ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-174-1(7) Columbia County
P. I. No. 231440

OFFICE Preconstruction

DATE April 19, 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:

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

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-174-1(7) Columbia County
P.I. No. 231440

OFFICE Preconstruction

DATE April 8, 2002

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 widening and reconstruction of SR 232 from Old Belair Road (CR 221) to Belair Road (SR 383) for a total of 1.83 miles. This project is needed to accommodate existing and future traffic demands. Currently, this portion of SR 232 consists of one, 12' lane in each direction with rural shoulders from the beginning of the project to CR 799, and two, 12' lanes in each direction separated by a 14' flush median for the remainder of the project limits. The existing bridge over Crawford Creek will be replaced under project BR-0000-00(809). Project BR-0000-00(809) proposes to relocate SR 232 north of its existing location, extending a total of 0.60 mile. The proposed new bridge will be 162' x 44' and will be located just north of the existing bridge structure.

For the years 1995-1997, the accident rate on SR 232 has been higher, on average, than the statewide average for similar facilities. The vast majority of accidents reported were the rear-end and angle-intersection type accidents. Projected traffic on SR 232 is 11,450 VPD and 17,760 VPD in the years 1998 and 2018 respectively. With the projected traffic volumes steadily increasing, a need exists to improve this two lane roadway to better accommodate existing and future traffic volumes.

The proposed construction will provide two, 12' lanes in each direction separated by a 14' flush median with sidewalk on both sides from the beginning of the project to CR 799, where it will transition into the existing five lane section. From there, the project proposes to construct sidewalk and/or curb and gutter along existing SR 232 to the end of the project. This project proposes to widen the bridge constructed under project BR-0000-00(809) to 74' to accommodate the new lanes. Project BR-0000-00(809) will acquire sufficient right-of-way for future widening to 74'. Traffic will be maintained during construction.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; an information meeting will be held; time saving procedures are appropriate. Although this project is classified as a minor project, there is the potential for extensive public involvement.

STP-174-1(17) Columbia
April 8, 2002

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE	LET DATE
Construction (includes E&C and inflation)	$3,705,000	$4,158,000	LR	LR
Right-of-Way	$ 122,000	$ 60,000		
Utilities*	-----	-----		

*LGPA to be sent.

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

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
MAR 20 2002

INTERDEPARTMENT CORRESPONDENCE

FILE STP-174-1(7) Columbia County
P.I. No. 231440

OFFICE Tennille

DATE March 19, 2002

FROM George M. Brewer, District Design Engineer

TO Wayne Hutto, P.E., Assistant Director of Preconstruction

SUBJECT **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).

If any further assistance is needed, please contact George M. Brewer at (478) 552-4642.

GMB

cc: David Mulling
Harvey Keepler
~~Marion Waters~~ PHILLIP ALLEN
Marta Rosen
Herman Griffin

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

District Two Design Office

Project Number: *STP-174-1(7)*
County: *Columbia*
P. I. Number: *231440*

Federal Route Number: *None*
State Route Number: *232*

Recommendation for approval:

DATE 3/19/02 _____
Project Manager

DATE 3-19-02 _____
District Engineer

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

DATE _____ _____
State Transportation Planning Administrator

DATE _____ _____
State Transportation Programming Engineer

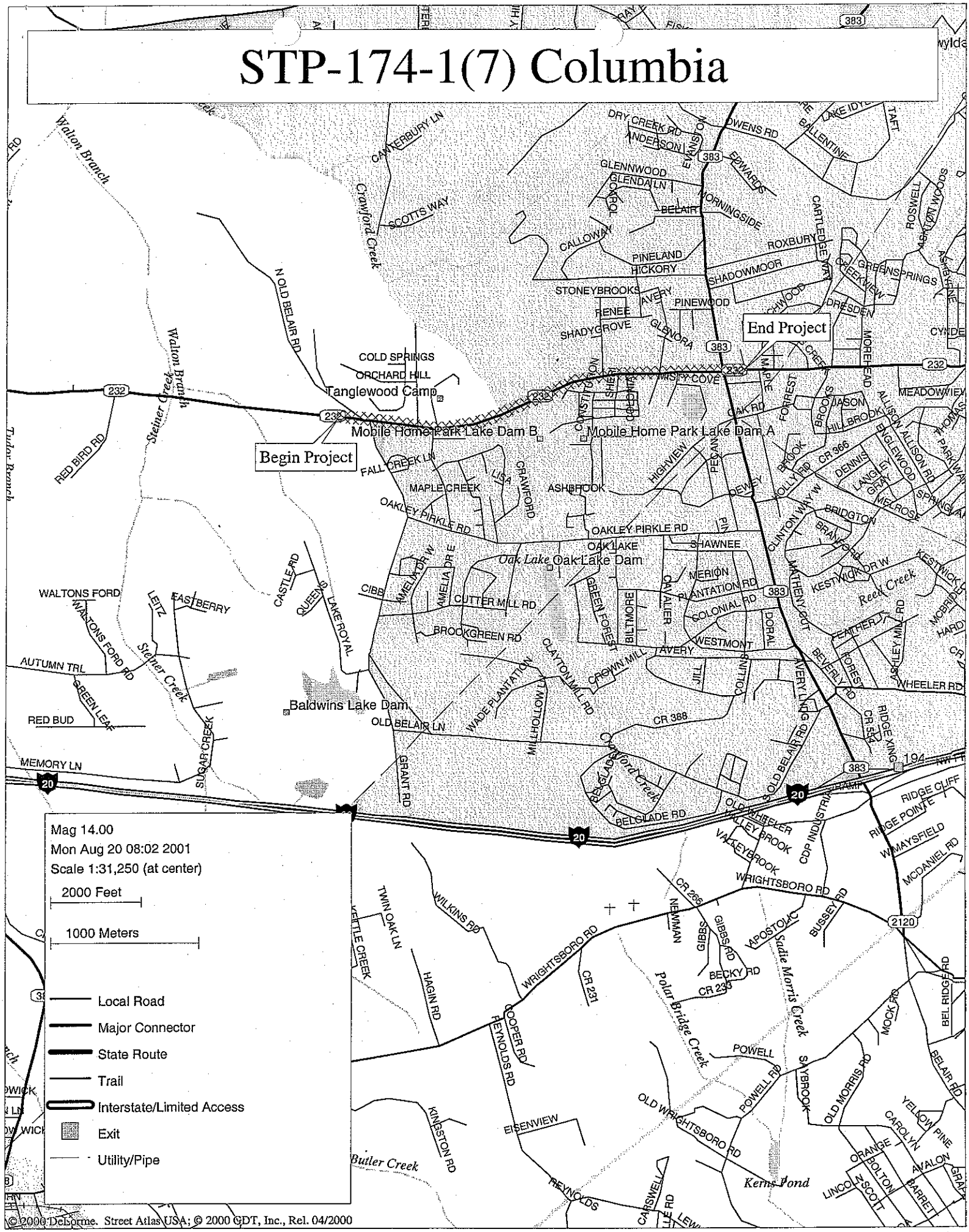
DATE _____ _____
State Environmental/Location Engineer

