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 MD 5 AND THE I-495 ON RAMP/AUTH ROAD IN PRINCE GEORGE'S COUNTY, MARYLAND AND INVOLVES ROADWAY IMPROVEMENTS, AND THE RECONSTRUCTION OF LOOP DETECTORS FOR THE EXISTING SIGNALTHAT IS EFFECTED BY THESE IMPROVEMENTS. MD 5 WILL OPERATE CONCURRENTLY AND WITH EXCLUSIVE LEFT TURNS. MD 5 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE PROPOSED TRAFFIC SIGNAL WILL OPERATE IN A NEMA SIX (6) PHASE, FULLY TRAFFIC ACTUATED MODE. THE MD 5 APPROACHES WILL OPERATE CONCURRENTLY. WITH EXCLUSIVE LEFT TURN PHASES. THE AUTH ROAD APPROACH WILL OPERATE SEPERATELY.

AN EXISTING EIGHT PHASE FULLY TRAFFIC ACTUATED CONTROLLER WILL REMAIN.

III. SPECIAL NOTES

1. THE SIGNAL SHOP WILL BE NOTIFIED TO PERFORM INTERNAL WIRING OF THE CABINET AT MD 458 AND SUITLAND ROAD. 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.

2. MOT PLATES FOR THIS PROJECT WILL BE AS FOLLOWS: 104.00 TO 104.00-12, 104.02-01, 104.03-01

CONSTRUCTION DETAILS

- (A) EXISTING CONTROLLER TO REMAIN
- (B) EXISTING STEEL SPAN WIRE POLE TO REMAIN
- (C) EXISTING HAND HOLE TO REMAIN
- (D) EXISTING CONDUIT TO REMAIN
- (E) EXISTING 6' X 30' LOOP DETECTOR TO BE REMOVED
- (F) EXISTING 6' X 30' LOOP DETECTOR TO REMAIN
- (G) INSTALL 6' X 30' LOOP DETECTOR IN 1/4 INCH FLEXIBLE TUBING (3-6-3 TURNS)
- (H) INSTALL 24" WHITE PERMANENT PREFORMED PAVEMENT MARKING (STOP BAR)
- (I) INSTALL 1 IN. LIQUID TIGHT FLEXABLE NON-METALIC CONDUIT FOR DETECTOR SLEEVE
- (J) RELOCATE EXISTING SIGNAL HEAD
- (K) RELOCATE EXISTING OVERHEAD SIGN
- (L) REMOVE EXISTING OVERHEAD SIGN
- (M) REMOVE EXISTING SIGNAL HEAD
- (N) INSTALL 2" SCHEDULE 80 PVC CONDUIT - TRENCHED
- (O) INSTALL 2" SCHEDULE 80 PVC CONDUIT - BORED
- (P) INSTALL HAND HOLE

EQUIPMENT LIST

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

ITEM NO.	QUANTITY	DESCRIPTION
900001	2 EA	12" 1-WAY, 4-SECTION (R,Y,G,GA) TRAFFIC SIGNAL HEAD - SPAN MOUNT
900001	7.5 SF	SHEET ALUMINUM SIGNS
	1 EA	R3-5L SIGN (30 IN. X 36 IN.) "LEFT TURN ONLY"

B. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
585445	50 LF	FURINSH AND INSTALL 24 " WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE (STOP BAR)
805160	60 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT SLEEVE
861104	75 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR ALUMINUM SHIELDED
861108	400 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR 14 AWG
862101	1700 LF	FURNISH AND INSTALL LOOP WIRE IN FLEXIBLE TUBING
862102	550 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
860220	2 EA.	INSTALL SIGNAL HEAD SPAN WIRE MOUNT ANY TYPE
813015	7.5 SF	INSTALL OVERHEAD SIGN
814004	2 EA.	REMOVE AND SALVAGE EXISTING SIGNAL HEAD
800000	1 EA.	RELOCATE EXISTING OVERHEAD SIGN
811001	4 EA.	FURNISH AND INSTALL HAND HOLE
800000	415 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED
805105	130 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 PVC CONDUIT - BORED
822002	900 LF	FURNISH AND INSTALL 12 PAIR VOICE GRADE TELEMETRY JELLY FILLED INTERCONNECT CABLE - UNDERGROUND

THE FOLLOWING CONTACT PERSONS FOR DISTRICT # 3 ARE AS FOLLOWS:

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

Mr. Majib Shakib
Asst. District Engineer - Traffic
(301) 513-7358

Mr. Augustine Rebish
Acting Engineer - Utility
(301) 513-7350

Mr. Charles Watkins
District Engineer
(301) 513-7311

Mr. Randy Brown
Asst. District Engineer - Maintenance
(301) 513-7304

The Power Company Representative is:

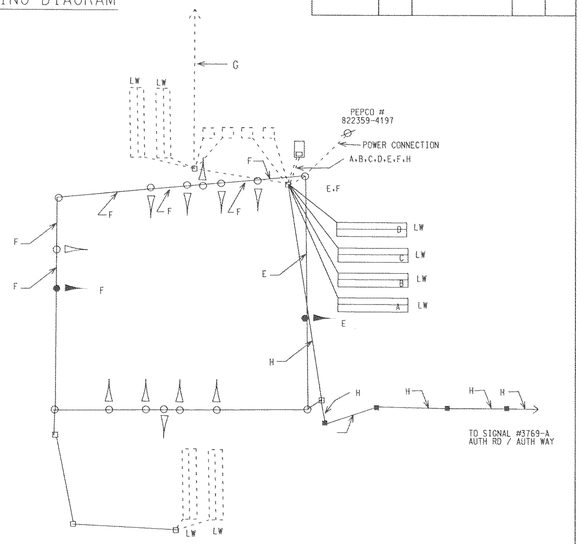
POTOMAC ELECTRIC POWER COMPANY

8300 OLD MARLBORO PIKE
UPPER MARLBORO MARYLAND 20772
(301) 961-5325

WIRING KEY

A-D	2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
E-F	7 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
G	EXISTING 12-PAIR VOICE GRADE TELEMETRY JELLY FILLED INTERCONNECT CABLE
H	12-PAIR VOICE GRADE TELEMETRY JELLY FILLED INTERCONNECT CABLE
LW	LOOP WIRE

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 1 & 5	~~G~~	~~G~~	~~G~~	R	R	~~R~~	~~G~~	~~G~~	R	R	R	R	R
1 & 5 CHANGE TO PHASE 1 & 6 OR PHASE 2 & 5													
PHASE 1 & 6	~~G~~	~~G~~	~~G~~	G	G	~~R~~	~~R~~	~~R~~	R	R	R	R	R
PHASE 1 & 6 CHANGE	~~Y~~	~~Y~~	~~Y~~	G	G	~~R~~	~~R~~	~~R~~	R	R	R	R	R
PHASE 2 & 5	~~R~~	~~R~~	~~R~~	R	R	~~G~~	~~G~~	~~G~~	G	G	R	R	R
PHASE 2 & 5 CHANGE	~~R~~	~~R~~	~~R~~	R	R	~~Y~~	~~Y~~	~~Y~~	G	G	R	R	R
PHASE 2 & 6	~~R~~	~~R~~	~~R~~	G	G	~~R~~	~~R~~	~~R~~	G	G	R	R	R
PHASE 2 & 6 CHANGE	~~R~~	~~R~~	~~R~~	Y	Y	~~R~~	~~R~~	~~R~~	Y	Y	R	R	R
PHASE 4	~~R~~	~~R~~	~~R~~	R	R	~~R~~	~~R~~	~~R~~	R	R	G ~~G~~	G ~~G~~	G
PHASE 4 CHANGE	~~R~~	~~R~~	~~R~~	R	R	~~R~~	~~R~~	~~R~~	R	R	Y	Y	Y
FLASHING OPERATION	FL ~~AY~~	FL ~~AY~~	FL ~~AY~~	FL/Y	FL/Y	FL ~~AY~~	FL ~~AY~~	FL ~~AY~~	FL/Y	FL/Y	FL/R	FL/R	FL/R

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future

REVISIONS				
D	9/98	PG3742A	RECONSTRUCT LOOP WIRES FOR AUTH RD DUE TO GEOMETRICS, REPOSITION SIGNAL HEADS	
E.WUNT				
C.J				
C	7/95	A/E GROUP	RECONSTRUCT FOR NEW GEOMETRICS	

APPROVALS

DESIGN SECTION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

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

MD 5 (BRANCH AVE.) @ I-495 RAMP / AUTH ROAD
LOG MILE: I6000512.17

DRAWN BY:	I. MANK	F.A.P. NO.	SEE TITLE SHEET	GI NO.	SHEET NO.
CHK. BY:	W.F. FITCH	S.H.A. NO.	HW-563-802-312	594-D	79 OF 125
SCALE:		COUNTY	PRINCE GEORGE'S		
DATE:	MAY 20, 1992				

FILE: m:\metro_hw\md5_gen.dgn
DATE: 3-Oct-98 14:43