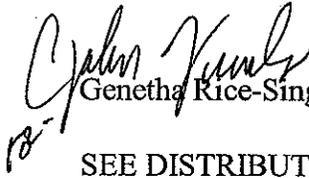


ORIGINAL TO GENERAL FILES

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 370822-, Coweta County **OFFICE** Preconstruction
BRZLB--0077-00(007)
CR 129/Moore Road over White Oak Creek Tributary-
Bridge Replacement **.DATE** January 2, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

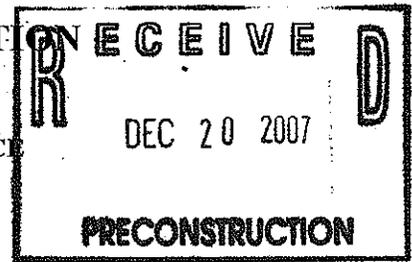
Attachment

DISTRIBUTION:

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

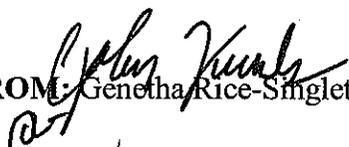
INTERDEPARTMENTAL CORRESPONDENCE



FILE: P.I. No. 370822-, Coweta County
BRZLB-0077-00(007)
CR 129/Moore Road over White Oak Creek Tributary-
Bridge Replacement

OFFICE: Preconstruction

DATE: October 26, 2007

FROM:  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO:  Gerald M. Ross, P.E., Chief Engineer

SUBJECT: *PROJECT CONCEPT REPORT*

This project is the replacement of a structurally deficient bridge on CR 129/Moore Road over White Oak Creek Tributary, 3.0 miles east of Moreland, Georgia. The existing bridge, constructed in 1970, is a 40' x 22.5' concrete structure with a sufficiency rating of 26. County Road 129 at this location is a rural two lane roadway with 10' lanes with variable width' grass shoulders with a posted speed of 55 MPH. County Road 129 is classified as a rural local road. The existing traffic (2006) along this section of CR 129 is 520 VPD. The design year (2031) volumes are projected to be 1300 VPD. The proposed speed design is 45 MPH.

The project proposes to construct a new 100' x 32' concrete bridge over White Oak Creek Tributary at the existing bridge site. A cast-in-place reinforced concrete T-beam bridge is selected for the replacement because of the overhead construction clearance limitations associated with the existing high voltage transmission lines located directly over the proposed bridge location. The approaches will consist of two, 12' lanes with 4' rural shoulders (2' paved). A design variance is anticipated for the proposed 4' shoulder width which does not meet the minimum requirements of the GDOT Design Policy Manual. The existing bridge will be closed to traffic during construction. Traffic will be detoured via an off-site detour.

Environmental concerns include requiring a COE 404 permit; Categorical Exclusion will be prepared; a Public hearing is not required; Time saving procedures is appropriate.

P.I. No. 370822-, Coweta County
October 26, 2007

The estimated costs for this project are:

	PROPOSED	APPROVED	FUNDING	PROG DATE
Construction (includes E&C)	\$ 1,170,000	\$ 1,170,000	L110	LR
Right-of-way & Utilities	Local	Local	Local	

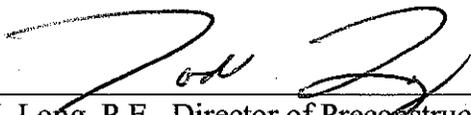
* Coweta County signed PFA for PE and utilities on 2-27-07/ Right-of-way and construction to be done by future agreements.

I recommend this project concept be approved.


GRS: JDQ

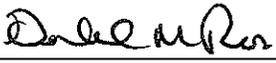
Attachment

CONCUR



Todd I. Long, P.E., Director of Preconstruction

APPROVED



Gerald M. Ross, P.E., Chief Engineer

NOTICE OF LOCATION AND DESIGN APPROVAL

BRZLB-077(7)

Coweta County

P.I. No. 370822

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

The date of approval is January 2, 2008.

This project is approximately 0.3 miles long. It spans from mile 0.17 to 0.47 on County Route 129, 0.32 miles south of the intersection of CR 129 and CR 130 (Cannon Road) in Coweta County, 1st District, Land Lot 10. The project is located within the 3rd Congressional District and Georgia Militia District 1711.

This project will replace the structurally deficient bridge over White Oak Creek Tributary on County Route 129 in Coweta County.

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

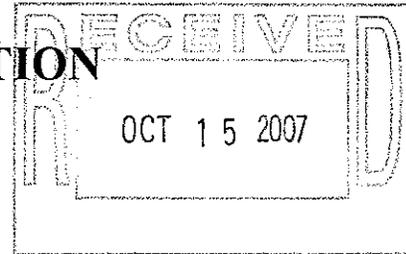
Havard Seldon
Area Engineer
Georgia Department of Transportation
Havard.Seldon@dot.state.ga.us
1107 Hogansville Road
LaGrange, Georgia 30241
(706)845-4115

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

William J. Rountree, P.E.
District Design Engineer
Georgia Department of Transportation
Bill.Rountree@dot.state.ga.us
115 Transportation Boulevard
Thomaston, Georgia 30286
(706)646-6990

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

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

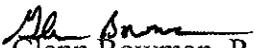


INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No. 370822

OFFICE: Environment/Location

DATE: October 15, 2007

FROM: 
Glenn Bowman, P.E., State Environmental/Location Engineer

TO: Genetha Rice-Singleton, Assistant Director of Preconstruction

**SUBJECT: PROJECT CONCEPT REPORT
BRZLB-077(7) / Coweta County
Bridge Replacement on CR 129 (Moore Rd.) over white Oak Creek Tributary**

The above subject Concept Report has been reviewed and appears satisfactory subject to the following comments:

- 1) The Bridge was built in 1970 and is not listed in GHBS.
- 2) This Project will require PM2.5 documentation.

If you have any questions, please contact me at (404) 699-4401.

GB:lc

Attachment

cc: Brian Summers
Jamie Simpson
Keith Golden
Angela Alexander
Thomas Howell
Paul Liles

Recommendation for approval:

DATE 9/26/07

William J. [Signature]
Project Manager

DATE 9/20/07

[Signature]
District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE 10/12/07

[Signature]
State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

DATE _____

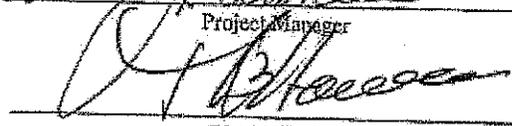
State Bridge Engineer

Recommendation for approval:

DATE 9/20/07


Project Manager

DATE 9/26/07


District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Eocation Engineer

DATE 10-9-07


State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge Engineer

370822, COWETA

Recommendation for approval:

DATE 9/26/07

William J. [Signature]
Project Manager

DATE 9/20/07

[Signature]
District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

DATE 10/3/07

Paul V. [Signature]
State Bridge Engineer

Recommendation for approval:

DATE 9/26/07


Project Manager

DATE 9/26/07


District Engineer

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

DATE 10/1/07


State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

District 3 Design

PROJECT CONCEPT REPORT

Project Number: BRZLB-~~077(7)~~ ^{- 0077-00(007)}

County: Coweta

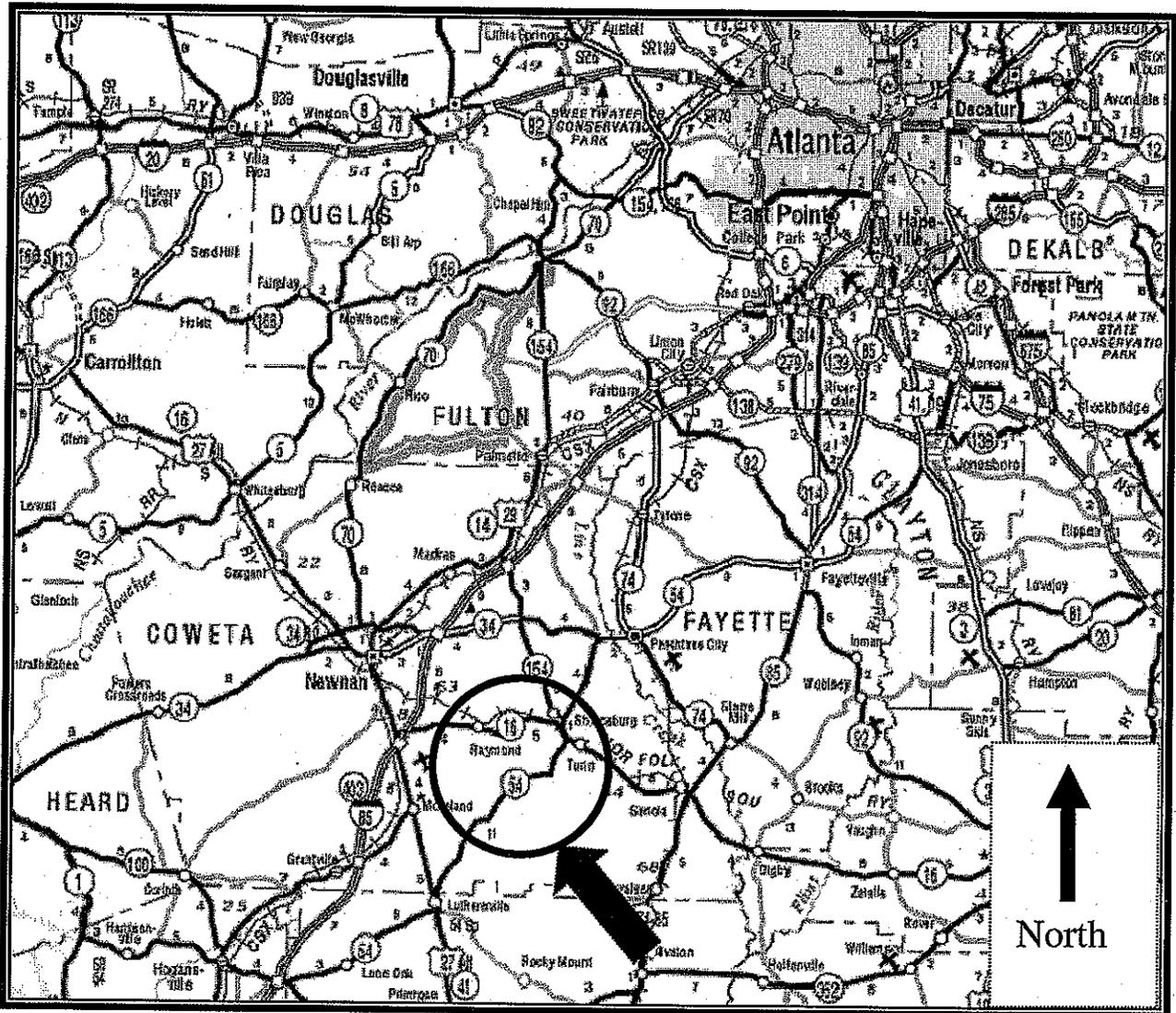
P. I. Number: 370822

Federal Route Number: N/A

State Route Number: N/A

Regional Location Sketch

Bridge Replacement on CR 129 (Moore Road) over White Oak Creek Tributary
Coweta County, GA

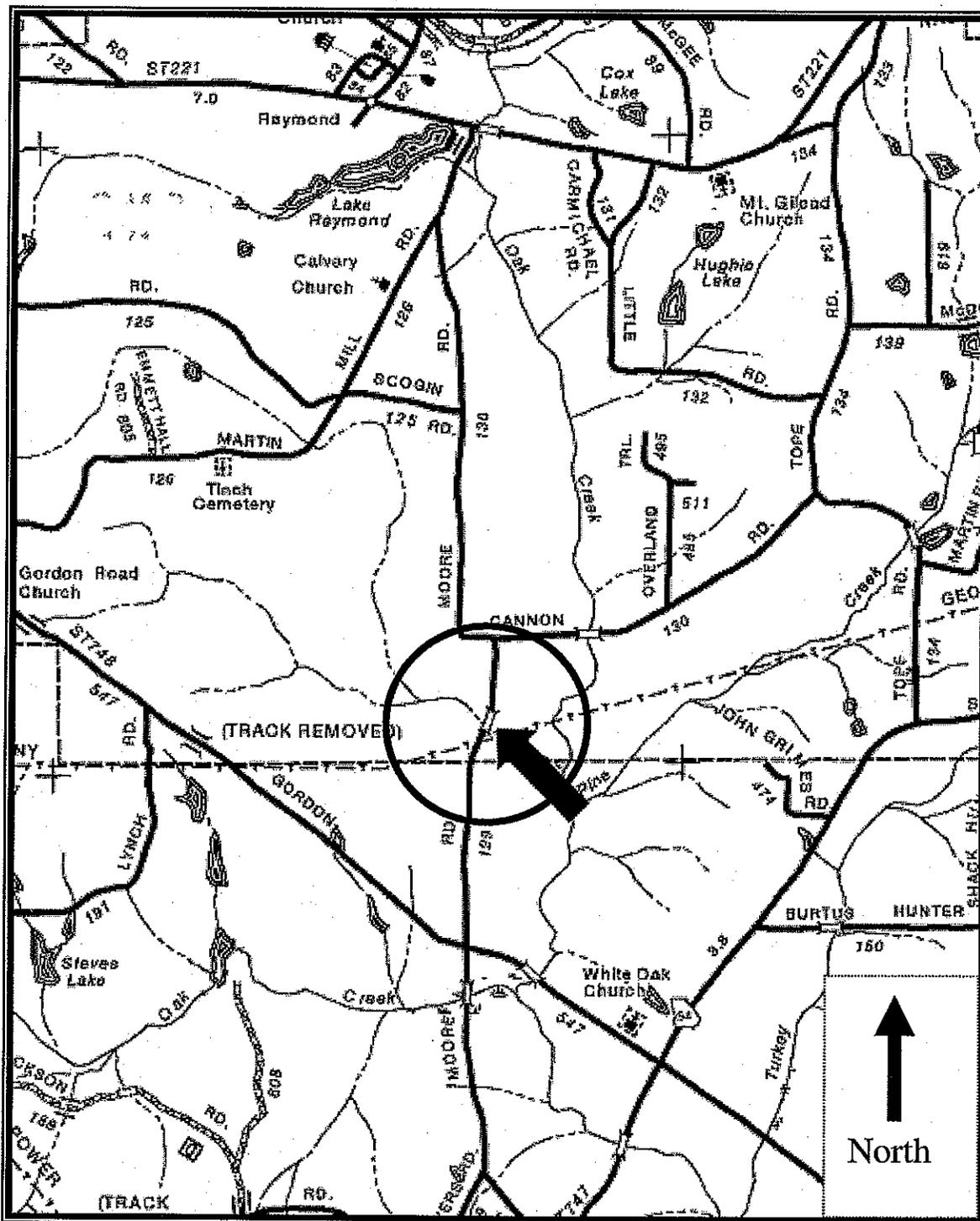


PROJECT LOCATION MAP

0071-00(007)

Project: BRZLB-077(7) Coweta County PI No.: 370822

Description: CR 129 (Moore Road) over White Oak Creek Tributary



Need and Purpose:

Bridge project BRZLB-077(7), Coweta County, P.I. No. 370822 proposes to replace the structurally deficient bridge carrying County Road 129 (Moore Road) over a tributary of White Oak Creek approximately 3.5 miles east of Moreland in Coweta County. The total project length is approximately 0.3 miles (from milepost 0.17 to 0.47) consisting of bridge replacement and construction of adequate approaches from both directions. The bridge is located approximately 0.32 miles south of the intersection of CR 129 (Moore Road) and CR 130 (Cannon Road). As currently programmed the project is locally-sponsored by Coweta County with an anticipated construction date of 2009.