DATE _____ _____
State Traffic Safety and Design Engineer

DATE _____ _____
Project Review Engineer

DATE _____ _____
State Bridge and Structural Design Engineer

STP-174-1(7) Columbia



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Need and Purpose: *See attached sheets.*

Description of the proposed project: *This project consists of the widening and reconstruction of State Route 232 from Old Belair Road (CR 221) at MP 8.40 to Belair Road (SR 383) at MP 10.23.*

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

PDP Classification: Major_____ Minor_X_____
Federal Oversight: Full Oversight ( ), Exempt(X), State Funded( ), or Other ( )

Functional Classification: *Urban Minor Arterial*

U. S. Route Number(s): *None* **State Route Number(s):** *232*

Traffic (AADT):
Current Year: *11,450 (1998)* Design Year: *17,760 (2018)*

Existing design features:

- Typical Section: *1-12' lane in each direction with 5' rural shoulders from west of Crawford Creek to County Road 799 (Shady Grove Drive) and 2-12' lanes in each direction separated by a 14' flush median with curb and gutter from County Road 799 to State Route 383*
- Posted speed: *45/55 mph* Maximum degree of curvature: *3°*
- Maximum grade: *6.7% mainline, 10% cross roads, and 12% driveways*
- Width of right of way: *150 ft.*
- Major structures: *27.4' x 69' bridge over Crawford Creek (Sufficiency Rating 60.6)*
  To be replaced under project BR-0001-00(809) with a 155'x44' bridge
- Major interchanges or intersections along the project: *SR 232 @ SR 383*
- Existing length of roadway: *1.83 miles*

Proposed Design Features:

- Proposed typical section(s): *2-12' lanes in each direction separated by a 14' flush median with urban shoulders*
- Proposed Design Speed Mainline: *45 mph*
- Proposed Maximum grade Mainline: *5%*
- Maximum grade allowable Mainline: *5%*
- Proposed Maximum grade Side Street: *5%*
- Maximum grade allowable on Side Streets: *5%*
- Proposed Maximum grade driveway: *15%*
- Proposed Maximum degree of curve: *3°*
- Maximum degree allowable: *6°*
- Right of way
  - Width: *Varies 150 ft. to 200 ft.*
  - Easements: Temporary ( ), Permanent ( ), Utility ( ), Other ( ).
  - Type of access control: Full ( ), Partial ( ), By Permit (*X*), Other ( ).
  - Number of parcels: *10* Number of displacements: *0*
    - Business: _____
    - Residences: _____
    - Mobile homes: _____
    - Other: _____
- Structures: 162' x 44'
  - Bridges: ~~155'~~ *x 44' bridge over Crawford Creek to be widened to 74'*
  - Retaining walls: *None*
- Major intersections and interchanges: *SR 232 @ SR 383*
- Traffic control during construction: *All construction will be done under traffic.*
- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL 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: *None*

- Level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes (*X*), No ( ),
  - Categorical exclusion (*X*),
  - Environmental Assessment/Finding of No Significant Impact (FONSI) ( ), or
  - Environmental Impact Statement (EIS) ( ).
- Utility involvements:
  - Telephone – *Bellsouth*
  - Power – *Georgia Power*
  - Gas – *Atlanta Gas Light*
  - Water – *Columbia County*
  - Sewer – *Columbia County*
  - Cable TV – *Comcast, Knology of Augusta*

Project responsibilities:

- Design: *District Two Preconstruction*
- Right of Way Acquisition: *District Two Preconstruction*
- Relocation of Utilities: *District Two Utilities*
- Letting to contract: *DOT Contracts Administration*
- Supervision of construction: *Augusta DOT Area Office*
- Providing material pits: *Contractor*
- Providing detours: *None Required*

Coordination

- Concept meeting date: *March 5, 2002*
- P. A. R. meetings: *None Required*
- FEMA, USCG, and/or TVA: *FEMA coordination will be required at Crawford Creek*
- Public involvement: *A public information meeting will be required.*
- Local government comments: *Columbia County will be requested to fund all reimbursable utility relocations.* FY-03
- Other projects in the area: *BR-0000-00(809), STP-2120(4)*

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: *12 months*
- Time to complete preliminary construction plans: *12 months*
- Time to complete right of way plans: *6 months*
- Time to complete the Section 404 Permit: *12 months*
- Time to complete final construction plans: *12 months*
- Time to complete to purchase right of way: *18 months*

Other alternates considered: *The only other alternate considered was "no-build" which would not satisfy the Need & Purpose of the project.*

Comments: *The District recommends approval.*

Attachments:

1. Need & Purpose,
2. Traffic Data,
3. Cost Estimates:
    a. Construction including E&C,
    b. Utilities,
    c. Right-of-Way.
4. Typical sections,
5. Pavement Design,
6. Minutes of Concept meeting,
7. Location and Design Notice

Need and Purpose Statement
SR 232 from Old Belair Road to Belair Road
Columbia County; PI 231440
Project No. STP-174-1(7)

Background

In 2000 the Augusta MPO adopted its Long Range Transportation Plan (LRTP). This adopted Long Range Plan is the direct result of a comprehensive, cooperative and continuous planning process conducted by the local governments and the Georgia Department of Transportation in cooperation with the Federal Highway and Federal Transit Administrations. The city of Augusta recommends in its Long Range Transportation Plan the widening of SR 232 from Old Belair Rd. (CR 221) to Belair Rd. (SR 383). The LRTP recommendation is to widen the road from two to four through lanes.

