12/12/00 3:40:01 AM G:\PLOTTING\PS7\OCF\MYLAR_HP.qcf McSendy Pierre Division: Transportation m:\1997\0197029\md28\tschiffl\sp02tsul.prf

PROJECT DESCRIPTION

I. GENERAL

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

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA, FIVE (5) PHASE, SEMI-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE-PERMISSIVE LEFT TURN/U-TURN PHASE FOR BOTH THE EASTBOUND AND WESTBOUND MD 28 MOVEMENTS. THE MD 28 APPROACHES WILL OPERATE CONCURRENTLY AND THE TSCHIFFELY SQUARE APPROACH WILL OPERATE SEPARATELY. AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE WEST LEG OF MD 28 AND A CONCURRENT PEDESTRIAN PHASE WILL BE PROVIDED ACROSS TSCHIFFELY SQUARE ROAD.

AN EIGHT (8) PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH TWO (2) FOUR (4) CHANNEL LOOP DETECTOR AMPLIFIERS, L.A.U., L.A.U. PANEL, HARNESS HOUSED IN A NEMA SIZE "6" POLE MOUNTED CABINET EXISTS AT THIS LOCATION.

III. INTERCONNECTION

THE EXISTING 50 PAIR VOICE GRADE INTERCONNECT CABLE BETWEEN THE INTERSECTIONS OF MD 28 @ TSCHIFFELY SQUARE ROAD AND MD 28 @ OWENS GLEN WAY IS TO BE MAINTAINED.

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.
CHEIF, 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
MONTGOMERY COUNTY DPW-T IS:
MR. ROBERT GONZALES
PHONE: (240) 777-8761

EQUIPMENT LIST 'A'

EQUIPMENT TO BE SUPPLIED BY THE SHA.

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
48	SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: - 1 EACH R3-5R (30" X 36")-MAST ARM MOUNT - 1 EACH R3-5L (30" X 36")-MAST ARM MOUNT - 1 EACH R10-12 (36" X 42")-MAST ARM MOUNT - 1 EACH R10-12 (1) (36" X 42")-MAST ARM MOUNT - 1 EACH D3-2 (TSCHIFEELY SQUARE RD - ARROW) (DUEL FACE) (VAR.' X 16') -MAST ARM MOUNT

EQUIPMENT LIST 'B'

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

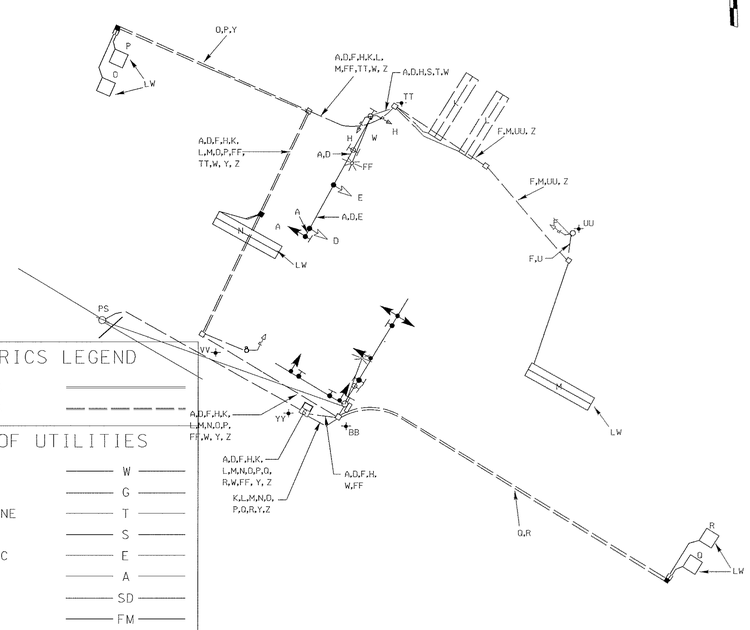
QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
400	LF	556	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING TAPE
150	LF	556	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING TAPE
48	SF	813	INSTALL OVERHEAD SIGN
3	EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
22	LF	805	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
115	LF	805	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT- BORED
175	LF	805	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
4	EA	804	FURNISH AND INSTALL GROUND ROD-3/4 INCH DIAMETER X 10-FOOT LENGTH
420	LF	810	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
2085	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED)
260	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO 14 AWG)

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR (CONTINUED).

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
270	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 3 CONDUCTOR (NO 14 AWG)
281	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)
660	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO 14 AWG)
2050	LF	810	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)
560	LF	815	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
310	LF	810	FURNISH AND INSTALL 2-CONDUCTOR ELECTRICAL CABLE (NO 12 AWG)
1	LS	SP	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
24	EA	814	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD
160	LF	805	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
1	LS	SP	RELOCATE EXISTING COMMUNICATION CABLE
2	EA	814	RELOCATE EXISTING SIGNAL HEAD

ULTIMATE WIRING DIAGRAM



WIRING KEY

A,D - 7-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
E,H - 5-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
K,L,M,N,O,P,Q,R - 2-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG) ALUMINUM SHIELDED
F - 3-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
W - 2-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
FF - 2-CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO.12 AWG)
BB,TT,UU,VV,YY - STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
LW - LOOP WIRE (NO.14 AWG)
- 3/4 INCH x 10 FOOT GROUND ROD
Y, Z - 50 PAIR COMMUNICATION CABLE, JELLY FILLED

GEOMETRICS LEGEND

PROPOSED GEOMETRICS
EXISTING GEOMETRICS

LEGEND OF UTILITIES

WATER	W
GAS	G
UNDERGROUND TELEPHONE	T
SANITARY SEWER	S
UNDERGROUND ELECTRIC	E
AERIAL	A
STORM DRAIN	SD
SEWAGE FORCE MAIN	FM
CABLE TV	TV

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 & 5	G/R	G/R	R	G/R	G/R	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASE 1-6 OR 2-5 OR 2-6											
PHASE 1 & 6	G/G	G/G	G	R	R	R	R	R	DW	DW	DW	DW
1 CHANGE	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	G/G	G/G	G	R	R	DW	DW	DW	DW
5 CHANGE	R	R	R	Y/G	Y/G	Y	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	W	W	DW	DW
PED CLEAR	G	G	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW
ALT 4	R	R	R	R	R	R	G	G	DW	DW	W	W
PED CLEAR	R	R	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW
ALT 4 CHANGE	R	R	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

TSP 32

REVISION 'A'
KCI TECHNOLOGIES INC.
ENGINEERS AND PLANNERS
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1888
(410) 316-7800

REVISIONS
A 6-00 NEW MD 28 GEOMETRICS SHA CONT. NO. MO5285271
2 ADDENDUM NO. 2 REPLACEMENT SHEET 11/ /2000
Q.X.

APPROVALS
PROJECT MANAGER, SIGNAL DESIGN DIVISION
ORIGINAL ON FILE
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNAL PLAN
GENERAL INFORMATION SHEET
PHASE ULTIMATE CONSTRUCTION
MD 28 (DARNESTOWN RD) AND TSCHIFFELY SQUARE RD

DRAWN BY: T. ZAYDEL	F.A.P. NO.		TS NO. 3609A-GI
CHECKED BY: T. HANNAN	S.H.A. NO.		SHEET NO. ___ OF ___
SCALE: NONE	COUNTY: MONTGOMERY		T.I.M.S. NO. D107
DATE: 6-3-96	LOG MILE: 15002816.06		

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