

D.O.T. 66

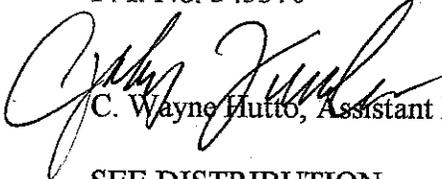
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-0746(8) Harris County
P. I. No. 343370

OFFICE Preconstruction

DATE January 17, 2002

FROM  C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Paul Liles
Ben Buchan
Glenn Durrence
BOARD MEMBER

D.O.T. 66

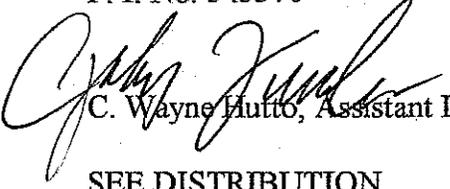
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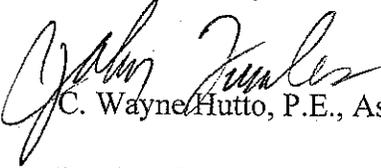
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BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-0746(8) Harris County **OFFICE** Preconstruction
P.I. No. 343370

DATE October 26, 2001

FROM  C. Wayne Hutto, 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 116 over Palmetto Creek in Hamilton, Georgia. The existing bridge, constructed in 1955, is load limited with a sufficiency rating of 38. State Route 116 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. Traffic is projected to be 4,800 VPD and 8,600 VPD in the years 2006 and 2026 respectively. The posted speed and the design speed are 55 MPH.

The construction proposes to relocate SR 116 east of its present location, extending a total of 0.42 mile. The proposed new bridge will be 120' x 44' and will be located just east of the existing bridge structure. The relocated SR 116 will consist of two, 12' lanes with 10' rural shoulders (2' paved). Traffic will be maintained on the existing bridge while the proposed bridge is constructed.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; 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)	\$1,100,000	\$1,100,000	2003	03-06
Right-of-Way	\$ 25,000	\$ 10,000		
Utilities*	LGPA	LGPA		

*Harris County signed LGPA for utilities 8-3-99; LGPA sent requesting the city of Hamilton do utilities 7-19-99.

Frank L. Danchetz
Page 2

BRST-0746(8) Harris
October 26, 2001

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

CWH:JDQ/cj

Attachment

CONCUR



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

APPROVE



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

SCORING RESULTS AS PER MOG 2440-2

Project Number: BRSLB-0746(8)		County: HARRIS		PI No.: 343370-		
Report Date: 10/18/01			Concept By:			
			DOT Office: CONSULTANT DESIGN			
<input checked="" type="checkbox"/> CONCEPT						
			Consultant: J. B. TRIMBLE, INC.			
Project Type: Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input checked="" type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange <input type="checkbox"/> Intersection <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous		
FOCUS AREAS	SCORE	RESULTS				
Presentation	100%					
Judgement	100%					
Environmental	100%					
Right of Way	100%					
Utility	100%					
Constructability	100%					
Schedule	100%					

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE **BRST-0746(8) Harris County** OFFICE Atlanta
SR 116 over Little Palmetto Creek in Hamilton
P.I. No. 343370-

FROM *James R. Chambers, me*
James R. Chambers, State Consultant Design Engineer DATE October 18, 2001

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).

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, State Transportation Programming Engineer
Glenn Durrence, District Engineer – Thomaston
Paul Liles, State Bridge & Structural Engineer

JRC: OC

cc: J.B. Trimble, Inc.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-0746(8)

County: HARRIS

P.I. Number: 343370

Federal Route Number: N/A

State Route Number: 116

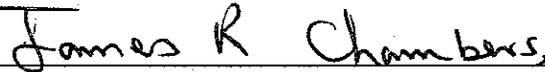
Recommendation for approval:

DATE 10-18-01

DATE 10-18-01



Project Manager



State Consultant Design Engineer

MBA

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 _____

State Transportation Programming Engineer

DATE _____

State Environmental / Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

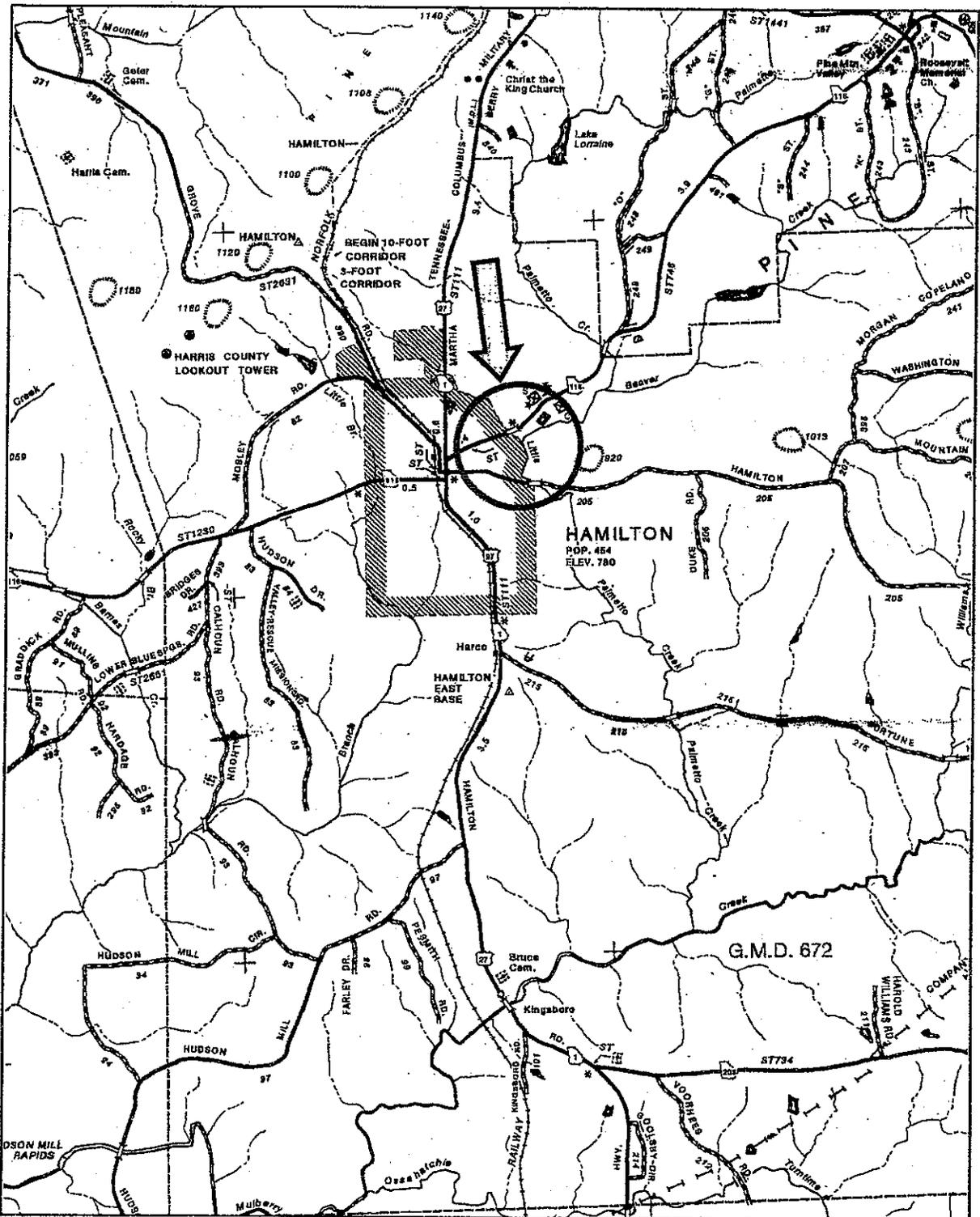
District Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge & Structural Design Engineer



Location Map

Project: BRST-0746(8) Harris County PI No.: 343370-
 Description: SR 116 over Little Palmetto Creek in Hamilton

Need and Purpose Statement

SR 116 over Little Palmetto Creek in Hamilton BRST-0746 (8), Harris County P.I. No.: 343370

Bridge project BRST-0746 (8) would replace the structurally deficient bridge located on State Route (SR) 116 over Little Palmetto Creek. The bridge's sufficiency rating is 38.7. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 be replaced rather than improved. This project would replace the existing bridge with a structurally adequate bridge.

This section of SR 116 is functionally classified as a rural major collector and is designated as a school bus route. The posted speed along this section of SR 116 is 55 mph. The bridge is located in Hamilton and was constructed in 1955. The Average Daily Traffic (ADT) along this section of SR 116 is 4800 for 2006. The projected (2026) ADT is 8600 with 5% 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

PROJECT: BRST-0746(8)

PROJECT NEED & PURPOSE
See Attached

DESCRIPTION OF PROPOSED PROJECT
<p>This project is located in Harris County on SR 116 at Little Palmetto Creek, within the city limits of Hamilton. It consists of replacing the existing structurally deficient bridge on SR 116 over Little Palmetto Creek. Traffic will be maintained on existing alignment and the proposed bridge will be constructed on a new alignment to the south.</p> <p>Project Length: 0.42 miles Is the project located in a Non-attainment area? No</p>

FEDERAL OVERSIGHT:

PDP CLASSIFICATION <u>MINOR</u>
<input type="checkbox"/> Full Oversight () <input checked="" type="checkbox"/> Exempt (X) <input type="checkbox"/> State Funded ()

FUNCTIONAL CLASSIFICATION
RURAL MAJOR COLLECTOR

TRAFFIC			
CURRENT		PROJECTED	
<u>YEAR</u>	<u>AADT</u>	<u>YEAR</u>	<u>AADT</u>
2006	4,800	2026	8,600

PROJECT CONCEPT REPORT

EXISTING DESIGN FEATURES				
TYPICAL SECTION: The existing roadway is a two lane rural section with 12-foot travel lanes, narrow shoulders and side ditches.				
R/W WIDTH: 80'				
POSTED SPEED	MAX DEGREE OF CURVATURE		MAX GRADE	
55 mph	≈4°00'00"		≈3.0%	
STRUCTURES:	Length	Width	Priority Rating	Sufficiency Rating
Structure No. 145-0021-0 SR 116 over Little Palmetto Creek: 3-15' concrete box spans on steel H pile bents	45'	26'	1-34S	38.7
EXISTING ROADWAY SEGMENT LENGTH: 0.42 miles				
BEGINNING MILE LOG FOR COUNTY SEGMENT: 9.43				

PROPOSED DESIGN FEATURES		
TYPICAL SECTION: The proposed roadway will consist of two 12-foot travel lanes, 2 foot paved shoulders, 8 foot unpaved shoulders and rural side ditch sections.		
MAINLINE DESIGN SPEED	MAX DEGREE OF CURVE	MAX GRADE
55 mph	Proposed: 3°30'00" Allowable: 5°15'00"	Proposed: 7.0% Allowable: 7.0%