Design

State Route 232 from Old Belair Road to Belair Road currently consists of one 12' lane in each direction with 5' rural shoulders from west of Crawford Creek to County Road 799 (Shady Grove Drive), and 2-12' lanes in each direction separated by a 14' flush median ~~with curb and gutter~~ from County Road 799 to State Route 383. The proposed improvement will widen SR 232 to 2-12' lanes in each direction separated by a 14' flush median with urban shoulders. There is a bridge crossing at Crawford Creek that is to be replaced under project BR-0001-00(809). (See Attachment A for Project limits).

Logical Termini

SR 383 is a logical terminus because SR 232 is an existing four-lane highway east of this point and the highway carries 17,300 AADT on this section (Traffic Count Station 183). (See Attachment A for TC Station Locations). Old Belair Road (CR 221) is a logical terminus due to the drop in traffic volumes that occur west of this point. TC Station 181 currently carries 6,800 AADT. Traffic volumes drop at Old Belair Rd. due to the heavy residential development east of Old Belair Rd. There is little development and thus less traffic west of Old Belair Rd.

Travel Demand and Operational Conditions

SR 232 is classified as an Urban Minor Arterial. Level-of-Service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream. There are six identified LOS at which a roadway can operate. A letter, "A" through "F", identifies each of the six. LOS "A" represents free flow traffic where drivers are virtually unaffected by the presence of other vehicles; whereas, level "F" represents operating conditions in which demand exceeds capacity.

According to historical traffic counts for the past ten years, the traffic volumes on the subject section are increasing at a 1.5% growth rate. The subject section of SR 232 is currently operating at a LOS of "E" at TC Station 183. With no improvements, this segment of SR 232 will be operating at a LOS of "F" in 2025. Widening and improving

SR 232 from Old Belair Road to Belair Road would improve the existing and future operational conditions.

Community Issues

Data from the 2000 Census indicates that 15,713 people reside within the limits of this project. 85% of the residents are White and 10% are Black. The land use along this corridor of SR 232 is zoned primarily residential. However, there are several businesses located along the project corridor. The project as proposed will impact 50 parcels of land with no displacements. SR 232 serves as the primary route to and from the neighborhoods in this corridor. The proposed improvements will provide area residents with improved access between their jobs, schools and other community activities.

Safety

For the years 1995-1997 (the most recent years for which complete accident data is available) the accident rate on SR 232 has been higher, on average, than the statewide average for similar facilities. Injury rates, on average, are above the statewide average for this type of facility and no fatalities occurred on this section of SR 232. The following table summarizes the corridor's accident statistics:

	1995		1996		1997	
	SR 232	State	SR 232	State	SR 232	State
Accidents	55		66		62	
Accident Rate	1,355	549	1,418	525	1,347	549
Injuries	17		20		13	
Injury Rate	419	162	430	152	282	155
Fatalities	0		0		0	
Fatality Rate	0	1.39	0	1.56	0	1.41

From 1995-1997, 33% of reported accidents for this subject section of SR 232 were as a result of one vehicle rear-ending another. 30% of all accidents were angle intersection related. The proposed turn lanes will allow motorists to exit the through lane before turning, thus reducing the opportunity for rear-end accidents. The ~~raised~~ FLUSH median will help reduce the opportunity for angle intersection accidents by reducing the number of conflict points that are caused by driveways and side streets. While no fatalities have occurred from 1995-1997 on this portion of SR 232, accident rates and injury rates exceed statewide averages for similar facilities.

Other projects in the Area

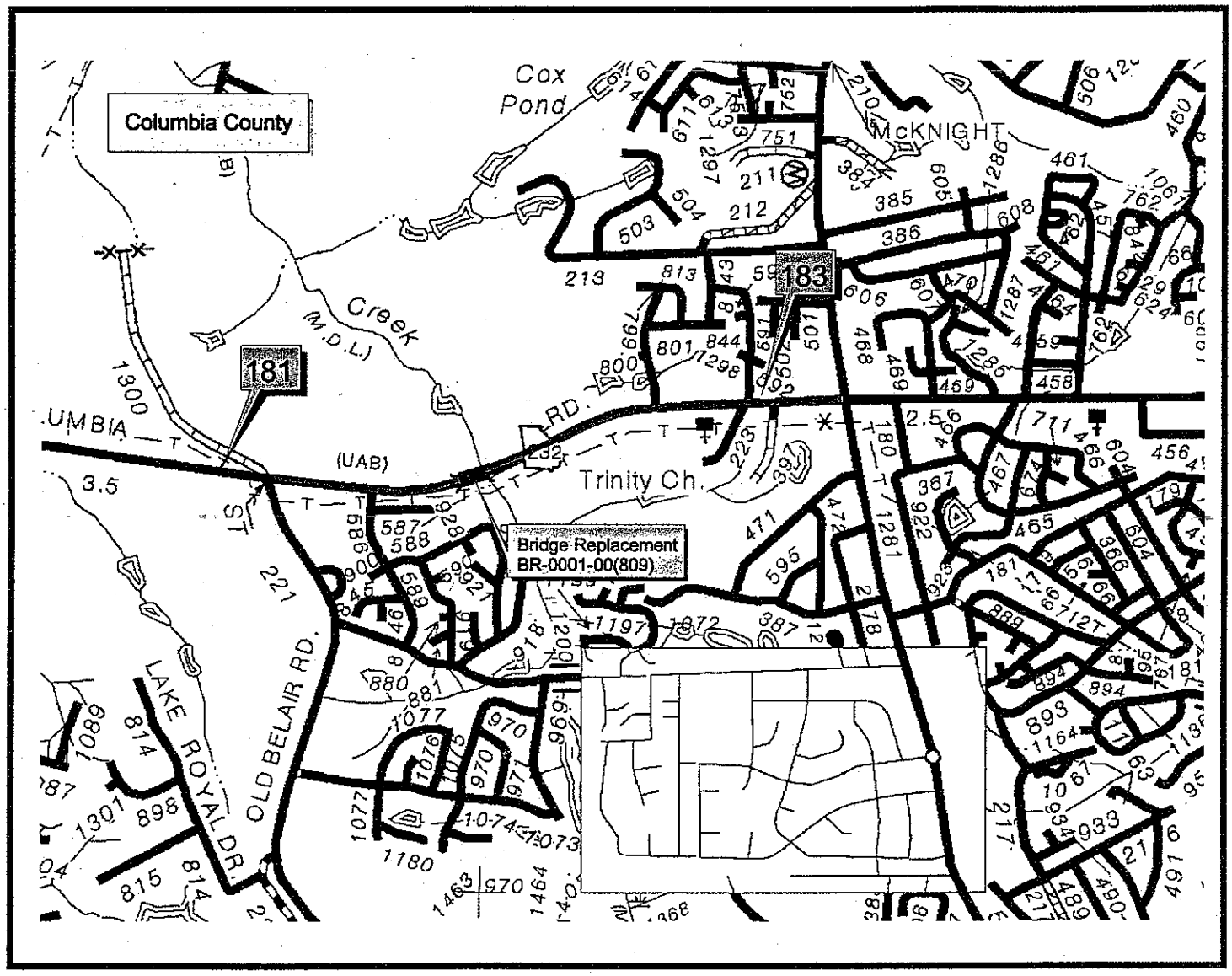
The only other project located nearby is a bridge replacement (BR-0001-00(809)). PE is authorized, ROW is scheduled for 2002 and construction is scheduled for 2003.

