PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Flasher with street lighting at the intersection of US 301 and MD 456 in Queen Anne's County. Advance warning flasher beacons shall be installed for the north and southbound approaches to the intersection and an opticom detector system shall be installed for the eastbound approach of MD 456. US 301 is assumed to run an north-south direction.

II. INTERSECTION OPERATION

1. The intersection shall continue operating in a flashing mode with the US 301 approaches flashing "Yellow" while the MD 456 approaches shall continue flashing "Red". When a emergency vehicle is detected, the advance warning flashers shall flash continuously until the emergency vehicle has cleared the intersection.

2. A full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall remain in use at this intersection.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.

2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.

3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9089	Sheet aluminum signs to consist of:	122 SF
	W96-7(1) "WATCH FOR EMERGENCY VEHICLES WHEN FLASHING" sign, (120" x 54") mast arm mounted	2 EA
	W11-8 "FIRE STATION" (48" x 48") mast arm mounted	2 EA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR*

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
2002	Test Pit Excavation	2 C.Y.
8006	Cut, clean, galvanize and cap traffic signal structure.	2 EA
8011	Furnish and install 12" vehicular traffic signal head section	4 EA
8016	Furnish and install 3M opticom #764 discrimination module-4 channel.	1 EA
8017	F+I 3M opticom Emitters System	8 EA
8018	Furnish and install 3M opticom #721 detector eye	1 EA
8023	Furnish and install 27' mast arm pole and 60'(cut to 38') mast arm.	2 EA
8051	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	1680 L.F.
8052	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	150 L.F.
8056	Furnish and install 4-conductor opticom detector cable.	150 L.F.
8057	Furnish and install concrete for signal foundation.	10 C.Y.
8060	Furnish and install No. 6 AWG stranded bare copper ground wire.	2240 L.F.
8064	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	90 L.F.
8072	Furnish and install electrical handhole.	13 EA
8075	Install overhead sign.	122 S.F.
8080	Furnish and install ground rod -3/4" x 10'.	2 EA
Neg.	Furnish and install electrical cable - 5 conductor (No. 12 AWG).	2255 L.F.

The contact persons for District #2 are as follows:

Mr. Robert Kiel
Assistant District Engineer - Traffic
Phone: (410) 810-3240

Mr. Terry Wright
Assistant District Engineer - Maintenance
Phone: (410) 810-3250

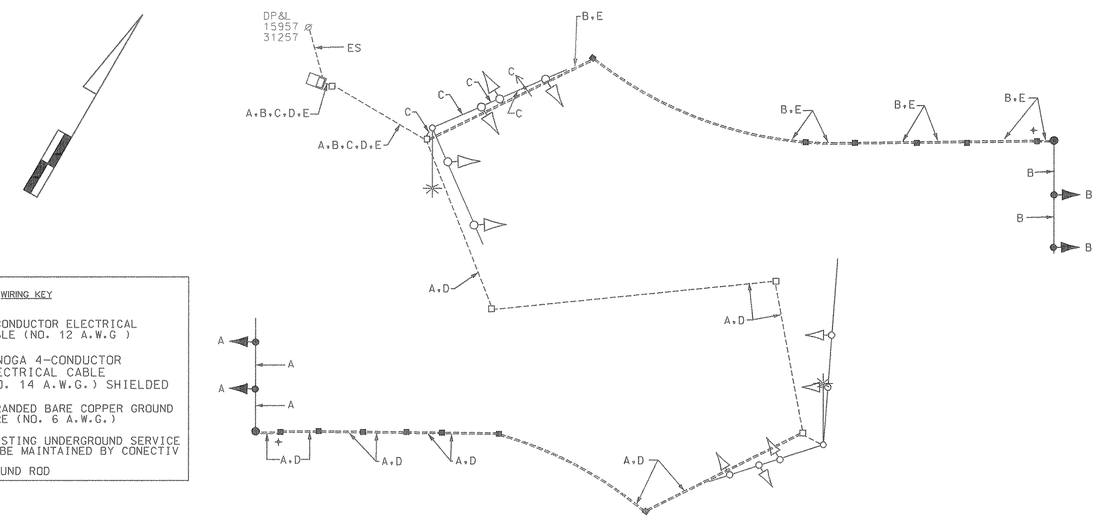
Mr. Barry Clothier
Assistant District Engineer - Utility
Phone: (410) 810-3060

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12	
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(R)	(R)	(R)	(R)	
DARK	DARK	FL/Y	FL/Y	DARK	DARK	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	
FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	

WIRING DAGRAM



WIRING KEY

A) 5-CONDUCTOR ELECTRICAL
B) CABLE (NO. 12 A.W.G)

C - CANOGA 4-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) SHIELDED

D) STRANDED BARE COPPER GROUND
E) WIRE (NO. 6 A.W.G.)

ES- EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY CONECTIV

+ - GROUND ROD

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. N.W.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

413101.dgn

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

US 301 AT MD 456

QUEENSTOWN, MARYLAND

DRAWN BY:	ROB CICCHINI	F.A.P. NO.	XX1065185	TS NO.	TS-937(E)
CHECKED BY:	R ZACHERL	S.H.A. NO.	[illegible]		
SCALE:	NONE	COUNTY:	QUEEN ANNE'S	T.I.M.S. NO.	F034
DATE:	5-1-02	LOG MILE:	17030112.88	SHEET NO.	2 OF 2

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