

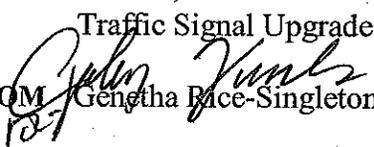
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0007360, Columbia/Richmond Counties
CSSTP-0007-00(360)
SR 121,223 and 338-
Traffic Signal Upgrade

OFFICE: Program Control

DATE: January 4, 2010

FROM 
Genetha Pace-Singleton, Program Control Administrator

TO SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Ron Wishon
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Paul Liles
Anthony Collins
George Brewer
Cynthia Burney
BOARD MEMBER

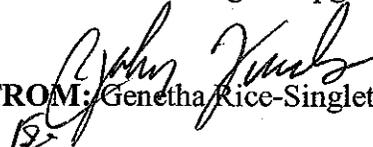
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: P.I. No. 0007360, Columbia/Richmond Counties
CSSTP-0007-00(360)
SR 121,223 and 338-
Traffic Signal Upgrade

OFFICE: Program Control

DATE: December 15, 2009


FROM: Genetha Rice-Singleton, Program Control Administrator

TO: Gerald M. Ross, P.E., Chief Engineer

SUBJECT: PROJECT CONCEPT REPORT

This project consists of signal upgrades, interconnected communications, pedestrian facility improvements, and signal coordination for seven (7) locations within Columbia and Richmond Counties.

- (1) SR 223 @ SR 388/Wrightsboro Road
- (2) SR 388 @ Wrightsboro Road
- (3) SR 121 @ Phinizy Road
- (4) SR 121 @ Rosier Road
- (5) SR 121 @ Pepperidge Drive
- (6) SR 121 @ Tobacco Road
- (7) Tobacco Road@ Gracewood Drive

A combination of growth and aging traffic control equipment within the corridor has created unacceptable levels of congestions. Upgrades to traffic signal control equipment and communications hardware are needed to allow coordination of signals, reduce congestion and improve safety.

The proposed project will provide traffic signalization upgrades using the latest 2070 controller hardware and software platforms. The project will include interconnected communications between intersections using fiber optics, energy savings LED signal heads, pedestrian countdown signals, ADA wheel chair ramps, and crosswalk striping. Traffic signals will be timed to maintain coordinated traffic flow progression through the synchronized intersections. 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 progression in the major roadway. Traffic will be maintained during construction.

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

The estimated costs for this project are:

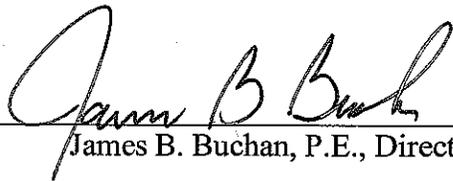
	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C)	\$811,547	\$ 700,000	L240F	LUMP
Right-of-way	-0-			
Utilities	\$50,000			

I recommend this project concept be approved.

GRS: JDQ

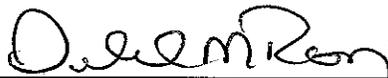
Attachment

CONCUR



James B. Buchan, P.E., Director of Engineering

APPROVED



Gerald M. Ross, P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

Office of Traffic Operations

PROJECT CONCEPT REPORT

Project Number: CSSTP-0007-00(360)

County: Columbia and Richmond

P. I. Number: 0007360

Federal Route Number: 25

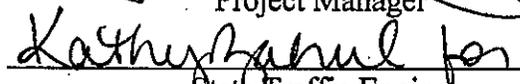
State Route Number: 121, 223, and 388

Recommendation for approval:

DATE 28 Aug 2009

DATE 8-28-09



Project Manager


Kathy Bahul for
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).

