

PROJECT DESCRIPTION

GENERAL
 THIS PROJECT INVOLVES THE INSTALLATION OF APS (ACCESSIBLE PEDESTRIAN SIGNALS)/CPS (COUNTDOWN PEDESTRIAN SIGNALS) AND INSTALLATION OF ADA COMPLIANT CURB RAMPS AT THE INTERSECTION OF US 1 BUSINESS (BALTIMORE PIKE) AND MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) IN HARFORD COUNTY, MARYLAND. US 1 BUSINESS IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION
 THE INTERSECTION OPERATION WILL REMAIN THE SAME.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

US 1 BUSINESS (BALTIMORE PIKE) AND MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) - NORTH LEG

INTERSECTION WITH ANGLED CROSSING
 WAIT: "WAIT TO CROSS BALTIMORE AT VETERANS MEMORIAL. CROSSWALK ANGLES RIGHT. WAIT." **
 WALK: RAPID TICK

US 1 BUSINESS (BALTIMORE PIKE) AND MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) - SOUTH LEG

INTERSECTION WITH ANGLED CROSSING
 WAIT: "WAIT TO CROSS BALTIMORE AT VETERANS MEMORIAL. CROSSWALK ANGLES RIGHT. WAIT." **
 WALK: RAPID TICK

MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) AND US 1 BUSINESS (BALTIMORE PIKE) - EAST LEG

INTERSECTION WITH ANGLED CROSSING
 WAIT: "WAIT TO CROSS VETERANS MEMORIAL AT BALTIMORE. CROSSWALK ANGLES RIGHT. WAIT." **
 WALK: RAPID TICK

MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) AND US 1 BUSINESS (BALTIMORE PIKE) - WEST LEG

INTERSECTION WITH ANGLED CROSSING
 WAIT: "WAIT TO CROSS VETERANS MEMORIAL AT BALTIMORE. CROSSWALK ANGLES LEFT. WAIT." **
 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
 THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CONTROLLER WILL BE RETROFITTED TO OPERATE APS EQUIPMENT.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9571	104 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 4 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS VIETNAM VET. MEM. HWY"
		- 4 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS BALTIMORE PIKE"
		- 3 EACH M1-5(6) SIGN (24 IN. x 48 IN.)
		- 4 EACH M1-5(6) SIGN (36 IN. x 72 IN.)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA
 ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

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-104.04-03 (LEFT LANE CLOSURE)
 STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. ERIN KUHN
 ASSISTANT DISTRICT ENGINEER - TRAFFIC
 PHONE: (410) 229-2381

MR. ROBERT SNYDER
 ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION
 PHONE: (410) 787-7631

MR. ANDRE FUTRELL
 ASSISTANT DISTRICT ENGINEER - MAINTENANCE
 PHONE: (410) 229-2361

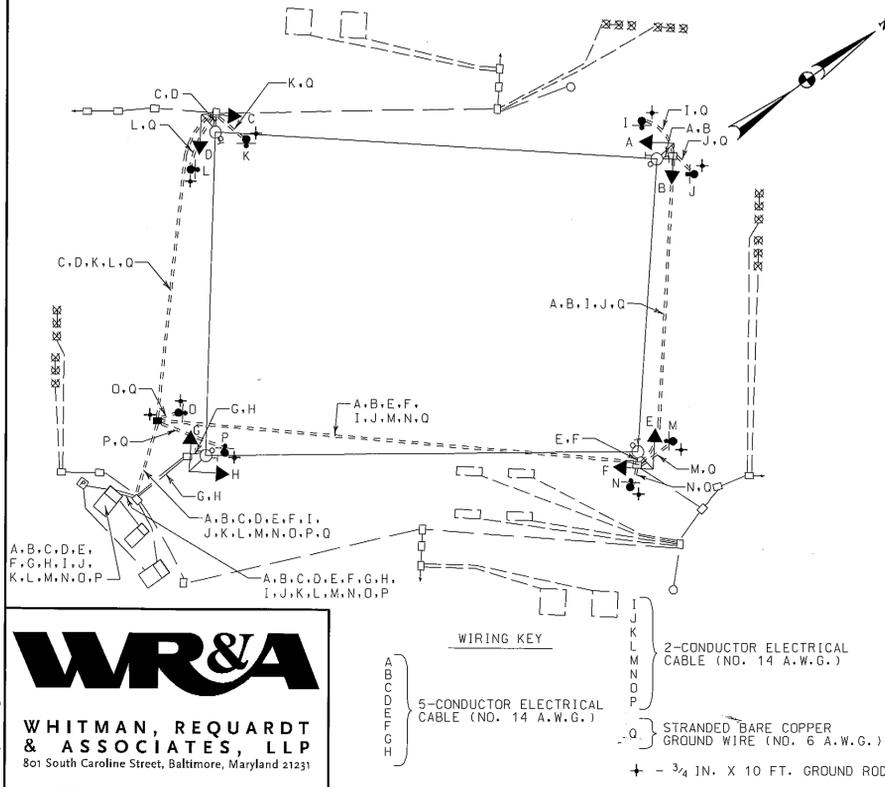
MR. MIKE PASQUARIELLO
 DISTRICT UTILITY ENGINEER
 PHONE: (410) 321-2841

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
2001	8 CY	CLASS 2 EXCAVATION
2002	8 CY	TEST PIT EXCAVATION
5003	1200 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	1250 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	100 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	690 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	2240 SF	5 INCH CONCRETE SIDEWALK
6003	180 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8002	1 EACH	2-WIRE CENTRAL CONTROL UNIT
8005	4 EACH	ADJUST HANDHOLE TO GRADE WITH NEW FRAME AND COVER
8008	8 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	8 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8016	8 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8039	365 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
8040	75 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8041	12 LF	WOOD SIGN SUPPORTS UP TO 4"x6"
8042	107 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	440 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8048	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8055	1450 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	1450 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

WIRING DIAGRAM



WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
 801 South Caroline Street, Baltimore, Maryland 21251

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
1 AND 5 CHANGE	PHASE 1 AND 5 MAY CHANGE TO PHASE 1 AND 6, PHASE 2 AND 5 OR PHASE 2 AND 6																						
PHASE 1 AND 6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	DW							
1 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	DW							
PHASE 2 AND 5	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
2 AND 5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 2 AND 6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	WK							
PED CLEARANCE	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	FLDW							
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	DW							
PHASE 3 AND 7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
3 AND 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 3 AND 8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
3 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 4 AND 7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
4 AND 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 4 AND 8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
4 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 4 AND 8 ALT	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PED CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
4 AND 8 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 1	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 1 CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW							
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	DARK							

TOD NO: XY125-14
 SHA NO: HA400B56
 US 1 Bus. @ MD 924, MD 24 @
 Marketplace Dr./MD 924 @ Ring Factory
 Rd/Bel Air/Laurel Bush Rd/Holly Wreath

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 US 1 Business and MD 24 (Veterans Memorial Hwy)
 Bel Air, MD

GENERAL INFORMATION SHEET

SCALE: N.T.S. DATE: 10/02/2012 CONTRACT NO.: XY125185

DESIGNED BY: J.D.C. COUNTY: HARFORD
 DRAWN BY: S.M.D. LOGMILE: 12.00101.98
 CHECKED BY: N.M.L. TMS NO.: L646
 F.A.P. NO.: TOD NO.:

TS NO. 1947 H DRAWING TSP-3 OF 15 SHEET NO. 3 OF 15