in fair condition with only minor section loss in the steel beams. The substructure is in fair condition due to some minor deterioration in the timber elements. Due to the structural integrity, based on the design and the condition of the deck, replacement of this bridge is recommended.*

*This bridge currently has an AASHTO Sufficiency Rating of 35.83 and meets FHWA criteria to be classified as Structurally Deficient. As such, this bridge qualifies to be selected for replacement funding under the federal Highway Bridge Replacement and Rehabilitation Program (BHRRP).*

**Description of the approved concept:** *The approved concept report proposes to close SR 90 while replacing the bridge and detouring traffic onto a local road, Hammock Drive/CR 57. As a result, Hammock Drive/CR 57 would need to be paved and geometric modifications would need to be made to bring it up to AASHTO standards.*

**PDP Classification:**     Major                       Minor

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

**Projected Traffic ADT as shown in the approved Concept Report:**

Open Year (2005): 1,700

Design Year (2025): 3,000

**Updated Traffic ADT (attached):**

Open Year (2015): 1,700

Design Year (2035): 3,000

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

**VE Study anticipated:**     No                       Yes                       Completed – Date: [Click here to enter a date.](#)

## PROPOSED REVISIONS

<b>Approved Features:</b>	<b>Proposed Features:</b>
<p><i>The following approved features are affected by the proposed revision:</i></p> <ul style="list-style-type: none"> <li>• <i>Project termini: The approved concept project termini would include the existing bridge and approaches on SR 90. The termini also include the temporary detour along Hammock Road/CR 57 and its two intersections with SR 90, located approximately 1.15 miles southeast and 0.67 miles northwest of the existing bridge.</i></li> <li>• <i>Additional RW: The approved concept would require minimal additional RW along SR 90, plus minimal additional RW along the temporary detour. Environmental surveys have been performed for:</i> <ul style="list-style-type: none"> <li>○ <i>Historic resources</i></li> <li>○ <i>Endangered species</i></li> <li>○ <i>Archeological resources</i></li> <li>○ <i>Wetlands or open waters</i></li> <li>○ <i>Streams or their buffers</i></li> </ul> </li> <li>• <i>Revised alignment: The approved concept would replace the existing SR 90 bridge over the CSX Railroad at its existing location. A temporary detour on Hammock Road/CR 57 would be needed while the new bridge is being constructed and the temporary detour would require upgrades.</i></li> </ul>	<p><i>The following items are to be revised:</i></p> <ul style="list-style-type: none"> <li>• <i>Project termini: The proposed revision would no longer include the temporary detour. The project termini would include the new construction of the new roadway approaches to the new bridge, and would start at approximately MP 14.2, and end at approximately MP 15.2.</i></li> <li>• <i>Additional RW: the proposed revision to the concept will require additional RW along SR 90. The following environmental surveys need to be re-assessed:</i> <ul style="list-style-type: none"> <li>○ <i>Historic resources</i></li> <li>○ <i>Endangered species</i></li> <li>○ <i>Archeological resources</i></li> <li>○ <i>Wetlands or open waters</i></li> <li>○ <i>Streams or their buffers</i></li> </ul> </li> <li>• <i>Revised alignment: the concept is proposed to be revised to replace the existing SR 90 bridge over the CSX Railroad with a new bridge and corresponding roadway approaches. The new bridge would be approximately 288 feet long and 43 feet 3 inches wide, and located approximately 76 feet southeast of the existing bridge. No detour would be needed while the new bridge is being constructed.</i></li> </ul>
<p><b>Reason(s) for change:</b> <i>The construction costs of the proposed revision are estimated to be approximately \$804,500 less than the construction costs of the approved concept. The proposed revision would also significantly reduce disruption impacts to the local community and local/regional traffic when compared to the approved concept.</i></p>	

## ENVIRONMENTAL

### 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

**Potential environmental impacts of proposed revision:** *This revision to the approved concept may affect endangered/protected species, streams and/or stream buffers, and the view shed of historical resources. Based on previous surveys conducted on the approved concept, no additional impacts are expected. The environmental re-evaluation should be completed by May/June 2012.*

**Have proposed revisions been reviewed by environmental staff?**  No  Yes

**Environmental responsibilities (Studies/Documents/Permits):** *Heath and Lineback is under contract to provide all special studies, except history. They are also on contract to provide a NEPA document that meets the requirements for approval by GDOT and FHWA.*

### Environmental impacts by section:

**NEPA:** *The proposed revision will require a re-evaluation of the approved Categorical Exclusion.*

**Ecology:** *Two tributaries of Camp Creek may be impacted. Additional surveys are needed to evaluate possible impacts of the realignment on protected/threatened species.*

**Archeology:** *None anticipated.*

**History:** *The history special study has been conducted on the approved concept. Additional impacts to historic resources are not anticipated.*

## PROJECT COST & ADDITIONAL INFORMATION

Updated Cost Estimate		Date of Estimate
Base Construction Cost:	\$3,037,100.00	3/27/2012
Engineering and Inspection:	\$151,800.00	3/27/2012
Liquid AC Adjustment:	\$69,800.00	3/27/2012
<u>Total Construction Costs:</u>	\$3,258,700.00	
Right-of-Way:	\$178,775.00	Authorized
Reimbursable Utilities:	\$92,500.00	12/6/2011
Reimbursable Railroad:	\$175,000.00	3/13/2012
<u>Total Reimbursable Costs:</u>	\$267,500.00	
<b>TOTAL PROJECT COST:</b>	<b>\$3,704,975.00</b>	<b>3/27/2012</b>

