

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 50 AND MD 565/BARBER ROAD IN TALBOT COUNTY, U.S. 50 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 50 APPROACHES OPERATING CONCURRENTLY AND THE MD 565/BARBER ROAD APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR EASTBOUND AND WESTBOUND U.S. 50 APPROACHES.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH THREE (3) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

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

- STANDARD NO. MD-104.00 - 104.00-30
- STANDARD NO. MD-104.37-01 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.38-01 (RIGHT LANE CLOSURE)
- STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT LANE CLOSURE)
- STANDARD NO. MD-104.43-01 (SHOULDER WORK)
- STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE)
- STANDARD NO. MD-104.46-01 (CENTER LANE CLOSURE)
- STANDARD NO. MD-104.48-01 (INTERSECTION TURN BAY LANE CLOSURE)
- STANDARD NO. MD-104.49-01 (SHOULDER WORK)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RICHARD LINDSAY
DISTRICT ENGINEER
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MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
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MR. TERRY WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 778-3061

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9002	3 EACH	FOUR CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
9081	1 EACH	EIGHT PHASE, FULL TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR AND HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9089	100 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH D-3(1) SIGN (VARIABLE X 16 IN.) DUAL FACED - MAST ARM MOUNT - 2 EACH R10-12 SIGN (36 IN. X 42 IN.) - MAST ARM MOUNT - 1 EACH R3-5R SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT - 2 EACH M95-1 SIGN (72 IN. X 24 IN.) - MAST ARM MOUNT - 2 EACH R4-7 SIGN (36 IN. X 48 IN.) - GROUND MOUNT
9105	1 EACH	27' STEEL POLE WITH 38' SERIES MAST ARM AND ANCHOR BOLTS
9107	NON-INVENTORY 1 EACH	27' STEEL POLE WITH 70' SERIES MAST ARM AND ANCHOR BOLTS
9000	1 EACH	21' STEEL POLE WITH 60' SERIES MAST ARM AND ANCHOR BOLTS
9000	1 EACH	21' STEEL POLE WITH 56' MAST ARM AND ANCHOR BOLTS

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	10 C.Y.	TEST PIT EXCAVATION
6001	100 S.F.	4 INCH CONCRETE SIDEWALK
8001	20 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION STRUCTURE
8006	4 EACH	CUT, CLEAN, GALVANIZE, AND CAP TRAFFIC SIGNAL STRUCTURE
8017	4 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FOOT LEAD-IN
8020	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8021	850 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8022	40 L.F.	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8023	80 L.F.	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	1100 L.F.	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	40 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8030	80 L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8032	400 L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8033	12 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	7 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FT. LENGTH
8040	2800 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8041	1200 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8044	120 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8045	2300 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8046	350 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.) TYPE IN. TC. IN.
8048	520 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8049	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG - THHN, THWN
8051	34 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCH X 6 INCH
8052	24 S.F.	INSTALL GROUND MOUNTED SIGN
8053	76 S.F.	INSTALL OVERHEAD SIGN
8055	1 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8056	1 EACH	FURNISH AND INSTALL 15 FOOT LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8057	5 EACH	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 INCH BELOW GRADE
8058	5 EACH	REMOVAL OF EXISTING CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE
8059	1 EACH	DELIVERY OF REMOVED CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE
8060	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8066	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V. 1 PHASE 3 WIRE SYSTEM)
8074	4 EACH	INSTALL STEEL POLE AND SINGLE MAST ARM (ANY SIZE)
8084	32 EACH	HEAD SECTION
8085	6 EACH	FURNISH AND INSTALL 8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8086	6 EACH	FURNISH AND INSTALL 12 INCH OPTICALLY PROGRAMMED TRAFFIC SIGNAL HEAD SECTION

