

**PROJECT DESCRIPTION**

**GENERAL**

THIS PROJECT INVOLVES THE INSTALLATION OF APS (ACCESSIBLE PEDESTRIAN SIGNALS/CPS (COUNTDOWN PEDESTRIAN SIGNALS AND THE UPGRADING OF SIDEWALK RAMPS AT THE INTERSECTION OF MD 140 (MAIN STREET/WESTMINISTER PIKE) AND MD 30 (HANOVER PIKE) IN BALTIMORE COUNTY, MARYLAND.

MD 140 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

**TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS**

MD 140 (MAIN STREET) AND MD 30 (HANOVER PIKE) - NORTH LEG

**INTERSECTION WITH ANGLED CROSSING**

WAIT: "WAIT TO CROSS MAIN AT HANOVER. CROSSWALK ANGLES LEFT, WAIT." \*\*

WALK: RAPID TICK

MD 140 (MAIN STREET) AND MD 140 (WESTMINISTER PIKE) - SOUTH LEG

**STREETS AT 90 DEGREES**

WAIT: "WAIT TO CROSS MAIN AT WESTMINISTER, WAIT." \*

WALK: RAPID TICK

MD 140 (WESTMINISTER STREET) AND MD 140 (MAIN STREET/MD 30 (HANOVER PIKE) - WEST LEG

**INTERSECTION WITH ANGLED CROSSING**

WAIT: "WAIT TO CROSS WESTMINISTER AT MAIN AND HANOVER. CROSSWALK ANGLES RIGHT, 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.

**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-104.02-13 (INTERSECTION FLAGGING OPERATION)

**PROJECT CONTACTS**

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

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

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

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

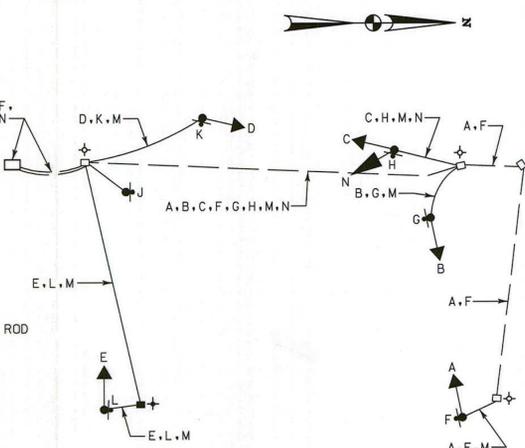
MR. RICHARD L. DAFF, SR.  
 CHIEF, TRAFFIC OPERATIONS DIVISION  
 PHONE: (410) 787-7630

MR. MIKE PASQUARIELLO  
 DISTRICT UTILITY ENGINEER  
 PHONE: (410) 229-2341

**WIRING KEY**

**WIRING DIAGRAM**

- A, B, C, D, E } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- F, G, H, J, K, L } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- N } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- M } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- + - 3/4 IN. X 10 FT. GROUND ROD
- ⊕ - EXISTING 3/4 IN. X 10 FT. GROUND ROD



**EQUIPMENT LIST "A"**

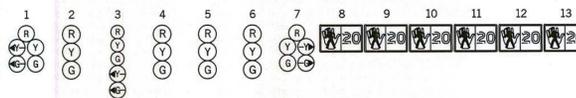
A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9571	28 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT) :
	- 4 EACH	R10-3(1) SIGN (9 IN. X 15 IN.) TO READ "PUSHBUTTON TO CROSS MAIN STREET"
	- 2 EACH	R10-3(1) SIGN (9 IN. X 15 IN.) TO READ "PUSHBUTTON TO CROSS WESTMINISTER PIKE"
	- 2 EACH	W11-2 SIGN (36 IN. X 36 IN.) AND W16-7P (24 IN. X 12 IN.) - GROUND MOUNT

**EQUIPMENT LIST "C"**

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

**PHASE CHART**



	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 2 + 5	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW
2 + 5 CHANGE	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	R	R	DW	DW	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	R	R	DW	DW	DW	DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	WK	WK	WK	WK	WK	WK
PED CLEARANCE	R	R	R	R	R	R	R	FLOW	FLOW	FLOW	FLOW	FLOW	FLOW
4 CHANGE	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	DARK	DARK	DARK	DARK	DARK	DARK

**EQUIPMENT LIST "B"**

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EACH	MAINTENANCE OF TRAFFIC
2001	8 C.Y.	CLASS 2 EXCAVATION
2002	3 C.Y.	TEST PIT EXCAVATION
5001	775 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5002	740 L.F.	5" HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS
5004	385 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	70 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	391 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	11405 <del>1345</del> S.F.	5 INCH CONCRETE SIDEWALK
6003	83 S.F.	DETECTABLE WARNING SURFACES
8001	24 EACH	12 INCH LED SIGNAL HEAD SECTION
8002	1 EACH	2 WIRE CENTRAL CONTROL UNIT
8004	3 EACH	8 INCH LED SIGNAL HEAD SECTION
8008	6 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8009	6 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8015	6 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8023	1 EACH	REM & DISPOSE MAT & EQUIP PER ASSIGN
8037	60 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8038	110 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8039	45 L.F.	WOOD SIGN SUPPORTS UP TO 4' X 6'
8040	47 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8041	25 S.F.	REMOVE-REINSTALL DECORATIVE BRICK SIDEWALK
8042	330 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8046	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8053	870 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8055	855 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8056	170 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

*Greenline Revision*  
 1 GREENLINE REVISION NO. 1  
 REVISED QUANTITIES DUE TO SE  
 CORNER RAMP MODIFICATION FOR 48:1  
 ADA SLOPE REQUIREMENTS. 1/11/2012

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 140 (Main Street) and MD 30 (Hanover Pike)  
 Reisterstown, Maryland

**GENERAL INFORMATION SHEET**

SCALE	NONE	ADVERTISED DATE	6/9/2011	CONTRACT NO.	XX6455185
DESIGNED BY	S. Bloss	COUNTY	Baltimore		
DRAWN BY	S. Bloss	LOGMILE	03014009.33		
CHECKED BY	N. Leary	TIMS NO.	K353		
F.A.P. NO.		TOD NO.			
TS NO.	435 E	DRAWING	TSP-3	OF	3
		SHEET NO.	3	OF	3

