

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

ENVIRONMENTAL REEVALUATION

I. GENERAL INFORMATION

Federal Project Number: STP-7063(1)

County: Columbia

P.I. Number: 250470

Project Name: The Widening of Old Petersburg Road and Old Evans Road

Project Limits: The proposed project begins in a commercial area on Washington Road, branches off on new location, and continues through residential area along Old Evans Road to Old Petersburg Road and ends at Baston Road.

II. DESCRIPTION OF PROJECT IN MOST RECENTLY APPROVED DOCUMENT:

Project STP-7063(1) consists of the widening and improving of Old Petersburg Road and Old Evans Road. The proposed concept would consist of a four-lane (two lanes in each direction) roadway with bike lanes and a 20-foot raised median on a minimum of 150-foot of right-of-way. The roadway would have urban shoulders including curb and gutter, and sidewalks.

The widening of Old Petersburg Road would start on existing location beginning approximately 1,400 feet west of the intersection of Baston Road and extending to the intersection with Old Evans Road. From this point, the project would follow Old Evans Road in a northwesterly direction on existing location to Columbia Industrial Boulevard and then extend westward on new location to tie into Washington Road at the intersection with Town Center Drive and Washington Road. A new bridge would be constructed to grade separate the roadway over the CSX Railroad. The project length would be approximately 2.92 miles.

III. TYPE OF ENVIRONMENTAL DOCUMENT: EA/FONSI

Actions Requiring Concurrences	YES	NO
1. Section 4(f) Evaluation		X
2. Section 106/Assessment of Effects Required		X
3. Endangered Species/Section 7 Consultation		X
4. USFWS Coordination for Longitudinal Stream Encroachments		X

IV. FHWA DOCUMENT APPROVAL DATE: June 3, 2002

V. DATE[S] OF PRIOR REEVALUATION[S]: None

VI. PROJECT DEVELOPMENT STAGE: Right-of-Way

**VII. HAS DESIGN OR ROW CHANGED SINCE THE LAST APPROVAL:
(If No Change, Go to Item IX) Yes**

VIII. DESCRIPTION OF CURRENT PROJECT/DESIGN CHANGES:

As a result of comments from the PFPR and a meeting with the utility companies, it was decided to increase the right of way width by 4 feet on each side of Old Petersburg Road/Old Evans Road. The amount of easement will be decreased by a corresponding amount and the total footprint of the project will not change.

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 Project # STP-7063(1), PI# 250470, Columbia County
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IX. HAVE THE ENVIRONMENTAL STUDIES BEEN UPDATED SINCE THE LAST PROJECT APPROVAL: Yes

X. HAVE THERE BEEN SIGNIFICANT CHANGES IN THE AFFECTED ENVIRONMENT:
 (If the answers to questions VII, IX, and X are all no, skip to question XII) Yes

XI. REVIEW OF EFFECTS: Yes

A. SOCIAL ENVIRONMENT	YES	NO	REMARKS
1. Land Use Changes		X	
2. Community Cohesion		X	
3. Relocation Potential		X	
4. Churches and Institutions			
5. Parks/Recreation Areas/Wildlife Refuges		X	
6. Title VI/E.O. 12898		X	
7. Public Controversy Potential		X	
8. Public Involvement		X	
9. Economic		X	
10. Other		X	

B. CULTURAL ENVIRONMENT	YES	NO	REMARKS
1. Historic Sites		X	
2. Archaeological Resources		X	
3. Section 4(f)		X	

C. NATURAL ENVIRONMENT	YES	NO	REMARKS
1. Water Quality/303(d) List		X	
2. Wetlands		X	
3. Streams	X		SEE ATTACHMENT 1
4. Wild or Scenic Rivers		X	
5. Essential Fisheries Habitat		X	
6. Floodplains		X	
7. Endangered/Threatened Species		X	
8. Invasive Species		X	
9. Other		X	

D. PHYSICAL ENVIRONMENT	YES	NO	REMARKS
1. Noise		X	
2. Air		X	
3. Energy/Mineral Resources		X	
4. Construction/Utilities		X	
5. USTs		X	
6. Hazardous Waste Sites		X	

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E. PERMITS/VARIANCES/ COMMITMENTS REQUIRED	YES	NO	REMARKS
1. U.S. Coast Guard Permit		X	
2. Forest Service/Corps Land		X	
3. Section 404	X		SEE ATTACHMENT 1
4. Tennessee Valley Authority		X	
5. Stream Buffer Variance			
6. Coastal Zone Management Coordination		X	
7. Other Commitments	X		See Green Sheet

XII. NEED FOR PUBLIC INVOLVEMENT:

A public information open house was held on November 19, 1998 and on April 26, 2000 for this project. Also, a public hearing open house was held on August 30, 2001 for this project.