Need and Purpose

This project is needed to satisfactorily accommodate existing and future traffic demands. The purpose of the proposed improvement is to provide a facility that will adequately and safely serve current and future travel demand.

ATTACHMENT A

Traffic Count Stations and Project Limits STP-174-1(7) Columbia County



Current Projects in the Area
Project Limits

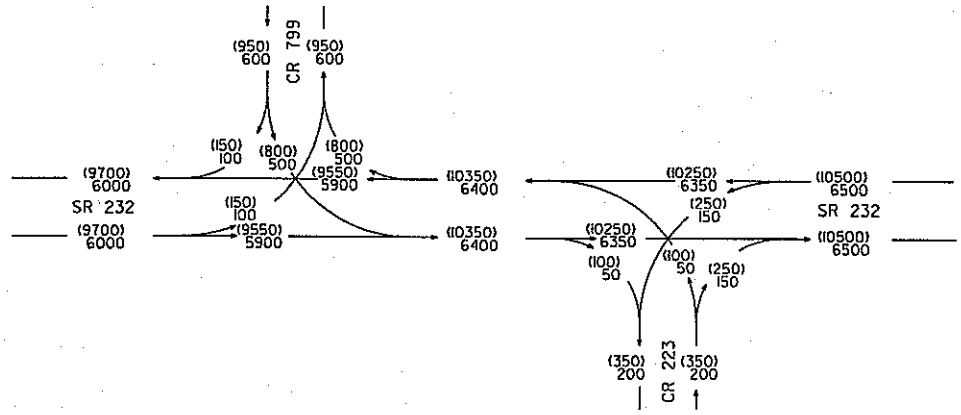
N

SHEET 1 OF 1

COLUMBIA COUNTY

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

2026 ADT = (000)
2006 ADT = 000



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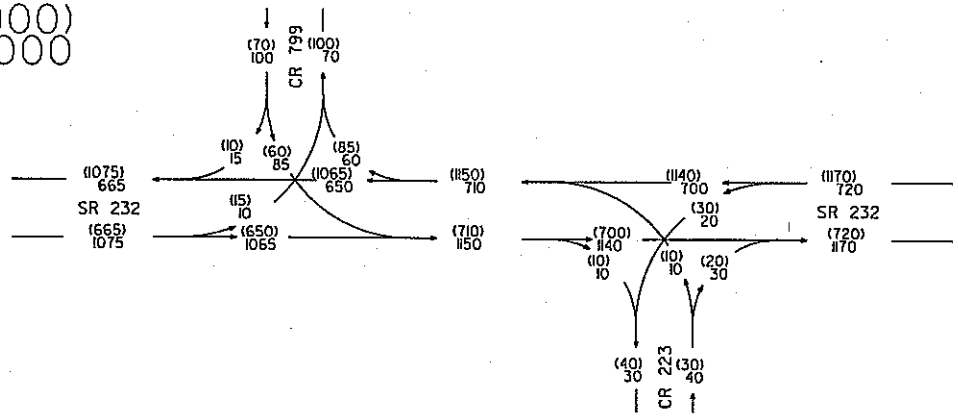
2026 AM DHV = 000



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STP-174-1(7)
PI#231440
COLUMBIA COUNTY

SR 232

T = 5%
24 HR T = 7%
SU = 5%
COMB = 2%

DRF
04/00

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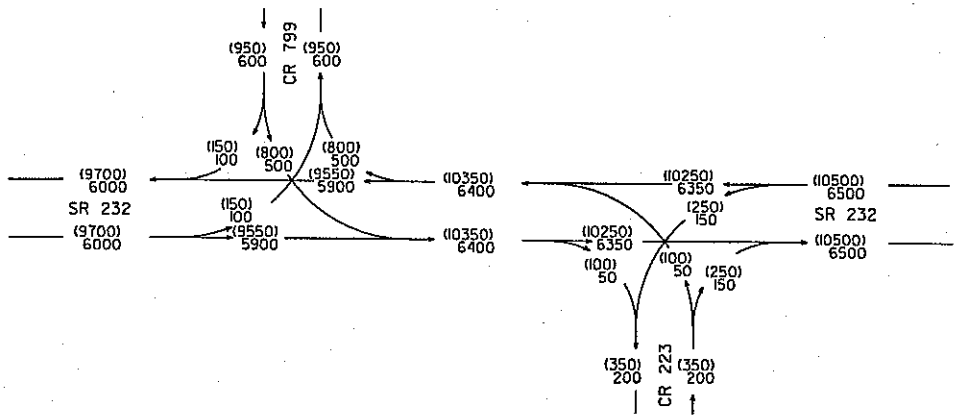
SHEET 1 OF 1

