

GENERAL

THIS PORTION OF THE PROJECT INVOLVES INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 237 (CHANCELLORS RUN ROAD) AND BUCK HEWITT ROAD / NORRIS ROAD IN ST. MARYS COUNTY, MARYLAND. MD 237 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 237 APPROACHES OPERATING CONCURRENTLY AND THE BUCK HEWITT ROAD / NORRIS ROAD APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR THE NORTHBOUND AND SOUTHBOUND MD 237 APPROACHES.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS THE SOUTH LEG OF MD 237. PEDESTRIAN INDICATIONS ARE PROPOSED ACROSS BUCK HEWITT ROAD AND NORRIS ROAD.

EMERGENCY PRE-EMPTION PHASES WILL BE PROVIDED FOR THE NORTHBOUND AND SOUTHBOUND MD 237 APPROACHES, THE NORRIS ROAD APPROACH AND THE BUCK HEWITT ROAD APPROACH.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

SOUTH LEG - MD 237 (CHANCELLORS RUN ROAD) AND NORRIS ROAD/BUCK HEWITT ROAD

WAIT: "WAIT TO CROSS CHANCELLORS RUN AT NORRIS AND BUCK HEWITT."*

WALK: RAPID TICK

EAST LEG - BUCK HEWITT ROAD AND MD 237 (CHANCELLORS RUN ROAD)

WAIT: "WAIT TO CROSS BUCK HEWITT AT CHANCELLORS RUN."*

WALK: RAPID TICK

WEST LEG - NORRIS ROAD AND MD 237 (CHANCELLORS RUN ROAD)

WAIT: "WAIT TO CROSS NORRIS AT CHANCELLORS RUN."*

WALK: RAPID TICK

* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPENDICULAR CROSSING IS < 10'
** MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4) CAMERAS, ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS WITH SYSTEM PACKAGE, MASTER CONTROLLER WITH TELEMETRY AND ASSOCIATED HARNESSES 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 MAYBE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-03 (LANE SHIFT)

STANDARD NO. MD-104.02-14 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

MR. MIKE HUBER
DISTRICT UTILITY ENGINEER
PHONE: (301) 624-8115

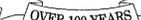
MR. JOHN S. MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

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



Whitman, Requardt and Associates, LLP
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Baltimore, Maryland 21231
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EQUIPMENT LIST "A"

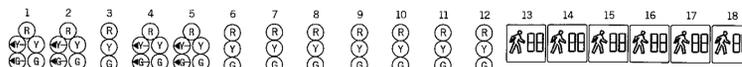
A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH TELEMETRY PANEL AND HARNESS, MASTER ASC 11 M. CONTROLLER WITH TELEMETRY MODULE AND HARNESS HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9086	1 EACH	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	148 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 4 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 237, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 237, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 237, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 237, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT - 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS CHANCELLORS RUN ROAD" - 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS BUCK HEWITT ROAD" - 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS NORRIS ROAD" - 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"

NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

PHASE CHART



PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
PHASE 1 + 6	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 6 CHANGE	R	R	R	G	G	G	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
PHASE 2 + 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
2 + 5 CHANGE	R	R	R	G	G	G	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	FLOW	FLOW	FLOW	FLOW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FLOW	FLOW
4 + 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
EMERGENCY PRE-EMPTION 1 & 2	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
EMERGENCY PRE-EMPTION 3	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "B"

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

CATEGORY CODE	QUANTITY	DESCRIPTION
203030	8 C.Y.	TEST PIT EXCAVATION
585621	405 L.F.	12 INCH HEAT APPLIED WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS LINE
585625	125 L.F.	24 INCH HEAT APPLIED WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
801004	22 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
801106	38 L.F.	WOOD SIGN SUPPORTS 4" x 6"
802501	465 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805115	210 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805118	260 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805125	120 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805135	700 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	140 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
807202	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
810010	105 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G. - THHN/THWN
810601	4 EACH	NONINVASIVE DETECTOR, 1000 FT. LEAD-IN
811001	11 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813010	2 EACH	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
813014	26 S.F.	INSTALL GROUND MOUNTED SIGN
813015	122 S.F.	INSTALL OVERHEAD SIGN
816001	4 EACH	VIDEO DETECTION CAMERA
816005	3 EACH	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
816010	1 EACH	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
816201	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
816215	4 EACH	OPTICOM NO. 721 DETECTOR EYE
818004	2 EACH	10 FOOT BREAKAWAY PEDESTAL POLE
818030	1 EACH	STEEL POLE WITH A 38 FOOT MAST ARM
818036	3 EACH	STEEL POLE WITH A 50 FOOT MAST ARM
837001	7 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
860272	44 EACH	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860292	3 EACH	CUT, CLEAN, GALVANIZED AND CAP TRAFFIC SIGNAL STRUCTURE
861107	1035 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
861105	1150 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	1600 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
861116	320 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
866103	1 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
871202	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	6 EACH	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	6 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE STATION
800000	1 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT
800000	835 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
800000	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

2009 6/4/09
GREENLINE REVISION NO. 2
REVISED QUANTITIES
5/1/2009

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 237 AND BUCK HEWITT ROAD / NORRIS ROAD

GENERAL INFORMATION SHEET

SCALE	NONE	ADVERTISED DATE	APRIL 3, 2009	CONTRACT NO.	SM7575171
DESIGNED BY	S. BLOSS	COUNTY	ST. MARYS		
DRAWN BY	S. BLOSS	LOGMILE	18023701.88		
CHECKED BY	N. LEARY	TMS NO.	H783		
F.A.P. NO.	AGSTP-HP-2442(00)E	TOD NO.			
TS NO.	4692	DRAWING TSP-10	OF 16	SHEET NO.	11 OF 36



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