PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MARYLAND ROUTE 28 (DARNESTOWN ROAD) AND POTOMAC VALLEY SHOPPING CENTER IN MONTGOMERY COUNTY. MARYLAND ROUTE 28 (DARNESTOWN ROAD) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA, SIX (6) PHASE, SEMI-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH EASTBOUND AND WESTBOUND MD 28 MOVEMENTS. THE MD 28 THROUGH MOVEMENTS ARE TO OPERATE CONCURRENTLY. THE POTOMAC VALLEY SHOPPING CENTER MOVEMENTS ARE TO OPERATE CONCURRENTLY. AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE WEST AND EAST LEGS OF MD 28. A CONCURRENT PEDESTRIAN PHASE WILL OPERATE ACROSS THE NORTH AND SOUTH LEGS OF THE DRIVEWAY.

VIDEO TRAFFIC DETECTION SYSTEM [4]

A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ~~THREE (3) FOUR-CHANNEL, TIME-DELAY OUTPUT LOOP DETECTOR AMPLIFIERS,~~ AND L.A.U. AND L.A.U. PANEL WITH ASSOCIATED HARNESS HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET WILL BE INSTALLED AT THIS LOCATION.

III. INTERCONNECTION

THE EXISTING 50 PAIR VOICE GRADE INTERCONNECT CABLE BETWEEN THE INTERSECTIONS OF MD 28 @ POTOMAC VALLEY SHOPPING CENTER AND MD 28 @ TSCHIFFELY SQUARE ROAD IS TO BE ROUTED AS SHOWN ON WIRING DIAGRAM.

IV. PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT THREE ARE AS FOLLOWS:

MR. CHARLIE WATKINS
DISTRICT ENGINEER
PHONE (301) 513-7311

MR. AUGUSTINE REBISH
UTILITY ENGINEER
PHONE: (301) 513-7350

MR. MAJID SHAKIB
ASSISTANT DISTRICT
ENGINEER-TRAFFIC
PHONE: (301) 513-7358

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

THE POWER COMPANY REPRESENTATIVE IS
POTOMAC ELECTRIC POWER COMPANY
MR. JIM SLAYTON
PHONE: (202) 872-2000

THE CONTACT PERSON FOR
MONTGOMARY COUNTY DPW-T IS:
MR. ROBERT CONZALES
PHONE: (240)777-8761

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

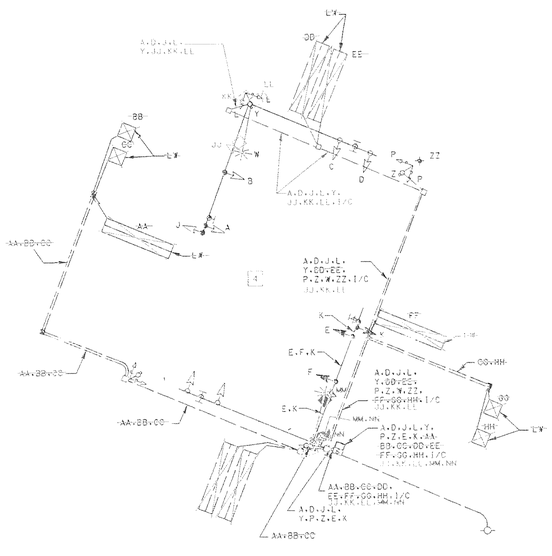
QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
11	SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
			-1 EACH R10-12 (36"X42") - MAST ARM MOUNT

EQUIPMENT LIST 'B'

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

	QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
	550	LF	553	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
	200	LF	553	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
	4	EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
~~[4]~~	~~19~~	~~LF~~	~~805~~	~~FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE~~
	95	LF	805	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
	176	LF	805	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - SLOTTED
	127	LF	810	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE GROUND COPPER WIRE
~~[4]~~	~~1285~~	~~LF~~	~~810~~	~~FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED)~~
	289	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 AWG)
	456	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)
	505	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 AWG)
~~[4]~~	~~1422~~	~~LF~~	~~810~~	~~FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)~~
~~[4]~~	~~372~~	~~LF~~	~~815~~	~~FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)~~
	145	LF	810	FURNISH AND INSTALL 2-CONDUCTOR 12 AWG
	577	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
	13	EA	814	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
	1	EA	SP	RELOCATE EXISTING OVERHEAD SIGNS
	3	EA	814	RELOCATE EXISTING SIGNAL HEADS
	11	SF	813	INSTALL OVERHEAD SIGN
	1	LS	SP	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
	1	LS	SP	RELOCATE EXISTING COMMUNICATION CABLE
[4]	2	EA	SP	FURNISH AND INSTALL VIDEO TRAFFIC DETECTION SYSTEM
[4]	1130	LF	SP	FURNISH AND INSTALL VIDEO TRAFFIC DETECTION CABLE

ULTIMATE WIRING DIAGRAM



WIRING KEY

A.E.J.K - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

D.F.L.P - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

Y.Z - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

[4] ~~AA.BB.CC.DD.EE.FF.GG.HH - 8-CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED~~

W - 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG)

ZZ - STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)

[4] ~~LW - LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)~~

I/C - 50 PAIR COMMUNICATION CABLE, JELLY-FILLED

[4] ~~JJ.KK.LL.MM.NN - VIDEO TRAFFIC DETECTION CABLE (NO. 18 AWG)~~

PHASE CHART

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

TSP 26

REVISIONS	APPROVALS
3 10-00 NEW MD 28 GEOMETRICS SHA CONT. NO. MO5285271	PROJECT MANAGER, SIGNAL DESIGN DIVISION: ORIGINAL
2 ADDENDUM NO. 3 REPLACEMENT SHEET 12/19/2000	ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION: ON
1 REDLINE NO. 4 REPLACEMENT SHEET 9/07/2001	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION: FILE
M.P.	DIRECTOR, TRAFFIC & SAFETY

KCI TECHNOLOGIES

REVISION 'A'
KCI TECHNOLOGIES INC.
ENGINEERS AND PLANNERS
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1288
(410) 316-7800

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
ULTIMATE
MD 28 (DARNESTOWN RD) AND POTOMAC VALLEY SHOPPING CENTER

DRAWN BY:	S.C.K.	F.A.P. NO.		TS NO. 3474A-G1	SHEET NO.
CHECKED BY:	STEVE RENZI	S.H.A. NO.	M528-501-371		
SCALE:	NONE	COUNTY:	MONTGOMERY	T.I.M.S. NO. D107	325 OF 434
DATE:	OCTOBER 1994	LOG MILE:	15002815.79		

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22/01 5:33:00 PM G:\PLOTTING\PS7\OCP\MYLAR_HP.dgn McSendy Pierre Division: Transportation m:\1997\01\97029\md28\MACCRUDR\SP02MCUI.PRP