PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND ST. JOHNS LANE IN HOWARD COUNTY, MARYLAND. IN ADDITION, THE EXISTING INTERCONNECT SYSTEM BETWEEN ST. JOHNS LANE AND RIDGE ROAD WILL BE MAINTAINED. U.S. 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE US 40 APPROACHES OPERATING CONCURRENTLY AND THE ST. JOHNS LANE APPROACHES OPERATING IN A SPLIT-PHASE MODE.

EXCLUSIVE LEFT TURN PHASES EXIST FOR BOTH THE EASTBOUND AND WESTBOUND US 40 APPROACHES.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER AND CABINET WILL BE USED.

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-104.12-01 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.13-01 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.18-01 (SHOULDER WORK)

STANDARD NO. MD-104.81-02 (MOBILE SERVICE WORK)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. ROBERT FISHER
DISTRICT ENGINEER
PHONE: (301) 624-8140

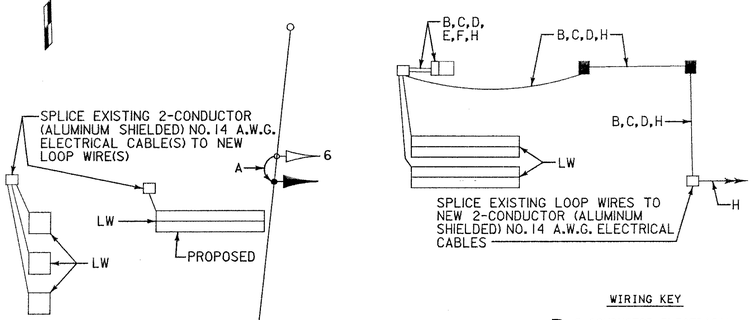
MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 301-624-8141

MR. LEON KERNS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 301-624-8140

MR. JOHN WRIGHT
DISTRICT UTILITIES ENGINEER
PHONE: 301-624-8140

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

WIRING DIAGRAM



LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	S
STORM DRAIN	SD
WATER	W
CABLE TV	TV

WIRING KEY

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

B, C, D, E, F } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED

H } 12-PAIR COMMUNICATION CABLE (JELLY-FILLED)

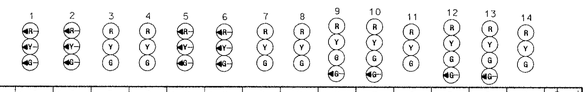
LW - LOOP WIRE (NO. 14 A.W.G.)

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
973023	16 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 2 EACH R3-5L (30 IN. X 36 IN.) - SPAN WIRE MOUNT

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 + 5	←G—	←G—	R	R	←G—	←G—	R	R	R	R	R	R	R	R
1 + 5 CHANGE	←Y—	←Y—	R	R	←Y—	←Y—	R	R	R	R	R	R	R	R
PHASE 2 + 6	←R—	←R—	G	G	←R—	←R—	G	G	R	R	R	R	R	R
2 + 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	Y	Y	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	Y	R	R	R
PHASE 4	←R—	←R—	R	R	←R—	←R—	←G—	←G—	R	R	R	←G—	←G—	G
4 CHANGE	←R—	←R—	R	R	←R—	←R—	Y	Y	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	FL/R

REDLINE REVISION NO. 1
MAY 31, 2000
CONTRACT NO. H07845176

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
130850	LUMP SUM	MOBILIZATION
500000	60 L.F.	24 INCH WHITE HEAT APPLIED PERMENENT PREFORMED PAVEMENT MARKING
585450	50 L.F.	REMOVAL OF EXISTING PAVEMENT MARKINGS - ANY WIDTH
805011	20 L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT (GALVANIZED DETECTOR SLEEVE)
805150	240 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT -SLOTTED
805160	60 L.F.	FURNISH AND INSTALL LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
811011	11 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	16 S.F.	INSTALL OVERHEAD SIGN
822002	3600 L.F.	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE (JELLY-FILLED)
861103	1400 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	20 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 5 CONDUCTOR (NO. 14 A.W.G)
862101	2050 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	690 L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
800000	LUMP SUM	REMOVAL AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
800000	2210 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	3 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD-SECTION
800000	2 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FT. LEAD-IN

TSP - 4

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
US 40 AND ST. JOHNS LANE

DRAWN BY:	S. CHERNACK	F.A.P. NO.		TS NO.	SHEET NO.
CHECKED BY:	N.LEARY	S.H.A. NO.		T.I.M.S. NO.	18.2 OF 26
SCALE:	NONE	COUNTY:	HOWARD		
DATE:	6/7/00	LOG MILE:			

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