**Recommendation:** Recommend that the proposed revision to the concept be approved for implementation.

**Comments:** None

**Attachments:**

1. Sketch map
2. Cost Estimate(s)
  - a. Construction
  - b. Liquid AC Adjustment
  - c. Utilities
  - d. Railroad
3. Preliminary Project Layout including Roadway Plan & Profile
4. Preliminary Bridge Layout including Plan & Elevation
5. Bridge Inventory Data Listing
6. Updated Design Traffic

**APPROVALS**

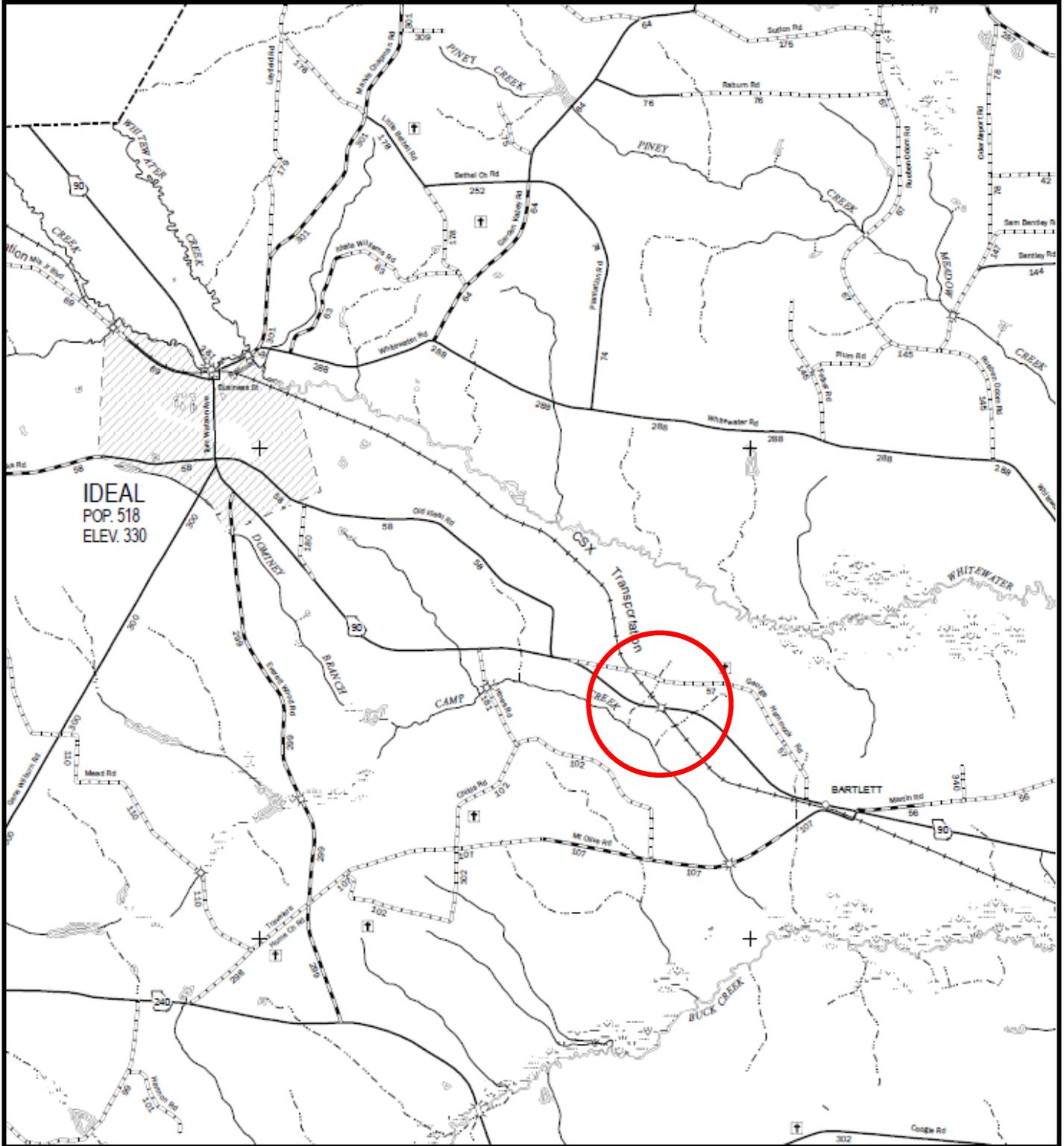
*Exempt Projects*

Concur:   
Director of Engineering

Approve:   
Chief Engineer

4-11-12  
Date

# PROJECT LOCATION MAP



PI# 322285- Macon County,

SR 90 Bridge Replacement over CSX Railroad

# DETAILED COST ESTIMATE



**Job: 322285-REV**

**JOB NUMBER:** 322285-REV

**FED/STATE PROJECT NUMBER**

**SPEC YEAR:** 01

**DESCRIPTION:** REVISED CR - PARALLEL REPLACEMENT BRIDGE

**ITEMS FOR JOB 322285-REV**

**100 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0100	210-0100	1.000	LS	\$880,000.00	GRADING COMPLETE - PI# 322285-	\$880,000.00
0115	310-1101	8300.000	TN	\$19.42	GR AGGR BASE CRS, INCL MATL	\$161,183.76
0120	318-3000	100.000	TN	\$17.60	AGGR SURF CRS	\$1,760.19
0125	402-3100	720.000	TN	\$79.24	REC AC 9.5 MM SP,TPI,GP1ORBL1,INCL BM&HL	\$57,054.71
0130	402-3121	1750.000	TN	\$65.86	RECYL AC 25MM SP,GP1/2,BM&HL	\$115,257.31
0135	402-3190	1260.000	TN	\$67.89	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	\$85,537.28
0140	413-1000	680.000	GL	\$2.88	BITUM TACK COAT	\$1,961.34
0145	433-1100	290.000	SY	\$138.81	REF CONC APPR SL/INCL CURB	\$40,253.48
0150	436-1000	1180.000	LF	\$7.98	ASPH CONC CURB - PI# 322285-	\$9,412.18
0160	500-0100	270.000	SY	\$7.89	GROOVED CONCRETE	\$2,131.07
0305	634-1200	29.000	EA	\$102.34	RIGHT OF WAY MARKERS	\$2,967.84
0310	641-1100	84.000	LF	\$72.45	GUARDRAIL, TP T	\$6,086.06
0315	641-1200	2600.000	LF	\$17.50	GUARDRAIL, TP W	\$45,493.42
0320	641-5001	6.000	EA	\$611.05	GUARDRAIL ANCHORAGE, TP 1	\$3,666.31
0325	641-5012	6.000	EA	\$1,892.39	GUARDRAIL ANCHORAGE, TP 12	\$11,354.34
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$1,424,119.29</b>

**200 - BRIDGE**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0165	211-0200	340.000	CY	\$22.75	BR EXCAV, GRADE SEPARATION	\$7,734.86
0225	540-1101	1.000	LS	\$118,300.00	REM OF EX BR, STA NO - PI# 322285-	\$118,300.00
0170	543-9000	1.000	LS	\$1,183,000.00	CONSTR OF BRIDGE COMPLETE - PI# 322285-	\$1,183,000.00
0300	610-9099	1.000	LS	\$3,800.00	REM WINGWALLS/PARAPETS, STA - PI# 322285-	\$3,800.00
