

D.O.T. 66

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** BR-0003-00(090) Harris County  
P. I. No. 0003090

**OFFICE** Preconstruction

**DATE** February 24, 2003

**FROM**

*Tom*  
*Margaret B. Pirkle*

Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO**

SEE DISTRIBUTION

**SUBJECT** PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

**DISTRIBUTION:**

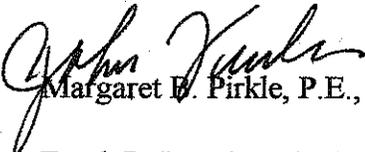
David Mulling  
Harvey Keeper  
Jerry Hobbs  
Percy Middlebrooks  
Michael Henry  
Phillip Allen  
Marta Rosen  
Paul Liles  
Ben Buchan  
Thomas Howell  
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** BR-0003-00(090) Harris County **OFFICE** Preconstruction  
P.I. No. 0003090

**DATE** February 3, 2003

**FROM**  Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO** Frank L. Danchetz, P.E., Chief Engineer

**SUBJECT PROJECT CONCEPT REPORT**

This project is the replacement of a structurally deficient bridge on CR 219/Brown Creek Road over Brown Creek, 5.0 miles northeast of Waverly Hall, Georgia. The existing bridge, constructed in 1940, is load limited with a sufficiency rating of 26. County Road 219 at this location is a two lane dirt road (18' travel width) with no shoulders. This section of CR 219 is functionally classified as a rural local road. Traffic is projected to be 200 VPD and 300 VPD in the years 2007 and 2027 respectively. The posted speed and the design speed are 35 MPH.

The construction proposes to construct a new 90' x 28' concrete bridge over Brown Creek at the existing bridge site. The approaches will consist of two, 10' lanes with 4' rural shoulders. Traffic will be maintained during construction utilizing an off-site detour.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; a public hearing is not required; time saving procedures are appropriate.

The estimated costs for this project are:

|   | <u>PROPOSED</u> | <u>APPROVED</u> | <u>PROG DATE</u> | <u>LET DATE</u> |
|---|-----------------|-----------------|------------------|-----------------|
| Construction (includes E&C and inflation) | \$520,000       | \$384,000       | 2005             | 2005            |
| Right-of-Way & Utilities*                 | Local           | Local           |                  |                 |

\* Harris County signed LGPA on 10-16-01 for right-of-way, utilities, and detours.

Frank L. Danchetz

Page 2

BR-0003-00(090) Harris

February 3, 2003

I recommend this project concept be approved.

MBP:JDQ/cj

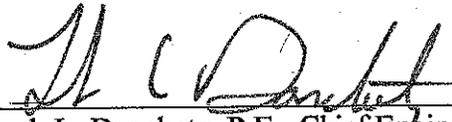
Attachment

CONCUR



Thomas L. Turner, P.E., Director of Preconstruction

APPROVE



Frank L. Danchetz, P.E., Chief Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

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INTERDEPARTMENTAL CORRESPONDENCE

**FILE:** BR-0003-00(090) Harris  
P.I. Number 0003090

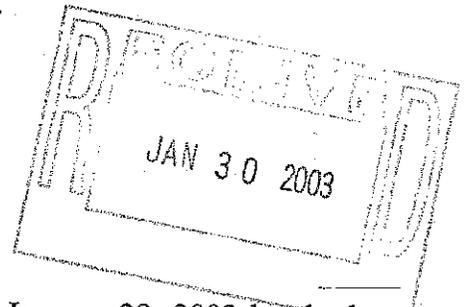
**OFFICE:** Engineering Services

**DATE:** January 29, 2003

**FROM:** David Mulling, Project Review Engineer *REW*

**TO:** Meg Pirkle, Assistant Director of Preconstruction

**SUBJECT: CONCEPT REPORT**



We have reviewed the concept report submitted January 28, 2003 by the letter from James B. Buchan dated January 22, 2003, and have no additional comments.

The costs for this project are:

|                        |                             |
|------------------------|-----------------------------|
| Construction           | \$428,990                   |
| Inflation              | \$47,300                    |
| E&C                    | \$42,900                    |
| Reimbursable Utilities | \$0.00                      |
| Right of Way           | \$20,000 (LGPA anticipated) |

REW

c: Ben Buchan, Attn: Otis Clark

## SCORING RESULTS AS PER MOG 2440-2

|  |              |   |   |  |  |
|--|--------------|---|---|--|--|
| <b>Project Number:</b><br>BR-003-00(090)                 |              | <b>County:</b><br>Harris  |   | <b>PI No.:</b><br>0003090  |  |
| <b>Report Date:</b><br>January 22, 2003                  |              | <b>Concept By:</b><br>DOT Office: Consultant Design                         |   |  |  |
| <input checked="" type="checkbox"/> <b>Concept Stage</b> |              | Consultant: URS Corporation   |   |  |  |
| <b>Project Type:</b><br>Choose One From Each Column      |              | <input type="checkbox"/> Major<br><input checked="" type="checkbox"/> Minor | <input type="checkbox"/> Urban<br><input checked="" type="checkbox"/> Rural | <input type="checkbox"/> ATMS<br><input checked="" type="checkbox"/> Bridge Replacement<br><input type="checkbox"/> Building<br><input type="checkbox"/> Interchange Reconstruction<br><input type="checkbox"/> Intersection Improvement<br><input type="checkbox"/> Interstate<br><input type="checkbox"/> New Location<br><input type="checkbox"/> Widening & Reconstruction<br><input type="checkbox"/> Miscellaneous |  |
| <b>FOCUS AREAS</b>                                       | <b>SCORE</b> | <b>RESULTS</b>  |   |  |  |
| Presentation   | 100          |   |   |  |  |
| Judgement  | 100          |   |   |  |  |
| Environmental  | 100          |   |   |  |  |
| Right of Way   | 100          |   |   |  |  |
| Utility  | 100          |   |   |  |  |
| Constructability   | 100          |   |   |  |  |
| Schedule   | 100          |   |   |  |  |

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE**     **BR-0003-00(090) Harris County**  
CR 219/Brown Creek Rd at Brown Creek 5 mi NE of Waverly Hall  
P.I. No. 0003090

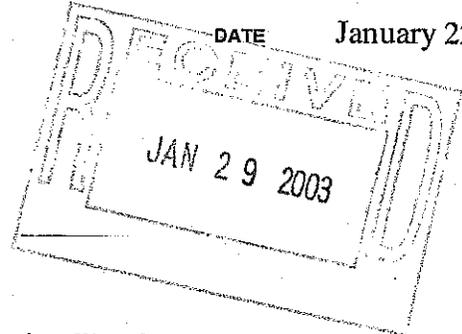
**OFFICE**     Atlanta

**FROM**     *James B. Buchan*  
James B. Buchan, State Consultant Design Engineer

**DATE**     January 22, 2003

**TO**     Margaret B. Pirkle, Assistant Director of Preconstruction

**SUBJECT**     **PROJECT CONCEPT REPORT**



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

Those on the distribution list below should review the Concept Report and send comments and/or the signature page to the Preconstruction Office within 10 days as per the PDP.

