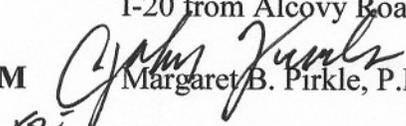


D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 210810-, Newton County **OFFICE** Preconstruction
NH-20-2(167)
I-20 from Alcovy Road to SR 142 Interchange **DATE** February 7, 2006
FROM  Margaret B. Pirkle, P.E., Assistant Director of Preconstruction
TO *ra* SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Babs Abubakari
Mike Thomas
BOARD MEMBER
FHWA

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-20-2(167) Newton County OFFICE Atlanta, Georgia
I-20 from Alcovy Road to State Route 142 and
Alcovy Road Interchange
P.I. No. 210810 DATE January 5, 2006

FROM *M. B. Abubakari*
Mohammed (Babs) Abubakari, P. E., State Consultant Design Engineer

TO Meg Pirkle, P. E., Assistant Director of Preconstruction

SUBJECT **Revised Project Concept Report**

Attached is the original copy of the revised Concept Report for your further handling and approval in accordance with the Plan Development Process

The concept is being revised to change the shoulder on the left side of Alcovy Road between City Pond Road and Harland Drive from a rural shoulder to an urban shoulder. The shoulder is being changed to reduce the right of way impacts to a proposed development.

If you have any questions, please contact Joe Wheeler at (404)657-9759.

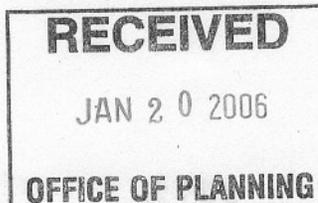
JAW
MBA:JDW
Attachment

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

DATE: 1/23/06

Joseph P. Palladi
State Transportation Planning Administrator

cc: Brian Summers
Harvey Keeper
Keith Golden
Joe Palladi
Jamie Simpson
Michael Thomas



REVISED PROJECT CONCEPT REPORT

Need and Purpose: See Attachment

Project Location: Interstate 20 in Newton County, Georgia, from west of Alcovy Road (MP 6.22) to State Route 142 (MP 8.01) and Alcovy Road from approximately 2150 feet east of the interchange with Interstate 20 to Harland Drive. The project length is 1.79 miles along Interstate 20 and 0.94 miles along Alcovy Road.

Description of the approved concept: The approved concept is to widen the Interstate 20 from the end of the existing six lane section west of Alcovy Road to State Route 142 and also to widen Alcovy Road from an existing four lane section south of Interstate 20 to tie to a future four lane section south of State Route 142. The approved typical section is six lanes (three lanes in each direction) separated by a 40-foot paved median with barrier on Interstate 20 and four lanes (two lanes in each direction) with 4-foot bike lanes, curb and gutter, sidewalks, and a 20-foot raised median on Alcovy Road. The minimum width of right of way is 100 feet on Alcovy Road while the work along Interstate 20 will be constructed within the existing right of way. The approved concept also includes replacement of the existing Interstate 20 bridges over Alcovy Road and widening of the existing bridges over the CSX Railroad.

PDP Classification: Major X Minor _____

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

Functional Classification: Interstate 20 - Urban Interstate
Alcovy Road - Urban Minor Arterial/Urban Collector Street

U. S. Route Number(s): Interstate 20

State Route Number(s): Interstate 20 - SR 402

U. S. Route Number(s): Alcovy Road - none

State Route Number(s): Alcovy Road - none

Traffic (AADT) as shown in the approved concept:

Current Year: Interstate 20 - 41600 (2006)

Design Year: Interstate 20 - 67400 (2026)

Alcovy Road - 19800 (2006)

Alcovy Road - 34000 (2026)

Proposed features to be revised: The approved concept is proposed to be revised as follows:

- Revise the typical section of Alcovy Road on the left side (west) of the roadway from City Pond Road (Sta. 200+00 +/-) to Harland Drive (Sta. 214+00) by utilizing an urban type shoulder. The original concept provided an urban shoulder at this location. The concept was revised to use a rural shoulder to match the proposed shoulder for the adjacent future project (STP-1418(3) Newton County, PI. 242230). The majority of the property between City Pond Road and State Route 142 is a single parcel that was undeveloped at the time of the revised concept. Since that time, the owner has notified the Department of his intentions to develop the property as commercial parcel. This revision will minimize the impacts to the property.

