ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-074-2(42) Coweta County
P. I. No. 333176

OFFICE Preconstruction

DATE September 6, 2002

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

TO SEE DISTRIBUTION

SUBJECT **PROJECT CONCEPT REPORT APPROVAL**

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Paul Liles
Ben Buchan
Thomas Howell
BOARD MEMBER

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: BRST-074-2(42) Coweta County
P.I. No. 333176

OFFICE Preconstruction

DATE August 21, 2002

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

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

SUBJECT PROJECT CONCEPT REPORT

This project is the replacement of a structurally deficient bridge on SR 74 over Southern Railroad in Senoia, Georgia. The existing bridge, constructed in 1950, is load limited with a sufficiency rating of 57. The original design load capacity is H-15. In accordance with DOT MOG 2405-1, the existing bridge meets the established criteria for replacement. State Route 74 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. This section of SR 74 is functionally classified as a rural minor arterial. Traffic is projected to be 12,600 VPD and 20,700 VPD in the years 2007 and 2027 respectively. The posted speed and the design speed are 55 MPH.

The construction proposes to construct a new 120' x 44' concrete bridge over Southern Railroad at existing bridge site. The approaches will consist of two, 12' lanes with 10' rural shoulders (2' paved). Traffic will be maintained during construction utilizing an on-site detour.

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

This project will require split funding because the sufficiency rating exceeds 50. "BR" funding will cover the amount equal to the widening and the remainder will consist of "STP" funding.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE	LET DATE
Construction (includes E&C and inflation)	**BR** **$756,000** **STP** **$424,000**	$1,100,000	2004	FY-05
Right-of-Way	$ 160,000	$ 10,000		
Utilities*	$ 8,000	-----		

BRST-074-2(42) Coweta
August 21, 2002

*LGPA sent 7-12-99 requesting Coweta County do utilities.

This project is in the STIP. I recommend this project concept be approved.

MBP:JDQ/cj

Attachment

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

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **BRST-074-2(42) Coweta County**
SR 74 over Southern Railroad(718831X) in Senoia
P.I. No. 333176-

OFFICE Atlanta

James B. Buchan MBA

FROM James B. Buchan, State Consultant Design Engineer

DATE July 22, 2002

RECEIVED AUG - 6 2002

TO Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

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

This project will require split funding because the bridge sufficiency rating exceeds 50. BR funding will cover the amount equal to the widening costs and the remainder will have to come from STP funding as appears in the attached estimate.

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

If you have any questions or require further information please call Otis Clark at (404)463-6265 or Mal Bricks of Transportation Systems Design, Inc. at (770) 396-4877.

Distribution:

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

JBB:MBA:OC

cc: Transportation Systems Design, Inc.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-074-2 (42)
County: Coweta
P.I. Number: 333176

Federal Route Number: N/A
State Route Number: 85/74

Recommendation for approval:

