

F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT IS LOCATED AT THE INTERSECTION OF THE I-83 SOUTHBOUND RAMP AND PADONIA ROAD IN BALTIMORE COUNTY MARYLAND AND INVOLVES THE CONSTRUCTION OF A NEW TRAFFIC SIGNAL. PADONIA ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE PROPOSED TRAFFIC SIGNAL WILL OPERATE IN A NEMA THREE (3) PHASE, FULLY TRAFFIC ACTUATED MODE. THE PADONIA ROAD APPROACHES WILL OPERATE CONCURRENTLY. THE I-83 SOUTHBOUND RAMP APPROACH WILL OPERATE SEPARATELY.

A NEW EIGHT PHASE FULLY TRAFFIC ACTUATED CONTROLLER WILL BE INSTALLED WITH TWO (2) FOUR CHANNEL RACK MOUNTED LOOP DETECTOR AMPLIFIERS, TELEMETRY MODULE, AND INTERSECTION MONITOR WITH BATTERY BACK UP HOUSED IN A NEMA SIZE SIX (6) BASE MOUNTED CABINET.

III. SPECIAL NOTES

- THE SIGNAL SHOP WILL BE NOTIFIED TO PERFORM INTERNAL WIRING OF THE CABINET AT PADONIA ROAD AND I-83 SOUTHBOUND RAMP. ALL CABLE SHALL BE IDENTIFIED AND BROUGHT INTO THE CONTROLLER BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY MR. EDWARD RODENHIZER, SHA SIGNAL SHOP AT (410) 787-7650 SEVENTY-TWO (72) HOURS IN ADVANCE OF THIS WORK.
- MOT PLATES FOR THIS PROJECT WILL BE AS FOLLOWS: 104.00 TO 104.00-12, 104.02-01, 104.03-01
- UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7631 TO ARRANGE FOR A PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
9014	7 EA	12" I-WAY 3 SECTION SIGNAL HEAD (R, Y, G) - MAST ARM MOUNT
9082	1 EA	FURNISH NEMA 6 BASE MOUNTED CABINET & CONTROLLER
9089	40 SF	SHEET ALUMINUM SIGN - YELLOW AND SILVER ONE (1) R3-1, (24"X24") "RIGHT TURNS PROHIBITED"; ONE (1) R3-2, (24"X24") "LEFT TURNS PROHIBITED"; FOUR (4) W3-3, (48"X48") "NEW SIGNAL AHEAD"
9090	7.5 SF	SHEET ALUMINUM SIGN - GREEN ONE (1) D3-2, (18"XVARIABLE) "Padonia Rd"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
NEG.	6 SF	REMOVE EXISTING GROUND MOUNT SIGNS
NEG.	14 SF	RELOCATE EXISTING GROUND MOUNT SIGNS AND BAND TO POLE
1001	1 LS	MAINTENANCE OF TRAFFIC
2001	3 CY	TEST PIT EXCAVATION
5004	80 LF	FURNISH AND INSTALL 24" WHITE PAVEMENT MARKING TAPE
5013	110 LF	REMOVE EXISTING PAVEMENT MARKINGS
8001	7 CY	FURNISH AND INSTALL CONCRETE FOUNDATION
8011	7 EA	INSTALL SIGNAL HEAD (ANY TYPE)
8016	1 EA	FURNISH AND INSTALL MICROLOOP PROBE SET 500 FT. LEAD IN
8017	4 EA	FURNISH AND INSTALL MICROLOOP PROBE SET 1,000 FT. LEAD IN
8020	1 EA	INSTALL NEMA 6 BASE MOUNTED CABINET AND CONTROLLER
8021	122 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	30 LF	FURNISH AND INSTALL 1" NON-METALLIC SLEEVE
8024	840 LF	FURNISH AND INSTALL 2" SCHEDULE 80 PVC CONDUIT - TRENCHED
8026	150 LF	FURNISH AND INSTALL 2" SCHEDULE 80 PVC CONDUIT - BORED
8027	50 LF	FURNISH AND INSTALL 3" SCHEDULE 80 PVC CONDUIT - TRENCHED
8029	30 LF	FURNISH AND INSTALL 3" SCHEDULE 80 PVC CONDUIT - BORED
8030	50 LF	FURNISH AND INSTALL 4" SCHEDULE 80 PVC CONDUIT - TRENCHED
8033	10 EA	FURNISH AND INSTALL HANDHOLE
8034	2 EA	FURNISH AND INSTALL GROUND ROD
8040	410 LF	FURNISH AND INSTALL LOOP WIRE
8041	15 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED
8044	315 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG
8049	15 LF	FURNISH AND INSTALL BARE COPPER GROUND WIRE - NO. 6 AWG
8050	140 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG
8053	39 SF	INSTALL GROUND MOUNTED SIGNS WOOD POST
8054	8 SF	INSTALL OVERHEAD SIGN
8070	1 EA	FURNISH AND INSTALL CTR DIST EQPT (120/240V, 1PH, 3W)
8084	1 EA	FURNISH AND INSTALL STEEL POLE WITH 70' MAST ARM

