

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE UPGRADE OF AN EXISTING INTERSECTION CONTROL BEACON TO A NEW FULL-TRAFFIC-ACTUATED SIGNAL AT THE INTERSECTION OF MD 175 AND OCEANO AVENUE/ JESSUP PARK ENTRANCE IN HOWARD COUNTY, MARYLAND. MD 175 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 175 APPROACHES OPERATING CONCURRENTLY AND THE OCEANO AVENUE/ JESSUP PARK ENTRANCE APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR THE WESTBOUND MD 175 APPROACH.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, SYSTEM PACKAGE, VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS), HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

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.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

- STANDARD NO. MD-104.04-01 (SHOULDER WORK)
- STANDARD NO. MD-104.02-03 (LANE SHIFT RIGHT OR LEFT)
- STANDARD NO. MD-104.02-09 (FLAGGER OPERATION)
- STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)
- STANDARD NO. MD-104.04-15 (INTERSECTION LEFT LANE, TURN BAY)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140/8141

MR. ANDREA ABEND
DISTRICT UTILITY ENGINEER
PHONE: (301) 624-8115/8116

MR. RAY JOHNSON
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 624-8105/8106

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

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	166 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 4 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 2 EACH D3-3 SIGN (72" x 24") - GROUND MOUNT - 1 EACH R3-6 SIGN (30" x 36") - MAST ARM MOUNT - 1 EACH R3-5(R) SIGN (30" x 36") - MAST ARM MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD, LEFT ARROW" (36 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD, RIGHT ARROW" (24 IN. x 51 IN.) - GROUND MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD, LEFT ARROW" (36 IN. x 75 IN.) - GROUND MOUNT - 2 EACH W3-3 SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL (24 IN. x 24 IN.) AND FLAG - GROUND MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST "B"

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

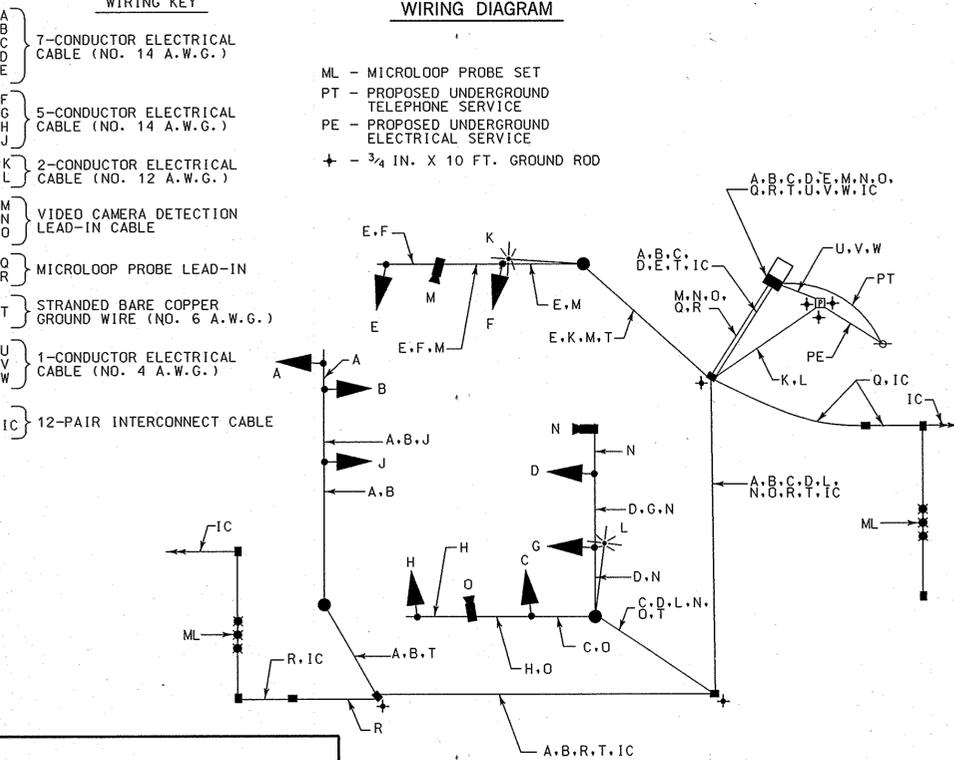
ITEM NO.	QUANTITY	DESCRIPTION
1001	3 EACH	MAINTENANCE OF TRAFFIC
2001	3 C.Y.	TEST PIT EXCAVATION
5001	300 L.F.	5 INCH HEAT APPLIED WHT OR YEL PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5002	575 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	150 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	28 EACH	12 INCH LED SIGNAL HEAD SECTION
8004	3 EACH	8 INCH LED SIGNAL HEAD SECTION
8007	2 EACH	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
8017	1 EACH	MAST ARM POLE & 60 FT MAST ARM ANY 'T' DIMENSION
8019	1 EACH	MAST ARM POLE & 50 FT MAST ARM ANY 'T' DIMENSION
8021	2 EACH	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT.
8022	1 EACH	REM & DISPOSE MAT & EQUIP PER ASSIGN
8025	1 EACH	TWIN MAST ARM POLE & 50 FT/50 FT MAST ARMS ANY 'T' DIMENSION
8027	3 EACH	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8030	6300 L.F.	12 - PAIR COMMUNICATION CABLE, SELF-SUPPORTING OR JELLYFILLED
8035	90 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8036	4635 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8037	535 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8038	140 L.F.	WOOD SIGN SUPPORTS UP TO 4 X 6
8040	166 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8042	95 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8044	1 EACH	METERED SERVICE PEDESTAL EMBEDDED
8046	95 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8048	32 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8057	70 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	1050 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8059	305 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC
8065	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

PHASE CHART

	1	2	3	4	5	6	7	8	9
PHASE 1 AND 6	G	G	G	R	R	R	R	R	R
1 AND 6 CHANGE	G	G	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R
PHASE 4 AND 8	R	R	R	R	R	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

WIRING KEY

WIRING DIAGRAM



TOD NO: AX142-23M
SHA NO: HO407A54/B54
MD 175@ OCAENO AVE

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 175 AND Oceano Ave/Entr. to Jessup Park

GENERAL INFORMATION SHEET

SCALE	NONE	ADVERTISED DATE	8/2008	CONTRACT NO.	AX142.5185
DESIGNED BY	B. DONOWAY	COUNTY	HOWARD		
DRAWN BY	B. DONOWAY	LOGMILE	130.175 00.52		
CHECKED BY	N. Leary	TIMS NO.	1484		
F.A.P. NO.		TOD NO.			
TS NO. 4001C	DRAWING TSP-2	OF 2	SHEET NO. 6	OF 6	



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