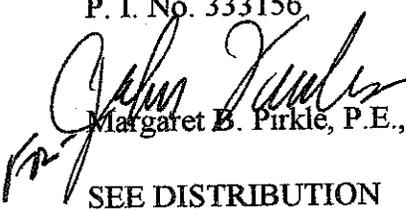


D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-158-1(17) Harris County **OFFICE** Preconstruction
P. I. No. 333156 **DATE** January 16, 2003

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

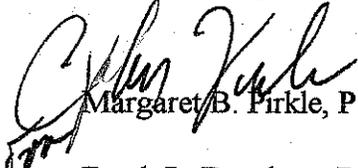
DISTRIBUTION:

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

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-158-1(17) Harris County **OFFICE** Preconstruction
P.I. No. 333156 **DATE** January 9, 2003

FROM  Margaret B. Firkle, 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 103 over Flat Shoals Creek, 4.0 miles southeast of West Point, Georgia. The existing bridge, constructed in 1950, is load limited with a sufficiency rating of 30. State Route 103 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. Traffic is projected to be 2250 VPD and 3500 VPD in the years 2006 and 2026 respectively. The posted speed and the design speed are 55 MPH.

The construction proposes to construct a new 350' x 40' concrete bridge over Flat Shoals Creek at the existing bridge site. The approaches will consist of two, 12' lanes with 10' rural shoulders (2' paved). Traffic will be detoured via an on-site drainage structure and temporary detour road constructed parallel and east of the existing bridge.

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

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$2,978,000	\$2,480,000	2006	FY-06
Right-of-Way	\$ 15,000	\$ 15,000		
Utilities*	LGPA	LGPA		

*Harris County signed LGPA for utilities 8-3-99.

Frank L. Danchetz

Page 2

BRST-158-1(17) Harris

January 9, 2003

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

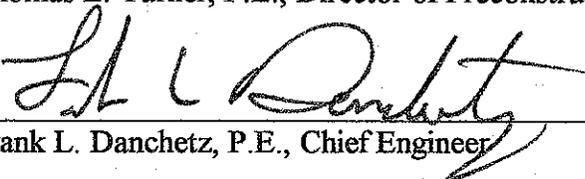
MBP:JDQ/cj

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-158-1(17) Harris County** **OFFICE** Atlanta
SR 103 @ Flat Shoals Creek 11.2 mi W of SR 116
P.I. No. 333156-

FROM *James B. Buchan* ^{msk}
James B. Buchan, State Consultant Design Engineer **DATE** December 9, 2002

TO Margaret B. Pirkle, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

DEC 10 2002

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

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

If you have any questions or require further information please call Otis Clark at (404)463-6265 or Steve Tiedemann of J.B. Trimble, Inc. at (770) 952-1022.

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: J.B. Trimble, Inc.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

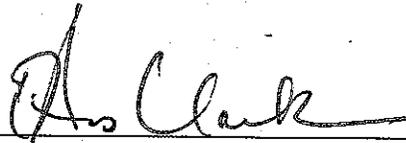
Project Number: BRST-158-1(17)
County: Harris
P.I. Number: 333156

Federal Route Number: N/A
State Route Number: 103

Recommendation for approval:

DATE 12-9-02

DATE 12-9-02


Project Manager

State Consultant Design Engineer

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

DATE _____	State Transportation Planning Administrator
DATE _____	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 3
Project Number: BRST-158-1(17)
P.I. Number: 333156
County: Harris

NEED AND PURPOSE
PROJECT BRST-158-1(17), HARRIS COUNTY
PI No. 333156
BRIDGE REPLACEMENT

Bridge project BRST-158-1(17) in Harris County will replace the structurally deficient bridge located on State Route (SR) 103 over Flat Shoals Creek. The bridge's sufficiency rating is 30.6. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. This project will replace the existing bridge with a structurally adequate bridge.

This section of SR 103 is functionally classified as a rural minor arterial and is a designated school bus route. SR 103 is not on the state bicycle network. The posted speed limit along this section of SR 103 is 55 mph. The bridge is located approximately 3 miles southeast of West Point and was constructed in 1950. The Annual Average Daily Traffic (AADT) along this section of roadway was 2,200 in 1999. The projected (2026) AADT for this section of roadway is 3,500 with 11% trucks.

