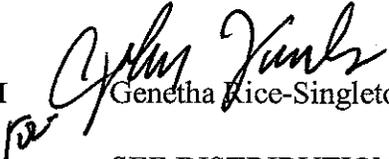


**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P. I. No. 0004729, Muscogee County **OFFICE** Preconstruction  
BR000-0004-00(729)  
Brown Avenue over Norfolk Southern Railroad  
Bridge Replacement **DATE** July 7, 2008

**FROM**  Genetha Rice-Singleton, Assistant Director of Preconstruction

**TO** SEE DISTRIBUTION

**SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT**

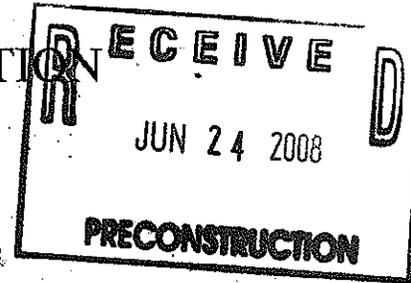
Attached for your files is the approval for subject project.

Attachment

**DISTRIBUTION:**

Brian Summers  
Glenn Bowman  
Ken Thompson  
Michael Henry  
Keith Golden  
Angela Alexander  
Paul Liles  
Thomas Howell  
David Millen  
Bill Rountree  
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

FILE BR000-0004-00(729) Muscogee OFFICE Thomaston  
P.I. No. 0004729  
Bridge Replacement on Brown Ave over Norfolk  
Southern Railroad

FROM *W. Howell* Thomas B. Howell, P.E., District Engineer DATE  
TO Genetha Rice-Singleton, Assistant Director of Preconstruction  
SUBJECT **Revised Project Concept Report**

Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The proposed revision will include replacing the two structurally deficient bridges over Bragg Smith St. and Norfolk Southern Railroad. Because of Historical restraints the two bridges will be replaced with one continuous bridge having an approximate size of 1040' by 46'.

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

Date 6/23/08 *Angela J. Alexander*  
State Transportation Planning Administrator

DBM:WJR:JWM:JMS

- C: Brian Summers, Project Review Engineer
- Glenn Bowman, State Environmental/Location Engineer
- Keith Golden, State Traffic and Safety Design Engineer
- Angela Alexander, State Transportation Planning Administrator
- OFM Concept Reports Mailbox
- Paul Liles, State Bridge Design Engineer
- Debra Fowler Pruitt, District Environmentalist
- Colandra Barron, Support Assistant

# REVISED PROJECT CONCEPT REPORT

## **Need and Purpose:**

### **Project Description**

Project Number BR000-0004-00(729) will replace both of the structurally deficient bridges on Brown Avenue with one structurally adequate two lane bridge. The Brown Avenue structurally deficient bridges are located over the Norfolk Southern Railroad and Bragg Smith Street in southwest Columbus Georgia. This project is identified in both the Columbus FY08 Transportation Improvement Program and the Columbus 2030 Long Range Transportation Improvement Program.

### **Bridge Characteristics**

Both of the bridges were built in 1940. The bridge over Bragg Smith Street has a sufficiency rating of 47.02 and the bridge over the Norfolk Southern Railroad has a sufficiency rating of 26.15. This project will replace the existing two-lane bridges with one structurally adequate bridge. The bridge is being considered for replacement as per DOT policy 2405-1. The Office of Bridge Maintenance has determined that any bridge with a bridge sufficiency rating under 50 should be replaced.

### **Route Characteristics**

Brown Avenue is functionally classified as an urban minor arterial and is a designated school bus route. Brown Avenue is not part of local or statewide bicycle network. These two bridges provide connectivity between the Willet and Wynnton neighborhoods of Columbus, so sidewalks are being proposed for pedestrians' access. The posted speed limit along this roadway is 30 miles per hour.

### **Traffic Counts**

The existing (Year 2005) Annual Average Daily Traffic (AADT) along this segment of Brown Avenue is 11,500 vehicles per day (VPD). The projected (Year 2033) AADT for this segment of roadway would be 18,000 VPD with 3% trucks. The Level-of-Service (LOS) is "E" for both of the years 2005 and 2033.