There have been no changes in this project design or environmental effects which would require an additional public hearing/information open house.

XIII. FINDINGS/CONCLUSIONS:

Based on the analysis contained in this reevaluation, it has been determined that the change in project design and/or environmental effects would not significantly alter the conclusions reached in the approved environmental document and/or previous reevaluations.

PREPARED BY: Jayha Lashere
 Signature

4/12/04
 Date

APPROVED BY: Harvey D. Kephart
 Signature (GDOT)

4-12-04
 Date

CONCURRED: Katy Z Allen, P.E.
 Signature (FHWA)

4-12-04
 Date

Attachment 1
Project STP-7063(1), Columbia County
P.I. 250470

C. Natural Environment

3. Streams

Four streams were identified within the project corridor. The original document noted 185 feet of stream impact would occur with the proposed project. After a resurvey and coordination/discussion, it was determined approximately 730 feet of stream would be impacted by the proposed project. Stream impacts for the project are summarized in attachment 2, Table 1.

Avoidance and Minimization

In order to minimize impacts to Stream 2/Reed Creek the design was changed from a culvert to a bridge. This reduced impacts from approximately 220 feet to 0 feet of impact. The additional cost to the project was estimated to be \$1, 179,000.

Impacts to Stream 3 were reduced from 230 feet of longitudinal encroachment to 0 feet of impact by lengthening the proposed bridge. By lengthening the proposed bridge, the endslope would no longer be located over the existing channel. The additional cost of lengthening the bridge was estimated to be \$290,000.

Four alternatives were discussed to minimize and avoid impacts to Stream 4. Alternative 1 would utilize the current design, which would include the construction of an above-ground detention pond and a 42 inch culvert under the roadway. Alternative 2 would include the replacement of the 42 inch culvert with a bottomless structure while keeping the detention facility. Alternative 2 would cost an additional \$489,000. Alternative 3 would utilize an underground, offline detention structure while keeping the 42 inch culvert. Alternative 3 would cost an additional \$1,131,400. Alternative 4 would relocate the above ground detention facility and retain the current drainage items. Alternative 4 would cost an additional \$508,040, plus the cost of additional ROW and relocations.

A Practical Alternative Report (PAR) was held among federal resource agencies responsible for the review and approval of the project, including the Federal Highway Administration, U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (FWS), Environmental Protection Agency (EPA), and the Georgia Department of Natural Resources (DNR). The purpose of the meeting was to conduct early interagency coordination that would achieve a general consensus on the avoidance alternatives that have been selected and to identify issues that would need further consideration. PAR packages were delivered prior to the November 2003 Interagency meeting. It was decided that an on-site visit was unnecessary. No comments were received from the agencies regarding the project.

The project would be expected to produce some increased siltation within wetlands and streams during the construction phase. Environmental harm would be minimized by

standard sedimentation and erosion and hydrological control measures. These include the following:

- 1) Preservation of roadside vegetation beyond limits of construction where possible;
- 2) Early re-vegetation of disturbed areas so as to hold soil movement to a minimum;
- 3) The use of slope drains, detention/retention structures, surface, subsurface and cross drains, designed as appropriate or needed so that discharge would occur in locations and in such a manner that surface and subsurface water quality would not be affected (the outlets may require aprons, bank protection, silt basins and energy dissipaters);
- 4) Inclusion of construction features for the control of predicted erosion and water pollution in the plans, specifications and contract pay items [Georgia Standard Specifications - 2001 Section 160 through 171 and 700 through 715 identify the pollution control measures which may be used];
- 5) The dumping of chemicals, fuels, lubricants, bitumen, raw sewage, or other harmful waste into or alongside of streams or impounds, or into natural or manmade channels leading thereto, would be prohibited.
- 6) Compliance with terms of the National Pollutant Discharge Elimination System (NPDES) permit for construction activities to include preparation and submittal of project Notice of Intent (NOI) and Notice of Termination (NOT). The NPDES permit also requires preparation and implementation of an Erosion, Sedimentation, and Pollution Control Plan and a Comprehensive Monitoring Program. Best management practices outlined in the Erosion, Sedimentation, and Pollution Control Plan must be consistent with, and no less stringent than, practices set forth in the Manual for Erosion and Sedimentation Control in Georgia.

