PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL FOR THE ULTIMATE SIGNAL AT THE INTERSECTION OF MD 940/OWINGS MILLS BOULEVARD AND RED RUN BOULEVARD IN BALTIMORE COUNTY. MD 940 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 940/OWINGS MILLS BOULEVARD APPROACHES OPERATING CONCURRENTLY AND THE RED RUN BOULEVARD APPROACHES OPERATING CONCURRENTLY.

DOUBLE EXCLUSIVE LEFT-TURN PHASING EXISTS FOR SOUTHBOUND AND NORTHBOUND MD 940/OWINGS MILLS BOULEVARD APPROACHES.

DOUBLE EXCLUSIVE LEFT-TURN PHASING EXISTS FOR EASTBOUND RED RUN BOULEVARD AND DOUBLE EXCLUSIVE LEFT-TURN PHASING IS PROVIDED FOR WESTBOUND RED RUN BOULEVARD.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED.

SPECIAL NOTE

THE BALTIMORE COUNTY AREAWIDE CONTRACTOR WILL BE CONSTRUCTING TRAFFIC SIGNAL MODIFICATIONS.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30
STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)
STANDARD NO. MD-104.44-01 (LEFT-LANE CLOSURE)
STANDARD NO. MD-104.49-01 (SHOULDER WORK)
STANDARD NO. MD-104.45-01 (RIGHT-LANE CLOSURE)
STANDARD NO. MD-104.35-01 (LANE SHIFT)
STANDARD NO. MD-104.33-02 (SHOULDER WORK)
STANDARD NO. MD-104.32-02 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. DAVE MALKOWSKI
DISTRICT ENGINEER
PHONE: (410) 321-2810

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781

MR. DAVE RAMSEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
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ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 321-2821

MR. JOSEPH MCMAHON
DISTRICT UTILITIES ENGINEER
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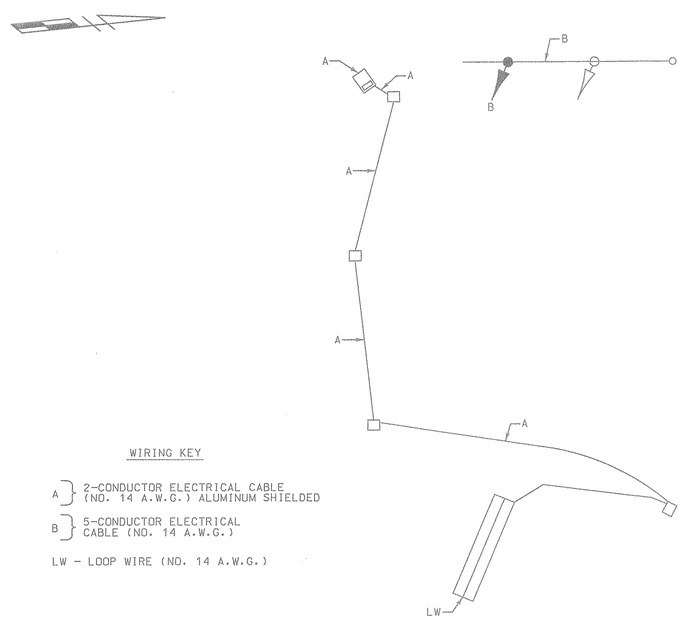
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM



WIRING KEY

A } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED

B } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

LW - LOOP WIRE (NO. 14 A.W.G.)

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY BALTIMORE COUNTY

QUANTITY	DESCRIPTION
1 EACH	12 IN., ONE-WAY, THREE-SECTION (RA,YA,GA) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT.
8 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
	- 1 EACH R3-5L SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT.

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
5010	50 L.F.	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS
5012	6 EACH	THERMOPLASTIC PAVEMENT MARKING ARROW
5013	40 L.F.	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH
8011	1 EACH	INSTALL SIGNAL HEAD (ANY TYPE)
8021	165 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	10 L.F.	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8040	540 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8041	270 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
8044	25 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8054	8 S.F.	INSTALL OVERHEAD SIGN
8061	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
NEG.	1 EACH	RELOCATE SIGNAL HEAD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G
PHASE 1 + 5	←G—	←G—	R	R	R	←G—	←G—	R	R	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
1 + 5 CHANGE	1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6																		
PHASE 1 + 6	←G—	←G—	G	G	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
1 + 6 CHANGE	←Y—	←Y—	G	G	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
PHASE 2 + 5	←R—	←R—	R	R	G	←G—	←G—	G	G	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
2 + 5 CHANGE	←R—	←R—	R	R	G	←Y—	←Y—	G	G	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
PHASE 2 + 6	←R—	←R—	G	G	G	←R—	←R—	G	G	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
2 + 6 CHANGE	←R—	←R—	Y	Y	Y	←R—	←R—	Y	Y	←R—	←R—	←R—	R	R	←R—	←R—	←R—	R	R
PHASE 3 + 7	←R—	←R—	R	R	R	←R—	←R—	R	R	←G—	←G—	←G—	R	R	←G—	←G—	←G—	R	R
3 + 7 CHANGE	3 + 7 MAY CHANGE TO PHASE 3 + 8, PHASE 4 + 7 OR PHASE 4 + 8																		
PHASE 3 + 8	←R—	←R—	R	R	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	←G—	←G—	←G—	G	G
3 + 8 CHANGE	←R—	←R—	R	R	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	←Y—	←Y—	←Y—	G	G
PHASE 4 + 7	←R—	←R—	R	R	R	←R—	←R—	R	R	←G—	←G—	←G—	G	G	←R—	←R—	←R—	R	R
4 + 7 CHANGE	←R—	←R—	R	R	R	←R—	←R—	R	R	←Y—	←Y—	←Y—	G	G	←R—	←R—	←R—	R	R
PHASE 4 + 8	←R—	←R—	R	R	R	←R—	←R—	R	R	←R—	←R—	←R—	G	G	←R—	←R—	←R—	G	G
4 + 8 CHANGE	←R—	←R—	R	R	R	←R—	←R—	R	R	←R—	←R—	←R—	Y	Y	←R—	←R—	←R—	Y	Y
FLASHING OPERATION	←FL/R—	←FL/R—	FL/Y	FL/Y	FL/Y	←FL/R—	←FL/R—	FL/Y	FL/Y	←FL/R—	←FL/R—	←FL/R—	FL/R	FL/R	←FL/R—	←FL/R—	←FL/R—	FL/R	FL/R

ULTIMATE SIGNAL

REVISIONS	APPROVALS
	ASST. TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY

WR&A
Whitman, Requardt and Associates, LLP
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 940 (OWINGS MILLS BOULEVARD) AND RED RUN BOULEVARD

DRAWN BY: S.BLOSS	F.A.P. NO.	TS NO. TS-3467A	SHEET NO.
CHECKED BY: N.LEARY	S.H.A. NO.		
SCALE: NONE	COUNTY: BALTIMORE	T.I.M.S. NO.	4 OF 4
DATE: 5-27-99	LOG MILE:		

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