PROJECT CONCEPT REPORT

PROPOSED RIGHT OF WAY				
R/W WIDTH: Varies 75' min. 120' max.'				
EASEMENTS:	Temporary (X)	Permanent (X)	Utility ()	Other ()
TYPE OF ACCESS CONTROL:	Full ()	Partial ()	By Permit (X)	Other ()
NUMBER OF PARCELS IMPACTED: 7				
DISPLACEMENTS:	Businesses ()	Residences ()	Mobile Homes ()	Other ()

STRUCTURES		
	LENGTH	WIDTH
Bridge	120'	44'
Description: The proposed structure will consist of 3-40' concrete T-beam spans on steel H pile bents.		

MAJOR INTERSECTIONS AND INTERCHANGES
Description: None

TRAFFIC CONTROL DURING CONSTRUCTION
Description: The proposed structure will be constructed on a new alignment to the east while traffic is maintained on the existing bridge and roadway.

PROJECT CONCEPT REPORT

DESIGN EXCEPTIONS TO CONTROLLING CRITERIA ANTICIPATED:

	YES	NO	UNDETERMINED
HORIZ ALIGNMENT	()	(X)	()
ROADWAY WIDTH	()	(X)	()
SHOULDER WIDTH	()	(X)	()
VERT GRADES	()	(X)	()
CROSS SLOPES	()	(X)	()
STOPPING SIGHT DIST	()	(X)	()
SUPERELEV RATES	()	(X)	()
HORIZ CLEARANCE	()	(X)	()
SPEED DESIGN	()	(X)	()
VERTICAL CLEARANCE	()	(X)	()
BRIDGE WIDTH	()	(X)	()
BR STRUCT CAPACITY	()	(X)	()

Environmental Concerns: NWP 23 with PCN anticipated. Also, the project is within the viewshed of a potentially historic structure on the east side of the road.

LEVEL OF ENVIRONMENTAL ANALYSIS

Are Time Saving Procedures Appropriate?: Yes (X) No ()

Categorical Exclusion (X)
Anticipated

Environmental Assessment /
Finding of No Significant
Impact (FONSI) ()

Environmental Impact
Statement ()

UTILITY INVOLVEMENTS

WATER: City of Hamilton

TELEPHONE:

POWER:

GAS:

CABLE TV:

PROJECT CONCEPT REPORT

PROJECT RESPONSIBILITIES

DESIGN: J.B. Trimble, Inc.

RIGHT OF WAY ACQUISITION: Georgia Department of Transportation

RELOCATION OF UTILITIES: Local Government Project Agreement

LETTING TO CONTRACT: Georgia Department of Transportation

SUPERVISION OF CONSTRUCTION: Georgia Department of Transportation

PROVIDING MATERIAL PITS: Contractor

PROVIDING DETOURS: N/A

COORDINATION

CONCEPT TEAM MEETING DATE (Minutes Attached): October 11, 2001

MEETS LOGICAL TERMINI REQUIREMENTS: Yes

P.A.R. MEETING: None

LOCATION INSPECTION DATE: August 20, 2000

FEMA, USCG AND/OR TVA: None

LEVEL OF PUBLIC INVOLVEMENT: None anticipated

LOCAL GOVERNMENT COMMITMENTS: Utility Relocation; LGPA signed by Harris County 8-3-99;
LGPA signed by City of Hamilton on 7-19-99

OTHER PROJECTS IN THE AREA: BRST-0746(7), BRST-0746(6)

OTHER COORDINATION TO DATE: City of Hamilton coordination

PROJECT CONCEPT REPORT

SCHEDULING (Responsible Parties' Estimate)

TIME TO COMPLETE ENVIRONMENTAL PROCESS:	6	Months
TIME TO COMPLETE PRELIMINARY RD/RW PLANS:	4	Months
TIME TO COMPLETE 404 PERMIT:	4	Months
TIME TO COMPLETE FINAL CONSTRUCTION PLANS:	3	Months
TIME TO PURCHASE RIGHT-OF-WAY:	9	Months
OTHER MAJOR ITEMS THAT WILL AFFECT PROJECT SCHEDULE:	None	

ALTERNATIVES CONSIDERED

Alternate 1 - Close SR 116 and route traffic to an off-site detour. This was considered impractical since the detour would be 10-15 miles long and would require vehicles to travel US 27 to SR 190 to SR 354. This would probably substantially impact the county prison and maintenance departments in the immediate vicinity.

Alternate 2 - Permanently realign SR 116 to the north. While realigning the road to the inside of the existing curve would have been desirable, the creek parallels the road against the toe of slope before flowing under the bridge. This alternative would substantially impact the creek. There is also an office building in close proximity to the road that would be heavily impacted as well. For these reasons this alternative was determined to be impractical.

Alternate 3 - Temporarily maintain traffic via an on-site detour and construct the bridge in the existing location. Because of the fill required, it is estimated that a temporary detour on the south side would cost approximately \$380,000. A detour on the north side would have the same impacts on the creek as Alternate 2 would have. Therefore, this alternative was determined to be impractical.

Alternate 4 - Rehabilitate the existing structure. The FHWA has mandated that any structure with a sufficiency rating less than 50 should be replaced. Since this bridge has a sufficiency rating of 38.7, a full replacement is required and this alternative was discarded.

