

ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** STP-064-1(41) Chatham County **OFFICE** Preconstruction  
P.I. No. 522490  
*CWH* **DATE** December 22, 1998  
**FROM** C. Wayne Hutto, Assistant Director of Preconstruction  
**TO** SEE DISTRIBUTION

**SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL**

Attached for your files is the approval for subject project.

CWH/cj

Attachment

**DISTRIBUTION:**

Walker Scott  
Bobby Mustin  
David Studstill (ATTN: Harvey Keepler)  
Jerry Hobbs  
Herman Griffin  
Marta Rosen (ATTN: Michael Henry)  
Marion Waters  
Toni Dunagan  
Joe Palladi  
Gary Priester

1/2001 c

# DEPARTMENT OF TRANSPORTATION

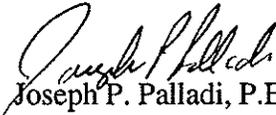
## STATE OF GEORGIA

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### INTERDEPARTMENT CORRESPONDENCE

**FILE** STP-064-1(41), Chatham County **OFFICE** URBAN  
US 80 from Bull River To Lazeratto Creek P.I. No.  
522490

**DATE** 11/10/98

**FROM**   
Joseph P. Palladi, P.E., State Urban Design Engineer

**TO** Wayne Hutto, P.E., Assist Director of Preconstruction

**SUBJECT** REVISED PROJECT CONCEPT REPORT

This project consists of widening 5.77 miles of existing US 80/SR26 and two bridges from just west of Bull River to just east of Lazeratto Creek.

The original concept typical section as approved was for 4 lanes with a varied depressed median (40' minimum between toe of slopes). This report will revise this typical section as described below.

The revised typical section will be 4 lanes with a 20' median and a type 22 or type 22A barrier separating the lanes, bicycle shoulders and 2:1 slopes on the outside (see attached typical sections). The barrier wall and the 2:1 slopes were added to reduce the footprint of the proposed typical section thus minimizing the wetland impacts by approximately +/-57 acres. The Office of Materials and Research has approved the use of the barrier wall at this location with the provision that fabric reinforced mat in combination with soil foundation be used.