COLUMBIA COUNTY

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

2026 ADT = (000)
2006 ADT = 000



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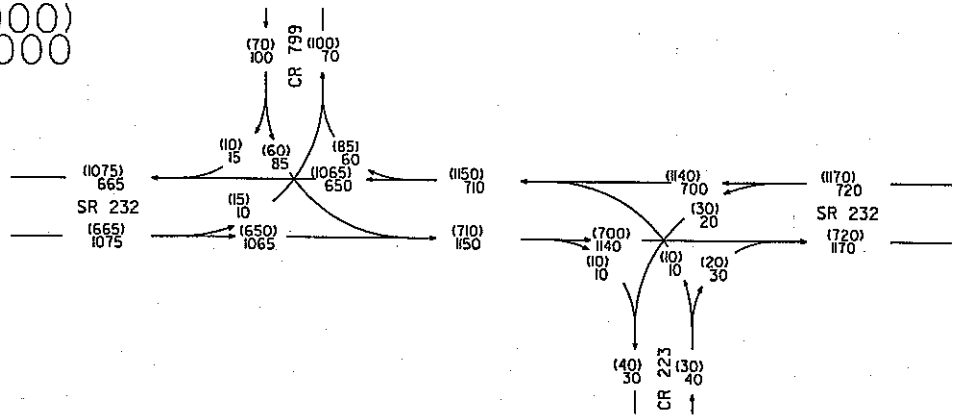
2026 AM DHV = 000



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STP-174-1(7)
PI#231440
COLUMBIA COUNTY

SR 232

T = 5%
24 HR T = 7%
SU = 5%
COMB = 2%

DRF
04/00

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UD01231440STP-174-1(7) COLUMBIA S.R.232 CR 221 TO SR 383

PROJECT LENGTH = 1.42 MILES

ITEM	DESCRIPTION	UNITS	WT. AVG.	QUANTITY	COST
	*** ROADWAY ***				
150-1000	TRAFFIC CONTROL - STP-174-1(7)	LUMP	100000	LUMP	$100000.00
210-0100	GRADING COMPLETE - STP-174-1(7)	LUMP	500000	LUMP	$500000.00
310-1101	GR AGGR BASE CRS, INCL MATL	TN	22	13206	$290532.00
318-3000	AGGR SURF CRS	SY	18	1100	$19800.00
402-3112	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2 INCL BITUM MAT	TN	40	1950	$78000.00
402-3113	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2 INCL BITUM M	TN	40	1460	$58400.00
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2 INCL BITUM MAT	TN	40	3900	$156000.00
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	40	1000	$40000.00
413-1000	BITUM TACK COAT	GL	1	3268	$3268.00
432-5010	MILL ASPH CONC PVMT, VARIABLE DEPTH	SY	2	19000	$38000.00
433-1100	REINF CONC APPROACH SLAB, INCL CURB	SY	100	586	$58600.00
441-0016	DRIVE CONCRETE, 6 IN TK	SY	27	60	$1620.00
441-4030	CONC VALLEY GUTTER, 8 IN	SY	40	580	$23200.00
441-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF	11	12500	$137500.00
444-1000	SAWED JOINTS IN EXIST PAVEMENTS - PCC	LF	5.5	24	$132.00
446-3000	PAVEMENT REINFORCING FABRIC, SELF ADHESIVE	LF	3	7000	$21000.00
500-3101	CLASS A CONCRETE	CY	445	42	$18690.00
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	CY	160	5	$800.00
511-1000	BAR REINF STEEL	LB	0.65	4100	$2665.00
550-1150	STORM DRAIN PIPE, 15 IN, H 1-10	LF	30	1500	$45000.00
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	30	1500	$45000.00
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF	35	1500	$52500.00
550-1300	STORM DRAIN PIPE, 30 IN, H 1-10	LF	43	1500	$64500.00
550-1360	STORM DRAIN PIPE, 36 IN, H 1-10	LF	56	1500	$84000.00
550-1480	STORM DRAIN PIPE, 48 IN, H 1-10	LF	90	1000	$90000.00
550-2150	SIDE DRAIN PIPE, 15 IN, H 1-10	LF	18	200	$3600.00
550-3615	SAFETY END SECTION 15 IN,SIDE DRAIN,6:1 SLOPE	EA	320	4	$1280.00
550-4215	FLARED END SECTION 15 IN (STORM DRAIN)	EA	320	2	$640.00
550-4224	FLARED END SECTION 24 IN (STORM DRAIN)	EA	455	1	$455.00
573-2006	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	LF	10	2000	$20000.00
603-2180	STN DUMPED RIP RAP, TP 3, 12 IN	SY	3	100	$300.00
634-1200	RIGHT OF WAY MARKERS	EA	78	65	$5070.00
643-1137	CH LK FENCE, ZC COAT, 5 FT, 11 GA	LF	9	2580	$23220.00
643-8010	GATE, CH LK ZC COAT - 10 FT. WIDE	EA	343	4	$1372.00
668-1100	CATCH BASIN, GP 1	EA	1800	40	$72000.00
668-2100	DROP INLET, GP 1	EA	1534	8	$12272.00
668-5000	JUNCTION BOX	EA	1330	7	$9310.00
668-7015	DRAIN INLET, 15 IN	EA	975	10	$9750.00
668-8012	SAFETY GRATE, TP 2	SF	30	48	$1440.00
			Section SUB TOTAL		$2089916.00
	*** EROSION CONTROL ***				
700-6900	PERMANENT GRASSING	LB	51	945	$48195.00
700-7000	AGRICULTURAL LIME	TN	77	54	$4158.00
700-8000	FERTILIZER MIXED GRADE	TN	259	16.2	$4195.80
700-8100	FERTILIZER NITROGEN CONTENT	LB	3	900	$2700.00
710-9000	PERMANENT SOIL REINFORCING MAT	SY	7	300	$2100.00