Alternate 5 - Permanently realign SR 116 to the south. Since there are no structures close to the road and the terrain is largely open pasture, this alternative was considered to be the most practical. The existing alignment also facilitated easy transitions to the new alignment.

PROJECT CONCEPT REPORT

COMMENTS:

1. The existing structure that is of potential historic significance is a small two-story pump house with a stone façade. The structure is on the east side of the project approximately 300' from the proposed alignment and will in all probability not be impacted by the project.
2. For comparison purposes, the total cost for the alternative selected is approximately \$1,124,375. The total project cost of the alternative utilizing an on-site detour would have been \$1,504,375. The cost of the alternative with an on-site detour takes in to account the fact that less right of way would be required.

ATTACHMENTS:

- Detailed Cost Estimate
- Sketch Location Map
- Typical Sections
- Estimated traffic assignments
- Need and Purpose Statement
- Concept Team meeting minutes
- Notice of Location and Design Approval
- Bridge inventory data

PREPARED BY: J.B. Trimble, Inc.

PROJECT CONCEPT REPORT
PRELIMINARY COST ESTIMATE

PROJECT NUMBER: BRST-0746(8)

COUNTY: HARRIS

DATE: September 21, 2001

ESTIMATED LETTING DATE: FY 2003

PREPARED BY: J.B. Trimble, Inc.

PROJECT LENGTH (MILES): 0.42 Mi

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

PROJECT COST	
A. RIGHT-OF-WAY: (LGPA)	
1. PROPERTY (LAND & EASEMENT)	\$15,000.00
2. DISPLACEMENTS; RES:0, BUS:0, M.H.:0	\$0.00
3. OTHER COST (ADM./COST, INFLATION)	\$10,000.00
SUBTOTAL: A	\$25,000.00
B. REIMBURSABLE UTILITIES: (LGPA)	
1. RAILROAD	\$0.00
2. TRANSMISSION LINES	\$0.00
3. SERVICES (by Local Governments)	\$15,000.00
SUBTOTAL: B	\$15,000.00
CONSTRUCTION	
C. MAJOR STRUCTURES	
1. RETAINING WALLS	\$0.00
2. BRIDGES (120' X 44' bridge)	\$369,600.00
3. DETOUR BRIDGES	\$0.00
4. EXTEND/REPLACE EXISTING CULVERTS	\$0.00
SUBTOTAL: C	\$369,600.00

PROJECT CONCEPT REPORT

D. GRADING AND DRAINAGE		
1. EARTHWORK		
a. BORROW: (14,600 cu. yd. @ \$6.00)		\$87,600.00
b. EXCAVATION: (9,200 cu. yd. @ \$4.00)		\$36,800.00
	SUBTOTAL: D-1	\$124,400.00
2. DRAINAGE		
a. SIDE DRAIN PIPE (250 ft of 42 in @) \$40)		\$10,000.00
b. 42" SES (8 ea @ \$2,200)		\$17,600.00
c. 24" TYPE I RIPRAP (65 SY @ \$40)		\$2,600.00
	SUBTOTAL: D-2	\$30,200.00
	SUBTOTAL: D	\$154,600.00
E. BASE AND PAVING		
1. AGGREGATE BASE (4,000 sq. yd. of 12" @ \$12)		\$48,000.00
2. SURFACE AGGREGATE (100 tons @ \$15)		\$1,500.00
3. ASPHALT PAVING		
a. Surface - 19 mm Superpave (500 tons @ \$34.50)		\$17,250.00
b. Binder - 25 mm Superpave (2,060 tons @ \$37)		\$76,220.00
c. Base - 12.5 mm Superpave (1,360 tons @ \$33)		\$44,880.00
d. Leveling (200 tons @ \$36.50)		\$7,300.00
e. Tack Coat (1,050 gals @ \$1)		\$1,050.00
	SUBTOTAL: E-3	\$146,700.00
4. CONCRETE PAVING – Approach Slabs (230 sq. yd. @ \$90)		\$20,700.00
	SUBTOTAL: E	\$216,900.00

PROJECT CONCEPT REPORT

F. LUMP ITEMS		
1. TRAFFIC CONTROL		\$35,000.00
2. CLEARING AND GRUBBING		\$50,000.00
3. GRASSING		\$10,000.00
4. EROSION CONTROL		\$55,000.00
5. REMOVAL OF EXISTING BRIDGE		\$40,000.00
	SUBTOTAL: F	\$190,000.00
G. MISCELLANEOUS		
1. SIGNING		
a. SIGNS		\$1,000.00
b. POSTS		\$500.00
	SUBTOTAL: G-1	\$1,500.00
2. STRIPING		
1. 5 IN WHITE SOLID (4400 ft @ \$0.50)		\$2,200.00
2. 5 IN YELLOW SOLID (4400 ft @ \$0.50)		\$2,200.00
	SUBTOTAL: G-2	\$4,400.00
3. GUARDRAIL		
a. TYPE W (650 ft @ \$12)		\$7,800.00
b. TYPE T (84 ft @ \$35)		\$2,940.00
c. TYPE 12 ANCHORS (2 @ \$1600)		\$3,200.00
d. TYPE 1 ANCHORS (2 @ \$450)		\$900.00
	SUBTOTAL: G-3	\$14,840.00
	SUBTOTAL: G	\$20,740.00