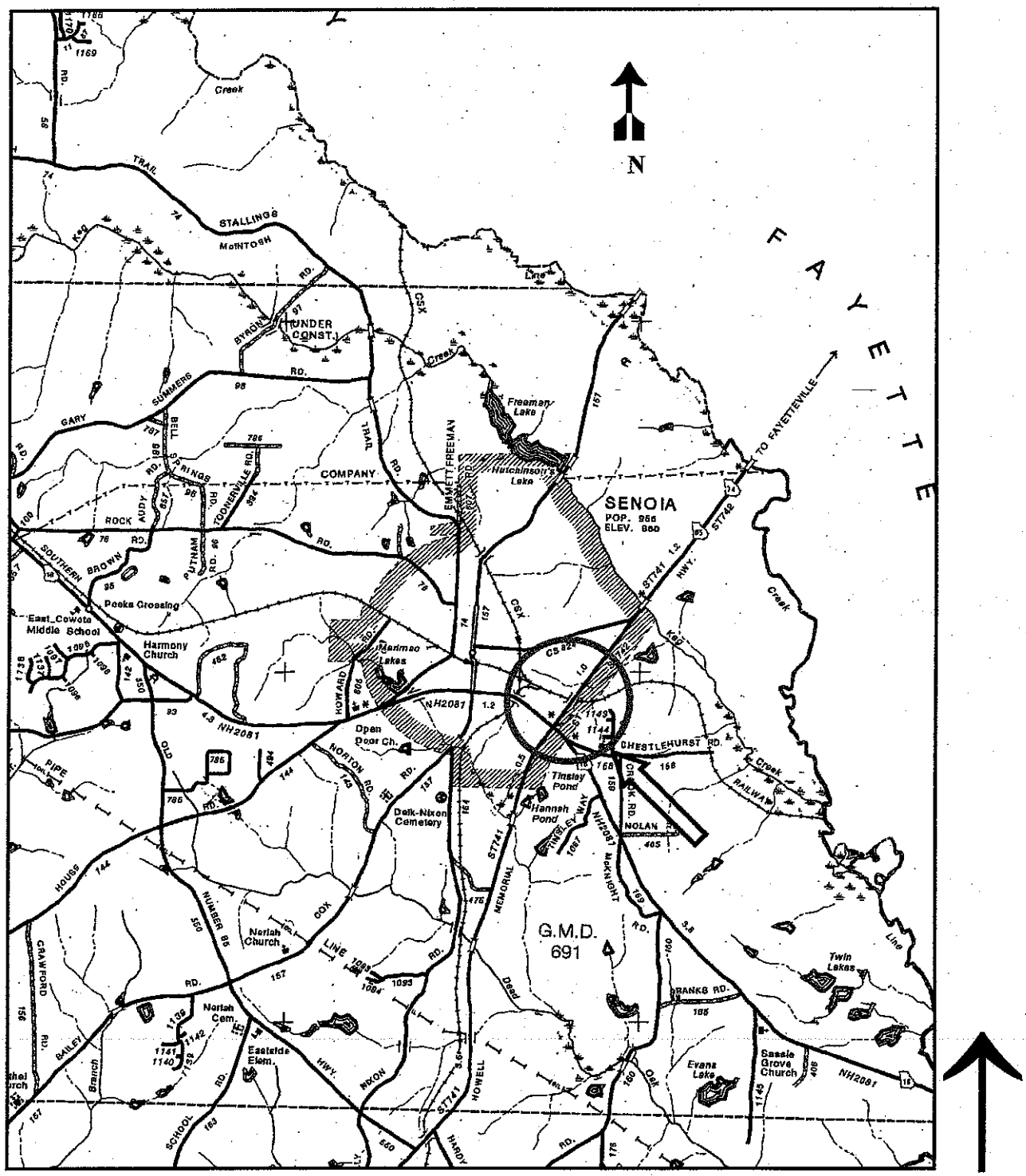
DATE 7-22-02 _____ Project Manager

DATE 8-05-02 _____ State Consultant Design Engineer

The 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	State Transportation Planning Administrator
DATE	Office of Financial Management Administrator
DATE	State Environmental / Location Engineer
DATE	State Traffic Safety and Design Engineer
DATE	District Engineer
DATE	Project Review Engineer
DATE	State Bridge & Structural Design Engineer

Project Concept Report Page 2
Project Number: BRST-074-2(42)
P.I. Number: 333176
County: Coweta



Scale: 1 inch = 1 mile

N

Location Map

Project: BRST-074-2(42) Coweta County **PI No.:** 333176
Description: SR 74 over Southern Railroad (718831X) in Senoia

PROJECT BRST-074-2(42), COWETA COUNTY
PI NO. 333176
BRIDGE REPLACEMENT

Project BRST-074-2 (42) consists of the replacement of the bridge on SR 74/Clark Howell Memorial Highway over the Southern Railroad in Senoia in Coweta County, just south of the Coweta/Fayette County line in southeast Coweta County. This route serves commuter traffic traveling north to Fayetteville in Fayette County. SR 74/Clark Howell Memorial Highway is classified as a Rural Minor Arterial and is not a designated bike route.

This bridge was constructed in 1950 and consists of concrete bents, steel beam superstructure, and a concrete deck. The original design load capacity is H-15. The sufficiency rating on the structure is 57.5, and the bridge is classified as Functionally Obsolete and requires widening. The sufficiency rating is a number from 0 to 100 and is a method of evaluating structural adequacy and safety, serviceability, and functional obsolescence. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. However, in accordance with DOT policy 2405-1, the policy recommends that this bridge be replaced due to the unacceptable load capacity.

Existing 2000 traffic volumes along this section of roadway are approximately 5,900 vehicles per day (VPD). Future volumes are expected to be approximately 12,600 VPD in 2006; and 20,700 VPD in 2026 with 13 % trucks.

Replacing this bridge will bring it up to current AASHTO geometric design standards and in doing so will improve the operation and safety of this roadway.

PROJECT CONCEPT REPORT

Description of the proposed project: *The proposed project is located in Coweta County on SR 74/85 over Southern Railroad. The project consists of replacing the structurally deficient bridge over Flat Shoals Creek on its existing location. A temporary onsite detour will be constructed to the west of the existing bridge to handle traffic during construction of the new bridge. The proposed project length is 0.27 miles.*

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

PDP Classification: Major_____ Minor___X___

PDP Designation: Full Oversight ( ), Exempt (X), State Funded ( ), or Other ( )

Functional Classification: *Rural Minor Arterial*

U.S. Route Number(s): N/A **State Route Number(s):** 74/85

Traffic (AADT):

Current Year: (2006) 12,600 Design Year: (2026) 20,700

Existing design features:

- Typical Section: *Two, 11' Lanes with 8' grassed shoulders.*
- Posted Speed: 55 mph Maximum degree of curvature: NA
- Maximum grade: 5.9% Mainline
- Width of right of way: 130'
- Major structures:
  - *120' x 28' bridge over Southern Railroad on State Route 75/84.*
    Structure ID: 077-0028-0 *Sufficiency rating: 57.5*
- Major interchanges or intersections along the project: *None*
- Existing length of roadway segment: 0.27 miles
  inventory mile post: 5.62

Proposed Design Features:

- Proposed typical section(s): *The proposed roadway will consist of two 12' lanes with 2' paved shoulder and 8' grassed shoulders with side slopes.*
- Proposed Design Speed Mainline: 55 mph
- Proposed Maximum grade Mainline: 5.9% Maximum grade allowable: 6%
- Proposed Maximum grade Side Street: *N/A* Maximum grade allowable: *N/A*
- Proposed Maximum grade driveway: 6%
- Proposed Maximum degree of curve: N/A Maximum degree allowable: 6°45'00"
- Right of Way
  - Width: *Varies 130'-175'*
  - Easements: Temporary (X), Permanent (X), Utility ( ), Other ( ).
  - Type of access control: Full ( ), Partial ( ), By Permit (X), Other ( ).
  - Number of parcels: 4 Number of displacements:
    - Business: 0
    - Residences: 0
    - Mobile Homes: 0
    - Other: 0
- Structures:
  - Bridges: *The proposed bridge will be approximately 120' long and 44' wide.*
  - Retaining Walls: *None*
- Major intersections and interchanges: *SR16 is a signalized intersection just south of the bridge.*
- Traffic control during construction: *A temporary onsite detour will be constructed 50' west of the existing bridge centerline to handle traffic during the removal and construction of the proposed bridge. The proposed detour length will be approximately 0.28 miles.*
- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZ 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)

- Design Variances: *None*
- Environmental Concerns: *The railroad corridor is classified as historic..*
- Level of Environmental Analysis:
  - Are Time Saving Procedures Appropriate? Yes (X), No ( )
  - Categorical Exclusion Anticipated? Yes (X), No ( )
  - Environmental Assessment/Finding of No Significant Impact: Yes ( ), No (X)
  - Environmental Impact Statement (EIS): Yes ( ), No (X)

