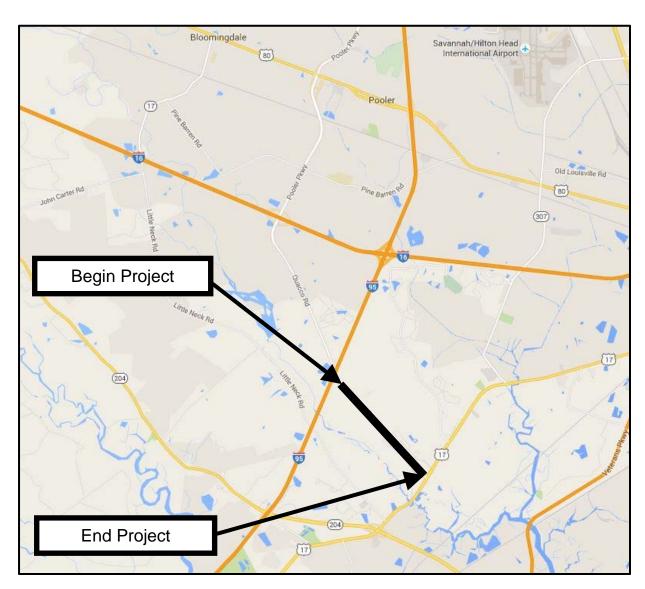
CHATHAM COUNTY STATE OF GEORGIA

CONCEPT REPORT

Project Type:	Widening	P.I. Number:	N/A
GDOT District:	5	County:	Chatham
Federal Route Number:	17	State Route Number:	25
	Project Number:	N/A	

Quacco Road Improvements

PROJECT LOCATION MAP



Concept Report – Page 2 County: Chatham

PLANNING & BACKGROUND DATA

Project Justification Statement: Quacco Road is a two-lane east-west roadway located in Chatham County, Georgia. The proposed project is a 2.6-mile-long segment beginning east of the existing bridge at I-95 and terminates at the intersection with SR 25/US 17. The majority of the project will widen from a two-lane section to a three-lane section, including ADA compliant sidewalk and a 10-foot shared use path to improve pedestrian connectivity. The existing two lanes have rural shoulders and ditches throughout. Land use along this rural corridor is a mixture of residential, churches, and commercial development as well as being a Chatham Area Transit (CAT) bus route creating the need for safety and operational improvements to the corridor. Additionally, crashes are consistently occurring at several intersections along Quacco Road and are reported as rear-end or sideswipe crashes. The addition of the center turn lane flush median will help improve these safety and operational deficiencies. The high demand for pedestrian facilities is evidenced by worn foot paths on the shoulders and will be provided to allow safe connectivity to the bus stops. The alternatives provided in this report were analyzed with the traffic study recommendations for turn lanes on Quacco Road and SR 25/US 17 and realigned where necessary to minimize impacts.

P.I. Number: N/A

Existing conditions: The project consists of two 11-foot lanes along a 2.6-mile-long segment of Quacco Road. The majority of the corridor is a rural typical section with grassed shoulders and ditches. The intersection with SR 25/US 17 is signalized and US17/SR 25 consist of four 12-foot lanes with 4' bike lanes and paved shoulders. The posted roadway speed varies from 50 MPH near the existing Quacco Road Bridge over I-95 and reduces to 40 MPH near Quacco Trail to the SR 25/US 17 intersection.

Description of the proposed project: This project will include roadway widening and operational improvements to intersections, drainage features, and pedestrian facilities along a 2.6-mile-long segment of Quacco Road beginning east of the existing Quacco Road bridge over I-95 and terminating at SR 25/US 17. The roadway widening will consist of two 12-foot lanes with a 14-foot flush median along most of the corridor. Four 12-foot lanes and an urban typical section will be used at the intersection along the SR 25/US 17 widening. Right-turn-lanes will also be added along the corridor to prevent queueing along Quacco Road. Pedestrian facilities will be a large part of the improvements for this project. A 10-foot shared use path will be along the north side and a 5-foot sidewalk will be along the south side and will include bus terminals for the CAT bus route that currently services the area. Options being considered will improve and address the signalized intersection at SR 25/US 17.