CR 129 is a north-south county road functionally classified as a rural local road. CR 129 provides local access and connectivity between Gordon Road (CR 547) to the south and SR 16 to the north. The environs within the immediate project limits are of a rural character with land uses generally being a combination of single-family residential, agricultural, or undeveloped wooded properties. East-west trending Georgia Power overhead transmission lines transect the project corridor at the bridge location. There are no commercial or industrial land uses within the CR 129 corridor. Given the rural, undeveloped nature of the area surrounding the bridge, it is unlikely that the bridge will experience, or be influenced by, a significant increase in commercial, residential, and industrial development.

CR 129 is currently a two-lane roadway with a posted speed of 55 mph. Moore Road is a local school bus route. It is not a designated state or county bicycle route. Traffic data was collected in 2006, which will be the base year for the project. The Estimated Time of Completion (ETC) was forecasted to 2011. From the 2011 ETC, the design year was forecasted ahead 20 years to 2031. The existing AADT is 520, the ETC AADT is forecasted to be 620, and ETC+20 is forecasted to be 1300. The two lane cross-section provides adequate capacity for the existing and forecasted traffic volumes. Currently, the average percentage of truck traffic is 9%.

A query of historical accident records maintained by the Office of Traffic Safety and Design returned no accident data on CR 129.

The bridge carrying CR 129 over White Oak Creek Tributary was built in 1970 and consists of two 20-foot continuous steel beam spans supported on timber pile bents. According to the Department's Bridge Maintenance records, the bridge has a sufficiency rating of 26.03. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than rehabilitated. The steel beams exhibit signs of corrosion. This structure has a posted gross load limit of 10 tons due to the low original design capacity of the substructure. The Bridge Inventory Data Listing is attached. The bridge has a flat deck in a sag vertical curve. The sag vertical curve does not meet AASHTO requirements for stopping sight distance at the 55 mph posted speed. The horizontal curves on both the north and south approaches currently do not meet AASHTO requirements for minimum curve radius for the posted speed limit.

The project is necessary to remove an existing deficient structure with posted load limits and replace it with a structurally adequate bridge capable of carrying CR 129 over White Oak Creek Tributary without posted load restrictions. The purpose of the proposed project is to provide a structurally sound bridge which meets minimum bridge width and hydraulic design criteria. The

replacement structure will be lengthened to improve the bridge hydraulics by lowering the channel velocity and backwater during the design year storm. In order to keep superelevation transitions off of the proposed bridge structure, the horizontal curve on the north roadway approach will be lengthened. The horizontal curve on the south approach will not be improved as part of this project. The project terminates within the existing horizontal curve on the south approach.

This project will be consistent with Executive Order 12898 as it pertains to environmental justice. The project will include 1) feasible and prudent design decisions to avoid, minimize and/or mitigate adverse human health and environmental effects, including social and economic effects, 2) the design development process will provide opportunities for full and fair public participation of potentially effected individuals or groups of individuals, and 3) the process will not discriminate against any individual or group of individuals in the receipt of benefits.

Description of the proposed project:

This project is approximately 0.3 miles long. It extends from mile 0.17 to 0.47 on County Route 129 (Moore Road), 0.32 miles south of the intersection of CR 129 and CR 130 (Cannon Road) in Coweta County. The project location is approximately 3.5 miles northeast of Moreland and is not within any incorporated municipalities. Termini for the project are based on the replacement of the bridge, guardrail, and required approaches. The project will remove the restrictive load limits on CR 129 across White Oak Creek Tributary by replacing the deficient bridge structure as well as improve safety conditions associated with the horizontal and vertical roadway geometries and bridge width deficiencies.

Is the project located in a Non-attainment area?

Yes, but this is a bridge replacement project and is exempt from non-attainment requirements.

PDP Classification: Minor

Federal Oversight: Exempt

Functional Classification: Rural Local Road

U. S. Route Number(s): N/A

State Route Number(s): N/A

Traffic (AADT):

Current Year: (2006) 520 Design Year: (2031) 1300

Existing design features:

- *Typical Section:* Rural – The section consists of two 10' lanes with variable 1' to 6' grass shoulders. There is no curb and gutter or sidewalk within the project limits.
- *Posted Speed:* 55 mph
- *Minimum Radius of Curvature:* 580'
- *Maximum Superelevation Rate for Curve:* 10.2%
- *Maximum Grade:*
 - Mainline = 7.1 %
 - Side Road = N/A
 - Driveway = 8%

- *Width of R/W:* 80'
- *Major Structures:* The existing 22.5' wide bridge was constructed in 1970 and consists of two 20' continuous steel beam spans supported on timber pile bents. The roadway is supported by corrugated metal deck atop closely-spaced longitudinal steel beams. A "W"-beam guardrail mounted to the exterior steel beams is located on both sides of the roadway. Existing clearance between the underside of the steel beams and the top of stream bank is approximately 8.8'. According to bridge inspection records the bridge has a sufficiency rating of 26.03. The stone rubble abutments from an older bridge are located beneath the spans of the existing bridge structure.

Proposed Design Features:

- *Proposed typical section:* Rural – The proposed cross section consists of two 12' lanes with 4' shoulders (2' paved). This typical section provides travel lane and shoulder continuity with the proposed 32' wide bridge. Based on the project design speed and ADT, the 2004 Green Book recommends a minimum 11' travel lane and 5' shoulder width (32' roadway width) for Rural Local Roads. The proposed typical section provides a wider 12' travel lane and a narrower 4' shoulder (32' roadway width). A design exception is not anticipated. The overall shoulder width varies as necessary to accommodate the project tie-in points, guardrail, and spillways. There is no sidewalk or curb and gutter (see attachments).
- *Proposed Design Speed Mainline:* 45mph
The Proposed Design Speed of 45 mph is less than the currently posted 55 mph speed limit. The project site has no accident history or recorded incidents which can be attributed to excessive speed. In order to maximize the vertical clearance between the proposed roadway and existing overhead high-voltage electric transmission and electric distribution lines, it was recommended during the Concept Team Meeting that the County investigate the option to lower the posted speed limit from 55 mph to 45 mph through the project area. The County has acknowledged the interest and ability to formally reduce the posted speed limit within the project site from 55 mph to 45 mph. The County will initiate and be responsible for the reduction of the posted speed limit. The proposed vertical alignment for a 45 mph design speed is controlled by stopping sight distance, not bridge hydraulics.
- *Proposed Maximum grade Mainline:* 6.00 %
 - *Maximum grade allowable:* 7%.
- *Proposed Maximum grade Side Street:* N/A
 - *Maximum grade allowable:* N/A
- *Proposed Maximum grade driveway:* 9%
- *Proposed Minimum radius for curve:* 650' (existing curve at south project terminus)
- *Minimum radius allowable:* 1060'
- *Proposed Maximum super-elevation rate for curve:* $e_{max} = 6\%$
- Right of way
 - *Width:* Variable (120' Max, 80' Min.)
 - *Easements:* Temporary (X), Permanent (X), Utility (), Other ().
 - *Type of access control:* Full (), Partial (), By Permit (X), Other ().

- Number of parcels: 6

Number of displacements:

- Business: none
- Residences: none
- Mobile homes: none
- Other: none

- Structures:

- **Bridges:** A new 32' by 100' long reinforced concrete T-beam bridge will be constructed in place of the existing bridge. The minimum bridge width based on the design speed and design year ADT per TOPPS 4265-9 is 32'. A cast-in-place reinforced concrete T-beam bridge is selected as the replacement structure. The primary reason for this structure type selection is constructability and vertical clearance safety concerns. Because of the overhead construction clearance limitations associated with the overhead electric facilities, the use of a cast-in-place structure is more desirable than a prestressed concrete beam bridge. Construction of the cast-in-place structure will allow the use of alternative construction procedures and equipment to minimize potential overhead conflicts. The limited overhead clearance will be further investigated during detailed design development and selection of the superstructure, substructure, and foundations.
- **Culverts:** None
- **Retaining Walls:** N/A

- **Major intersections and interchanges:** N/A

- **Traffic control during construction:** An offsite detour is anticipated during construction.

- **Design Exceptions to controlling criteria anticipated:**

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

The south end of the project terminates within an existing 640' radius horizontal curve. The existing curve does not meet the 1060' AASHTO minimum radius for horizontal curves (AASHTO Policy on Geometric Design of Highways and Streets Exhibit 3-15). A Design Exception is not anticipated for the horizontal alignment because the alignment will match the existing geometry at the southerly project limit.

- **Design Variances:**

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	(X)	()
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)

SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

A design variance is anticipated for the proposed 4' shoulder width which does not meet the 10' minimum required by the shoulder width table in Chapter 6 of the GDOT Design Policy Manual

- *Environmental concerns:* None – an environmental scan letter is attached.
- *Level of environmental analysis:*
 - Are Time Savings Procedures appropriate? Yes
 - Categorical Exclusion
 - *PM 2.5 DOCUMENTATION* *JAL 10/26/07*
- *Utility involvements:* Water, Communications, and Electric – both overhead distribution and transmission lines are present at the site.

High voltage transmission lines are located directly over the proposed bridge location. Because raising or relocating the electric transmission lines is not feasible and the cost to do so is prohibitive, the design speed within the project area will be lowered from 55 mph to 45 mph. The reduction in design speed allows for modifications in the vertical approach geometry of the road to provide additional vertical clearance between the transmission lines and the proposed roadway. Extensive on-site coordination and safety measures will be required during design development and construction. Georgia Power Co. will require that driveway access to their easements from CR 129 be maintained with readily traversable slopes.

Project responsibilities:

- *Design, Coweta County (Design Consultant)*
- *Right of Way Acquisition, Coweta County*
- *Relocation of Utilities, Coweta County*
- *Letting to contract, GDOT*
- *Supervision of construction, GDOT*
- *Providing material pits, Contractor*
- *Providing detours, Coweta County*

Coordination

- *Initial Concept Meeting:* None.
- *Concept meeting:* Held on August 28, 2007 at the GDOT District 3 Office in Thomaston. Meeting Minutes attached.
- *Public involvement:* A Public Detour Meeting will be held to inform interested parties of the offsite detour during construction.
- *Other projects in the area:* CSBRG-0006-00(957), P.I. No. 0006957. Bridge replacement project at CR 130 (Cannon Road) over White Oak Creek, approximately 0.6 miles northeast of the project. This project involves the replacement of a 180 foot long steel bridge with a reinforced concrete bridge. There are two possible detour routes for the proposed project: an easterly route which is approximately 5.9 miles in length and a

westerly route which is approximately 6.7 miles in length. The easterly route (5.9 miles in length) crosses over P.I. No. 0006957. Coweta County has requested that construction of P.I. No. 0006957 be delayed until construction of the proposed project is complete.

- **VE STUDY REQUIRED: NO.**

J. D. [Signature]

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 10 Months
- Time to complete preliminary construction plans: 5 Months
- Time to complete right of way plans: 2 Months
- Time to complete the Section 404 Permit: 9 Months
- Time to complete final construction plans: 4 Months
- Time to complete to purchase right of way: 8 Months
- Time to complete bridge plans: 4 Months

Other alternates considered:

- *No Build:* This alternate would not meet the need and purpose of the project because it does not remove the load limits and structural deficiencies, address cross sectional deficiencies with the existing bridge structure, nor does it improve the bridge hydraulic opening. This alternate would not serve current and future travel demands on this portion of CR 129.
- *Rehabilitate Existing Bridge Structure:* This alternate would not meet the need and purpose of the project because it would not address cross sectional deficiencies with the existing bridge structure. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than rehabilitated. This alternate would not address cross sectional deficiencies with the existing bridge structure or improve bridge hydraulics.
- *Replace Existing Bridge (Culvert Alternate):* A number of reinforced concrete box culvert configurations were considered and eliminated. The primary reason for elimination of culvert options was the inability to feasibly satisfy the hydraulic design requirements.
- *Replace Existing Bridge (Bridge Alternate):* This alternate is the chosen alternate. The existing bridge will be removed and replaced. The proposed bridge structure will provide sufficient load carrying capacity and meet the AASHTO minimum bridge width requirements. The hydraulic capabilities of the bridge will be improved with a lengthened replacement bridge.

Attachments:

1. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities.
2. Typical Sections
3. Bridge Inventory
4. Environmental Scan Letter
5. Concept Team Meeting Minutes
6. Project Framework Agreement
7. Location and Design Notice

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

District 3 Design

PROJECT CONCEPT REPORT

Project Number: BRZLB-077(7)

County: Coweta

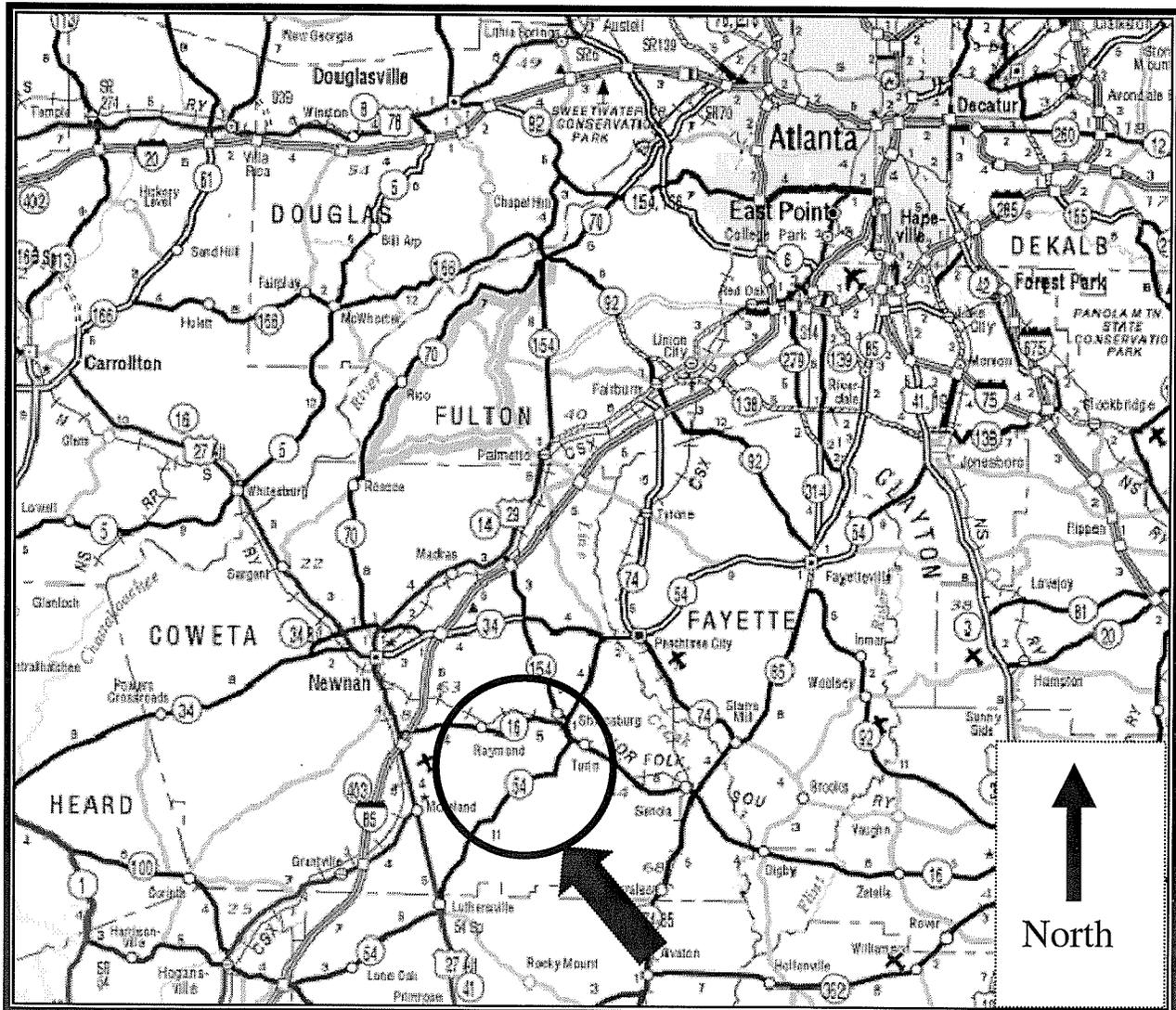
P. I. Number: 370822

Federal Route Number: N/A

State Route Number: N/A

Regional Location Sketch

*Bridge Replacement on CR 129 (Moore Road) over White Oak Creek Tributary
Coweta County, GA*

