

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC CONTROL SIGNAL WITH INTERSECTION LIGHTING AND SIGNALING STATION LOOP DETECTORS AT THE INTERSECTION OF MD 650 AND EDNOR ROAD IN MONTGOMERY COUNTY. MD 650 RUNS IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

A SYSTEM READY CONTROLLER AND RACK MOUNTED DETECTOR AMPLIFIERS ALL HOUSED IN A BASE MOUNTED CABINET ARE TO BE INSTALLED AT THIS LOCATION. THE INTERSECTION IS TO OPERATE IN A NEMA FIVE (5) PHASE MODE. THE MD 650 THROUGH MOVEMENTS WILL RUN CONCURRENTLY. THE EDNOR ROAD MOVEMENTS WILL RUN CONCURRENTLY. AN EXCLUSIVE / PERMISSIVE LEFT TURN PHASE SHALL BE PROVIDED FOR THE APPROACH ON MD650 NB.

CONTROLLER REQUIREMENTS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE, EXCLUDING INTERCONNECT, TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE. DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. THE CONTRACTOR SHALL RUN THE INTERCONNECT CABLE INTO THE BASE OF EACH CABINET AND PROPERLY TAG THE CABLE. CONTACT MR. BOB GONZALES AT (240) 777-8761 SEVENTY TWO HOURS IN ADVANCE OF THE INTENDED WORK.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TEMPORARY WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THIS PROJECT.

- STANDARD NO. MD-104.209
- STANDARD NO. MD-104.211
- STANDARD NO. MD-104.212
- STANDARD NO. MD-104.301
- STANDARD NO. MD-104.303
- STANDARD NO. MD-104.304

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

NAME Charlie Watkins
DISTRICT ENGINEER
(301)513-7300

NAME Majid Shakib
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301)513-7358

NAME Randy Brown
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

NAME Richard Daff, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
(410) 787-7630

NAME Barry King
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
(410) 787-4060

NAME Bob Gonzales
MONTGOMERY COUNTY TRAFFIC DIVISION
ENGINEER III
(240) 777-8761

MONTGOMERY COUNTY

POTOMAC ELECTRIC POWER COMPANY
1610 GAITHER ROAD
ROCKVILLE, MARYLAND 20850
(301) 670-8740

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY THE ADMINISTRATION.