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

Project Concept Report Page 4
Project Number: BRST-158-1(17)
P.I. Number: 333156
County: Harris

PROJECT CONCEPT REPORT

Description of the proposed project: *The proposed project is located in Harris County on SR 103 over Flat Shoals Creek. The project consists of replacing the structurally deficient bridge over Flat Shoals Creek on its existing location. A temporary onsite detour will be constructed west of the existing bridge to handle traffic during construction of the new bridge. The proposed project length is 0.63 miles.*

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

PDP Classification: Major Minor

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

Functional Classification: *Rural Minor Arterial*

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

State Route Number(s): 103

Traffic (AADT):

Current Year: (2006) 2250

Design Year: (2026) 3500

Existing design features:

- Typical Section: *Two, 12' Lanes with 2' paved shoulders and 6' grassed shoulders.*
- Posted Speed: 55 mph Maximum degree of curvature: 1°00'
- Maximum grade: 5.5% Mainline
- Width of right of way: Varies 100'-200'
- Major structures:
 - *305' x 28' bridge over Flat Shoals Creek on State Route 103.*
Struct. ID: 145-0017-0 Sufficiency rating: 30.6
- Major interchanges or intersections along the project: *None*
- Existing length of roadway segment: 0.63
Beginning mile log for county segment: 10.87

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: 5.0% Maximum grade allowable: 6%
- Proposed Maximum grade Side Street: N/A Maximum grade allowable: N/A
- Proposed Maximum grade driveway: 10%
- Proposed Maximum degree of curve: 1°00'00" Maximum degree allowable: 6°45'00"
- Right of Way
 - Width: Varies 160'-200'
 - Easements: Temporary(), Permanent(X), Utility(), Other().
 - Type of access control: Full(), Partial(), By Permit(X), Other().
 - Number of parcels: 6 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile Homes: 0
 - Other: 0
- Structures:
 - Bridges: *The proposed bridge will be approximately 350' long and 40' wide.*
 - Retaining Walls: *None*
- Major intersections and interchanges: *None*
- Traffic control during construction: *An 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 0.57 miles.*
- Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
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: *Possible involvement with waters of the US.*
- 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: *Interstate Telephone*
 - Power: *Troup EMC*
 - Gas: *None*
 - Cable TV: *None*

Project Responsibilities:

- Design: *Earth Tech*
- Right of way acquisition: *GDOT*
- Relocation of utilities: *Harris County is responsible for reimbursable utilities. LGPA signed 8-03-99.*
- Letting to contract: *GDOT*
- Supervision of construction: *GDOT*
- Providing material pits: *Contractor*
- Providing detours: *GDOT*

Coordination:

- Concept Meeting date(Minutes Attached): *February 15, 2002*
- P.A.R. meetings, dates, and results: *None*
- FEMA, USCG and/or TVA: *None*
- Public involvement: *None*
- Local government comments: *None*
- Other projects in the area: *None*
- Other coordination to date: *None*

Scheduling – Responsible Parties' Estimate

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

Other alternates considered:

Alternate 1 – *This alternate consists of permanently realigning SR 103 to the west of the existing bridge. This alternate was not chosen because of its 1.5 mile length and because of traffic staging difficulties. In addition, a substandard vertical curve on the north end of the project must be corrected if this alternate is chosen. The current K value of this vertical curve is approximately 115. For a 55 mph design speed, the minimum K value is 150. Eleven parcels will be impacted if this alternate is chosen.*

Alternate 2 – *This alternate consists of replacing the existing bridge on existing location and constructing a temporary detour bridge to the east (upstream) of the existing bridge centerline to handle traffic. Placing a temporary detour bridge on the upstream side of the proposed bridge is discouraged because the temporary detour bridge will be designed for a 10-year storm and there is a risk of the temporary detour bridge washing out and destroying the proposed bridge if a larger storm event occurs. A detour to the east would be approximately 0.51 miles.*

Alternate 3 – *Replace the bridge on existing location and provide an offsite detour. This alternate was not chosen because of the lengthy 12 mile detour, and because SR 103 is a designated school bus route.*

Alternate 4 – *Rehabilitate the existing bridge. This alternate was eliminated because the Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced. The sufficiency rating for this bridge is 30.6*

Comments: *It is recommended to construct the proposed bridge on existing location and provide a detour to the west of the proposed bridge. This alternate creates the least impacts to adjacent properties and it provides a smooth geometric alignment. In addition, the temporary detour bridge is located on the downstream side of the proposed bridge thus creating the most desirable situation from a hydraulic standpoint.*

Attachments:

1. Cost Estimates:
 - a. Construction including E&C
 - b. Right of Way, and
 - c. Utilities.
2. Typical sections,
3. Bridge Inventory
4. Concept Meeting Minutes

Project Concept Report Page 8
Project Number: BRST-158-1(17)
P.I. Number: 333156
County: Harris

5. Location and Design Notice
6. Preliminary Pavement Design
7. Traffic Counts
8. Datatrieve Sheet
9. Existing Bridge Plan

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: BRST-158-1(17)

COUNTY: Harris

DATE: November 12, 2001

ESTIMATED LETTING DATE: Feb-07

PREPARED BY: BWH

PROJECT LENGTH:

0.63

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

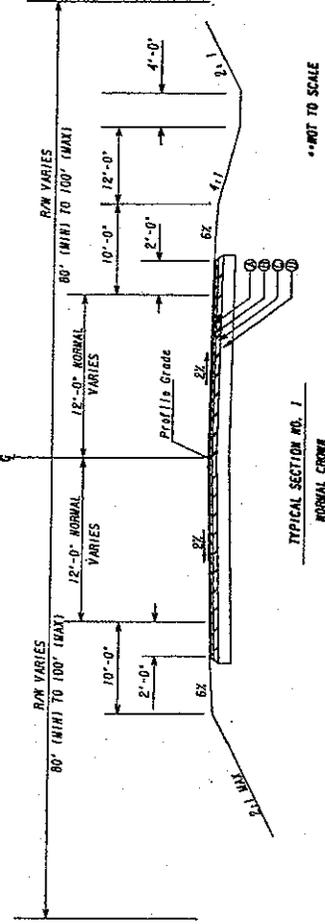
PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT) 2.81 AC		\$	15000
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0		\$	
3. OTHER COST (ADM./COST, INFLATION)		\$	
SUBTOTAL: A			\$ 15,000
B. REIMBURSABLE UTILITIES:			
1. RAILROAD		\$	
2. TRANSMISSION LINES		\$	
3. SERVICES (3 utility poles) (by LGPA, cost not included in total)		\$	5000
SUBTOTAL: B			\$ 5,000
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. BRIDGES (350' X 43.25' X \$70)		\$	1059625
SUBTOTAL: C-1.a			\$ 1,059,625
b. OTHER		\$	-
SUBTOTAL: C-1			\$ 1,059,625
2. GRADING AND DRAINAGE:			
a. EARTHWORK (Mainline)			
Borrow	7895	CY @ \$7.5	\$ 59,213
Excavation	7619	CY @ \$7.5	\$ 57,143
SUBTOTAL: C-2a			\$ 116,355
b. EARTHWORK (Detour)			
Borrow	7490	CY @ \$	\$ 56,175
Excavation	7410	CY @ \$	\$ 55,575
SUBTOTAL: C-2b			\$ 111,750

c.. DRAINAGE			
1) Side Drain Pipe	20	LF @ \$21	\$ 420
2) Storm drain pipe	150	LF @ \$44	\$ 6,600
3) Longitudinal System (incl. catch basins)		LF @ \$0	\$ -
4) Safety End Sections	2	EA @ \$280	\$ 560
5) Perforated Underdrain	300	LF @ \$6	\$ 1,800
6) Temporary Pipe Slope Drain	300	LF @ \$24	\$ 7,200
SUBTOTAL: C-2.c			\$ 16,580
SUBTOTAL: C-2			\$ 244,685
3. BASE AND PAVING:			
a. AGGREGATE BASE	4977	SY @ \$10	\$ 49,770
b. ASPHALT PAVING (Mainline & Cross-Roads):			
19 mm Superpave	580	Tons @ \$43	\$ 24,940
25 mm Superpave	1141	Tons @ \$37	\$ 42,217
9.5 mm Superpave	380	Tons @ \$42	\$ 15,960
Tack Coat	121	Gallons @ \$1	\$ 121
SUBTOTAL: C-3.b			\$ 83,238
c. ASPHALT PAVING (Onsite detour):			
19 mm Superpave	791	Tons @ \$43	\$ 34,013
25 mm Superpave	1610	Tons @ \$37	\$ 59,570
9.5 mm Superpave	394	Tons @ \$42	\$ 16,548
Tack Coat	500	Gallons @ \$1	\$ 500
d. AGGREGATE BASE	7021	SY @ \$10	\$ 70,210
SUBTOTAL: C-3.c			\$ 180,841
e. OTHER (Leveling, Milling, etc.)			
			\$ 1000
f. AGGREGATE SURFACE COURSE	25	Tons @ \$19	\$ 475
SUBTOTAL: C-3			\$ 315,324

