PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE ADDITION OF PEDESTRIAN SIGNALS AND CROSSWALKS TO FOUR LEGS OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF FOREST DRIVE AND MD 393 (OLD SOLOMON'S ISLAND RD.) IN ANNE ARUNDEL COUNTY. THIS TRAFFIC CONTROL SIGNAL IS INCLUDED WITHIN THE MD 2/ MD 178/ MD 450 SYSTEM. AN EXISTING VIDEO DETECTION CAMERA SYSTEM PROVIDES DETECTION FOR THE NORTH LEG OF MD 393. FOR THE REMAINING LEGS THE EXISTING LOOP DETECTORS AND MICRO PROBE SET SHALL BE REPLACED.

FOREST DRIVE IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

1. THE INTERSECTION SHALL CONTINUE TO OPERATE IN A NEMA (5) FIVE-PHASE, SEMI-TRAFFIC-ACTUATED MODE, WITH EXCLUSIVE/ PERMISSIVE LEFT TURN FOR THE WEST LEG OF FOREST DRIVE. FOREST DRIVE APPROACHES SHALL RUN CONCURRENTLY. MD 393 (OLD SOLOMON'S ISLAND RD.) APPROACHES SHALL ALSO RUN CONCURRENTLY. THE EXISTING DETECTION SHALL BE MAINTAINED. PEDESTRIAN SIGNALS AND CROSSWALKS SHALL BE INSTALLED FOR THE FOUR LEGS OF THE INTERSECTION.

2. THE EIGHT-PHASE, FULL-TRAFFIC ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH ONE (1) FOUR- CHANNEL RACK MOUNTED LOOP DETECTOR AMPLIFIER, RACK POWER SUPPLY, VIDEO DETECTION INTERFACE AND ALL NECESSARY EQUIPMENT HOUSED IN THE NEMA SIZE "6" BASE-MOUNTED CABINET SHALL BE MAINTAINED AT THE INTERSECTION.

PROJECT CONTACTS

Mr. Greg Welker
District Engineer
Phone: (410) 841-1001

Mr. Charles George
Assistant District Engineer - Maintenance
Phone: (410) 841-1002

Mr. Kim Tran
Assistant District Engineer - Traffic
Phone: (410) 841-1003

Mr. John Mays
Assistant District Engineer - Utility
Phone: (410) 841-1002

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

The power company representative is:
Baltimore Gas and Electric
Mike Malizewski
7317 Parkway Drive
Hanover, Maryland 21076
410-859-9043

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY M.S.H.A.

ITEM NO. QUANTITY UNIT DESCRIPTION

THERE ARE NO MATERIALS BEING FURNISHED BY THE ADMINISTRATION.

EQUIPMENT LIST "B"

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

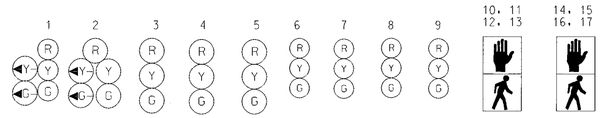
ITEM NO.	QUANTITY	UNIT	DESCRIPTION.
120500	1	LS	MAINTANANCE OF TRAFFIC.
203030	2	CY	TEST PIT EXCAVATION.
585416	110	LF	F & I 24" WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING.
585620	1050	LF	F & I 12" WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
865001	4	EA	F & I PUSHBUTTON AND SIGN, TO READ "PUSH BUTTON TO CROSS FOREST DRIVE"
801605	3	SF	F & I SHEET ALUMINUM SIGN, TO READ " TO CROSS OLD SOLOMONS ISLAND ROAD"
870163	30	LF	F & I 3" PVC SCHEDULE 80 ELECTRICAL CONDUIT- TRENCHED.
801004	3	CY	F & I CONCRETE FOR SIGNAL FOUNDATION.
802501	50	LF	F & I NO 6 AWG STRANDED BARE COPPER GROUND WIRE.
861104	750	LF	F & I 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED).
805160	25	LF	F & I 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
800000	1	EA	F & I INVASIVE MICROLOOP PROBE SET - 500 FT
862101	1278	LF	F & I LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	500	LF	F & I SAW CUT FOR SIGNAL
860278	16	EA	F & I 12" PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT
861117	900	LF	F & I ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
861105	470	LF	F & I ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
868003	2	EA	F & I 10 FT BREAKAWAY PED POLE
822001	625	LF	F & I 12 PAIR COMM. CABLE JELLY FILLED (OVERHEAD)
800000	1	LS	REMOVE AND DISPOSE OF EXISTING MATERIALS & EQUIPMENT
800000	625	LF	F & I FIBER OPTIC WIRE
837001	1	EA	F & I GROUND ROD - 3/4 DIAMETER X 10 FOOT LEGENTH

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE OFFICE OF TRAFFIC, HANOVER.

ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10, 11 12, 13	14, 15 16, 17
PHASE 1 & 6	G G	G G	G	R	R	R	R	R	R	DW	DW
1 CHANGE	G Y	G Y	G	R	R	R	R	R	R	DW	DW
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	WK	DW
PED. CLEARANCE	G	G	G	G	G	R	R	R	R	FL/DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	DW	DW
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	DW	DW
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
PHASE ALT. 4 & 8	R	R	R	R	R	G	G	G	G	DW	WK
PED. CLEARANCE	R	R	R	R	R	G	G	G	G	DW	FL/DW
ALT. 4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK

PROPOSED WIRING KEY

M, O, P — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)(SHIELDED)

U, V, W, X — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

Y, Z, aa, bb, cc, dd, ee, ff — 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

R – 12 PAIR JELLY FILLED TELEMENTRY INTERCONNECT CABLE (SELF-SUPPORTING) OVERHEAD

S – MICROLOOP PROBE SET WITH 500' LEAD-IN CABLE TO BE PULLED BACK AND RE-WIRED

hh – FIBER OPTIC WIRE

gg – STANDARD BARE COPPER GROUND WIRE (NO. 6 AWG.)

LW – LOOP WIRE (NO. 14 AWG.)

✦ – GROUND ROD

EXISTING WIRING KEY

A, B, C, D — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

E, F, G, H, J — 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

K – 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) Tray type

L – VIDEO DETECTION 250' PRE-MANUFACTURED CABLE

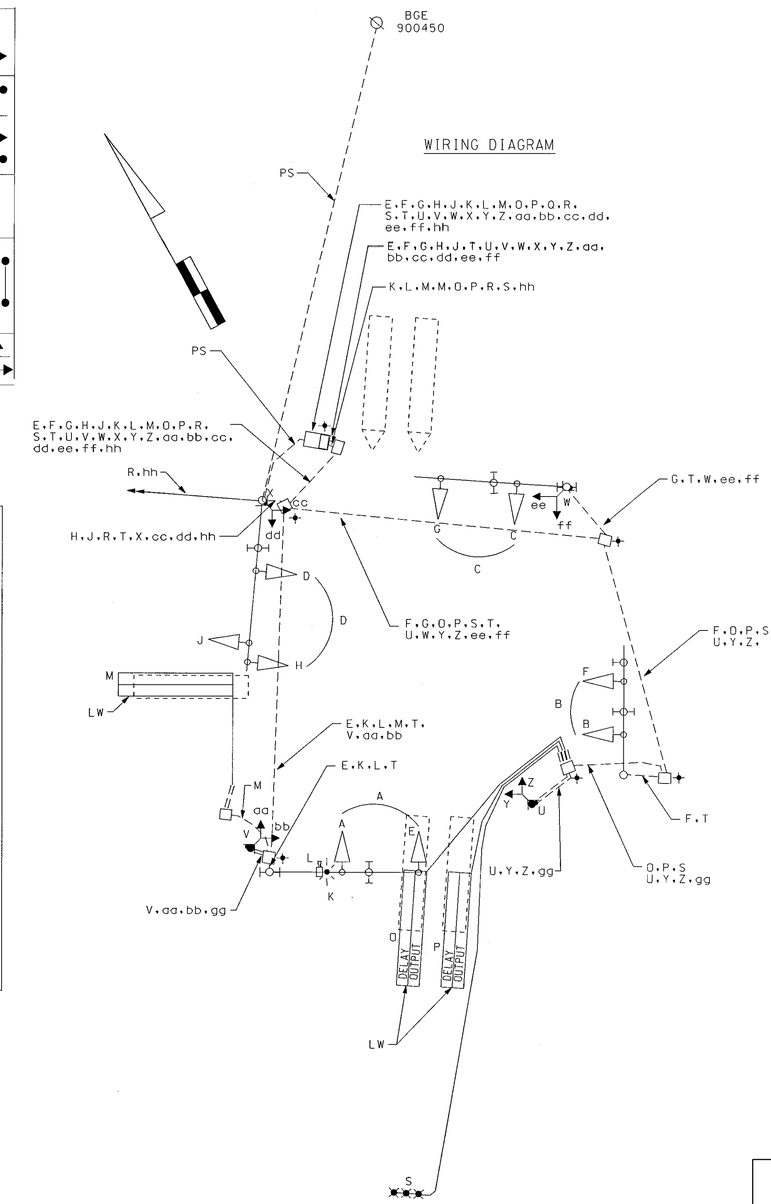
Q – 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

T – STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

PS – PROPOSED OVERHEAD SERVICE TO BE INSTALLED BY BG&E

✦ – GROUND ROD

WIRING DIAGRAM



SS-2

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

FOREST DRIVE AND MD 393
(OLD SOLOMON'S ISLAND ROAD)

PREPARED BY URS HUNT VALLEY, MARYLAND	DRAWN BY: TAR	F.A.P. NO.		TS NO. 4098F GI	SHEET NO.
	CHECKED BY: KJS	S.H.A. NO.			
	SCALE: NONE	COUNTY:	ANNE ARUNDEL	T.I.M.S. NO. F 203	43 OF 43
	DATE: 8-12-04	LOG MILE:	02039300.26		

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