Describe the revised feature(s) to be approved: The shoulder on the left side of Alcovy Road between City Pond Road and Harland Drive is proposed to be a urban shoulder to minimize the impacts to the adjacent property that is being developed as a commercial parcel. The shoulder on the right side of Alcovy Road will remain as an urban shoulder.

Updated traffic data (AADT):

Current Year: Interstate 20 - 62,200 (2008)
Alcovy Road - 17,300 (2008)

Design Year: Interstate 20 - 102,000 (2028)
Alcovy Road - 26,900 (2028)

Programmed/Schedule:

P.E. 10-1998

R/W: 2005

Construction: 2006

Revised cost estimates:

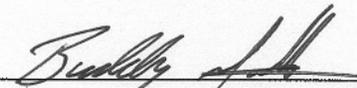
- 1. Construction cost including inflation and E&C, \$24,583,000
- 2. Right-of-way, and \$ 6,129,000
- 3. Utilities \$ 511,500

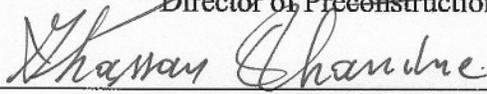
Is the project located in a Non-attainment area? Yes No.

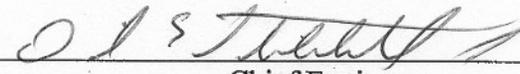
Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:

- 1. Need and Purpose Statement
- 2. Sketch Map
- 3. Alcovy Road Typical Sections
- 4. Cost Estimate

Concur: 
Director of Preconstruction

Approve: 
For: Division Administrator, FHWA

Approve: 
Chief Engineer

NEED AND PURPOSE

PROJECT NH-20-2(167) Newton County

P. I. NO 210810

June 3, 1999

Revised November 1, 1999

Revised February 17, 2000

Revised December 11, 2003

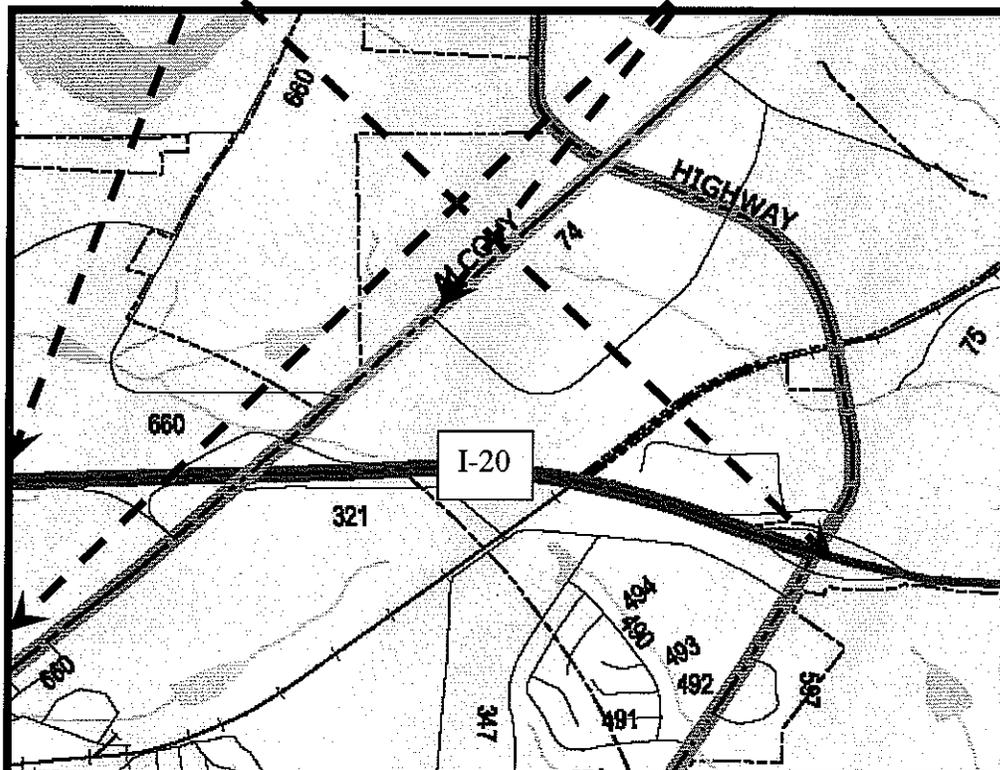
I-20 (SR 402) Widening and Interchange Improvements and Widening and Improvements to Alcovy Road/CR 74/CR660