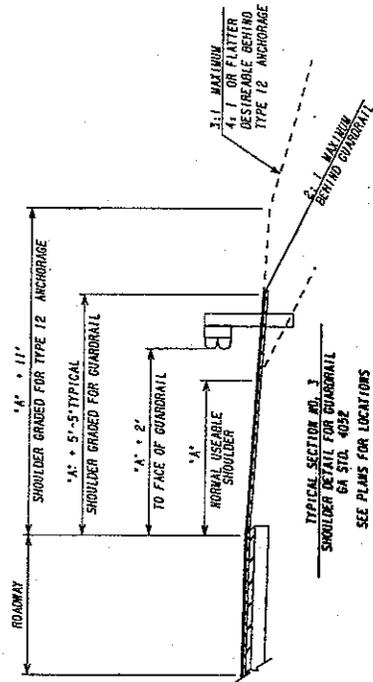
4. EROSION CONTROL (Mainline)				
a. SILT FENCE				
1. TYPE A	2600	LF @ \$3.5	\$	9,100
2. TYPE B		LF @ \$2.6	\$	-
3. TYPE C	1900	LF @ \$5.3	\$	10,070
			\$	19,170
b. RIP RAP	600	SF @ \$30	\$	18,000
c. PLASTIC FILTER FABRIC	600	SF @ \$5.8	\$	3,480
d. PERMANENT SOIL REINFORCING MAT	500	SY @ \$5	\$	2,500
SUBTOTAL: C-4a			\$	62,320
EROSION CONTROL (Detour)				
e. SILT FENCE				
1. TYPE A	3166	LF @ \$3.5	\$	11,081
2. TYPE B		LF @ \$2.6	\$	-
3. TYPE C	2100	LF @ \$5.3	\$	11,130
			\$	22,211
f. RIP RAP	400	SF @ \$30	\$	12,000
g. PLASTIC FILTER FABRIC	400	SF @ \$5.8	\$	2,320
h. PERMANENT SOIL REINFORCING MAT	500	SY @ \$5	\$	2,500
SUBTOTAL: C-4b				61,242
SUBTOTAL: C-4			\$	123,562
5 TRAFFIC CONTROL			\$	10000
SUBTOTAL: C-5			\$	10,000
6. MISCELLANEOUS:				
a. LIGHTING				\$
b. SIGNING - MARKING				\$
c. GUARDRAIL				
W Beam	1500	LF @ \$12	\$	18,000
T Beam	84	LF @ \$40	\$	3,360
Anchors	TYPE 12	2 @ \$1600	\$	3,200
	TYPE 1	2 @ \$450	\$	900
SUBTOTAL: C-6.c			\$	25,460
d. SIDEWALK				\$
e. MEDIAN / SIDE BARRIER				\$
f. APPROACH SLABS	390	SY @ \$90	\$	35,100
g. REMOVAL				
Bridges			\$	60000
SUBTOTAL: C-6.g			\$	60,000
h. Detour bridge				\$
SUBTOTAL: C-6			\$	473,560
7. SPECIAL FEATURES				
SUBTOTAL: C-7			\$	-

SUMMARY	
A. RIGHT-OF-WAY	\$ 15,000
B. REIMBURSABLE UTILITIES (by LGPA, cost not included in total)	\$ 5,000
C. CONSTRUCTION	
1. MAJOR STRUCTURES	\$ 1,059,625
2. GRADING AND DRAINAGE	\$ 244,685
3. BASE AND PAVING	\$ 315,324
4. EROSION CONTROL	\$ 123,562
5. LUMP ITEMS	\$ 10,000
6. MISCELLANEOUS	\$ 473,560
7. SPECIAL FEATURES	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 2,226,756
INFLATION (5% PER YEAR)	\$ 479,880
NUMBER OF YEARS	4
E. & C. (10% of Construction Cost)	\$ 270,664
TOTAL CONSTRUCTION COST	\$ 2,977,299
DETOUR COST (for information only)	\$ 704,833
	-
GRAND TOTAL PROJECT COST	\$ 2,997,299

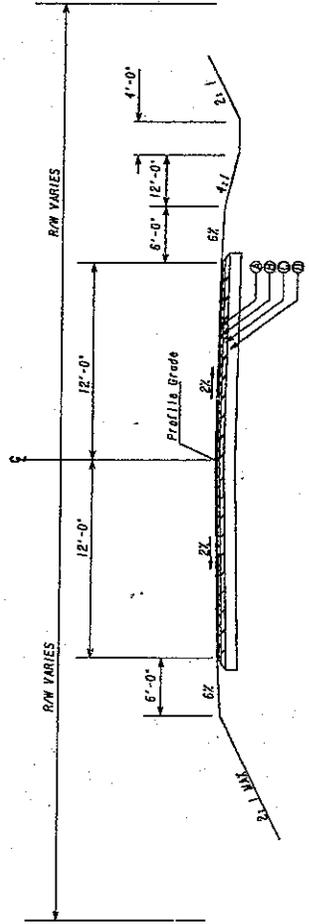
STATE PROJECT NUMBER
 GA BRST-158-11171



TYPICAL SECTION NO. 1
 NORMAL CROWN



TYPICAL SECTION NO. 3
 SHOULDER DETAIL FOR GUARDRAIL
 GA STD. 405Z
 SEE PLANS FOR LOCATIONS



TYPICAL SECTION NO. 2
 APPLIES TO ALL TEMPORARY DETOUR STATIONS

SLOPE	CONTROLS	FILL
4:1	CUT TO FL.	0-10 FT.
2:1	OVER 10 FT.	OVER 10 FT.

* REQUIRES GUARDRAIL

- REQUIRED PAVEMENT
- ① 165 LBS/ST RECYCLED ASPH CONC 5.5 MM SUPERPAVE, GPE ONLY, INCL BITUM & H LIME (SUPERPAVE LEVEL "B")
 - ② 200 LBS/ST RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM & H LIME (SUPERPAVE LEVEL "B")
 - ③ 140 LBS/ST RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM & H LIME (SUPERPAVE LEVEL "A")
 - ④ 8" GRADED AGGREGATE BASE