*Estimated Costs:*

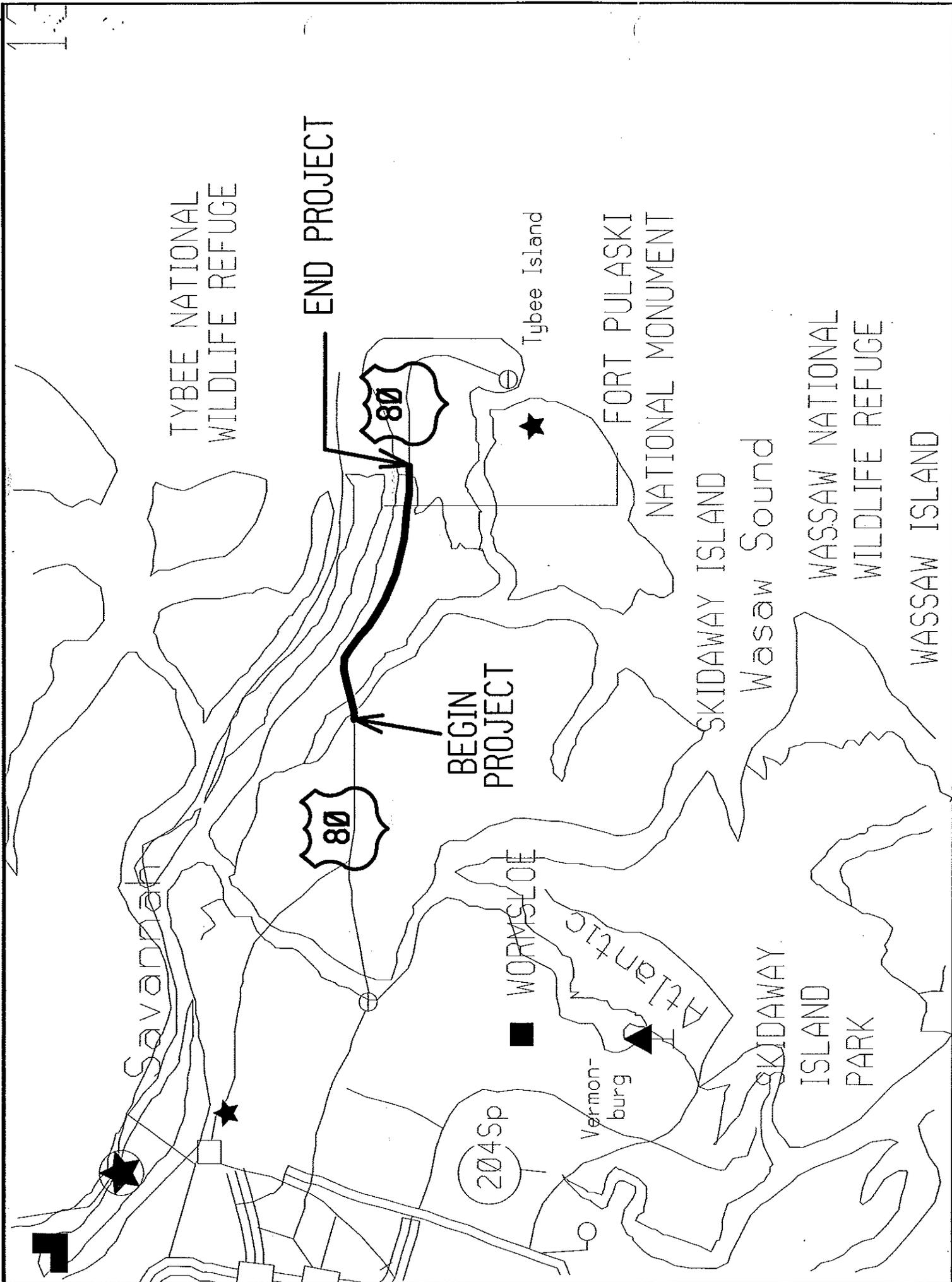
	<u>Proposed</u>	<u>Approved</u>
Constr. (Infl. and E &C)	\$38,148,661	\$35,345,000
Right-of-way	\$ 593,000	\$ 559,000
Utilities	\$ Locals	\$ Locals
Program Date	2003 (Construction)	

Recommendation: We recommend that the proposed revision to the concept be approved for implementation.

Concur: *Walter W. Scott*  
Director of Preconstruction

Approve: *Frank L. Dancho*  
Chief Engineer

Attachments: Sketch Map, Cost Estimate, Typical Sections



TYBEE NATIONAL  
WILDLIFE REFUGE

END PROJECT

Tybee Island

FORT PULASKI  
NATIONAL MONUMENT

BEGIN  
PROJECT

SKIDAWAY ISLAND

Wasaw Sound

WASSAW NATIONAL  
WILDLIFE REFUGE

WASSAW ISLAND

Savannah

80

80

WORMSLOE

Atlantic

Vermont-  
burg

SKIDAWAY  
ISLAND  
PARK

204Sp



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**PRELIMINARY COST ESTIMATE**  
**URBAN DESIGN OFFICE**

DATE: 11/17/98 PREPARED BY: JLS  
 PROJECT NO: STP-064-1(41) FILE NAME: OPTION2.XLS  
 P.I. NO: 522490 LENGTH: 9.286 KILOMETERS  
 PROJECT DESCRIPTION/CONCEPT: US80/SR26 WIDENING FROM BULL RIVER TO LAZERATTO CREEK.