Mitigation

Mitigation would be required for the 730 linear feet of stream that would be impacted by the proposed project. Stream impacts greater than 100 linear feet will be mitigated according to the SOP. A total of 3,622 credits (Attachment 2, worksheet 1) will be withdrawn from a USACE approved mitigation bank.

E. Permits/Variations/Commitments Required

3. Section 404

The placement of fill material in waters of the United States requires a permit from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act of 1977. There are three levels of this permit and the appropriate one is determined based primarily on the type of fill activity, the amount and the location of fill involved. An Individual Section 404 Permit is anticipated for this project.

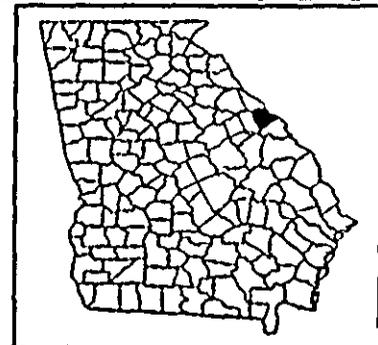
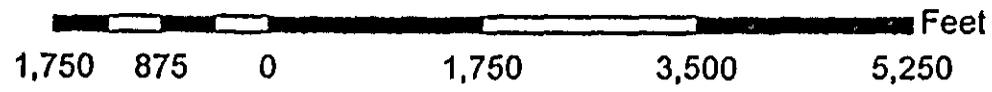
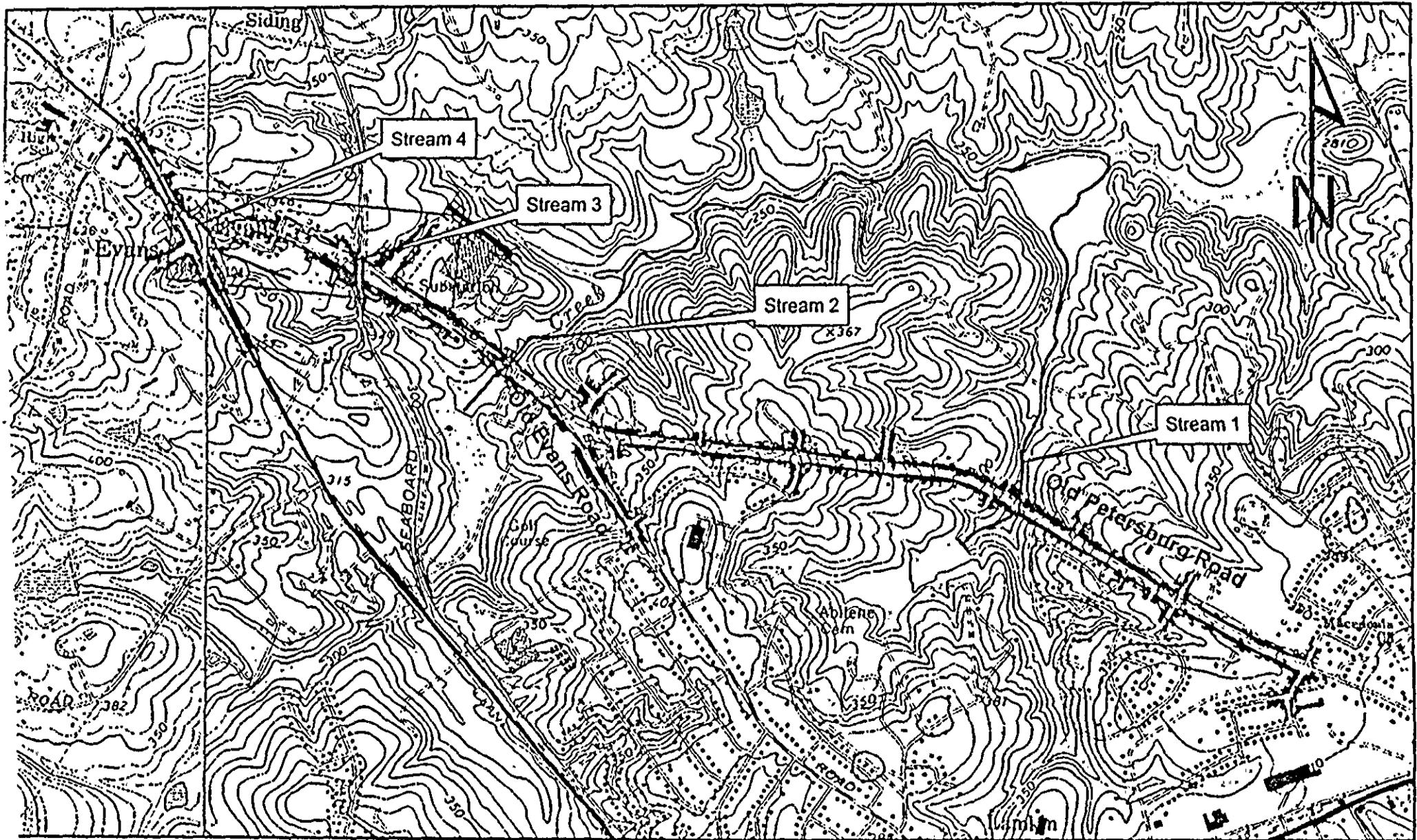