0555	610-9099	1.000	LS	\$3,800.00	REM WINGWALLS/PARAPETS, STA - PI# 322285-	\$3,800.00
<b>SUBTOTAL FOR BRIDGE:</b>						<b>\$1,316,634.86</b>

**300 - DRAINAGE**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0230	500-3101	116.000	CY	\$495.12	CLASS A CONCRETE	\$57,434.43
0235	500-9999	42.000	CY	\$173.28	CL B CONC,BASE OR PVM T WIDEN	\$7,277.58
0240	511-1000	18374.000	LB	\$0.81	BAR REINF STEEL	\$14,952.03
0265	550-2240	64.000	LF	\$31.29	SIDE DR PIPE 24",H 1-10	\$2,002.77
0280	550-4124	2.000	EA	\$619.51	FLARED END SECT 24 IN, SIDE DR	\$1,239.02
<b>SUBTOTAL FOR DRAINAGE:</b>						<b>\$82,905.83</b>

# DETAILED COST ESTIMATE



**Job: 322285-REV**

## 400 - EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0345	163-0232	9.000	AC	\$260.69	TEMPORARY GRASSING	\$2,346.23
0350	163-0240	36.000	TN	\$238.73	MULCH	\$8,594.14
0355	163-0300	2.000	EA	\$1,167.68	CONSTRUCTION EXIT	\$2,335.37
0360	163-0501	2.000	EA	\$555.37	CONSTR AND REMOVE SILT CONTROL GATE, TP 1	\$1,110.74
0370	163-0520	800.000	LF	\$15.66	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	\$12,529.20
0375	163-0527	50.000	EA	\$247.59	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	\$12,379.63
0380	163-0529	1200.000	LF	\$4.15	CNST/REM TEMP SED BAR OR BLD STRW CK DM	\$4,981.67
0385	165-0010	1000.000	LF	\$1.02	MAINT OF TEMP SILT FENCE, TP A	\$1,020.41
0390	165-0030	540.000	LF	\$1.07	MAINT OF TEMP SILT FENCE, TP C	\$577.35
0395	165-0041	1000.000	LF	\$1.21	MAINT OF CHECK DAMS - ALL TYPES	\$1,209.29
0400	165-0085	2.000	EA	\$133.02	MAINT OF SILT CONTROL GATE, TP 1	\$266.03
0410	165-0101	2.000	EA	\$413.19	MAINT OF CONST EXIT	\$826.39
0415	167-1000	2.000	EA	\$358.00	WATER QUALITY MONITORING AND SAMPLING	\$716.00
0420	167-1500	24.000	MO	\$618.00	WATER QUALITY INSPECTIONS	\$14,831.89
0425	171-0010	2000.000	LF	\$2.10	TEMPORARY SILT FENCE, TYPE A	\$4,205.16
0430	171-0030	1100.000	LF	\$3.23	TEMPORARY SILT FENCE, TYPE C	\$3,548.61
0435	603-2182	144.000	SY	\$34.12	STN DUMPED RIP RAP, TP 3, 24"	\$4,913.20
0440	603-7000	144.000	SY	\$3.96	PLASTIC FILTER FABRIC	\$569.71
0445	700-6910	18.000	AC	\$959.36	PERMANENT GRASSING	\$17,268.45
0450	700-7000	17.000	TN	\$81.98	AGRICULTURAL LIME	\$1,393.62
0460	700-8000	8.000	TN	\$506.48	FERTILIZER MIXED GRADE	\$4,051.88
0465	700-8100	420.000	LB	\$3.14	FERTILIZER NITROGEN CONTENT	\$1,317.88
0475	715-2200	1033.000	SY	\$2.02	BITUM TRTD ROVING, WATERWAYS	\$2,082.21
0480	716-1000	1600.000	SY	\$1.45	EROSION CONTROL MATS, WATERWAYS	\$2,323.54
<b>SUBTOTAL FOR EROSION CONTROL:</b>						<b>\$105,398.60</b>