- Utility Involvements:
  - Telephone: *Bellsouth*
  - Power: *Georgia Power*
  - Gas: *None*
  - Cable TV: *None*

Project Responsibilities:

- Design: *Transportation Systems Design Inc.*
- Right of way acquisition: *GDOT*
- Relocation of utilities: *LGPA letter sent to Coweta County July 9, 1999. (not signed)*
- Letting to contract: *GDOT*
- Supervision of construction: *GDOT*
- Providing material pits: *Contractor*
- Providing detours: *Transportation Systems Design Inc provides on site staging plan.*

Coordination:

- Concept Meeting date(Minutes attached): June 7, 2002
- P.A.R. meetings, dates, and results: *None anticipated*
- FEMA, USCG and/or TVA: *None anticipated*
- Public involvement: *None anticipated*
- Local government comments:
- Other projects in the area: *None*
- Other coordination to date: *None*

Scheduling – Responsible Parties' Estimate

Time to complete the environmental process:	6 Months
Time to complete preliminary construction plans:	4 Months
Time to complete right of way plans:	2 Months
Time to complete the section 404 permit:	3 Months
Time to complete final construction plans:	3 Months
Time to complete the purchase right-of-way:	9 Months
Other major items that will affect project schedule:	None

Other alternates considered:

Alternate 1 – *This alternate consists of permanently realigning SR 85/75 to the west of the existing bridge. This alternate was not chosen because it would introduce unnecessary compound curves and create an undesirable roadway alignment. This situation would not serve driver expectancy and might increase the accident rate in the area. Also, a permanent realignment would require the acquisition of additional right-of-way. The preferred alternate would require minimal right-of-way.*

Alternate 2 – *This alternate consists of replacing the existing bridge on existing location and constructing a temporary detour bridge to the east of the existing bridge centerline to handle traffic. This alternate was not chosen because it impacts the commercial property along the length of the project.*

Alternate 3 – *Replace the bridge on existing location and provide an offsite detour. This alternate was not chosen because although a 2.0 mile detour does exist, it would direct traffic through the city streets of Senoia. An increase in right turns and a decrease in posted speed limit would add considerable time to the length of detour.*

Alternate 4 – *Rehabilitate the existing bridge. This alternate was not chosen because the bridge is very narrow and has a high daily traffic volume. It has been classified as functionally obsolete and needs widening.*

Alternate 5 – *Widen the existing bridge to meet safety requirements. It has been recommended by Buddy Gratton PE, in accordance with DOT policy 2405-1, that the bridge be replaced due to unacceptable load capacity. (see attached letter)*

Alternate 6 – *No build. Due to its narrow width and high daily traffic volumes, the bridge is unsafe and needs replacement.*

Comments: *It is recommended to construct the proposed bridge on existing location and provide a temporary on site detour to the west of the proposed bridge. This alternate creates the least impacts to adjacent properties and it provides a smooth geometric alignment.*

Attachments:

1. Cost Estimates:
    a. Construction including E&C
    b. Right of Way, and
    c. Utilities.
2. Cost estimate for "widening only" condition
3. Sketch location map (in body of report)
4. Typical sections
5. Bridge Inventory
6. Concept Meeting Minutes
7. Location and Design Notice
8. Preliminary Pavement Design (included on typical section)
9. Traffic Counts
10. Memo regarding Bridge Replacement with sufficiency rating above 50

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: BR-074-2(42) COUNTY: Coweta

DATE:05.13.2002 ESTIMATED LETTING DATE: FY-05

PREPARED BY: Tranportation Systems Design, Inc PROJECT LENGTH: 0.27 miles

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT) 0.72 AC		$	137750
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0		$	
3. OTHER COST (ADM./COST, INFLATION)		$	21,713
NUMBER OF YEARS	3		
	SUBTOTAL: A	$	**159,463**
B. REIMBURSABLE UTILITIES:			
1. RAILROAD		$	
2. TRANSMISSION LINES		$	
3. SERVICES (4 utility poles)		$	8000
	SUBTOTAL: B	$	**8,000**
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. BRIDGES (120' X 47.25'X $75)	5670 SF @ $75		425,250
		$	369600
		$	
	SUBTOTAL: C-1.a	$	369,600
b. OTHER			
		$	-
		$	
	SUBTOTAL: C-1	$	**369,600**
2. GRADING AND DRAINAGE:			
a. EARTHWORK (Mainline)			
Borrow	4200 CY @ $7.5	$	31,500
Excavation	2400 CY @ $7.5		18,000
	SUBTOTAL: C-2a	$	49,500
b. EARTHWORK (Detour)			
Borrow	16750 CY @ $	$	125,625
Excavation	2800 CY @ $		21,000
	SUBTOTAL: C-2b	$	146,625

c.. DRAINAGE			
1) Side Drain Pipe	60 LF @ $27	$	1,620
2) Storm drain pipe	LF @ $44	$	-
3) Longitudinal System (incl. catch basins)	LF @ $0	$	-
4) Flared End Sections	1 EA @ $318	$	318
5) Perforated Underdrain	LF @ $6	$	-
6)Temporary Pipe Slope Drain	960 LF @ $10	$	9,600
	SUBTOTAL: C-2.c	$	11,538
	SUBTOTAL: C-2	$	**207,663**
3. BASE AND PAVING:			
a. AGGREGATE BASE CRS	290 TN @ $13	$	3,770
b. ASPHALT PAVING (Mainline & Cross-Roads):			
19 mm Superpave	75 Tons @ $37	$	2,775
25 mm Superpave	215 Tons @ $33	$	7,095
9.5 mm Superpave	270 Tons @ $37	$	9,990
Tack Coat	80 Gallons @ $1	$	80
	SUBTOTAL: C-3.b	$	19,940
c. ASPHALT PAVING (Onsite detour):			
19 mm Superpave	125 Tons @ $37	$	4,625
25 mm Superpave	370 Tons @ $33	$	12,210
9.5 mm Superpave	110 Tons @ $37	$	4,070
Tack Coat	120 Gallons @ $1	$	120
d. AGGREGATE BASE CRS	510 TN @ $13	$	6,630
	SUBTOTAL: C-3.c	$	27,655
e. OTHER (Leveling,Milling, etc.)		$	2000
f. AGGREGATE SURFACE COURSE	Tons @ $19	$	-
	SUBTOTAL: C-3	$	**53,365**