Project Scope

PROJECT NH-20-2(167), P. I. NO 210810 in Newton County is a project which addresses deficiencies on both I-20 and on Alcovy Road. I-20 is proposed to be widened to six lanes with a divided median with median barrier and includes 14 foot outside shoulders. Ramps at Alcovy Road are proposed to be widened and reconstructed as necessary. The I-20 bridges over Alcovy Road are proposed to be replaced; the bridges over CSX Railroad are proposed to be widened. Alcovy Road is proposed to be widened to four lanes, including a bike lane in both directions, median, curb and gutter and sidewalks, and turn lanes at intersections where required. The total project length is 3.99 miles.

The project length on I-20 extends from a point approximately 400ft. just before the eastbound exit ramp to Alcovy Road to a point approximately 120 ft past the SR 142 overpass bridge centerline.
2.73 Miles

The project length on Alcovy Road extends from a point approximately 100ft. north of the railroad tracks to a point approximately 50 ft. north past the center of Harland Rd. at SR 142 intersection.
1.26 Miles



I-20 Facility Overview and Area Characteristics

Interstate 20 (SR 402) is a National Highway System (NHS) corridor that traverses the southern United States from South Carolina to Texas, east to west. I-20 crosses north-central Georgia, connecting Alabama to South Carolina through the cities of Atlanta and Augusta. The I-20 corridor is also a Surface Transportation Assistance Act (STAA) National Network route; STAA designates specific routes to help facilitate freight movement. The project boundaries fall within northeastern limits of the City of Covington in an area that is developing primarily commercial and industrial in nature. Just north of the project area off SR 142 is the Covington Municipal Airport.

Regionally, I-20 provides connectivity for residents in other Metro-Atlanta counties to work in Newton County. The following 2000 Census statistics show that approximately 5034 residents of adjacent or nearby counties come to Newton County to work. Congestion in the metro Atlanta area is creating growth opportunities for Newton County giving additional cause to develop the transportation infrastructure to mitigate potential problems.

Number of people who work in Newton County and the counties in which they reside.				
DeKalb	Fulton	Morgan	Rockdale	Walton
744	373	494	2,334	1,089

Newton County, as one of Georgia's fastest growing counties, is becoming increasingly more urbanized as is indicated in the 2000 Census Survey. In comparison to 1990, 2000 statistics indicates a 48% increase in area population, with an increase of 83% in the number of families with 2 or more vehicles available.

I-20 Traffic Data and LOS

Level-of-Service (LOS)

Level-of-Service is defined as a qualitative measure describing operational conditions within a traffic stream. There are six identified Levels-of-Service a roadway can operate under. A designated letter, A through F, identifies each of the six. Level-of-Service A represents the best operating conditions and Level-of-Service F the worst. For example, Level-of-Service A represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. The general level of comfort and convenience provided to the motorist is excellent. Level-of-Service C marks the beginning of a range of flow in which the operation of the individual users becomes significantly affected by interactions with others in the traffic stream. The general level of comfort declines noticeably at this level. Level-of-Service E represents operating conditions at or near capacity. All speeds are reduced to a low, but relatively uniform value. Comfort and convenience levels are extremely poor. Level-of-Service F represents heavily congested flow with traffic demands exceeding capacity. Volumes are lower than capacity and speeds are below capacity speed.

I-20 Traffic Counts and LOS Projections With and Without Improvements (Projections made based upon 3% increase)

TC Station 214 MP 4.88 to MP 6.80	2001	2010	2035	TC Station 216 MP 6.80 to MP 8.01	2001	2010	2035
	AADT	AADT	AADT		AADT	AADT	AADT
	47,100	57,400	95,800		40,200	49,000	81,800
Without Improvements (4Ln) LOS	B	C	F		B	C	F
With Improvements (6Ln) LOS Construction Year 2010	n/a	B	D		n/a	B	C

The facility experienced an overall approximate 5% average increase in traffic per year between years 1990-2000, with the greatest increase at 29% in 1992 and the greatest decrease of .16% in 1997. A 3% projection is based on anticipated regional development, urbanization and growth of the I-20 corridor, and increase in vehicular movement between states on the interstate system of highways as the population of the country increases. 2000 U.S. Census data reflects Georgia is projected to have a 1.66% increase in population, and Newton County is shown as the 7th fastest growing county in the nation.