## 500 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0490	636-1033	17.000	SF	\$19.95	HWY SIGNS, TP1MAT,REFL SH TP 9	\$339.19
0495	636-2070	30.000	LF	\$8.21	GALV STEEL POSTS, TP 7	\$246.24
0500	636-5010	12.000	EA	\$47.23	DELINEATOR, TP 1	\$566.81
0505	636-5100	1.000	EA	\$169.16	MILEPOST SIGNS	\$169.16
0510	652-5451	6000.000	LF	\$0.14	SOLID TRAF STRIPE, 5 IN, WHITE	\$838.08
0515	652-5452	6000.000	LF	\$0.26	SOLID TRAF STRIPE, 5 IN, YELLOW	\$1,568.40
0525	652-6502	2100.000	GLF	\$0.10	SKIP TRAF STRIPE, 5 IN, YELLOW	\$210.80
0535	654-1001	130.000	EA	\$3.74	RAISED PVMT MARKERS TP 1	\$486.18
0540	657-1084	560.000	LF	\$6.28	PRF PL SD PVMT MKG,8",WH,TP PB	\$3,515.83
0545	657-1085	560.000	LF	\$5.48	PRF PL SD PVT MKG,8",B/W,TP PB	\$3,069.79
<b>SUBTOTAL FOR SIGNING AND MARKING:</b>						<b>\$11,010.48</b>

## 600 - MISCELLANEOUS

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0550	150-1000	1.000	LS	\$30,000.00	TRAFFIC CONTROL - PI# 322285-	\$30,000.00
0560	153-1300	1.000	EA	\$67,008.48	FIELD ENGINEERS OFFICE TP 3	\$67,008.48
<b>SUBTOTAL FOR MISCELLANEOUS:</b>						<b>\$97,008.48</b>

### TOTALS FOR JOB 322285-REV

<b>ITEMS COST:</b>	<b>\$3,037,077.54</b>
<b>COST GROUP COST:</b>	<b>\$0.00</b>
<b>ESTIMATED COST:</b>	<b>\$3,037,077.54</b>
<b>CONTINGENCY PERCENT:</b>	<b>0.00</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>0.05</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$3,188,931.42</b>

PROJ. NO.

BRF00-0153-01(024) - Parallel Bridge no Detour

CALL NO.

P.I. NO.

322285-

DATE

3/5/2012

INDEX (TYPE)

REG. UNLEADED

Mar-12 \$ 3.679

DIESEL

\$ 4.070

LIQUID AC

\$ 614.00

Link to Fuel and AC Index:

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

LIQUID AC ADJUSTMENTS

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

Asphalt

Price Adjustment (PA)				<b>68706.6</b>	\$	<b>68,706.60</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	982.40		
Monthly Asphalt Cement Price month project let (APL)			\$	614.00		
Total Monthly Tonnage of asphalt cement (TMT)				<b>186.5</b>		

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	720	5.0%	36
25 mm SP	1750	5.0%	87.5
19 mm SP	1260	5.0%	63
	<b>3730</b>		<b>186.5</b>

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	<b>1,075.97</b>	\$	<b>1,075.97</b>
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	982.40			
Monthly Asphalt Cement Price month project let (APL)			\$	614.00			
Total Monthly Tonnage of asphalt cement (TMT)						2.920668627	

Bitum Tack

Gals	gals/ton	tons
680	232.8234	2.92066863

PROJ. NO.

BRF00-0153-01(024) - Parallel Bridge no Detour

CALL NO.

P.I. NO.

322285-

DATE

3/5/2012

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)					<b>0</b>	\$	-
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$	982.40		
Monthly Asphalt Cement Price month project let (APL)				\$	614.00		
Total Monthly Tonnage of asphalt cement (TMT)					0		

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

<b>TOTAL LIQUID AC ADJUSTMENT</b>						\$	<b>69,782.57</b>
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# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

FILE: BFR00-0153-01(024), Macon County  
P.I. No. 322285  
SR 90 Bridge Replacement

OFFICE: State Utilities Office

FROM: *RAC FOR*  
Jeff Baker, State Utilities Engineer

DATE: March 13, 2012

TO: Bobby Hilliard, State Program Delivery Engineer  
ATTN: Sue Anne Decker, Project Manager

SUBJECT: PRELIMINARY RAILROAD COST FOR SURFACE WORK (CONCEPT ESTIMATE)

A review of railroads located within the project limits on the above referenced project has been conducted based on the proposed concept report provided. Listed below is a breakdown of the estimated railroad costs:

<u>FACILITY OWNER</u>	<u>NON-REIMBURSABLE</u>	<u>REIMBURSABLE</u>
CSX Transportation, Inc.	\$0.00	\$175,000.00
<b>Total Reimbursement Cost:</b>	<b>\$0.00</b>	<b>\$175,000.00</b>

Total railroad surface work reimbursable cost for the above project is estimated to be:

**\$175,000.00.**

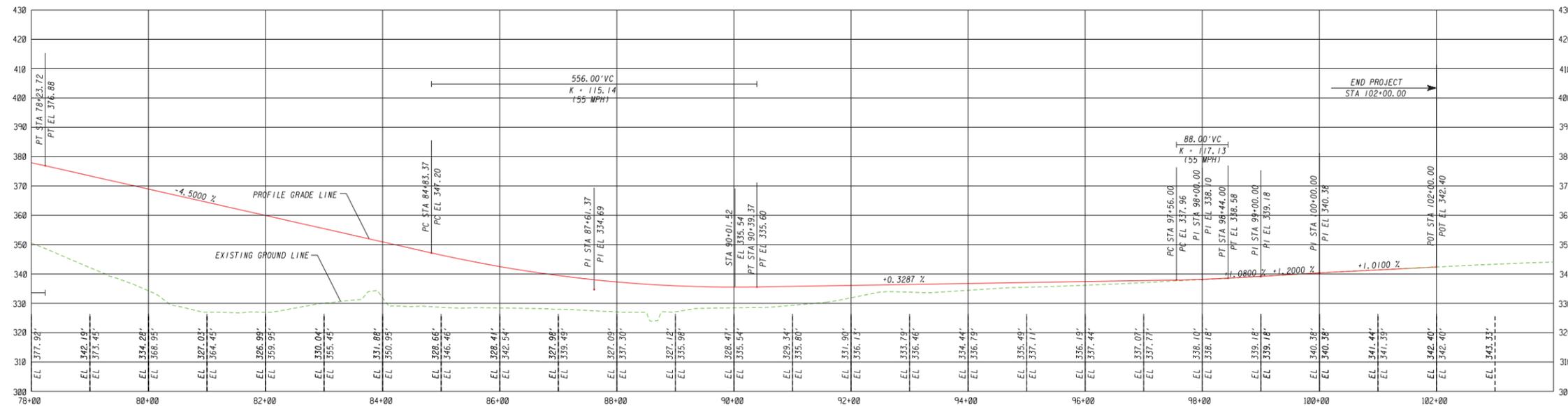
Please note that this amount does not include other reimbursable utility costs that may be associated with this project. Please keep the railroad costs separate from other utilities in your designer's cost estimate.

If you have any questions, please contact Richard Crowley, (404)631-1372, [rcrowley@dot.ga.gov](mailto:rcrowley@dot.ga.gov) or Jill Franks, (404) 631-1370, [jfranks@dot.ga.gov](mailto:jfranks@dot.ga.gov).

JB:rlc

cc: Sal Pirzad, State Utilities Preconstruction Engineer  
Angela Robinson, State Financial Management Administrator  
Kerry Gore, District 3 Utilities Engineer  
Stanley Mack, Railroad Crossing Engineer





**SR 90 AT CSX RAIL ROAD**  
BRF00-0153-01(024), MACON COUNTY  
P.I. No.: 322285

**GEORGIA**  
DEPARTMENT  
OF  
TRANSPORTATION

**H & L** Heath & Lineback Engineers  
INCORPORATED  
2390 CANTON ROAD, BUILDING 200  
MARIETTA, GEORGIA 30066-5393  
(770)424-1668

**BENCH MARK DATA**

BM #SVA5 IS A 3/8" IRON PIN AT STATION 72+39.38, 60.51' RIGHT OF THE CONSTRUCTION C, ELEVATION 380.15. COORDINATES: N 853138.3254 E 2304682.4378

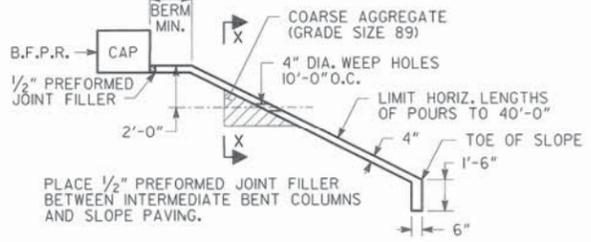
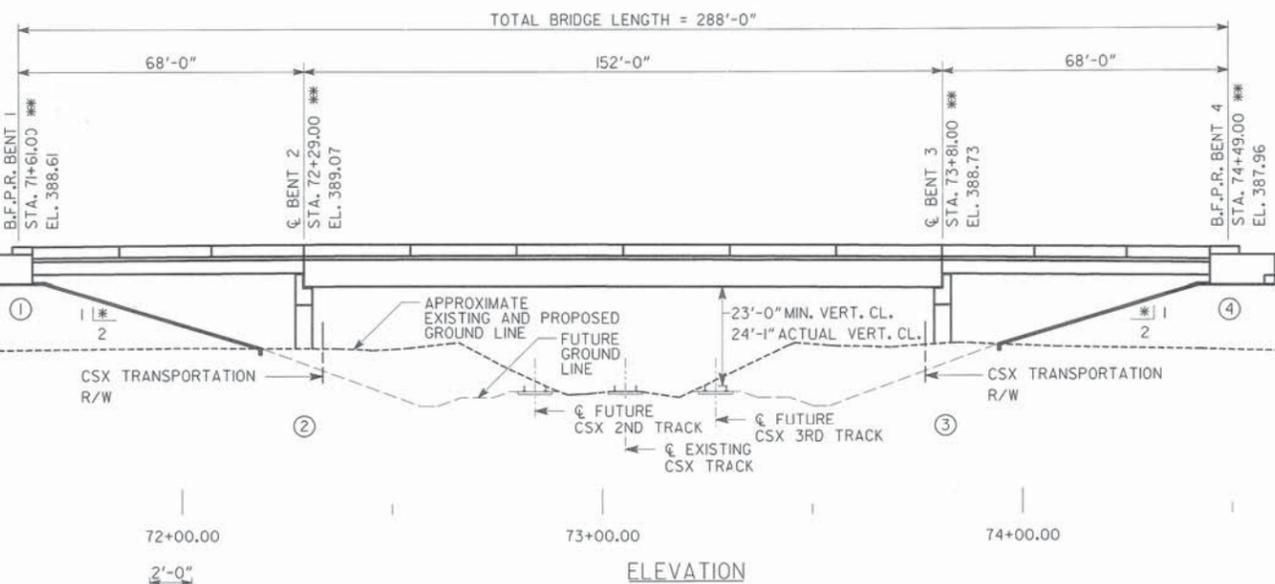
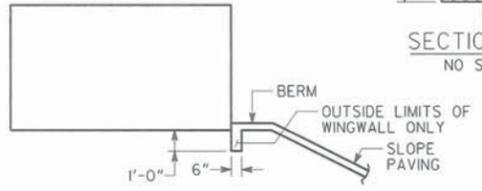
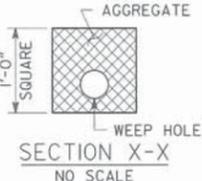
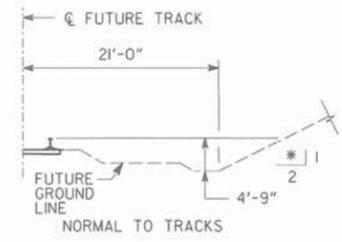
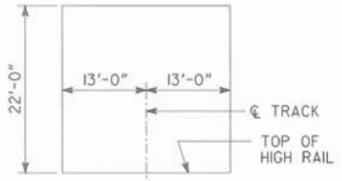
RAILROAD EXISTING GRADE DATA	
STATION	ELEVATION***
103+00.00	357.91
103+50.00	357.69
104+00.00	357.47
104+50.00	357.30
105+00.00	357.22
105+50.00	357.14
106+00.00	357.16

