

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. Nos. 621440, 621445, 621760 Bartow County **OFFICE** Preconstruction
STP-179-1(10), BHF-179-1(11), BRP-179-1(12)
SR 113 Widening/Reconstruction **DATE** March 24, 2005

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

TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

- David Mulling
- Harvey Keepler
- Ken Thompson
- Jamie Simpson
- Michael Henry
- Keith Golden
- Joe Palladi (file copy)
- Babs Abubakari
- Kent Sager
- BOARD MEMBER

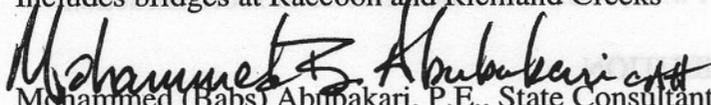
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ORIGINAL TO GENERAL FILE

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

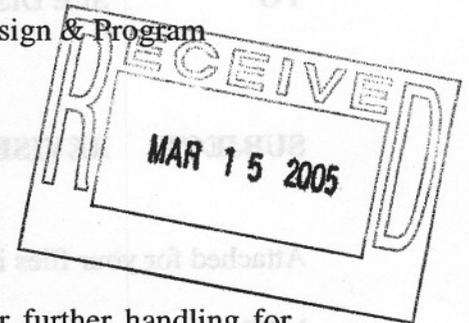
INTERDEPARTMENT CORRESPONDENCE

FILE STP-179-1(10), BHF-179-1(11), & BRF-179-1(12) **OFFICE** Atlanta, Georgia
Bartow County
P.I. No's. 621440, 621445, & 621760 **DATE** March 1, 2005
Widening/Reconstruction SR 113 from CR 31 to SR 61
Includes bridges at Raccoon and Richland Creeks

FROM 
Mohammed (Babs) Abubakari, P.E., State Consultant Design & Program
Delivery Engineer

TO Meg Pirkle, P.E., Assistant Director of Preconstruction

SUBJECT REVISED PROJECT CONCEPT REPORT



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

Listed below are the proposed revisions to the current concept:

- Project BRF-179-1(12) will still replace the existing bridge, but also build the parallel bridge over Richland Creek. This project will also build a full 4-lane roadway from the bridges west to attain full guardrail warrant length and superelevation transition, then transition back to the existing 2-lane. The alignment also changes to match Project STP-2946(1), PI No. 621410, Old Alabama Road Relocation. Project BRF-179-1(12) will need to be awarded to construction preferably in the same contract as Project STP-2946(1), because of staging requirements.
- Project BHF-179-1(11) is revised from rehabilitation to replacement of the existing bridge over Raccoon Creek (sufficiency rating 41.0).
- Project STP-179-1(10) will now complete the 4-lane widening from CR 31 to Richland Creek/Old Alabama Relocation, parallel bridge at Raccoon Creek, with BRF-179-1(12) and a portion of Project STP-2946(1) being treated as an exception in project length. Project STP-179-1(10) will also complete the 4-lane widening (old SR 113) from the Old Alabama Relocation northeastward into Cartersville ending at SR 61, for approximate new lengths of 2.9 and 1.0 miles respectively.

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

Date 3/12/05

Joseph Palladi
State Transportation Planning Administrator

MBA:CAH:RR

Attachment

- cc: David Mulling, Project Review Engineer, w/attach.
- Harvey Keeper, State Environmental/Location Engineer, w/attach.
- Keith Golden, Transportation Engineering Adm., w/attach.
- Joe Palladi, State Transportation Planning Adm., w/attach.
- Jamie Simpson, State Transportation Financial Management Administrator, w/attach.
- Kent Sager, District 6 Engineer, w/attach.
- Paul Liles, State Bridge Design Engineer, w/attach.

RECEIVED
MAR 04 2005
BY:

RECEIVED
MAR 15 2005

ROUTING.	<input type="checkbox"/>	JOE
<input checked="" type="checkbox"/> Chamica	<input type="checkbox"/>	Chamica
<input checked="" type="checkbox"/> Roxana	<input type="checkbox"/>	MED
<input checked="" type="checkbox"/> Mysses	<input type="checkbox"/>	

REVISED PROJECT CONCEPT REPORT

PROJECT STP-179-1(10), BHF-179-1(11), & BRF-179-1(12) BARTOW COUNTY P. I. NO'S. 621440, 621445, & 621760

Need and Purpose: (Original) The purpose of these projects is to upgrade the SR 113 corridor by increasing capacity between Rockmart in Polk County and Cartersville in Bartow County, and diverting truck traffic around Cartersville.