715-2200	BITUMINOUS TREATED ROVING, WATERWAYS			
	TEMPORARY EROSION CONTROL*			
163-0230	TEMPORARY GRASSING	SY	3.25	300	$975.00
163-0235	TEMPORARY MULCH		Section SUB TOTAL		$62323.80
163-0300	CONSTRUCTION EXIT				
163-0530	CONSTR & REM BALED STRAW EROSION CHECK	LB	33	135	$4455.00
165-0010	MAINTNANCE OF TEMPORARY SILT FENCE, TYPE A	TN	750	14	$10500.00
165-0030	MAINTNANCE OF TEMPORARY SILT FENCE, TYPE C	EA	1215	2	$2430.00
165-0070	MAINTENANCE OF BALED STRAW EROSION CHECK	LF	3.3	7500	$24750.00
167-0100	WATER QUALITY MONITORING	LF	1.5	3750	$5625.00
167-0200	WATER QUALITY SAMPLING	LF	2.1	250	$525.00
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	1.3	3750	$4875.00
171-0030	TEMPORARY SILT FENCE, TYPE C	MO	2685	15	$40275.00
716-1000	EROSION CONTROL MATS, WATERWAYS	EA	170	30	$5100.00
716-2000	EROSION CONTROL MATS, SLOPES	LF	2.34	7500	$17550.00
		LF	5	500	$2500.00
	*** WIDENING OF BRIDGE OVER CRAWFORD CREEK ***	SY	3	1000	$3000.00
543-9000	WIDENING OF EXISTING BRIDGE (155'X30'X$60)	SY	3	500	$1500.00
641-1200	GUARDRAIL, TP W		Section SUB TOTAL		$123085.00
641-5001	GUARDRAIL ANCHORAGE, TP 1				
641-5012	GUARDRAIL ANCHOR, TP 12	LUMP	279000	LUMP	$279000.00
		LF	12	400	$4800.00
	*** HIGHWAY SIGNS ***	EA	430	2	$860.00
636-0500	WOOD SIGN POSTS	EA	1675	2	$3350.00
636-1020	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 3		Section SUB TOTAL		$288010.00
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2				
653-0130	THERMOPLASTIC PVMT MARKING, ARROW, TP 3	LF	50	364	$18200.00
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	SF	20	1655	$33100.00
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	EA	60	12	$720.00
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	EA	100	2	$200.00
653-3501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	LF	0.3	15000	$4500.00
653-3502	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	LF	0.3	15000	$4500.00
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	LF	3.7	75	$277.50
654-1001	RAISED PVMT MARKERS TP 1	GLF	0.15	15000	$2250.00
654-1003	RAISED PVMT MARKERS TP 3	GLF	0.15	15000	$2250.00
654-1010	RAISED PVMT MARKERS TP 10	SY	2.7	550	$1485.00
		EA	4.7	315	$1480.50
	***INFLATION & E&C ***	EA	4.7	375	$1762.50
100-0001	INFLATION (5% X 5 YRS)	EA	32	20	$640.00
100-0002	E & C (10%)				
			730000	LUMP	$730000.00
			340000	LUMP	$340000.00
			Section SUB TOTAL		$1141365.50
			Total Project Cost		$3704700.30

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-174-1 (7) - Columbia County
PI No. - 231440

OFFICE: Tennille Utilities

DATE: March 1, 2002

JFH / DAS

FROM James F. Hobby, Jr., District Utilities Engineer

TO David Griffith, District Preconstruction Engineer
Attention: George Brewer

SUBJECT UPDATED UTILITY COST ESTIMATE

This estimate has been updated to reflect current unit relocation costs based on former "Force Account Agreements" and the "Mean Item Index". This office has reviewed the referenced project site to determine the extent of conflicts with eligible utilities and to estimate a utility cost to local government. State Route 232 has 150 feet of Right of Way with a Georgia Power Company transmission line on the back of the existing Right of Way. BellSouth, ComCast, Atlanta Gas Light Company, and the Columbia County Water Department also have facilities on the existing Right of Way. Georgia Power Company has facilities off existing Right of Way. This eligible cost is estimated below.

POWER
Georgia Power Company

Relocate 8 Distribution Power Poles @ $7,000.00	$56,000.00
Total Estimated Eligible Utilities Costs	**$56,000.00**

The cost to local government to relocate the water and sewer facilities is estimated as follows:

WATER & SEWER
Columbia County Water & Sewer Department

7,500' x 10" PVC water main @ $30/ft.	$225,000.00
200' x 8" PVC sewer main @ $25/ft.	$5,000.00
Total estimated county utility cost	**$230,000.00**

Actual conflicts will be determined as plans are developed. If you should have questions, please contact Alan Smith in the Utilities Section of this office at 478-552-4637.