4. EROSION CONTROL (Mainline)				
a. SILT FENCE				
1. TYPE A		1200 LF @ $3.5	$	4,200
2. TYPE B		LF @ $2.6	$	-
3. TYPE C		2260 LF @ $5.3	$	11,978
			$	
b. RIP RAP		100 SF @ $30	$	3,000
c. PLASTIC FILTER FABRIC		100 SF @ $5.8	$	580
d. PERMANENT SOIL REINFORCING MAT		1000 SY @ $5	$	5,000
e.MULCH		50 TN @ $433		21,650
f.PERMANENT GRASS		145 LB @ $42		6,090
h.TEMPORARY GRASS		18 LB @ $33		594
		SUBTOTAL: C-4a	$	**53,092**
EROSION CONTROL (Detour)				
e. SILT FENCE				
1. TYPE A		800 LF @ $3.5	$	2,800
2. TYPE B		LF @ $2.6	$	-
3. TYPE C		1400 LF @ $5.3	$	7,420
			$	10,220
f. RIP RAP		100 SF @ $30	$	3,000
g. PLASTIC FILTER FABRIC		100 SF @ $5.8	$	580
h. PERMANENT SOIL REINFORCING MAT		SY @ $5	$	-
		SUBTOTAL: C-4b		**24,020**
		SUBTOTAL: C-4	$	**77,112**
5 TRAFFIC CONTROL			$	20000
CLEARING&GRUBBING				10000
		SUBTOTAL: C-5	$	**30,000**
6. MISCELLANEOUS:				
a. LIGHTING			$	
b. SIGNING - MARKING			$	2000
c. GUARDRAIL				
W Beam		1080 LF @ $12	$	12,960
T Beam		120 LF @ $40	$	4,800
Anchors	TYPE 12	2 ea @ $1600	$	3,200
	TYPE 1	2 ea @ $450	$	900
		SUBTOTAL: C-6.c	$	21,860
d. SIDEWALK			$	
e. MEDIAN / SIDE BARRIER			$	
f. APPROACH SLABS		293 SY @ $90	$	26,370
g. REMOVAL				
Bridges			$	20000
		SUBTOTAL: C-6.g	$	20,000
h. Detour bridge		5670 SF @ $21	$	119,070
		SUBTOTAL: C-6	$	**189,300**
7. SPECIAL FEATURES				
		SUBTOTAL: C-7	$	-

SUMMARY		
A. RIGHT-OF-WAY	$	159,463
B. REIMBURSABLE UTILITIES	$	8,000
C. CONSTRUCTION		
1. MAJOR STRUCTURES	$	369,600
2. GRADING AND DRAINAGE	$	207,663
3. BASE AND PAVING	$	53,365
4. EROSION CONTROL	$	77,112
5. LUMP ITEMS	$	30,000
6. MISCELLANEOUS	$	189,300
7. SPECIAL FEATURES	$	-
SUBTOTAL CONSTRUCTION COST	$	927,040
INFLATION (5% PER YEAR)	$	146,125
NUMBER OF YEARS 3		
E. & C. (10%)	$	107,316
TOTAL CONSTRUCTION COST	$	**1,180,481**
DETOUR COST (for information only)	$	319,370
GRAND TOTAL PROJECT COST	$	**1,347,944**

PRELIMINARY COST ESTIMATE FOR BR FUNDING COMPARISON

BRIDGE WIDENING ONLY

PROJECT NUMBER: BR-074-2(42) COUNTY: Coweta

DATE:05.13.2002 ESTIMATED LETTING DATE: FY-05

PREPARED BY: Transportation Systems Design Inc. PROJECT LENGTH: 0.27 miles

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT)		$	60000
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0		$	0
3. OTHER COST (ADM./COST, INFLATION)		$	9,458
NUMBER OF YEARS	3		
	SUBTOTAL: A	$	**69,458**
B. REIMBURSABLE UTILITIES:			
1. RAILROAD		$	0
2. TRANSMISSION LINES		$	0
3. SERVICES (4 utility poles)		$	0
	SUBTOTAL: B	$	-
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. WIDEN BRIDGE FROM 28' to 47.25' (Length 120')	2310 SF @ $150		346,500
		$	0
		$	0
	SUBTOTAL: C-1.a	$	346,500
b. OTHER			
		$	-
		$	
	SUBTOTAL: C-1	$	**346,500**
2. GRADING AND DRAINAGE:			
a. EARTHWORK (Mainline)			
Borrow	4200 CY @ $7.5	$	31,500
Excavation	2400 CY @ $7.5		18,000
	SUBTOTAL: C-2a	$	49,500
b. EARTHWORK (Detour)			
Borrow	0 CY @ $	$	-
Excavation	0 CY @ $		-
	SUBTOTAL: C-2b	$	-
c.. DRAINAGE			
1) Side Drain Pipe	60 LF @ $27	$	1,620
2) Storm drain pipe	LF @ $44	$	-
3) Longitudinal System (incl. catch basins)	0 LF @ $0	$	-
4) Flared End Sections	1 EA @ $318	$	318
5) Perforated Underdrain	LF @ $6	$	-

