

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

Office of Traffic Operations

PROJECT CONCEPT REPORT

Project Number: CSSTP-0007-00(350)

County: Jackson

P. I. Number: 0007350

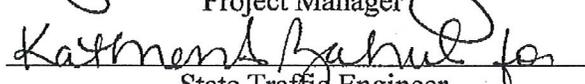
Federal Route Number: 129, 441

State Route Number: 11 BUS, 15, 59, 98, 334

Recommendation for approval:

DATE 19 Jan 2010

DATE 1-20-10


Project Manager

State Traffic Engineer

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

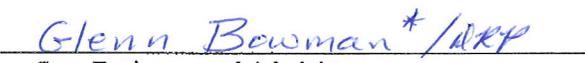
DATE 3-15-10


State Transportation Planning Administrator

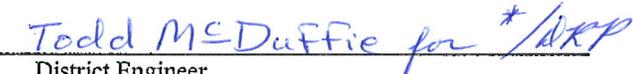
DATE _____

State Transportation Financial Management Administrator

DATE 03/29/2010


State Environmental Administrator

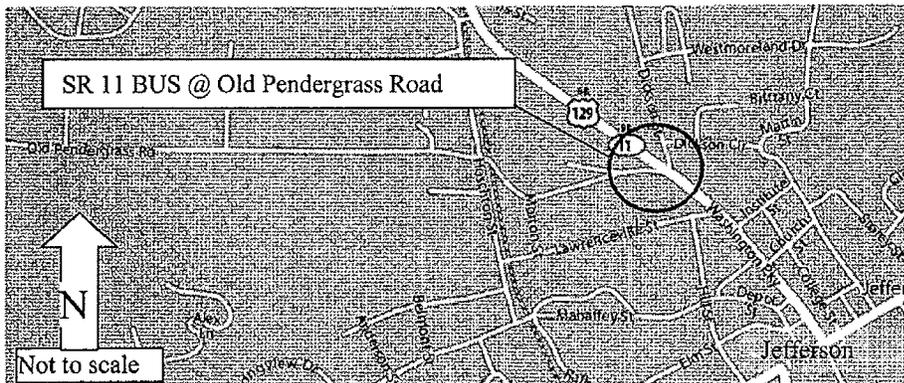
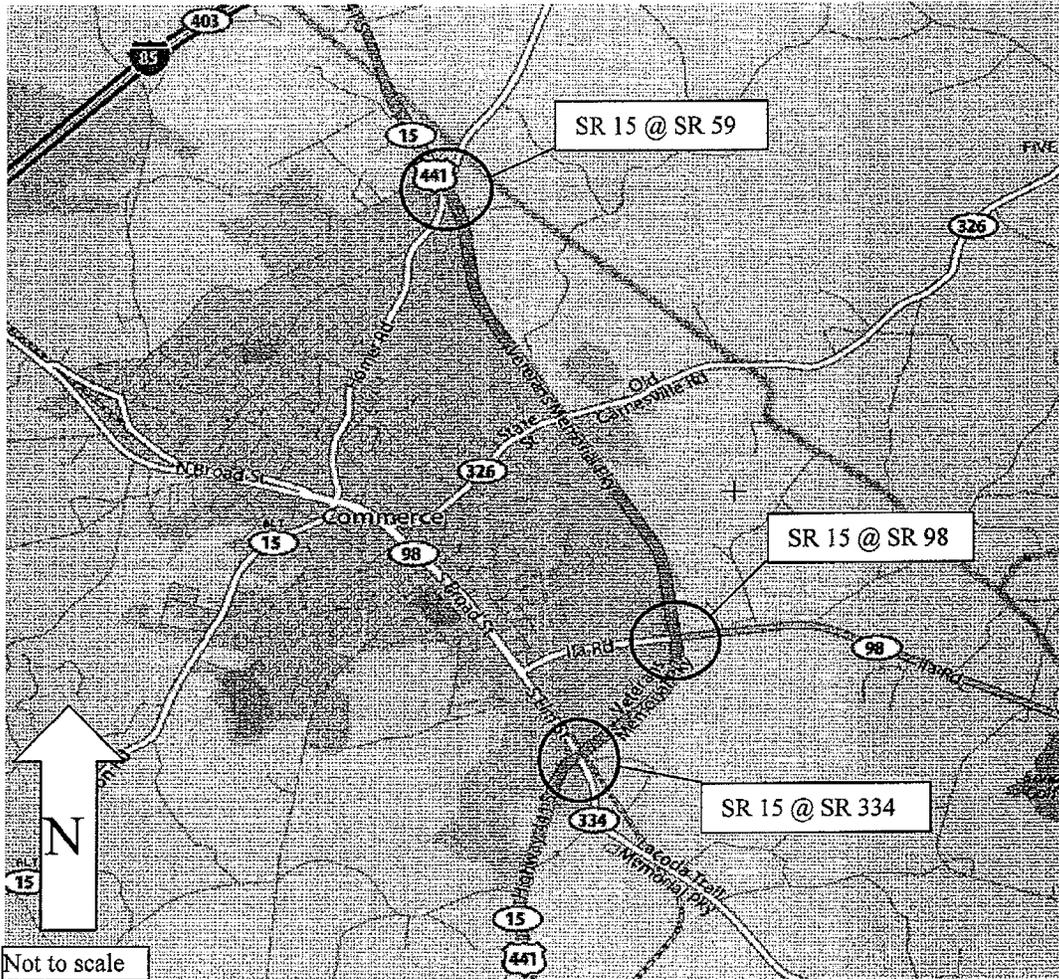
DATE 03/12/2010