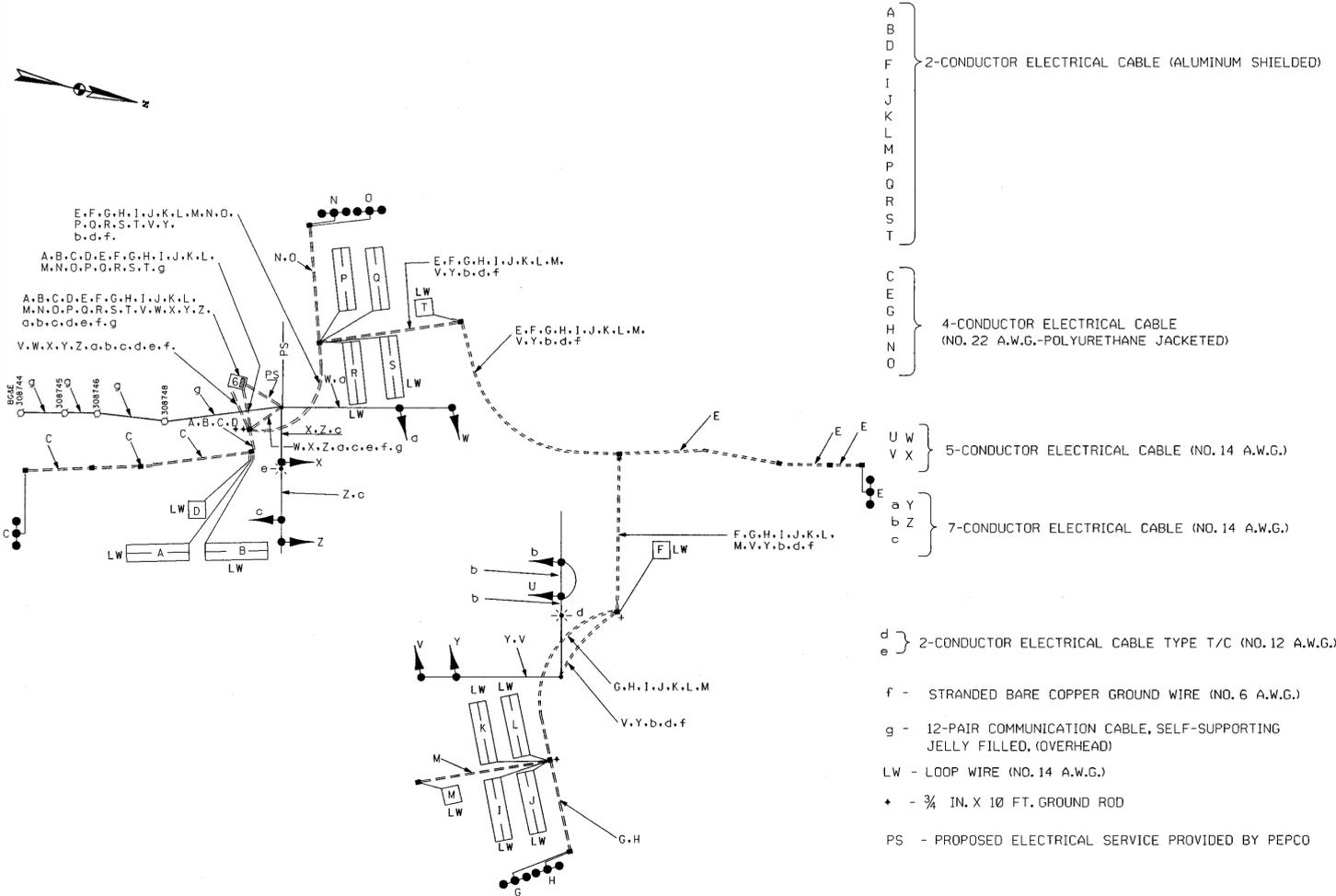
CATEGORY CODE NO.:	DESCRIPTION	SPECIFICATION SECTION	UNIT	QUANTITY
960022	12 INCH 1 WAY, 3 SECTION (R,Y,G) SIGNAL HEAD - WITH MAST ARM MOUNTING HARDWARE	814	EA	7
900000	8 1/2" 1 WAY, 5 SECTION (R,Y,G,YA,GA) SIGNAL HEAD - WITH MAST ARM MOUNTING HARDWARE	814	EA	1
960028	12 INCH 1 WAY, 5 SECTION (R,Y,YA,G,GA) SIGNAL HEAD - WITH MAST ARM MOUNTING HARDWARE	814	EA	1
900000	FOUR-CHANNEL LOOP DETECTOR AMPLIFIER	814	EA	5
971017	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER, HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.	816	EA	1
973023	SHEET ALUMINUM SIGNS	813	SF	95
	D3-2 (VARIABLE IN X 16 IN) "NEW HAMPSHIRE AVE 17100" SIGN - MAST ARM MOUNT		EA	2
	D3-2 (VARIABLE IN X 16 IN) "EDNOR RD 900" SIGN - MAST ARM MOUNT		EA	4
	R 10-12 SIGN (36 IN X 42 IN) MAST ARM MOUNT		EA	1
	M 3-1 SIGN (24 IN X 12 IN) POLE MOUNT		EA	2
	M 1-5 SIGN (30 IN X 24 IN) POLE MOUNT		EA	4
	M 6-1 SIGN (21 IN X 15 IN) POLE MOUNT		EA	4
	M 3-3 SIGN (24 IN X 12 IN) POLE MOUNT		EA	2