GEORGIA
 DEPARTMENT OF TRANSPORTATION
 TYPICAL SECTIONS
 PROJECT: SR 103 & GREAT SHOALS
 COUNTY: HARRIS
 DATE: 3-1

DATE	REVISIONS	DATE	REVISIONS

EARTH TECH
 1435 OLD ALABAMA ROAD, SUITE 170
 ROSELLE, GEORGIA 30016
 (770) 596-1468

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 145-0017-0

Harris County

SUFF. RATING: 30.6

Location & Geography

* Structure I.D. No.: 145-0017-0
 * 200 Bridge Information: 06
 * 6A Feature Int.: FLAT SHOALS CREEK
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: SR00103
 * 7B Facility Carried: SR 103
 * 9 Location: 4 MILES S.E. WEST POINT
 * 2 DOT District: 3
 * 207 Year Photo: 1997
 * 91 Inspection Frequency: 24 Date: 11/22/1999
 * 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

Signs & Attachments

* 104 Highway System: 0
 * 26 Functional Classification: 06
 * 204 Federal Route Type: F No: 158-1
 * 110 Truck Route: 0
 * 206 School Bus Route: 1
 * 217 Benchmark Elevation: 581.00
 * 218 Datum: 2
 * 19 Bypass Length: 12
 * 20 Toli: 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: 00
 * 35 Structure Flared: 0
 * 38 Navigation Control: 0
 * 213 Special Steel Design: 0
 * 267 Type of Paint: 1
 * 42 Type Service On: 1 Under: 5
 * 214 Movable Bridge: 00
 * 203 Type Bridge: O-N-M-O
 * 259 Pile Encasement: 2
 * 43 Structure Type Main: 4 02
 * 45 No. Spans Main: 003
 * 44 Structure Type Appr: 3 3
 * 46 No. Spans Appr: 0002
 * 226 Bridge Curve Horiz: 0 Vert: 1
 * 111 Pier Protection: 0
 * 107 Deck Structure Type: 1
 * 108 Wearing Surface Type: 1 Membrane: 0 Protection: 0
 * 223 Expansion Joint Type: 04
 * 242 Deck Drains: 1
 * 243 Parapet Location: 0 Height: 0 Width: 0
 * 238 Curb: 1.2 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
 * 244 Approach Slab: 3
 * 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: 32 Sewer: 00
 * 247 Lighting Street: 0 Navigation: 0 Aerial: 0
 * 248 County Continuity No: 00

* 4 Place Code: 00000
 * 5 Inventory Route (O/U): 1 Type: 3 Designator: 1 Number: 00103 Direction: 0
 * 16 Latitude: 32-50.2
 * 17 Longitude: 85 -06.9
 * 98 Border Bridge: 000 %Shared: 00
 * 99 ID Number: 000000000000000000
 * 100 Defense Highway: 0
 * 101 Parallel Structure: N
 * 102 Direction of Traffic: 2
 * 264 Road Inventory Mile Post: 010.87
 * 208 Inspection Area: 08 Initials: JLA
 * Location I.D. No: 145-00103D-010.87N
 * XReferen I.D. No: 000-0000000-000.000

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 145-0017-0

Harris County

SUFF. RATING: 30.6

Programming Data

201 Project No: FAS 632 (1)
 202 Plans Available: 0
 249 Prop. Proj No: BRST-158-1 (17)
 250 Approval Status: 0000
 251 P.I. No: 333156
 252 Contract Date: 02/01/2002
 260 Seismic No: 00000
 75 Type Work: 34 1
 94 Bridge Imp. Cost: \$ 391
 95 Roadway Imp. Cost: \$ 238
 96 Total Imp. Cost: \$ 793
 76 Imp. Length: 001625
 97 Imp. Year: 1990
 114 Future ADT: 002415 Year: 2018

Measurements

* 29 ADT: 001610 Year: 1998
 109 % Trucks: 16
 * 28 Lanes On: 02 Under: 00
 210 No. Trucks On: 00 Under: 00
 * 48 Max. Span Length: 0082
 * 49 Structure Length: 305
 51 Br. Rdwy. Width: 23.9
 52 Deck Width: 28.0
 * 47 Tot. Horz. Cl: 23.9
 50 Curb/Sdewlk Width: 2.0/2.0
 32 Approach Rdwy Width: 023
 * 229 Shlder Width:

Rear Lt: 6.0 Type: 8 Rt: 6.0
 Fwrd Lt: 6.0 Type: 8 Rt: 6.0
 Pvwnt Width:

Rear: 23.0 Type: 2
 Fwrd: 23.0 Type: 2
 Intersection Rear: 0 Fwrd: 0

36 Safety Features Br. Rail:
 Transition: 2
 App. G. Rail: 2
 App. Rail End: 2

53 Minimum Cl. Over: 99'99"
 Under: N 00'00"
 * 228 Min. Vert. Cl

Act. Odm. Dir: 99'99"
 Oppo. Dir: 99'99"
 Posted Odm. Dir: 00'00"
 Oppo. Dir: 00'00"

55 Lateral Undercl. Rt: N 99.9
 56 Lateral Undercl. Lt: 0.0
 * 10 Max Min Vert Cl: 99'99" Dir: 0

39 Nav Vert Cl: 000
 Horz: 0000
 116 Nav Vert Cl Closed: 000
 245 Deck Thickness Main: 6.0

Deck Thick Approach: 6.0
 246 Overlay Thickness: 0.0
 211 Tons Structural Steel: 114.0
 212 Year Last Painted: Sup: 1986 Sub: 1986

