PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the installation of a traffic signal and interconnect at the intersection of MD 410 (East-West Highway) and Montgomery Avenue. in Montgomery County, Maryland.
MD 410 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA two (2) phase, semi traffic-actuated mode.
The MD 410 westbound through movement will operate alone.
The Montgomery Avenue through movement will operate alone.

A. An advance signal ahead warning HB is to be installed approx. 530 ft. east of the proposed signal head along MD 410 westbound.

III. SPECIAL NOTES

The Contractor will be connecting the new interconnect cable to the exisitng Montgomery County fiber-optic cable. The Contractor shall notify Bob Gonzales (240-777-8761) a minimum of 72 hours prior to begining this portion of the project.

CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Charlie Watkins
District Engineer
301-513-7313

Mr. Majib Shakib
Assistant District Engineer - Traffic
301-513-7358

Mr. Augie Rebish
Assistant District Engineer - Utility
301-513-7350

Mr. Raleigh Medley
Assistant District Engineer - Maintenance
301-513-7304

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

The Power Company Representative is:
Potomac Electric Power Company
Mr. Steven Custer
4016 Powder Mill Road
Calverton, MD 20705
301-931-2882

EQUIPMENT LIST

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

Item No.	Quantity	Units	Description
9083	1	EA	Cabinet Montgomery County with LAU. Size 5.
9087	1	EA	Controller ASC II with telemetry. 36 in. x 36 in.
9089	119	SF	Flat sheet aluminum sign - yellow, orange, or silver. (2 each - 48 in. x 48 in. W-3-3). (1 each - 36 in. x 36 in. W-3-3). (1 each - 24 in. x 24 in. "NEW") (1 each - 36 in. x 42 in. R10-12(41)) Flat sheet aluminum sign - florescent yellow-green. (4 each - 30 in. x 30 in. S2-1) (4 each - 21 in. x 15 in. M6-2)
9090	10.4	SF	Flat sheet aluminum sign - blue or green. (1 each - 16 in. x Var. D-301)
9098	5	EA	Sign hardware 30 in. form tube.
9099	1	EA	Sign hardware 60 in. form tube.
	1	EA	"G" CABINET W/ FLASHER MONTGOMERY COUNTY

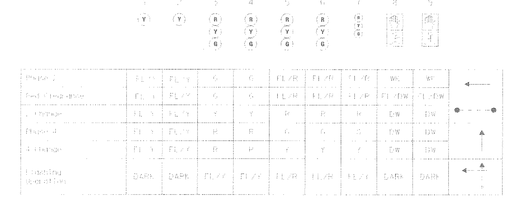
B. Equipment to be furnished and/or installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Item No.	Quantity	Units	Description
1001	1	LS	Maintenance of traffic per assignment.
2001	2	CY	Test pit excavation.
2004	3	CY	Class 2 excavation.
5003	500	LF	12 in. white HDPE TPM.
6001	160	SF	4 in. concrete sidewalk.
6009	20	LF	Depressed curb and gutter.
8001	8	CY	Concrete for signal foundations.
8003	1	EA	Breakaway pedestal pole (any size).
8006	2	EA	Clean, cut, galvanize, and cap traffic signal structure.
8008	2	EA	Weatherhead 3 in.
8019	1	EA	Install controller and cabinet - pole mount.
8021	70	LF	Sawcut for signal loop detector.
8023	10	LF	1 in. liquid tight flexible non-metallic conduit - sleeve.
8024	5	LF	2 in. (Schedule 80) PVC electrical conduit- trenched.
8027	10	LF	3 in. (Schedule 80) PVC electrical conduit- trenched.
8028	60	LF	3 in. (Schedule 80) PVC electrical conduit - slotted in roadway.
8033	3	EA	Electrical handhole.
8034	3	EA	Ground rod (3/4 in. x 10 ft. length).
8038	760	LF	12-pair communication cable, self-supporting (overhead).
8040	175	LF	Loop detector wire encased in flexible tubing (No. 14 AWG).
8041	40	LF	Electrical cable - 2-conductor (aluminum shielded).
8043	85	LF	Electrical cable - 3-conductor (No. 14 AWG)
8044	~~720~~ 20	LF	Electrical cable - 5-conductor (No. 14 AWG)
8045	150	LF	Electrical cable - 7-conductor (No. 14 AWG).
8048	15	LF	Stranded bare copper ground wire (No. 6 AWG).
8049	~~55~~ 120	LF	Electrical cable - 1 conductor No. 4 AWG - THHN/THWN
8050	65	LF	Wood sign supports 4 in. x 4 in.
8051	30	LF	Wood sign supports 4 in. x 6 in.
8052	38.125	SF	Install ground mounted sign.
8053	61.275	SF	Install overhead sign.
8066	2	EA	Control and distribution equipment (120/240, 1 phase, 3 wire).
8077	1	EA	Mast arm pole and 50 ft. mast arm.
8078	1	EA	Mast arm pole and 60 ft. mast arm.
8084	14	EA	12 in. black faced vehicular traffic signal head section.
8085	3	EA	8 in. black faced vehicular traffic signal head section.
8087	4	EA	12 in. pedestrian signal head section.
Neg.	1	EA	3 in. conduiet.
Neg.	1	EA	Video Detection Camera with pole mounting hardware.
Neg.	30	LF	6-pair (Essex Gopic-FSF) overall shielded communication cable (No. 19 AWG).