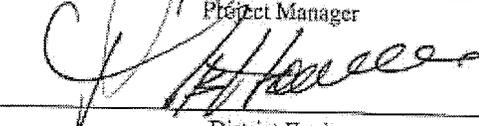


Recommendation for approval:

DATE 9/26/07

DATE 9/26/07


Project Manager


District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

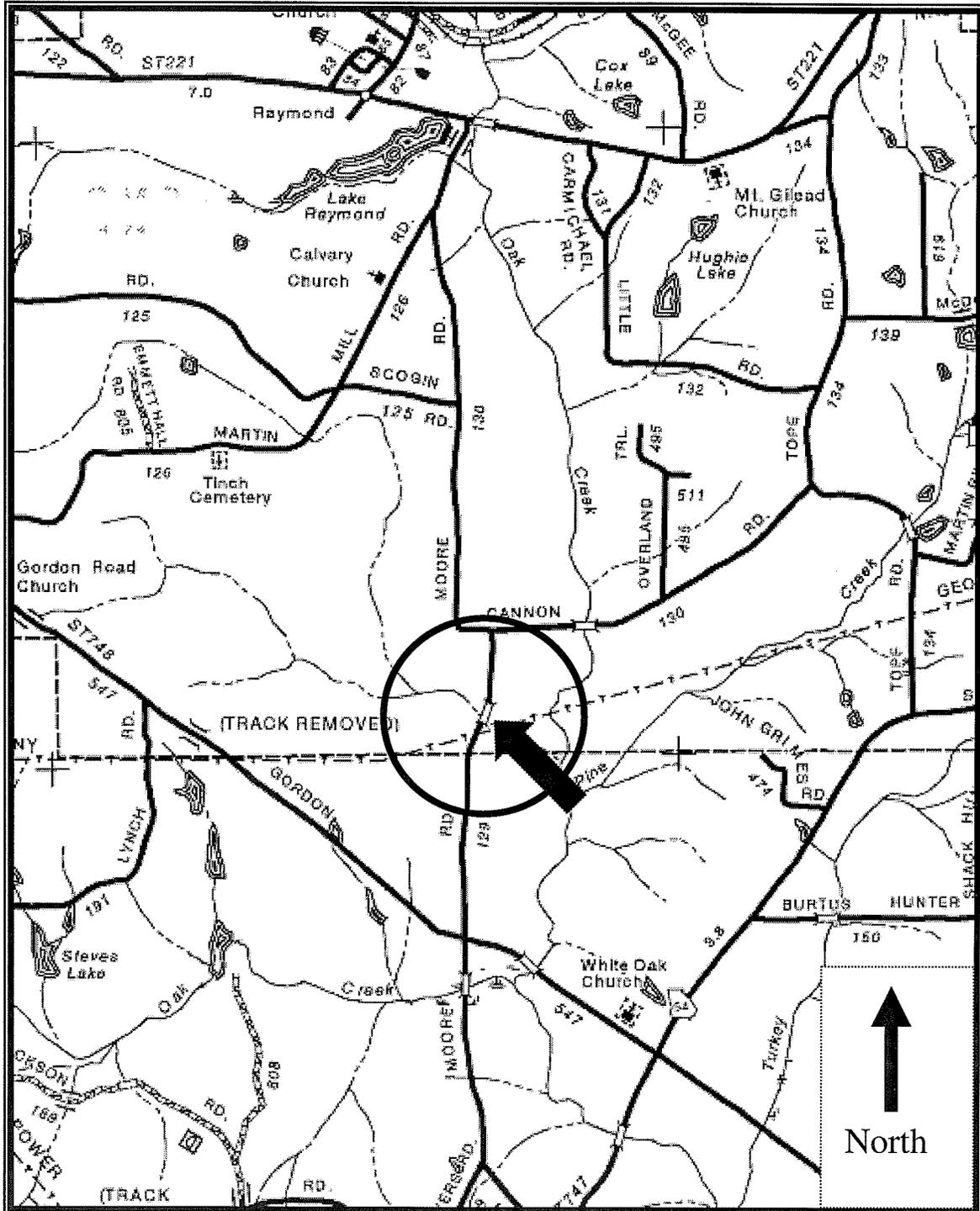
Project Review Engineer

DATE _____

State Bridge Engineer

PROJECT LOCATION MAP

Project: BRZLB-077(7) Coweta County PI No.: 370822
Description: CR 129 (Moore Road) over White Oak Creek Tributary



Need and Purpose:

Bridge project BRZLB-077(7), Coweta County, P.I. No. 370822 proposes to replace the structurally deficient bridge carrying County Road 129 (Moore Road) over a tributary of White Oak Creek approximately 3.5 miles east of Moreland in Coweta County. The total project length is approximately 0.3 miles (from milepost 0.17 to 0.47) consisting of bridge replacement and construction of adequate approaches from both directions. The bridge is located approximately 0.32 miles south of the intersection of CR 129 (Moore Road) and CR 130 (Cannon Road). As currently programmed the project is locally-sponsored by Coweta County with an anticipated construction date of 2009.

CR 129 is a north-south county road functionally classified as a rural local road. CR 129 provides local access and connectivity between Gordon Road (CR 547) to the south and SR 16 to the north. The environs within the immediate project limits are of a rural character with land uses generally being a combination of single-family residential, agricultural, or undeveloped wooded properties. East-west trending Georgia Power overhead transmission lines transect the project corridor at the bridge location. There are no commercial or industrial land uses within the CR 129 corridor. Given the rural, undeveloped nature of the area surrounding the bridge, it is unlikely that the bridge will experience, or be influenced by, a significant increase in commercial, residential, and industrial development.

CR 129 is currently a two-lane roadway with a posted speed of 55 mph. Moore Road is a local school bus route. It is not a designated state or county bicycle route. Traffic data was collected in 2006, which will be the base year for the project. The Estimated Time of Completion (ETC) was forecasted to 2011. From the 2011 ETC, the design year was forecasted ahead 20 years to 2031. The existing AADT is 520, the ETC AADT is forecasted to be 620, and ETC+20 is forecasted to be 1300. The two lane cross-section provides adequate capacity for the existing and forecasted traffic volumes. Currently, the average percentage of truck traffic is 9%.

A query of historical accident records maintained by the Office of Traffic Safety and Design returned no accident data on CR 129.

The bridge carrying CR 129 over White Oak Creek Tributary was built in 1970 and consists of two 20-foot continuous steel beam spans supported on timber pile bents. According to the Department's Bridge Maintenance records, the bridge has a sufficiency rating of 26.03. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than rehabilitated. The steel beams exhibit signs of corrosion. This structure has a posted gross load limit of 10 tons due to the low original design capacity of the substructure. The Bridge Inventory Data Listing is attached. The bridge has a flat deck in a sag vertical curve. The sag vertical curve does not meet AASHTO requirements for stopping sight distance at the 55 mph posted speed. The horizontal curves on both the north and south approaches currently do not meet AASHTO requirements for minimum curve radius for the posted speed limit.

The project is necessary to remove an existing deficient structure with posted load limits and replace it with a structurally adequate bridge capable of carrying CR 129 over White Oak Creek Tributary without posted load restrictions. The purpose of the proposed project is to provide a structurally sound bridge which meets minimum bridge width and hydraulic design criteria. The

replacement structure will be lengthened to improve the bridge hydraulics by lowering the channel velocity and backwater during the design year storm. In order to keep superelevation transitions off of the proposed bridge structure, the horizontal curve on the north roadway approach will be lengthened. The horizontal curve on the south approach will not be improved as part of this project. The project terminates within the existing horizontal curve on the south approach.

This project will be consistent with Executive Order 12898 as it pertains to environmental justice. The project will include 1) feasible and prudent design decisions to avoid, minimize and/or mitigate adverse human health and environmental effects, including social and economic effects, 2) the design development process will provide opportunities for full and fair public participation of potentially effected individuals or groups of individuals, and 3) the process will not discriminate against any individual or group of individuals in the receipt of benefits.

Description of the proposed project:

This project is approximately 0.3 miles long. It extends from mile 0.17 to 0.47 on County Route 129 (Moore Road), 0.32 miles south of the intersection of CR 129 and CR 130 (Cannon Road) in Coweta County. The project location is approximately 3.5 miles northeast of Moreland and is not within any incorporated municipalities. Termini for the project are based on the replacement of the bridge, guardrail, and required approaches. The project will remove the restrictive load limits on CR 129 across White Oak Creek Tributary by replacing the deficient bridge structure as well as improve safety conditions associated with the horizontal and vertical roadway geometries and bridge width deficiencies.

Is the project located in a Non-attainment area?

Yes, but this is a bridge replacement project and is exempt from non-attainment requirements.

PDP Classification: Minor

Federal Oversight: Exempt

Functional Classification: Rural Local Road

U. S. Route Number(s): N/A

State Route Number(s): N/A

Traffic (AADT):

Current Year: (2006) 520 Design Year: (2031) 1300

Existing design features:

- *Typical Section:* Rural – The section consists of two 10' lanes with variable 1' to 6' grass shoulders. There is no curb and gutter or sidewalk within the project limits.
- *Posted Speed:* 55 mph
- *Minimum Radius of Curvature:* 580'
- *Maximum Superelevation Rate for Curve:* 10.2%
- *Maximum Grade:*
 - Mainline = 7.1 %
 - Side Road = N/A
 - Driveway = 8%

- *Width of R/W:* 80'
- *Major Structures:* The existing 22.5' wide bridge was constructed in 1970 and consists of two 20' continuous steel beam spans supported on timber pile bents. The roadway is supported by corrugated metal deck atop closely-spaced longitudinal steel beams. A "W"-beam guardrail mounted to the exterior steel beams is located on both sides of the roadway. Existing clearance between the underside of the steel beams and the top of stream bank is approximately 8.8'. According to bridge inspection records the bridge has a sufficiency rating of 26.03. The stone rubble abutments from an older bridge are located beneath the spans of the existing bridge structure.

Proposed Design Features:

- *Proposed typical section:* Rural – The proposed cross section consists of two 12' lanes with 4' shoulders (2' paved). This typical section provides travel lane and shoulder continuity with the proposed 32' wide bridge. Based on the project design speed and ADT, the 2004 Green Book recommends a minimum 11' travel lane and 5' shoulder width (32' roadway width) for Rural Local Roads. The proposed typical section provides a wider 12' travel lane and a narrower 4' shoulder (32' roadway width). A design exception is not anticipated. The overall shoulder width varies as necessary to accommodate the project tie-in points, guardrail, and spillways. There is no sidewalk or curb and gutter (see attachments).
- *Proposed Design Speed Mainline:* 45mph
The Proposed Design Speed of 45 mph is less than the currently posted 55 mph speed limit. The project site has no accident history or recorded incidents which can be attributed to excessive speed. In order to maximize the vertical clearance between the proposed roadway and existing overhead high-voltage electric transmission and electric distribution lines, it was recommended during the Concept Team Meeting that the County investigate the option to lower the posted speed limit from 55 mph to 45 mph through the project area. The County has acknowledged the interest and ability to formally reduce the posted speed limit within the project site from 55 mph to 45 mph. The County will initiate and be responsible for the reduction of the posted speed limit. The proposed vertical alignment for a 45 mph design speed is controlled by stopping sight distance, not bridge hydraulics.
- *Proposed Maximum grade Mainline:* 6.00 %
 - *Maximum grade allowable:* 7%.
- *Proposed Maximum grade Side Street:* N/A
 - *Maximum grade allowable:* N/A
- *Proposed Maximum grade driveway:* 9%
- *Proposed Minimum radius for curve:* 650' (existing curve at south project terminus)
- *Minimum radius allowable:* 1060'
- *Proposed Maximum super-elevation rate for curve:* $e_{\max} = 6\%$
- Right of way
 - *Width:* Variable (120' Max, 80' Min.)
 - *Easements:* Temporary (X), Permanent (X), Utility (), Other ().
 - *Type of access control:* Full (), Partial (), By Permit (X), Other ().

- *Number of parcels:* 6
- *Number of displacements:*
 - Business: none
 - Residences: none
 - Mobile homes: none
 - Other: none
- Structures:
 - *Bridges:* A new 32' by 100' long reinforced concrete T-beam bridge will be constructed in place of the existing bridge. The minimum bridge width based on the design speed and design year ADT per TOPPS 4265-9 is 32'. A cast-in-place reinforced concrete T-beam bridge is selected as the replacement structure. The primary reason for this structure type selection is constructability and vertical clearance safety concerns. Because of the overhead construction clearance limitations associated with the overhead electric facilities, the use of a cast-in-place structure is more desirable than a prestressed concrete beam bridge. Construction of the cast-in-place structure will allow the use of alternative construction procedures and equipment to minimize potential overhead conflicts. The limited overhead clearance will be further investigated during detailed design development and selection of the superstructure, substructure, and foundations.
 - *Culverts:* None
 - *Retaining Walls:* N/A
- *Major intersections and interchanges:* N/A
- *Traffic control during construction:* An offsite detour is anticipated during construction.
- *Design Exceptions to controlling criteria anticipated:*

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

The south end of the project terminates within an existing 640' radius horizontal curve. The existing curve does not meet the 1060' AASHTO minimum radius for horizontal curves (AASHTO Policy on Geometric Design of Highways and Streets Exhibit 3-15). A Design Exception is not anticipated for the horizontal alignment because the alignment will match the existing geometry at the southerly project limit.