Projected Traffic: ADT Current Year (2014): 14,104 Traffic Projections Performed by:	24 HR T: <u>4</u> % open Year (2020): <u>14,830</u> Coastal Engineering and Cons	Design Year (2040): <u>18,095</u> sulting				
Functional Classification (Mainlin	ne): Urban Minor Arterial Stre	eet				
Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants: Warrants met: □None ⊠Bicycle ⊠Pedestrian ⊠Transit						
Pavement Evaluation and Recommendations Preliminary Pavement Evaluation Summary Report Required? □No □Yes Preliminary Pavement Type Selection Report Required? □No □Yes Feasible Pavement Alternatives: □HMA □PCC □HMA & PCC						

Concept Report – Page 3 County: Chatham

P.I. Number: N/A

DESIGN AND STRUCTURAL

Description of Proposed Project: *Quacco Road Improvements* **Major Structures:** 8'X5' Reinforced Concrete Box Culvert

Mainline Design Features: Quacco Road

lainline Design Features: Quacco Roa	a		
Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2-3
- Lane Width(s)	11'	12'	12'
- Median Width & Type	N/A	14'	14' flush; 20'
			raised
- Outside Shoulder Width	Varies 0'- 6'	10'	10'
- Outside Shoulder Slope	Varies	6%	6%
- Sidewalks	N/A	5'	10' shared use
			path & 5' sidewalk
- Auxiliary Lanes	12'	12'	12'
- Bike Lanes	N/A	4'	10' shared use
			path; 4' (US 17)
Posted Speed	50; 40		50mph; 40mph
Design Speed	50; 40		50mph; 40mph
Min Horizontal Curve Radius		833; 533	1950
Maximum Superelevation Rate		6%; 4%	6%; 4%
Maximum Grade		6%; 7%	3.7433%
Minimum Rate of Vertical Curvature, K			
- AASHTO 2011 Green Book, Crest		44 ft/A; 84 ft/A	84 ft/A; 44 ft/A
- AASHTO 2011 Green Book, Sag		64 ft/A; 96 ft/A	96 ft/A; 64 ft/A
Design Vehicle	Passenger Car/	Passenger Car/	Passenger Car/
	City Bus	City Bus	City Bus
Pavement Type	Asphalt	Asphalt	Asphalt
Additional Items as warranted			
		•	•

^{*}According to current GDOT design policy if applicable

UTILITY AND PROPERTY

Railroad Involvement:	None				
Utility Involvements: 0 Telecommunications	GA Power, Atlan	ta Gas Light, City	/ of Savannah W	ater & Sewer,	
SUE Required:	⊠ No	□Yes			
Right-of-Way: Required Right-of-Way Easements anticipated:	•	80 ft. □ No ⊠ Temporary	Proposed width ⊠ Yes ⊠ Permanent	: 100-200 ft. Undetermine Utility	ed Other
	Anticipated t Displacements	·	npacted parcels: Businesses: Residences: Other: Displacements:	0	

Concept Report – Page 4 County: Chatham

ENVIRONMENTAL AND PERMITS

MS4 Compliance – Is the project located in an MS4 area? ☐ No ☐ Yes

Environmental Permits, Variances, Commitments, and Coordination anticipated:

- Section 404 permit anticipated, NWP #14
- Requirements for stream buffer variance will be coordinated with state waters determinations made by ACOE.

P.I. Number: N/A

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
	Chatham County	Chatham County	Chatham County	GDOT	Chatham County	
Quacco Road	County	County	County		County	
Total 2.6 mi.	\$933,030	TBD	TBD	\$8,396,100	TBD	\$9,329,130
SR 25/US 17 at Quacco Road Intersection (GDOT Project ID 16-630)	\$233,481	TBD	TBD	\$900,000	TBD	\$1,133,481

^{*}CST Cost includes: Construction, Engineering and Inspection, and Contingencies.

ALTERNATIVES DISCUSSION

Alternative 1A: Realignment of Quacco Road CL at SR 25/US 17

Estimated CST Time: 18 months

Rationale: This alternative slightly realigns Quacco Road to the north to avoid impacts to 2-54" and 2-34" oak trees along the south side of Quacco Road. This centerline shift will provide an approximate 74-degree intersection skew and accommodate a future 4-lane widening through the tree locations.

Alternative 1B: Widening SR 25/US 17 to provide dual left turn lanes onto Quacco Road

Estimated CST Time: 18 months

Rationale: This alternative will begin as a 3-lane section with a 14' flush median and right turn lanes at appropriate intersections. Approaching SR 25/US 17 will consists of a 3-lane section with a 20' raised median and will include dual left turn lanes from Quacco Road to Northbound SR 25/US 17. Along SR 25/US 17 is currently four 12-foot lanes with a 20' raised median and will be widened to provide dual left turn lanes onto Quacco Road from the Northbound approach.

Alternative 2: No Widening for existing left turn lane from SR 25/US 17

Estimated CST Time: 18 months

Rationale: This alternative will begin as a 3-lane section with a 14' flush median and right turn lanes at appropriate intersections. Approaching SR 25/US 17 will consists of a 3-lane section with a 20' raised median and will include dual left turn lanes from Quacco Road to Northbound SR 25/US 17. SR 25/US 17 will remain in its existing condition with no additional turn lane capacity.