An analysis was performed to determine the number of lanes required to maintain a LOS "C" for AM and PM Peak hour traffic using the latest version of HCS Highway Capacity Software (HSC2000) and existing and projected traffic counts. For the purpose of this document the traffic counts from TC 214 and the projection years were used to make the determination. A minimum of 2 lanes were required each direction in 2001 to maintain a LOS of "C" during AM and PM peak traveling hours. A minimum of 3 lanes are required in each direction by year 2010. A minimum of 4 lanes are required in each direction in year 2035. Existing AM and PM Peak LOS is "F."

The proposed widening and safety improvements to Alcovy Road will add to the efficiency of the local grid of roads to mitigate the impact to the interstate LOS and assist in accident prevention on ramps.

Accident Data – I-20 and Statewide Comparisons

1996 - 1998, 2000, & 2001 Accident Data

(Accident data not available for 1999 or 2002; 1998 is 62% complete)

TC Station 214 - MP 4.88 to MP 6.73

TYPE	Angle/ Intersect	Rear End	Side Swipe	Head on	Collisions not with a Vehicle	Total
1996	2	5	5	0	10	22
1997	2	3	3	0	9	17
1998	6	0	2	0	3	11
2000	6	4	1	0	9	20
2001	6	8	1	1	5	21
TOTAL	22	20	12	1	36	91

Number of Injuries: 39

Number of Fatalities: 0

TC Station 216 - MP 6.73 to MP 8.01

TYPE	Angle/ Intersect	Rear End	Side Swipe	Head on	Collisions not with a Vehicle	Total
1996	1	3	6	0	9	19
1997	1	3	1	0	8	13
1998	1	0	0	0	4	5
2000	5	2	2	0	16	25
2001	2	0	0	2	5	9
TOTAL	10	8	9	2	42	71

Number of Injuries: 35

Number of Fatalities: 0

Comparisons with Statewide Averages for:

Interstate - Urban

Comparisons with Statewide Averages for similar Facilities ~~Years 1999, 2000~~, NOT Available.
(see below for 2001 Accident Data; 1998 data only 62% complete)

	1997	1998	2001
SR 402 Accidents per 100 MVMT	95	44	68
Comparisons with Statewide Averages for similar Facilities 100 MVMT	167	162	197
% Higher/Less than Statewide Average for Interstate -Urban	41% Less	63% Less	66% Less

The above LOS analysis and Accident Data indicates that I-20 in this section of Newton County does not operate at an unsafe level. However, the proposed improvements will bring this facility up to current design standards and will provide for an enhanced level of comfort through construction of the proposed improvements. This will serve both local residents and through traffic as the urbanized area continues to develop along the I-20 corridor in Newton County.

Alcovy Road Traffic Data and LOS

Alcovy Road Facility Overview

Alcovy Road/CR 74 (TC Station 460) north of the Interstate is classified as an Urban Collector with an estimated 2003 AADT of 3660. Alcovy Road/CR660 (TC Station 252) south of the Interstate is classified as Urban Minor Arterial with an estimated 2003 AADT of 12,621.

Alcovy Road Traffic Counts and LOS Projections With and Without Improvements (Projections made based upon 3% increase)

TC Station 460 MP 4.85 to MP 5.13 CR 74	2001	2010	2035
	AADT	AADT	AADT
	3400	4600	9100
Without Improvements (2Ln.)			
LOS	B	C	C
With Improve. (4Ln.) Construction year 2010			
LOS	n/a	A	A

TC Station 252 MP 0.00 to MP 1.15 CR 660	2001	2010	2035
	AADT	AADT	AADT
	11500	14,800	23,000
Without Improvements (2Ln.)			
LOS	D	D	F
With Improv. (4Ln.) Construction year 2010			
LOS	n/a	B	B

The traffic projection data analysis indicates a reasonable LOS on Alcovy Road will be maintained as a result of making proposed improvements. HCS2000 indicates the LOS changes from A to B at approximately 11400 AADT on a four lane facility. There is no accident data available on Alcovy Road/CR 74 and CR 660 for the years 1996 and 1997 to make a comparative analysis of accident data to statewide averages for similar types of facilities. Only year 2001 is complete due to lack of sufficient data and comparative reference information.