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: 6

216 Water Depth: 03.0 Br Height: 45.0
 222 Slope Protection: 6
 221 Spur Dikes Rear: 0 Fwrd: 0

219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000

Type:
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0

* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No: 145-00103D-010.87N
 * XReferen I.D. No: 000-000000-000.000

Ratings

66 Inventory Type: 2 Rating: 13
 64 Operating Type: 2 Rating: 29
 231 Calculated Loads

H-Modified: 14 1
 HS-Modified: 22 1
 Type 3: 18 1
 Type 3s2: 33 1
 Timber: 25 1
 Piggyback: 00 0

261 H Inventory Rating: 10
 262 H Operating Rating: 15
 67 Structural Evaluation: 2
 58 Deck Condition: 6
 59 Superstructure Condition: 7

* 227 Collision Damage: 0
 60A Substructure Condition: 5
 60B Scour Condition: 7
 60C Underwater Condition: N
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 8
 68 Deck Geometry: 3
 69 UnderClr. Horz/Vert: N
 72 Appr. Alignment: 6
 62 Culvert: N

Posting Data

70 Bridge Posting Required: 3
 41 Struct Open, Posted, Cl: P
 * 103 Temporary Structure: T

232 Posted Loads H-Modified: 14
 HS-Modified: 22
 Type 3: 18
 Type 3S2: 33
 Timber: 25
 Piggyback: 00

253 Notification Date: 0000
 253 Fed Notify Date: 0000

E

MEETING MINUTES

Earth Tech
1455 Old Alabama Road
Roswell, Georgia 30076
(770) 990-1400 Fax (770) 990-1503

DATE: February 18, 2002

PROJECT: BRST-158-1(17)
P.I. No. 333156
SR 103 @ Flat Shoals Creek

SUBJECT: Concept Team Meeting Minutes

ATTENDEES:	Windy Bickers	GDOT	(404) 463-5023
	Archie Cash	Troup EMC	(706) 845-2000
	Tommy Cleaveland	GDOT Location	(706) 646-6589
	Edsel D. Meacham	GDOT Area 7	(706) 568-2165
	Keith King	Interstate Telephone	(706) 645-8604
	Bill Patrick	Harris County	(706) 628-4958
	Tom Queen	GDOT	(706) 646-6591
	Larry Sharpe	Interstate Telephone	(706) 645-8669
	Steve Tiedemann	J.B. Trimble	(770) 952-1022
	Britt Hennessey	Earth Tech	(770) 990-1400
	Cindy Lee	Earth Tech	(770) 990-1400

Notes prepared by: Britt Hennessey, Earth Tech

A Concept Team Meeting was held on the above project on February 15, 2002 at the Archives Building in Thomaston, Georgia. Britt Hennessey called the meeting to order at 9:00 AM. Ms. Hennessey then presented the project. The following comments/discussions were noted:

Ms. Hennessey presented the conceptual layout and showed that the existing, structurally deficient bridge will be replaced on its existing alignment. An on-site detour will be constructed to accommodate traffic during construction of the new bridge.

Earth Tech will contact Melanie Evans at GDOT ((404) 646-6595) to check on the most current functional classification of SR 103.

Edsel Meacham expressed concern with the 15' offset between the detour bridge and the proposed bridge. Tommy Cleaveland suggested at least 75' from edge to edge if there is a large elevation change between the detour bridge and the proposed bridge. Since there is less than a 4' elevation change, the 15' offset should be sufficient.

Windy Bickers explained that GDOT is responsible for payment for the detour. Earth Tech will update this in the concept report.

Tom Queen said that the program dates for this project are 2004 for Right of Way and 2007 for letting.

Ms. Bickers said that the Utilities LGPA signed by Harris County was for private and public utilities.

E

MEETING MINUTES

Earth Tech
1455 Old Alabama Road
Roswell, Georgia 30076
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Mr. Queen asked if the existing bridge was considered historical since it was constructed in 1950. Environmental representatives were not present. Historical impacts are being studied by environmental consultants.

Ms. Bickers stated that the number of years for construction should be changed to 5 in the concept report. Earth Tech will make this change.

Mr. Queen verified that it is best to change all temporary easement to permanent right of way.

Steve Tiedemann expressed concern over the amount of rock located on this project. Mr. Meacham said that it would not be a problem with the bridge footings, but the cost may increase.

Tom Queen asked if any stream realignment would be necessary. Mr. Tiedemann noted that none would be required with this project.

Those in attendance agreed that the proposed western detour is the best alternative.

Earth Tech will mail hard copies of the displays to Troup EMC and to Interstate Telephone Company. The meeting displays were given to Bill Patrick.

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. BRST-158-1(17)
P.I. No. 333156

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

The date of location approval is JANUARY 16, 2003

This project is located entirely in Harris County on SR 103 over Flat Shoals Creek. The project is located within Land District 5, Land Lot numbers 113 and 114.