Concept Report – Page 5 County: Chatham

P.I. Number: N/A

LIST OF ATTACHMENTS/SUPPORTING DATA

- 1. Concept Layout
- 2. Typical sections
- 3. Cost Estimates
- 4. Traffic diagrams or projections
- 5. Summary of TE Study and Capacity Analysis

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COST ESTIMATE

QUACCO ROAD WIDENING (INCLUDING SR 25/US 17 INTERSECTION)

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION
	ROADWAY				
150-1000	TRAFFIC CONTROL -	LS	1	320,000.00	320,000.00
207-0203	FOUND BKFILL MATL, TP II	CY	16	59.64	954.24
210-0100 310-1101	GRADING COMPLETE - GR AGGR BASE CRS, INCL MATL	LS TN	1 28300	1,240,000.00 22.35	1,240,000.00 632,505.00
318-3000	AGGR SURF CRS	TN	360	23.45	8,442.00
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	12400	80.00	992,000.00
402-4510	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITU	TN	9600	100.00	960,000.00
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	TN	4300	90.00	387,000.00
413-1000 432-5010	BITUM TACK COAT MILL ASPH CONC PVMT, VARIABLE DEPTH	GL SY	8000 12800	2.27 1.93	18,160.00 24,704.00
441-0016	DRIVEWAY CONCRETE, 6 IN TK	SY	320	38.42	12,294.40
441-0018	DRIVEWAY CONCRETE, 8 IN TK	SY	920	53.16	48,907.20
441-0104	CONC SIDEWALK, 4 IN	SY	20600	30.53	628,918.00
441-0740	CONCRETE MEDIAN, 4 IN	SY	290	30.67	8,894.30
441-0748 441-4030	CONCRETE MEDIAN, 6 IN CONC VALLEY GUTTER, 8 IN	SY SY	110	47.97 53.11	5,276.70
441-4030	CONCRETE HEADER CURB, 6 IN, TP 2	LF	58 240	19.78	3,080.38 4,747.20
441-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF	9300	15.68	145,824.00
500-3101	CLASS A CONCRETE	CY	50	697.86	34,893.00
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	CY	130	214.03	27,823.90
511-1000	BAR REINF STEEL	LB	4900	0.99	4,851.00
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF LF	8100	35.82	290,142.00
550-1240 550-1360	STORM DRAIN PIPE, 24 IN, H 1-10 STORM DRAIN PIPE, 36 IN, H 1-10	LF LF	210 93	48.57 72.38	10,199.70 6,731.34
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	LF	480	28.07	13,473.60
550-3318	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	EA	4	562.30	2,249.20
550-4118	FLARED END SECTION 18 IN, SIDE DRAIN	EA	60	538.27	32,296.20
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA	9	692.15	6,229.35
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	EA	3	797.97	2,393.91
550-4236 573-2006	FLARED END SECTION 36 IN, STORM DRAIN UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	EA LF	1 100	1,243.34 21.96	1,243.34 2,196.00
634-1200	RIGHT OF WAY MARKERS	EA	78	115.25	8,989.50
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	4700	2.09	9,823.00
668-1100	CATCH BASIN, GP 1	EA	19	2,518.63	47,853.97
668-2100	DROP INLET, GP 1	EA	45	2,349.43	105,724.35
	SIGNING & MARKING				
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	110	16.16	1,777.60
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	SF	170	14.87	2,527.90
636-2070 636-2090	GALV STEEL POSTS, TP 7 GALV STEEL POSTS, TP 9	LF LF	280 250	5.76 6.70	1,612.80 1,675.00
652-0105	PAVEMENT MARKING, BIKE SHARED LANE SYMBOL	EA	6	45.00	270.00
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	EA	71	70.29	4,990.59
653-0170	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	EA	2	101.45	202.90
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LF	35400	0.40	14,160.00
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LF	27900	0.41	11,439.00
653-1704 653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF LF	350 1700	5.56 1.83	1,946.00 3,111.00
653-3501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	GLF	9200	0.27	2,484.00
653-3502	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	GLF	23800	0.26	6,188.00
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	85	3.40	289.00
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	750	3.18	2,385.00
654-1001	RAISED PVMT MARKERS TP 1	EA	320	3.20	1,024.00
654-1002 654-1003	RAISED PVMT MARKERS TP 2 RAISED PVMT MARKERS TP 3	EA EA	300 270	3.14 3.55	942.00 958.50
034-1003	SIGNALIZATION	LA	270	3.33	758.50
615-1200	DIRECTIONAL BORE - 3 IN	LF	560	9.96	5,577.60
615-1200	DIRECTIONAL BORE - 5 IN	LF	50	17.55	877.50
636-1041	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	SF	30	26.19	785.70
639-4004	STRAIN POLE, TP IV	EA	4	9,337.15	37,348.60
647-1000 682-6120	TRAFFIC SIGNAL INSTALLATION NO - 1 CONDUIT, RIGID, 2 IN	LS LF	1 710	60,000.00 16.89	60,000.00 11,991.90
	PERMANENT EROSION CONTROL				
603-2181	STN DUMPED RIP RAP, TP 3, 18 IN	SY	25	57.69	1,442.25
603-7000	PLASTIC FILTER FABRIC	SY	25	3.75	93.75
700-6910 700-7000	PERMANENT GRASSING AGRICULTURAL LIME	AC TN	19 56	1,361.95 69.91	25,877.05 3,914.96
700-7000	FERTILIZER MIXED GRADE	TN	8	552.80	4,422.40
700-8100	FERTILIZER NITROGEN CONTENT	LB	930	2.76	2,566.80
710-9000	PERMANENT SOIL REINFORCING MAT	SY	18775	6.45	121,098.75
716-2000	EROSION CONTROL MATS, SLOPES	SY	50900	1.20	61,080.00

