

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the reconstruction of the existing traffic control signal at the intersection of MD 140 and Naylor's Lane in Baltimore County, Maryland. MD 140 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to continue to operate in a NEMA three (3) phase, full-traffic-actuated mode. The MD 140 through movements operate concurrently. The Naylor's Lane movement operates alone.

The existing controller shall be utilized. Two 4-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet shall be installed at this location.

EQUIPMENT LIST

A. Equipment to be furnished by MD-SHA and installed by the Contractor.

Category Code No.	Quantity	Units	Description
900000	1	EA	Standard S.H.A. base mounted cabinet, and two 4-channel rack mounted loop detector amplifiers.
900000	16	SF	Sheet aluminum sign with mast arm mounting hardware: [2 each 16 in. x Var. D-3(1)].

B. Equipment to be furnished and/or installed by the Contractor.  
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Category Code No.	Quantity	Units	Description
203030	3	CY	Test pit excavation.
500000	95	LF	24 in. wide HAPPTPM - white for stop line.
818041	2	EA	21 ft. steel mast arm pole with 60 ft. mast arm [Notes: four 2 in. x 90 in. anchor bolts].
800000	18	EA	12 in. black faced traffic signalhead section with mast arm mounting hardware.
800000	3	EA	8 in. black faced traffic signalhead section with mast arm mounting hardware.
800000	16	SF	Install sign - mast arm mount.
871202	1	EA	Install base mounted cabinet/controller.
811001	7	EA	Handhole.
862102	400	LF	Sawcut for signal loop detector.
862101	990	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
861104	20	LF	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
861107	90	LF	5-conductor electrical cable (No. 14 A.W.G.).
861108	570	LF	7-conductor electrical cable (No. 14 A.W.G.).
861117	40	LF	3-wire (No. 4 A.W.G.) electrical cable.
802501	140	LF	Bare copper stranded ground wire (No. 6 A.W.G.).
805160	35	LF	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
800000	15	LF	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
805105	5	LF	2 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
805145	60	LF	2 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
800000	15	LF	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
805115	55	LF	3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
805150	425	LF	3 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
800000	10	LF	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
805155	85	LF	4 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
801004	10.55	CY	Concrete foundation for traffic signal equipment.
837001	3	EA	Ground rod - 3/4 in. diameter x 10 ft. length.
838003	1	EA	Control and distribution equipment (120/240 V, one phase, three wire system) for a MD-SHA (Type B-7) overhead electrical service.
800000	4	EA	Microloop probe (set of three) with 500 ft. lead-in cable.
800000	Lump Sum	LS	Remove and disposal of existing traffic signal equipment.

CONTACT LIST

The contact persons for District #4 are as follows:

Mr. Dave Malkowski  
District Engineer  
410-321-2800

Mr. Randall Scott  
Assistant District Engineer - Traffic  
410-321-2800

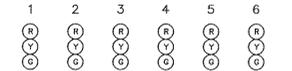
Mr. Joseph McMahon  
Assistant District Engineer - Utility  
410-321-2800

Mr. Dave Ramsey  
Assistant District Engineer - Maintenance  
410-321-2800

Mr. Richard L. Daff  
Chief, Traffic Operations Division  
410-787-7630

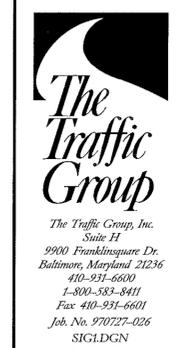
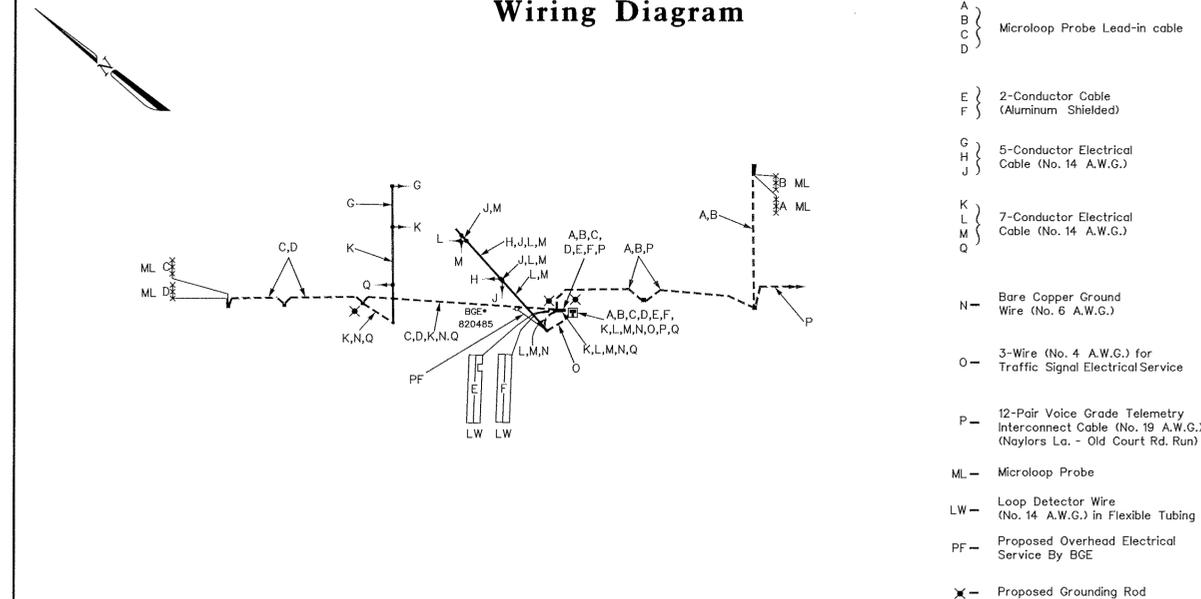
The Power Company Representative is:  
Baltimore Gas and Electric Company  
Mr. Bernie Thuman  
7317 Parkway Drive South  
Hanover, Maryland 21067  
410-859-9030

**Phase Chart**



Phase	1	2	3	4	5	6	7
Phase 2 & 6	G	G	G	G	R	R	G
2 & 6 Change	Y	Y	Y	Y	R	R	Y
Phase 4	R	R	R	R	G	G	R
4 Change	R	R	R	R	Y	Y	R
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/Y

**Wiring Diagram**



**MDOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
(General Information)

**MD 140 at Naylor's Lane**

DATE: December 7, 1999 LOG MILE: 03014001.52

DRAWN BY: JES/FJH PLAN SHEET NO.: 2345A-G1  
CHK. BY: S.H.A. NO. BA3035183 SHEET NO.: 2 of 21  
SCALE: N/A COUNTY: Baltimore

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