PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF TWO EXISTING TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF MD 710 AND GLEN BURNIE MALL ENTRANCE/SHOPPING CENTER ENTRANCE AND MD 710 AND CHESAPEAKE CENTRE DRIVE/ARUNDEL CORP. ROAD IN ANNE ARUNDEL COUNTY. MD 710 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

1. MD 710 AND GLEN BURNIE MALL ENTRANCE/SHOPPING CENTER ENTRANCE

   THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 710 APPROACHES OPERATING CONCURRENTLY AND THE GLEN BURNIE MALL ENTRANCE/SHOPPING CENTER ENTRANCE APPROACHES OPERATING CONCURRENTLY.

   EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING EXISTS FOR THE EASTBOUND AND WESTBOUND MD 710 APPROACHES.

2. MD 710 AND CHESAPEAKE CENTRE DRIVE/ARUNDEL CORP. ROAD

   THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 710 APPROACHES OPERATING CONCURRENTLY AND THE CHESAPEAKE CENTRE DRIVE/ARUNDEL CORP. ROAD APPROACHES OPERATING WITH SPLIT PHASES.

   EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING EXISTS FOR THE EASTBOUND AND WESTBOUND MD 710 APPROACHES.

CONTROLLER REQUIREMENTS

1. MD 710 AND GLEN BURNIE MALL ENTRANCE/SHOPPING CENTER ENTRANCE

   INSTALL ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER IN THE EXISTING BASE MOUNTED CABINET.

2. MD 710 AND ARUNDEL CORP. ROAD/CHESAPEAKE CENTRE DRIVE

   THE DETECTOR RACK SHALL BE RETRO-FITTED WITH FOUR (4), FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS IN THE EXISTING POLE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

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

STANDARD NO. MD-104.00 - 104.00-12
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. PAUL D. ARMSTRONG
DISTRICT ENGINEER
PHONE: (410) 841-5450

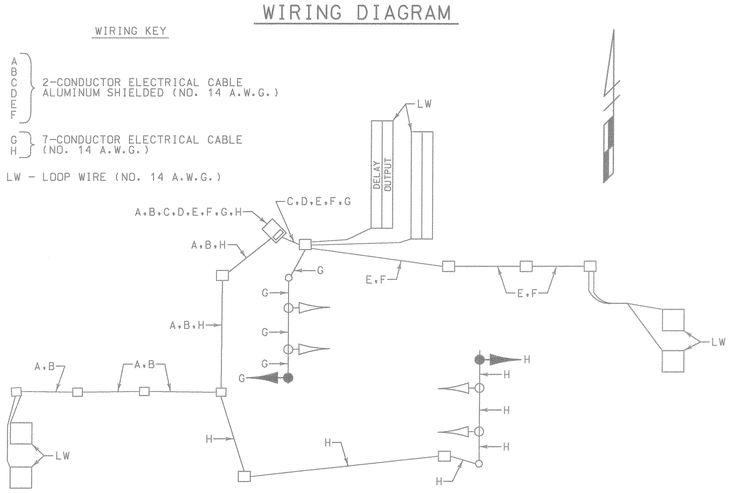
MR. LAWRENCE E. ELLIOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-5463

MR. RAYMOND E. HUTZLER
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-5462

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (410) 841-5450

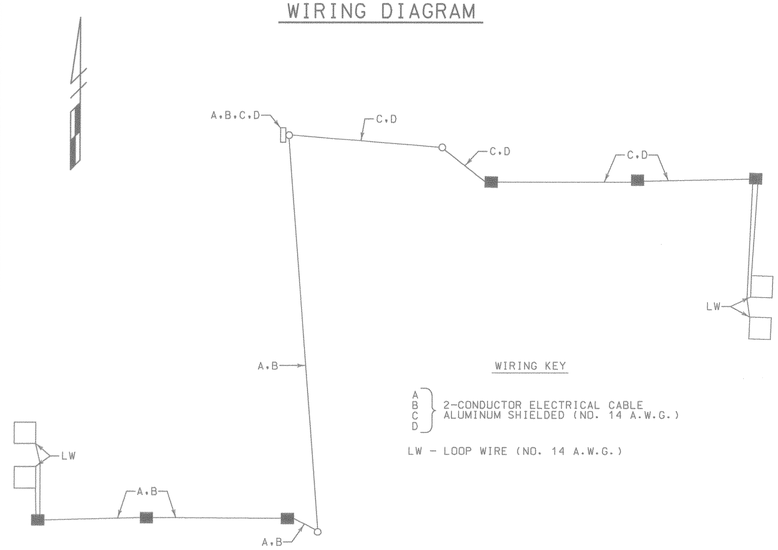
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM



MD 710 AND SHOPPING CENTER ENTRANCE

WIRING DIAGRAM



MD 710 AND CHESAPEAKE CORP. DR./ARUNDEL CTR. RD.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

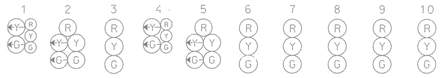
ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EACH	RETRO-FIT DETECTOR RACK
9002	5 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9019	2 EACH	8 IN./12 IN., ONE-WAY, FIVE-SECTION (R,Y,YA,G,GA) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT.

EQUIPMENT LIST "B"

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

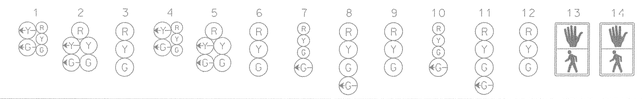
CATEGORY CODE NO.	QUANTITY	DESCRIPTION
1001	1 EA.	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
1003	1 EACH	MOBILIZATION FOR ASSIGNMENTS OUT OF CONTRACT AREA
5010	100 L.F.	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING TAPE
5013	75 L.F.	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH
8008	1 EACH	FURNISH AND INSTALL 3 IN. WEATHERHEAD
8011	2 EACH	INSTALL SIGNAL HEAD (ANY TYPE)
8021	720 L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
8022	30 L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8023	80 L.F.	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	740 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8033	6 EA.	FURNISH AND INSTALL HANDHOLE
8040	2440 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8041	4250 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8045	480 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8061	1 EA.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8065	2 EACH	INSTALL CONDUIT BEND IN EXISTING BASE

PHASE CHARTS



	1	2	3	4	5	6	7	8	9	10
PHASE 1 + 5	R G	R G	R	R G	R G	R	R	R	R	R
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6									
PHASE 1 + 6	G G	G G	G	R	R	R	R	R	R	R
1 + 6 CHANGE	G Y	G Y	G	R	R	R	R	R	R	R
PHASE 2 + 5	R	R	R	G G	G G	G	R	R	R	R
2 + 5 CHANGE	R	R	R	G Y	G Y	G	R	R	R	R
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

MD 710 AND SHOPPING CENTER ENTRANCE



	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 + 5	R G	R G	R	R G	R G	R	R	R	R	R	R	R	DW	DW
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6													
PHASE 1 + 6	G G	G G	G	R	R	R	R	R	R	R	R	R	DW	DW
1 + 6 CHANGE	G Y	G Y	G	R	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 + 5	R	R	R	G G	G G	G	R	R	R	R	R	R	DW	DW
2 + 5 CHANGE	R	R	R	G Y	G Y	G	R	R	R	R	R	R	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	G G	G G	G	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW
PHASE 4	R	R	R	R	R	R	G G	G G	G	R	R	R	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	G G	G G	G	R	R	R	WK	WK
PED. CLEARANCE	R	R	R	R	R	R	G G	G G	G	R	R	R	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

MD 710 AND CHESAPEAKE CORP. DR./ARUNDEL CTR. RD.

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

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

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 710 INTERSECTIONS

DRAWN BY: S.BLOSS	F.A.P. NO.	TS NO.	SHEET NO.
CHECKED BY: N.LEARY	S.H.A. NO. AW277A5Y/B5Y		
SCALE: 1" = 20'	COUNTY: ANNE ARUNDEL	T.I.M.S. NO. C893	3 OF 3
DATE: 4-9-99	LOG MILE:		

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