The SR 113 corridor between Rockmart and Cartersville has an overall length of 21.8 miles. The typical section is 24 feet of pavement with four foot grassed shoulders. The majority of this corridor is primarily rural-agriculture in nature, with the exception of Cartersville and Rockmart.

Traffic in the SR 113 corridor between Rockmart and Cartersville varies from 4,000 vehicles per day (VPD) near Taylorsville, to 6,100 VPD in Stilesboro, to 16,900 VPD in Cartersville to 8,000 VPD west of I-75. Peak travel periods are from 7 to 8 a.m. and from 4 to 5 p.m., with the am traffic being the heaviest. Heavy trucks make up 7.5 to 8.0 percent of the average daily traffic at the Cartersville end of the SR 113 corridor

The proposed projects will include; widening and reconstruction of two bridges (those over Dry Creek and Raccoon Creek), widening and reconstruction of SR 113 from CR 433 (Rockmart Bypass) to Richland Creek (near the CR 636 intersection with SR 113), and relocation from near the Richland Creek bridge to I-75 at the Emerson exit. These six projects will help ease traffic congestion due to new development and the increased truck traffic north of SR 61 south in Cartersville, and the relocation of SR 113 will allow approximately 600-700 truck trips per day to be diverted around Cartersville. The projects for relocation of SR 113 between Richland Creek and I-75 at the Emerson Exit (along CR 636) and for improving the bridges over the Dry Creek and Raccoon Creeks were recommended in a Plan Development Bureau report dated January 1989.

Other related projects within this corridor are improvements of the bridges over Hills Creek and Richland Creek, both of which are programmed for Fiscal Year 2002. The Proposed Outer Loop will intersect the SR 113 corridor south of Taylorsville in Polk County.

Project Location: Project STP-179-1(10) widens a 4.5 mile section of SR 113 from CR 31 in Stilesboro northeast to SR 61 near the Cartersville Airport. Project BHF-179-1(11) proposes to reconstruct/rehabilitate the bridge over Raccoon Creek (sufficiency rating 41.0). Project BRF-179-1(12) proposes to replace the bridge over Richland Creek (sufficiency rating 23.4).

Description of the approved concept: Proposed roadway typical was to widen/reconstruct the existing 2-lane rural roadway to 4-lanes with 44' depressed grassed median and 10' rural shoulders. Project BHF-179-1(11) proposed to reconstruct/rehabilitate the bridge over Raccoon Creek. Project BRF-179-1(12) proposed to replace the bridge over Richland Creek. Project STP-179-1(10) proposed to also build the parallel bridges at each creek.

PDP Classification:

Full Oversight (), Exempt (X), SF (), Other ()

Functional Classification: Rural Arterial

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

State Route Number(s): 113

Traffic (AADT) as shown in the approved concept :

Current Year: (1997) 9000

Design Year: (2017) 14200

Proposed features to be revised: The features from the approved concept being revised are the projects' scope, typical section, and alignment. The original concept proposed two bridge projects to either reconstruct or rehabilitate the existing bridges with associated 2-lane roadway tie-ins back to the existing 2-lane roadway. STP-179-1(10) would build the full 4-lane and the parallel bridges at each creek from CR 31 to SR 61.

Describe the revised feature(s) to be approved:

- Project BRF-179-1(12) will still replace the existing bridge (sufficiency rating 23.4), but also build the parallel bridge over Richland Creek. This project will also build a full 4-lane roadway from the bridges west to attain full guardrail warrant length and superelevation transition, then transition back to the existing 2-lane. The alignment also changes to match Project STP-2946(1), PI No. 621410, Old Alabama Road Relocation. Project BRF-179-1(12) will need to be awarded to construction preferably in the same contract as Project STP-2946(1), because of staging requirements.
- Project BHF-179-1(11) will now replace the existing bridge over Raccoon Creek (sufficiency rating 41.0).
- Project STP-179-1(10) will now build a new 4-lane roadway from CR 31 to Richland Creek/Old Alabama Relocation, parallel bridge at Raccoon Creek, with BRF-179-1(12) and a portion of Project STP-2946(1) being treated as an exception in project length. Project STP-179-1(10) will also complete the 4-lane widening (old SR 113) from the Old Alabama Relocation northeastward into Cartersville ending at SR 61, for approximate new lengths of 2.9 and 1.0 miles respectively. Existing 2-lane is now proposed to be totally replaced on both sections.

Updated traffic data (AADT):

Current Year: (2007) 16,600

Design Year: (2027) 31,700

Programmed/Schedule:

STP-179-1(10)

P.E: 1998

R/W: LR Construction: LR

BHF-179-1(11)

P.E: 1993

R/W: N/A Construction: LR

BRF-179-1(12)

P.E: 1993

R/W: 2007 Construction: 2008

Revised cost estimates:

1. Construction cost including inflation and E&C,
2. Right-of-Way – use current programmed cost
3. Utilities – update requested

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

Recommendation: It is recommended that the proposed revision to the concept be approved for implementation.