- *Design Variances:*

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	(X)	()
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)

SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)

A design variance is anticipated for the proposed 4' shoulder width which does not meet the 10' minimum required by the shoulder width table in Chapter 6 of the GDOT Design Policy Manual

- *Environmental concerns:* None – an environmental scan letter is attached.
- *Level of environmental analysis:*
 - Are Time Savings Procedures appropriate? Yes
 - Categorical Exclusion
- *Utility involvements:* Water, Communications, and Electric – both overhead distribution and transmission lines are present at the site.

High voltage transmission lines are located directly over the proposed bridge location. Because raising or relocating the electric transmission lines is not feasible and the cost to do so is prohibitive, the design speed within the project area will be lowered from 55 mph to 45 mph. The reduction in design speed allows for modifications in the vertical approach geometry of the road to provide additional vertical clearance between the transmission lines and the proposed roadway. Extensive on-site coordination and safety measures will be required during design development and construction. Georgia Power Co. will require that driveway access to their easements from CR 129 be maintained with readily traversable slopes.

Project responsibilities:

- *Design, Coweta County (Design Consultant)*
- *Right of Way Acquisition, Coweta County*
- *Relocation of Utilities, Coweta County*
- *Letting to contract, GDOT*
- *Supervision of construction, GDOT*
- *Providing material pits, Contractor*
- *Providing detours, Coweta County*

Coordination

- *Initial Concept Meeting:* None.
- *Concept meeting:* Held on August 28, 2007 at the GDOT District 3 Office in Thomaston. Meeting Minutes attached.
- *Public involvement:* A Public Detour Meeting will be held to inform interested parties of the offsite detour during construction.
- *Other projects in the area:* CSBRG-0006-00(957), P.I. No. 0006957. Bridge replacement project at CR 130 (Cannon Road) over White Oak Creek, approximately 0.6 miles northeast of the project. This project involves the replacement of a 180 foot long steel bridge with a reinforced concrete bridge. There are two possible detour routes for the proposed project: an easterly route which is approximately 5.9 miles in length and a

westerly route which is approximately 6.7 miles in length. The easterly route (5.9 miles in length) crosses over P.I. No. 0006957. Coweta County has requested that construction of P.I. No. 0006957 be delayed until construction of the proposed project is complete.

Scheduling – Responsible Parties’ Estimate

- Time to complete the environmental process: 10 Months
- Time to complete preliminary construction plans: 5 Months
- Time to complete right of way plans: 2 Months
- Time to complete the Section 404 Permit: 9 Months
- Time to complete final construction plans: 4 Months
- Time to complete to purchase right of way: 8 Months
- Time to complete bridge plans: 4 Months

Other alternates considered:

- *No Build:* This alternate would not meet the need and purpose of the project because it does not remove the load limits and structural deficiencies, address cross sectional deficiencies with the existing bridge structure, nor does it improve the bridge hydraulic opening. This alternate would not serve current and future travel demands on this portion of CR 129.
- *Rehabilitate Existing Bridge Structure:* This alternate would not meet the need and purpose of the project because it would not address cross sectional deficiencies with the existing bridge structure. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than rehabilitated. This alternate would not address cross sectional deficiencies with the existing bridge structure or improve bridge hydraulics.
- *Replace Existing Bridge (Culvert Alternate):* A number of reinforced concrete box culvert configurations were considered and eliminated. The primary reason for elimination of culvert options was the inability to feasibly satisfy the hydraulic design requirements.
- *Replace Existing Bridge (Bridge Alternate):* This alternate is the chosen alternate. The existing bridge will be removed and replaced. The proposed bridge structure will provide sufficient load carrying capacity and meet the AASHTO minimum bridge width requirements. The hydraulic capabilities of the bridge will be improved with a lengthened replacement bridge.

Attachments:

1. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities.
2. Typical Sections
3. Bridge Inventory
4. Environmental Scan Letter
5. Concept Team Meeting Minutes
6. Project Framework Agreement
7. Location and Design Notice

SCORING RESULTS AS PER TOPPS 2440-2

Project Number: BRZLB-077(7)		County: Coweta		PI No.: 370822	
Report Date: September 27, 2007		Concept By: DOT Office: District 3 Design			
<input checked="" type="checkbox"/> CONCEPT		Consultant: Clough, Harbour & Associates LLP			
Project Type: Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input checked="" type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange <input type="checkbox"/> Intersection <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
FOCUS AREAS	SCORE	RESULTS			
Presentation					
Judgement					
Environmental					
Right of Way					
Utility					
Constructability					
Schedule					

CONCEPT COST ESTIMATE

PROJECT NUMBER: BRZLB-077(7) COUNTY: COWETA

PI #: 370822 DESCRIPTION: Bridge Replacement on CR 129 over White Oak Creek Tributary

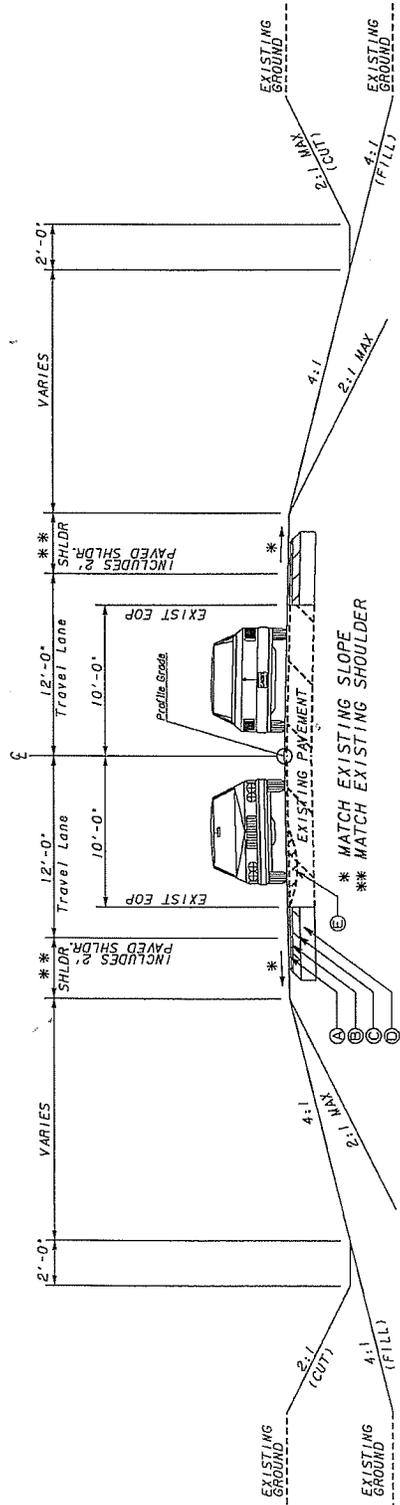
DATE: 9/21/2007 ESTIMATED LETTING DATE: 2010

PREPARED BY: Clough Harbour & Associates PROJECT LENGTH: 0.3 MILES

PROGRAMMING PROCESS CONCEPT DEVELOPMENT DURING PROJECT DEVELOPMENT

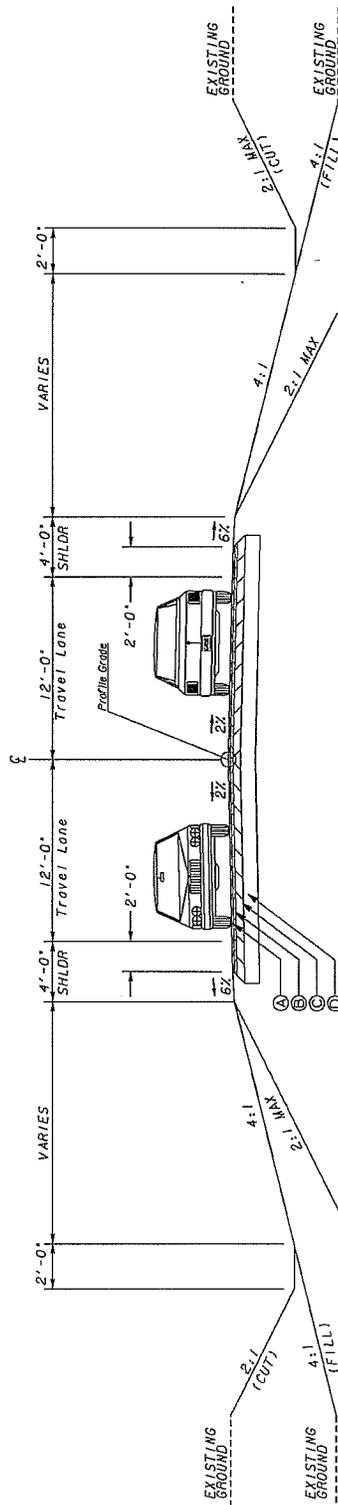
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT)	1.50 AC	\$50,000.00 PER AC	\$75,000.00
2. DISPLACEMENTS	RES: 0	BUS: 0	M.H.: 0
3. OTHER COST (ADM./COST, INFLATION)			\$0.00
SUBTOTAL: A			\$75,000.00
B. REIMBURSABLE UTILITIES:			
1. POWER, COMMUNICATIONS, WATER			\$250,000.00
2. SERVICES			\$0.00
SUBTOTAL: B			\$250,000.00
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. BRIDGES	100 LF	\$3,200.00 PER LF	\$320,000.00
b. CONC APPROACH SLAB	2 EA	\$25,000.00 PER EA	\$50,000.00
c. REMOVAL OF EXISTING BRIDGE	40 LF		\$50,000.00
SUBTOTAL: C-1			\$420,000.00
2. GRADING AND DRAINAGE			
a. EARTHWORK	6,000 CY	\$10.00 PER CY	\$60,000.00
b. DRAINAGE			
1) CROSS DRAIN PIPE	0 EA	\$11,300.00 PER EA	\$0.00
2) SIDE DRAIN PIPE	6 EA	\$6,200.00 PER EA	\$37,200.00
SUBTOTAL: C-2			\$97,200.00
3. BASE AND PAVING			
a. AGGREGATE BASE	2,800 TN	\$25.00 PER TN	\$70,000.00
b. ASPHALT PAVING			
1) SURFACE	350 TN	\$100.00 PER TN	\$35,000.00
2) BINDER	470 TN	\$100.00 PER TN	\$47,000.00
3) BASE	1,900 TN	\$100.00 PER TN	\$190,000.00
4) LEVELING	25 TN	\$100.00 PER TN	\$2,500.00
SUBTOTAL: C-3.b			\$274,500.00
c. BITUM TACK COAT	600 GAL	\$2.00 PER GAL	\$1,200.00
SUBTOTAL: C-3			\$345,700.00

4. LUMP ITEMS:			
a. GRASSING	4.00 AC	\$2,000.00 PER AC	\$8,000.00
b. CLEARING AND GRUBBING	3.50 AC	\$5,000.00 PER AC	\$17,500.00
c. EROSION CONTROL (12%)			\$112,400.00
d. TRAFFIC CONTROL	1 LS	\$15,000.00	\$15,000.00
SUBTOTAL: C-4			\$152,900.00
5. MISCELLANEOUS:			
a. SIGNING	8 EA	\$560.00 PER EA	\$4,480.00
b. ASPH PAVEMENT MARKING	1,600 LF	\$0.60 PER LF	\$960.00
c. GUARDRAIL	1,400 LF	\$30.00 PER LF	\$42,000.00
SUBTOTAL: C-5			\$47,440.00
6. SPECIAL FEATURES:			
a.	0 UNIT	\$0.00 COST PER UNIT	\$0.00
SUBTOTAL: C-6			\$0.00
ESTIMATE SUMMARY			
A. RIGHT-OF-WAY			\$75,000.00
B. REIMBURSABLE UTILITIES			\$250,000.00
C. CONSTRUCTION			
1. MAJOR STRUCTURES		\$420,000.00	
2. GRADING AND DRAINAGE		\$97,200.00	
3. BASE AND PAVING		\$345,700.00	
4. LUMP ITEMS		\$152,900.00	
5. MISCELLANEOUS		\$47,440.00	
6. SPECIAL FEATURES		\$0.00	
SUBTOTAL CONSTRUCTION COST			\$1,063,240.00
E. & C. (10%)			\$106,324.00
TOTAL CONSTRUCTION COST			\$1,169,564.00
GRAND TOTAL PROJECT COST			\$1,494,564.00
This project is 100 % in Congressional District 3			



- REQUIRED PAVEMENT**
- Ⓐ ASPH. CONC. 9.5mm SUPERPAVE, 125 LB/YSY
 - Ⓑ ASPH. CONC. 19mm SUPERPAVE, 250 LB/YSY
 - Ⓒ ASPH. CONC. 25mm SUPERPAVE, 770 LB/YSY - 2 LIFTS
 - Ⓓ 12" - GRADED AGGREGATE BASE
 - Ⓔ ASPHALTIC CONCRETE LEVELING, AS REQ'D

TYPICAL SECTION #1: OVERLAY SECTION
 THIS SECTION APPLIES AT THE BEGINNING
 AND ENDING OF THE PROJECT AS NECESSARY



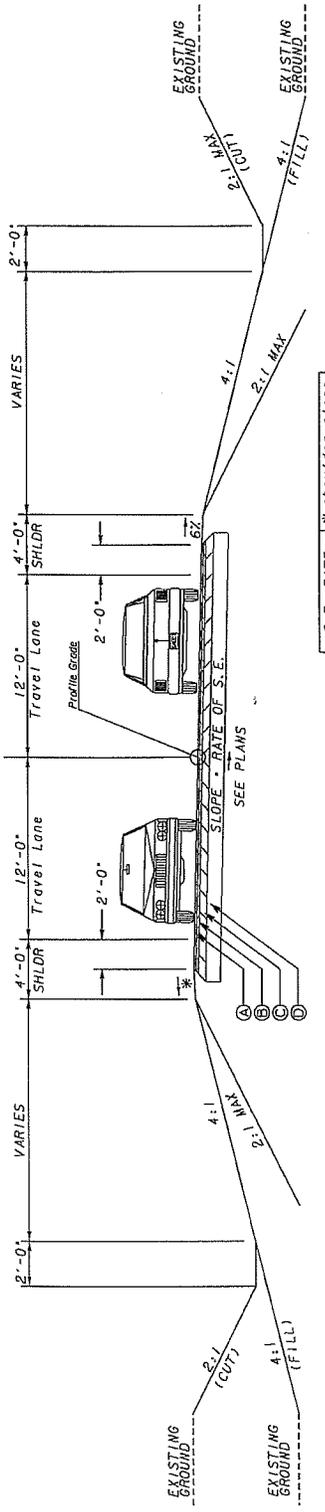
TYPICAL SECTION #2: TANGENT SECTION
 THIS SECTION APPLIES WHERE REQUIRED

PI # 371001

LUTHER BAILEY ROAD OVER DOUBLE BRANCH CREEK
 TYPICAL SECTIONS

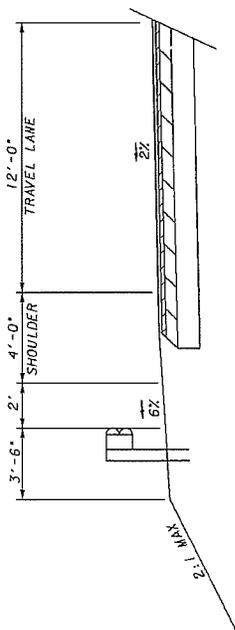


CLOUGH HARBOUR & ASSOCIATES LLP
 1800 Peachtree St. NW, Atlanta, GA 30309-2518
 www.cloughharbour.com