JFH:DAS
cc: Jeff Baker / Scott Greene via e-mail
Herman Griffin
David Griffith
Debbie Pennington

RIGHT OF WAY COST BREAKDOWN SHEET

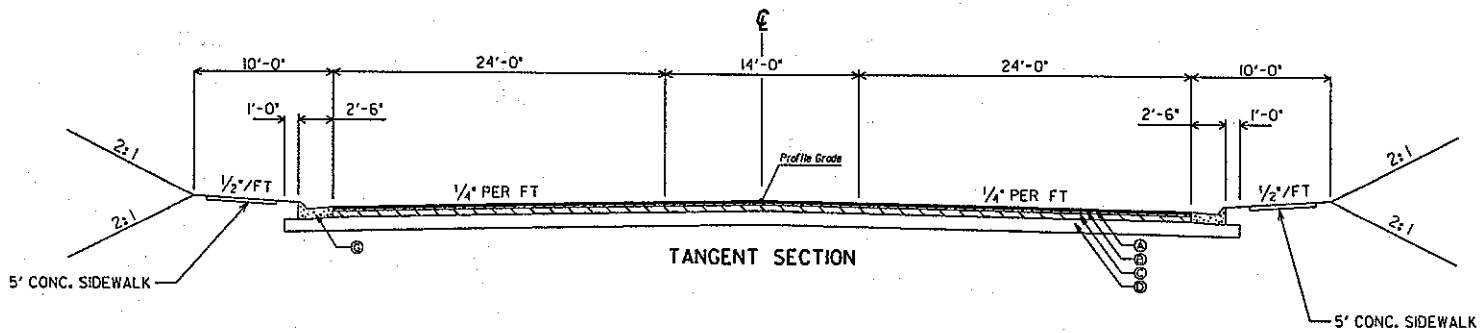
PROJECT: STP-174-1 (7) Columbia
P. I. No: 231440
No. of Parcels: 2
Project Description:

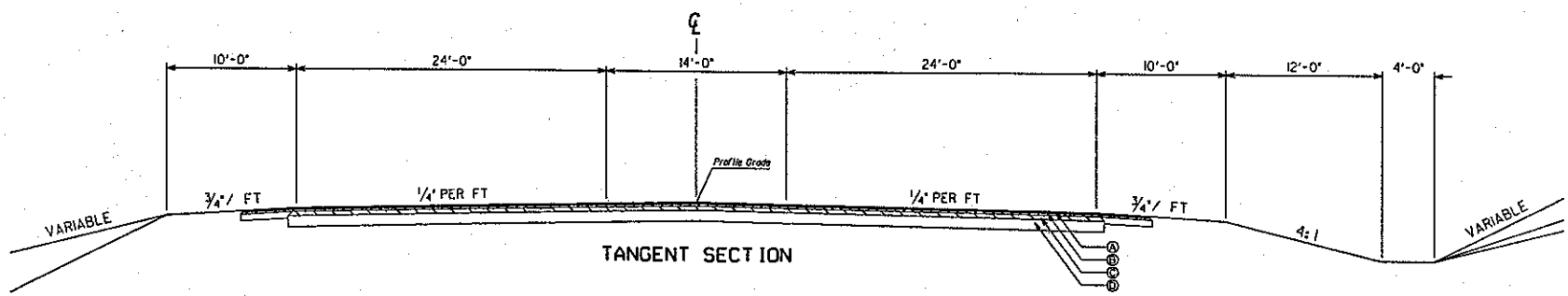
Date: February 12, 2002

Land:	Residential 1 @ $5,000	$ 5,000	$ 5,000
	Commercial 1 @ $25,000	$25,000	$25,000
	Industrial @	N/A	
	Agicultural @		
Improvements:	Single family residences	N/A	
	Commercial buildings	N/A	
Relocation:	residential @	N/A	
	business @	N/A	
Damages:	Proximity 1	$40,000	$40,000
	Wetland replacement	N/A	
	Estimated Cost of Right of Way		$70,000
	C/O Condemnation Increase & Legal Cost (50% of R/W)		$35,000
	Fee Appraisal Cost 2 x 1,200		$ 2,400
	Condemnation Cost (2 par x 10% x $5,500)		$ 1,100
	Incidentals (2 par x $1,500)		$ 3,000
	Net Cost		$41,500
	Inflation (10% rural; 25% urban)		$10,375

TOTAL C0ST	**$ 121,875**
Prepared by:	Credit hours
Prepared by:	Credit hours
Reviewed by:	Title:

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	STP-174-N71		
REVISION DATES			





NOT TO SCALE

STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION	WIDENING OF SR 232 FROM OLD BELAIR ROAD TYPICAL SECTIONS	DRAWING No.

o:\231440\concept\typical.dgn Apr. 04, 2002 09:34:22

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: STP-174-1(7) **County:** COLUMBIA
P.I. no.: 231440
Description: WIDENING AND RECONSTRUCTION OF SR 232

Traffic Data (NOTE: AADTs are one-way)
24-hour Truck Percentage: 7.00%
AADT initial year of design period: 6,500 vpd (2006)
AADT final year of design period: 10,500 vpd (2026)
Mean AADT (one-way): 8,500 vpd

Design Loading

Mean AADT		LDF		Trucks		18-K ESAL		Total Daily Loads
8,500	*	0.80	*	0.070	*	0.95	=	453

Total predicted design period loading = 453 * 20 * 365 = 3,306,900

Design Data
Terminal Serviceability Index: 2.50
Soil Support: 3.00
Regional Factor: 1.60

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness mm	(in.)	Structural Coefficient	Structural Value
9.5 mm Superpave	40	(1.57)	0.0173	0.69
19 mm Superpave	50	(1.97)	0.0173	0.86
25 mm Superpave	24	(0.94)	0.0173	0.42
	76	(2.99)	0.0118	0.90
Graded Aggregate Base	250	(9.84)	0.0063	1.58

Required SN = 5.06 Proposed SN = 4.45

>>> Proposed pavement is 12.1% Underdesign <<<

Remarks:

Prepared by George Brewer, Dist. Design Engineer November 5, 2001
Date

Recommended _____
State Materials & Research Engineer **Date**

Approved _____
District Engineer **Date**

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-174-1(7) Columbia County
P.I. No. 231440

OFFICE Tennille

DATE March 6, 2002

FROM George M. Brewer, District Design Engineer

TO Files

SUBJECT **CONCEPT TEAM MEETING MINUTES**

A Concept Team Meeting was held March 5, 2002 on the above-mentioned project. The following were in attendance:

George Brewer, District Design Engineer
Alan Smith, Assistant District Utilities Engineer
Lyn Wright, Right-of-Way
David Griffith, District Preconstruction Engineer
Ronald D. Hutto, Columbia County Preconstruction Engineer
Debbie Pennington, District Planning & Programming Engineer
Willie Smith, Columbia County Water Department
Wayne Eubanks, Columbia County Water Department
Gary Pulliam, DOT Augusta Construction
Gary McFerrin, Knology
Gus Cooper, Area Engineer
Phillip Scarborough, District Environmentalist
Jimmy Smith, Traffic Operations

The Concept Team had the following comments:

1. The bridge project at Crawford Creek should construct a bridge wide enough to accommodate the five lane typical section for this project. If that is not possible, the bridge project should construct the proposed endrolls wide enough to accommodate the wider bridge so that the environmental impacts to the stream could be handled at one time.
2. A study should be conducted to determine if a traffic signal will be warranted for the intersection at Old Belair Road.

