PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL STRAIN POLE IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF US 40 AND MARRIOTSVILLE ROAD IN HOWARD COUNTY. IT INVOLVES THE INSTALLATION OF A NEW STRAIN POLE, SPAN WIRE, SIGNS TRAFFIC SIGNAL HEADS AND DETECTORS. US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THERE WILL BE NO CHANGE TO THE NEMA SIX PHASE OPERATION.

CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CABINET AND CONTROLER SHALL BE USED.

PROJECT CONTACTS

THE CONTACT PERSON FOR SHA DISTRICT #7 ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT
ENGINEER - TRAFFIC
(301) 624-8140

MS. ANDREA ABEND
DISTRICT ENGINEER - UTILITY
(301)624-8115

MR. EDWARD RODENHIZER
CHIEF TRAFFIC SIGNAL SHOP
(410) 787-7650

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

THE POWER COMPANY REPRESENTATIVE IS :

BALTIMORE GAS ELECTRIC COMPANY
MR. KIETH MAYLE
7317 PARKWAY DRIVE SOUTH
HANOVER, MD 21076
(410) 859-9070

EQUIPMENT LIST "A"

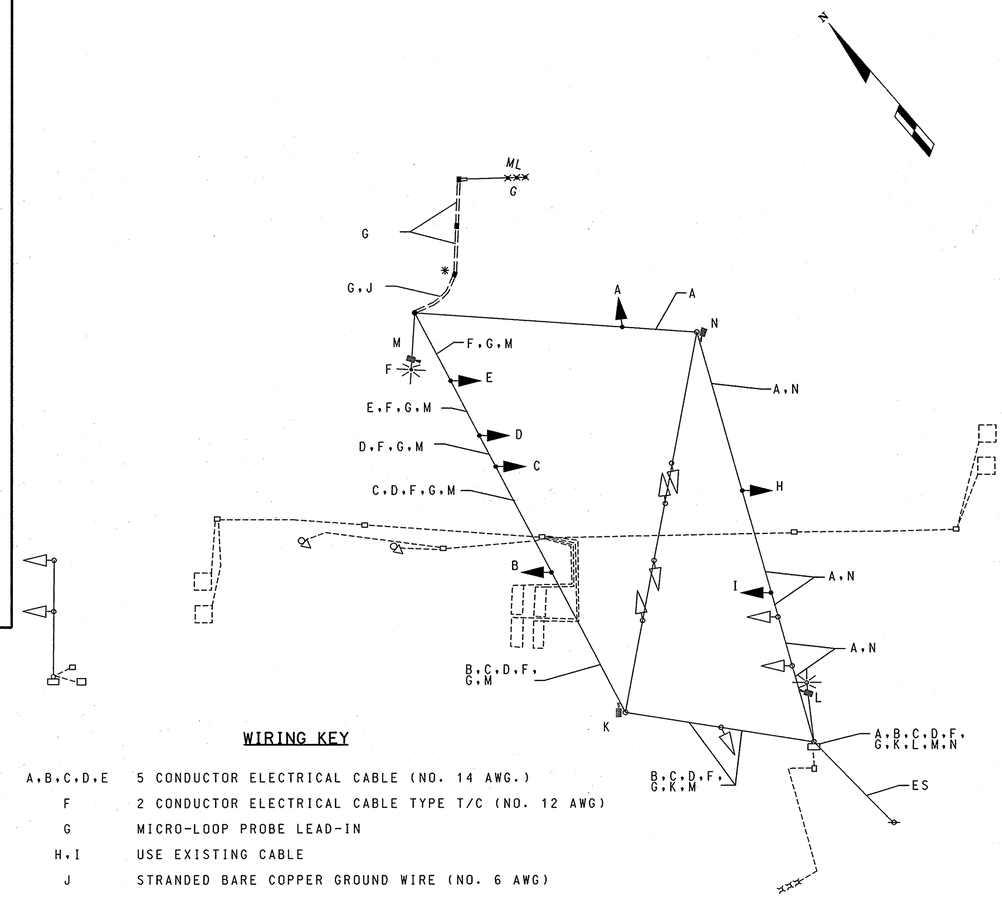
A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

CATEGORY CODE NO.	QUANTITY	UNIT	DESCRIPTION
900000	20.25	SF	SHEET ALUMINUM GROUND MOUNTED SIGN CONSISTS OF:
			1- EA RI-2 SIGN (36"x 36")
			1- EA R3-8 MOD SIGN (54"x 30")
900000	60.6	SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN CONSIST OF:
			1- EA ROUTE MARKER ASSEMBLY (30"x51")
			2- EA ROUTE MARKER ASSEMBLY (48"x75")
900000	44.0	SF	SHEET ALUMINUM SPAN MOUNTED SIGN CONSIST OF:
			1- EA D-3(1) SIGN (72" x 16") DUAL FACED
			1- EA R3-6 SIGN (30"x 36")
			2- EA R10-12(4) SIGN (36"x42")
			1- EA R3-5R SIGN (30"x 36")
900000	1	EA	VIDEO DETECTION INTERFACE EQUIPMENT-1 TO 4 CAMERA

EQUIPMENT LIST "B"