### **Social Economic Characteristics**

Of the 188,660 residents of Muscogee County, the ethnic groups consist of 49.1% White, 46.5% African American, 3.8% Hispanic, and 2.1% Asian. The median household income along this project corridor was \$35,130 (2004 dollars). The land parcels surrounding the project are primarily developed commercial.

### **Conclusion**

Replacing these bridges is justified due to its current deficient load rating. Replacing the bridges with a modern bridge with improved design and load standards will improve the operation and safety of this corridor and benefit all communities in the project area.

**Project location:** The proposed project is to begin at mile log 1.44 (Cusseta Rd), and end at mile log 1.82 (MLK Blvd). The total length of this project is 2006.40 ft. This project is inside the city limits of Columbus, Georgia.

**Description of the approved concept:**

**PDP Classification:** Minor

**Federal Oversight:** Exempt

**Functional Classification:** Urban Minor Arterial

**U. S. Route Number(s):** None

**State Route Number(s):** None

**Traffic (AADT) as shown in the approved concept:**

Current Year (2005): 11,500 vpd

Design year (2033): 18,000 vpd

**Proposed features to be revised:** The approved Concept Report has two new bridges included in the construction. The first bridge is over Bragg Smith St., and has an approximate proposed size of 150' x 46'. The second bridge is over Norfolk Southern Railroad, and has an approximate proposed size of 292' x 46'.

**Describe the revised feature(s) to be approved:** The two existing bridges will be replaced with one bridge with the approximate proposed size of 1040' x 46'. This structure will span both Bragg Smith St. and the railroad with one continuous bridge. The existing road bed shall only be removed to the point necessary for construction of the bridge. Constructing the bridge in this manner will avoid the demolition of 6 structures within the Bragg Smith Historical District. This district parallels the current alignment of Brown Ave to the east of the roadway.