Alcovy Road/CR 74 Accident Data

Accident data not available for 1998, 1999 or 2002 (n/a = not available)

TC Station 460 - MP 4.85 to MP 5.13

TYPE	Angle/ Intersect	Rear End	Side Swipe	Head on	Collisions not with a Vehicle	Total
1998	n/a	n/a	n/a	n/a	n/a	n/a
2000	4	4	0	0	0	8
2001	5	3	0	1	4	13
TOTAL	9	7	0	1	4	21

Number of Injuries: 11	Number of Fatalities: 0
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Alcovy Road/CR 660 Accident Data

(Accident data not available for 1999 or 2002; 1998 is 62% complete)

TC Station 252 - MP 0.00 to MP 1.15

TYPE	Angle/ Intersect	Rear End	Side Swipe	Head on	Collisions not with a Vehicle	Total
1998	1	0	0	0	5	6
2000	8	2	1	1	0	12
2001	2	0	0	2	5	9
TOTAL	11	2	1	3	10	27

Number of Injuries: 25	Number of Fatalities: 0
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Comparisons with Statewide Averages for 2001 ONLY

Comparisons with Statewide Averages for similar Facilities Years 1999, 2000, NOT Available.
(1998 data only 62% complete)

CR 74	Rural Minor Collector
13 Accidents in 2001	
Statewide Average Rate of accidents per 100 MVMT for Rural Minor Collector	86
Rate of accidents per 100 MVMT on CR 74	3741
435% Higher than Statewide Average	

CR 660	Urban Minor Arterial
9 Accidents in 2001	
Statewide Average Rate of accidents per 100 MVMT For Urban Minor Arterial	550
Rate of accidents per 100 MVMT on CR 660	186
66.2% Less than Statewide Average	

Bridge Information

The office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. The 2000 project concept report indicated all bridges with a sufficiency rating of 72.8 or above. The Alcovy Road bridges are being replaced due to the geometrics of lengthening to accommodate the additional lanes of the I-20 widening over the bridges. The bridges over the CSX railroad will be upgraded and widened.

Programmed Area Projects

Listed below are programmed projects in the CWP and STIP in the vicinity of Alcovy Road at I-20. The below listed projects do not include improvements Newton County may make to local roads which connect to these or other roads in the immediate area.

Project	Description	Scheduled Let Date
PI 210530	I-20 at SR 142-12 Covington Interchange reconstruction/rehabilitation; includes relocation of frontage road/CR 72	June, 2005
PI 231220	Widening to 4 lanes with 44' median SR 142 from south of SR12/US 278 North to North of CR 75 in Covington	August, 2005
PI 231630	Widening to 4 lanes with 44' median SR12/US 278 from Covington Bypass/CR 653 East to SR 142 (P.I. 231635 – Twin)	November, 2006
PI 242230	Widening to 4 lanes with 20' median SR142 from I-20 to Alcovy Road in Covington	April, 2006

Community Characteristics

The census demographic characteristics along the I-20 project corridor in Newton County indicate a population of people of which 1567 are white, 577 African American, 8 Asian, and 49 of Hispanic or Latino origin. Income by race is shown in the following table:

Project Area Economic Indicators	White	African American	American Indian	Asian	Two or More Races	Hispanic or Latino
Less than \$10,000	139	186	0	8	0	0
\$10,000 to \$24,999	235	126	0	0	0	0
\$25,000 to \$44,999	627	139	0	0	0	5
\$45,000 to \$74,999	281	119	0	0	0	30
\$75,000 to \$124,999	235	7	0	0	0	0
\$125,000 to \$199,999	38	0	0	0	0	14
\$200,000 or more	12	0	0	0	0	0
Totals	1567	577	0	8	0	49

This statistical information indicates these factors would not influence the proposed project.

Statement of Need and Purpose

The proposed improvements address upgrading and widening bridges over the CSX railroad, replacing existing Alcovy Road bridges with longer and wider bridges to accommodate widening of I-20, widening of Alcovy Road, and performing upgrades of interchange ramps at Alcovy Road. The Alcovy Road facility will be widened to 4 lanes with urban upgrades which include raised median, sidewalks, curbs and gutters and extended turn lane bays. With the exception of Alcovy Road/CR660 the facilities affected by the proposed improvements do not presently operate at unacceptable levels of service. However, new developments are occurring and growth rate projections indicate that by construction year 2010 there is a need to have in place adequate

facilities along the I-20 corridor. I-20 provides linkage supporting national and regional economic vitality. The proposed project improvements are necessary and recommended from the aspect of continuing to ease congestion, provide a safer driving environment, and maintain an acceptable level of service at the time the proposed improvements are completed and well into the future.