THE FOLLOWING CONTACT PERSONS FOR DISTRICT # 4 ARE AS FOLLOWS:

Mr. David Malkowski
District Engineer
Phone: (410) 321-3461

Mr. Randall Scott
Assistant District Engineer-Traffic
Phone: (410) 321-3514

Mr. David Ramsey
Assistant District Engineer-Maintenance
Phone: (410) 363-1315

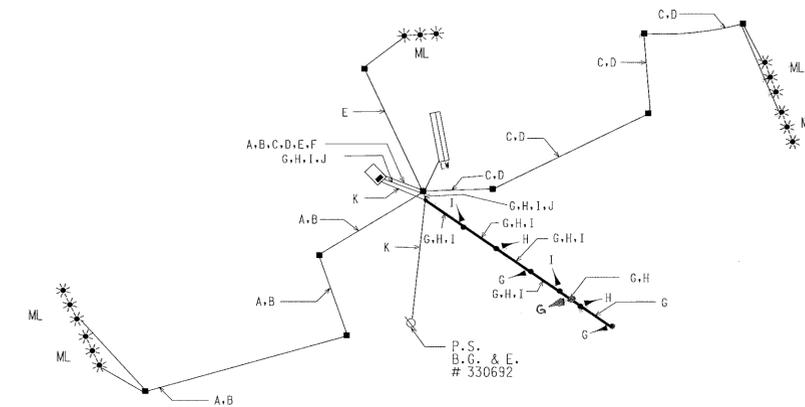
Mr. Joe McMahon
Assistant District Engineer-Utility
Phone: (410) 321-3456

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

The Power Company Representative is:

BALTIMORE GAS AND ELECTRIC
Mr. Joe Weber
7317 PARKWAY DRIVE
HANOVER MARYLAND 21076
(410) 859-9026

WIRING DIAGRAM



WIRING KEY

- A-E MICRO PROBE CABLE
- F 2 CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED CABLE (NO. 14 AWG) 3-6-3 TURNS
- G-I 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- J STRANDED BARE COPPER GROUND WIRE NO. 6 AWG
- ML MICRO LOOP PROBES
- LW LOOP WIRE
- K 1 CONDUCTOR ELECTRICAL CABLE NO. 4 AWG
- PS POWER SOURCE

PHASE CHART

	1	2	3	4	5	6	
PHASE 2 & 6	G	G	G	G	R	R	←
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	R	R	←
PHASE 4	R	R	R	R	G	G	↓
PHASE 4 CHANGE	R	R	R	R	Y	Y	↓
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	↔



REVISIONS	APPROVALS	REVISIONS	<p>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION I-83 SOUTHBOUND RAMP AND PADONIA ROAD GENERAL INFORMATION</p>	LOG MILE:	
	ASST. DIVISION CHIEF			DRAWN BY: R. MELLO	TS NO. 3770
	ASST. DISTRICT ENGINEER, TRAFFIC			CHK. BY: [Signature]	SHEET NO. 2 OF 2
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION			SCALE: 1" = 20'	
	DIRECTOR, TRAFFIC & SAFETY		DATE: 10/97	COUNTY: BALTIMORE	