This project consists of replacing the structurally deficient bridge on SR 103 over Flat Shoals Creek. The proposed bridge structure will be built on existing location. An onsite detour and detour bridge will be constructed to handle traffic during removal and construction of the new bridge.

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

Mr. Dewayne Meacham
Dewayne.Meacham@dot.state.ga.us
Columbus, Georgia 31907
(706) 568-2165

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

Otis Clark
Office of Consultant Design
Otis.Clark@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 Project and P.I. Numbers as noted at the top of this notice.

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: BRST-158-1(17)

County: HARRIS

P.I. no.: 333156

Description: SR 103 OVER FLAT SHOALS CREEK

Traffic Data (NOTE: AADTs are one-way)

24-hour Truck Percentage: 9.00%

AADT initial year of design period: 1,125 vpd (2006)

AADT final year of design period: 1,750 vpd (2026)

Mean AADT (one-way): 1,438 vpd

Design Loading

Mean AADT	LDF	Trucks	18-K ESAL		Total Daily Loads
1,438 *	1.00 *	0.090 *	0.95	=	124

Total predicted design period loading = 124 * 20 * 365 = 905,200

Design Data

Terminal Serviceability Index: 2.50

Soil Support: 2.50

Regional Factor: 2.00

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness		Structural Coefficient	Structural Value
	mm	(in.)		
9.5 mm Superpave	38	(1.50)	0.0173	0.66
19 mm Superpave	51	(2.00)	0.0173	0.88
25 mm Superpave	25	(0.99)	0.0173	0.43
	77	(3.01)	0.0118	0.90
Graded Aggregate Base	203	(8.00)	0.0063	1.28

Required SN = 4.61

Proposed SN = 4.15

>>> Proposed pavement is 9.9% Underdesign <<<

Remarks: Full depth pavement design

Prepared by Brittain W. Hennessey November 7, 2001
Date

Recommended _____
Date

State Consultant Design Engineer

Approved _____
Date

Chief Engineer

I

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-158-1(17) Harris Co.
P.I. No. 333156