Attachments:

1. Location Map
2. Cost Estimate – STP-179-1(10), BRF-179-1(12)
3. Revision To Programmed Cost - BHF-179-1(11)

Concur: Buddy Aft 3/22/05
 Director of Preconstruction Date

Approve: Paul W. North 3/22/05
 Chief Engineer Date

Updated traffic data (AADT):
 Current Year: (2007) 10,000 Design Year: (2027) 21,700

Program/Schedule	P.E.	Year	Construction
STP-179-1(10)	P.E.	2008	LR Construction
BHF-179-1(11)	P.E.	2007	WA Construction
BRF-179-1(12)	P.E.	2003	WA Construction

Revised cost estimates:
 1. Construction cost including inflation and B&C
 2. Right-of-Way - use current programmed cost
 3. Utilities - update requested

Is the project located in a Non-attainment area? Yes X No
 Recommendation: It is recommended that the proposed revision to the concept be approved for implementation.

PRELIMINARY COST ESTIMATE

PROJECT NUMBER:	STP-179-1(10)	COUNTY:	BARTOW
DATE:	22-Feb-05	ESTIMATED LETTING DATE:	LR
PREPARED BY:	Rick Reasons	PROJECT LENGTH (MILES):	3.90
<input type="checkbox"/> PROGRAMMING PROCESS		<input type="checkbox"/> CONCEPT DEVELOPMENT <input checked="" type="checkbox"/> DURING PROJECT DEV.	

PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT):	Current Programmed Cost	\$	4,015,000
2. DISPLACEMENTS:		\$	
3. OTHER COST (ADM./ COST, INFLATION)		\$	
SUBTOTAL: A			\$ 4,015,000
B. REIMBURSABLE UTILITIES: (LGPA)			
1. RAILROAD		\$	
2. TRANSMISSION LINES		\$	
3. SERVICES		\$	
SUBTOTAL: B			\$ 0
C. CONSTRUCTION:			
1. MAJOR STRUCTURES:			
a. RETAINING WALLS	0 SF @ \$30/SF	\$	0
b. BRIDGES	(180'X38') = 6840 SF @ \$60/SF	\$	410,400
c. DETOUR BRIDGES		\$	
d. BOX CULVERTS	Single 4X6, 5X3, 6X3	\$	115,406
SUBTOTAL: C-1			\$ 525,806
2. GRADING AND DRAINAGE:			
a. EARTHWORK	UNCLASS EXCAV 330000 CY @ \$3.19/CY		
	BORROW EXCAV 70000 CY @ \$3.95/CY	\$	1,329,200
b. DRAINAGE:		\$	
1. Cross Drain Pipe		\$	200,012
2. Curb and Gutter & Sidewalk		\$	0
3. Longitudinal System	MEDIAN DRAINS, DROP INLETS	\$	1,110,626
SUBTOTAL: C-2			\$ 2,639,838
3. BASE AND PAVING:			
a. AGGREGATE BASE	118300 TONS @ \$13.1/TON	\$	1,549,730
b. ASPHALT PAVING: Surface	16900 TONS @ \$36.73/TON	\$	620,737
c. BINDER	21900 TONS @ \$37.48/TON	\$	820,812

d. BASE	42300 TONS @ \$34.87/TON	\$ 1,475,001
c. CONCRETE PAVING		\$ 0
d. MILLING AND SAWING		\$
e. OTHER: LEVELING, TACK		\$ 695,559
SUBTOTAL: C-3		\$ 5,161,839
4. LUMP ITEMS:		
a. TRAFFIC CONTROL		\$ 153,000
b. CLEARING AND GRUBBING		\$ 572,000
c. LANDSCAPING		\$
d. EROSION CONTROL		\$ 346,351
e. DETOURS		\$
SUBTOTAL: C-4		\$ 1,071,351
5. MISCELLANEOUS:		
a. LIGHTING		\$
b. SIGNING - STRIPING		\$ 91,646
c. SIGNALS	(5) Modified @ \$50,000/Signal & (2) New Signals @ \$100,000/Signal	\$ 0
d. GUARDRAIL		\$ 101,006
e. MEDIAN BARRIER (TEMP.)		\$
SUBTOTAL: C-5		\$ 192,652
SUBTOTAL: C		\$ 9,591,485

