PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AND STREET LIGHTING AT THE INTERSECTION OF U.S. 50 BUS. AND BEAGLIN PARK DRIVE AND THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 350 AND BEAGLIN PARK DRIVE IN WICOMICO COUNTY. U.S. 50 AND MD 350 (MT. HERMON ROAD) ARE ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

1. U.S. 50 BUS. AND BEAGLIN PARK

   THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC ACTUATED MODE WITH THE U.S. 50 BUS. APPROACHES OPERATING CONCURRENTLY AND THE BEAGLIN PARK DRIVE APPROACHES OPERATING IN A SPLIT PHASE MODE.

   EXCLUSIVE LEFT-TURN PHASES ARE PROVIDED FOR EASTBOUND AND WESTBOUND U.S. 50 BUS.

   EMERGENCY PRE-EMPTION WILL BE PROVIDED ON ALL LEGS OF THE INTERSECTION. THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS AN EMERGENCY VEHICLE PRE-EMPTS THE TRAFFIC SIGNAL AND STOPS THE U.S. 50 BUS. OR NORTHBOUND BEAGLIN PARK DRIVE APPROACHES.

2. MD 350 (MT. HERMON ROAD) AND BEAGLIN PARK DRIVE

   THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC ACTUATED MODE WITH THE MD 350 (MT. HERMON ROAD) APPROACHES OPERATING CONCURRENTLY AND THE BEAGLIN PARK DRIVE APPROACHES OPERATING IN A SPLIT PHASE MODE.

   EXCLUSIVE/PERMISSIVE LEFT-TURN PHASES ARE PROVIDED FOR EASTBOUND AND WESTBOUND MD 350.

   EMERGENCY PRE-EMPTION WILL BE PROVIDED ON NORTHBOUND BEAGLIN PARK DRIVE APPROACH. THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS AN EMERGENCY VEHICLE PRE-EMPTS THE TRAFFIC SIGNAL AND STOPS THE MD 350 (MT. HERMON ROAD) APPROACHES FOR THE NORTHBOUND BEAGLIN PARK DRIVE APPROACH.

CONTROLLER REQUIREMENTS

1. U.S. 50 BUS. AND BEAGLIN PARK DRIVE

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

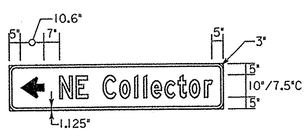
2. MD 350 (MT. HERMON ROAD) AND BEAGLIN PARK DRIVE

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

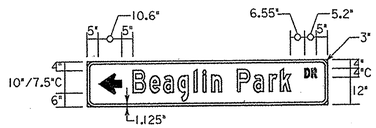
PHONE DROP

PHONE SERVICE TO U.S. 50 BUS. AND BEAGLIN PARK DRIVE INTERSECTION SHALL BE PROVIDED FROM THE MD 350 AND BEAGLIN PARK DRIVE INTERSECTION.

SIGN DETAILS



DETAIL 'A'



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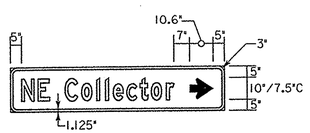

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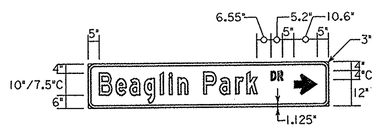

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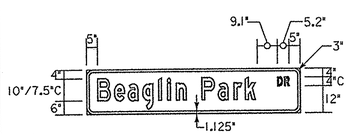

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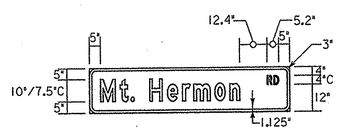

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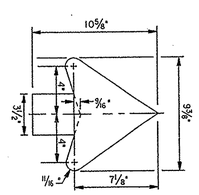

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODE	QUANTITY	DESCRIPTION
963010	2 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
971017	2 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
900000	2 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
973023	185 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
	- 3 EACH	R3-5L SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
	- 2 EACH	R10-12 SIGN (36 IN. x 42 IN.) - MAST ARM MOUNT
	- 1 EACH	D-3(1) MOD. SIGN (108 IN. x 20 IN.) DUAL FACED - MAST ARM MOUNT
	- 3 EACH	D-3(1) MOD. SIGN (96 IN. x 20 IN.) DUAL FACED - MAST ARM MOUNT
	- 2 EACH	D-3(1) MOD. SIGN (90 IN. x 20 IN.) DUAL FACED - MAST ARM MOUNT
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "BUSINESS, EAST, U.S. 50, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "BUSINESS, WEST, U.S. 50, LEFT ARROW" (36 IN. x 75 IN.) - POLE MOUNT
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "BUSINESS, WEST, U.S. 50, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT
	- 1 EACH	ASSOCIATED SHIELD ASSEMBLY "BUSINESS, EAST, U.S. 50, LEFT ARROW" (36 IN. x 75 IN.) - POLE 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 AT MD 350 AND U.S. 50 BUS. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

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. GENE COFIELL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 677-4040

MR. JAMES R. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 677-4010

MR. BRUCE W. POOLE
DISTRICT UTILITY ENGINEER
PHONE: (410) 677-4082

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

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
203030	4 C.Y.	TEST PIT EXCAVATION
585624	285 L.F.	24 INCH WHITE HEAT APPLIED PREMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
801004	14 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	730 L.F.	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
805115	60 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805118	650 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805125	225 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805135	595 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	170 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805160	40 L.F.	1 INCH LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT - DETECTOR SLEEVE
807400	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT (120/240V 60 AMPS)
810010	45 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG - THHN/THWN
810550	1 EACH	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE
810555	5 EACH	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
811001	9 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	185 S.F.	INSTALL OVERHEAD SIGN
816001	8 EACH	VIDEO DETECTION CAMERA
816005	4 EACH	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	4 EACH	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816201	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO 764
816215	3 EACH	OPTICOM NO. 721 DETECTOR EYE
818010	2 EACH	14 FOOT BREAKAWAY PEDESTAL POLE
818051	2 EACH	STEEL POLE WITH TWIN 50 FOOT AND 70 FOOT MAST ARMS
822002	640 L.F.	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
831010	2 EACH	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
837001	6 EACH	GROUND ROD - ¾ INCH DIAMETER x 10 FOOT LENGTH
860270	12 EACH	8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860272	80 EACH	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860288	960 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
860292	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861107	595 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	2320 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	490 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
862102	215 L.F.	SAWCUT FOR SIGNAL (LOOP DETECTOR)
866103	2 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
871202	2 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	LUMP SUM	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
800000	610 L.F.	DISCONNECT,PULL BACK AND REROUTE CABLE
800000	2 EACH	INSTALL CONDUIT BEND IN EXISTING FOUNDATION
800000	640 L.F.	5-PAIR (NO. 22 A.W.G.) ELECTRICAL CABLE

TSP-4

WR&A
Whitman, Requardt 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
U.S. 50 BU/MD 350 AND BEAGLIN PARK INTERSECTIONS

DRAWN BY: S. BLOSS	F.A.P. NO. N/A	TS NO. 4306-G-I	SHEET NO.
CHECKED BY: N. LEARY	S.H.A. NO. W16555177		
SCALE: NONE	COUNTY: WICOMICO	T.I.M.S. NO. G006	28 OF 28
DATE: 2/25/2004	LOG MILE:		

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