PROJECT DESCRIPTION

GENERAL

STAGE 1 OF THE PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL FOR STAGE 1 OF THE MAINTENANCE OF TRAFFIC AT U.S. 301 AND BILLINGSLEY ROAD IN CHARLES COUNTY. U.S. 301 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

DURING STAGE 1, THE INTERSECTION OPERATION WILL REMAIN THE SAME. THE INTERSECTION OPERATES IN A NEMA SIX PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 301 APPROACHES OPERATING CONCURRENTLY AND THE BILLINGSLEY ROAD APPROACHES OPERATING WITH SPLIT PHASES.

A LEAD EXCLUSIVE LEFT-TURN PHASE IS PROVIDED FOR SOUTHBOUND U.S. 301 AND LAG EXCLUSIVE LEFT-TURN PHASE FOR NORTHBOUND U.S. 301.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET, EIGHT PHASE CONTROLLER WILL BE USED.

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-104.49-01 (SHOULDER WORK)
STANDARD NO. MD-104.44-01 (LEFT-LANE CLOSURE)
STANDARD NO. MD-104.45-01 (RIGHT-LANE CLOSURE)
STANDARD NO. MD-104.46-01 (CENTER 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

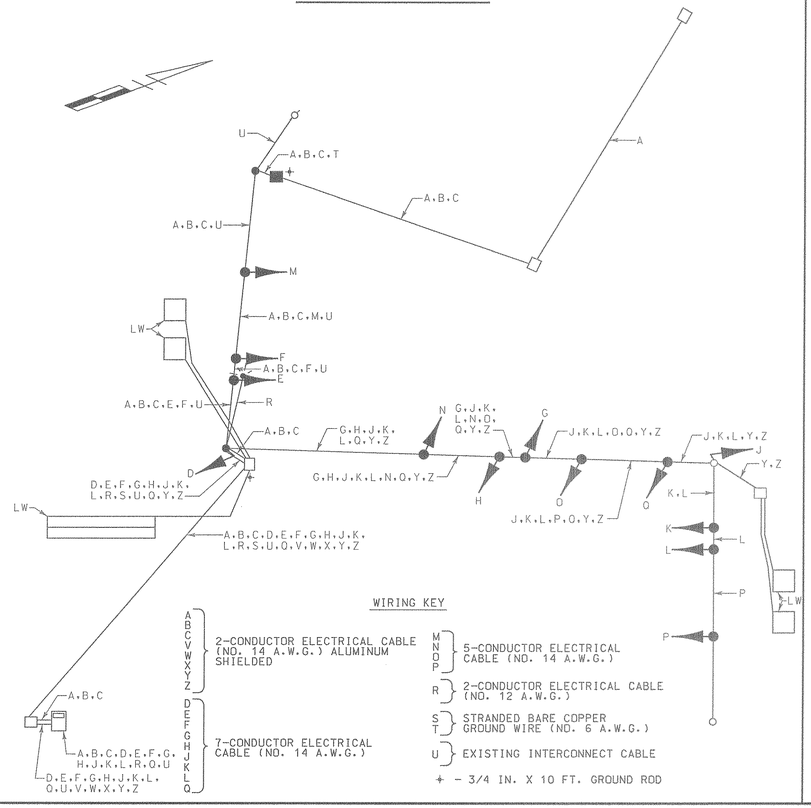
MR. LAWRENCE E. ELLIOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-5463

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

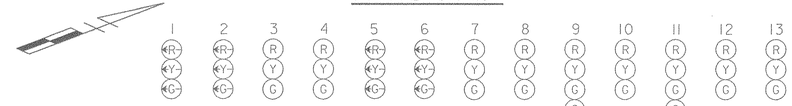
MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (410) 841-5450

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

WIRING DIAGRAM



PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 2 + 5	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	R
2 + 5 CHANGE	←R—	←R—	R	R	←Y—	←Y—	G	G	R	R	R	R	R
PHASE 2 + 6	←R—	←R—	G	G	←R—	←R—	G	G	R	R	R	R	R
2 + 6 CHANGE	←R—	←R—	G	G	←R—	←R—	Y	Y	R	R	R	R	R
PHASE 1 + 6	←G—	←G—	G	G	←R—	←R—	R	R	R	R	R	R	R
1 + 6 CHANGE	←Y—	←Y—	Y	Y	←R—	←R—	R	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	←G G—	G	R	R	R
3 CHANGE	R	R	R	R	R	R	R	R	Y	Y	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	R	←G G—	G	G
4 CHANGE	R	R	R	R	R	R	R	R	R	R	Y	Y	Y
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	FL/R

EQUIPMENT LIST "B"

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

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
5 U.D.	ARROW PANEL
300 S.F.	TEMPORARY TRAFFIC SIGNS
LUMP SUM	MOBILIZATION
2 C.Y.	TEST PIT EXCAVATION
6 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
200 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER WIRE (NO. 6 A.W.G.)
220 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
80 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
30 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
15 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
2 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
400 L.F.	PULL BACK AND RE-FEED 12-PAIR COMMUNICATION CABLE, SELF-SUPPORTING (OVERHEAD)
2 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
4050 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
140 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
2500 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
220 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
1 EACH	FURNISH AND INSTALL 20 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE
240 L.F.	FURNISH AND INSTALL STEEL SPAN WIRE 1/4 IN. DIAMETER
240 L.F.	FURNISH AND INSTALL STEEL SPAN WIRE 3/8 IN. DIAMETER
91 S.F.	RELOCATE EXISTING SIGN
3 EACH	FURNISH AND INSTALL SPLICE KIT
2 EACH	FURNISH AND INSTALL 12 IN. X 30 FT. STRAIN POLE
1 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
41 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
55 L.F.	FURNISH AND INSTALL 1 IN. GALVANIZED CONDUIT (DETECTOR WIRE SLEEVE)
1200 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING
325 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL
LUMP SUM	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

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

TEMPORARY TRAFFIC SIGNAL STAGE I

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
U.S. 301 AND BILLINGSLEY ROAD

DRAWN BY: S.BLOSS	F.A.P. NO.	TS NO. 2484 X-1 GI	SHEET NO.
CHECKED BY: N.LEARY	S.H.A. NO.		
SCALE: NONE	COUNTY: CHARLES	T.I.M.S. NO. D-083	2 OF 8
DATE: 04-00	LOG MILE: 08030121.01		

M:\94002\40735GI4.DGN