ESTIMATE SUMMARY

A. RIGHT-OF-WAY		\$ 4,015,000
B. REIMBURSABLE UTILITIES		\$ 0 *
C. CONSTRUCTION		\$
1. MAJOR STRUCTURES		\$ 525,806
2. GRADING AND DRAINAGE		\$ 2,639,838
3. BASE AND PAVING		\$ 5,161,839
4. LUMP ITEMS		\$ 1,071,351
5. MISCELLANEOUS		\$ 192,652
SUBTOTAL CONSTRUCTION COST		\$ 9,591,485
E. & C. (10%)		\$ 959,149
INFLATION (5% PER YEAR)		\$ 2,914,946
	NUMBER OF YEARS	5
TOTAL CONSTRUCTION COST		\$ 13,465,580
GRAND TOTAL PROJECT COST		\$ 17,480,580

PRELIMINARY COST ESTIMATE

PROJECT NUMBER:	BRF-179-1(12)	COUNTY:	BARTOW
DATE:	22-Feb-05	ESTIMATED LETTING DATE:	2008
PREPARED BY:	Rick Reasons	PROJECT LENGTH (MILES):	0.50
<input type="checkbox"/> PROGRAMMING PROCESS		<input type="checkbox"/> CONCEPT DEVELOPMENT <input checked="" type="checkbox"/> DURING PROJECT DEV.	

PROJECT COST

A. RIGHT-OF-WAY:		
1. PROPERTY (LAND & EASEMENT):		\$
2. DISPLACEMENTS:		\$
3. OTHER COST (ADM./ COST, INFLATION)		\$
SUBTOTAL: A		\$ 0
B. REIMBURSABLE UTILITIES: (LGPA)		
1. RAILROAD		\$
2. TRANSMISSION LINES		\$
3. SERVICES		\$
SUBTOTAL: B		\$ 0
C. CONSTRUCTION:		
1. MAJOR STRUCTURES:		
a. RETAINING WALLS	0 SF @ \$30/SF	\$ 0
b. BRIDGE:	2 x (180'X38') = 13680 SF @ \$60/SF	\$ 820,800
c. DETOUR BRIDGES		\$
d. BOX CULVERTS		\$ 0
SUBTOTAL: C-1		\$ 820,800
2. GRADING AND DRAINAGE:		
a. EARTHWORK	UNCLASS EXCAV 60000 CY @ \$3.19/CY	
	BORROW EXCAV 40000 CY @ \$3.95/CY	\$ 349,400
b. DRAINAGE:		\$
1. Cross Drain Pipe		\$ 0
2. Curb and Gutter & Sidewalk		\$ 0
3. Longitudinal System	MEDIAN DRAINS, DROP INLETS	\$ 118,911
SUBTOTAL: C-2		\$ 468,311
3. BASE AND PAVING:		
a. AGGREGATE BASE	9400 TONS @ \$13.1/TON	\$ 123,140
b. ASPHALT PAVING: Surface	1400 TONS @ \$36.73/TON	\$ 51,422
c. BINDER	1800 TONS @ \$37.48/TON	\$ 67,464

d. BASE	3300 TONS @ \$34.87/TON	\$	115,071
c. CONCRETE PAVING	APPROACH SLAB	\$	74,500
d. MILLING AND SAWING		\$	
e. OTHER: LEVELING, TACK		\$	126,744
	SUBTOTAL: C-3	\$	558,341
4. LUMP ITEMS:			
a. TRAFFIC CONTROL		\$	50,000
b. CLEARING AND GRUBBING		\$	50,000
c. LANDSCAPING		\$	
d. EROSION CONTROL		\$	93,848
e. DETOURS		\$	
	SUBTOTAL: C-4	\$	193,848
5. MISCELLANEOUS:			
a. LIGHTING		\$	
b. SIGNING - STRIPING		\$	16,231
c. SIGNALS		\$	0
d. GUARDRAIL		\$	43,306
e. MEDIAN BARRIER (TEMP.)		\$	
	SUBTOTAL: C-5	\$	59,537
	SUBTOTAL: C	\$	2,100,837

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY		\$ 0
B. REIMBURSABLE UTILITIES		\$ 0
C. CONSTRUCTION		\$
1. MAJOR STRUCTURES		\$ 820,800
2. GRADING AND DRAINAGE		\$ 468,311
3. BASE AND PAVING		\$ 558,341
4. LUMP ITEMS		\$ 193,848
5. MISCELLANEOUS		\$ 59,537
SUBTOTAL CONSTRUCTION COST		\$ 2,100,837
E. & C. (10%)		\$ 210,084
INFLATION (5% PER YEAR)		\$ 638,465
	NUMBER OF YEARS	5
TOTAL CONSTRUCTION COST		\$ 2,949,385
GRAND TOTAL PROJECT COST		\$ 2,949,385

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

OFFICE OF CONSULTANT DESIGN & PROGRAM DELIVERY

INTERDEPARTMENT CORRESPONDENCE

FILE: BHF-179-1(11), Bartow County
P.I. No. 621445

OFFICE: Atlanta, Ga.