**Updated traffic data (AADT):**

Current Year (2005): 11,500 vpd

Design year (2033): 18,000 vpd

**Programmed/Schedule:**

P.E.: 2005

R/W: Local Acquisition

Construction: 2010

**Value Engineering Study required?**

    Yes

  X   No



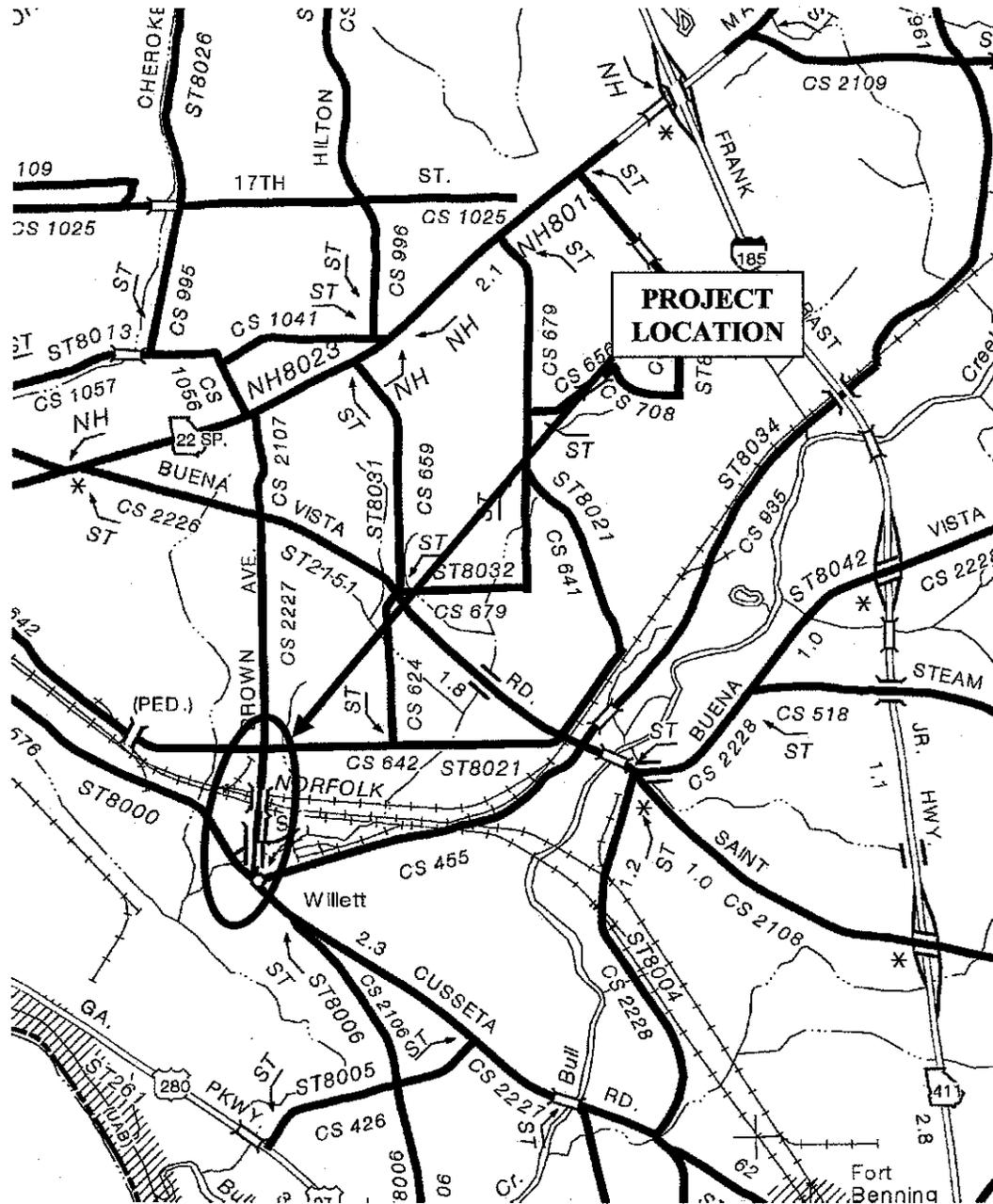
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF DISTRICT THREE DESIGN

# PROJECT LOCATION SKETCH

**BR000-0004-00(729)**

**Muscogee County**

**P.I. No.: 0004729**



## Estimate Report for file "MUSCOGEE - 0004729"

<b>Section ROADWAY</b>					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	Lump	LS	100000.00	TRAFFIC CONTROL - BR000-0004-00(729)	100000.00
210-0100	Lump	LS	40000.00	GRADING COMPLETE - BR000-0004-00(729)	40000.00
310-1101	2100	TN	25.00	GR AGGR BASE CRS, INCL MATL	52500.00
402-3121	1400	TN	100.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	140000.00
402-3131	210	TN	100.00	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	21000.00
402-3190	340	TN	100.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	34000.00
413-1000	250	GL	1.90	BITUM TACK COAT	475.00
441-0104	940	SY	33.24	CONC SIDEWALK, 4 IN	31245.60
441-6222	1700	LF	16.96	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	28832.00
634-1200	15	EA	101.50	RIGHT OF WAY MARKERS	1522.50
641-1100	290	LF	42.44	GUARDRAIL, TP T	12307.60
641-1200	320	LF	15.44	GUARDRAIL, TP W	4940.80
641-5001	2	EA	619.00	GUARDRAIL ANCHORAGE, TP 1	1238.00
641-5012	2	EA	1838.99	GUARDRAIL ANCHORAGE, TP 12	3677.98
643-8200	520	LF	2.91	BARRIER FENCE (ORANGE), 4 FT	1513.20
<b>Section Sub Total:</b>					<b>\$473,252.68</b>

<b>Section BRIDGE</b>					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
433-1000	310	SY	165.48	REINF CONC APPROACH SLAB	51298.80
501-9999	49220	SF	90.00	BRIDGE CONSTRUCTION	4429800.00
<b>Section Sub Total:</b>					<b>\$4,481,098.80</b>

