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

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT IN PRINCE GEORGE'S COUNTY, MARYLAND INVOLVES ROADWAY IMPROVEMENTS, AND THE RECONSTRUCTION OF LOOP DETECTORS FOR THE EXISTING SIGNAL THAT IS AFFECTED BY THESE IMPROVEMENTS. AUTH ROAD IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

THE PROPOSED TRAFFIC SIGNAL WILL OPERATE IN A NEMA SIX (6) PHASE, FULLY TRAFFIC ACTUATED MODE. THE AUTH ROAD APPROACHES WILL OPERATE CONCURRENTLY. THE AUTH PLACE / I-495 OFF RAMP APPROACHS WILL OPERATE SEPERATELY.

AN EXISTING EIGHT PHASE FULLY TRAFFIC ACTUATED CONTROLLER WILL BE MODIFIED 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

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 MAST ARM POLE TO REMAIN
- (C) EXISTING HAND HOLE TO REMAIN
- (D) INSTALL HAND HOLE
- (E) REMOVE EXISTING HAND HOLE
- (F) EXISTING CONDUIT TO REMAIN
- (G) INSTALL 2" SCHEDULE 80 PVC CONDUIT - TRENCHED
- (H) EXISTING 6' X 30' LOOP DETECTOR TO BE REMOVED
- (I) EXISTING 6' X 30' LOOP DETECTOR TO REMAIN
- (J) INSTALL 6' X 30' LOOP DETECTOR IN 3/4 INCH FLEXIBLE TUBING (3-6-3 TURNS)
- (K) EXISTING MICROLOOP PROBE SET TO BE REMOVED
- (L) EXISTING MICROLOOP PROBE SET TO REMAIN
- (M) INSTALL MICROLOOP PROBE SET 500 FT. LEAD-IN
- (N) INSTALL 24" WHITE PERMANENT PREFORMED PAVEMENT MARKING (STOP BAR)
- (O) INSTALL 1 IN. LIQUID TIGHT FLEXABLE NON-METALIC CONDUIT FOR DETECTOR SLEEVE

EQUIPMENT LIST

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

ITEM NO.	QUANTITY	DESCRIPTION

B. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
585445	210 LF	FURNISH AND INSTALL 24 " WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE (STOP BAR)
805125	275 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED
805160	70 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT SLEEVE
811001	3 EA	FURNISH AND INSTALL HANDHOLE
861104	1000 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR ALUMINUM SHIELDED
862101	2600 LF	FURNISH AND INSTALL LOOP WIRE IN FLEXIBLE TUBING
862102	925 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
800000	7 EA	FURNISH AND INSTALL MICROLOOP PROBE SET 500 FT. LEAD IN

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

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

Mr. Majib Shaklb
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:

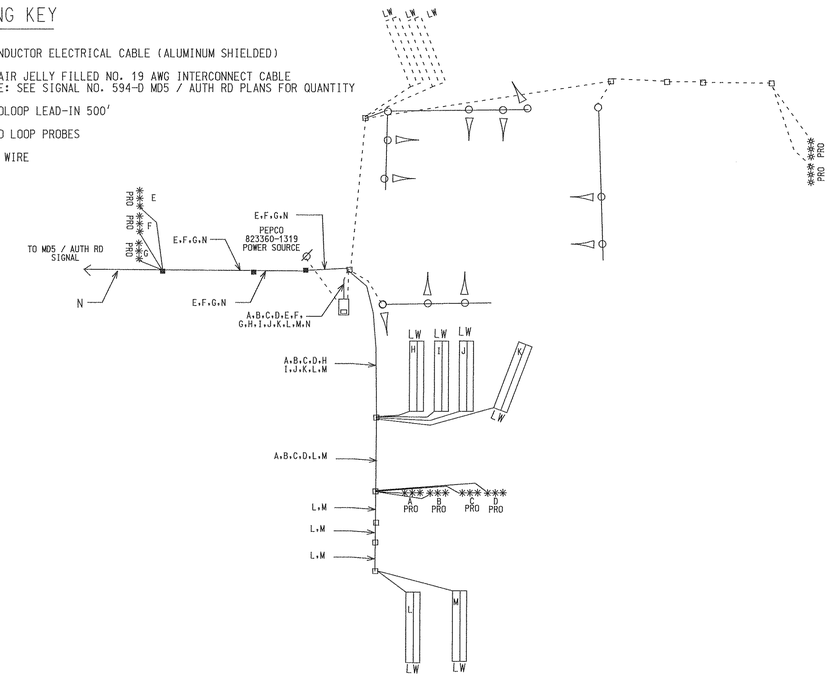
POTOMAC ELECTRIC POWER COMPANY

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

WIRING DIAGRAM

WIRING KEY

H-M	2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
N	12 PAIR JELLY FILLED NO. 19 AWG INTERCONNECT CABLE (NOTE: SEE SIGNAL NO. 594-D MD5 / AUTH RD PLANS FOR QUANTITY
A-G	MICROLOOP LEAD-IN 500'
PRO	MICRO LOOP PROBES
LW	LOOP WIRE



PHASE CHART

	1	2	3	4	5	6	7	8	9	10
PHASE 2 & 6	G	G	G	G	R	R	R	R	~~R~~	~~R~~
PHASE 2 & 6 CHANGE	R	R	Y	Y	R	R	R	R	~~R~~	~~R~~
PHASE 3	R	R	R	R	G ~~G~~	G ~~G~~	G	R	~~R~~	~~R~~
PHASE 3 CHANGE	R	R	R	R	Y	Y	Y	R	~~R~~	~~R~~
PHASE 4	R	R	R	R	R	R	R	G	~~G~~	~~G~~
PHASE 4 CHANGE	R	R	R	R	R	R	R	Y	~~Y~~	~~Y~~
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

REVISIONS					
A 9/98 C. MUNZ	P021751T0	LOOP REPLACEMENT DUE TO GEOMETRIC IMPROVEMENTS			

APPROVALS

DESIGN SECTION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

ORIGINAL SIGNED BY: J.D. 3/99

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future

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

AUTH ROAD @ I-495 RAMP / AUTH PLACE
LOG MILE: I63584000.25

DRAWN BY:	T. ZAYDEL	F.A.P. NO.	AC-STPG-000S (588) E	GI NO.	SHEET NO.
CHK. BY:	K. SCHMID	S.H.A. NO.	PG21A21	3769-A	___ OF ___
SCALE:	1"=20'	COUNTY	PRINCE GEORGE'S		
DATE:	2-23-98				