If you have any questions or require further information please call Otis Clark at (404)463-6265 or Don Harris of URS Corporation at (404) 888-8800.

*Distribution:*

- David Mulling, Project Review Engineer
- Harvey Keeper, State Environmental/Location Engineer
- Phillip Allen, State Traffic Safety and Design Engineer
- Marta Rosen, State Transportation Planning Administrator
- Herman Griffin, Office of Financial Management Administrator
- Thomas Howell, District Engineer – Thomaston
- Paul Liles, State Bridge & Structural Engineer

JBB:MBA:OC

cc: URS Corporation

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
Office of Consultant Design

PROJECT CONCEPT REPORT

CR219/BROWN CREEK ROAD OVER BROWN CREEK

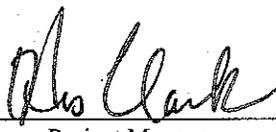
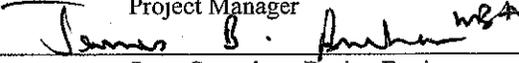
Project Number: BR-0003-00(090)  
P.I. NO. 0003090  
County: HARRIS

FEDERAL ROUTE NO: N/A  
STATE ROUTE NO: N/A  
COUNTY ROUTE NO: 219

Prepared by:

DATE 1-22-03

DATE 1-27-03

  
Project Manager  
  
State Consultant Design Engineer

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

|             |  |
|-------------|--|
| <u>DATE</u> | <u>State Transportation Planning Administrator</u>   |
| <u>DATE</u> | <u>Financial Management Administrator</u>            |
| <u>DATE</u> | <u>State Environmental / Location Engineer</u>       |
| <u>DATE</u> | <u>Project Review Engineer</u>                       |
| <u>DATE</u> | <u>State Traffic Safety and Design Engineer</u>      |
| <u>DATE</u> | <u>State Bridge &amp; Structural Design Engineer</u> |



**Need and Purpose:** *See attached Need & Purpose Statement*

**Description of the proposed project:** The proposed project is comprised of replacing the bridge over Brown Creek and improving the approach to the bridge on CR219/Brown Creek Road. The Existing Bridge has a current structural rating of 26.0 (based on H 15 design live load). The length of the project is approximately 0.14 miles. The new bridge will be *approximately* 90 feet in length with 28 feet of clear width (per MOG 4265-9). The project will utilize an off site detour during the construction phase.

**Is the project located in a Non-attainment area?**  Yes  No.

**PDP Classification:** Major , or Minor

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

**Functional Classification:** Rural Local

**U. S. Route Number(s):** N/A      **State Route Number(s):** N/A      **County Route Number(s):** 219

**Traffic (AADT):** Base Year: (2007) 200      Design Year: (2027) 300

**Existing design features:**

- Typical Section: 2 lane dirt (18' travel width), no shoulder
- Posted speed 35 mph
- Maximum degree of curvature: 8
- Maximum grade: 9.5 % (CR 219)
- Width of right of way: 60 ft.
- Major structures: ID 145-5033-0, L=30ft, W=16ft, SR=26.0
- Existing length of roadway segment: .26mi

**Proposed Design Features:**

- Proposed typical section(s): 2 10ft lanes, 4ft grass shoulders.
- Proposed Design Speed Mainline: 35 mph
- Proposed Maximum grade Mainline: 9 %
- Maximum grade allowable: 9.5 %
- Proposed Maximum grade Side Street: N/A
- Maximum grade allowable: N/A
- Proposed Maximum grade driveway: 15%
- Proposed Maximum degree of curve: 8
- Maximum degree allowable: 17.5°



### **Coordination**

- Concept meeting date and brief summary. Attach minutes To be scheduled.
- P. A. R. meetings, dates and results: Not required
- FEMA, USCG, and/or TVA: FEMA (project encroaches mapped 100-year floodplain).
- Public involvement. Not required
- Local government comments.: None Anticipated
- Other projects in the area.: None Anticipated

### **Scheduling – Responsible Parties' Estimate**

- Time to complete the environmental process: 9 Months.
- Time to complete preliminary construction plans: 4 Months.
- Time to complete right of way plans: 2 Months.
- Time to complete the Section 404 Permit: 6 Months.
- Time to complete final construction plans: 4 Months.
- Time to purchase right of way: 6 Months.
- List other major items that will affect the project schedule: \_\_\_N/A\_\_\_ Months.

### **Alternates considered:**

1. Replacement bridge on existing location (off site detour).
2. Alignment on a new location was studied. This alternative would allow the existing bridge to remain open to facilitate traffic. This alternate was discounted due to the additional construction and right of way costs. See attached cost estimates.
3. On existing location with on-site detour (temporary bridge).
4. No Build. This alternate was discounted since it does not satisfy the need and purpose of the project.
5. Bridge Culvert.

### **Comments:**

Alternative (1) is the preferred alternate.

Alternatives (2) and (3) were discounted due to higher construction related costs, added utility and right of way costs, and greater negative environmental impacts.

Alternative (4) was eliminated due to the deficient design live load (H 15) and long term maintenance costs.

Alternative (5) will be studied during preliminary design.

Project Concept Report Page 6  
Project Number: BR-0003-00(090) P.I. Number:0003090  
5/15/02  
County:Harris

**Attachments:**

1. Cost Estimates:
  - a. Preferred alternate (Const., R/W, and utilities)
  - b. Realignment alternate (Const., R/W, and utilities)
2. Typical sections
3. Bridge inventory
4. Minutes of Concept meeting (Omitted from this draft)
5. Location and Design Notice
6. Concept Report Rating Form
7. Need and Purpose
8. Traffic counts
9. Cover sheet

**PRELIMINARY COST ESTIMATE**

PREPARED BY: Jerome Henderson, Jr.

