

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the reconstruction of the existing traffic control signal at the intersection of MD 589 and Manklin Creek Road in Worcester County, Maryland. MD 589 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to continue to operate in a NEMA four (4) phase, full-traffic-actuated mode. During the first phases of roadway reconstruction.

A new eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, telemetry equipment, video detection equipment, and one (1) - four-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

III. SPECIAL NOTE:

The Contractor shall notify Mr. Robert Snyder of SHA at 410-787-7635 to arrange for the phone drop installation.

The Contractor is to provide Mr. Snyder with the nearest street number, zip code, and telephone number.

CONTACT LIST

The contact persons for District #1 are as follows:

Mr. Gene Coffield
Assistant District Engineer - Traffic
410-543-6715

Mr. Bruce Poole
Assistant District Engineer - Utility
410-677-4082

Mr. James Wright
Assistant District Engineer - Maintenance
410-543-6715

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

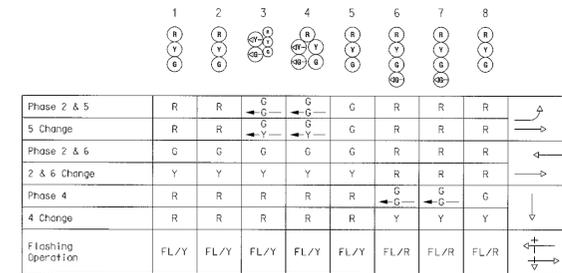
The Power Company Representative is:
Choptank Electric
Robert H. Jump, Jr.
410-479-0420 Ext. 3223

EQUIPMENT LIST

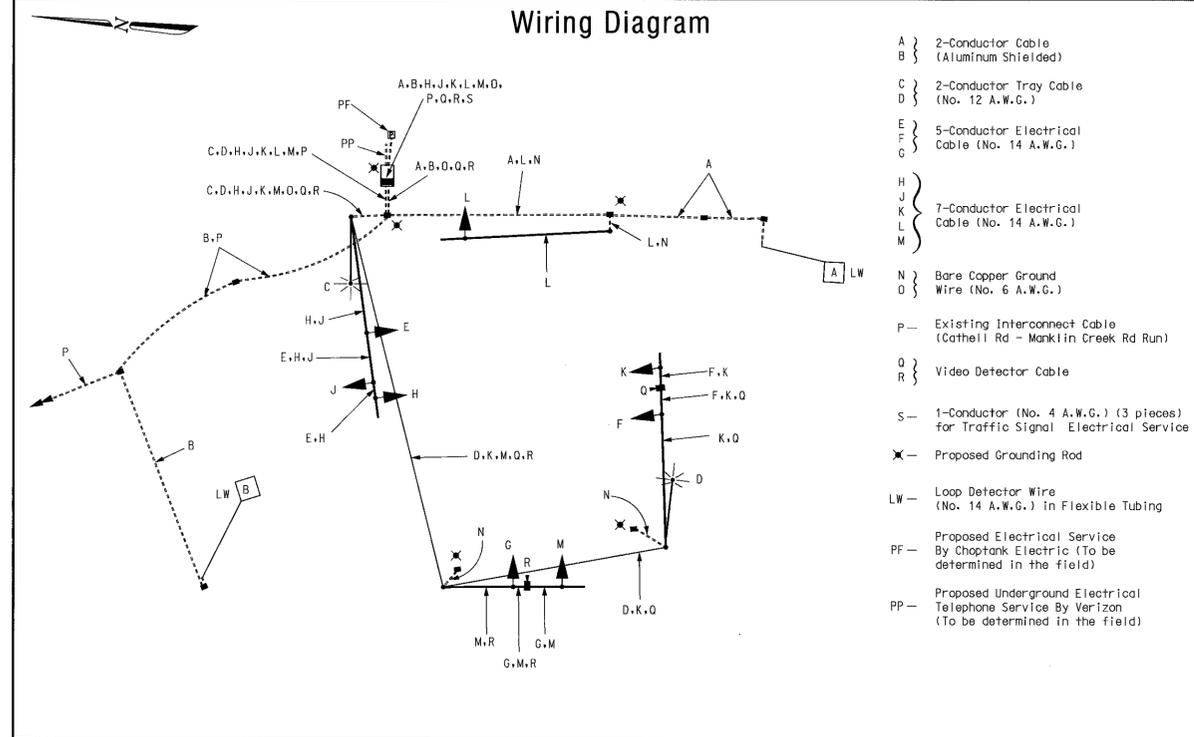
Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description	Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.	5	CY	205	Test pit excavation.
Lump Sum	LS	104	Maintenance of traffic.	10	EA	811	Handhole.
1	EA	818	27 ft. steelmast arm pole with a 50 ft. mast arm	125	LF	815	Sawcut for signal loop detector.
1	EA	818	27 ft. steelmast arm pole with a 60 ft. mast arm	325	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
2	EA	818	27 ft. steelmast arm pole with a 70 ft. mast arm	90	LF	810	1-conductor electrical cable (No. 4 A.W.G.) (3 pieces).
1	EA	816	Standard S.H.A. traffic signal controller, base mounted cabinet, one (1) four-channel loop detector amplifier, video detection equipment, and telemetry equipment. [Notes: Controller and cabinet shall be purchased from Econalite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].	900	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
				375	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
				120	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
2	EA	---	Video Detector with Manufacture Recommended Cables 1- 250 LF 1- 400 LF	1000	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
				175	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
4	EA	814	12 in., one-way, three section (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.	260	LF	819	3/8 in. steelspan wire.
				10	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
2	EA	814	12 in., one-way, four section (R,Y,G,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.	15	LF	805	1 in. galvanized steel conduit for loop detector sleeve.
				725	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.	70	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
				20	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
1	EA	814	12 in./8 in., one-way, five section (12 in. YA, GA/ 8 in. R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.	210	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
				3	EA	805	3 in. weatherhead.
1	EA	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.	22	CY	801	Concrete foundation for traffic signal equipment.
1	EA	813	36 in. x 42 in. R 10-12 sign with mast arm mounting hardware.	5	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
3	EA	813	16 in. x Var. (Dual Faced) D-3(1) with mast arm mounting hardware.	1	EA	807	Electrical utility service equipment (120/240 V, one phase, three wire system) for an underground electrical power service as per MD-SHA Typical No. 807.05-01.
1	EA	813	30 in. x 51 in. Shield Assembly with pole mounting hardware.	2	EA	---	Temporary Back Guy
1	EA	813	48 in. x 75 in. Shield Assembly with pole mounting hardware.	1	EA	---	Remove and dispose of existing concrete foundation 12 inches below grade.
2	EA	806	20 ft. luminaire arm.	Lump Sum	LS	---	Relocated existing interconnect cable.
2	EA	806	250 W H.P.S. lamp and luminaire.	Lump Sum	LS	---	Remove and dispose of existing signal equipment.

Phase Chart



Wiring Diagram



MOT- Phase 1 & 2

The Traffic Group, Inc.
410-931-6600
Fax 410-931-6601

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 589 (Race Track Road) at Manklin Creek Road

DRAWN BY: J. Dirndorfer	F.A.P. NO. N/A	TS NO. 2406A-X1	SHEET NO. 2 OF 4
CHECKED BY:	S.H.A. NO. BW996M82	T.I.M.S. NO. G220	
SCALE: N/A	COUNTY: Worcester	LOG MILE: 23058902.12	
DATE: February 3, 2005			