EXISTING ROADWAY: US 80 Proposed Finished Elevation 9' mean sea level

TRAFFIC: CURRENT ADT PROJECTED ADT  
 11100 VPD (1997) 18000 VDP (2017)

- ( ) PROGRAMMING PROCESS
- (X) CONCEPT DEVELOPMENT
- ( ) DURING PROJECT DEVELOPMENT

**PROJECT COSTS**

A. RIGHT OF WAY	lump sum		\$0.00
		<b>SUBTOTAL</b>	<b>\$0.00</b>
B. UTILITIES	lump sum		\$0.00
		<b>SUBTOTAL</b>	<b>\$0.00</b>
C. CLEARING AND GRUBBING	24 ha @	\$9,885.00	\$237,240.00
		<b>SUBTOTAL</b>	<b>\$237,240.00</b>
D. EARTHWORK			
<u>Embankment</u>			
Borrow Incl Haul	384228 m <sup>3</sup> @	\$10.00	\$3,842,280.00
<u>Excavation</u>			
Soil	11469 m <sup>3</sup> @	\$24.75	\$283,857.75
<u>Miscellaneous</u>			
Filter Fabric	260000 m <sup>2</sup> @	\$6.00	\$1,560,000.00
		<b>SUBTOTAL</b>	<b>\$5,686,137.75</b>

## E. BASE AND PAVING

### Aggregate Base

Soil Cement	20866 MG @	\$10.00	\$208,660.00
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### Asphalt Paving

Asph Conc 12.5 mm Superpave	9254 MG @	\$34.25	\$316,949.50
Asph Conc 19 mm Superpave	12021 MG @	\$35.75	\$429,750.75
Asph Conc 25 mm Superpave	35834 MG @	\$36.50	\$1,307,941.00
Leveling	908 MG @	\$34.00	\$30,872.00
Tack Coat	45142 L @	\$1.00	\$45,142.00
		<b>SUBTOTAL</b>	<b>\$2,339,315.25</b>

## F. DRAINAGE

### Drainage Lump Sum

Cost per km	10 km @	\$90,000.00	\$900,000.00
		<b>SUBTOTAL</b>	<b>\$900,000.00</b>

## G. CONCRETE WORK

Approach Slabs	983 m <sup>2</sup> @	\$108.00	\$106,164.00
Median Barrier	7788 linear meter @	\$342.00	\$2,663,496.00
		<b>SUBTOTAL</b>	<b>\$2,769,660.00</b>

## H. TRAFFIC CONTROL

lump sum			\$500,000.00
		<b>SUBTOTAL</b>	<b>\$500,000.00</b>

## I. EROSION CONTROL

lump sum			\$175,000.00
		<b>SUBTOTAL</b>	<b>\$175,000.00</b>

## J. GUARDRAIL

W-Beam Rail	7788 linear meter @	\$34.10	\$265,570.80
T-Beam Rail	153 linear meter @	\$75.00	\$11,475.00
Type 1 Anchors	5 each @	\$435.83	\$2,179.15
Type 12 Anch	5 each @	\$1,710.00	\$8,550.00
		<b>SUBTOTAL</b>	<b>\$287,774.95</b>

## K. SIGNS, STRIPING, SIGNALS, LIGHTING

Striping	lump sum		\$600,000.00
Roadside Signs	lump sum		\$100,000.00
Traffic Signals	2 each @	\$30,000.00	\$60,000.00
		<b>SUBTOTAL</b>	<b>\$760,000.00</b>

## L. GRASSING/LANDSCAPING

lump sum			\$100,000.00
		<b>SUBTOTAL</b>	<b>\$100,000.00</b>

**M. MISCELLANEOUS**

Field Engineer Office	1 each @	\$31,000.00	\$31,000.00
Right-of-Way Markers	28 each @	\$50.73	\$1,420.44
		<b>SUBTOTAL</b>	<b>\$32,420.44</b>

**N. MAJOR STRUCTURES**

Bridges	Bull Rvr New	15006 m <sup>2</sup> @	\$645.85	\$9,691,625.10
Bridges	Bull Rvr Widen	5139 m <sup>2</sup> @	\$538.20	\$2,765,809.80
Bridges	Lazeratto New	6104 m <sup>2</sup> @	\$645.85	\$3,942,268.40
Bridges	Lazeratto Widen	2358 m <sup>2</sup> @	\$538.20	\$1,269,075.60
			<b>SUBTOTAL</b>	<b>\$17,668,778.90</b>