PROJECT LENGTH: 0.14 miles

ESTIMATED LETTING DATE:

 PROGRAMMING PROCESS
  CONCEPT DEVELOPMENT
  DURING PROJECT DEV.

| <b>PROJECT COST Preferred Alternative 1, Replacement Bridge</b> |                     |               |
|---|---------------------|---------------|
| <b>A. RIGHT-OF-WAY:</b>   |                     |               |
| 1. PROPERTY (LAND & EASEMENT)                                   | LGPA \$20,000       | \$ 0.00       |
| 2. DISPLACEMENTS: RES: 0, BUS: 0, M.H.: 0                       |                     | \$ 0.00       |
| 3. OTHER COST (ADM./COST, INFLATION)                            |                     | \$ 0.00       |
|   | <b>SUBTOTAL:A</b>   | \$ 0.00       |
| <b>B. REIMBURSABLE UTILITIES:</b>                               |                     |               |
| 1. RAILROAD   |                     | \$ 0.00       |
| 2. TRANSMISSION LINES   |                     | \$ 0.00       |
| 3. SERVICES   |                     | \$ 0.00       |
|   | <b>SUBTOTAL:B</b>   | \$ 0.00       |
| <b>C. CONSTRUCTION:</b>   |                     |               |
| 1. MAJOR STRUCTURES Bridge (90 x 31.3' @ \$55/sf)               |                     | \$ 154,940.00 |
| a. OVERPASSES   |                     | \$ 0.00       |
| b. RETAINING WALL   |                     | \$ 0.00       |
|   | <b>SUBTOTAL:C-1</b> | \$ 154,940.00 |
| <b>2. GRADING AND DRAINAGE:</b>                                 |                     |               |
| a. EARTHWORK  |                     | \$ 150,000.00 |
| b. DRAINAGE:  |                     |               |
| 1) Curb and Gutter  |                     | \$ 0.00       |
| 2) Longitudinal System  |                     |               |
| Catch Basins ( 0 @ \$2000/basin)                                |                     | \$ 0.00       |
| Drop Inlets ( 0 @ \$2000/inlet)                                 |                     | \$ 0.00       |
| Flared End Section ( 0 @ \$495/FES)                             |                     | \$ 0.00       |
| Safety End Section ( 0 @ \$400/SES)                             |                     | \$ 0.00       |
| MH ( 0 @ \$2014/MH)   |                     | \$ 0.00       |
| 24 inch pipe ( 0 ft @ \$32/ft)                                  |                     | \$ 0.00       |

**PROJECT COST Preferred Alternative 1, Replacement Bridge**

|  |             |               |
|--|-------------|---------------|
| SUBTOTAL:C-2   |             | \$ 150,000.00 |
| 3. BASE AND PAVING:  |             |               |
| a. AGGREGATE BASE (550 tons @ \$13/ton)                      |             | \$ 7,160.00   |
| b. ASPHALT PAVING:   |             |               |
| Milling (444 yd <sup>2</sup> @ \$4.00/ yd <sup>2</sup> )     | \$ 1,776.00 |               |
| Surface (135 tons @ \$50/ton)                                | \$ 6,750.00 |               |
| Binder (180 tons @ \$50/ton)                                 | \$ 9,000.00 |               |
| Base (173 tons @ \$50/ton)                                   | \$ 8,650.00 |               |
| SUBTOTAL:C-3.b   |             | \$ 33,336.00  |
| c. CONCRETE PAVING   |             | \$ 0.00       |
| d. OTHER   |             | \$ 0.00       |
| SUBTOTAL:C-3   |             | \$ 40,496.00  |
| 4. LUMP ITEMS:   |             |               |
| a. GRASSING ( 0.69 acre @ \$1000/acre)                       |             | \$ 690.00     |
| b. CLEARING AND GRUBBING                                     |             | \$ 15,000.00  |
| c. LANDSCAPING   |             | \$ 0.00       |
| d. EROSION CONTROL (LUMP)                                    |             | \$ 24,000.00  |
| e. TRAFFIC CONTROL   |             | \$ 30,000.00  |
| SUBTOTAL:C-4   |             | \$ 69,690.00  |
| 5. MISCELLANEOUS:  |             |               |
| a. LIGHTING  |             | \$ 0.00       |
| b. SIGNING - MARKING   |             | \$ 420.00     |
| c. GUARDRAIL   |             | \$            |
| W Beam (400 ft @ \$13/ft)                                    | \$ 5,200.00 |               |
| TP 12 Anchor (4 @ \$1,350)                                   | \$ 5,400.00 |               |
| d. SIDEWALK ( 0 yd <sup>2</sup> @ \$25.75/ yd <sup>2</sup> ) | \$ 0.00     |               |
| SUBTOTAL:C-5   |             | \$ 11,020.00  |
| 6. SPECIAL FEATURES: Removal of Existing Bridge              |             |               |
| SUBTOTAL:C-6   |             | \$ 10,000.00  |

| <b>ESTIMATE SUMMARY Preferred Alternative 1, Replacement Bridge</b> |               |                      |
|---|---------------|----------------------|
| A. RIGHT-OF-WAY ( )   | LGPA \$20,000 | \$ 0.00              |
| B. REIMBURSABLE UTILITIES   |               | \$ 0.00              |
| <b>C. CONSTRUCTION</b>  |               |                      |
| 1. MAJOR STRUCTURES   |               | \$ 154,940.00        |
| 2. GRADING AND DRAINAGE   |               | \$ 150,000.00        |
| 3. BASE AND PAVING  |               | \$ 33,336.00         |
| 4. LUMP ITEMS   |               | \$ 69,690.00         |
| 5. MISCELLANEOUS  |               | \$ 11,020.00         |
| 6. SPECIAL FEATURES   |               | \$ 10,000.00         |
| <b>SUBTOTAL CONSTRUCTION COST</b>                                   |               | <b>\$ 428,990.00</b> |
| E. & C. (10%)   |               | \$ 42,900.00         |
| INFLATION (5% PER YEAR)   |               | \$ 47,300.00         |
| NUMBER OF YEARS   | 2             |                      |
| <b>TOTAL CONSTRUCTION COST</b>                                      |               | <b>\$ 519,190.00</b> |
| <b>GRAND TOTAL PROJECT COST</b>                                     |               | <b>\$ 519,190.00</b> |

This project is 100 percent in Harris County.

