

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES UPGRADING THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 1 (BELAIR ROAD) AND PUTTY HILL ROAD/RIDGE ROAD IN BALTIMORE COUNTY, MARYLAND. U.S. 1 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 U.S. 1 APPROACHES OPERATING CONCURRENTLY AND THE PUTTY HILL/RIDGE ROAD APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND U.S. 1 APPROACHES. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS NORTH LEG OF U.S. 1. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS SOUTH LEG OF U.S. 1.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

US 1 (BELAIR ROAD) AND PUTTY HILL AVENUE - SOUTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS BELAIR AT PUTTY HILL, WAIT." *
WALK: RAPID TICK

US 1 (BELAIR ROAD) AND RIDGE ROAD - SOUTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS BELAIR AT RIDGE, WAIT." *
WALK: RAPID TICK

US 1 (BELAIR ROAD) AND PUTTY HILL AVENUE - NORTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS BELAIR AT PUTTY HILL, WAIT." *
WALK: RAPID TICK

US 1 (BELAIR ROAD) AND RIDGE ROAD - NORTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS BELAIR AT RIDGE, 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.

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-104.03-01 (SHOULDER WORK)
- STANDARD NO. MD-104.03-03 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.03-05 (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. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 229-2361

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

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

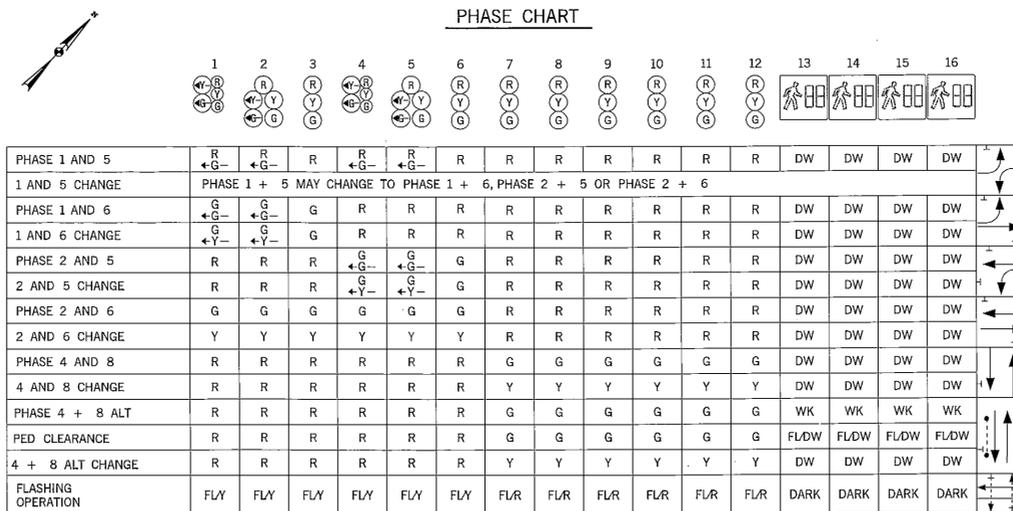
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

EQUIPMENT LIST "A"