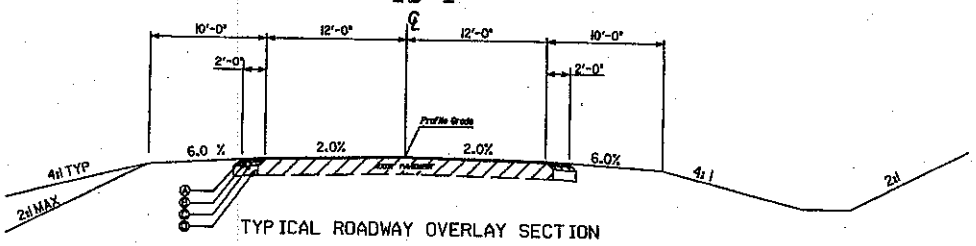
6)Temporary Pipe Slope Drain	960 LF @ $10	$	9,600
	SUBTOTAL: C-2.c	$	11,538
	SUBTOTAL: C-2	$	**61,038**
3. BASE AND PAVING:			
a. AGGREGATE BASE CRS	290 TN @ $13	$	3,770
b. ASPHALT PAVING (Mainline & Cross-Roads):			
19 mm Superpave	75 Tons @ $37	$	2,775
25 mm Superpave	215 Tons @ $33	$	7,095
9.5 mm Superpave	270 Tons @ $37	$	9,990
Tack Coat	80 Gallons @ $1	$	80
	SUBTOTAL: C-3.b	$	19,940
c. ASPHALT PAVING (Onsite detour):			
19 mm Superpave	0 Tons @ $37	$	-
25 mm Superpave	0 Tons @ $33	$	-
9.5 mm Superpave	0 Tons @ $37	$	-
Tack Coat	0 Gallons @ $1	$	-
d. AGGREGATE BASE CRS	0 TN @ $13	$	-
	SUBTOTAL: C-3.c	$	-
e. OTHER (Leveling,Milling, etc.)		$	0
f. AGGREGATE SURFACE COURSE	Tons @ $19	$	-
	SUBTOTAL: C-3	$	**23,710**

4. EROSION CONTROL (Mainline)				
a. SILT FENCE				
1. TYPE A		1200	LF @ $3.5	$ 4,200
2. TYPE B		0	LF @ $2.6	$ -
3. TYPE C		2260	LF @ $5.3	$ 11,978
				$
b. RIP RAP		100	SF @ $30	$ 3,000
c. PLASTIC FILTER FABRIC		100	SF @ $5.8	$ 580
d. PERMANENT SOIL REINFORCING MAT		1000	SY @ $5	$ 5,000
e.MULCH		50	TN @ $433	21,650
f.PERMANENT GRASS		145	LB @ $42	6,090
h.TEMPORARY GRASS		18	LB @ $33	594
	SUBTOTAL: C-4a			$ **53,092**
EROSION CONTROL (Detour)				
e. SILT FENCE				
1. TYPE A		0	LF @ $3.5	$ -
2. TYPE B		0	LF @ $2.6	$ -
3. TYPE C		0	LF @ $5.3	$ -
				$ -
f. RIP RAP		0	SF @ $30	$ -
g. PLASTIC FILTER FABRIC		0	SF @ $5.8	$ -
h. PERMANENT SOIL REINFORCING MAT			SY @ $5	$ -
	SUBTOTAL: C-4b			-
	SUBTOTAL: C-4			$ **53,092**
5 TRAFFIC CONTROL				$ 40000
CLEARING&GRUBBING				10000
	SUBTOTAL: C-5			$ **50,000**
6. MISCELLANEOUS:				
a. LIGHTING				$ 0
b. SIGNING - MARKING				$ 2000
c. GUARDRAIL				
W Beam		1080	LF @ $12	$ 12,960
T Beam		120	LF @ $40	$ 4,800
Anchors	TYPE 12	2	ea @ $1600	$ 3,200
	TYPE 1	2	ea @ $450	$ 900
	SUBTOTAL: C-6.c			$ 21,860
d. SIDEWALK				$ 0
e. MEDIAN / SIDE BARRIER		260	LF @ $34	$ 8,840
f. APPROACH SLABS		293	SY @ $90	$ 26,370
g. REMOVAL				
Bridges				$ 0
	SUBTOTAL: C-6.g			$ -
h. Detour bridge		0	SF @ $21	$ -
	SUBTOTAL: C-6			$ **59,070**
7. SPECIAL FEATURES				
	SUBTOTAL: C-7			$ -

SUMMARY		
A. RIGHT-OF-WAY	$	69,458
B. REIMBURSABLE UTILITIES	$	-
C. CONSTRUCTION		
1. MAJOR STRUCTURES	$	346,500
2. GRADING AND DRAINAGE	$	61,038
3. BASE AND PAVING	$	23,710
4. EROSION CONTROL	$	53,092
5. LUMP ITEMS	$	50,000
6. MISCELLANEOUS	$	59,070
7. SPECIAL FEATURES	$	-
SUBTOTAL CONSTRUCTION COST	$	593,410
INFLATION (5% PER YEAR)	$	93,536
NUMBER OF YEARS 3		
E. & C. (10%)	$	68,695
TOTAL CONSTRUCTION COST	$	**755,641**
DETOUR COST (for information only)	$	-
GRAND TOTAL PROJECT COST	$	**825,099**