\*\*\* ELEVATIONS ARE ALONG EXISTING TOP OF HIGH RAIL.

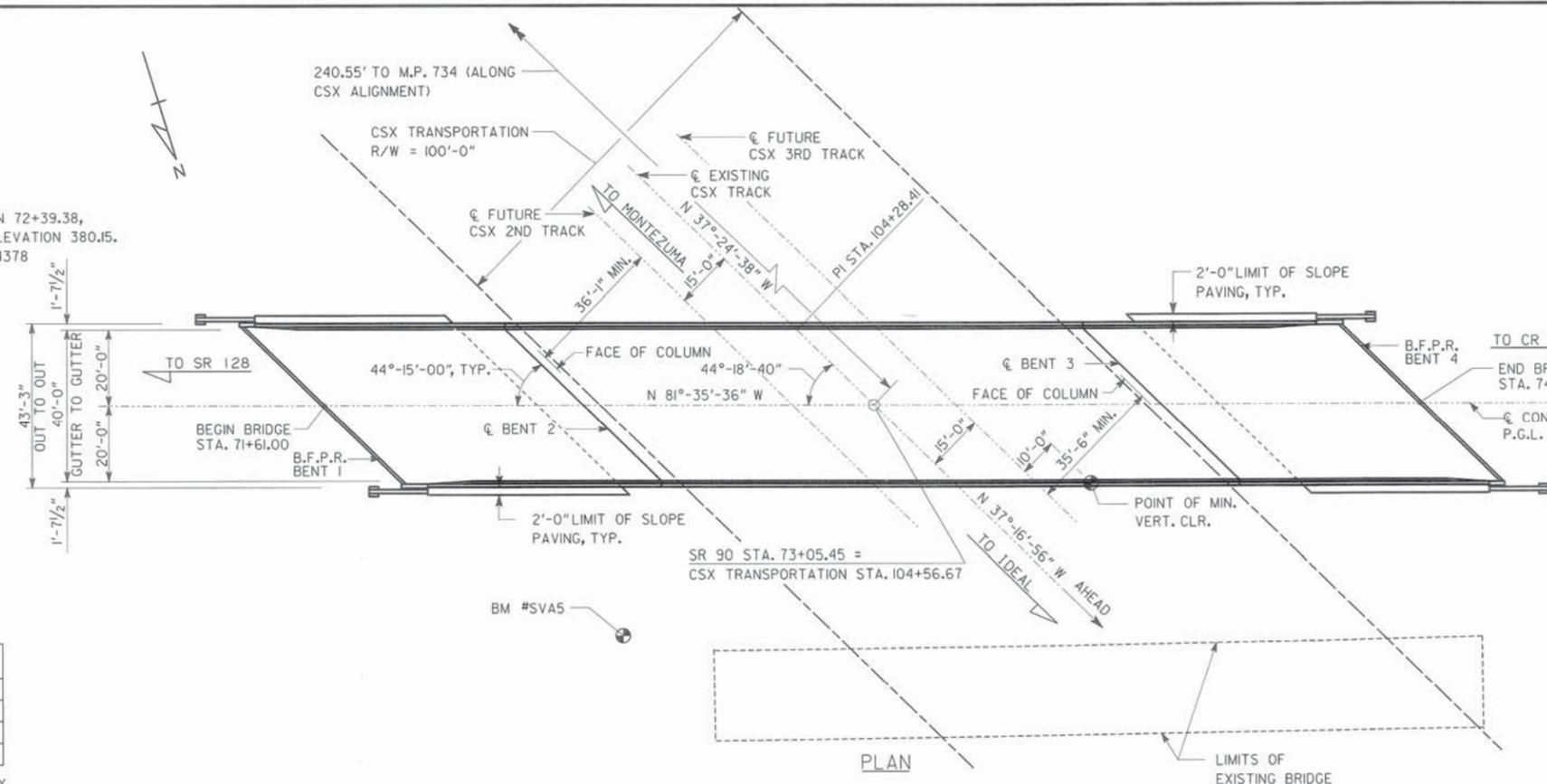
ELEVATION OF FUTURE 2ND AND 3RD TRACKS ASSUMED SIMILAR TO EXISTING TRACK.

