F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW INTERSECTION CONTROL BEACON AND STREET LIGHTING AT THE INTERSECTION OF MD 227 AND MIDDLETOWN ROAD/TURKEY HILL ROAD IN CHARLES COUNTY. MD 227 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE TRAFFIC SIGNAL WILL OPERATE IN A FLASHING MODE WITH MD 227 SIGNAL INDICATIONS FLASHING YELLOW AND MIDDLETOWN ROAD/TURKEY HILL ROAD SIGNAL INDICATIONS FLASHING RED.

CONTROLLER REQUIREMENTS

INSTALL A NEMA SIZE "6" BASE MOUNTED CABINET, TWO-CIRCUIT FLASHER UNIT WITH PHOTO-CELL, DIMMER SWITCH AND INTERSECTION MONITOR II, WITH BATTERY BACK-UP FOR PHONE DROP.

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 WITH THE NEAREST STREET ADDRESS, ZIPCODE AND PHONE NUMBER.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

MR. PAUL D. ARMSTRONG
ACTING, DISTRICT ENGINEER
PHONE: (410) 841-5450

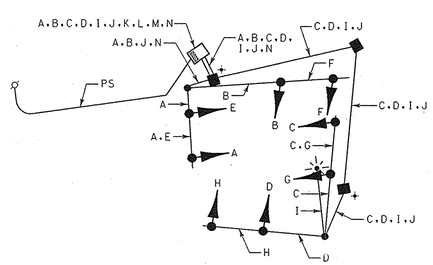
MR. LAWRENCE E. ELLIOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-5450

MR. ERNEST L. HODSHON
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-5462

MR. JOHN MAYS
DISTRICT UTILITIES ENGINEER
PHONE: (410) 841-5450

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

WIRING DIAGRAM



WIRING KEY

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

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

I — 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)

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

K, L, M — 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

N — 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

PS - PROPOSED UNDERGROUND ELECTRICAL SERVICE

⏚ 3/4 IN. GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9012	4 EACH	12 IN., ONE-WAY, ONE-SECTION (Y) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS.
9012	4 EACH	12 IN., ONE-WAY, ONE-SECTION (R) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR MAST ARM MOUNTING AND TUNNEL VISORS.
9080	1 EACH	TWO CIRCUIT FLASHER UNIT, DIMMER SWITCH AND INTERSECTION MONITOR II WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.
9089	100 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
	- 4 EACH	D3-2 SIGN (VARIABLE X 16 IN.) DUAL FACED - MAST ARM MOUNT.
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "WEST, MD 227, LEFT ARROW" (36 IN. X 75 IN.) - POLE MOUNT.
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "WEST, MD 227, RIGHT ARROW" (24 IN. X 51 IN.) - POLE MOUNT.
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "EAST, MD 227, RIGHT ARROW" (24 IN. X 51 IN.) - POLE MOUNT.
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "EAST, MD 227, LEFT ARROW" (36 IN. X 75 IN.) - POLE MOUNT.

PHASE CHART

	1	2	3	4	5	6	7	8
	Y	Y	Y	Y	R	R	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	3 C.Y.	TEST PIT EXCAVATION
8001	7 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8006	4 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8011	8 EACH	INSTALL SIGNAL HEAD
8020	1 EACH	INSTALL CABINET - BASE MOUNT
8024	250 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8030	50 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8032	90 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
8033	3 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	3 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
8043	50 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 A.W.G.)
8044	80 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8045	510 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8046	180 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
8047	2 EACH	FURNISH AND INSTALL MAST ARM POLE AND TWIN 50 FT./50 FT. MAST ARMS
8049	140 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
8050	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 1 CONDUCTOR - THHN/THWN (NO. 4 A.W.G.)
8053	56 L.F.	INSTALL GROUND MOUNTED SIGN
8054	44 S.F.	INSTALL OVERHEAD SIGN
8056	1 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8057	1 EACH	FURNISH AND INSTALL 20 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE
8064	1 EACH	USE EXISTING DISK AND AS-BUILT TRAFFIC CONTROL DEVICES
8070	1 EACH	CONTROL AND DISTRIBUTION EQUIPMENT
8073	1 EACH	FURNISH AND INSTALL PHOTOCELL
8000	LUMP SUM	TRIM TREE

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

REVISIONS	APPROVALS	REVISIONS
	ASSISTANT DIVISION CHIEF	
	ASST. DISTRICT ENGINEER, TRAFFIC	
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY	

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET

MD 227 AND MIDDLETOWN ROAD/TURKEY HILL ROAD

DATE: 8-4-97	DRAWN BY: S.BLOSS	F.A.P. NO. STPG-000S(590)E	PLAN SHEET NO.: TS-3660	SHEET NO. 2 OF 2
SCALE: NONE	DESIGNED BY: N.LEARY	S.H.A. NO. AW219-5785		
APPROVED BY:	CHECKED BY: T.HANNAN	COUNTY CHARLES M5V		

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