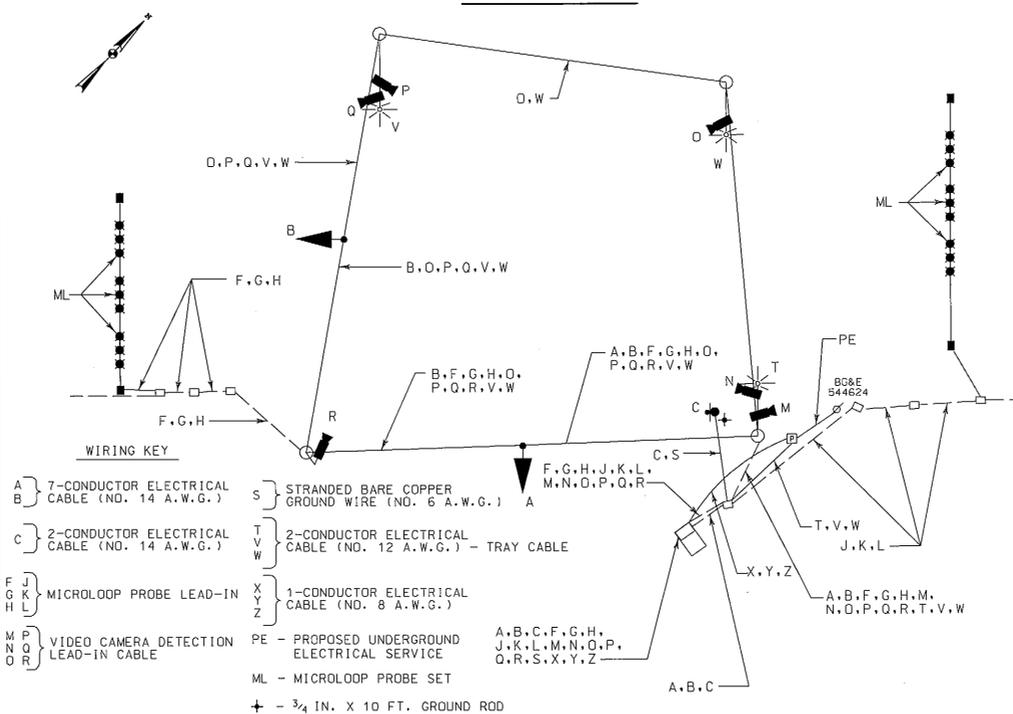
A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-8 CAMERAS
9571	78 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT) :
-	2 EACH	D-3(1) SIGN (VARIABLE X 16 IN.) DUAL FACED - MAST ARM MOUNT
-	1 EACH	M1-5(6) "NORTH, US, RIGHT ARROW" (24 IN. X 48 IN.) - POLE MOUNT
-	1 EACH	M1-5(6) "NORTH, US, LEFT ARROW" (36 IN. X 72 IN.) - POLE MOUNT
-	1 EACH	M1-5(6) "SOUTH, US, RIGHT ARROW" (24 IN. X 48 IN.) - POLE MOUNT
-	1 EACH	M1-5(6) "SOUTH, US, LEFT ARROW" (36 IN. X 72 IN.) - POLE MOUNT
-	4 EACH	R10-3(1) SIGN (9 IN. X 15 IN.) TO READ "PUSHBUTTON TO CROSS BELAIR ROAD"

PHASE CHART



WIRING DIAGRAM



EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
5003	255 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5004	330 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	60 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	365 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	1413 S.F.	5 INCH CONCRETE SIDEWALK
6003	75 S.F.	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8001	38 EACH	12 INCH LED SIGNAL HEAD SECTION
8004	6 EACH	8 INCH LED SIGNAL HEAD SECTION
8008	4 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8009	1 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8012	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
8022	6 EACH	NONINVASIVE DETECTOR (ANY LENGTH) LEAD-IN CABLE UP TO 1000'
8023	1 EACH	REM & DISPOSE MAT & EQUIP (PER ASSIGNMENT)
8028	6 EACH	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8034	775 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TYPE T/C
8037	200 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8038	75 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8040	78 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING HARDWARE)
8041	26 S.F.	REMOVE AND RESET DECORATIVE BRICK
8042	100 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	90 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8046	4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8053	35 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	350 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

EQUIPMENT LIST "C"

- C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA
- AT THE TIME OF SIGNAL TURN ON, THE EXISTING VIDEO DETECTION CAMERAS AND INTERFACE EQUIPMENT SHALL BECOME PROPERTY OF SHA.
 - ALL OTHER REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR.

TOD NO: XX645-13
SHA NO: BA938B5A
US 1 @ Putty Hill Ave./Ridge Rd

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
U.S. 1 (Belair Road) and
Putty Hill Avenue /Ridge Road

GENERAL INFORMATION SHEET

SCALE	NONE	ADVERTISED DATE	7/21/11	CONTRACT NO.	XX6455185
DESIGNED BY	B. Donoway	COUNTY	Baltimore		
DRAWN BY	B. Donoway	LOGMILE	0900105.69		
CHECKED BY	N. Leary	TIMS NO.	K828		
F.A.P. NO.		TOD NO.			
TS NO.	631 E	DRAWING	TSP-3	OF 3	SHEET NO. 3 OF 3

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21237

BY: bdonoway