3. The existing drainage problem on SR 232 at Shady Grove Drive should be addressed by this project.
4. The left turn movements at the McDonald's drive should be controlled.
5. Alan Smith submitted a revised utility estimate which will be included as a part of the report.

If any further assistance is needed, please contact George Brewer at (478)552-4642.

GMB

NOTICE OF LOCATION AND DESIGN APPROVAL

STP-174-1(7) COLUMBIA COUNTY
P. I. NUMBER 231440

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 was APRIL 19, 2002
Date of Approval

This project proposes to widen and reconstruct State Route 232 (Columbia Road) from County Road 221 (Old Belair Road) to State Route 383 (Belair Road). The proposed typical section will consist of 2-12' lanes in each direction separated by a 14' flush median with urban shoulders. The total project length is 1.83 miles.

Drawings of the proposed project are on file and are available for inspection at the Georgia Department of Transportation.

Jack D. Cooper, Jr.
jack.cooper@dot.state.ga.us
4260 Frontage Road
Augusta, GA 30909

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:

DAVID O. GRIFFITH
PRECONSTRUCTION ENGINEER
P.O. BOX 8
TENNILLE, GA 31089
(912)552-4629

Any written requests or communication in reference to this projector notice SHOULD include the Project and P.I. Numbers as noted at the top of this notice.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

District Two Design Office

Project Number: *STP-174-1(7)*
County: *Columbia*
P. I. Number: *231440*

Federal Route Number: *None*
State Route Number: *232*

Recommendation for approval:

DATE 3/19/02 _____
Project Manager

DATE 3-19-02 _____
District Engineer

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

DATE 3-21-02 _____
State Transportation Planning Administrator

DATE _____ _____
State Transportation Programming Engineer

DATE _____ _____
State Environmental/Location Engineer

DATE _____ _____
State Traffic Safety and Design Engineer

DATE _____ _____
Project Review Engineer

DATE _____ _____
State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

District Two Design Office

Project Number: *STP-174-1(7)*
County: *Columbia*
P. I. Number: *231440*

Federal Route Number: *None*
State Route Number: *232*

Recommendation for approval:

DATE 3/19/02 _____
Project Manager

DATE 3-19-02 _____
District Engineer

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

DATE _____
State Transportation Planning Administrator

DATE 3/20/02 _____
State Transportation Programming Engineer

DATE _____
State Environmental/Location Engineer

DATE _____
State Traffic Safety and Design Engineer

DATE _____
Project Review Engineer

DATE _____
State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: **P.I. No. 231440**

OFFICE: Environment/Location

DATE: April 3, 2002

FROM: Harvey D. Keepler, State Environmental/Location Engineer

TO: Wayne Hutto, P.E., Assistant Director of Preconstruction

SUBJECT: **PROJECT CONCEPT REPORT**
STP-174-1(7), COLUMBIA COUNTY

The above subject concept report has been reviewed. Is there anyway the projects can be combined (bridge replacement/widening) so we have one permit and one mitigation?

If you have any questions, please contact me at (404) 699-4401.

HDK/rtt

Attachment

cc: David Mulling
George Brewer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

District Two Design Office

Project Number: *STP-174-1(7)*
County: *Columbia*
P. I. Number: *231440*

Federal Route Number: *None*
State Route Number: *232*

Recommendation for approval:

DATE 3/19/02 _____ Project Manager

DATE 3-19-02 _____ District Engineer

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

DATE _____ State Transportation Planning Administrator

DATE _____ State Transportation Programming Engineer

DATE 4/2/02 _____ State Environmental/Location Engineer

DATE _____ State Traffic Safety and Design Engineer

DATE _____ Project Review Engineer

DATE _____ State Bridge and Structural Design Engineer

Department of Transportation
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE

File: STP-174-1(7), Columbia County
P.I. No. 231440

Office: Traffic Safety & Design
Atlanta, Georgia
Date: April 10, 2002

PMAllen

From: Phillip M. Allen, State Traffic Safety and Design Engineer

To: Wayne Hutto, Assistant Director of Preconstruction

RECEIVED
APR 12 2002

Subject: Project Concept Report Review

We have reviewed the above referenced concept report for the proposed widening and reconstruction of State Route 232 from Old Belair Rd (CR 221) to Belair Road (SR 383) in Columbia County.

The Office of Traffic Safety & Design finds this report satisfactory for approval because it will improve safety and traffic operations within this area.

PMA/sz

Attachment (signature page)

Cc: Harvey Keepler, State Environment/Location Engineer
Mike Thomas, District Engineer
Attention: George Brewer, District Design Engineer
David Mulling, State Review Engineer, w/ attachment
Marta Rosen, State Transportation Planning Administrator
Chuck Hasty, TMC
General Files
Office Files

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

District Two Design Office

Project Number: *STP-174-1(7)*
County: *Columbia*
P. I. Number: *231440*

Federal Route Number: *None*
State Route Number: *232*

Recommendation for approval:

DATE 3/19/02 _____
Project Manager

DATE 3-19-02 _____
District Engineer

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

DATE _____ _____
State Transportation Planning Administrator

DATE _____ _____
State Transportation Programming Engineer

DATE _____ _____
State Environmental/Location Engineer

DATE 4-10-02 _____
State Traffic Safety and Design Engineer

DATE _____ _____
Project Review Engineer

DATE _____ _____
State Bridge and Structural Design Engineer