B. EQUIPMENT TO BE FURNISHED AND /OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.:	DESCRIPTION	SPECIFICATION SECTION	UNIT	QUANTITY
120500	MAINTENANCE OF TRAFFIC	104	LS	LUMP SUM
203030	TEST PIT EXCAVATION	205	CY	2
585445	24 INCH WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE.	555	LF	105
585448	PERMANENT PREFORMED PAVEMENT MARKING ARROW	555	EA	6
801004	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION	801	CY	11
802501	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)	810	LF	420
80518	FURNISH AND INSTALL 4 " POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - BORED	805	LF	170
805125	FURNISH AND INSTALL 2 INCH POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED	805	LF	1810
805135	FURNISH AND INSTALL 3 " POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED	805	LF	40
805140	FURNISH AND INSTALL 4 " POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT-TRENCHED	805	LF	160
805160	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR LOOP DETECTOR SLEEVE	805	LF	200
806002	FURNISH AND INSTALL 250 WATT H.P.S.-LAMP AND LUMINAIRE-RECTANGULAR	806	EA	2
807205	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT	807	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	811	EA	22
813015	INSTALL OVERHEAD SIGN - MAST ARM MOUNT	813	SF	95
837001	FURNISH AND INSTALL GROUND ROD -3/4" DIAMETER X 10' LENGTH	804	EA	3
860220	INSTALL SIGNAL HEADS - MAST ARM MOUNT	814	EA	9
86104	FURNISH AND INSTALL ELECTRICAL CABLE -2 CONDUCTOR (ALUMINUM SHIELDED)	810	LF	2580
86107	FURNISH AND INSTALL ELECTRICAL CABLE -5 CONDUCTOR (NO. 14 A.W.G.)	810	LF	750
86108	FURNISH AND INSTALL ELECTRICAL CABLE -7 CONDUCTOR (NO. 14 A.W.G.)	810	LF	1180
86116	FURNISH AND INSTALL ELECTRICAL CABLE -2 CONDUCTOR (NO. 12 A.W.G.)	810	LF	420
862101	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)	810	LF	4170
862102	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)	815	LF	870
866104	FURNISH AND INSTALL 20' LIGHTING ARM ON SIGNAL STRUCTURE	818	EA	2
871117	INSTALL 8 PHASE (FULLY ACTUATED) CONTROL - CABINET BASE MOUNT	816	EA	1
800000	27' STEEL POLE WITH A TWIN 50'/60' MAST ARMS (4 - 2"x 90" ANCHOR BOLTS)	818	EA	1
800000	27' STEEL POLE WITH A TWIN 50'/70' MAST ARMS (4 - 2"x 90" ANCHOR BOLTS)	818	EA	1
800000	FURNISH AND INSTALL 2 IN. PVC CONDUIT BEND	805	EA	1
800000	FURNISH AND INSTALL 3 IN. PVC CONDUIT BEND	805	EA	2
800000	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT	SP	LS	1
800000	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE, SELF-SUPPORTING, JELLY FILLED, (OVERHEAD)	701	LF	5760
800000	FURNISH AND INSTALL TRIPLE MICROLOOP PROBE SET-500 FT	816	EA	2
800000	FURNISH AND INSTALL TRIPLE MICROLOOP PROBE SET-1000 FT	816	EA	4

WIRING DIAGRAM

WIRING KEY



PHASE CHART

	1	2	3	4	5	6	7	8	9
Phase 1 & 6	R	R	R	R	R	R	R	R	R
Phase 1 & 6 Change	G	G	G	G	G	G	G	G	G
Phase 2 & 6	G	G	G	G	G	R	R	R	R
Phase 2 & 6 Change	Y	Y	Y	Y	Y	R	R	R	R
Phase 4 & 8	R	R	R	R	R	G	G	G	G
Phase 4 & 8 Change	R	R	R	R	R	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

SG - 02

Sverdrup
CIVIL, INC.
CONSULTING ENGINEERS
575 SOUTH CHARLES STREET
SUITE 404
BALTIMORE, MARYLAND 21201
Tel. (410) 837-5840

REVISIONS	APPROVALS
	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 650 AT EDNOR ROAD

TS\STD. NO.: TS-1350A

DRAWN BY: R.F.	F.A.P. NO. SEE TITLE SHEET	TS NO. 1350
CHECKED BY: R.D.	S.H.A. NO. MO 8295171	SHEET NO. 25 OF 25
SCALE: NONE	COUNTY: MONTGOMERY	T.I.M.S. NO.
DATE: 11/23/99	LOG MILE: 150.65009-716	