PROJECT CONCEPT REPORT

ESTIMATE SUMMARY	
A. RIGHT-OF-WAY (by GDOT)	\$ 25,000.00
B. REIMBURSABLE UTILITIES (LGPA)	\$ 10,000.00
CONSTRUCTION	
C. MAJOR STRUCTURES	\$369,600.00
D. GRADING AND DRAINAGE	\$154,600.00
E. BASE AND PAVING	\$216,900.00
F. LUMP ITEMS	\$190,000.00
G. MISCELLANEOUS	\$20,740.00
SUBTOTAL CONSTRUCTION COST	\$951,840.00
INFLATION (5% PER YEAR)	\$47,592.00
NUMBER OF YEARS - 1	
E. & C. (10%)	\$99,943.00
TOTAL CONSTRUCTION COST	\$1,099,375.00
GRAND TOTAL PROJECT COST	\$1,124,375.00

PI 343370
Concept Team Meeting Notes

Attendees:

Bill Patrick – Harris County Engineer	706-628-4958
Scott Parker – GDOT District #3 Traffic & Operations	706-646-6561
Otis Clark – GDOT Office of Consultant Design	404-463-6265
Ronny Stubbs – GDOT District #3 Right-of-Way	706-646-6540
Kim Brown – GDOT District #3 Utilities	706-646-6548
Lamar Pruitt Jr. – GDOT District #3 Construction	706-646-6569
Steve Linley – J.B. Trimble	770-952-1022

Steve Linley of J.B. Trimble, the consultant firm providing the design services for the project, gave a brief overview of the project including a discussion of how the alignment was developed. Primarily, the proposed alignment along the south side of SR 116 was chosen as a way to keep the state route open while minimizing impacts to Little Palmetto Creek and the adjacent properties. An off-site detour isn't feasible due to the long detour route (approximately 10 - 15 miles). An on site detour was not considered cost effective.

Items of discussion included:

Bill Patrick informed the team of the County's intentions to build a 12' combination bike and walkway from the City of Hamilton to approximately 1 ½ miles east of the City line. Mr. Patrick asked about the possibilities of including a pedestrian bridge in this project. Lamar Pruitt stated that the County should look into obtaining TEA-21 funds. Mr. Pruitt also asked that J.B. Trimble to supply the County with copies of the conceptual plans.

Mr. Pruitt questioned whether or not a culvert could be utilized at this location reducing the construction cost substantially. Mr. Linley stated that design teams were having a difficult time getting culvert designs approved by the Office of Environment & Location. In later conversations with the designing hydraulic engineers, Mr. Linley was informed that a box culvert design would not meet minimum backwater criteria and would also produce excessive stream velocities.

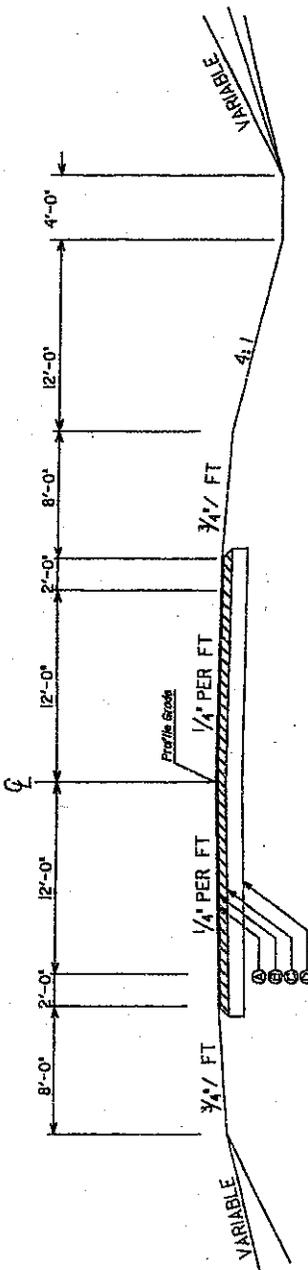
Mr. Pruitt also inquired about the alignment being shifted to the outside instead of the inside of the existing alignment. Mr. Linley stated that the proposed alignment was located along the south side of the roadway to minimize the impacts to Little Palmetto Creek, which runs parallel along the toe of the existing north slope of the roadway for approximately 100 feet near the bridge opening. Locating the proposed alignment south of the existing roadway will also minimize impacts to adjacent property owners.

October 11, 2001
GDOT Office of Consultant Design
PI 343370 – Concept Mtg.

Mr. Patrick expressed concerns about possible conflicts with the City of Hamilton's sanitary sewer lines. He requested that the consultant verify the location of the existing facilities.

There was a general discussion of the constructability of the project. It was agreed that the western most existing side road on the south side of the project could be closed for a brief period of time to allow for reconstruction of this roadway. This roadway has another outlet in the City of Hamilton.

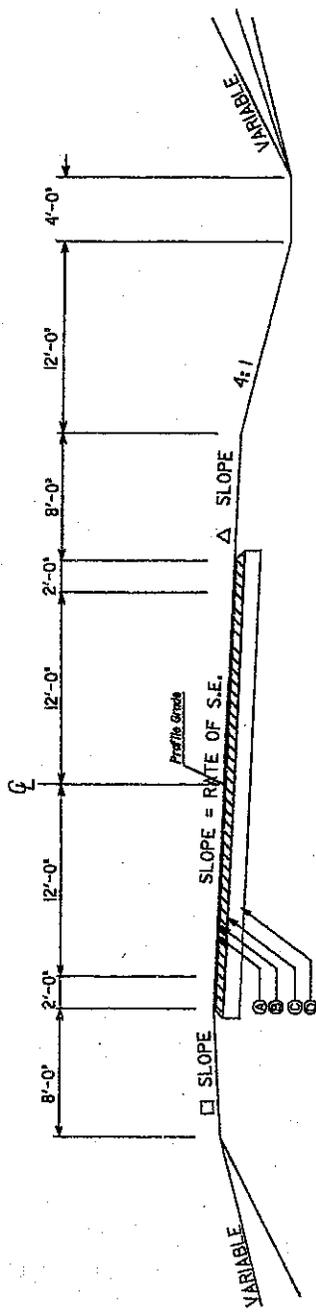
Mr. Pruitt requested that the proposed vertical grade be reduced below 7% to increase the safety of the roadway.