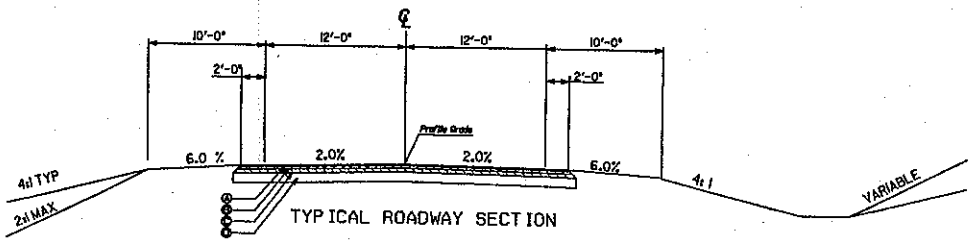
STATE	PROJECT NUMBER	SHEET NO.
GA.	BRST-074-2(42)	

TS—1



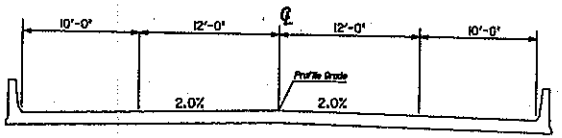
TYPICAL ROADWAY OVERLAY SECTION

TS—2



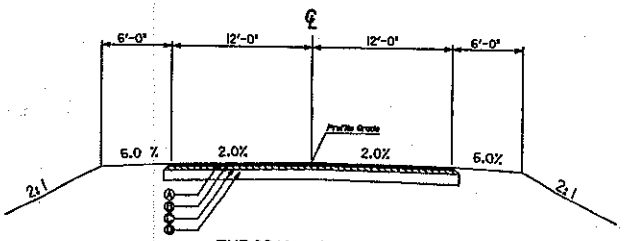
TYPICAL ROADWAY SECTION

TS—3



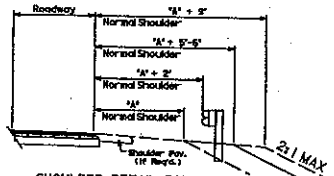
BRIDGE SECTION

TS—4



TYPICAL DETOUR SECTION

SLOPE CONTROLS		
SLOPE	CUT	FILL
4:1	0-4'	0-10'
3:1	4'-6'	--
2:1	OVER 10'	OVER 10'



SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION
SEE GA STD 4051 OR 4052 FOR DETAILS
NOT TO SCALE

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO "BEST FIT" EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A. NORMAL CROWN

SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES LESS THAN 0.5%
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM
0.0208 FT/FT - DESIRABLE	0.0208 FT/FT - DESIRABLE
0.0250 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM

B. SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR SE RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

C. SUPERELEVATION TRANSITION LENGTH (LENGTH FROM FLAT POINT TO FULL SE)

	RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM	1:150	0.67%
DESIRABLE	1:200	0.50%
MAXIMUM	1:300	0.33%

LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).

REQUIRED PAVEMENT

Ⓐ 9.5 mm ASPHALTIC CONCRETE SUPERPAVE -135 LB/SY
Ⓑ 19 mm RECYCLED ASPHALTIC CONCRETE SYPERPAVE-220 LB/SY
Ⓒ 25 mm RECYCLED ASPHALTIC CONCRETE SYPERPAVE-660 LB/SY
Ⓓ GRADED AGGREGATE BASE, 8"
Ⓔ ASPHALTIC CONCRETE LEVELING, AS REQ'D

REQUIRED SUPERPAVE MIX DESIGN: LEVEL B FOR ROADWAY SURFACE
REQUIRED SUPERPAVE MIX DESIGN: LEVEL A FOR SHOULDER SURFACE

NOT TO SCALE

TSD
TRANSPORTATION SYSTEMS DESIGN, INC.
ENGINEERS & SURVEYORS
[illegible]

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF CONSULTANT TASK FORCE

DATE	REVISIONS	DATE	REVISIONS

GEORGIA
DEPARTMENT OF TRANSPORTAT
CONCEPT TYPICAL SECTIONS
PROJECT BRST-074-2(42)
COUNTY: COWETA
DATE 05.07.02 SH 1 OF

SHOWDATET DNE000000

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 077-0028-0 **Coweta County** SUFF. RATING: 57.5

Location & Geography

* Structure I.D. No.: 077-0028-0
200 Bridge Information: 07

* 6A Freature Int.: SOU. RAILROAD (718831X)
* 6B Critical Bridge: 0
* 7A Route Number Carried: SR00074
* 7B Facility Carried: SR 74
* 9 Location: CITY OF SENOIA
2 DOT District: 3
207 Year Photo: 1999

* 91 Inspection Frequency: 24 Date: 10/06/1999
92A Fract Crit Insp Freq: 0 00 Date: 0000
92B Underwater Insp Freq: 0 00 Date: 0000
92C Other Spc. Insp Freq: 0 00 Date: 0000

* 4 Place Code: 69672

* 5 Inventory Route (O/U): 1
Type: 3
Designator: 1
Number: 00074
Direction: 0

* 16 Latitude: 33-17.7
* 17 Longitude: 84 -32.6

98 Border Bridge: 000 %Shared: 00
99 ID Number: 000000000000000

* 100 Defense Highway: 0
* 101 Parallel Structure: N
* 102 Direction of Traffic: 2
264 Road Inventory Mile Post: 005.62

* 208 Inspection Area: 03 Initials: DJM

* Location I.D. No: 077-00074D-001.95E
* XReferen I.D. No: 000-000000-000.000

* 104 Highway System: 0
* 26 Functional Classification: 06
* 204 Federal Route Type: F No: 074-2
* 110 Truck Route: 0
206 School Bus Route: 0
217 Benchmark Elevation: 0.00
218 Datum: 0
* 19 Bypass Length: 2
* 20 Toll: 3
* 21 Maintenance: 01
* 22 Owner: 01
* 31 Design Load: 2
37 Historical Significance: 5
205 Congressional District: 03
* 27 Year Constructed: 1950
106 Year Reconstructed: 0000
33 Bridge Median: 0
34 Skew: 22
35 Structure Flared: 0
38 Navigation Control: N
213 Special Steel Design: 0
267 Type of Paint: 5