PRELIMINARY COST ESTIMATE OF REALIGNMENT ALTERNATE

PREPARED BY: Joe Brisbane

PROJECT LENGTH: 0.25 miles

ESTIMATED LETTING DATE:

PROGRAMMING PROCESS  CONCEPT DEVELOPMENT  DURING PROJECT DEV.

| <b>PROJECT COST Alternative 2 – Realignment</b>                                |               |
|--|---------------|
| <b>A. RIGHT-OF-WAY:</b>  |               |
| 1. PROPERTY (LAND & EASEMENT) <span style="float: right;">LGPA \$20,000</span> | \$ 0.00       |
| 2. DISPLACEMENTS: RES: 0, BUS: 0, M.H.: 0                                      | \$ 0.00       |
| 3. OTHER COST (ADM./COST, INFLATION)   | \$ 0.00       |
| SUBTOTAL:A   | \$ 20,000.00  |
| <b>B. REIMBURSABLE UTILITIES:</b>  |               |
| 1. RAILROAD  | \$ 0.00       |
| 2. TRANSMISSION LINES  | \$ 0.00       |
| 3. SERVICES  | \$ 0.00       |
| SUBTOTAL:B   | \$ 0.00       |
| <b>C. CONSTRUCTION:</b>  |               |
| 1. MAJOR STRUCTURES Bridge (30 x 28' @ \$75/sf)                                | \$ 62,720.00  |
| a. OVERPASSES  | \$ 0.00       |
| b. RETAINING WALL  | \$ 0.00       |
| SUBTOTAL:C-1   | \$ 62,720.00  |
| <b>2. GRADING AND DRAINAGE:</b>  |               |
| a. EARTHWORK   | \$ 200,000.00 |
| b. DRAINAGE:   |               |
| 1) Curb and Gutter   | \$ 0.00       |
| 2) Longitudinal System   |               |
| Catch Basins ( 0 @ \$2000/basin)   | \$ 0.00       |
| Drop Inlets ( 0 @ \$2000/inlet)  | \$ 0.00       |
| Flared End Section ( 0 @ \$495/FES)  | \$ 0.00       |
| Safety End Section ( 0 @ \$400/SES)  | \$ 0.00       |
| MH ( 0 @ \$2014/MH)  | \$ 0.00       |
| 24 inch pipe ( 0 ft @ \$32/ft)   | \$ 0.00       |

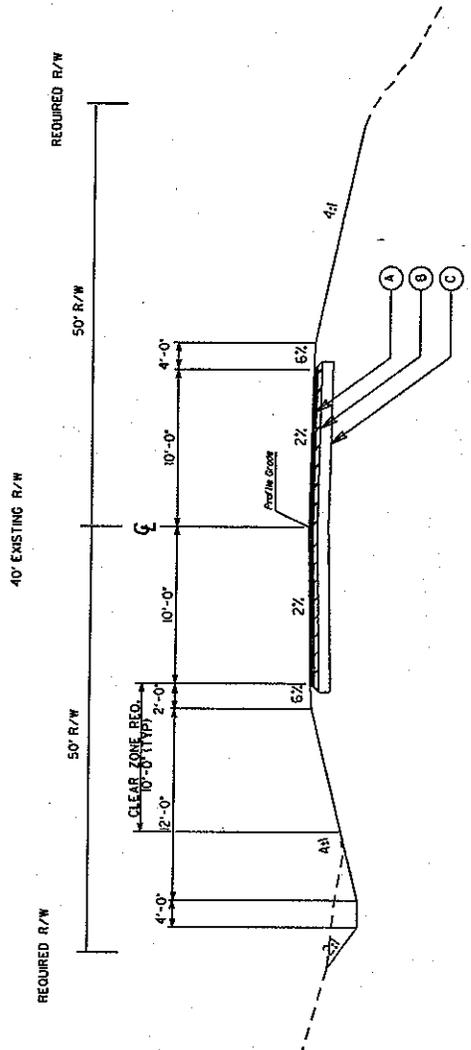
**PROJECT COST Alternative 2 – Realignment**

|  |              |               |
|--|--------------|---------------|
| SUBTOTAL:C-2   |              | \$ 200,000.00 |
| 3. BASE AND PAVING:  |              |               |
| a. AGGREGATE BASE (6083 tons @ \$13/ton)                     |              | \$ 79,079.00  |
| b. ASPHALT PAVING:   |              |               |
| Milling (444 yd <sup>2</sup> @ \$4.00/ yd <sup>2</sup> )     | \$ 1,776.00  |               |
| Surface (250 tons @ \$50/ton)                                | \$ 12,500.00 |               |
| Binder (3336 tons @ \$50/ton)                                | \$ 16,650.00 |               |
| Base (545 tons @ \$50/ton)                                   | \$ 27,250.00 |               |
| SUBTOTAL:C-3.b   |              | \$ 58,176.00  |
| c. CONCRETE PAVING   |              | \$ 0.00       |
| d. OTHER   |              | \$ 0.00       |
| SUBTOTAL:C-3   |              | \$ 137,255.00 |
| 4. LUMP ITEMS:   |              |               |
| a. GRASSING ( 0.80 acre @ \$1000/acre)                       |              | \$ 800.00     |
| b. CLEARING AND GRUBBING                                     |              | \$ 10,000.00  |
| c. LANDSCAPING   |              | \$ 0.00       |
| d. EROSION CONTROL (LUMP)                                    |              | \$ 24,000.00  |
| e. TRAFFIC CONTROL   |              | \$ 30,000.00  |
| SUBTOTAL:C-4   |              | \$ 64,800.00  |
| 5. MISCELLANEOUS:  |              |               |
| a. LIGHTING  |              | \$ 0.00       |
| b. SIGNING - MARKING   |              | \$ 420.00     |
| c. GUARDRAIL   |              | \$            |
| W Beam (400 ft @ \$13/ft)                                    | \$ 5,200.00  |               |
| TP 12 Anchor (4 @ \$1,350)                                   | \$ 5,400.00  |               |
| d. SIDEWALK ( 0 yd <sup>2</sup> @ \$25.75/ yd <sup>2</sup> ) | \$ 0.00      |               |
| SUBTOTAL:C-5   |              | \$ 11,020.00  |
| 6. SPECIAL FEATURES: Removal of Existing Bridge              |              |               |
| SUBTOTAL:C-6   |              | \$ 20,000.00  |