TANGENT SECTION

- REQUIRED PAVEMENT
- ⊕ ASPHALTIC CONCRETE 'E', 1 1/2"
 - ⊙ ASPHALTIC CONCRETE 'B', 2"
 - ⊙ ASPHALTIC BASE, 8"
 - ⊕ GRADED AGGREGATE BASE, 12"

- Δ SLOPE 3/4" / 1'-0" OR RATE OF S.E. WHICHEVER IS GREATER
- SLOPE AS FOLLOWS:
- S.E. RATE OF 0.03'/FT OR LESS USE 1/2" IN 1'-0"
 - S.E. RATE OF 0.04'/FT, USE 3/8" IN 1'-0"
 - S.E. RATE OF 0.06'/FT, USE 1/4" IN 1'-0"
 - S.E. RATE OF 0.08'/FT, USE 1/4" IN 1'-0"
 - S.E. RATE OF 0.08'/FT, USE +0.01'/FT
- ALGEBRAIC DIFFERENCE IN PAVING AND SHOULDER SLOPES NOT TO EXCEED 0.08'/FT



SUPERELEVATED SECTION

- REQUIRED PAVEMENT
- ⊕ ASPHALTIC CONCRETE 'E', 1 1/2"
 - ⊙ ASPHALTIC CONCRETE 'B', 2"
 - ⊙ ASPHALTIC BASE, 8"
 - ⊕ GRADED AGGREGATE BASE, 12"

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

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	0.0155 FT/FT - MINIMUM
0.0200 FT/FT - DESIRABLE	0.0200 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	0.07%
DESIRABLE 1:100	0.50%
MAXIMUM 1:50	0.33%

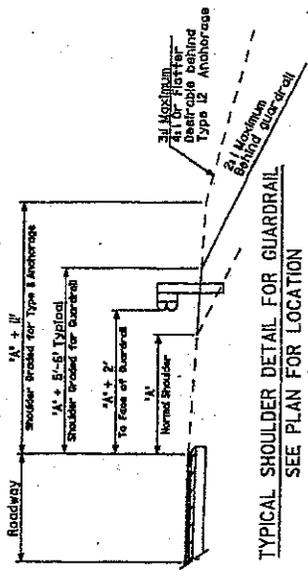
LENGTH SHALL BE SET TO AVOID CREATING A FLAT OUTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

- 50% OF TRANSITION INSIDE CURVE - MAXIMUM
- 35% OF TRANSITION INSIDE CURVE - DESIRABLE
- BOX 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).



TYPICAL SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION

NOTICE OF LOCATION AND DESIGN APPROVAL

BRST-0746(8), Harris County
P. 1. NUMBER 343370

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 this project.

The date of location approval is JANUARY 17, 2002.

The project is located in Harris County on SR 116 at Little Palmetto Creek just east of the city of Hamilton and within the city limits. The project is located in Land District 21 in Land Lots 132, 133 and 156.

The project consists of the replacement of the structurally deficient bridge on SR 116 over Little Palmetto Creek. The proposed bridge structure will be built on new alignment to the south of the existing bridge.

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. Dewayne Meacham – Area Engineer
Email address: dewayne.meacham@dot.state.ga.us
3600 Schatulga Road
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 the Project and P. I. Numbers as noted at the top of this notice.

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-0746(8), Harris County
OFFICE Environment/ Location
P.I. # 343370
DATE March 22, 2000

FROM David E. Studstill, P.E., State Environment/ Location

TO Jimmy Chamber, Office Of Consultant Management
Attn. Ted Cashin

SUBJECT SR 116 @ Little Palmetto Creek in Harris County.

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

2006 AADT = 4800

2026 AADT = 8600

K = 10%

D = 60%

T = 5%

24 HR. T = 7%

S.U. = 4%

COMB. = 3%

If you have any questions concerning this information please contact Dan Funk at (404) 699-3474.

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 145-0021-0

Harris County

SUFF. RATING: 38.7

Programming Data

201 Project No: STATE MAINT FORCES
 202 Plans Available: 0
 249 Prop. Proj No: BRST-0746 (8)
 250 Approval Status: 0000
 251 P.I. No: 343370
 252 Contract Date: 02/01/2003
 260 Seismic No: 00000
 75 Type Work: 34 1
 94 Bridge Imp. Cost: \$ 57
 95 Roadway Imp. Cost: \$ 227
 96 Total Imp. Cost: \$ 328
 76 Imp. Length: 001365
 97 Imp. Year: 1990
 114 Future ADT: 005250 Year: 2018