* 42 Type Service On: 1
Under: 2
214 Movable Bridge: 00
203 Type Bridge: Z-O-M-O
259 Pile Encasement: 3
* 43 Structure Type Main: 3 02
45 No. Spans Main: 003
44 Structure Type Appr: 0 0
46 No. Spans Appr: 0000
226 Bridge Curve Horz: 0 Vert: 0
111 Pier Protection: 0
107 Deck Structure Type: 1

108 Wearing Surface Type: 6
Membrane: 0
Protection: 0

Signs & Attachments

223 Expansion Joint Type: 02
242 Deck Drains: 0

243 Parapet Location: 0
Height: 0
Width: 0

238 Curb: 1.1 1
239 Handrail: 1 1
* 240 Median Barrier Rail: 0

241 Bridge Median Height: 0
Width: 0

* 230 Guardrail Loc Dir Rear: 3
Fwrd: 3
Oppo Dir Rear: 0
Fwrd: 0

244 Approach Slab: 0
224 Retaining Wall: 0

233 Posted Speed Limit: 55
236 Warning Sign: 0
234 Delineator: 1
235 Hazard Boards: 1

237 Utilities Gas: 00
Water: 00
Electric: 00
Telephone: 00
Sewer: 00

247 Lighting Street: 0
Navigation: 0
Aerial: 0

* 248 County Continuity No: 00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 077-0028-0 **Coweta County** SUFF. RATING: 57.5

Programming Data

201 Project No: F-2710 (2) CT.2
202 Plans Available: 1
249 Prop. Proj No: BRST-074-2 (42)
250 Approval Status: 0000
251 P.I. No: 333176
252 Contract Date: 02/01/2004
260 Seismic No: 00000
75 Type Work: 34 1
94 Bridge Imp. Cost: $ 116
95 Roadway Imp. Cost: $ 233
96 Total Imp. Cost: $ 424
76 Imp. Length: 001440
97 Imp. Year: 1990
114 Future ADT: 013350 Year: 2019

Hydraulic Data

215 Waterway Data
Highwater Elev: 0000.0 Year: 0000
Flood Elev: 0000.0 Freq: 00
Avg. Streambed Elev: 0000.0
Drainage Area: 00000
Area of Opening: 000000
113 Scour Critical: N
216 Water Depth: 00.0 Br Height: 00.0
222 Slope Protection: 0
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No Barrels: 0
Width: 0.0
Height: 0.0
Length: 0
Apron: 0
* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No: 077-00074D-001.95E
* XReferen I.D. No: 000-000000-000.000

Measurements

* 29 ADT: 008900 Year: 1999
109 % Trucks: 12
* 28 Lanes On: 02 Under: 00
210 No. Tracks On: 00 Under: 01
* 48 Max. Span Length: 0040
* 49 Structure Length: 120
51 Br. Rdwy. Width: 25.8
52 Deck Width: 31.8
* 47 Tot. Horz. Cl: 25.8
50 Curb/Sdewlk Width: 2.0/2.0
32 Approach Rdwy Width: 022
* 229 Shlder Width:
Rear Lt: 8.0 Type: 8 Rt: 8.0
Fwrd Lt: 8.0 Type: 8 Rt: 8.0
Pvment Width:
Rear: 22.0 Type: 2
Fwrd: 22.0 Type: 2
Intersection Rear: 0 Fwrd: 0
36 Safety Features Br. Rail: 2
Transition: 2
App. G. Rail: 1
App. Rail End: 1
53 Minimum Cl. Over: 99' 99"
Under: R 21' 09"
* 228 Min. Vert. Cl
Act. Odm. Dir: 99' 99"
Oppo. Dir: 99' 99"
Posted Odm. Dir: 00' 00"
Oppo. Dir: 00' 00"
55 Lateral Undercl. Rt: R 10.6
56 Lateral Undercl. Lt: 0.0
* 10 Max Min Vert Cl: 99' 99" Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 6.7
Deck Thick Approach: 0.0
246 Overlay Thickness: 1.5
211 Tons Structural Steel: 32.0
212 Year Last Painted: Sup: 1999 Sub: 0000

Ratings

66 Inventory Type: 2 Rating: 21
64 Operating Type: 2 Rating: 34
231 Calculated Loads
H-Modified: 20 0
HS-Modified: 25 0
Type 3: 25 0
Type 3s2: 38 0
Timber: 36 0
Piggyback: 40 0
261 H Inventory Rating: 15
262 H Operating Rating: 24
67 Structural Evaluation: 4
58 Deck Condition: 7
59 Superstructure Condition: 8
* 227 Collision Damage: 0
60A Substructure Condition: 7
60B Scour Condition: N
60C Underwater Condition: N
71 Waterway Adequacy: N
61 Channel Protection Cond: N
68 Deck Geometry: 2
69 UnderClr. Horz/Vert: 4
72 Appr. Alignment: 5
62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
41 Struct Open, Posted, Cl: A
* 103 Temporary Structure: 0

232 Posted Loads H-Modified: 00
HS-Modified: 00
Type 3: 00
Type 3S2: 00
Timber: 00
Piggyback: 00
253 Notification Date: 0000
253 Fed Notify Date: 0000 0

TRANSPORTATION SYSTEMS DESIGN, INC.