BERM ELEVATION *		
LOCATION	ELEVATION	
	LEFT	RIGHT
BENT 1	381.94	382.36
BENT 4	381.80	381.19

\* FOR BRIDGE ENDROLL STAKING ONLY



- NOTES:
- \* SLOPE NORMAL TO END BENT.
  - \*\* STATIONS ARE ALONG C CONSTRUCTION AT THE INTERSECTION WITH B.F.P.R OR C BENT. ELEVATIONS ARE PROFILE GRADE.
  - ALL BENTS ARE PARALLEL.
  - END BENT PILES NOT SHOWN.
  - REMOVE EXISTING BRIDGE AND EXISTING SUBSTRUCTURE AS PER THE SPECIFICATIONS.
  - PROPOSED BRIDGE DECK IS TO BE BUILT ON NORMAL CROWN.



**PROPOSED VERTICAL CURVE DATA**  
ALONG PROFILE GRADE LINE

+2.4205 %  
840 FT V.C.  
-4.4997 %

**TRAFFIC DATA**

TRAFFIC ----- ADT = 1700 (2015)  
ADT = 3000 (2035)

DESIGN SPEED ----- 55 MPH  
TRUCKS ----- 14%  
24 HR TRUCKS ----- 20%  
DIRECTIONAL ----- 60%

**EXISTING UTILITIES**

NONE

**BRIDGE CONSISTS OF**

- 2 - 68'-0" TYPE II PSC BEAM SPANS ----- SPECIAL DESIGN
- 1 - 152'-0" BULB TEE, 74 IN, PSC BEAM SPAN ----- SPECIAL DESIGN
- 2 - PILE END BENTS ----- SPECIAL DESIGN
- 2 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN

**DESIGN DATA**

SPECIFICATIONS ----- AASHTO LRFD 5TH EDITION, 2010  
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)

TYPICAL HL93 LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

EXISTING BRIDGE SERIAL NO. 193-0019-0  
EXISTING BRIDGE I.D. NO. 193-00090D-014.60N  
PROJECT P.I. NO. 322285  
BRIDGE NO. 1



GEORGIA  
**DEPARTMENT OF TRANSPORTATION**  
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

PRELIMINARY LAYOUT  
SR 90 OVER  
CSX TRANSPORTATION  
MACON COUNTY BRF00-0153-01(024)

SCALE: 1" = 20'-0" FEBRUARY 2012

DESIGNED: GTP	CHECKED: KAK/MS	REVIEWED: WMD
DRAWN: GTP	DESIGN GROUP:	APPROVED: BFR



DRAWING NO. 35 - 01  
BRIDGE SHEET 1 OF 1

1 INCH WHEN PRINTED FULL SIZE

BRIDGE PRELIMINARY SR90-PELION

# Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:193-0019-0

Macon

SUFF. RATING: 35.23

**Location & Geography**

**Structure ID:** 193-0019-0  
 200 Bridge Information: 06  
 \*6A Feature Int: CSX RAILROAD  
 \*6B Critical Bridge: 0  
 \*7A Route No Carried: SR00090  
 \*7B Facility Carried: SR 90  
 9 Location: 3.5 MI SE OF IDEAL  
 2 Dot District: 3  
 207 Year Photo: 2010  
 \*91 Inspection Frequency: 24 Date: 12/20/2010  
 92A Fract Crit Insp Freq: 0 Date: 02/01/1901  
 92B Underwater Insp Freq: 0 Date: 02/01/1901  
 92C Other Spc. Insp Freq: 0 Date: 02/01/1901  
 \* 4 Place Code: 00000  
 \*5 Inventory Route(O/U): 1  
 Type: 3  
 Designation: 1  
 Number: 00090  
 Direction: 0  
 \*16 Latitude: 32 20.7422 HMMS Prefix:SR  
 \*17 Longitude: 84 -08.4507 HMMS Suffix:00 MP:14.60  
 98 Border Bridge: 000%Shared:00  
 99 ID Number: 0000000000000000  
 \*100 STRAHNET: 0  
 12 Base Highway Network: 1  
 13A LRS Inventory Route: 1931009000  
 13B Sub Inventory Route: 0  
 101 parallel Structure: N  
 \*102 Direction of Traffic: 2  
 \*264 Road Inventory Mile Post: 014.05  
 \*208 Inspection Area: 3 Initials: EFP  
 Engineer's Initials: kww  
 \* Location ID No: 193-00090D-014.60N

\*104 Highway System: 0  
 \*26 Functional Classification: 06  
 \*204 Federal Route Type: F No: 01531  
 105 Federal Lands Highway: 0  
 \*110 Truck Route: 0  
 2006 School Bus Route: 1  
 217 Benchmark Elevation: 0000.00  
 218 Datum: 0  
 \*19 Bypass Length: 03  
 \*20 Toll: 3  
 \*21 Maintenance: 01  
 \*22 Owner: 01  
 \*31 Design Load: 2  
 37 Historical Significance: 5  
 205 Congressional District: 02  
 27 Year Constructed: 1937  
 106 Year Reconstructed: 0000  
 33 Bridge Medium: 0  
 34 Skew: 99  
 35 Structure Flared: 0  
 38 Navigation Control: N  
 213 Special Steel Design: 0  
 267 Type of Paint: 1  
 \*42 Type of Service On: 1  
 Type of Service Under: 2  
 214 Movable Bridge: 0  
 203 Type Bridge: C  
 259 Pile Encasement 3  
 \*43 Structure Type Main: 3 02  
 45 No.Spans Main: 008  
 44 Structure Type Appr: 0 00  
 46 No Spans Appr: 0000  
 226 Bridge Curve Horz 0 Vert: 1  
 111 pier Protection 0  
 107 Deck Structure Type: 1  
 108 Wearing Structure Type: 1  
 Membrane Type: 0  
 Deck Protection: 8