**ESTIMATE SUMMARY**

A. Right of Way	\$0.00
B. Reimbursable Utilities	\$0.00

**CONSTRUCTION COST SUMMARY**

C. Clearing and Grubbing	\$237,240.00
D. Earthwork	\$5,686,137.75
E. Base and Paving	\$2,339,315.25
F. Drainage	\$900,000.00
G. Concrete Work	\$2,769,660.00
H. Traffic Control	\$500,000.00
I. Erosion Control	\$175,000.00
J. Guardrail	\$287,774.95
K. Signs, Striping, Signals, Lighting	\$760,000.00
L. Grassing/Landscaping	\$100,000.00
M. Miscellaneous	\$32,420.44

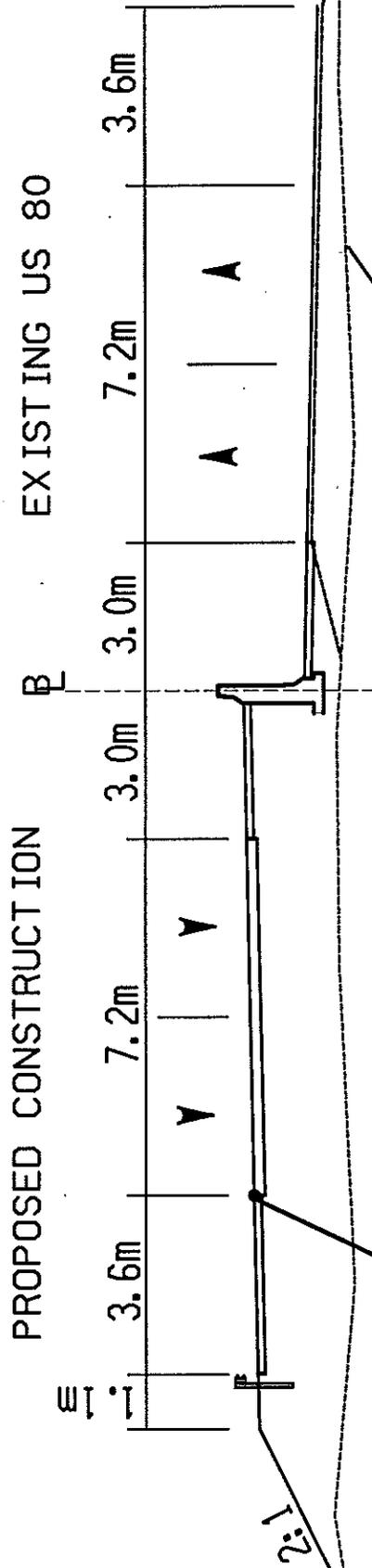
**SUBTOTAL CONSTRUCTION \$13,787,548.39**

N. Major Structures	\$17,668,778.90
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**SUBTOTAL \$ 31,456,327.29**

2 Years of		
Inflation at	5 %	\$3,224,273.55
10 % E & C		\$3,468,060.08

**TOTAL CONSTRUCTION ESTIMATE \$38,148,660.92**



PROPOSED  
PROFILE GRADE  
= 9' / 2.7m MSL

EXISTING GROUND = 3' / 0.9m MSL

REVISED CONCEPT  
U.S. 80 WIDENING  
PROJECT STP-064-1 (41)  
PI NO 522490  
CHATHAM COUNTY



### REVISED R/W CALCULATIONS

57 Acres Commercial & Salt Marsh @ \$5300/acre	\$302,100.00
Consequential Damages (If applicable)	\$ 70,000.00
Net Cost	\$372,100.00
Adm./Court Cost Factor 45%	\$167,445.00
Sub Total	\$539,545.00
Inflation Factor 10%	\$ 53,955.00
<b>TOTAL COST</b>	<b>\$593,500.00</b>

PROJECT NUMBER/COUNTY: STP-064-1(41) CHATHAM

P. I. NUMBER: 522490

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



STATE TRANSPORTATION PLANNING ADMINISTRATOR

DATE: 11/30/98