PRELIMINARY COST ESTIMATE
CONSULTANT DESIGN OFFICE

DATE: 1/5/2005
PROJECT NO.: NH-20-2(167)
P.I. NO.: 210810

PREPARED BY: Qk4

PROJECT DESCRIPTION/CONCEPT:

EXISTING ROADWAY:

TRAFFIC (ADT): Existing: Design:

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



PROJECT COSTS

RIGHT OF WAY	1	LS @	6,128,850.00	\$6,128,850
UTILITIES	1	LS @	511,511.00	\$511,511
CONSTRUCTION				
150-1000 TRAFFIC CONTROL	1	LS @	1,750,000	\$1,750,000
153-1300 FIELD ENGINEERS OFFICE TP 3	1	EA @	55,553	\$55,553
201-1500 CLEARING AND GRUBBING	1	LS @	1,200,000	\$1,200,000
210-0100 GRADING COMPLETE	1	LS @	1,200,000	\$1,200,000
310-1101 GR AGGR BASE CRS, INCL MATL	150000	TN @	15.18	\$2,277,000
318-3000 AGGR SURF CRS	2000	TN @	16.63	\$33,260
433-1000 REINF CONC APPROACH SLAB	1000	SY @	148.90	\$148,900
439-0108 PLAIN PC CONC PVMT, CL 3 CONC, 12 INCH THK	17000	SY @	60.45	\$1,027,650
441-0754 CONC MEDIAN, 7 1/2 IN	645	SY @	38.82	\$25,039
402-1812 RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	20000	TN @	41.01	\$820,200
402-3113 RECYCLED ASPH CONC 12.5mm	18000	TN @	46.85	\$843,300
402-3112 RECYCLED ASPH CONC 19mm	25000	TN @	55.14	\$1,378,500
402-3121 RECYCLED ASPH CONC 25mm	60000	TN @	41.86	\$2,511,600
413-1000 BITUM TACK COAT	40000	GAL @	1.02	\$40,800
441-0016 DRIVEWAY CONCRETE, 6 IN TK	200	SY @	29.38	\$5,876
441-0018 DRIVEWAY CONCRETE, 8 IN TK	1000	SY @	34.92	\$34,920
441-0104 CONC SIDEWALK, 4IN	5500	SY@	24.97	\$137,335
441-4020 CONC VALLEY GUTTER, 6 IN	425	SY @	29.45	\$12,516
441-6022 CONC CURB & GUTTER, 6 IN X30", TP 2	15000	LF @	10.68	\$160,200

