

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF FIREHOUSE HAZARD IDENTIFICATION BEACONS ON NORTHBOUND AND SOUTHBOUND MD 30 (HANOVER PIKE) APPROACHING OLD HANOVER ROAD FOR THE BORING VOLUNTEER FIRE DEPARTMENT IN BALTIMORE COUNTY. MD 30 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE HAZARD IDENTIFICATION BEACONS WILL BE ACTUATED WITH OPTICOM DETECTION LOCATED ON OLD HANOVER ROAD.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER, INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

SPECIAL NOTE

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 THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER, RELAY AND INTERSECTION MONITOR II WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9571	72 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH W96-7 SIGN (108 IN. x 48 IN.) - MAST ARM MOUNT

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	4 C.Y.	TEST PIT EXCAVATION
8001	9 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8014	1 EACH	MAST ARM POLE (15' T) AND 50 FT. MAST ARM
8015	2 EACH	MAST ARM POLE (15' T) AND 60 FT. MAST ARM
8018	1 EACH	PEDESTRIAN POLE (ANY SIZE)
8023	1315 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 12 A.W.G.)
8029	1200 L.F.	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8035	280 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8036	50 L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8037	35 L.F.	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8038	670 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8039	70 L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8045	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 V. 60 AMPS
8046	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR (NO. 4 AWG) - THHN/THWN
8052	8 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8055	72 S.F.	INSTALL OVERHEAD SIGN
8057	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 76
8058	3 EACH	OPTICOM EMITTER SYSTEM, 700 SERIES
8059	1 EACH	OPTICOM NO. 721 DETECTOR EYE
8073	4 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH x 10 FOOT LENGTH
8075	4 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8077	50 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
8078	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8083	50 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8094	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT OR OTHERS AS NECESSARY FOR MAINTENANCE OF TRAFFIC.

- STANDARD NO. MD-104.00 - 104.00-30 STANDARD NO. MD-104.32-01 (INTERSECTION FLAGGING OPERATION)
- STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)
- STANDARD NO. MD-104.33-01 (SHOULDER WORK)
- STANDARD NO. MD-104.34 (LANE SHIFT)

EQUIPMENT LIST "C"

NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

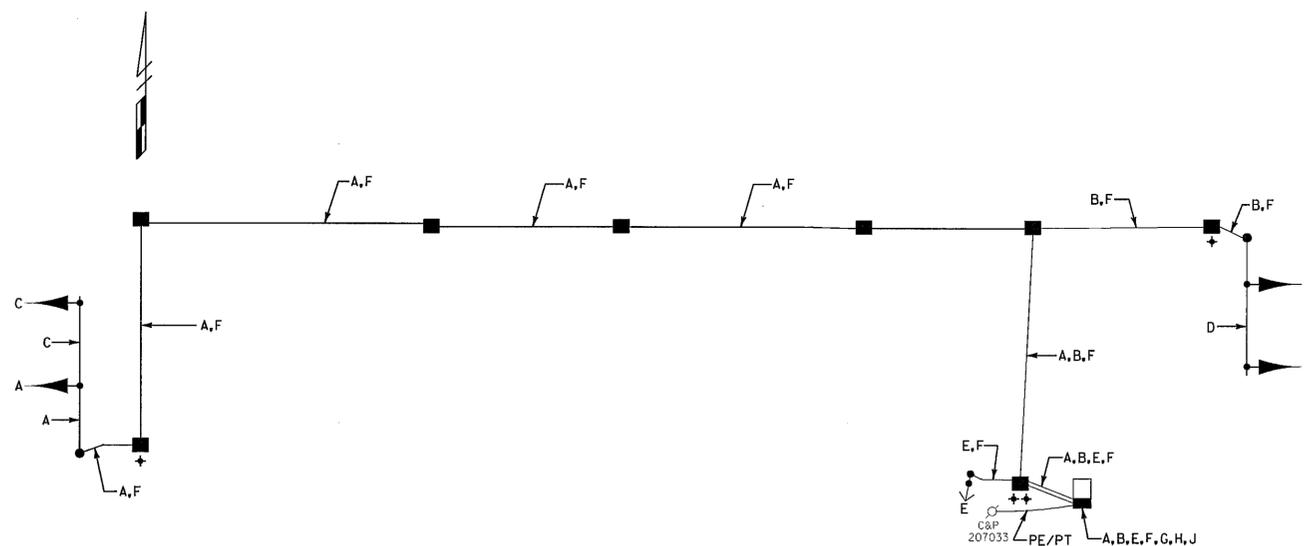
MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781/2785

MS. SUENETTE POPE
DISTRICT UTILITY ENGINEER
PHONE: (410) 321-2841

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM



WIRING KEY

- A } 5-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- B } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- C } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E } 4-CONDUCTOR OPTICOM DETECTOR CABLE
- F } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- G } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- H } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- J } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

PE/PT - PROPOSED UNDERGROUND TELEPHONE SERVICE

+ - 3/4 IN. X 10 FT. GROUND ROD

(A) REVISION NO. 1
MODIFIED CONDUIT LAYOUT
04/21/04



Whitman, Reardon and Associates, LLP

801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
HAZARD IDENTIFICATION BEACON
NORTHBOUND AND SOUTHBOUND MD 30
OLD HANOVER RD @ GLEN FALLS RD

DRAWN BY: B. DONOWAY	F.A.P. NO.:	TS NO.:
CHECKED BY: N. LEARY	S.H.A. NO. AT3575185	TS-4311A
SCALE: NONE	COUNTY: BALTIMORE	T.I.M.S. NO.:
DATE: 4/22/2004	LOG MILE: 03030002.51	G173

SHEET NO.

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