District Engineer

DATE 03/13/2010


Project Review Engineer

* Recommendation on file



PROJECT LOCATION MAP

Need and Purpose:

Four (4) signalized intersections in Jackson County have been identified for upgrades. The signal deficiencies are characterized by the needs and improvements to meet current design standards outlined in the Manual of Uniform Traffic Control Devices (MUTCD) and the American with Disabilities Act (ADA) requirements. These specific needs for the signalized intersections improvements will aid in maximizing efficiency and effectiveness and include the following: need for modernization for cost-effective maintenance and communication capability, and signal operational capabilities to accommodate pedestrian traffic.

Description of the proposed project:

The proposed project is located in Jackson County (100%). The project's four(4) locations consist of traffic signalization upgrades including interconnect communication between intersections using fiber optics; countdown pedestrian signals, ADA wheel chair ramps, and cross walk striping. The project will end with volume data collection to develop and install signal coordination and timing.

The project consists of signal upgrades, signal communication design, pedestrian facility improvements, and signal coordination at the following signalized intersections:

1. SR 15/US 441 @ SR 59(N. Broad Street), MP 16.05
2. SR 15/US 441 @ SR 98(N. Elm Street), MP 12.97
3. SR 15/US 441 @ SR 334, MP 12.03
4. SR 11 BUS/US 129 @ Old Pendergrass Road, MP 1.96

Traffic Signal Timing and Coordination

Traffic signals will be timed to maintain traffic progression through the coordinated intersections. The signal timing will be designed to minimize the overall total delay of the roadway segment. The major street typically carries the larger volumes, thus the signal timing will provide the majority of the green time to the major roadway approaches. The progression of vehicles along the major roadway will be given the priority even when the characteristics of the roadway traffic flow and control changes. Once a signal timing plan has been completed to optimize traffic flow, any modification to the signal timing to increase green time on minor streets will not adversely affect the traffic flow progression on the major roadway.

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: SR 11 BUS/US 129 – Rural Minor Arterial
SR 15/US 441 – Urban Principal Arterial – Other,
SR 59(West Hancock Street) – Urban Minor Arterial
SR 98(N. Elm Street) - Urban Minor Arterial
SR 334 – Rural Major Collector

Old Pendergrass Road – Rural Minor Collector

U. S. Route Number(s): 129, 441 State Route Number(s): 11BUS,15,59,98,334

Traffic (AADT):

Current Year: N/A Design Year: N/A
(This project does not add capacity.)

Existing design features:

- Typical Section:
 - SR 11 BUS: 2-12' lanes, no turning lanes at its intersection with old Pendergrass Road, existing sidewalk on the south east side
 - SR 15: 4 lane divided highway with 12' lanes and left and right turning lanes at its intersections with SR 59, SR 98, and SR 334
 - SR 59: 2-12' lanes with a northbound right turning lane on the east side of its intersection with SR 15
 - SR 98: 2-12' lanes, no turning lanes at its intersection with SR 15
 - SR 334: 2-12' lanes with left and right tuning lanes at its intersection with SR 15
 - Old Pendergrass Road: 2-11' lanes, no sidewalk, no turning lanes
- Posted speed: varies 25-55 mph
- Minimum radius for curve: N/A
- Maximum super elevation rate for curve: N/A
- Maximum grade: N/A %
- Width of right of way: varies 60-180 ft
- Major structures: N/A
- Major interchanges or intersections along the project: N/A