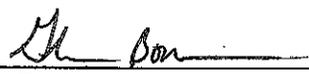
DATE _____

State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE 9/16/09



State Environmental/Location Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

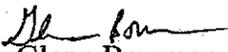
FILE: P.I. No. 0007360

OFFICE: Environment/Location

PROJECT No. CSSTP-0007-00(360) / Columbia and
Richmond County

DATE: 9/17/09

State Route Numbers: 121, 223, and 388

FROM: 
Glenn Bowman, P.E., State Environmental/Location Engineer

TO: Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT: PROJECT CONCEPT REPORT REVIEW

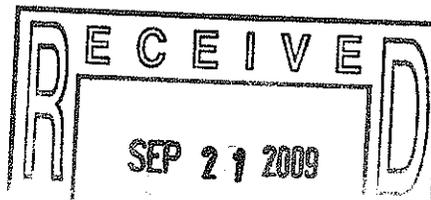
The Concept Report for the above project has been reviewed and appears satisfactory subject to the following comments:

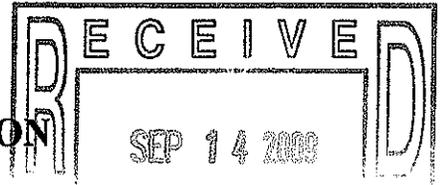
1. Presumably, the statement "No sites require preservation in place" should be revised to read, "No known archaeological sites"? Please verify this.
2. Please list who is responsible for the environmental work in the Project Responsibilities section.
4. Six (6) months is not enough time to get environmental document approval. Please revise the schedule to a minimum of nine (9) months.
5. Please note that TPRO denotes the ROW authorization month as July 2009, but there is no ROW phase. The Artemis schedule finish date needs to reflect that environmental document approval will probably need nine (9) months from the time a project boundary map is received to begin studies.
6. See page 5 in concept report under Environmental Concerns. If significant impacts to historic 4(f) resources cannot be avoided, then the proposed environmental schedule must be revised significantly.

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

GB:lc

cc: Ron Wishon
Angela Whitworth
Keith Golden
Angela Alexander





DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

Office of Traffic Operations

PROJECT CONCEPT REPORT

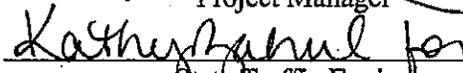
Project Number: CSSTP-0007-00(360)
County: Columbia and Richmond
P. I. Number: 0007360

Federal Route Number: 25
State Route Number: 121, 223, and 388

Recommendation for approval:

DATE 28 Aug 2009

DATE 8-28-09


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 9/10/09


State Transportation Planning Administrator

DATE _____

State Transportation Financial Management Administrator

DATE _____

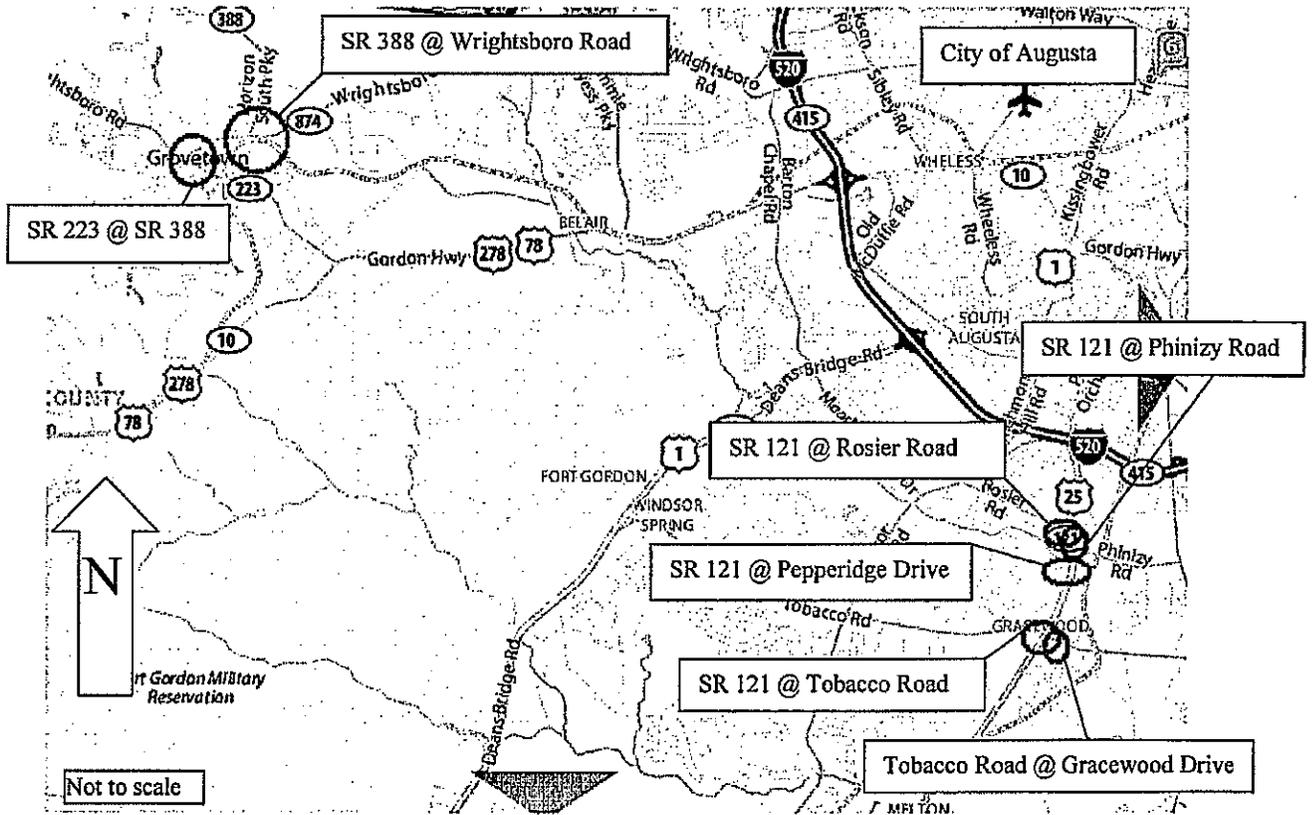
State Environmental/Location Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer



PROJECT LOCATION MAP

8235/b

Need and Purpose:

Columbia and Richmond Counties have continued to grow as more people move into the Augusta area. Columbia and Richmond Counties have experienced significant increase in traffic flow through their counties and anticipate continued growth in the future. These Counties have identified needs, improvements, and deficiencies of seven (7) signalized intersections located on both state routes and local streets. The Counties' purpose is to meet transportation goals, achieve economic development, and improve the quality of life by enhancing the interconnection of people, goods, and services within and through the Columbia and Richmond Counties. 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 Columbia (29%) and Richmond (71%) Counties. The project's seven (7) locations consist of traffic signalization upgrades using the latest GDOT 2070 controller hardware and software platforms; interconnect communication between intersections using fiber optics; energy saving LED signal heads; pedestrian facility improvements to include 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 223 @ SR 388/Wrightsboro Road
2. SR 388 @ Wrightsboro Road
3. SR 121 @ Phinzy Road
4. SR 121 @ Rosier Road
5. SR 121 @ Pepperidge Drive
6. SR 121 @ Tobacco Road
7. Tobacco Road @ Gracewood Drive

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

PDP Classification: Major Minor

Federal Oversight: Full Oversight (), Exempt(X), State Funded (), or Other ()

Project Concept Report page 4
Project Number: CSSTP-0007-00(360)
P. I. Number: 0007360
Counties: Columbia, Richmond

Functional Classification: SR 121/US 25 – Urban Principle Arterial - Other
SR 388(Wrightsboro Road) – Urban Principle Arterial - Other
SR 223 – Urban Principle Arterial - Other
Tobacco Road – Urban Principle Arterial - Other
Phinizy Road – Urban Collector
Rosier Road – Urban Collector
Pepperidge Drive – Urban Local
Gracewood Drive – Urban Local

U. S. Route Number(s): 25 State Route Number(s): 121, 223, 338

Traffic (AADT):

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

Existing design features:

- Typical Section:
 - SR 121: 2-12' lanes with a 14' two-way left turn lane (@ Tobacco Road), widens to 6-12' with raised grassed median (@ Rosier and Phinizy Road)
 - SR 223: 2-12' lanes
 - SR 388/Wrightsboro Road: 2-12' lanes widens at intersections to include right and left turning lanes
 - Tobacco Road: 4-12' lanes with a 14' two-way left turn lane, widens at major intersection to include left and right turn lanes
 - Phinizy Road: a skewed intersection with SR 121, has 1-12' right lane, 1-12' left turn lane, and 1-18' entrance lane
 - Rosier Road: a skewed intersection, has 1-15' left turn lane separated from 1-15' right turn lane by a raised grassed median, and 1-12' entrance lane
 - Pepperidge Drive: an entrance into a residential area – raised grassed islands for the right turn into and out of residential area, crosswalks present, but no sidewalks, 2-12' entrance lanes, a 12' raised grassed median and 2-12' exit lanes
 - Gracewood Drive: an entrance into a commercial area - 1-22' entrance lane with a 12' grassed raised median and 2-16' exit lanes (one left and a left right shared), has sidewalk and crosswalks
- 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 60-120 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.
 - There is history in the vicinity of some of the intersections.
 - ~~No sites require preservation in place.~~ *No known archaeological sites*
- 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, Power, Television, Water, etc.)*
- VE Study Required: Yes () NO (X)

Project Concept Report page 6
Project Number: CSSTP-0007-00(360)
P. I. Number: 0007360
Counties: Columbia, Richmond

Project responsibilities:

- o Design: GDOT
- o Right of Way Acquisition: None Anticipated
- o Relocation of Utilities: GDOT
- o Letting to contract: GDOT
- o Supervision of construction: GDOT
- o Providing material pits: N/A
- o Providing detours: N/A

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
- FEMA, USCG, and/or TVA: N/A
- Public involvement: N/A
- Local government comments: N/A
- Other projects in the area: N/A
- Railroads (*None anticipated*)
- Other coordination to date: N/A

Scheduling – Responsible Parties' Estimate

9 months

- Time to complete the environmental process: 6 Months.
- Time to complete preliminary construction plans: 1.5 Months.
- Time to complete right of way plans: 0.5 Months.
- Time to complete the Section 404 Permit: N/A Months.
- Time to complete final construction plans: 1.5 Months.
- Time to complete to purchase right of way: 12 Months, (if required).
- List other major items that will affect the project schedule: none

Other alternates considered: N/A

Comments: *None*

Attachments:

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

NOTICE OF LOCATION AND DESIGN APPROVAL

**PROJECT: CSSTP-0007-00(360), COLUMBIA & RICHMOND COUNTIES,
P.I. NO. 0007360**

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: JANUARY 4, 2010

Project CSSTP-0007-00(360) in Columbia and Richmond Counties consists of signal upgrades, interconnected communications, pedestrian facility improvements, and signal coordination for seven (7) locations within Columbia and Richmond Counties.

The proposed construction will consist of upgrades using the latest GDOT 2070 controller hardware and software platforms; interconnect communication between intersections using fiber optics, mast arm poles; energy saving LED signal heads, 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:

Ms. Cynthia C. Burney, P.E.
Office of Traffic Operations
935 E. Confederate Ave, Bldg 24
Atlanta, Georgia 30316
(404) 635-8149
email: cburney@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:

Keith Golden, P.E.
Office of Traffic Operations
935 E. Confederate Ave, Bldg 24
Atlanta, Georgia 30316
email: kgolden@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(360),
Columbia and Richmond Counties
Traffic Signal Upgrades on SR 121, 223, 388 @
7 locations
P.I. No. 0007361

OFFICE: Traffic Operations

DATE: August 31, 2009

Kathryn Gabriel for
FROM: Keith Golden, P.E., State Traffic Engineer

TO: Ron Wishon, State Project Review Engineer

SUBJECT: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Cynthia C. Burney, P.E.