| <b>ESTIMATE SUMMARY Alternative 2 – Realignment</b> |               |                      |
|---|---------------|----------------------|
| A. RIGHT-OF-WAY ( )                                 | LGPA \$20,000 | \$ 0.00              |
| B. REIMBURSABLE UTILITIES                           |               | \$ 0.00              |
| C. CONSTRUCTION                                     |               |                      |
| 1. MAJOR STRUCTURES                                 |               | \$ 62,720.00         |
| 2. GRADING AND DRAINAGE                             |               | \$ 200,000.00        |
| 3. BASE AND PAVING                                  |               | \$ 137,255.00        |
| 4. LUMP ITEMS                                       |               | \$ 64,800.00         |
| 5. MISCELLANEOUS                                    |               | \$ 11,020.00         |
| 6. SPECIAL FEATURES                                 |               | \$ 20,000.00         |
| SUBTOTAL CONSTRUCTION COST                          |               | \$ 475,795.00        |
| E. & C. (10%)                                       |               | \$ 47,579.00         |
| INFLATION (5% PER YEAR)                             |               | \$ 78,505.00         |
| NUMBER OF YEARS                                     | 3             |                      |
| TOTAL CONSTRUCTION COST                             |               | \$ 601,879.00        |
| <b>GRAND TOTAL PROJECT COST</b>                     |               | <b>\$ 601,879.00</b> |

This project is 100 percent in Harris County.

|       |                |              |
|-------|----------------|--------------|
| STATE | PROJECT NUMBER | SHEET NUMBER |
| GA.   | BR-0003-006500 | 10           |
|       | ISSUE DATE     |              |
|       |                |              |



CR219/BROWN CREEK ROAD OVER BROWN CREEK

- ⓐ 165 lbs/yd<sup>3</sup> 12.5mm SUPERPAVE GP 2 ONLY (MDL B)
- ⓑ 220 lbs/yd<sup>3</sup> 19mm SUPERPAVE GP1 OR GP2 ONLY (MDL B)
- ⓒ 6" GRADED AGGREGATE BASE COURSE

|   |   |             |                  |               |
|---|---|-------------|------------------|---------------|
| STATE OF GEORGIA<br>DEPARTMENT OF TRANSPORTATION<br>OFFICE OF CONSULTANT DESIGN | URS<br>225 FLEMING AVENUE, SUITE 200<br>ATLANTA, GEORGIA 30329<br>TEL: 404.521.2000 | BROWN CREEK | TYPICAL SECTIONS | SCALE: 1"=10' |
|---|---|-------------|------------------|---------------|

# BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 145-5033-0

Harris County

SUFF. RATING: 26.0

## Location & Geography

\* Structure I.D. No.: 145-5033-0  
 \* 200 Bridge Information: 06  
 \* 6A Feature Int.: BROWN CREEK  
 \* 6B Critical Bridge: 0  
 \* 7A Route Number Carried: CR00219  
 \* 7B Facility Carried: BROWN CREEK ROAD  
 \* 9 Location: 5 MI.NW OF WAVERLY HALL  
 \* 2 DOT District: 3  
 \* 207 Year Photo: 1997  
 \* 91 Inspection Frequency: 24 Date: 01/05/2000  
 \* 92A Fract Crit Insp Freq: 0.00 Date: 0000  
 \* 92B Underwater Insp Freq: 0.00 Date: 0000  
 \* 92C Other Spc. Insp Freq: 0.00 Date: 0000  
 \* 4 Place Code: 00000

\* 5 Inventory Route (O/U): 1  
 Type: 4  
 Designator: 1  
 Number: 00219  
 Direction: 0

\* 16 Latitude: 32-46.2  
 \* 17 Longitude: 084-46.2

98 Border Bridge: 000 %Shared: 00  
 /99 ID Number: 0000000000000000

\* 100 Defense Highway: 0  
 \* 101 Parallel Structure: N  
 \* 102 Direction of Traffic: 3  
 264 Road Inventory Mile Post: 001.27

\* 208 Inspection Area: 08 Initials: JLA  
 \* Location I.D. No: 145-00219X-001.27S  
 \* XReferen I.D. No: 000-000000-000.000

## Signs & Attachments

\* 104 Highway System: 0  
 \* 26 Functional Classification: 09  
 \* 204 Federal Route Type: 0 No: 00000  
 \* 110 Truck Route: 0  
 206 School Bus Route: 1  
 217 Benchmark Elevation: 0.00  
 218 Datum: 0  
 \* 19 Bypass Length: 6  
 \* 20 Toll: 3  
 \* 21 Maintenance: 02  
 \* 22 Owner: 02  
 \* 31 Design Load: 0  
 37 Historical Significance: 5  
 205 Congressional District: 03  
 \* 27 Year Constructed: 1940  
 106 Year Reconstructed: 1978  
 33 Bridge Median: 0  
 34 Skew: 00  
 35 Structure Flared: 0  
 38 Navigation Control: 0  
 213 Special Steel Design: 0  
 267 Type of Paint: 1

\* 42 Type Service On: 1  
 Under: 5  
 214 Movable Bridge:  
 203 Type Bridge: C-K-M-I  
 259 Pile Encasement: 3  
 \* 43 Structure Type Main: 3 02  
 45 No. Spans Main: 001  
 44 Structure Type Appr: 0 0  
 46 No. Spans Appr: 0000  
 226 Bridge Curve Horz: 0 Vert: 1  
 111 Pier Protection: 0  
 107 Deck Structure Type: 8

108 Wearing Surface Type: 7  
 Membrane: 0  
 Protection: 0

223 Expansion Joint Type: 00  
 242 Deck Drains: 0  
 243 Parapet Location: 0  
 Height: 0  
 Width: 0  
 238 Curb: 0.00  
 239 Handrail: 00  
 \* 240 Median Barrier Rail: 0  
 241 Bridge Median Height: 0  
 Width: 0  
 \* 230 Guardrail Loc Dir Rear: 0  
 Fwrd: 0  
 Oppo Dir Rear: 0  
 Fwrd: 0  
 244 Approach Slab: 0  
 224 Retaining Wall: 0  
 233 Posted Speed Limit: 35  
 236 Warning Sign: 0  
 234 Delineator: 0  
 235 Hazard 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 GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 145-5033-0

