DRILL HOLES

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BORGER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new Firehouse Traffic Signal at MD 118 and West Germantown Fire Station #22 with street lighting and interconnect to the adjacent traffic signal to the north at MD 117 and MD 118 in Germantown, Montgomery County. MD 118 (Germantown Rd) runs in an north - south direction.

II. INTERSECTION OPERATION

A. MD 118 AND WEST GERMANTOWN FIRE STATION # 22 DRIVEWAY

The firehouse traffic signal shall flash 8" Yellow for MD 118 and flash Red for the firehouse driveway during normal operation. A full traffic-actuated, eight phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this location.

PRE-EMPTION - 1

When pre-empted by pushbutton activation from within the firehouse the mainline (MD 118) shall go to an 8" Yellow quick flash and then 12" solid Yellow and to Red. The indications for the Firehouse shall go to 8" flashing Yellow.

PRE-EMPTION - 2

When pre-empted by pushbutton activation from within the firehouse, the southbound MD 118 signals shall go to an 8" Yellow quick flash and then 12" solid Yellow and to Red. The northbound signals MD 118 remain green.

B. MD 117 AND MD 118

PRE-EMPTION - 1

The existing Phasing shall remain. The Pre-emption Phase shall consist of Northbound MD 118 thru and left turn phases being Green with all other movements being Red. The existing base-mounted cabinet and controller shall remain.

PRE-EMPTION - 2

Normal Operation is not affected.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, for the new controller excluding interconnect, to the appropriate terminals and shall properly label each cable.
2. All controller cabinet wiring for both the existing and proposed controllers will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #3 (Montgomery County) are as follows:

Mr. Jeff Wentz
Assistant District Engineer - Traffic
Phone: (301) 513-7318

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350

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

Mr Keith Lord
Montgomery County Signal Shop
(301) 674-8365

Mr. Sonny Bailey
Sign Shop
410-787-7670

The power company representative is:

Mr. Steve Custer
PEPCO Customer Design
201 W Guide Dr.,
Rockville, MD 20850
Phone: 301 548-4333

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

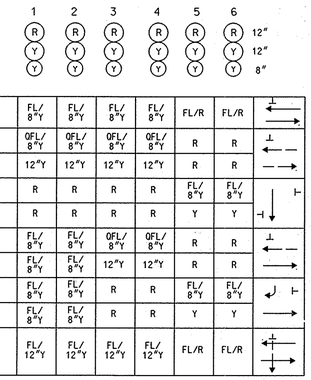
THERE IS NO EQUIPMENT TO BE SUPPLIED BY YHE SHA.

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

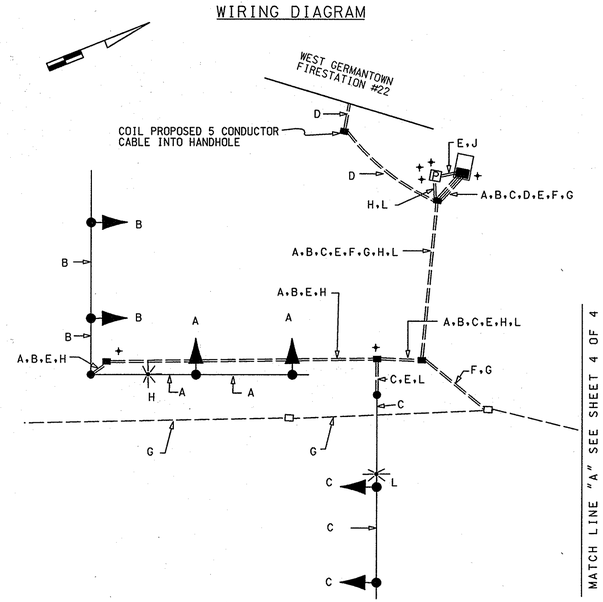
SPEC. NUMBER	DESCRIPTION	QUANTITY
814	12", one-way, three-section (R,12"Y,8"Y) LED traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	6 EA
	Eight-phase, full-traffic actuated, solid state digital controller with 4-channel, rack mount loop detector amplifiers and intersection Monitor with battery backup housed in a NEMA size "6 "- mounted cabinet	1 EA
205	Test pit excavation.	4 C.Y.
801	Furnish and install concrete for signal foundation.	10.5 C.Y.
813	Ground mounted sheet aluminum signs to consist of:	36 S.F.
	W11-8 "Firestation (Symbolic)" sign (36" x 36") with hardware.	2 EA
	W11-12p "EMERGENCY SIGNAL AHEAD" sign, (36"x36") ground mounted with hardware.	2 EA
813	Overhead (mast arm) mounted sheet aluminum sign consisting of:	57.5 S.F.
	R3-2"NO LEFT TURN (Symbolic)" sign, (30" x 30").	2 EA
	R10-13 "EMERGENCY SIGNAL" sign, (72" x 36").	2 EA
	W9-2(4) "LANE ENDS / MERGE LEFT" sign, (42"X30").	1 EA
556	24" white heat applied permanent preformed thermoplastic pavement marking	100 L.F.
805	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched	15 L.F.
805	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	20 L.F.
805	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - trenched	385 L.F.
805	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	150 L.F.
811	Furnish and install electrical handhole.	5 EA
810	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).	904 L.F.
810	Furnish and install 1-conductor electrical cable (No. 4 A.W.G.) THHN/THWN.	20 L.F.
810	Furnish and install ground rod -3/4" x 10'.	6 EA
810	Furnish and install No. 6 AWG stranded bare copper ground wire.	290 L.F.
810	Furnish and install tray cable - 2 conductor (No. 12 AWG)	500 L.F.
810	Furnish and install 12-pair communication cable, (jelly filled).	700 LF
806	Furnish and install 250 watt HPS Luminaire with photocell.	2 EA
808	Furnish and install 20' lighting bracket arm for traffic signal structure.	2 EA
812	Furnish and install wood sign supports (4"x6").	32 L.F.
	Reroute existing interconnect cable.	525 L.F.
	Furnish and install 27' steel pole pole and 50' mast arm.	1 EA
	Relocate existing ground mounted sign.	2 EA
	Furnish and install 27' steel pole pole and twin (50'/60') arms.	1 EA
	Meter Pedestal	1 EA
	Cable - 1 conductor (No. 250 KCMIL), Cu. USE	100 L.F.

PHASE CHART

FIREHOUSE



WIRING DIAGRAM



WIRING KEY

A, B, C, D - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
E - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
F - 12-PAIR VOICE GRADE INTERCONNECT CABLE (JELLY FILLED)
G - EXISTING INTERCONNECT CABLE
H, L - 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G)
J - 2-1 CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
K - 1-CONDUCTOR ELECTRICAL CABLE (NO. 250 KCMIL)
EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
PS - PROPOSED UNDERGROUND SERVICE TO BE INSTALLED BY PEPCO
+ - GROUND ROD

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 118 (GERMANTOWN RD) AND WEST GERMANTOWN FIRE STATION #22

GERMANTOWN, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 10/22/07 CONTRACT NO. BW996M82

DESIGNED BY RRZ COUNTY MONTGOMERY
DRAWN BY RC LOGMILE 15011707.64
CHECKED BY Bruce Thompson 11/07 TIMS NO. I364
F.A.P. NO. TOD NO.

TS NO. ~~2443~~ 4630 B | DRAWING NO. 3 OF 4 | SHEET NO. OF

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.NW.
Glen Burnie,MD 21061
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