

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE UPGRADING OF THE EXISTING DETECTION AND SIGNAL HEADS AT MD 43 (WHITEMARSH BOULEVARD) & ENTRANCE TO PERRY HILLS / RAMP 'A' TO US 1 SOUTH INTERSECTION. THIS PROJECT IS LOCATED IN BALTIMORE COUNTY, MARYLAND.

MD 43 (WHITEMARSH BOULEVARD) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

CONTROLLER REQUIREMENTS

MD 43 (WHITEMARSH BOULEVARD) AND ENTRANCE TO PERRY HILLS / RAMP 'A' TO US 1 SOUTH

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CABINET WILL BE RETROFITTED TO OPERATE VIDEO DETECTION AND THE DETECTOR RACK SHALL BE RETROFITTED WITH ONE (1) 4-CHANNEL LOOP AMPLIFIER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EACH	4 CHANNEL LOOP AMPLIFIER
9046	1 EACH	RETROFIT DETECTOR RACK
9086	1 EACH	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1003	1 EACH	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
8006	2 EACH	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
8020	8 EACH	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8021	1 EACH	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
8025	4 EACH	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8033	260 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
8046	9 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8050	55 EACH	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8057	790 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8058	500 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC

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-104.04-13 (LEFT TURN BAY CLOSURE)
STANDARD NO. MD-104.04-05 (RIGHT LANE 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

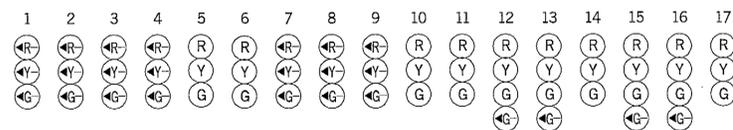
MR. ROBERT SYNDER
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (443) 572-5229