Harris County

SUFF. RATING: 26.0

## Programming Data

201 Project No: UNKNOWN  
 202 Plans Available: 0  
 249 Prop. Proj No: 00000000000000000000000000000000  
 250 Approval Status: 0000  
 251 P.I. No: 000000  
 252 Contract Date: 0000  
 260 Seismic No: 00000  
 75 Type Work: 31 1  
 94 Bridge Imp. Cost: \$ 32  
 95 Roadway Imp. Cost: \$ 110  
 96 Total Imp. Cost: \$ 159  
 76 Imp. Length: 001351  
 97 Imp. Year: 1990  
 114 Future ADT: 000150 Year: 2019

## Measurements

\* 29 ADT: 000100 Year: 1999  
 109 % Trucks: 9  
 \* 28 Lanes On: 01 Under: 00  
 210 No. Tracks On: 00 Under: 00  
 \* 48 Max. Span Length: 0031  
 \* 49 Structure Length: 31  
 51 Br. Rdwy. Width: 14.4  
 52 Deck Width: 14.4  
 \* 47 Tot. Horz. Cl: 14.4  
 50 Curb/Sdewlk Width: 0.0/0.0  
 32 Approach Rdwy Width: 020  
 \* 229 Shlder Width:  
     Rear Lt: 0.0 Type: 7 Rt: 0.0  
     Fwrd Lt: 0.0 Type: 7 Rt: 0.0  
     Pvment Width:  
         Rear: 20.0 Type: 7  
         Fwrd: 20.0 Type: 7  
     Intersection Rear: 0 Fwrd: 0  
 36 Safety Features Br. Rail: 0  
     Transition: 0  
     App. G. Rail: 0  
     App. Rail End: 0  
 53 Minimum Cl. Over: 99' 99"  
     Under: N 00' 00"  
 \* 228 Min. Vert. Cl  
     Act. Odm. Dir: 99' 99"  
     Oppo. Dir: 99' 99"  
     Posted Odm. Dir: 00' 00"  
     Oppo. Dir: 00' 00"  
 55 Lateral Undercl. Rt: N 99.9  
 56 Lateral Undercl. Lt: 0.0  
 \* 10 Max Min Vert Cl: 99' 99" Dir: 0  
 39 Nav Vert Cl: 000 Horz: 0000  
 116 Nav Vert Cl Closed: 000  
 245 Deck Thickness Main: 0.0  
     Deck Thick Approach: 0.0  
 246 Overlay Thickness: 0.0  
 211 Tons Structural Steel: 7.0  
 212 Year Last Painted: Sup: 1940 Sub: 0000

## Ratings

66 Inventory Type: 2 Rating: 15  
 64 Operating Type: 2 Rating: 21  
 231 Calculated Loads  
     H-Modified: 11 1  
     HS-Modified: 17 1  
     Type 3: 14 1  
     Type.3s2: 21 1  
     Timber: 21 1  
     Piggyback: 00 0  
 261 H Inventory Rating: 10  
 262 H Operating Rating: 14  
 67 Structural Evaluation: 4  
 58 Deck Condition: 4  
 59 Superstructure Condition: 5  
 \* 227 Collision Damage: 0  
 60A Substructure Condition: 4  
 60B Scour Condition: 7  
 60C Underwater Condition: N  
 71 Waterway Adequacy: 6  
 61 Channel Protection Cond: 6  
 68 Deck Geometry: 6  
 69 UnderClr. Horz/Vert: N  
 72 Appr. Alignment: 4  
 62 Culvert: N

## Posting Data

70 Bridge Posting Required: 2  
 41 Struct Open, Posted, Cl: P  
 \* 103 Temporary Structure: 0  
 232 Posted Loads H-Modified: 11  
     HS-Modified: 17  
     Type 3: 14  
     Type 3S2: 21  
     Timber: 21  
     Piggyback: 00  
 253 Notification Date: 01/03/1996  
 253 Fed Notify Date: 0000 0

## Hydraulic Data

215 Waterway Data  
 Highway Elev: 0000.0 Year: 0000  
 Flood Elev: 0000.0 Freq: 00  
 Avg. Streambed Elev: 0000.0  
 Drainage Area: 00000  
 Area of Opening: 000000  
 113 Scour Critical: 6  
 216 Water Depth: 01.0 Br Height: 10.8  
 222 Slope Protection: 0  
 221 Spur Dikes Rear: 0 Fwrd: 0  
 219 Fender System: 0  
 220 Dolphin: 0  
 223 Culvert Cover: 000  
     Type:  
     No Barrels: 0  
     Width: 0.0  
     Height: 0.0  
     Length: 0  
     Apron: 0  
 \* 265 U/W Insp. Area: 0 Diver: ZZZ

\* Location I.D. No: 145-00219X-001.27S  
 \* XReferen I.D. No: 000-0000000-000.000

**NOTICE OF LOCATION DESIGN APPROVAL**

**BR-0003-00(090) HARRIS COUNTY**

**P. I. No. 0003090**

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of the above project.

Date of Location Design Approval: FEBRUARY 24, 2003

This project is the 0.09 mile replacement of the SR 219/Brown Creek Rd bridge over Brown Creek 4.0 miles southwest of Shiloh. A new bridge over the creek will be constructed to replace the currently deficient one. SR 219/Brown Creek Rd will be closed to through traffic during the construction of the new bridge. Traffic will be detoured along SR 116, CR224/Oak Mountain Rd and CR225/Irvin Rd. The project lies entirely within Harris County and within Land District 2 and Land Lots 38,58,59, and 71.

Drawings of maps or plats of the proposed project as approved are on file and are available for inspection at the Georgia Department of Transportation.

**Gary Mailhot, Area Engineer  
Department Of Transportation  
Columbus District Office  
3600 Schatulga Road  
Columbus, Georgia 31907  
(706) 568-2165**

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

**Otis Clark, Office of Consultant Design  
Department Of Transportation  
NO. 2. Capitol Square  
Atlanta, Georgia 30334  
(404) 463-6265  
Otis.Clark@dot.state.ga.us**

Any written request of communication in reference to this project or notice SHOULD include the Project and P.I. Numbers as noted at the top of this notice.