June 7, 2002

RE: BRST-074-2(42), Coweta County – Concept meeting minutes
P.I. No. 333176
TSD Proj. No. 0108.05 WO1

Present:

Anna Shmukler, PE	770-396-4877	ashmukler@tsdengineers.com	TSD, Inc.
Dan Bodycomb, PE	770-396-4877	dbodycomb@tsdengineers.com	TSD, Inc.
Ken Robinson Jr	706-646-6514	ken.robinson@dot.state.ga.us	GDOT
Gene McKissick	706-646-6571	gene.mckissick@dot.state.ga.us	GDOT
Ken Crabtree, Jr	706-845-4115	ken.crabtree@dot.state.ga.us	GDOT
Otis Clark	404-463-6265	otis.clark@dot.state.ga.us	OCD
Windy Bickers	404-463-5023	windy.bickers@dot.state.ga.us	OFM
Kim Brown	706-646-6548	kim.brown@dot.state.ga.us	GDOT Utilities
Charles Chapman	770-412-6681	clchapma@southernco.com	GA Power
Tom Queen	706-646-6591	tom.queen@dot.state.ga.us	GDOT

Minutes:

1. The meeting opened with introductions from everyone that was present.
2. It was noted that the Location Map doesn't accurately represent the location of the bridge. This will need to be updated.
3. The Need and Purpose statement was read next. There were no comments about it other than the fact that the traffic counts had changed. The new traffic numbers (12,600 VPD in 2006 and 20,700 VPD in 2026 with 13% trucks) will be added.
4. Next the project fact sheet was read. It was noted by Ken that Coweta County is in a Non-attainment area.
5. Otis stated that the R/W should be set so that the slopes required for shoulder improvements would be included inside the required R/W. And that we should start with permanent easement for the construction limits necessary for the detour construction.
6. Tom mentioned that the intersection at SR16 at SR74 is being improved by adding turning lanes. The project number is 0000818 and we should contact traffic operations to coordinate with our project.
7. It was noted that Coweta County hasn't signed the LGPA letter that was sent to them on July 12, 1999. Tom stated that another letter should be sent.
8. Otis mentioned that because the sufficiency of the bridge is over 50 then this project will be split funded. We need to include this fact on the cover sheet in big bold letters. (Split Funding)
9. Otis requested that we include a cost estimate for the widening of the existing bridge. They need this for the split funding.
10. Charles from GA Power said that they didn't think that they would have any conflict.

NOTICE OF LOCATION AND DESIGN APPROVAL

BRST-074-2(42), Coweta County
P. I. NUMBER 333176

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

The date of location approval is SEPTEMBER 6, 2002.

The project is located in Coweta County on SR 74/85 over Southern Railroad. The project is located in Land District 1 in Land Lots 290 and 291.

The project consists of the replacement of the structurally deficient bridge on SR74/85 over Southern Railroad. The proposed bridge structure will be built on the existing alignment. A detour bridge will be built to the west of the existing roadway.

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

Mr. Kenneth D. Crabtree Jr. – Area 6 Engineer
Email address: ken.crabtree@dot.state.ga.us
1107 Hogansville Road
LaGrange, Georgia 30241
706-845-4115

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

James B. Buchan, P.E.
Office of Consultant Design
Ben.Buchan@dot.state.ga.us
No. 2 Capital Square
Atlanta, Georgia 30334
404-463-6265

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

Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-074-2(42) Coweta
P.I. 333176

OFFICE Environment/ Location

DATE August 9, 2001

FROM Harvey D. Keepler, State Environmental/ Location Engineer

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

SUBJECT SR 74 @ Southern Railroad (718831X)

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

Existing 1999 ADT = 9900
2006 ADT = 12600
2026 ADT = 20700
K = 9%
D = 60%
T = 13%
24 HR T = 15%
SU = 6%
COMB = 9%

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

Department of Transportation
State of Georgia

J. TOM COLEMAN, JR.
COMMISSIONER
(404) 656-5206

FRANK L. DANCHETZ
CHIEF ENGINEER
(404) 656-5277

HAROLD E. LINNENKOHL
DEPUTY COMMISSIONER
(404) 656-5212

EARL MAHFUZ
TREASURER
(404) 656-5224

INTERDEPARTMENT CORRESPONDENCE

April 24, 2002

FROM: Buddy Gratton, P.E., State Maintenance Engineer

TO: James B. Buchan, P.E., State Consultant Design Engineer
Attn: Ted Cashin

SUBJECT: Bridge Replacement

BRST-074-2 (42) / Coweta
Structure ID 077-0028-0
Location ID 077-00074D-001.95E
SR 74 over Southern RR

This bridge was built in 1950 and consists of concrete bents, steel beam superstructure, and a concrete deck. The original design load capacity is H-15. The sufficiency rating on the structure is 56.2, and the bridge is classified as Functionally Obsolete and requires widening. However, in accordance with DOT policy 2405-1, we recommend that this bridge be replaced though due to unacceptable load capacity. Due to this criteria, no additional cost analysis or coring by the lab will be required. This bridge does not currently qualify for federal replacement BR funding but does qualify for federal bridge widening funds which can be used toward replacement up to the estimated cost of widening. The remaining funds would have to come from another funding source.

If further information is required, please contact Brian Summers at (404) 635-8179.

BG/BKS

cc: Percy Middlebrooks

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-074-2 (42)
County: Coweta
P.I. Number: 333176

Federal Route Number: N/A
State Route Number: 85/74

Recommendation for approval:

DATE 7-22-02 _____ Project Manager

DATE 8-05-02 _____ State Consultant Design Engineer

The 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).

8/7/02 DATE _____ State Transportation Planning Administrator

DATE _____ Office of Financial Management Administrator

DATE _____ State Environmental / Location Engineer

DATE _____ State Traffic Safety and Design Engineer

DATE _____ District Engineer

DATE _____ Project Review Engineer

DATE _____ State Bridge & Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-074-2 (42)
County: Coweta
P.I. Number: 333176

Federal Route Number: N/A
State Route Number: 85/74

Recommendation for approval:

DATE 7-22-02 — Project Manager

DATE 8-05-02 — State Consultant Design Engineer

The 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 — State Transportation Planning Administrator

DATE — Office of Financial Management Administrator

DATE — State Environmental / Location Engineer

DATE — State Traffic Safety and Design Engineer

DATE — District Engineer

DATE — Project Review Engineer

8/12/02 DATE — State Bridge & Structural Design Engineer