441-6740	CONC CURB & GUTTER, 8 IN X30", TP 7	7000	LF @	10.72	\$75,040
441-7001	CURB CUT WHEELCHAIR RAMPS, TP 1	51	EA @	884.53	\$45,111
432-0208	MILL ASPH CONC PVMT, 2 IN DEPTH	30000	SY @	0.97	\$29,100
456-2012	INDENTION RUMBLE STRIPS	7	GLM @	924.22	\$6,470
	- GROUND IN PLACE (CONTINUOUS)				
500-2100	CONCRETE BARRIER	7935	LF @	36.49	\$289,548
500-3201	CLASS B CONCRETE, RETAINING WALL	50	CU YD @	367.61	\$18,381
540-1101	REMOVAL OF EXISTING BR, STA NO 871+42.54	1	LS @	160,000.00	\$160,000
550-1180	STORM DRAIN PIPE, 18" H 1-10	7172	LF @	31.34	\$224,770
550-1240	STORM DRAIN PIPE, 24" H 1-10	5624	LF @	37.73	\$212,194
550-1300	STORM DRAIN PIPE, 30" H 1-10	212	LF @	49.14	\$10,418
550-1360	STORM DRAIN PIPE, 36" H 1-10	394	LF @	58.60	\$23,088
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	12	EA @	475.83	\$5,710
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	6	EA @	519.61	\$3,118
550-4230	FLARED END SECTION 30 IN, STORM DRAIN	2	EA @	658.78	\$1,318
550-4236	FLARED END SECTION 36 IN, STORM DRAIN	2	EA @	887.10	\$1,774
622-1033	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	7850	LF @	28.38	\$222,783
634-1200	RIGHT OF WAY MARKERS	86	EA @	88.44	\$7,606
636-1020	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	480	SF @	13.55	\$6,504
636-1031	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 6	481	SF @	16.86	\$8,110
636-2030	GALV STEEL POSTS, TP 3	1110	LF @	5.07	\$5,628
636-2070	GALV STEEL POSTS, TP 7	1110	LF @	6.96	\$7,726
641-1200	GUARDRAIL, TP W	7000	LF @	13.60	\$95,200
641-5001	GUARDRAIL ANCHORAGE, TP 1	9	EA @	476.68	\$4,290
641-5012	GUARDRAIL ANCHORAGE, TP 12	7	EA @	1,548.89	\$10,842
647-1000	TRAFFIC SIGNAL INSTALLATION	4	EA @	41,498.90	\$165,996
650-1010	GUARDRAIL IMPACT ATTENUATOR, TYPE T	3	EA @	12,083.08	\$36,249
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	60	EA @	58.93	\$3,536
653-0170	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	5	EA @	76.00	\$380
653-0210	THERMOPLASTIC PVMT MARKING, WORD, TP 1	15	EA @	92.31	\$1,385
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	45700	LF @	0.27	\$12,339
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	38285	LF @	0.26	\$9,954
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	580	LF @	3.35	\$1,943
653-1706	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, YELLOW	950	LF @	2.29	\$2,176
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	5990	SY @	1.64	\$9,824
653-3501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	46230	GLF @	0.17	\$7,859
653-3502	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	980	GLF @	0.17	\$167
654-1001	RAISED PVMT MARKERS TP 1	45	EA @	3.48	\$157
654-1002	RAISED PVMT MARKERS TP 2	200	EA @	3.04	\$608
654-1003	RAISED PVMT MARKERS TP 3	820	EA @	3.75	\$3,075
668-1100	CATCH BASIN, GP 1	75	EA @	1,786.23	\$133,967
668-2100	DROP INLET, GP 1	50	EA @	2,672.29	\$133,615
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	5	EA @	485.19	\$2,426
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	5	EA @	174.36	\$872
163-0521	CONST. AND REMOVE TEMPORARY DITCH CHECK	224	EA @	165.11	\$36,985
163-1041	CONSTR, MAINT & REM SEDIMENT BASIN, TP 1	4	EA @	7,611.49	\$30,446
165-0010	MAINTENANCE OF TEMP SILT FENCE, TP A	15000	LF @	1.07	\$16,050

165-0030	MAINTENANCE OF TEMP SILT FENCE, TP C	40	LF @	1.16	\$46
167-0100	WATER QUALITY MONITORING	18	MONTHS @	955.65	\$17,202
167-0200	WATER QUALITY SAMPLING	36	EA @	58.24	\$2,097
171-0010	TEMPORARY SILT FENCE, TYPE A	29425	LF @	1.84	\$54,142
					\$0
171-0030	TEMPORARY SILT FENCE, TYPE C	80	LF @	3.19	\$255
603-2182	STN DUMPED RIP RAP, TP 3, 24 IN	260	SY @	44.06	\$11,456
603-7000	PLASTIC FILTER FABRIC	260	SY @	3.99	\$1,037
163-0240	MULCH	60	TN @	198.36	\$11,902
700-6100	ADDL GRASSING	2000	LBS @	3.34	\$6,680
700-7000	AGRICULTURAL LIME	40	TN @	57.64	\$2,306
700-7010	LIQUID LIME	50	GAL @	18.78	\$939
700-8000	FERTILIZER MIXED GRADE	18	TN @	263.63	\$4,745
700-8100	FERTILIZER NITROGEN CONTENT	1000	LBS @	1.52	\$1,520
715-2200	BITUMINOUS TREATED ROVING, WATERWAYS	95	SY @	2.00	\$190
	MISCELLANEOUS ITEMS				
	LIGHTING (INTERSTATE)	1	LS @	638,000.00	\$638,000
	BRIDGE @ ALCOVY ROAD	55962.5	SF @	100.00	\$5,596,250
	BRIDGE @ CSX	9204	SF @	150.00	\$1,380,600
Subtotal Construction Estimate					\$23,476,749
Right of Way Estimate					\$6,128,850
Utility Estimate					\$511,511
Subtotal Construction Estimate					\$23,476,749
0.5 years inflation @ 5%					\$586,919
10% Contingency					\$2,406,367
TOTAL CONSTRUCTION ESTIMATE					\$26,470,035