<b>Section DRAINAGE</b>					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
441-0301	4	EA	2340.67	CONC SPILLWAY, TP 1	9362.68
500-3101	350	CY	377.57	CLASS A CONCRETE	132149.50
511-1000	53700	LB	0.86	BAR REINF STEEL	46182.00
550-1240	600	LF	46.55	STORM DRAIN PIPE, 24 IN, H 1-10	27930.00
668-1100	8	EA	2553.80	CATCH BASIN, GP 1	20430.40
<b>Section Sub Total:</b>					<b>\$236,054.58</b>

**Section PERMANENT EROSION CONTROL**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0240	120	TN	200.57	MULCH	
167-1000	2	EA	1037.94	WATER QUALITY MONITORING AND SAMPLING	24068.40
167-1500	12	MO	950.27	WATER QUALITY INSPECTIONS	2075.88
603-2024	500	SY	52.88	STN DUMPED RIP RAP, TP 1, 24 IN	11403.24
603-7000	500	SY	5.25	PLASTIC FILTER FABRIC	26440.00
700-6910	3	AC	939.80	PERMANENT GRASSING	2625.00
700-7000	9	TN	48.56	AGRICULTURAL LIME	2819.40
700-7010	8	GL	21.12	LIQUID LIME	437.04
700-8000	3	TN	286.86	FERTILIZER MIXED GRADE	168.96
700-8100	150	LB	2.31	FERTILIZER NITROGEN CONTENT	860.58
716-2000	11200	SY	1.03	EROSION CONTROL MATS, SLOPES	346.50
<b>Section Sub Total:</b>					<b>\$82,781.00</b>

**Section TEMPORARY EROSION CONTROL**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	2	AC	574.76	TEMPORARY GRASSING	
163-0300	2	EA	1816.42	CONSTRUCTION EXIT	1149.52
163-0501	1	EA	896.78	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	3632.84
163-0550	8	EA	228.63	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	896.78
165-0030	3800	LF	1.29	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	1829.04
165-0085	1	EA	243.29	MAINTENANCE OF SILT CONTROL GATE, TP 1	4902.00
165-0101	2	EA	516.98	MAINTENANCE OF CONSTRUCTION EXIT	243.29
165-0105	8	EA	80.96	MAINTENANCE OF INLET SEDIMENT TRAP	1033.96
171-0030	7600	LF	3.80	TEMPORARY SILT FENCE, TYPE C	647.68
<b>Section Sub Total:</b>					<b>\$43,215.11</b>

**Section TRAFFIC CONTROL**

Item Number	Quantity	Units	Unit Price	Item Description	Cost
652-0120	6	EA	53.86	PAVEMENT MARKING, ARROW, TP 2	
653-0130	2	EA	104.93	THERMOPLASTIC PVMT MARKING, ARROW, TP 3	323.16
653-2501	1	LM	1317.46	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	209.86
653-2502	1	LM	1341.76	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	1317.46
653-3501	320	GLF	0.50	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	1341.76
653-6004	47	SY	3.05	THERMOPLASTIC TRAF STRIPING, WHITE	160.00
653-6006	150	SY	2.92	THERMOPLASTIC TRAF STRIPING, YELLOW	143.35
654-1001	66	EA	3.08	RAISED PVMT MARKERS TP 1	438.00
654-1003	20	EA	3.76	RAISED PVMT MARKERS TP 3	203.28
657-1085	2800	LF	5.66	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	75.20
657-6085	2800	LF	6.02	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	15848.00
<b>Section Sub Total:</b>					<b>\$36,916.07</b>

**Total Estimated Cost: \$5,353,318.24**

<b>Subtotal Construction Cost</b>	<b>\$5,353,318.24</b>
Engineering and Inspection	\$267,665.92
Engineering Contingency	\$642,398.19
	<hr/>
<b>Total Construction Cost</b>	<b>\$6,263,382.35</b>
Right Of Way	PFA
ReImb. Utilities	PFA
	<hr/>
<b>Grand Total Project Cost</b>	<b>\$6,263,382.35</b>

*OK  
220  
6/25/2008*