PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) AND BOULTON STREET IN HARFORD COUNTY, MARYLAND. MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 24 APPROACHES OPERATING CONCURRENTLY AND THE BOULTON STREET APPROACHES OPERATING SPLIT.

EXCLUSIVE PHASING IS PROVIDED FOR NORTHBOUND MD 24 APPROACH.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS THE NORTH AND SOUTH LEG OF MD 24.

AN EXCLUSIVE PHASE WILL BE PROVIDED FOR THE SOUTHBOUND MD 24 APPROACH..

CONTROLLER REQUIREMENTS

THE EXISTING CABINET AND CONTROLLER SHALL BE USED.

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-104.04-01 (SHOULDER WORK)
STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)
STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.04-07 (CENTER LANE CLOSURE)
STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)
STANDARD NO. MD-104.04-15 (INTERSECTION LEFT LANE, TURN BAY)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

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

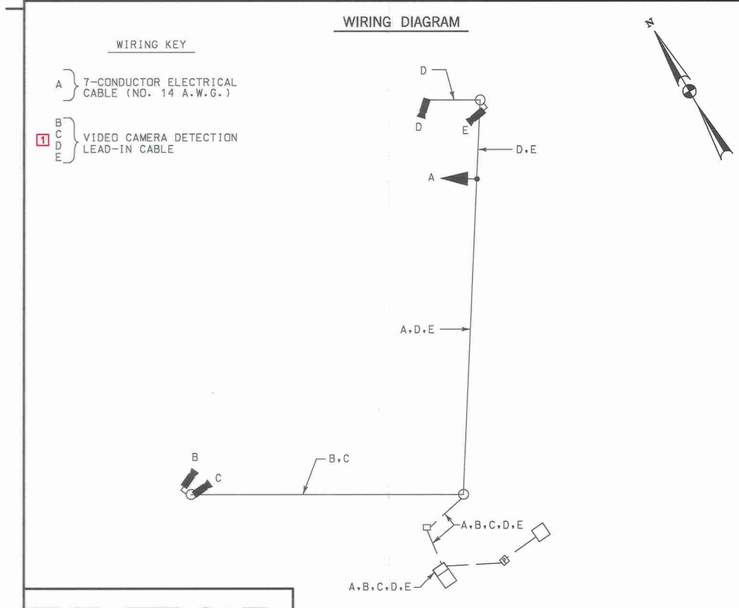
MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 229-2361

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

WIRING DIAGRAM



WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

BY: bdonoway

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

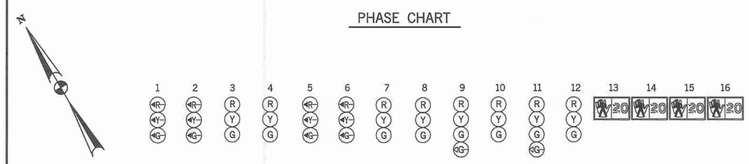
ITEM NO.	QUANTITY	DESCRIPTION
1 9086	1 EACH	VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS
9571	21 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 1 EACH R3-6(L) SIGN (30" x 36") SIGN - SPAN MOUNT
		- 1 EACH R10-10L SIGN (24" x 36") SIGN - SPAN MOUNT
		- 1 EACH R3-7R SIGN (30" x 30") SIGN - GROUND MOUNT

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	14	15	16
PHASE 1 + 5	←G—	←G—	R	R	←G—	←G—	R	R	R	R	R	R	DW	DW	DW	DW
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6															
PHASE 1 + 6	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	DW	DW	DW	DW
1 + 6 CHANGE	←R—	←R—	R	R	←Y—	←Y—	G	G	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 5	←G—	←G—	G	G	←R—	←R—	R	R	R	R	R	R	DW	DW	DW	DW
2 + 5 CHANGE	←Y—	←Y—	G	G	←R—	←R—	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 6	←R—	←R—	G	G	←R—	←R—	G	G	R	R	R	R	DW	DW	DW	DW
2 + 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	Y	Y	R	R	R	R	DW	DW	DW	DW
PHASE 3	←R—	←R—	R	R	←R—	←R—	R	R	R	R	←G G—	G	DW	DW	DW	DW
3 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	Y	Y	DW	DW	DW	DW
PHASE 3 ALT	←R—	←R—	R	R	←R—	←R—	R	R	R	R	←G G—	G	W	DW	DW	W
PED CLEARANCE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	←G G—	G	FL/DW	DW	DW	FL/DW
3 ALT CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	Y	Y	DW	DW	DW	DW
PHASE 4	←R—	←R—	R	R	←R—	←R—	R	R	←G G—	G	R	R	DW	DW	DW	DW
4 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	R	R	DW	DW	DW	DW
PHASE 4 ALT	←R—	←R—	R	R	←R—	←R—	R	R	←G G—	G	R	R	DW	W	W	DW
PED CLEARANCE	←R—	←R—	R	R	←R—	←R—	R	R	←G G—	G	R	R	DW	FL/DW	FL/DW	DW
4 ALT CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	R	R	DW	DW	DW	DW
FLASHING OPERATION	← FL/R —	← FL/R —	FL/Y	FL/Y	← FL/R —	← FL/R —	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
1003	95 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
1004	2 EACH	REMOVAL OF EXISTING PAVEMENT LETTERS, SYMBOLS, ARROWS AND NUMBERS
5001	185 L.F.	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	38 EACH	12 INCH (R,Y,G) LED SIGNAL HEAD SECTION
8017	1 EACH	REMOVE AND DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
1 8020	1 EACH	VIDEO DETECTION CAMERA ARM
8032	14 L.F.	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8046	7 S.F.	INSTALL GROUND MOUNTED SIGN
8047	14 S.F.	INSTALL OVERHEAD SIGN
1 8048	4 EACH	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT.
8059	155 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8069	5 EACH	FURNISH AND INSTALL HEAT APPLIED WHITE THERMOPLASTIC ARROWS
8073	4 EACH	FURNISH AND INSTALL HEAT APPLIED WHITE THERMOPLASTIC LETTERS

1 REDLINE REVSION NO. 1
UPGRADE VIDEO DETECTION
CONTRACT NO. XX4485185 8/13/2010
8-17-10
APPROVAL

WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 24 (Vietnam Veterans Memorial Highway) and Boulton Street
Bel Air, MD

GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 102867 CONTRACT NO. XX4485185

DESIGNED BY B. Donoway
DRAWN BY B. Donoway
CHECKED BY N. Leary
F.A.P. NO.
COUNTY Harford
LOGMILE 12002409.28
TIMS NO. K318
TOD NO.

TS NO. 2386E | DRAWING TSP-1 OF 2 | SHEET NO. 2 OF 2

PLOTTED: 08-16-2010
FILE: N:\31689-065\CADD\sSG-N002_RL.dgn