PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND MD 63 IN WASHINGTON COUNTY. THIS SHEET ADDRESSES THE ULTIMATE TRAFFIC CONTROL SIGNAL. US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT (8) PHASE, FULL-TRAFFIC-ACTUATED MODE. EXCLUSIVE/PERMISSIVE LEFT TURN PHASES AND RIGHT TURN OVERLAP MOVEMENTS WILL BE PROVIDED FOR ALL FOUR APPROACHES. ALTERNATE PEDESTRIAN PHASES WILL BE PROVIDED ACROSS ALL FOUR APPROACHES OF THE INTERSECTION.

III. CONTROLLER REQUIREMENTS

USE THE A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH THREE (3) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP, AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET INSTALLED DURING PHASE I CONSTRUCTION.

IV. PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT SIX ARE AS FOLLOWS:

MR. LARRY HUMBERTSON
UTILITY ENGINEER
PHONE: (301)729-8439

MR. GEORGE FRANKENBERRY
ASSISTANT DISTRICT
ENGINEER - MAINTENANCE
PHONE: (301)729-8457

MR. JOHN TRUE
ASSISTANT DISTRICT
ENGINEER - CONSTRUCTION
PHONE: (301)729-8411

MR. GEORGE SMALL
ASSISTANT DISTRICT
ENGINEER-TRAFFIC
PHONE: (301)729-8444

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

THE POWER COMPANY REPRESENTATIVE IS
ALLEGHENY POWER COMPANY
MR. RAYMOND KETROW, JR.
PHONE: (301)582-5272

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	QUANTITY	SPECIFICATION SECTION	DESCRIPTION
9003	22 SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: - 2 EACH R10-12 (36"x42") - MAST ARM MOUNT

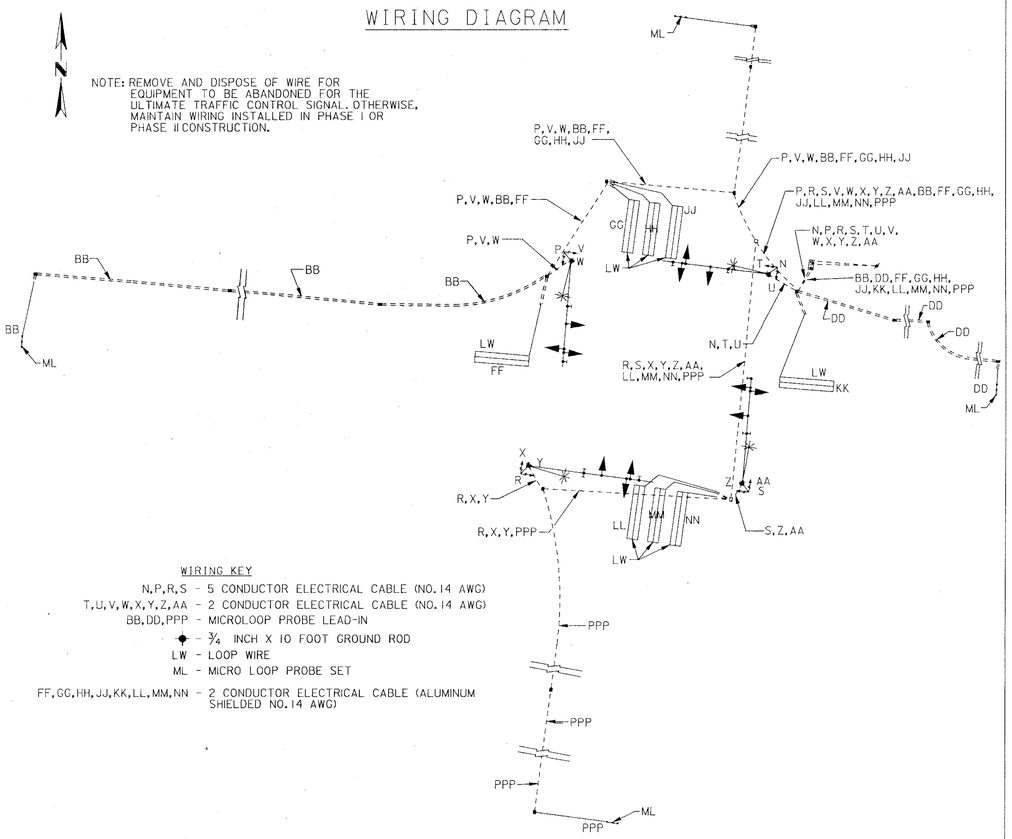
EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	SPECIFICATION SECTION	DESCRIPTION
1010	30 LF	104	REMOVAL OF REMOVABLE PREFORMED PAVEMENT MARKINGS - ANY WITH
2006	3 CY	205	TEST PIT EXCAVATION
5009	750 LF	555	12" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS
5010	160 LF	555	24" WHITE PERMANENT PREFORMED PAVEMENT MARKINGS
8003	625 LF	805	2" SCHEDULE 80, RIGID PVC CONDUIT - TRENCHED
8010	35 LF	805	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8013	150 LF	805	2" SCHEDULE 80, RIGID PVC CONDUIT - SLOTTED
8015	30 LF	805	1" LIQUID TIGHT NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8017	1 EA	810	MICROLOOP PROBE, 500 FOOT LEAD IN CABLE
8018	2 EA	810	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8019	5 EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8022	22 SF	813	INSTALL OVERHEAD SIGN
8026	1 EA	SP	AS-BUILT FOR TRAFFIC SIGNAL
8030	12 EA	814	RELOCATE EXISTING SIGNAL HEAD
8033	16 EA	814	12 INCH PEDESTRIAN SIGNAL HEAD SECTION
8034	1450 LF	810	ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED)
8035	1825 LF	810	ELECTRICAL CABLE- 2 CONDUCTOR (NO 14 AWG)
8036	950 LF	810	ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)
8038	4000 LF	810	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)
8039	1200 LF	815	SAWCUT FOR SIGNAL (LOOP DETECTOR)
8040	8 EA	817	PUSHBUTTON AND SIGN