**NEED AND PURPOSE**  
**PROJECT BR-0003-00(090) HARRIS COUNTY**  
**PI No. 0003090**  
**Bridge Replacement**

Project Number BR-0003-00(090) will replace the existing, structurally deficient bridge located on County Road (CR) 219 over Brown Creek in Harris County approximately 5 miles northwest of Waverly Hall, Georgia.

This bridge was constructed in 1940 and reconstructed in 1978; it has a sufficiency rating of 26. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating of less than 50 should be replaced rather than improved. This project will replace the existing bridge with a structurally adequate bridge.

County Road 219 (Brown Creek Road) is functionally classified as a rural major collector and is designated as a school bus route. The posted speed limit is 35 miles per hour. The Annual Average Daily Traffic (ADT) along this section of roadway has been projected to be 200 in 2007 and 300 in 2027 with 3 percent trucks. County Road 20 is not part of the Georgia Bicycle Statewide Network. Replacing this bridge will bring it up to current design standards and improve the operation and safety of this roadway.

# Department of Transportation State of Georgia

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## INTERDEPARTMENT CORRESPONDENCE

**FILE** BR-0003-00(090) Harris  
P.I. 0003088

**OFFICE** Environment/ Location

**DATE** November 9, 2001

**FROM** Harvey D. Keeper, State Environmental/ Location Engineer

**TO** Jim Chambers, P.E., State Consultant Design Engineer  
**Attn: Ted Cashin**

**SUBJECT** CR 219/Brown Creek Road @ Brown Creek

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

Existing 2001 ADT = 150  
2007 ADT = 200  
2027 ADT = 300  
K = 10%  
D = 60%  
T = 1%  
24 HR T = 3%  
SU = 2%  
COMB = 1%

If you have any questions concerning this information please contact  
Teresa Williamson at (404)699-4458

HDK:TJW

|       |                |      |       |
|-------|----------------|------|-------|
| STATE | PROJECT NUMBER | DATE | SCALE |
| GA.   | BR-0003-001090 | 1    | 1"    |

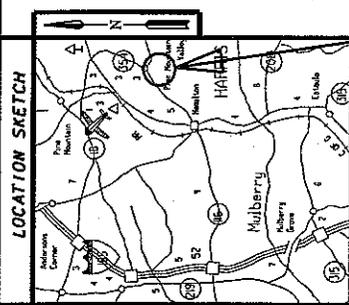
# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## PLAN AND PROFILE OF PROPOSED CR 219/BROWN CREEK ROAD HARRIS COUNTY

**FEDERAL PROJECT  
BR-0003-001090)**

FEDERAL ROUTE NO: N/A  
STATE ROUTE NO: N/A  
P.L. NO. 0003090

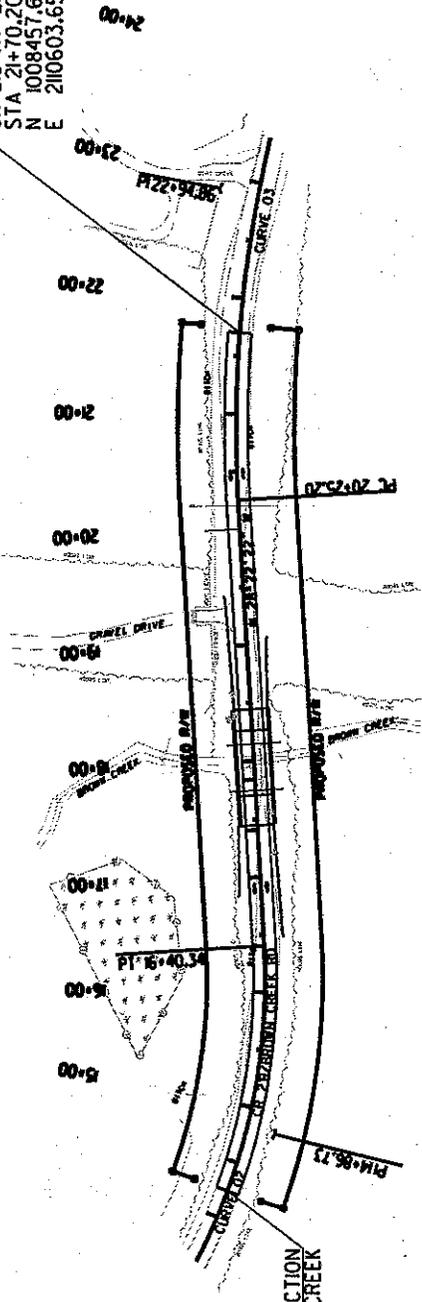
PROJECT NO. BR-0003-001090



|                       |               |
|-----------------------|---------------|
| DESIGN DATA:          |               |
| TRAFFIC A.D.T.:       | 1200/1 (2027) |
| BRIDGE CREEK ROAD     | 200 300       |
| TRAFFIC D.M.P.T.      | 12 10         |
| DIRECTIONAL DIST. SAC | 12 10         |
| SPEED DESIGN:         | 35 MPH        |
| FUNCTIONAL CLASS:     | RDIAL LOCAL   |

FUNCTIONAL CLASSIFICATION: RURAL LOCAL  
POP CLASSIFICATION: UNPOP EXISTING

LIMITS OF CONSTRUCTION  
CR 219 AT BROWN CREEK  
STA 14+24.68  
N 1007781.5589  
E 2110907.7464



LOCATION AND DESIGN APPROVAL DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 RECOMMENDED FOR SUBMISSION BY: \_\_\_\_\_  
 SUBMITTED BY: \_\_\_\_\_

|                               |  |
|-------------------------------|--|
| LENGTH OF PROJECT             | TOTAL HARRIS CO (090) BROWN CREEK ROAD MILES |
| NET LENGTH OF ROADWAY         | 0.12   |
| NET LENGTH OF BRIDGE CULVERTS | 0.02   |
| NET LENGTH OF PROJECT         | NA   |
| GROSS LENGTH OF EXCERPTION    | 0.14   |
| GROSS LENGTH OF PROJECT       | 0.14   |