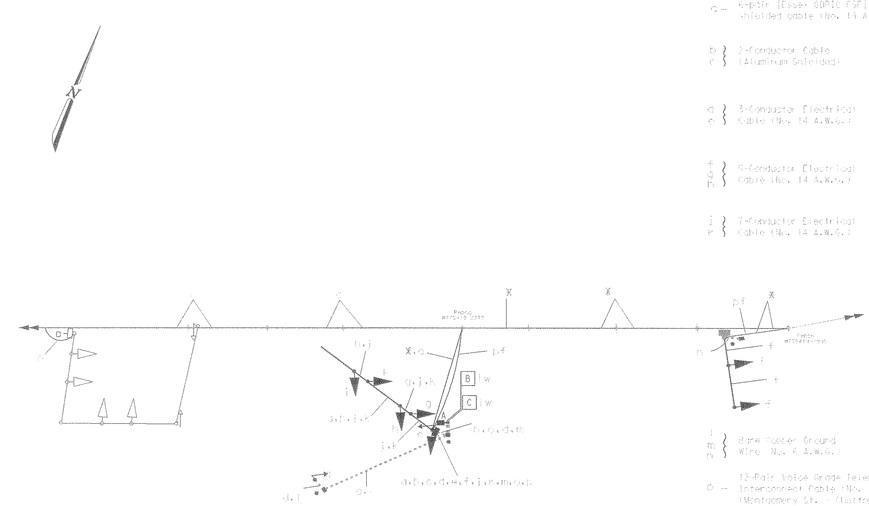
C. Existing equipment to be removed by the Contractor and delivered to the MDSHA Office of Traffic and Safety, Traffic Operations Division, Traffic Signal Shop, 7491 Connelley Drive, Hanover MD, 21076. A twenty-four (24) hour notice is required prior to delivery. Please contact Mr. Ed Radenhizer at (410) 787-7650.

Note, All equipment and/or material not listed above shall become the property of the Contractor.

Phase Chart



Wiring Diagram



The Traffic Group
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 410 (East-West Highway) at Montgomery Ave.

DRAWN BY:	F. Brownley	F.A.P. NO.	N/A	TS NO.	4103-GI
CHECKED BY:		S.H.A. NO.	XX1005385	SHEET NO.	2 OF 2
SCALE:	N/A	COUNTY:	Montgomery	T.I.M.S. NO.	E586
DATE:	May 30, 2001	LOG MILE:	15041000.45		

FILE: MDA7E