Figure 1. Waters of the US Location Map

Columbia STP-7063(1), PI#250470

Attachment 2.
Project STP-7063(1), Columbia County
250470

Table 1. Summary of Stream Impacts

Stream #/ Name	Drainage Association	Lost Type	HUC #	Stream Description	On 303(d) List?	Length (feet)/Type of Temporary Impact	Length (feet)/Type of Permanent Impact
Stream 1	Tributary of Reed Creek	Perennial	03060106	Stream flows from several impoundments located well upstream of the proposed alignment. The stream has a 25' forested riparian buffer that includes a heavy cover of invasive species, such as kudzu.	NO	0.00	55'/ culvert
Stream 2/Reed Creek	Tributary of Savannah River	Perennial	03060106	Stream has 10' incised banks. The buffer is approximately 40' wide and consists primarily of privet, sweetgum, and red maple. The water is approximately 2' deep and has moderately fast flow.	YES	0.00	0'/ bridge
Stream 3	Tributary of Reed Creek	Intermittent	03060106	The stream has been heavily impacted by the large flows typical of urban streams. The banks have eroded to create a v shaped channel that is 10' to 15' deep. Riparian edge consists of roadside grasses, riprap, black willow, red maple, sweetgum, privet, and Virginia creeper. The substrate consists of silty to sandy soil. At the last site visit, the water was relatively clear and flowing.	NO	0.00	0'/ bridge
Stream 4	Tributary of Reed Creek	Perennial	03060106	The upstream portion of Stream 4 is in a straight channel that is approximately 6" deep and 2' to 3' wide. The vegetation consists of lawn fescue, grasses, sweetgum, red maple, tulip poplar, tag alder, black willow, microstegium, wisteria, kudzu and poison oak. The downstream portion of the stream is sinuous, and somewhat incised, the stream is good quality for its location. The substrate consists of bedrock, gravel, and some cobble.	NO	0.00	675'/ culvert
TOTAL IMPACTS						0.00	730'

**WORKSHEET 1: ADVERSE IMPACT FACTORS FOR RIVERINE SYSTEMS
WORKSHEET**

(3/13/03 draft)

Stream Type Impacted	Intermittent 0.1			Perennial Stream > 15' in width 0.4			Perennial Stream ≤ 15' in width 0.8		
Priority Area	Tertiary 0.5			Secondary 0.8			Primary 1.5		
*Existing Condition	Fully Impaired 0.25			Somewhat Impaired 0.5			Fully Functional 1.0		
*Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.2		
*Dominant Impact	Shade/Clear 0.05	Utility X-ing 0.4	Bank Armor 0.7	Detention 1.5	Stream Crossing (≤ 100') 1.7	Impound 2.7	Morpho-logic Change 2.7	Pipe >100' 3.0	Fill 3.0
Scaling Factor (Based on # linear feet impacted)	< 100' impact 0	100-200' impact 0.05	201-500' impact 0.1	501-1000' impact 0.2	> 1000' impact 0.4 for each 1000' feet of impact (round impacts to the nearest 1000') (example: 2,200' of impact – scaling factor = 0.8; 2,800' of impact – scaling factor = 1.2)				

Factor	Stream 1	Stream 4 detention	Stream 4 Strm x-ing				
Stream Type Impacted	0.1	0.8	0.8				
Priority Area	0.8	0.8	0.8				
Existing Condition	0.5	0.5	0.5				
*Duration	0.2	0.2	0.2				
*Dominant Impact	1.7	1.5	3.0				
Scaling Factor	0	0.1	0.2				
Sum of Factors	3.3	3.9	5.5				
# Feet of Stream Impacted	55	170	505				
M X LF	181.5	663	2,777.5				

Total Mitigation Credits Required = (M X LF) = 3.622