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

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

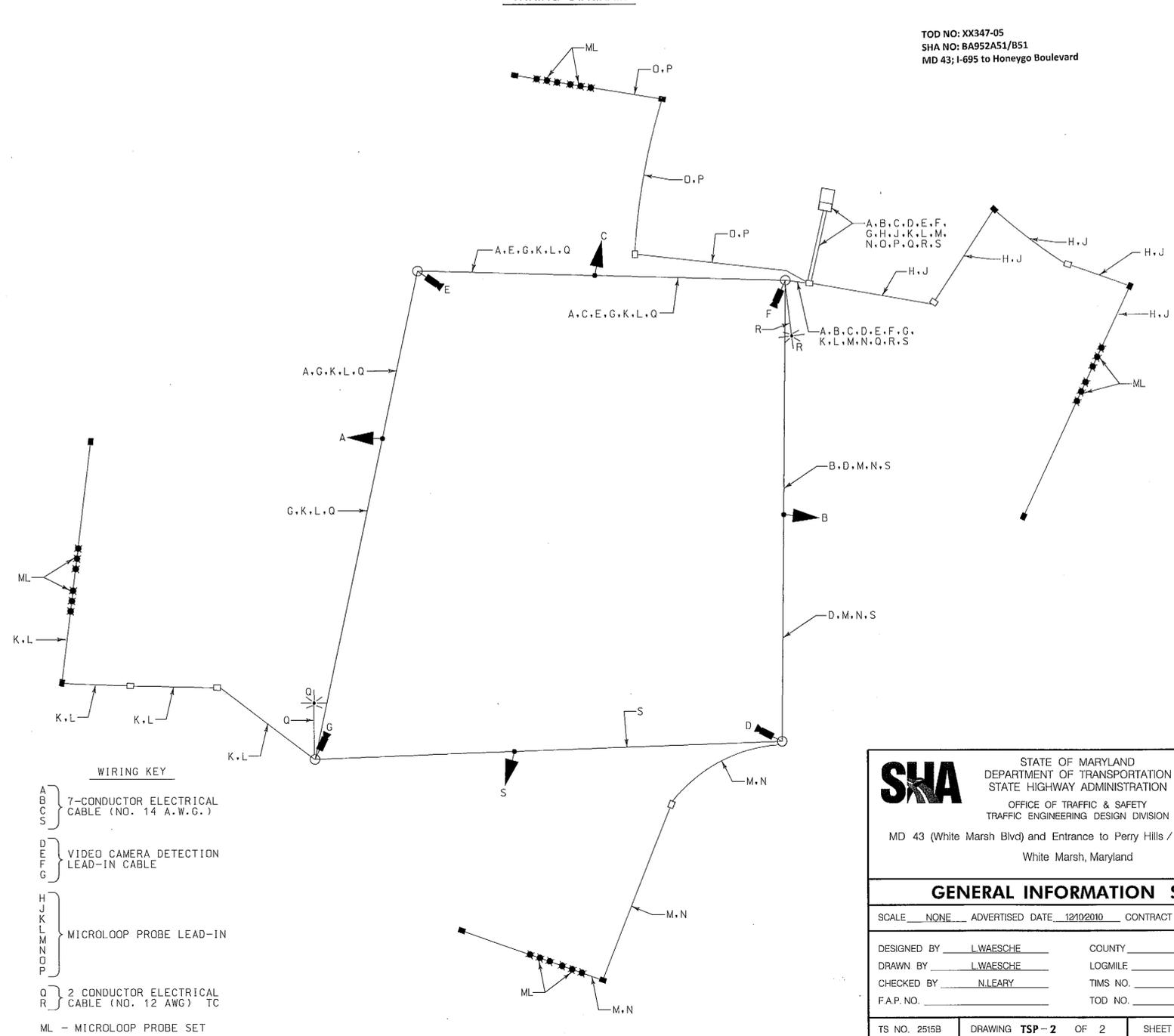
MR. MIKE PASQUARIELLO
DISTRICT UTILITY ENGINEER
PHONE: (410) 229-2341

PHASE CHART



PHASE 1 AND 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PHASE 1 AND 5	←G	←G	←G	←G	R	R	←G	←G	←G	R	R	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																	
PHASE 1 AND 6	←G	←G	←G	←G	G	G	←R	←R	←R	R	R	R	R	R	R	R	R
1 AND 6 CHANGE	←Y	←Y	←Y	←Y	Y	Y	←R	←R	←R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	←R	←R	←R	←R	R	R	←G	←G	←G	G	G	R	R	R	R	R	R
2 AND 5 CHANGE	←R	←R	←R	←R	R	R	←Y	←Y	←Y	Y	Y	R	R	R	R	R	R
PHASE 2 AND 6	←R	←R	←R	←R	G	G	←R	←R	←R	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	←R	←R	←R	←R	Y	Y	←R	←R	←R	Y	Y	R	R	R	R	R	R
PHASE 3	←R	←R	←R	←R	R	R	←R	←R	←R	R	R	R	R	R	←GG	←GG	G
PHASE 3 CHANGE	←R	←R	←R	←R	R	R	←R	←R	←R	R	R	R	R	R	Y	Y	Y
PHASE 4	←R	←R	←R	←R	R	R	←R	←R	←R	R	R	←GG	←GG	G	R	R	R
PHASE 4 CHANGE	←R	←R	←R	←R	R	R	←R	←R	←R	R	R	Y	Y	Y	R	R	R
FLASHING OPERATION	FL/R	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



TOD NO: XX347-05
SHA NO: BA952A51/B51
MD 43; I-695 to Honeygo Boulevard

WIRING KEY

- A, B, C, S } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D, E, F, G } VIDEO CAMERA DETECTION LEAD-IN CABLE
- H, J, K, L, M, N, O, P } MICROLOOP PROBE LEAD-IN
- Q } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TC
- R } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TC
- ML - MICROLOOP PROBE SET

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

MD 43 (White Marsh Blvd) and Entrance to Perry Hills / Ramp 'A' to US 1
White Marsh, Maryland

GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 12/10/2010 CONTRACT NO. XX3475185

DESIGNED BY L.WAESCHE COUNTY Baltimore
DRAWN BY L.WAESCHE LOGMILE 03004302.48
CHECKED BY N.LEARY TMS NO. K348
F.A.P. NO. TOD NO.

TS NO. 25158 DRAWING TSP-2 OF 2 SHEET NO. 2 OF 2

WR&A
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