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

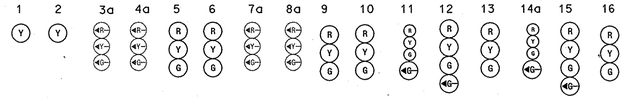
CATEGORY CODE NO.	QUANTITY	UNIT	DESCRIPTION
100000	1	LS	MAINTENANCE OF TRAFFIC
585405	432	LF	5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585407	520	LF	5" YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585408	180	LF	10" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585416	105	LF	16" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585624	26	EA	24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
585628	4	EA	HEAT APPLIED WHITE PERMANENT PREFORMED PAVEMENT MARKING SYMBOL
585630	4	LF	HEAT APPLIED WHITE PERMANENT PREFORMED PAVEMENT MARKING ARROW
800000	1	EA	REMOVE AND DEPOSE OF EXISTING MATERIALS & EQUIPMENT
800000	275	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO. 12 AWG TRAY CABLE
801104	50	LF	WOOD SIGN SUPPORT 4 IN. X 4 IN.
802501	20	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805135	20	LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805160	15	LF	1 IN. LIQUID TIGHT NON-METALLIC COND FOR DETECTOR SLEEVE
810555	1	EA	MICROLOOP PROBE - 1000 FT LEAD IN CABLE
811001	3	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	20.25	SF	INSTALL GROUND MOUNTED SIGN
813015	102.1	SF	INSTALL OVERHEAD SIGN
816001	4	EA	VIDEO DETECTION CAMERA
816005	1	EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	3	EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
831010	1	EA	250 WATT HIGH PRESS SOD LAMP & LUM W/PHOTO CELL
837001	1	EA	GROUND ROD 3/4 IN. DIA. X 10 FT. LENGTH
800000	12	EA	8" LED SIGNAL R,Y,G HEAD SECTION
800000	19	EA	12" YELLOW LED SIGNAL HEAD SECTION
861104	275	LF	ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED NO. 14 AWG
861107	1085	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG.)
866104	1	EA	20 FT. LIGHTING ARM ON SIGNAL STRUCTURE
867105	1	EA	12 IN. x 32 FT. STEEL STRAIN POLE
869101	158	LF	STEEL SPAN WIRE 1/4 INCH DIAMETER
869102	158	LF	STEEL SPAN WIRE 3/8 INCH DIAMETER
800000	19	EA	12" RED OR GREEN LED SIGNAL HEAD SECTION
800000	26	EA	LED SIGNAL HEAD MODULES, ANY SIZE



WIRING KEY

A, B, C, D, E	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG.)
F	2 CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 AWG)
G	MICRO-LOOP PROBE LEAD-IN
H, I	USE EXISTING CABLE
J	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
K, L, M, N	VIDEO DETECTION CAMERA
LW	LOOP WIRE (NO. 14 AWG)
ML	MICRO-LOOP PROBE SET WITH 1000 FT LEAD-IN
ES	EXISTING SERVICE (OVERHEAD)
*	GROUND ROD 3/4IN DIA.

PHASE CHART



	1	2	3a	4a	5	6	7a	8a	9	10	11	12	13	14a	15	16
PHASE 1 & 5	FL/Y	FL/Y	◄G-	◄G-	R	R	◄G-	◄G-	R	R	R	R	R	R	R	R
1 & 5 CHANGE TO PHASE 1 & 6 OR PHASE 2 & 5 OR PHASE 2 & 6																
PHASE 1 & 6	FL/Y	FL/Y	◄G-	◄G-	G	G	FL/◄R-	FL/◄R-	R	R	R	R	R	R	R	R
1 CHANGE	FL/Y	FL/Y	◄Y-	◄Y-	G	G	FL/◄R-	FL/◄R-	R	R	R	R	R	R	R	R
PHASE 2 & 5	FL/Y	FL/Y	◄R-	◄R-	R	R	◄G-	◄G-	G	G	R	R	R	R	R	R
5 CHANGE	FL/Y	FL/Y	FL/◄R-	FL/◄R-	R	R	◄Y-	◄Y-	G	G	R	R	R	R	R	R
PHASE 2 & 6	FL/Y	FL/Y	FL/◄R-	FL/◄R-	G	G	◄R-	◄R-	G	G	R	R	R	R	R	R
2 & 6 CHANGE	FL/Y	FL/Y	FL/◄R-	FL/◄R-	Y	Y	FL/◄R-	FL/◄R-	Y	Y	R	R	R	R	R	R
PHASE 3	FL/Y	FL/Y	◄R-	◄R-	R	R	◄R-	◄R-	R	R	G/◄G-	G/◄G-	R	R	R	R
3 CHANGE	FL/Y	FL/Y	◄R-	◄R-	R	R	◄R-	◄R-	R	R	Y	Y	Y	R	R	R
PHASE 4	FL/Y	FL/Y	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	G/◄G-	G/◄G-	G
4 CHANGE	FL/Y	FL/Y	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	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

GENERAL NOTES

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNAL PLAN
US 40 AND MARRIOTTSVILLE ROAD

PREPARED BY URS HUNT VALLEY, MARYLAND	DRAWN BY: K.J.S.	F.A.P. NO.	TS NO. TS-1622G	SHEET NO.
	CHECKED BY: T.A.R.	S.H.A. NO.		
	SCALE: NO SCALE	COUNTY: HOWARD	T.I.M.S. NO. G326	2 OF 2
	DATE: 01-2005	LOG MILE: 13004013.32		

G:\20827142-\20828357\CAD\GP020US40_rev.dgn HAHN 9/13/2005 3:08:32 PM