Proposed Design Features:

- Proposed typical section(s): Same as existing for all intersections
- Proposed Maximum grade Mainline: N/A Maximum grade allowable: N/A
- Proposed Maximum grade Side Street: N/A Maximum grade allowable: N/A
- Proposed Maximum grade driveway: N/A
- Proposed Maximum degree of curve: N/A Maximum degree allowable: N/A
- Right of way
 - Width: Same as existing
 - Easements: Temporary (), Permanent (), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 0 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Structures:
 - Bridges (N/A)
 - Retaining walls (N/A)
- Major intersections and interchanges: N/A

- Traffic control during construction: Traffic to remain on existing streets with limited lane closures.
- Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
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:

No 404 permit anticipated at this time.
 No impacts are expected to water quality.
 UST's are present and vary from location to location.
 SR 334 @ Old Pendergrass Road is in the historic district.
 No sites require preservation in place.

- 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: Atlanta Gas Light, at&t (Telephone), at&t Fiber (Cross-Country), Charter Communications, City of Commerce, City of Jefferson, Comcast, GA Power – Distribution, GA Power – Transmission, Georgia Transmission, Jackson County Water Authority, Jackson EMC, Windstream Communications (Telephone), Windstream Communications (CATV)
- VE Study Required: Yes () NO (X)

Project responsibilities:

- Design: GDOT
- Right of Way Acquisition: GDOT
- Relocation of Utilities: GDOT
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: N/A
- Providing detours: N/A
- Environmental Work: GDOT

Coordination

- Initial Concept Meeting date and brief summary: N/A
- Concept meeting date and brief summary: N/A
- P. A. R. meetings, dates and results: N/A

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Project Number: CSSTP-0007-00(350)
P. I. Number: 0007350
County: Jackson

- Public involvement: N/A
- Local government comments: N/A
- Other projects in the area: N/A
- Railroads: (Norfolk Southern) Coordination will begin when survey data is received
- Other coordination to date: N/A

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 6 Months.
- Time to complete preliminary construction plans: 4 Months.
- Time to complete right of way plans: 2 Months, (if required).
- Time to complete the Section 404 Permit: N/A Months.
- Time to complete final construction plans: 2 Months.
- Time to complete to purchase right of way: 12 Months, (if required).
- List other major items that will affect the project schedule:
 - Railroad Coordination: 12 Months

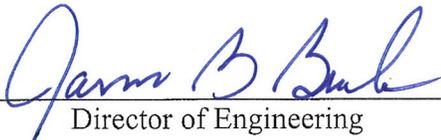
Other alternates considered: N/A

Comments: None

Attachments:

1. Notice of Location and Design Approval
2. Cost Estimate

Concur:


Director of Engineering

Approve:


Chief Engineer

Date:

5/5/20w

NOTICE OF LOCATION AND DESIGN APPROVAL

**PROJECT: CSSTP-0007-00(350), JACKSON COUNTY,
P.I. NO. 0007350**

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 projects.

Date of Location and Design Approval: May 13, 2010

Project CSSTP-0007-00(350) in Jackson County consists of signal upgrades, interconnected communications, pedestrian facility improvements, and signal coordination for four (4) locations within Jackson County.

The proposed construction will consist of upgrades including pedestrian countdown signals, ADA wheel chair ramps, and cross walk striping.

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

Mr. Johnny Emmett
Area Engineer, District One Area Six
450 Old Hull Road
Athens, GA 30601
email: jemmett@dot.ga.gov

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

Ms. Kathy Zahul, P.E.
Assistant State Traffic Engineer
Office of Traffic Operations
935 E. Confederate Ave, Bldg 24
Atlanta, Georgia 30316
email: kzahul@dot.ga.gov

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

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: PROJECT No. CSSTP-0007-00(350), Jackson County
SR 15 @ 3 LOCS & SR 11 BU @ 1 LOC
P.I. No. 0007350

OFFICE: Traffic Operations

DATE: January 5, 2010

✓
FROM: Kathy Zahul, P.E., Assistant State Traffic Engineer

TO: Ronald E. Wishon, Project Review Engineer

SUBJECT: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Cynthia C. Burney, P.E.

MNGT LET DATE 7/16/2010

MNGT R/W DATE 7/15/2009

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$400,000.00

DATE 3/17/2005

RIGHT OF WAY \$n/a

DATE n/a

UTILITIES \$n/a

DATE n/a

REVISED COST ESTIMATES

CONSTRUCTION* \$318,430.65

RIGHT OF WAY \$0.00

UTILITIES** \$50,000.00

* Costs contain 5% Engineering and Inspection and 0% Construction Contingencies.