QUACCO ROAD WIDENING (INCLUDING SR 25/US 17 INTERSECTION) CHATHAM COUNTY

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION
	TEMPORARY EROSION CONTROL				
163-0232	TEMPORARY GRASSING	AC	10	724.49	7,244.90
163-0240	MULCH	TN	400	133.72	53,488.00
163-0300	CONSTRUCTION EXIT	EA	2	1,512.38	3,024.76
163-0501	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	EA	1	1,119.78	1,119.78
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	7	503.49	3,524.43
163-0528	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	LF	6500	6.40	41,600.00
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	29	163.91	4,753.39
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	13400	0.51	6,834.00
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	LF	3300	3.68	12,144.00
165-0085	MAINTENANCE OF SILT CONTROL GATE, TP 1	EA	1	114.35	114.35
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	EA	7	75.43	528.01
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	2	545.83	1,091.66
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	29	62.23	1,804.67
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	2	353.14	706.28
167-1500	WATER QUALITY INSPECTIONS	MO	6	953.39	5,720.34
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	26700	3.38	90,246.00
	BOARDWALK NO. 1 & NO. 2				
520-0001	BOARDWALK NO.1 STA 149+50	LF	20	200.00	4,000.00
520-0002	BOARDWALK NO.1 STA 152+00	LF	110	200.00	22,000.00
520-2214	PILING, PSC, 14 IN SQ	LF	280	46.62	13,053.60
			SUB-TO	TAL PROJECT COST \$	6,716,879.50
			10%	E&I Contingency \$	671,687.95
			15%	Unit Cost Contingency \$	1,007,531.93
			13%	Total Contingencies \$	1,679,219.88
				Total Fuel Adjustment \$	1,079,219.00
			Tota	l Liguid AC Adjustment \$	-
			CON	STRUCTION TOTAL \$	8,396,100.00