- REQUIRED PAVEMENT
- (A) ASPH. CONC. 9.5mm SUPERPAVE. 125 LB/ST
 - (B) ASPH. CONC. 19mm SUPERPAVE. 220 LB/ST
 - (C) ASPH. CONC. 25mm SUPERPAVE. 170 LB/ST - 2 LIFTS
 - (D) 12" - GRADED AGGREGATE BASE
 - (E) ASPHALTIC CONCRETE LEVELING, AS REQ'D

TYPICAL SECTION #3: SUPER ELEVATED SECTION
 THIS SECTION APPLIES WHERE REQUIRED



SHOULDER DETAIL FOR GUARDRAIL
 SEE PLAN FOR LOCATIONS

PI # 371001



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 1800 Peachtree St. NW, Atlanta, GA 30309-2518
 www.cloughharbour.com

LUTHER BAILEY ROAD OVER DOUBLE BRANCH CREEK
 TYPICAL SECTIONS

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 077-5025-0 Coweta SUFF. RATING 26.03

Location & Geography

* Structure I.D.No: 077-5025-0
 * 200 Bridge Information 06
 * 6A Feature Int: WHITE OAK CREEK TRIB.
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: CR00129
 * 7B Facility Carried: MOORE ROAD
 * 9 Location: 3 MIE OF MORELAND
 * 2 DOT District: 3
 * 207 Year Photo: 2005
 * 91 Inspection Frequency: 24 Date: 08/26/2005
 * 92A Fract Crit Insp Freq: 00 Date: 02/01/1901
 * 92B Underwater Insp Freq: 00 Date: 02/01/1901
 * 92C Other Spc. Insp Freq: 00 Date: 02/01/1901
 * 4 Place Code: 000000
 * 5 Inventory Route (O/U): 1
 Type: 4

Designation: 1
 Number: 00129
 Direction: 0
 16 Latitude: 33-18.0
 17 Longitude: 084-44.6
 98 Border Bridge: 000
 99 ID Number: 0000000000000000
 * 100 STRAHNET: 0
 12 Base Highway Network: 1
 13A LRS Inventory Route: 772012900
 13B Sub Inventory Route: 0
 * 101 Parallel Structure: N
 * 102 Direction of Traffic: 2
 * 264 Road Inventory Mile Post: 000.32
 * 208 Inspection Area: 03 Initials: WBP
 Engineer's Initial: sgm

* Location I.D. No.: 077-00129X-000.32S
 Mt 0
 F 0

Signs & Attachments

* 104 Highway System: 0
 * 26 Functional Classification: 09
 * 204 Federal Route Type: 0 No.: 00000
 * 105 Federal Lands Highway: 0
 * 110 Truck Route: 0
 * 206 School Bus Route: 1
 * 217 Benchmark Elevation: 0000.00
 * 218 Datum: 0
 * 19 Bypass Length: 06
 * 20 Toll: 3
 * 21 Maintenance: 02
 * 22 Owner: 02
 * 31 Design Load: 0
 * 37 Historical Significance: 5
 * 205 Congressional District: 08
 * 27 Year Constructed: 1970
 * 106 Year Reconstructed: 0000
 * 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 of Service on: 1
 * 214 Movable Bridge: 0
 * 203 Type Bridge: C-1-M-M
 * 259 Pile Encasement: 3
 * 43 Structure Type Main: 3 02
 * 45 No. Spans Main: 002
 * 44 Structure Type Appr: 0 00
 * 46 No. Spans Appr: 0000
 * 226 Bridge Curve Horz: 0 Vert: 0
 * 111 Pier Protection: 0
 * 107 Deck Structure Type: 6
 * 108 Wearing Surface Type: 6
 Mt 0
 F 0

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 077-5025-0

Coweta

SUFF. RATING

26.03

Programming Data

201 Project No.: COUNTY DESIGN
 202 Plans Available: 0
 249 Prop. Proj. No. BRZLB-077 (6)
 250 Approval Status: 0000
 251 P.I. No.: 370821-
 252 Contract Date: 02/01/1901
 260 Seismic No.: 00000
 75 Type Work: 31 1
 94 Bridge Imp. Cost: \$ 43
 95 Roadway Imp. Cost: \$ 109
 96 Total Imp Cost: \$ 174
 76 Imp. Length: 001361
 97 Imp. Year: 1990
 114 Future ADT: 000585 Year: 2024

Measurements

* 29 ADT: 000390 Year: 2004
 109 % Trucks: 0
 * 28 Lanes On: 02 Under: 00
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0020
 * 49 Structure Length: 40
 51 Br. Rwdy. Width: 22.50
 52 Deck Width: 24.10
 * 47 Tot. Horz. Cl: 22.50
 50 Curb/Sdewlk Width: 0.00/0.00
 32 Approach Rdwy Width: 020
 * 229 Shoulder Width:
 Rear Lt: 5.00 Type: 8 Rt: 5.00
 Fwd Lt: 5.00 Type: 8 Rt: 5.00
 Pavement Width:
 Rear: 20.00 Type: 2
 Fwd: 20.00 Type: 2
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail:
 Transition: 0
 App. G. Rail: 3
 App. Rail End: 3
 53 Minimum Cl.Over:
 Under: N
 * 228 Min. Vertical Cl
 Act. Odsm Dir: 99 ' 99 "
 Oppo. Dir: 99 ' 99 "
 Posted Odsm. Dir: 00 ' 00 "
 Oppo. Dir: 00 ' 00 "
 55 Lateral Undercl. Rt: N 99.90
 56 Lateral Undercl. Lt: 0.00
 * 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: 0.00
 Deck Thick Approach: 0.00
 246 Overlay Thickness: 4.00
 212 Year Last Painted: Sup: 1970 Sub: 0000

Ratings

65 Inventory Rating Method: 1
 63 Inventory Rating Method: 1
 66 Inventory Type: 2 Rating: 12
 64 Operating Type: 2 Rating: 19
 231 Calculated Loads
 H-Modified: 10 1
 HS-Modified: 00 0
 Type 3: 00 0
 Type 3s2: 00 0
 Timber: 00 0
 Piggyback: 00 0

261 H Inventory Rating: 08
 262 H Operating Rating: 13
 67 Structural Evaluation: 4
 58 Deck Condition: 7
 59 Superstructure Condition: 7
 * 227 Collision Damage: 0
 60A Substructure Condition: 4
 60B Scour Condition: 6
 60C Underwater Condition: N
 71 Waterway Adequacy: 9
 61 Channel Protection Cond: 6
 68 Deck Geometry: 4
 69 UnderClr. Horz/Vert: N
 72 Appr. Alignment: 6
 62 Culvert: N

Posting Data

* 70 Bridge Posting Required: 0
 41 Struct Open, Posted, Cl: P
 * 103 Temporary Structure: T
 232 Posted Loads H-Modified: 10
 HS-Modified: 00
 Type 3: 00
 Type3s2: 00
 Timber: 00
 Piggyback: 00
 253 Notification Date 02/01/1901
 253 Fed Notify Date: 02/01/1901 0

Hydraulic Data

215 Waterway Data
 Highwater Elev.: 0000.0 Year: 1900
 Avg. Streambed Elev.: 0000.0 Freq.: 00
 Drainage Area: 00000
 Area Of Opening: 000000
 113 Scour Critical: U
 216 Water Depth: 00.9 Br. Height: 10.0
 222 Slope Protection: 0
 221 Spur Dikes Rear: 0 Fwd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No. Barrels: 0
 Width: 0.00 Height: 0.00
 Length: 0 Apron: 0 Diver: ZZZ
 * 265 U/W Insp. Area: 077-00129X-000.32S



July 9, 2007

Tom Karis, P.E.
Clough, Harbour & Associates LLP
1800 Peachtree Street NW
Atlanta, Georgia 30309-2518

SUBJECT: REVIEW OF POTENTIAL ENVIRONMENTAL CONCERN
Proposed Bridge Replacement in Coweta County, Georgia
Project limits: Moore Road at White Oak Creek Tributary
Project Number: BRZLB-077(7)
P.I. Number: 370822

INTRODUCTION

Applied Technology & Management, Inc. (ATM) has completed a preliminary review of available environmental data sources and field survey investigations for the proposed bridge replacement project for Clough, Harbour & Associates LLP and Coweta County. The project involves the replacement of a bridge on Moore Road over White Oak Creek Tributary. Coordinates at the project site are 33° 18' 1.4" N (latitude) and 84° 42' 39.2" W (longitude). ATM performed the following inventory during the site visit of proposed project:

- Records Review and Data analysis
- Wetland Determination and Verification
- Threatened & Endangered Terrestrial Species Survey
- Underground Storage Tank and Hazardous Materials
- Cultural Resources (Conducted by New South and Associates)
- Aquatic Survey (Conducted by CCR Environmental) - Due to the specialized expertise and sampling permits required, ATM did not conduct the aquatic protected species survey. The firm CCR Environmental conducted the aquatic protected species survey on May 3, 2007, the results of which are provided within this report.

The purpose of our review was to conduct a limited environmental inventory to document and identify any environmental conditions that could affect the design features of the proposed project, as well as affect the level of environmental analysis required and project scheduling. ATM conducted the preliminary review and physical fieldwork in accordance with Georgia Department of Transportation (GDOT) guidelines for environmental analysis. Environmental field observations were made on November 15, 2006.

PRELIMINARY ENVIRONMENTAL DATA REVIEW

ATM reviewed existing governmental databases along with an Environmental Data Resource report (EDR report) to determine any prior environmental concerns at the physical site. Governmental database reviews included:

- United States Geographic Survey (USGS) Topographic Map;

- U.S. Fish and Wildlife Endangered and Threatened species lists;
- U.S. Fish and Wildlife Services National Wetland Inventory (NWI);
- National Resource Conservation Soils (NRCS) and Hydric Soils Survey;
- FEMA flood information and maps; and
- State of Georgia Underground Storage Tank (UST) and Leaking Underground Storage Tank (LUST) listings within the County

The subject site is located within the Sharpsburg Quadrangle according to the USGS 7.5' Digital Elevation Model and topographic review. The EDR report displayed an elevation of 780 feet above sea level at the intersection. The general topographic gradient and slope of groundwater at the intersection was generally southeast.

The soil component name is Cecil; a sandy loam. The texture is moderately coarse with a water table of more than 6 feet deep. The hydrologic group of the soils was moderately well and well drained soils with moderate infiltration rates. Cecil soils in the Piedmont region of Georgia do not meet the requirements for a hydric soil, and investigations confirmed the mapped type.

Based on the environmental elements according to the EDR report and government entities/databases, ATM concluded that there were no initial recognized environmental conditions or threats to the proposed intersection improvements.

USTs/LUSTs and Hazardous Wastes

No Underground Storage Tanks or hazardous waste sites were documented in the EDR report or identified within the project corridor. There are no expected impacts to the proposed bridge replacement project.

FIELD WORK

General Information

The site visit was performed by an environmental scientist on November 15, 2006. The bridge on Moore Road at White Oak Creek Tributary is located approximately 8 miles southeast of the City of Newnan and 3.5 miles northeast of the City of Moreland. Coordinates of the site are approximately 33° 18' 1.4" N (latitude) and 84° 42' 39.2" W (longitude). This bridge project is located in the Flint River drainage basin (Hydrologic Unit Code [HUC] 03130005).

Habitat and Land Use

The general land use of the area is low density rural residential property. Northeast of the bridge there is a goat farm. The habitat located west of Moore Road is a wooded area consisting of upland shrub, brushland, and mixed hardwood trees. Landscaped, predominantly grass, residential property is located in the southeast quadrant and an open field in the northeast quadrant. There are no commercial properties in the area. Each separate quadrant of the proposed bridge replacement contains different vegetation:

- Northwest Quadrant – The project corridor is compromised of undeveloped mixed hardwood forest containing plant species such as white oak (*Quercus alba*), green briar (*Smilax rotundifolia*), peppervine (*Ampelopsis arborea*), muscadine vine (*Vitis rotundifolia*), Chinese privet (*Ligustrum sinense*), wild rose (*Rosa setigera*), American beech (*Fagus grandifolia*), American hornbeam (*Carpinus caroliniana*), chalk maple (*Acer leucoderme*), sweet gum tree

(*Liquidambar styraciflua*), American holly (*Ilex opaca*), and tulip tree (*Liriodendron tulipifera* L).

- Northeast Quadrant – This quadrant contains a small pasture utilized for goat tending as well as landscaped grasses with dominant shrub or tree species. Approximately 350 feet east of Moore Road is an undeveloped parcel of the property containing plant species such as bamboo (*Phyllostachys aurea*), green briar, peppervine, water oak (*Quercus nigra*), sweet gum, American holly, and chalk maple.
- Southeast Quadrant – This quadrant of the project corridor is primarily a landscaped yard on a residential property (low density). Few trees, including sweet gum tree and chalk maple, line the stream to the west of the grass on the bank edge.
- Southwest Quadrant – This quadrant contains undeveloped upland mixed hardwood/pine forest including species such as green briar, Chinese privet, peppervine, chalk maple, American hornbeam, southern bayberry or wax myrtle (*Myrica cerifera*), loblolly pine (*Pinus taeda*), sweet gum tree, water oak, southern red oak (*Quercus falcata*), American holly, and white oak.

Steep swales alongside the roadway within the ROW of Moore Road appear to drain directly toward White Oak Creek Tributary. The proposed project is located within the 100-year flood plain based on FEMA Flood Insurance Rate Map information and the EDR report.

Wetland Determination

No evidence of wetlands was observed in the project areas based on field investigation by an experienced wetland delineator. Drainage patterns were hydrologic indicators present during the site investigation. Due to the elevation differences, there was no evidence of a continual surface water connection from White Oak Creek Tributary to the adjacent areas of land; however, a heavy rain event could cause the stream to temporarily inundate surrounding uplands. The soils were not saturated and had no signs of recent inundation. Soils were consistent with the soil survey and did not meet the criteria for hydric soils.

Based on the criteria set forth by the United States Army Corps of Engineers 1987 COE Wetlands Delineation Manual during a routine wetland determination, the subject area does not contain a wetland.

Stream and Water Quality

The stream associated with the proposed project is White Oak Creek which crosses beneath Moore Road. The streambed consists mainly of rock, roots, and small amounts of detritus from slowly decomposing leaf matter and other vegetative materials. The substrate was dominated by sand with some silt, clay, and gravel, and moderate to severe sedimentation. Grasses and large roots provide the dominant-riparian vegetation. The stream has a low quality due to suspended sedimentation and stagnant debris reducing the water clarity. The stream is approximately 4 to 15 feet wide, with an average of 8 feet, and the depth ranged from 2 inches to 3 feet with an average of 7 inches. In situ water quality measurements taken in May 2007 were within the state standards (GDNR 2005) and within the acceptable range for protection of aquatic life (USEPA 1986). Dissolved oxygen was 6.19 mg/l; water temperature was 68°F; pH was 6.25; turbidity was 20 NTU; conductivity was 66.7 μ S/cm, and specific conductance was 73.8 μ S/cm.