NOTE 1  
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA", "STATE HIGHWAY DEPARTMENT", "GEORGIA STATE HIGHWAY DEPARTMENT", "HIGHWAY DEPARTMENT", OR "DEPARTMENT WHEN THE CONTEXT THEREOF MEANS THE DEPARTMENT OF TRANSPORTATION OF GEORGIA HEREIN, AND SHALL BE DEEMED TO BEAM THE DEPARTMENT OF TRANSPORTATION.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE AS SHOWN ON THE DRAWINGS AND NOTES. HOWEVER, THE SAME ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF THE DEPARTMENT OF TRANSPORTATION OF GEORGIA. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

THIS PROJECT IS LOCATED 100% WITHIN HARRIS COUNTY  
 THIS PROJECT IS LOCATED 100% IN CONGRESSIONAL DISTRICT NO. 3

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
Office of Consultant Design

PROJECT CONCEPT REPORT

CR219/BROWN CREEK ROAD OVER BROWN CREEK

Project Number: BR-0003-00(090)  
P.I. NO. 0003090  
County: HARRIS

FEDERAL ROUTE NO: N/A  
STATE ROUTE NO: N/A  
COUNTY ROUTE NO: 219

Prepared by:

DATE 1-22-03

DATE 1-27-03

Al Clark  
Project Manager  
James B. Archer WBA  
State Consultant Design Engineer

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

|                |  |
|----------------|--|
| <u>DATE</u>    | <u>State Transportation Planning Administrator</u>   |
| <u>DATE</u>    | <u>Financial Management Administrator</u>            |
| <u>DATE</u>    | <u>State Environmental / Location Engineer</u>       |
| <u>1/29/03</u> | <u>David J. Mullins, P.E.</u>                        |
| <u>DATE</u>    | <u>Project Review Engineer</u>                       |
| <u>DATE</u>    | <u>State Traffic Safety and Design Engineer</u>      |
| <u>DATE</u>    | <u>State Bridge &amp; Structural Design Engineer</u> |

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
Office of Consultant Design

PROJECT CONCEPT REPORT

CR219/BROWN CREEK ROAD OVER BROWN CREEK

Project Number: BR-0003-00(090)  
P.I. NO. 0003090  
County: HARRIS

FEDERAL ROUTE NO: N/A  
STATE ROUTE NO: N/A  
COUNTY ROUTE NO: 219

Prepared by:

DATE 1-22-03

DATE 1-27-03

*Rob Clark*  
Project Manager  
*James B. Fisher* *MSA*  
State Consultant Design Engineer

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

|                 |   |
|-----------------|---|
| <u>24-03</u>    | <u><i>Martin Rosen</i></u>                  |
| DATE            | State Transportation Planning Administrator |
| <u>        </u> | <u>        </u>                             |
| DATE            | Financial Management Administrator          |
| <u>        </u> | <u>        </u>                             |
| DATE            | State Environmental / Location Engineer     |
| <u>        </u> | <u>        </u>                             |
| DATE            | Project Review Engineer                     |
| <u>        </u> | <u>        </u>                             |
| DATE            | State Traffic Safety and Design Engineer    |
| <u>        </u> | <u>        </u>                             |
| DATE            | State Bridge & Structural Design Engineer   |

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
Office of Consultant Design

PROJECT CONCEPT REPORT

CR219/BROWN CREEK ROAD OVER BROWN CREEK

Project Number: BR-0003-00(090)

P.I. NO. 0003090

County: HARRIS

FEDERAL ROUTE NO: N/A

STATE ROUTE NO: N/A

COUNTY ROUTE NO: 219

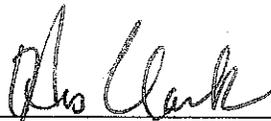
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DATE

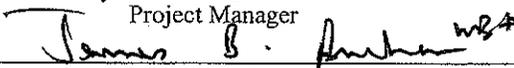
1-22-03

DATE

1-27-03



Project Manager



State Consultant Design Engineer

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

DATE

State Transportation Planning Administrator

DATE

Financial Management Administrator

DATE

State Environmental / Location Engineer

DATE

Project Review Engineer

DATE

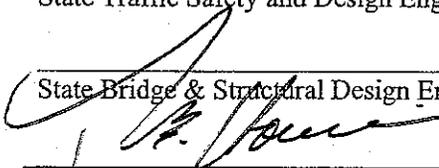
State Traffic Safety and Design Engineer

DATE

State Bridge & Structural Design Engineer

2-7-03

DATE



District Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
Office of Consultant Design

PROJECT CONCEPT REPORT

CR219/BROWN CREEK ROAD OVER BROWN CREEK

Project Number: BR-0003-00(090)  
P.I. NO. 0003090  
County: HARRIS

FEDERAL ROUTE NO: N/A  
STATE ROUTE NO: N/A  
COUNTY ROUTE NO: 219

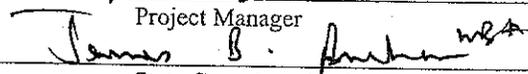
Prepared by:

DATE 1-22-03

DATE 1-27-03



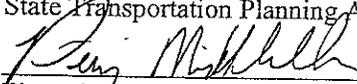
Project Manager



State Consultant Design Engineer

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DATE  
1/31/03  
DATE

State Transportation Planning Administrator  
  
Financial Management Administrator

DATE

State Environmental / Location Engineer

DATE

Project Review Engineer

DATE

State Traffic Safety and Design Engineer

DATE

State Bridge & Structural Design Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
Office of Consultant Design

PROJECT CONCEPT REPORT

CR219/BROWN CREEK ROAD OVER BROWN CREEK

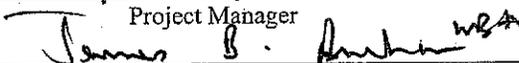
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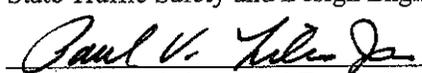
Prepared by:

DATE 1-22-03

DATE 1-27-03

  
Project Manager  
  
State Consultant Design Engineer

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|                               |   |
|-------------------------------|---|
| <u>DATE</u>                   | <u>State Transportation Planning Administrator</u>  |
| <u>DATE</u>                   | <u>Financial Management Administrator</u>   |
| <u>DATE</u>                   | <u>State Environmental / Location Engineer</u>  |
| <u>DATE</u>                   | <u>Project Review Engineer</u>  |
| <u>DATE</u>                   | <u>State Traffic Safety and Design Engineer</u>   |
| <u>2/20/03</u><br><u>DATE</u> | <u></u><br><u>State Bridge &amp; Structural Design Engineer</u> |