OFFICE Environment/ Location

DATE October 18, 2000

FROM Harvey D. Keepler, State Environmental/ Location Engineer

TO Jim Chambers, Office of Consultant Services
ATTN: Ted Cashin

SUBJECT SR 103 @ Flat Shoals Creek

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

2006 ADT = 2250

2026 ADT = 3500

K = 10%

D = 60%

T = 9%

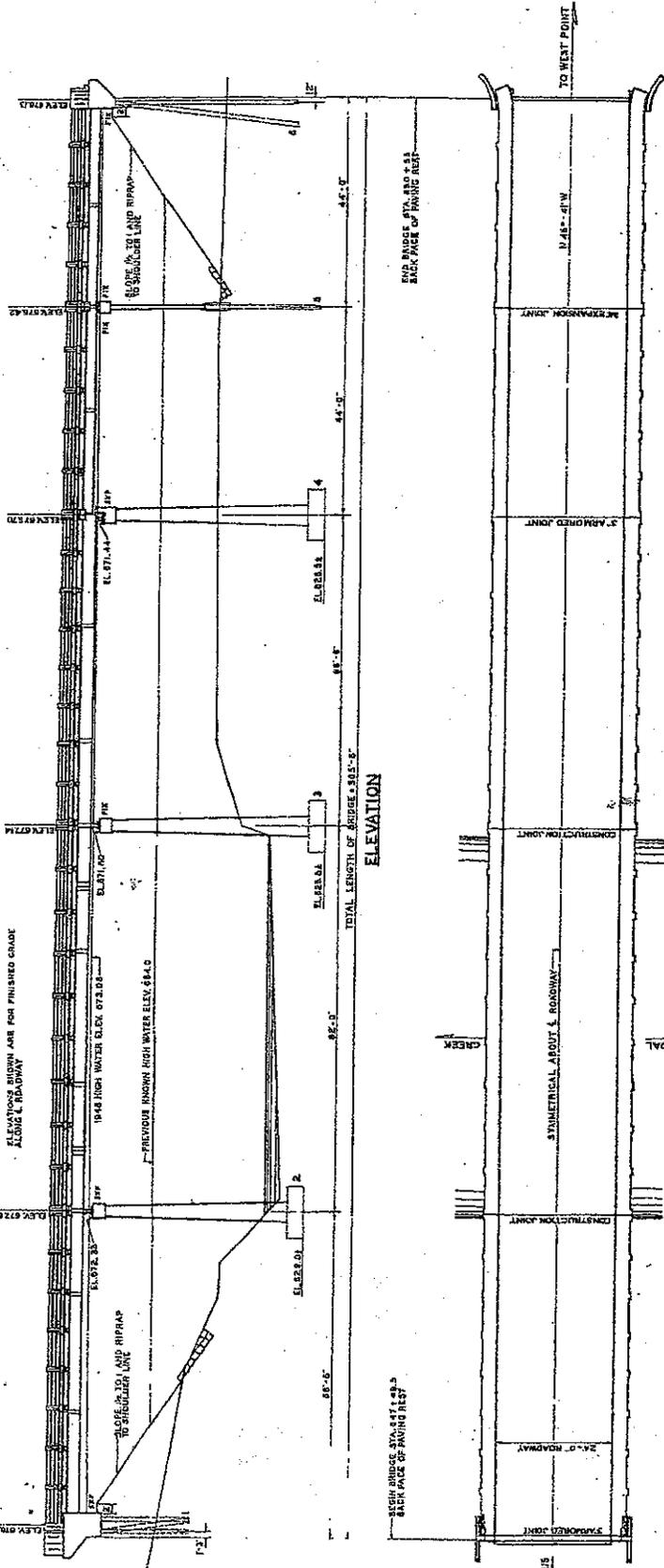
24 HR T = 11%

SU = 5%

COMB = 6%

If you have any questions concerning this information please contact
Gary Langford at (404)699-4404.

NO.	DATE	BY	CHKD.	APP.
1	10/15/44	W. H. HARRIS	J. W. HARRIS	
2	11/15/44	W. H. HARRIS	J. W. HARRIS	
3	12/15/44	W. H. HARRIS	J. W. HARRIS	
4	1/15/45	W. H. HARRIS	J. W. HARRIS	
5	2/15/45	W. H. HARRIS	J. W. HARRIS	
6	3/15/45	W. H. HARRIS	J. W. HARRIS	
7	4/15/45	W. H. HARRIS	J. W. HARRIS	
8	5/15/45	W. H. HARRIS	J. W. HARRIS	
9	6/15/45	W. H. HARRIS	J. W. HARRIS	
10	7/15/45	W. H. HARRIS	J. W. HARRIS	



DESIGN DATA
 SPECIFICATIONS A.A.S.H.O. 1949
 TYPICAL H-B LOADING
 IMPACT ALLOWED

STATE HIGHWAY DEPARTMENT OF GEORGIA
 BRIDGE DEPARTMENT
 PLAN AND ELEVATION
 BRIDGE OVER FLAT SHOAL CREEK
 STA. 647+49.5 TO STA. 650+55
 HARRIS COUNTY
 S-0632(0)
 APRIL 1944
 SCALE: 3/8" = 1'-0"

SUMMARY OF QUANTITIES
 550 CUYDOS CLASS X CONCRETE
 7000 LBS. BAR REINFORCEMENT STEEL
 10000 LBS. STRUCTURAL STEEL (21,000 LBS.)
 74 CUBIC YD. CONCRETE PILING (67 AT 42 LBS.)
 8 EACH 12" X 12" X 10' PILING (67 AT 42 LBS.)
 640 LIN. FT. CONCRETE HANDRAIL
 500 CU. YDS. EXCAVATION (NO. 1)
 1200 SQ. YDS. PLAIN RIPRAP
 1400 ACRES CLEARING AND GRUBBING (LUMP SUM)

GENERAL NOTES
 SPECIFICATIONS - GEORGIA STANDARD
 STRUCTURAL STEEL - THIS ITEM SHALL INCLUDE
 FURNISHING, PLACING AND PAINTING T-BEAMS, PLATES,
 SWAYBRACING, END CHAINS, ANCHOR BOLTS, AND
 SHORING.
 PAINT - STRUCTURAL STEEL AND INTERMEDIATE BENT
 RODS SHALL BE PAINTED AS FOLLOWS: SHOP COAT, NO. 1
 CONCRETE SHALL BE PAINTED AS FOLLOWS: SHOP COAT, NO. 1
 LEAD OIL (WHITE LEAD) AND SECOND COAT (BLACK) CALUMINOL
 COAT (RED OXIDE LEAD) AND SECOND COAT (BLACK) CALUMINOL
 NO. 1 AND NO. 2 SHALL BE ONE TEST PILE AS 1' LONG AT BENT
 NO. 1 AND NO. 2 SHALL BE ONE TEST PILE AS 1' LONG AT BENT
 TEST PILES TO REMAIN IN PLACE AS PERMANENT PILES
 FOR OTHER GENERAL NOTES SEE GEORGIA STANDARD
 NO. 3858 AND NO. 3810.

BRIDGE CONSISTS OF
 1-88'-82" CONTINUOUS T-BEAM UNIT
 2-STEEL H-PILE END BENTS
 3-CONCRETE PIERS
 3-STEEL H-PILE INTERMEDIATE BENT
 CONCRETE HANDRAILS
 SWAYBRACING ON BENT NO. 3

SPECIAL DESIGN
 GEORGIA STANDARD NO. 3858 (MODIFIED)
 GEORGIA STANDARD NO. 3810 (MODIFIED)

DRAINAGE DATA
 DRAINAGE AREA - 200 SQUARE MILES
 AREA OF OPENING UNDER HIGHWAY - 7400 SQUARE FEET