MNGT LET DATE 7/1/2010

MNGT R/W DATE n/a

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$0.00

DATE 5/1/2007

RIGHT OF WAY \$n/a

DATE n/a

UTILITIES \$n/a

DATE n/a

REVISED COST ESTIMATES

CONSTRUCTION* \$811,547.22

RIGHT OF WAY \$0.00

UTILITIES** \$50,000.00

* Costs contain 5% Engineering and Inspection and 4% Construction Contingencies.

** Costs contain \$50,000.00 for utility contingency.

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

1625 Amounts for Project: 0007360 Columbia and Richmond Counties - Concept May 2009

Construction Cost Estimate	\$744,538.73
Utility Cost	\$0.00
Engineering & Inspection	\$37,226.94
Construction Contingency	\$29,781.55
Utility Contingency	\$ 50,000.00
Fuel Index Adjustment	<u>\$0.00</u>
Total Contract Amount =	\$744,538.73
Total In-House Engineering Amount =	\$37,226.94
Total Contingency =	\$79,781.55
Total Project Construction Cost =	\$861,547.22

Estimate Report for file "0007360"

Section Traffic Signals					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	40000.00	TRAFFIC CONTROL - CSSTP-0007-00(360)	40000.00
441-0108	210	SY	78.24	CONC SIDEWALK, 8 IN	16430.40
615-1200	1500	LF	9.96	DIRECTIONAL BORE -	14940.00
639-3004	7	EA	12104.30	STEEL STRAIN POLE, TP IV	84730.10
643-8200	1000	LF	2.38	BARRIER FENCE (ORANGE), 4 FT	2380.00
647-1000	7	LS	75000.00	TRAFFIC SIGNAL INSTALLATION NO -	525000.00
647-2141	7	EA	1625.50	PULL BOX, PB-4S	11378.50
652-5451	7000	LF	0.28	SOLID TRAFFIC STRIPE, 5 IN, WHITE	1960.00
652-5452	4000	LF	0.24	SOLID TRAFFIC STRIPE, 5 IN, YELLOW	960.00
652-5701	700	LF	2.26	SOLID TRAF STRIPE, 24 IN, WHITE	1582.00
652-6501	1000	GLF	0.11	SKIP TRAFFIC STRIPE, 5 IN, WHITE	110.00
935-6562	7	EA	1694.00	EXTERNAL TRANSCEIVER, DROP AND REPEAT, 1310 SINGLE MODE, (SIGNAL JOBS)	11858.00
Section Sub Total:					\$711,329.00

Section ATMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
935-1116	7000	LF	1.59	OUTSIDE PLANT FIBER OPTIC CABLE, LOOSE TUBE, SINGLE MODE, 72 FIBER	11130.00
935-1511	700	LF	2.33	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, SINGLE MODE, 6 FIBER	1631.00
935-3206	7	EA	654.98	FIBER OPTIC CLOSURE, AERIAL (SEALED), 72 FIBER	4584.86
935-3602	7	EA	538.20	FIBER OPTIC CLOSURE, FDC PRE-TERMINATED, TYPE A, 6-FIBER	3767.40
935-4010	7	EA	50.78	FIBER OPTIC SPLICE, FUSION	355.46
935-5050	40	EA	41.85	FIBER OPTIC PATCH CORD, SM	1674.00
935-5060	25	EA	161.97	FIBER OPTIC SNOWSHOE	4049.25
935-8000	1	LS	1907.10	TESTING	1907.10
Section Sub Total:					\$29,099.07

Section Erosion Control					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	1	AC	311.88	TEMPORARY GRASSING	311.88
163-0240	5	TN	165.45	MULCH	827.25
700-6910	1	AC	792.72	PERMANENT GRASSING	792.72
700-7000	3	TN	66.74	AGRICULTURAL LIME	200.22
700-7010	5	GL	22.03	LIQUID LIME	110.15
700-8000	3	TN	405.48	FERTILIZER MIXED GRADE	1216.44
700-8100	200	LB	2.36	FERTILIZER NITROGEN CONTENT	472.00
713-3002	2000	SY	0.09	WOOD FIBER BLANKET, TP II, SLOPES	180.00
Section Sub Total:					\$4,110.66

Total Estimated Cost: \$744,538.73