DATE: March 1, 2005

FROM: *Mohammed B. Abubakari*
Mohammed (Babs) Abubakari, P.E., State Consultant Design & Program Delivery
Engineer

TO: David Mulling, P.E., Project Review Engineer

SUBJECT: REVISION TO PROGRAMMED COSTS

NO REVISION REQUIRED

PROGRAMMED COSTS:

- Construction Cost \$288,000.00
- Right-of-Way Cost N/R
- Reimbursable Utility Cost N/R

Estimate Date: **6-2-98**

NEW COST ESTIMATES:

- Construction Cost* \$628,460.00
- Right-of-Way Cost N/R
- Reimbursable Utility Cost N/R

*Costs contain 10 % E&C, and 5 % for 5 years of inflation.

Reasons why costs changed: Total Replacement

MBA:CAH:RR

Attachment: Cost Estimate

cc: Jamie Simpson, State Financial Management Administrator

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: BHF-179-1(11) **COUNTY:** BARTOW
DATE: 01-Mar-05 **ESTIMATED LETTING DATE:** LR
PREPARED BY: Rick Reasons **PROJECT LENGTH (MILES):** 0.05
 PROGRAMMING PROCESS CONCEPT DEVELOPMENT DURING PROJECT DEV.

PROJECT COST

A. RIGHT-OF-WAY:		
1. PROPERTY (LAND & EASEMENT):		\$
2. DISPLACEMENTS:		\$
3. OTHER COST (ADM./ COST, INFLATION)		\$
SUBTOTAL: A		\$ 0
B. REIMBURSABLE UTILITIES: (LGPA)		
1. RAILROAD		\$
2. TRANSMISSION LINES		\$
3. SERVICES		\$
SUBTOTAL: B		\$ 0
C. CONSTRUCTION:		
1. MAJOR STRUCTURES:		
a. RETAINING WALLS	0 SF @ \$30/SF	\$ 0
b. BRIDGE!	(180'X38') = 6840 SF @ \$60/SF	\$ 410,400
c. DETOUR BRIDGES		\$
d. BOX CULVERTS		\$ 0
SUBTOTAL: C-1		\$ 410,400
2. GRADING AND DRAINAGE:		
a. EARTHWORK		\$ 0
b. DRAINAGE:		\$
1. Cross Drain Pipe		\$ 0
2. Curb and Gutter & Sidewalk		\$ 0
3. Longitudinal System		\$ 0
SUBTOTAL: C-2		\$ 0
3. BASE AND PAVING:		
a. AGGREGATE BASE		\$ 0
b. ASPHALT PAVING: Surface		\$ 0
c. BINDER		\$ 0

d. BASE		\$	0
c. CONCRETE PAVING	APPROACH SLAB	\$	37,250
d. MILLING AND SAWING		\$	
e. OTHER: LEVELING, TACK		\$	0
SUBTOTAL: C-3		\$	37,250
4. LUMP ITEMS:			
a. TRAFFIC CONTROL		\$	0
b. CLEARING AND GRUBBING		\$	0
c. LANDSCAPING		\$	
d. EROSION CONTROL		\$	0
e. DETOURS		\$	
SUBTOTAL: C-4		\$	0
5. MISCELLANEOUS:			
a. LIGHTING		\$	
b. SIGNING - STRIPING		\$	0
c. SIGNALS		\$	0
d. GUARDRAIL		\$	0
e. MEDIAN BARRIER (TEMP.)		\$	
SUBTOTAL: C-5		\$	0
SUBTOTAL: C		\$	447,650

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY		\$ 0
B. REIMBURSABLE UTILITIES		\$ 0
C. CONSTRUCTION		\$
1. MAJOR STRUCTURES		\$ 410,400
2. GRADING AND DRAINAGE		\$ 0
3. BASE AND PAVING		\$ 37,250
4. LUMP ITEMS		\$ 0
5. MISCELLANEOUS		\$ 0
SUBTOTAL CONSTRUCTION COST		\$ 447,650
E. & C. (10%)		\$ 44,765
INFLATION (5% PER YEAR)		\$ 136,045
	NUMBER OF YEARS	5
TOTAL CONSTRUCTION COST		\$ 628,460
GRAND TOTAL PROJECT COST		\$ 628,460