

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE INSTALATION OF A NEW FLAG IN THE AIR SIGNAL AT THE INTERSECTION OF MD 165 (PYLESVILLE ROAD) @ NORTH HARFORD MIDDLE SCHOOL IN HARFORD COUNTY MARYLAND. MD 165 IS ASSUMED TO RUN IN AN NORTH SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE PROPOSED FLAG IN THE AIR SIGNAL WILL OPERATE IN A NEMA TWO (2) PHASE, MODE. THE MD 165 APPROACHES WILL OPERATE CONCURRENTLY WITH A CONTINUOUS YELLOW FLASHING MODE. THE FLASHING OPERATION SHALL CHANGE TO A RED MODE ALONG MD 165 DURING THE SCHOOL PM PEAK.

A NEW EIGHT PHASE FULLY TRAFFIC ACTUATED CONTROLLER WITH INTERSECTION MONITOR AND BATTERY BACK UP FOR PHONE DROP HOUSED IN A POLE MOUNTED CABINET. A 14" x 10" x 7" POINT CONTROL PERSON AUXILIARY CABINET WITH PUSH BUTTON AND SIGNAL WILL BE INSTALLED AT THE INTERSECTION. A ONE INCH RISER FOR A PHONE DROP SHALL BE INSTALLED.

UPON COMPLETION OF THIS PROJECT THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE.

EQUIPMENT LIST

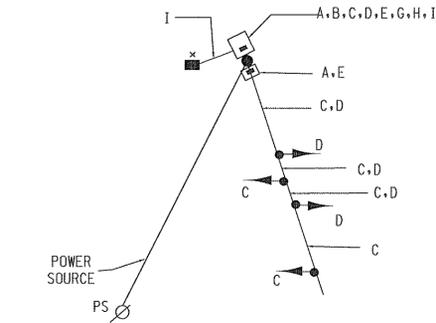
A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	SPEC. SECTION	DESCRIPTION
9080	1 EA	816	FURNISH SIZE 5 POLE MOUNTED CONTROLLER AND CABINET W/ INTERSECTION MONITOR AND BATTERY BACK UP.
9089	21 SF	813	FURNISH SHEET ALUMINUM SIGNS TO CONSIST OF S2-1(2) (MOD) (2) (36"x42") MAST ARM MOUNT
9000	1 EA		FURNISH POINT CONTROL PUSH BUTTON AND SIGNAL
9000	1 EA		FURNISH 21 FT GALVANIZED STEEL POLE WITH SINGLE 54 FT MAST ARM

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

ITEM NO.	QUANTITY	SPEC. SECTION	DESCRIPTION
1001	L.S.	104	FURNISH AND INSTALL MAINTENANCE OF TRAFFIC
2001	2 CY	104	TEST PIT EXCAVATION
5004	40 LF	SP 555	FURNISH AND INSTALL 24" WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE (STOP BAR)
6001	12 SF	610	FURNISH AND INSTALL 4" CONCRETE SIDEWALK/PAD
8001	4.65 CY	801	FURNISH AND INSTALL CONCRETE SIGNAL FOUNDATION
8049	150 LF	810	FURNISH AND INSTALL ELECTRICAL CABLE 1 CONDUCTOR NO. 4 AWG
8048	30 LF	810	FURNISH AND INSTALL STRANDARD BARE COPPER GROUND WIRE (NO.6 AWG)
8024	20 LF	805	FURNISH AND INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	20 LF	805	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8042	30 LF	810	FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR (NO.14 AWG)
8044	100 LF	810	FURNISH AND INSTALL ELECTRICAL CABLE 5 CONDUCTOR (NO.14 AWG)
8084	8 EA	814	FURNISH AND INSTALL 12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8085	4 EA	814	FURNISH AND INSTALL 8" VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8074	1 EA	818	INSTALL 21' GALVANIZED STEEL POLE W/ MAST ARM 54 FOOT
8019	1 EA	816	INSTALL CONTROLLER AND CABINET-POLE MOUNT
8034	1 EA	804	FURNISH AND INSTALL GROUND ROD-3/4" DIA. X 10' LENGTH
8066	1 EA	807	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT(120/240V, 1PH,3W)
8053	21 SF	813	INSTALL OVERHEAD SIGN
8033	1 EA	812	FURNISH AND INSTALL HANDHOLE
8043	30 LF	810	FURNISH AND INSTALL ELECTRICAL CABLE 3 CONDUCTOR (NO.14 AWG)
8065	20 LF	805	FURNISH AND INSTALL 1" RIGID METAL ELECTRICAL GALVANIZED CONDUIT RISER
8069	1 EA	806	FURNISH AND INSTALL PHOTOCCELL
8000	1 EA		FURNISH AND INSTALL 14" x 10" x 7" AUXILIARY CABINET
5007	500 LF	SP 555	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH

WIRING DIAGRAM



CONOWINGO POWER COMPANY C & P # 35

WIRING KEY

- A 2 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
- B 3 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) FOR PHOTCELL
- C,D,E 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- F,G,H 3 RUNS 1 CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG)
- I STRANDARD BARE COPPER GROUND WIRE NO 6 AWG
- PS POWER SOURCE OVERHEAD
- x GROUND ROD

PHASE CHART

	1	2	3	4	
	(R)	(R)	(R)	(R)	
	(Y)	(Y)	(Y)	(Y)	
NORMAL OPERATION	8" FL/Y	8" FL/Y	8" FL/Y	8" FL/Y	← →
POINT CONTROL OPERATION	8" FL/Y QUICK	8" FL/Y QUICK	8" FL/Y QUICK	8" FL/Y QUICK	←
	12" FL/Y	12" FL/Y	12" FL/Y	12" FL/Y	→
	12" R	12" R	12" R	12" R	→
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	← →

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

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

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

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

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

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

The Power Company
Representative Is:
Mr. Joe Weber
Baltimore Gas and Electric
7317 Parkway Drive
Hanover MARYLAND 21076
PHONE: (410) 859-9026

----- EXISTING GEOMETRICS
----- PROPOSED GEOMETRICS

LEGEND OF UTILITIES

- A — A — AERIAL
- G — G — GAS MAIN
- W — W — WATER MAIN
- S — S — SEWER MAIN
- E — E — ELECTRIC CABLES
- T — T — TELEPHONE CABLES
- C — C — CABLE TELEVISION

LOG MILE: 12016513.74

REVISIONS	APPROVALS	<p>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION</p>	GENERAL INFORMATION		
	CHIEF, DESIGN SECTION		MD. 165 (PYLESVILLE ROAD) & NORTH HARFORD MIDDLE SCHOOL		
	ASST. DISTRICT ENGINEER, TRAFFIC		DRAWN BY: C. G. MUNZ	F.A.P. NO. M. WOLNIAK	TS NO. 3910
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION		CHK. BY: M. WOLNIAK	S.H.A. NO. H188A51/BS1	SHEET NO. 2 OF 2
	DIRECTOR, TRAFFIC & SAFETY	SCALE: 1" = 20'	DATE: JUNE 1999	COUNTY: HARFORD	