No evidence of federally listed or state threatened or endangered species was observed in the project areas during field investigations. Because the project is in the range of federal and state protected freshwater mussels and fishes, a focused aquatic protected species survey was conducted May 3, 2007 by Chris Crow and Jeff Pittman of CCR Environmental, Inc. (CCR Environmental 2007). Based on data from the United States Fish and Wildlife Service (2004) and Georgia Natural Heritage Program (2007), three federally protected mussels (gulf moccasinshell, *Medionidus pencillatus*; oval pigtoe, *Pleurobema pyriforme*; and shinyrayed pocketbook, *Lampsilis subangulata*), five state protected mussels (southern elktoe, *Alasmidonta triangulata*; rayed creekshell, *Anodontoides radiatus*; delicate spike, *Elliptio arctata*; inflated spike, *Elliptio purpurella*; and southern creekmussel, *Strophitus subvexus*) and three state protected fish (blue striped shiner, *Cyprinella callitaenia*; highscale shiner, *Notropis hypsilepis*; and Halloween darter *Percina sp. cf. palmaris*) occur in Coweta County.

Using a 1/8" mesh net seine, visual inspection, and grubbing through the substrate, fourteen species of fish (mostly minnows of the family Cyprinidae) and the exotic Asian clam (*Corbicula fluminea*) were observed. No live or relic mussels, protected fish species or suitable habitat for protected species was found. Aquatic habitat conditions were poor, and the tributary was too small and too degraded by bank erosion, sedimentation, and channelization to harbor the protected species.

Cultural Resources

The project site did not contain historic properties or properties considered eligible for inclusion in the National Register of Historic Places. A site survey was conducted and no archaeological sites were found. An "Archaeological Report Short Form of Negative Findings" and "No Historic Properties Affected Form" will be submitted for this project. We anticipate concurrence from SHPO and the assigned GDOT archaeologist.

LEVEL OF ENVIRONMENTAL ANALYSIS

Based on our review of the potential environmental concerns for this project and our understanding of potential impacts to the environment, we anticipate the level of environmental analysis and documentation required to be a Categorical Exclusion (CE).

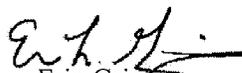
PUBLIC INVOLVEMENT

Public involvement is anticipated for the proposed bridge replacement project. A Public Detour Meeting will be held to inform interested parties of the offsite detour during construction.

ATM appreciates the opportunity to work with Clough, Harbour & Associates on this project. If you have any questions regarding our analysis, please do not hesitate to call me at (904) 249-8009 or Erin Griep at (912) 354-4160.

Sincerely,
Applied Technology & Management, Inc.


Jennifer Little
Environmental Scientist


Erin Griep
Project Manager

REFERENCES

- CCR Environmental, Inc. 2007. Aquatic Protected Species Survey Report. Moore Road Bridge Replacement Project Over Tributary to White Oak Creek. Coweta County, GA. Prepared for Clough Harbour & Associates LLP.
- Georgia Department of Natural Resources. 2005. Georgia Rules and Regulations for Water Quality Control, Chapter 391-3-6.03. Water Use Classifications and Water Quality Standards (amended November 2005). Environmental Protection Division, Water Protection Branch, Atlanta, GA.
- Georgia Natural Heritage Program. 2007. Element Occurrence Records in Database (updated February 16, 2007). Georgia Department of Natural Resources, Social Circle, GA. <http://georgiawildlife.dnr.stat.ga.us/>.
- United States Environmental Protection Agency. 1986. Quality Criteria for Water. EPA 440/5-86-001. Office of Water, Regulations, and Standards, Washington, D.C.
- United States Fish and Wildlife Service. 2004 (updated in May 2004). Listed Species in Georgia. Georgia Ecological Field Services Office, Athens, GA. <http://athens.fws.gov/endangered.html>.

CONCEPT TEAM MEETING MINUTES

MEETING DATE: August 28, 2007, 10:00 AM

MEETING LOCATION: GDOT District 3 Auditorium
Thomaston, GA

PROJECT: **BRIDGE REPLACEMENT PROJECT**
CR 129/Moore Road over White Oak Creek Tributary
Project Number: BRZLB-077(7)
PI Number: 370822
County: Coweta

ATTENDEES:

Wayne Kennedy (WK), Coweta County	770-254-3775
Thomas Howell, GDOT District 3 Engineer	706-646-6900
Bill Rountree (BR), GDOT District 3 Design	706-646-6604
David Millen (DM), GDOT District 3 Preconstruction	706-646-6594
Jason Mobley (JM), GDOT District 3 Squad Leader	706-646-6600
Mike England (ME), GDOT District 3 Traffic	706-646-6554
Lamar Pruitt (LP), GDOT District 3 Construction	706-646-6911
Kim Brown (KB), GDOT District 3 Utilities	706-646-6548
Audrey Gooch (AG), GDOT District 3 R/W	706-646-6602
Havard Seldon (HS), GDOT-LaGrange Area Engineer	706-845-4115
Kimberly Larson (KL), GDOT District 3 Communications	706-646-6938
Debra Pruitt (DP), GDOT District 3 Environmental	706-646-6984
Tom Queen (TQ), GDOT District 3 Planning and Programming	706-646-6982
Ron Jenkins (RJ), AT&T	770-251-6471
Bryan Prince (BP), Georgia Power Co. – Transmission	404-506-3882
Dan Everit (DE), Georgia Power Co. – Transmission	404-506-2889
Steve Manley (SM), Manley Services	770-278-0013
Tom Karis (TK), Clough, Harbour & Associates LLP (CHA)	404-352-9200
Chris Edmondson (CE), Clough, Harbour & Associates LLP (CHA)	404-352-9200
Kevin Kahle (KK), Clough, Harbour & Associates LLP (CHA)	404-352-9200
Helga Torres (HT), Clough, Harbour & Associates LLP (CHA)	404-352-9200

REVIEW COMMENTS VIA E-MAIL BY:

None

MEETING MINUTES:

1. Project Introduction

KK introduced the project by describing the project location on the detour plan and presenting the concept layout. The concept layout included the project limits,

proposed horizontal and vertical alignments, curve data, parcel data, proposed beginning and ending bridge stations, and typical sections. KK stated that the existing bridge is currently posted for load limits. KK stated that the bridge maintenance inventory report sufficiency rating was less than 50, concluding that the structure is not a feasible candidate for rehabilitation and must be considered for replacement.

KK described the existing roadway approach geometry and discussed how the vertical alignment for a 55 mph design speed will require raising the existing profile at the bridge site approximately 10'. KK also discussed how the horizontal curve radius at the site needs to be increased to meet a 55 mph design speed.

2. Need and Purpose Statement

KK stated the purpose of the bridge replacement was to address the deficient bridge structure with posted load limits and replace it with a structurally adequate drainage structure capable of carrying CR 129 over White Oak Tributary without posted load restrictions.

3. Functional Classification

The road is functionally classified as a Rural Local Road

4. Accident History and Traffic

Accident information had been requested by CHA. No accident data was available when the Draft Concept Report was submitted. The existing traffic information and the projected traffic volumes were stated. From the 85th percentile and pace speeds, it appears that 55 MPH is the appropriate posted speed limit.

5. Typical Sections & Roadway Items

KK briefly described the proposed typical section.

6. Major Structures

A 32' wide by 100' long, reinforced concrete bridge was proposed to replace the existing steel bridge.

7. Design Variances

Following the presentation by KK, there was significant discussion regarding the vertical alignment. It was presented by CHA that the vertical alignment was a function of sight distance geometrics and not necessarily a function of the hydraulic opening requirement. Because the vertical sight distance is in a sag curve there was limited discussion as to the use of street lighting to improve the sight distance limitation. After a brief discussion and indication by CHA that because the location does not have an accident history or accident prevalence for the posted speed limit, that a reduction in speed limit through the project site could be viable for the County. WK indicated that the County would not be opposed to reducing the speed limit and designing to the lower posted speed limit in an effort to save cost. Because there is no accident history at this location, it was suggested that this alternate is feasible

given the project constraints. Instead of a design variance, the County will investigate the process through the County Commissioners of reducing the posted speed limit for Moore Road within this section from 55 mph to 45 mph to avoid the 10' vertical profile change. The main reason to avoid raising the vertical profile is the overhead distribution and transmission lines located directly above the bridge site.

8. Utilities

CHA identified the existing overhead utilities as a design constraint. For the purposes of the concept development, CHA conducted a field survey of limited accuracy and estimated the minimum overhead transmission line clearances to be approximately 42' above the existing road grade.

9. Alternates Considered

The Replace Bridge option was the only alternate discussed during the course of the meeting. The No Build and Rehabilitate Existing Bridge alternates are not considered to be feasible and were not discussed.

10. Other Projects in the Area

KK identified the bridge replacement project CSBRG-0006-00(957) Cannon Road over White Oak Creek, 0.6 miles northeast of the proposed bridge location. Project coordination for the letting and construction will be on-going as the project is developed through the PDP Process.

11. Construction Detour

KK presented the two detour alternates on the detour plan. Coweta County did not commit to either of the detour routes

QUESTIONS & COMMENTS

12. Planning

TQ stated that the project is not yet in the TIP. There was some concern about coordination with Federal Energy Regulatory Commission for the overhead transmission lines. It was concluded through discussion that there would be no need for FERC involvement at this site.

13. Utilities

DE and BP from GPC stated their concerns regarding maintaining appropriate clearances from overhead lines during construction, especially if the vertical profile is to be raised 10'. Also, it was requested to maintain driveway access to the GPC and other utilities structures, and to maintain very low slopes for these driveways. There was discussion about the types of overhead facilities and the required clearances. It was discussed that the transmission lines may include 500kv (minimum clearance not recorded); 230kv requires 30 ft. of clearance; and 115kv requires 25-27 ft. of clearance. There was discussion regarding the ownership of the facilities. It was suggested that the ownership may be GTC and not GPC. On-going and formal

coordination will be required to ascertain the actual line heights and the minimum requirements.

KB added that horizontal realignment could result in additional conflicts with other utility structures in the area.

RJ from AT&T stated that there are no major concerns with their facilities.

BR requested that a utility cost estimate be prepared for in this project in coordination with Ms. Kim Brown from GDOT District 3 Utilities.

It was concluded that relocation of the utilities is cost prohibitive and not a feasible option. Construction safety and coordination must be foremost in the design development of the preferred alternative. Extensive on-site coordination and safety measures will be required.

14. Right of Way

DM asked if Georgia Power's ownership of the 150' transmission R/W is fee simple. No other comments were made for ROW. Determination of the ROW will be required.

15. Traffic Operations

ME stated that a public detour meeting will be required. TK stated that it would be more cost effective to hold one public detour meeting for multiple bridge replacement projects. It was generally agreed upon that this would be an acceptable approach to the public detour meetings.

DM suggested CHA investigate realigning the proposed roadway such that the existing bridge could be used during construction.

16. Construction

LP asked if replacing the existing bridge with a culvert was an option, and KK responded that it was not. CHA had conducted initial hydraulic modeling to conclude that box culvert options are not viable. This crossing is influenced by the water surface of White Oak Creek.

17. Environmental Analysis and Concerns

DP noted that a migratory bird survey needs to be conducted for all bridge projects. KK acknowledged that CHA's environmental sub consultants did not identify any threatened or endangered species, including birds, during their visit to the site. There were no additional comments for environmental.

18. Coweta County

WK requested that a formal pavement design be prepared for this project and submitted for approval. It was the consensus of the County and CHA that the selected standard pavement design for minor projects would be over-designed for this

project given the existing and proposed traffic volumes and composition. CHA agreed to advance the pavement design during Preliminary Design..

19. GDOT District 3

BR said every attempt should be made to obtain concept approval prior to October 1st, which is the deadline for the transition to the new LRFD Bridge Design Specifications.

20. Meeting was adjourned at 12:00 PM.

AGREEMENT
BETWEEN
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
AND
COWETA COUNTY
FOR
TRANSPORTATION FACILITY IMPROVEMENTS

This AGREEMENT is made and entered into this 6th day of February, 200~~8~~⁷, by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and the Coweta County Board of Commissioners, acting by and through its Chairman and Board of Commissioners, hereinafter called the "SPONSOR".

WHEREAS, the SPONSOR has represented to the DEPARTMENT a desire to improve the transportation facility described in **Exhibit A**, attached and incorporated herein by reference and hereinafter referred to as the "PROJECT"; and

WHEREAS, the SPONSOR has represented to the DEPARTMENT a desire to participate in certain activities of the PROJECT as set forth in this AGREEMENT, and the DEPARTMENT has relied upon such representations; and

WHEREAS, the DEPARTMENT has expressed a willingness to participate in certain activities of the PROJECT as set forth in this AGREEMENT.

NOW THEREFORE, in consideration of the mutual promises made and of the benefits to flow from one to the other, the DEPARTMENT and the SPONSOR hereby agree each with the other as follows:

1. The SPONSOR shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design) activities as per Exhibit "A", utility relocations, right of way acquisitions as per a future Right of Way Agreement and construction as per a future Construction Agreement. Expenditures incurred by the SPONSOR and eligible for reimbursement by the DEPARTMENT shall not be considered reimbursable to the SPONSOR until execution of this agreement and written notice to proceed for each phase.

2. The DEPARTMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design) activities as per Exhibit "A", right of way acquisitions as per a future agreement or construction as per a future construction agreement.

3. It is understood and agreed by the DEPARTMENT and the SPONSOR that the funding portion as identified in Exhibit "A" of this agreement only applies to the Preconstruction Engineering Activities. Additional agreements will be required to be executed by the DEPARTMENT and the SPONSOR for the funding portion of subsequent phases.

4. The SPONSOR shall be responsible for all costs for the continual maintenance and the continual operations of any and all sidewalks and the grass strip between the curb and gutter and the sidewalk within the PROJECT limits.

5. The SPONSOR shall Certify that they have read and understands the regulations for "CERTIFICATION OF COMPLIANCES WITH FEDERAL PROCUREMENT REQUIREMENTS, STATE AUDIT REQUIREMENTS, AND FEDERAL AUDIT REQUIREMENTS" as stated in attachment A of this Agreement and will comply in full with said provisions.

6. When applicable engineering invoicing can only be submitted following submittal and acceptance of project milestones. Project milestones are defined as approval of the Concept Report, Completion and verification of the Database Preparation, approval of the Environmental Document, submittal of Preliminary Plans for PFPR, approval of Right of Way plans, submittal of Final Plans for FFPR and submittal of Final Plans for letting.

