

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF AN INTERSECTION CONTROL BEACON AT THE I-83 NORTHBOUND OFF-RAMP AND MIDDLETOWN ROAD IN BALTIMORE COUNTY. MIDDLETOWN ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CONTROL BEACON WILL OPERATE IN A FLASHING MODE WITH THE MIDDLETOWN ROAD AND I-83 NORTHBOUND OFF-RAMP SIGNAL INDICATIONS FLASHING RED.

CONTROLLER REQUIREMENTS

INSTALL TWO-CIRCUIT FLASHER UNIT WITH PHOTOCELL, DIMMER SWITCH AND INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "5" POLE 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 INSTALLATIONS. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EACH	27 FT. STEEL POLE WITH 60 FT. MAST ARM AND ANCHOR BOLTS
9000	6 EACH	12 IN., ONE-WAY, ONE SECTION (R) LED TRAFFIC SIGNAL HEAD
9080	1 EACH	TWO CIRCUIT FLASHER UNIT WITH PHOTOCELL, DIMMER SWITCH AND INTERSECTION MONITOR II WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.
9089	76 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH R1-1 SIGN (30 IN. x 30 IN.) - GROUND MOUNT - 1 EACH R3-1 SIGN (30 IN. x 30 IN.) - GROUND MOUNT - 1 EACH R3-1 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT - 1 EACH R3-2 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT - 2 EACH W3-1a SIGN (36 IN. x 36 IN.) - GROUND MOUNT - 4 EACH R1-3 SIGN (12 IN. x 6 IN.) - GROUND MOUNT - 1 EACH R5-1 SIGN (30 IN. x 30 IN.) - GROUND MOUNT - 2 EACH R5-1a SIGN (36 IN. x 24 IN.) - GROUND MOUNT

EQUIPMENT LIST "B"

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

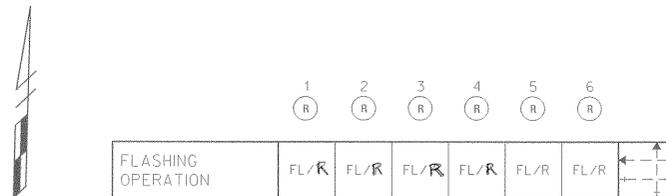
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	1 C.Y.	TEST PIT EXCAVATION
5000	175 L.F.	5 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING
5003	30 L.F.	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
8012	1 EACH	FURNISH AND INSTALL PHOTOCELL
8023	6 EACH	INSTALL SIGNAL HEAD (ANY TYPE)
8024	1 EACH	INSTALL STEEL POLE AND SINGLE MAST ARM
8028	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8031	50 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8033	30 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8037	5 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8038	20 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8047	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V, 1 PHASE 3 WIRE SYSTEM)
8049	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8050	62 S.F.	INSTALL GROUND MOUNTED SIGN
8051	14 S.F.	INSTALL OVERHEAD SIGN
8054	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G - TYPE USE, 600V
8057	1 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8061	30 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 3 CONDUCTOR (NO. 14 A.W.G.)
8062	90 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G)
8063	235 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G)
8069	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT
8000	85 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. X 4 IN.
NEG.	100 L.F.	10 IN. LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
NEG.	2 EACH	FURNISH AND INSTALL SQUARE PERFORATED TUBULAR STEEL POST
NEG.	2 EACH	FURNISH AND INSTALL SQUARE PERFORATED TUBULAR STEEL ANCHOR BASE

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

- STANDARD NO. MD-104.00 - 104.00-12
- STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)
- STANDARD NO. MD-104.33-01 (SHOULDER WORK)
- STANDARD NO. MD-104.35-01 (LANE SHIFT)

PHASE CHART



PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. DAVE MALKOWSKI
DISTRICT ENGINEER
PHONE: (410) 321-3461

MR. JOE McMAHON
DISTRICT UTILITIES ENGINEER
PHONE: (410) 321-3456

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-3514

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

MR. DAVE RAMSEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-3468

WIRING DIAGRAM



WIRING KEY

A, B, C } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

D, E, F } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

G } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

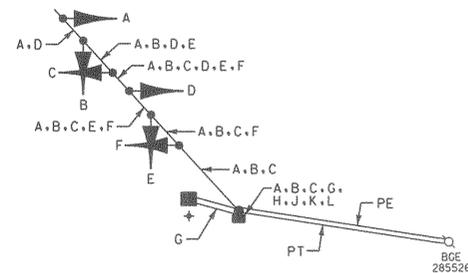
H, J, K } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

L } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

PE - PROPOSED OVERHEAD ELECTRICAL SERVICE

PT - PROPOSED UNDERGROUND TELEPHONE SERVICE

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



WR&A
Whitman, Reardon
and Associates, LLP
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
I-83 NB OFF-RAMP AND MIDDLETOWN ROAD

DRAWN BY: S. BLOSS	F.A.P. NO. TS-4140	TS NO. TS-4140	SHEET NO. 2 OF 2
CHECKED BY: N. LEARY	S.H.A. NO. 2385472502886	T.I.M.S. NO. E918	
SCALE: NONE	COUNTY: BALTIMORE	LOG MILE: 03083023.67	
DATE: 9/14/01			