**Signs & Attachments**

225 Expansion Joint Type: 02  
 242 Deck Drains: 1  
 243 Parapet Location: 0  
 Height: 0  
 Width: 0  
 238 Curb Height: 1  
 Curb Material: 1  
 239 Handrail 11  
 \*240 Medium Barrier Rail: 0  
 241 Bridge Median Height: 0  
 \* Bridge Median Width: 0  
 230 Guardrail Loc. Dir. Rear: 3  
 Fwd: 3  
 Oppo. Dir. Rear: 0  
 Oppo. Fwd: 0  
 244 Approach Slab 0  
 224 Retaining Wall: 0  
 233 Posted Speed Limit: 55  
 236 Warning Sign: 0.00  
 234 Delineator: 1.00  
 235 Hazzard Boards: 1  
 237 Utilities Gas: 00  
 Water: 00  
 Electric: 00  
 Telephone: 00  
 Sewer: 00  
 247 Lighting Street: 0  
 Navigation: 0  
 Aerial: 0  
 \*248 County Continuity No.: 00

# Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:193-0019-0

Programming Data		Measurements:				
201 Project No:	NRS-520-C	*29ADT	001370	Year:2007	65 Inventory Rating Method:	2
202 Plans Available:	4	109%Trucks:	0		63 Operating Rating Method:	2
249 Prop Proj No:	BRF-153-1 (24)	* 28 Lanes On:	02	Under:00	66 Inventory Type:	2 Rating: 22
250 Approval Status:	0000	210 No. Tracks On:	00	Under:01	64 Operating Type:	2 Rating: 22
251 PI Number:	322285-	* 48 Max. Span Length	0035		231 Calculated Loads:	
252 Contract Date:	02/01/2008	* 49 Structure Length:	202		H-Modified:	20 0
260 Seismic No:	00000	51 Br. Rwdy. Width	24.00		HS-Modified:	25 0
75 Type Work:	31 1	52 Deck Width:	25.20		Type 3:	26 0
94 Bridge Imp. Cost:	\$517	* 47 Tot. Horiz. Cl:	24		Type 3s2:	38 0
95 Roadway Imp. Cost:	91	50 Curb / Sidewalk Width	0.00 / 0.00		Timber:	36 0
96 Total Imp Cost:	703	32 Approach Rdwy. Width	028		Piggyback:	40 0
76 Imp Length:	000414	*229 Shoulder Width:			261 H Inventory Rating:	15
97 Imp Year:	1990	Rear Lt:	2.50	Type:2 Rt:2.50	262 H Operating Rating	23
114 Future ADT:	002055	Fwd. Lt:	2.50	Type:2 Rt:2.50	67 Structural Evaluation:	4
	Year:2027	Permanent Width:			58 Deck Condition:	4
		Rear:	23.00	Type:2	59 Superstructure Condition:	5
			23.00	Type:2	* 227 Collision Damage:	0
		Intersaction Rear:	0	Fwd: 0	60A Substructure Condition:	4
		36 Safety Features Br. Rail:	2		60B Scour Condition:	N
		Transition:	2		60C Underwater Condition	N
		App. G. Rail:	2		71 Waterway Adequacy:	N
		App. Rail End:	2		61 Channel Protection Cond.:	N
		53 Minimum Cl. Over:	99' 99 "		68 Deck Geometry:	4
		Under:			69 UnderClr. Horz/Vert:	4
		*228 Minimum Vertical Cl			72 Appr. Alignment:	8
		Act. Odm Dir.:	99' 99"		62 Culvert:	N
		Oppo. Dir:	99' 99"			
		Posted Odm. Dir:	00' 00"		<b>Posting Data</b>	
		Oppo. Dir:	00' 00"		70 Bridge Posting Required	5
		55 Lateral Undercl. Rt:	R 10 10		41 Struct Open, Posted, CL:	A
		56 Lateral Undercl. Lt:	0.00		* 103 Temporary Structure:	0
		*10 Max Min Vert Cl:	99' 99" Dir:0		232 Posted Loads	
		39 Nav Vert Cl:	000 Horiz:0000		H-Modified:	00
		116 Nav Vert Cl Closed:	000		HS-Modified:	00
		245 Deck Thickness Main	7.00		Type 3:	00
		Deck Thick Approach:	0.00		Type 3s2:	00
		246 Overlay Thickness:	0.00		Timber:	00
			0.00		Piggyback	00
		212 Year Last Painted:	Sup:1967Sub:0000		253 Notification Date:	02/01/1901
					258 Fed Notify Date:	2/1/1901 12:00:00AM

# Department of Transportation State of Georgia

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## INTERDEPARTMENT CORRESPONDENCE

**FILE** BRF00-0153-01(024), Macon County                      **OFFICE** Planning  
P.I. # 322285  
**DATE** December 20, 2011

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

**TO** Bobby Hilliard, P.E., State Program Delivery Engineer  
**Attention:** Sue Anne Decker

**SUBJECT** Traffic Link Volume for S.R. 90 @ CSX RR South of Ideal near CR 57.

Traffic Link Volume for the above project is attached below:

**Traffic Count # 167**  
**BUILD = NO BUILD**

2009 ADT = 1200  
2015 ADT = 1700  
2035 ADT = 3000  
2009 DHV = 110  
2015 DHV = 155  
2035 DHV = 270  
D = 60%  
K = 9%  
T = 14%  
S.U. = 15%  
COMB. = 6%  
24 HR. T. = 20%  
S.U. = 11%  
COMB. = 9%

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