7. The SPONSOR shall accomplish all of the design activities for the PROJECT. The design activities shall be accomplished in accordance with the DEPARTMENT's Plan Development Process, the applicable guidelines of the American Association of State Highway and Transportation Officials, hereinafter referred to as "AASHTO", the DEPARTMENT's Standard Specifications Construction of Transportation Systems, the DEPARTMENT's Plan Presentation Guide, PROJECT schedules, and applicable

guidelines of the DEPARTMENT. The SPONSOR's responsibility for design shall include, but is not limited to the following items:

a. Prepare the PROJECT concept report in accordance with the format used by the DEPARTMENT. The concept for the PROJECT shall be developed to accommodate the future traffic volumes as generated by the SPONSOR as provided for in paragraph 7b and approved by the DEPARTMENT. The concept report shall be approved by the DEPARTMENT prior to the SPONSOR beginning further development of the PROJECT plans. It is recognized by the parties that the approved concept may be modified by the SPONSOR as required by the DEPARTMENT and reapproved by the DEPARTMENT during the course of design due to public input, environmental requirements, or right of way considerations.

b. Develop the PROJECT's base year (year facility is expected to be open to traffic) and design year (base year plus 20 years) traffic volumes. This shall include average daily traffic (ADT) and morning (am) and evening (pm) peak hour volumes. The traffic shall show all through and turning movement volumes at intersections for the ADT and peak hour volumes and shall indicate the percentage of trucks expected on the facility.

c. Validate (check and update) the approved PROJECT concept and prepare a PROJECT Design Book for approval by the DEPARTMENT prior to the beginning of preliminary plans.

d. Prepare environmental studies, documentation, and reports for the PROJECT that show the PROJECT is in compliance with the provisions of the National Environmental Protection Act and Georgia Environmental Protection Act, as appropriate to the PROJECT funding. This shall include any and all

archaeological, historical, ecological, air, noise, underground storage tanks (UST), and hazardous waste site studies required as well as any environmental reevaluations required. The SPONSOR shall submit to the DEPARTMENT all environmental documents and reports for review and approval by the DEPARTMENT and the FHWA.

e. Prepare all public hearing and public information displays and conduct all required public hearings and public information meetings in accordance with DEPARTMENT practice.

f. Perform all surveys, mapping, soil investigation studies and pavement evaluations needed for design of the PROJECT.

g. Perform all work required to obtain project permits, including, but not limited to, US Army Corps of Engineers 404 and Federal Emergency Management Agency (FEMA) approvals. These efforts shall be coordinated with the DEPARTMENT.

h. Prepare the PROJECT's drainage design including erosion control plans and the development of the hydraulic studies for the Federal Emergency Management Agency Floodways and acquisition of all necessary permits associated with the drainage design.

i. Prepare traffic studies, preliminary construction plans including a cost estimate for the Preliminary Field Plan Review, preliminary and final utility plans, preliminary and final right of way plans, staking of the required right of way, and final construction plans including a cost estimate for the Final Field Plan Review, erosion control plans, lighting plans, traffic handling plans, and construction sequence plans and specifications including special provisions for the PROJECT.

j. Provide certification, by a Georgia Registered Professional Engineer, that the construction plans have been prepared under the guidance of the professional engineer and are in accordance with AASHTO and DEPARTMENT guidelines.

k. Failure of the SPONSOR to follow the DEPARTMENT's Plan Development Process will jeopardize the use of Federal funds in some or all of the categories outlined in this AGREEMENT, and it shall be the responsibility of the SPONSOR to make up the loss of that funding.

8. All Primary Consultant firms hired by the SPONSOR to provide services on the PROJECT shall be prequalified with the DEPARTMENT in the appropriate area-classes. The DEPARTMENT shall, on request, furnish the SPONSOR with a list of prequalified consultant firms in the appropriate area-classes.

9. The PROJECT construction and right of way plans shall be prepared in English units.

10. All drafting and design work performed on the project shall be done utilizing Microstation and CAiCE software respectively, and shall be organized as per the Department's guidelines on electronic file management.

11. The DEPARTMENT shall review and has approval authority for all aspects of the PROJECT provided however this review and approval does not relieve the SPONSOR of its responsibilities under the terms of this agreement. The

DEPARTMENT will work with the FHWA to obtain all needed approvals with information furnished by the SPONSOR.

12. The SPONSOR shall be responsible for the design of all bridge(s) and preparation of any required hydraulic and hydrological studies within the limits of this PROJECT in accordance with the DEPARTMENT's policies and guidelines. The SPONSOR shall perform all necessary survey efforts in order to complete the design of the bridge(s) and prepare any required hydraulic and hydrological studies. The final bridge plans shall be incorporated into this PROJECT as a part of this AGREEMENT.

13. The SPONSOR shall follow the DEPARTMENT's procedures for identification of existing and proposed utility facilities on the PROJECT. These procedures, in part, require all requests for existing, proposed, or relocated facilities to flow through the DEPARTMENT's Project Liaison and the District Utilities Engineer.

14. The SPONSOR shall address all railroad concerns, comments, and requirements to the satisfaction of the DEPARTMENT.

15. Upon the SPONSOR's determination of the rights of way required for the PROJECT and the approval of the right of way plans by the DEPARTMENT, the necessary rights of way for the PROJECT shall be acquired by the SPONSOR. Right of way acquisition shall be in accordance with the law and the rules and regulations of the FHWA including, but not limited to, Title 23, United States Code; 23 CFR 710, et. seq., and 49 CFR Part 24, and the rules and regulations of the DEPARTMENT and in accordance with the Contract for the Acquisition of Right of Way to be prepared by the

DEPARTMENT and executed between the SPONSOR and the DEPARTMENT prior to the commencement of any right of way activities. Failure of the SPONSOR to follow these requirements may result in the loss of Federal funding for the PROJECT and it will be the responsibility of the SPONSOR to make up the loss of that funding. All required right of way shall be obtained and cleared of obstructions, including underground storage tanks, prior to advertising the PROJECT for bids. The SPONSOR shall further be responsible for making all changes to the approved right of way plans, as deemed necessary by the DEPARTMENT, for whatever reason, as needed to purchase the right of way or to match actual conditions encountered.

16. Upon completion and approval of the PROJECT plans, certification that all needed rights of way have been obtained and cleared of obstructions, and certification that all needed permits for the PROJECT have been obtained by the SPONSOR, the PROJECT shall be let for construction. The SPONSOR, unless shown otherwise on EXHIBIT A, shall be solely responsible for securing and awarding the construction contract for the PROJECT.

17. The SPONSOR shall review and make recommendations concerning all shop drawings prior to submission to the DEPARTMENT. The DEPARTMENT shall have final authority concerning all shop drawings.

18. The SPONSOR agrees that all reports, plans, drawings, studies, specifications, estimates, maps, computations, computer diskettes and printouts, and any other data prepared under the terms of this AGREEMENT shall become the property of the DEPARTMENT if required. This data shall be organized, indexed,

bound, and delivered to the DEPARTMENT no later than the advertisement of the PROJECT for letting. The DEPARTMENT shall have the right to use this material without restriction or limitation and without compensation to the SPONSOR.

19. The SPONSOR shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by or on behalf of the SPONSOR pursuant to this AGREEMENT. The SPONSOR shall correct or revise, or cause to be corrected or revised, any errors or deficiencies in the designs, drawings, specifications, and other services furnished for this PROJECT. Failure by the SPONSOR to address the errors or deficiencies within 30 days shall cause the SPONSOR to assume all responsibility for construction delays caused by the errors and deficiencies. All revisions shall be coordinated with the DEPARTMENT prior to issuance. The SPONSOR shall also be responsible for any claim, damage, loss or expense, to the extent allowed by law, that is attributable to errors, omissions, or negligent acts related to the designs, drawings, specifications, and other services furnished by or on behalf of the SPONSOR pursuant to this AGREEMENT.

20. Both the SPONSOR and the DEPARTMENT hereby acknowledge that time is of the essence and both parties shall adhere to the priorities established in the approved Transportation Improvement Program/State Transportation Improvement Program (TIP/STIP) or earlier. Furthermore, all parties shall adhere to the detailed project schedule, as approved by the DEPARTMENT. In the completion of respective commitments contained herein, if a change in the schedule is needed, the DEPARTMENT shall have final authority. If, for any reason, the SPONSOR does not

produce acceptable deliverables at the milestone dates defined in the current TIP/STIP, or in the approved schedule, the DEPARTMENT reserves the right to delay the project's implementation until funds can be re-identified for construction or right of way, as applicable.

21. This AGREEMENT is made and entered into in FULTON COUNTY, GEORGIA, and shall be governed and construed under the laws of the State of Georgia. The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the DEPARTMENT and the SPONSOR have caused these presents to be executed under seal by their duly authorized representatives.

RECOMMENDED:

[Signature]
District Engineer – Thomaston

[Signature]
Deputy Commissioner

David E. Stambitt, Jr.
Chief Engineer

DEPARTMENT OF TRANSPORTATION

BY: [Signature]
Commissioner

ATTEST: [Signature]
Treasurer

REVIEWED AS TO LEGAL FORM:
[Signature] 3.5.07
Office of Legal Services

COWETA COUNTY

BY: [Signature]
Name
Title: Chairman

Signed, sealed and delivered this 6th
day of February, 2008, in the
presence of:

[Signature]
Witness

[Signature]
Notary Public
NOTARY PUBLIC COM. EXPIRES 12/31/2008

This Agreement approved on the
6th day of February, 2006 2007

[Signature]
City/County Clerk (as appropriate)

FEIN: 58-6000809
(sponsor to provide)

ATTACHMENT "A"

Project Numbers: Multiple Coweta County SPLOST ROAD and BRIDGE Projects

Project (PI#, Project # , Description)	Work Type	Preliminary Engineering		Right of Way		Construction		Utilities
		Funding	Design	Funding	Acquisition	Funding	Letting	
BRZLB-077 (6) PI # 370821 CR 129 E of Moreland @ Little White Oak Creek	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$863,702 80% DOT/Fed \$215,926 20% County	DOT	Coweta County
CSBRG-0008-00 (419) PI # 0008419 CR 249/JD Walton Road @ Carey Creek	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$1,247,382 80% DOT/Fed \$311,846 20% County	DOT	Coweta County
CSBRG-0006-00 (956) PI # 0006956 CR 41/Green Top Road @ CSX RR	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$1,430,722 80% DOT/Fed \$357,680 20% County	DOT	Coweta County
CSBRG-0006-00 (957) PI # 0006957 CR 130/Cannon Road @ White Oak Creek	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$1,278,006 80% DOT/Fed \$319,502 20% County	DOT	Coweta County
BRZLB-077 (7) PI# 370822 CR 129 E of Moreland @ White Oak Creek Tributary	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$801,750 80% DOT/Fed \$200,438 20% County	DOT	Coweta County

Multiple Coweta County SPLOST Road and Bridge Projects

ATTACHMENT "A" - Continued

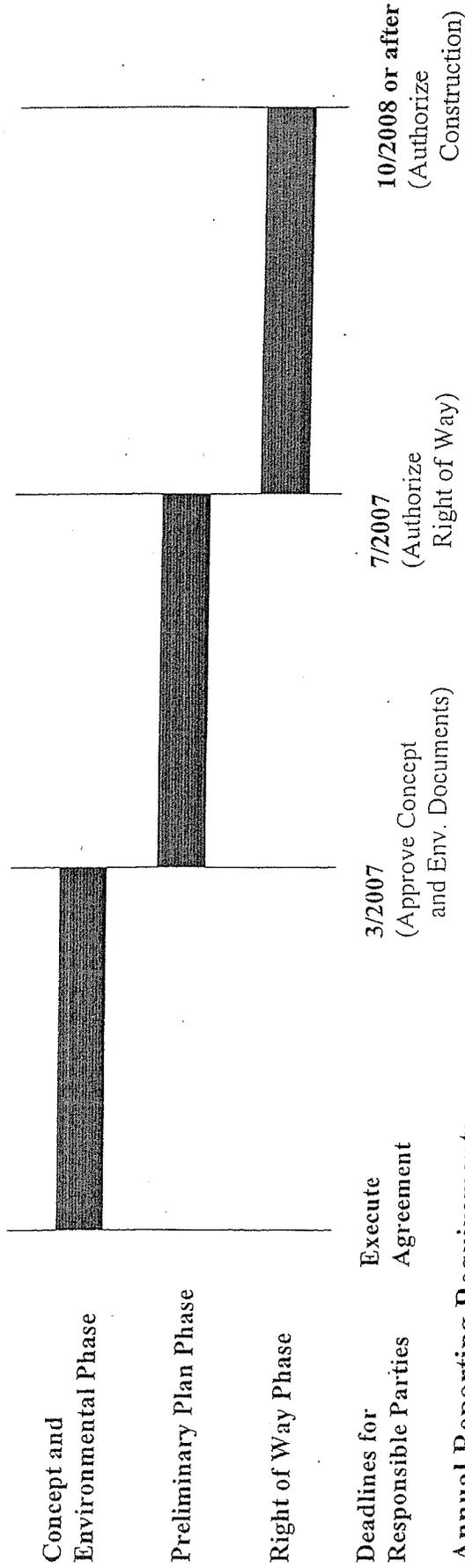
Project Numbers: Multiple Coweta County SPLOST ROAD and BRIDGE Projects

(PI#, Project # , Description)	Type	Funding	Design	Funding	Acquisition	Funding	Letting	Relocation Costs
BRZLB-077 (17) PI# 370832 CR 55 East of Sharpsburg @ Keg Creek	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$763,998 80% DOT/Fed \$191,000 20% County	DOT	Coweta County
BRZLB-077 (18) PI# 370833 CR 169 @ Little White Oak Creek - Meriwether and Coweta Co	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$1,436,406 80% DOT/Fed \$359,102 20% County	DOT	Coweta County
BRZLB-077 (29) PI# 371001 CR 157/Luther Bailey Road @ Double Branch Road SW of Senoia	L110 Bridge Replacement	Coweta County n	Coweta County	Coweta County	Coweta County	\$779,338 80% DOT/Fed \$194,850 20% County	DOT	Coweta County
CSBRG-0008-00 (418) PI# 0008418 Luther Bailey @ Dead Oak Creek	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$788,198 80% DOT/Fed \$197,050 20% County	DOT	Coweta County
BRZLB-077 (14) PI#370829 CR 71/Reese Rd. over Keg Creek	L110 Bridge Replacement	Coweta County	Coweta County	Coweta County	Coweta County	\$801,750 80% DOT/Fed \$200,438 20% County	DOT	Coweta County

Note: 1. Maximum allowable GDOT reimbursible amount may be shown above in lieu of percentages when applicable. Local Government will only be reimbursed the percentage of the accrued invoiced amounts up to but not to exceed the maximum amount indicated. 2. Cash participation limits may be shown above in lieu of percentages when applicable.