COST ESTIMATE

QUACCO ROAD WIDENING (SR 25/US 17 INTERSECTION ONLY) CHATHAM COUNTY

ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	EXTENSION
	ROADWAY				
150-1000	TRAFFIC CONTROL -	LS	1	40,000.00	40,000.00
210-0100	GRADING COMPLETE -	LS	1	90,000.00	90,000.00
310-1101	GR AGGR BASE CRS, INCL MATL	TN	1890	22.35	42,241.50
318-3000	AGGR SURF CRS	TN	20	23.45	469.00
402-1812	RECYCLED ASPH CONCLEVELING, INCL BITUM MATL & H LIME	TN	530	74.44	39,453.20
402-4510 402-3190	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLYMER-MODIFIED BITUM RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	TN TN	1900 260	76.98 70.10	146,262.00 18,226.00
413-1000	BITUM TACK COAT	GL	1020	2.27	2,315.40
432-5010	MILL ASPH CONC PVMT, VARIABLE DEPTH	SY	12730	1.93	24,568.90
441-0018	DRIVEWAY CONCRETE, 8 IN TK	SY	260	53.16	13,821.60
441-0104	CONC SIDEWALK, 4 IN	SY	630	30.53	19,233.90
441-0740	CONCRETE MEDIAN, 4 IN	SY	110	30.67	3,373.70
441-0748	CONCRETE MEDIAN, 6 IN	SY	110	47.97	5,276.70
441-4030	CONC VALLEY GUTTER, 8 IN	SY	100	53.11	5,311.00
441-5002 441-6222	CONCRETE HEADER CURB, 6 IN, TP 2 CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF LF	300 1700	19.78 15.68	5,934.00 26,656.00
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	CY	39	214.03	8,347.17
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	1100	35.82	39,402.00
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA	1	692.15	692.15
573-2006	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	LF	100	21.96	2,196.00
634-1200	RIGHT OF WAY MARKERS	EA	9	115.25	1,037.25
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	500	2.09	1,045.00
668-1100	CATCH BASIN, GP 1	EA	6	2,518.63	15,111.78
	SIGNING & MARKING				
636-1020 636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3 HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF SF	10 30	13.18 16.16	131.80 484.80
636-2070	GALV STEEL POSTS, TP 7	LF	20	5.76	484.80 115.20
636-2090	GALV STEEL POSTS, TP 9	LF	31	6.70	207.70
652-0105	PAVEMENT MARKING, BIKE SHARED LANE SYMBOL	EA	6	45.00	270.00
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	EA	16	70.29	1,124.64
653-0170	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	EA	2	101.45	202.90
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LF	7000	0.40	2,800.00
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LF	2400	0.41	984.00
653-1704 653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF LF	120 1700	5.56	667.20 3,111.00
653-3501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	GLF	6100	1.83 0.27	1,647.00
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	62	3.40	210.80
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	580	3.18	1,844.40
654-1003	RAISED PVMT MARKERS TP 3	EA	140	3.55	497.00
	SIGNALIZATION				
615-1200	DIRECTIONAL BORE - 3 IN	LF	560	9.96	5,577.60
615-1200	DIRECTIONAL BORE - 5 IN	LF	50	17.55	877.50
636-1041	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	SF	30	26.19	785.70
639-4004	STRAIN POLE, TP IV	EA	4	9,337.15	37,348.60
647-1000 682-6120	TRAFFIC SIGNAL INSTALLATION NO - 1 CONDUIT, RIGID, 2 IN	LS LF	710	60,000.00 16.89	60,000.00 11,991.90
002 0120	PERMANENT EROSION CONTROL		7.10	10.00	11,551.50
602 2181		CV	12	57.60	602.28
603-2181 603-7000	STN DUMPED RIP RAP, TP 3, 18 IN PLASTIC FILTER FABRIC	SY SY	12 12	57.69 3.75	692.28 45.00
700-6910	PERMANENT GRASSING	AC	2	1,361.95	2,723.90
700-7000	AGRICULTURAL LIME	TN	5	69.91	349.55
700-8000	FERTILIZER MIXED GRADE	TN	1	552.80	552.80
700-8100	FERTILIZER NITROGEN CONTENT	LB	80	2.76	220.80
710-9000 716-2000	PERMANENT SOIL REINFORCING MAT EROSION CONTROL MATS, SLOPES	SY SY	70 2500	6.45 1.20	451.50 3,000.00
710-2000		31	2300	1.20	3,000.00
162 0222	TEMPORARY EROSION CONTROL TEMPORARY CRASSING	AC	1	724.40	704.40
163-0232 163-0240	TEMPORARY GRASSING MULCH	TN	1 29	724.49 133.72	724.49 3,877.88
163-0300	CONSTRUCTION EXIT	EA	29	1,512.38	3,024.76
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	2	503.49	1,006.98
163-0528	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	LF	150	6.40	960.00
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	2	163.91	327.82
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	1700	0.51	867.00
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES MAINTENANCE OF SHIT CONTROL CATE TR 2	LF	80	3.68	294.40
165-0087 165-0101	MAINTENANCE OF SILT CONTROL GATE, TP 3 MAINTENANCE OF CONSTRUCTION EXIT	EA EA	2 2	75.43 545.83	150.86 1,091.66
165-0101	MAINTENANCE OF CONSTRUCTION EXTI MAINTENANCE OF INLET SEDIMENT TRAP	EA EA	2 2	62.23	1,091.66
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	2	353.14	706.28
167-1500	WATER QUALITY INSPECTIONS	MO	6	953.39	5,720.34
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	3300	3.38	11,154.00
			SUB-TO	TAL PROJECT COST \$	719,920.75
			10%	E&I Contingency \$	71,992.08
			15%	Unit Cost Contingency \$	107,988.11
				Total Contingencies \$ Total Fuel Adjustment \$	179,980.19
			Tot	al Liguid AC Adjustment \$	-
					000 000 00
			CON	STRUCTION TOTAL \$	900,000.00