WIRING DIAGRAM

NOTE: REMOVE AND DISPOSE OF WIRE FOR EQUIPMENT TO BE ABANDONED FOR THE ULTIMATE TRAFFIC CONTROL SIGNAL. OTHERWISE, MAINTAIN WIRING INSTALLED IN PHASE I OR PHASE II CONSTRUCTION.



WIRING KEY

N,P,R,S - 5 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
T,U,V,W,X,Y,Z,AA - 2 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
BB,DD,PPP - MICROLOOP PROBE LEAD-IN
◆ - ¾ INCH X 10 FOOT GROUND ROD
LW - LOOP WIRE
ML - MICRO LOOP PROBE SET
FF,GG,HH,JJ,KK,LL,MM,NN - 2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED NO.14 AWG)

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 & 5	G/R	G/R	R	G/R	G/R	R	R	R	R/G	R	R	R/G	DW	DW	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASE 1 & 6, OR PHASE 2 & 5, OR PHASE 2 & 6																			
PHASE 1 & 6	G/G	G/G	G	R	R	R	R	R	R	R	R	R/G	DW	DW	DW	DW	DW	DW	DW	DW
1 CHANGE	Y/G	Y/G	G	R	R	R	R	R	R	R	R	R/Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	G/G	G/G	G	R	R	R/G	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
5 CHANGE	R	R	R	Y/G	Y/G	G	R	R	R/Y	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
ALT 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	W	W	W	W	DW	DW	DW	DW
PED CLEAR	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
ALT 2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 & 7	R	R	R/G	R	R	R/G	G/R	G/R	R	G/R	G/R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 & 7 CHANGE	TO PHASE 3 & 8, OR PHASE 4 & 7, OR PHASE 4 & 8																			
PHASE 3 & 8	R	R	R/G	R	R	R	G/G	G/G	G	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R/Y	R	R	R	Y/G	Y/G	G	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 7	R	R	R	R	R	R/G	R	R	R	G/G	G/G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R/Y	R	R	R	Y/G	Y/G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
ALT 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	W	W	W	W	W
PED CLEAR	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	FL/DW
ALT 4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	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	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "C"

C. MATERIAL TO BE REMOVED AND RETURNED TO SHA.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

TSP-15

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ENGINEERS
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HUNT VALLEY, MARYLAND
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REVISION 'E'

REVISIONS

E	INTERSECTION RECONSTRUCTION (2/2002) WA1245176
JFL	
D	ADD LEAD LT FOR WB US 40 & RELOCATE SIGNAL HEADS
C	4-6-95 ADD NB MD 63 E/P LT
B	NOVEMBER 1, 1990 INSTALL NEW LOOP DETECTORS FOR SB AND EB APPROACHES

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY
ORIGINAL ON FILE

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNAL PLAN
US 40 AND MD 63
GENERAL INFORMATION SHEET - ULTIMATE

DRAWN BY:	B.T./J.G.	F.A.P. NO.	N/A	TS NO. 1199E- GI	SHEET NO.
CHECKED BY:	A.B.	S.H.A. NO.	W-657-501-685		
SCALE:	1" = 20'	COUNTY:	WASHINGTON	T.I.M.S. NO. E486	78 OF 102
DATE:	2/07/77	LOG MILE:	*2100401 4.54		

PLOTTED: 01:08 PM on Thursday, January 03, 2002
BY: Rick Briggs (Divisions Transportation)
FILE: mta\998\03821\drawings\98258401.dgn