ATTACHMENT "B" Coweta County

Proposed Project Schedule

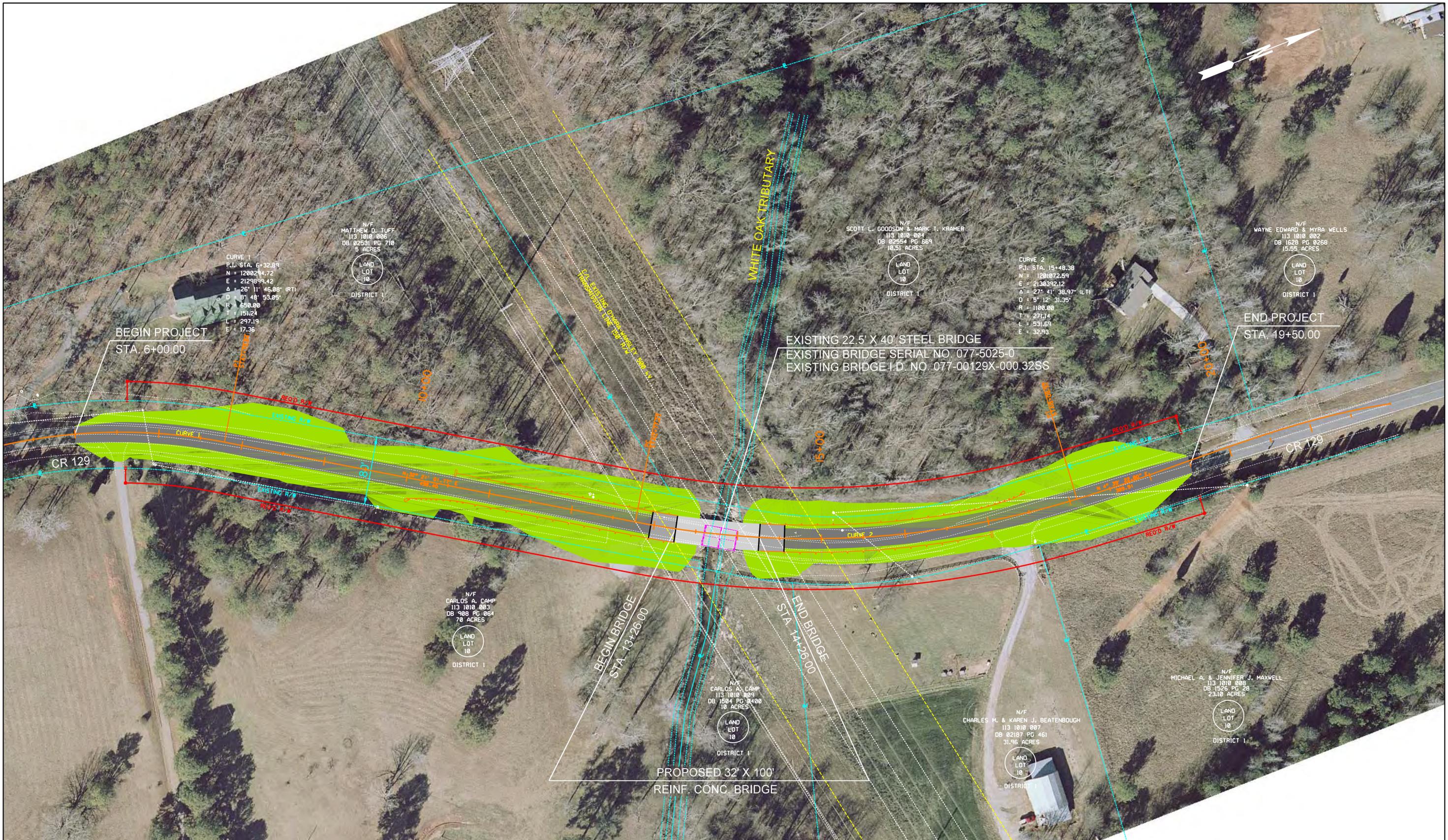


Annual Reporting Requirements

The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

Training Certification Requirement

The Local Government shall provide a written certification that all appropriate staff (employees and consultants) involved in the Project have attended or are scheduled to attend the Department's Plan Development Process Training Course. The written certification shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.



CURVE 1
 P.I. STA. 6+32.89
 N = 120024.72
 E = 212989.42
 Δ = 26° 11' 46.08" (RT)
 D = 8' 48" 53.05"
 R = 650.00
 T = 151.24
 L = 297.19
 E = 17.36

N/F
 MATTHEW D. TUFF
 113 1010 006
 DB 02531 PG 710
 5 ACRES
 LAND LOT 10
 DISTRICT 1

N/F
 SCOTT L. GOODSON & MARK T. KRAMER
 113 1010 004
 DB 02554 PG 669
 10.51 ACRES
 LAND LOT 10
 DISTRICT 1

CURVE 2
 P.I. STA. 15+48.38
 N = 1201072.59
 E = 2130392.12
 Δ = 27° 41' 38.97" (LT)
 D = 5' 12" 31.35"
 R = 1100.00
 T = 271.14
 L = 531.69
 E = 32.93

N/F
 WAYNE EDWARD & MYRA WELLS
 113 1010 002
 DB 1628 PG 0268
 15.55 ACRES
 LAND LOT 10
 DISTRICT 1

N/F
 CARLOS A. CAMP
 113 1010 003
 DB 988 PG 064
 70 ACRES
 LAND LOT 10
 DISTRICT 1

N/F
 CARLOS A. CAMP
 113 1010 009
 DB 1504 PG 0400
 10 ACRES
 LAND LOT 10
 DISTRICT 1

N/F
 CHARLES M. & KAREN J. BEATENBOUGH
 113 1010 007
 DB 02187 PG 461
 31.98 ACRES
 LAND LOT 10
 DISTRICT 1

N/F
 MICHAEL A. & JENNIFER J. MAXWELL
 113 1010 008
 DB 1526 PG 28
 23.10 ACRES
 LAND LOT 10
 DISTRICT 1

BEGIN PROJECT
 STA. 6+00.00

EXISTING 22.5' X 40' STEEL BRIDGE
 EXISTING BRIDGE SERIAL NO. 077-5025-0
 EXISTING BRIDGE I.D. NO. 077-00129X-000.32SS

END PROJECT
 STA. 19+50.00

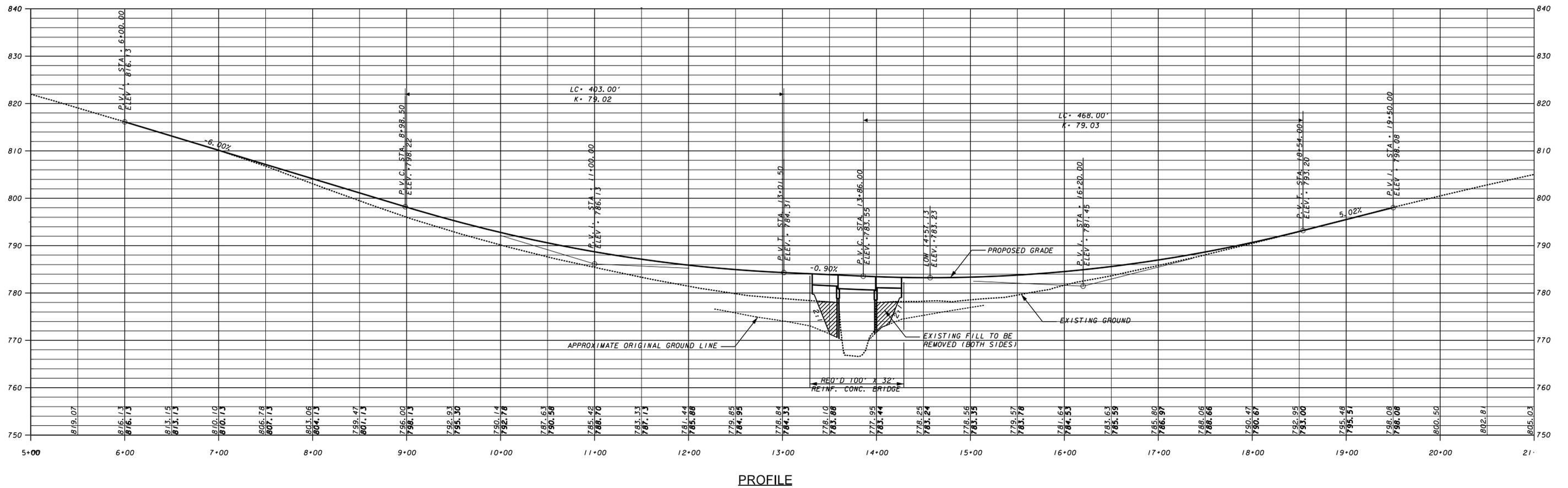
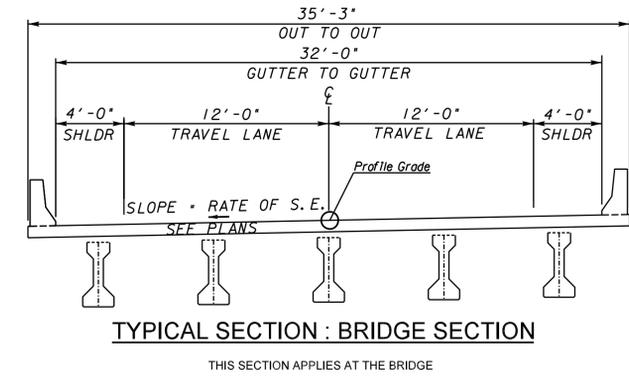
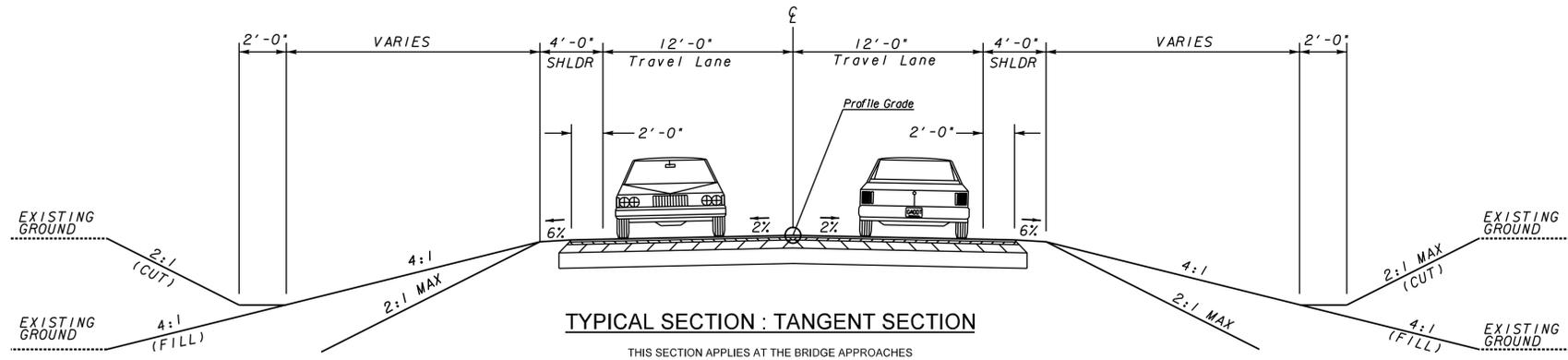
BEGIN BRIDGE
 STA. 13+26.00

END BRIDGE
 STA. 14+26.00

PROPOSED 32' X 100'
 REINF. CONC. BRIDGE

CR 129

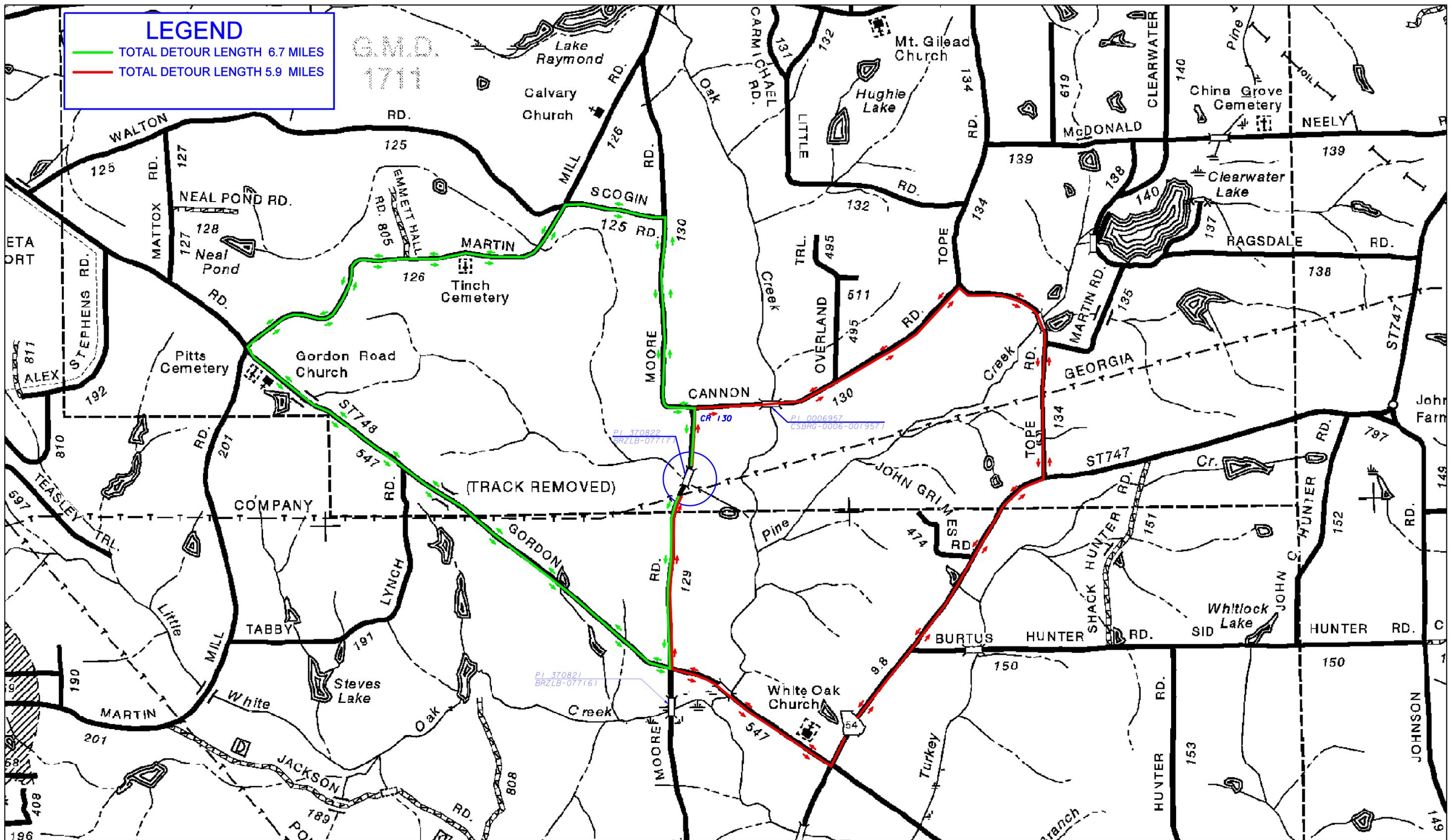
CR 129



LEGEND

- TOTAL DETOUR LENGTH 6.7 MILES
- TOTAL DETOUR LENGTH 5.9 MILES

G.M.D.
1711



DETOUR PLAN MOORE RD OVER WHITE OAK CREEK TRIB. Coweta County

Project Number: BRZLB-077(7)
P.I. Number 370822