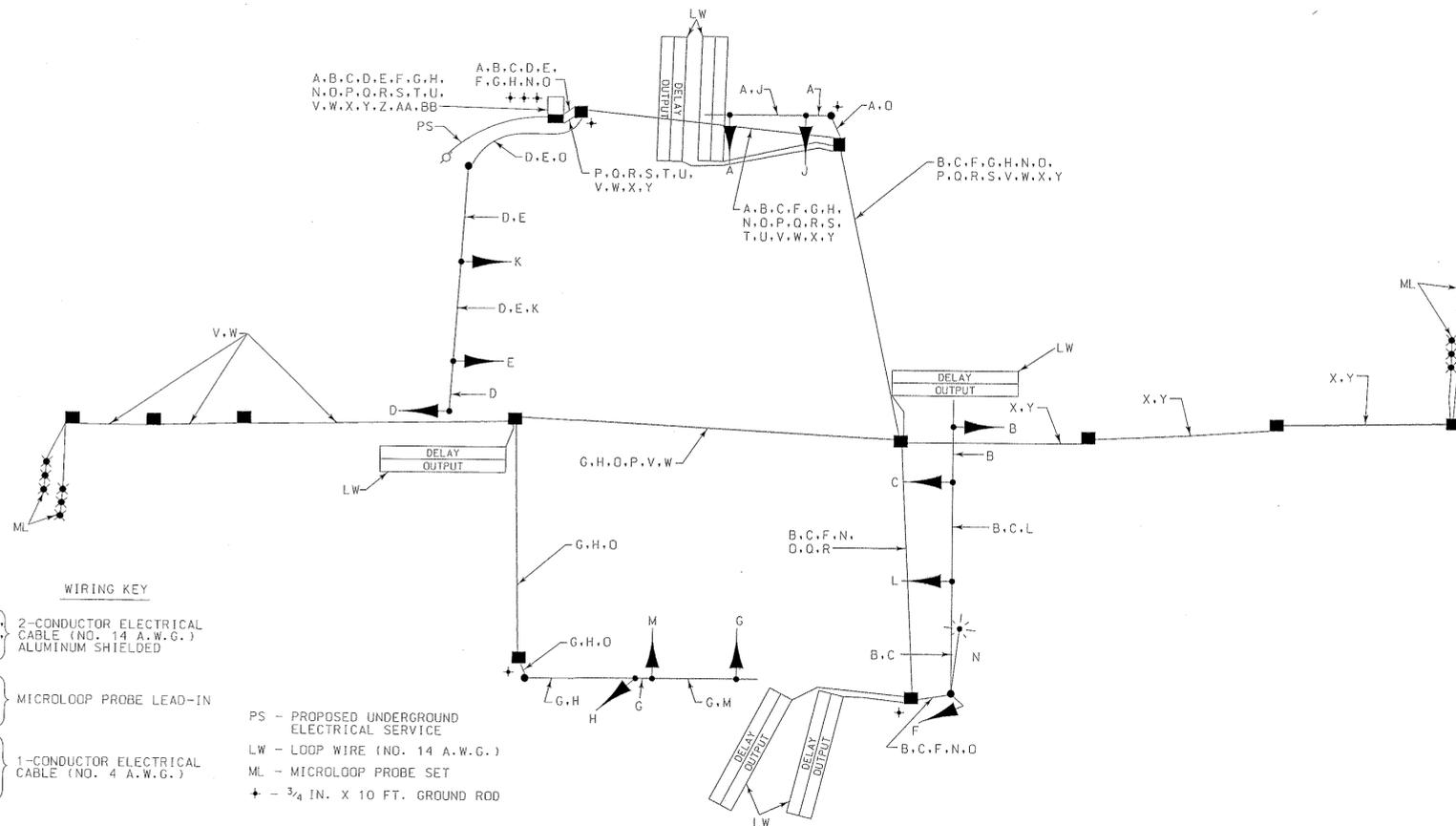
EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

- 1 EACH - BASE MOUNTED CABINET AND CONTROLLER

PHASE CHART

INTERSECTION OPERATION TO REMAIN THE SAME.



WIRING KEY

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

P, Q, R, S, T, U } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED

J, K, L, M } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

V, W, X, Y } MICROLOOP PROBE LEAD-IN

N } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)

Z, AA, BB } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

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

PS - PROPOSED UNDERGROUND ELECTRICAL SERVICE
 LW - LOOP WIRE (NO. 14 A.W.G.)
 ML - MICROLOOP PROBE SET
 + - 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
 TRAFFIC SIGNALIZATION PLAN
 U.S. 50 @ MD 565/BARBER ROAD

DRAWN BY: J.MONALDI	F.A.P. NO.:	TS NO.	SHEET NO.
CHECKED BY: NLEARY	S.H.A. NO.:	TS-402G	
SCALE: 1" = 20'	COUNTY: TALBOT	T.I.M.S. NO.	2 OF 2
DATE: \$DATE\$	LOG MILE:		