Measurements

* 29 ADT: 003500 Year: 1998
 109 % Trucks: 16
 * 28 Lanes On: 02 Under: 00
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0015
 * 49 Structure Length: 45
 51 Br. Rdwy. Width: 23.9
 52 Deck Width: 26.0
 * 47 Tot. Horz. Cl: 23.9
 50 Curb/Sdewik Width: 0.5/0.5
 32 Approach Rdwy Width: 23
 * 229 Shldr Width:
 Rear Lt: 2.0 Type: 2 Rt: 2.0
 Fwd Lt: 2.0 Type: 2 Rt: 2.0
 Pvmnt Width:
 Rear: 23.0 Type: 2
 Fwd: 23.0 Type: 2
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail: 3
 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: 12.0
 Deck Thick Approach: 0.0
 246 Overlay Thickness: 3.0
 211 Tons Structural Steel: 0.0
 212 Year Last Painted: Sup: 0000 Sub: 1955

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: 7
 59 Superstructure Condition: 7
 * 227 Collision Damage: 0
 60A Substructure Condition: 7
 60B Scour Condition: 8
 60C Underwater Condition: N
 71 Waterway Adequacy: 6
 61 Channel Protection Cond: 6
 68 Deck Geometry: 2
 69 UnderClr. Horz/Vert: N
 72 Appr. Alignment: 5
 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

Hydraulic Data

215 Waterway Data
 Highway 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: 00.6 Br Height: 11.2
 222 Slope Protection: 6
 221 Spur Dikes Rear: 0 Fwd: 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: 145-00116D-009.93E
 * XReferen I.D. No: 000-000000-000.000

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 145-0021-0

Harris County

SUFF. RATING: 38.7

Location & Geography

* Structure I.D. No.: 145-0021-0
 * 200 Bridge Information: 07
 * 6A Feature Int.: LITTLE PALMETTO CREEK
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: SR00116
 * 7B Facility Carried: SR 116
 * 9 Location: HAMILTON - NE SECTION
 * 2 DOT District: 3
 * 207 Year Photo: 1997
 * 91 Inspection Frequency: 24 Date: 12/15/1999
 * 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: 36220

* 5 Inventory Route (O/U): 1
 Type: 3
 Designator: 1
 Number: 00116
 Direction: 0

* 16 Latitude: 32-45.7
 * 17 Longitude: 84 -52.1

98 Border Bridge: 000 %Shared: 00
 99 ID Number: 0000000000000000

* 100 Defense Highway: 0
 * 101 Parallel Structure: N
 * 102 Direction of Traffic: 2
 264 Road Inventory Mile Post: 009.74

* 208 Inspection Area: 08 Initials: JLA
 * Location I.D. No: 145-00116D-009.93E
 * XReferen I.D. No: 000-000000-000.000

Signs & Attachments

* 104 Highway System: 0
 * 26 Functional Classification: 07
 * 204 Federal Route Type: S No: 00746
 * 110 Truck Route: 0
 206 School Bus Route: 1
 217 Benchmark Elevation: 0.00
 218 Datum: 0
 * 19 Bypass Length: 9
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 * 31 Design Load: 2
 37 Historical Significance: 5
 205 Congressional District: 03
 * 27 Year Constructed: 1955
 106 Year Reconstructed: 0000
 33 Bridge Median: 0
 34 Skew: 00
 35 Structure Flared: 0
 38 Navigation Control: 0
 213 Spectal Steel Design: 0
 267 Type of Paint: 1
 * 42 Type Service On: 1 Under: 5
 214 Movable Bridge: 00
 203 Type Bridge: E-N-A-O
 259 Pile Encasement: 2 ALL PILES S ECTORIZED
 * 43 Structure Type Main: 1 01
 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: 2
 108 Wearing Surface Type: 6
 Membrane: 0
 Protection: 0
 223 Expansion Joint Type: 02
 242 Deck Drains: 1
 243 Parapet Location: 0
 Height: 0
 Width: 0
 238 Curb: 1.2 1
 239 Handrail: 2.2
 * 240 Median Barrier Rail: 0
 241 Bridge Median Height: 0
 Width: 0
 * 230 Guardrail Loc Dir Rear: 6
 Fwrd: 6
 Oppo Dir Rear: 0
 Fwrd: 0
 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: 00
 Sewer: 00
 247 Lighting Street: 0
 Navigation: 0
 Aerial: 0
 * 248 County Continuity No: 00

P.I. NUMBER : 343370-

HARRIS CO.

SCHED. LET: 04-07

DESCRIPTION : SR 116 @ LITTLE PALMETTO CREEK HAMILTON - NE SECTION

PROJECT NO. : BRST-0746(8)

P.E. PROJECT: BRST-0746(8)

PROJ. LENGTH: .21 MI.

CONCEPT:

ASST. HD: JRC

SQUAD LDR: T. CASHIN

BIKE:

METRIC:

CONSULTANT: C

P.E. DATE: 10/26/99

ACTIVITY	SCHED START	SCHED FINISH	ACTUAL START	ACT/EST FINISH	PCT	NOTES	PROGRAM ESTIMATES
CONCEPT PHOTOS			NO RPT	NO RPT	N/R		
DRAFT CONCEPT/RPT			NO RPT	NO RPT	0%		PE : \$5,000
CONCEPT MTG				NO RPT			R/W : \$10,000
SUB RPT TO ENG SERV				NO RPT			CNST: \$554,000
ECV ENG SERV APPRV				NO RPT			EST DATE: 4/15/99
IGMT APPRV REPORT			NO RPT	NO RPT	0%		
							LOC TAX N
ENVIRONMENTAL			1-Jan-2002	31-Jul-2002	0%		
WORLD HEARING				NO RPT			
MAPPING			NO RPT	NO RPT	N/R		STIP: Y
PHOTO X-SECTIONS			NO RPT	NO RPT	N/R		PE PROG DATE: 9910
FIELD SURVEYS			NO RPT	NO RPT	0%		R/W PROG DATE: 2003
FINAL ALT. APPROVAL				NO RPT			CST PROG DATE: 2003
ENV. & D APPROVAL			NO RPT	NO RPT	0%		
WORLD PREL. FPR				NO RPT			EXEMPT: Y
REL RD/RW PLANS			NO RPT	NO RPT	0%		
APPROVE R/W PLANS			NO RPT	NO RPT	0%		
SECURE 404 PERMIT			NO RPT	NO RPT	0%		R/W DATA
REL BRIDGE/HYDRAU			NO RPT	NO RPT	0%		
BRIDGE PLANS			NO RPT	NO RPT	0%		SCHED R/W AUTH: 20-03
ECV SOIL SURVEYS				NO RPT			ACT. R/W AUTH: 20-03
L.S.T.'s			NO RPT	NO RPT	0%		R/W ACQD. BY: DOT
WORLD FINAL FPR				NO RPT			# PARCELS: 0
FINAL CST. PLANS			NO RPT	NO RPT	0%		# APPR. TO DATE: 0
							# ACQD. TO DATE: 0

COMMENTS

PDD : APRIL BOARD ADDITION: ASSIGNED CONSULTANT TASK FORCE 4/30/99

DZN :

PLAN:

DIST:

T&S : NO SIGN & MKG PLANS REQ'D KRA 4/29/99 #

BR : 5 BRIDGE REQUIRED

UT. :

RR :

LGPA: HARRIS SGN UTIL 8-3-99|REQ HAMILTON DO UTIL 7-19-99.

>LOC : BRIDGE

>EIS : MITCHELL - CONS TASK FORCE

>404 : NW 23 EXPECTED - CONSULTANT TASK FORCE

>UST :

>PITS:

>R/W :

HARRIS CO.

P.I. NUMBER : 343370-

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

PROJECT CONCEPT REPORT

Project Number: BRST-0746(8)

County: HARRIS

P.I. Number: 343370

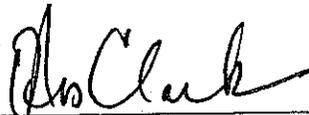
Federal Route Number: N/A

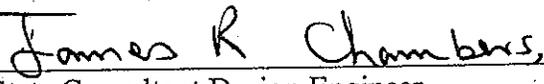
State Route Number: 116

Recommendation for approval:

DATE 10-18-01

DATE 10-18-01


Project Manager

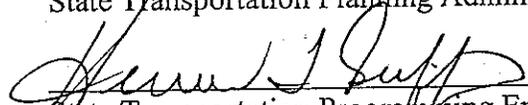

State Consultant Design Engineer *mga*

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

DATE _____

10/19/01
DATE

State Transportation Planning Administrator


State Transportation Planning Engineer

DATE _____

State Environmental / Location Engineer

DATE _____

State Traffic Safety & 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-0746(8)
County: HARRIS
P.I. Number: 343370

Federal Route Number: N/A
State Route Number: 116

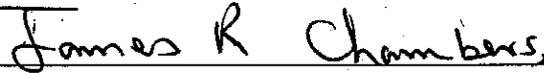
Recommendation for approval:

DATE 10-18-01

DATE 10-18-01



Project Manager



State Consultant Design Engineer *m&a*

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DATE

State Transportation Planning Administrator

DATE

State Transportation Programming Engineer

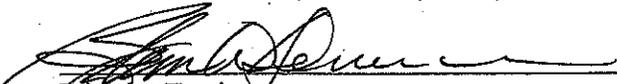
DATE

State Environmental / Location Engineer

DATE

State Traffic Safety & Design Engineer

10/31/01
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-0746(8)
County: HARRIS
P.I. Number: 343370

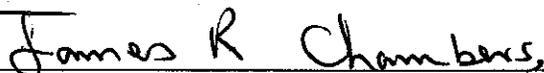
Federal Route Number: N/A
State Route Number: 116

Recommendation for approval:

DATE 10-18-01

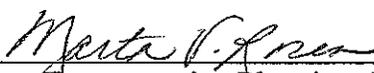

Project Manager

DATE 10-18-07


State Consultant Design Engineer *mra*

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

11-2-01
DATE


State Transportation Planning Administrator

DATE

State Transportation Programming Engineer

DATE

State Environmental / Location Engineer

DATE

State Traffic Safety & 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-0746(8)

County: HARRIS

P.I. Number: 343370

Federal Route Number: N/A

State Route Number: 116

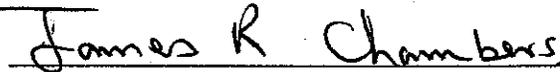
Recommendation for approval:

DATE 10-18-01

DATE 10-18-01



Project Manager



State Consultant Design Engineer

MBA

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 _____

State Transportation Programming Engineer

DATE _____

State Environmental / Location Engineer

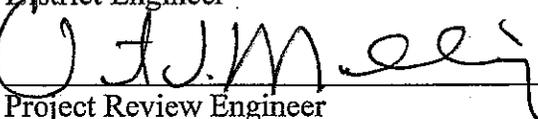
DATE _____

State Traffic Safety & Design Engineer

DATE _____

District Engineer

DATE 11/5/01



Project Review Engineer

DATE _____

State Bridge & Structural Design Engineer