** Cost contains \$50,000.00 for utility contingency.

REASON FOR COST DECREASE: This is a concept cost estimate.

Estimate Report for file "0007350"

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	50000.0	TRAFFIC CONTROL	50000.0
206-0002	1000	CY	3.78	BORROW EXCAV INCL MATL	3780.0
441-0106	2000	SY	23.19	CONC SIDEWALK, 6 IN	46380.0
500-3200	50	CY	344.66	CLASS B CONCRETE	17233.0
550-1240	32	LF	34.86	STORM DRAIN PIPE, 24 IN, H 1-10	1115.52
550-3324	2	EA	769.17	SAFETY END SECTION 24 IN, STORM DRAIN, 4:1 SLOPE	1538.34
Section Sub Total:					\$120,046.86

Section Traffic Signal

Item Number	Quantity	Units	Unit Price	Item Description	Cost
647-1000	1	LS	56000.0	TRAFFIC SIGNAL INSTALLATION NO - 1	56000.0
647-1000	1	LS	56000.0	TRAFFIC SIGNAL INSTALLATION NO - 2	56000.0
647-1000	1	LS	56000.0	TRAFFIC SIGNAL INSTALLATION NO - 3	56000.0
687-1050	1	LS	8931.46	TRAFFIC SIGNAL DATABASE CONVERSION	8931.46
Section Sub Total:					\$176,331.46

Section Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	1	AC	261.44	TEMPORARY GRASSING	261.44
163-0240	3	TN	146.17	MULCH	438.51
700-6910	1	AC	650.96	PERMANENT GRASSING	650.96
700-7000	3	TN	54.78	AGRICULTURAL LIME	164.34
700-7010	3	GL	18.93	LIQUID LIME	56.79
700-8000	1	TN	404.69	FERTILIZER MIXED GRADE	404.69
700-8100	1500	LB	2.31	FERTILIZER NITROGEN CONTENT	3465.00
713-3002	500	SY	0.14	WOOD FIBER BLANKET, TP II, SLOPES	70.0
Section Sub Total:					\$5,511.73

Section Signing and Marking

Item Number	Quantity	Units	Unit Price	Item Description	Cost
652-3501	2	GLM	241.99	SKIP TRAFFIC STRIPE, 5 IN, WHITE	483.98
652-5701	150	LF	1.92	SOLID TRAF STRIPE, 24 IN, WHITE	288.0
652-9001	300	SY	1.61	TRAFFIC STRIPE, WHITE	483.0
Section Sub Total:					\$932.98

Total Estimated Cost: \$302,823.03

P.I. Number 0007350

County Jackson

Project Number CSSSTP-0007-00(350)

**Special Provision, Section 109-Measurement and Payment
FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)**

ENTER FPL DIESEL	2.517
ENTER FPM DIESEL	5.663

ENTER FPL UNLEADED	2.268
ENTER FPM UNLEADED	5.103

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)		0.29		0.15		
Excavations paid as specified by Sections 206 (CUBIC YARD)		0.29		0.15		
GAB paid as specified by the ton under Section 310 (TON)		0.29		0.24		
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)		2.90		0.71		
PCC Pavement paid as specified by the square yard under Section 430 (SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __Concrete (CY) Section 500	50.00	344.66	17.2330	8.00	137.86	1.50	25.85	CLASS B CONC
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
PSC Beams____ (LF) Section 507				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511				8.00		1.50		
Piling__inch (LF) Section 520				8.00		1.50		
Piling__inch (LF) Section 520				8.00		1.50		
Piling__inch (LF) Section 520				8.00		1.50		
Piling__inch (LF) Section 520				8.00		1.50		
Piling__inch (LF) Section 520				8.00		1.50		
Piling__inch (LF) Section 520				8.00		1.50		
Drilled Caisson,____ (LF) Section 524				8.00		1.50		
Drilled Caisson,____ (LF) Section 524				8.00		1.50		
Drilled Caisson,____ (LF) Section 524				8.00		1.50		
Pile Encasement,____(LF) Section 547				8.00		1.50		
Pile Encasement,____(LF) Section 547				8.00		1.50		
			SUM OF DIESEL=		137.86	SUM OF UNLEADED=		25.85
DIESEL PRICE ADJUSTMENT(\$)					\$399.05			
UNLEADED PRICE ADJUSTMENT(\$)					\$67.42			

