PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL (ULTIMATE PHASE) AT THE INTERSECTION OF MD ROUTE 187 (OLD GEORGETOWN ROAD) AND I-270 SB AND NB RAMPS IN MONTGOMERY COUNTY. MD ROUTE 187 (OLD GEORGETOWN ROAD) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX (6) PHASE, SEMI-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE LEFT TURN PHASE FOR SOUTHBOUND AND NORTHBOUND MD 187 MOVEMENT. THE MD 187 THROUGH MOVEMENTS ARE TO OPERATE CONCURRENTLY. EASTBOUND MOVEMENTS FROM THE I-270 RAMPS WILL OPERATE CONCURRENTLY. AN ADDITIONAL EASTBOUND RIGHT TURN PHASE ON THE I-270 RAMP WILL OPERATE CONCURRENTLY WITH THE EASTBOUND I-270 RAMP MOVEMENT. CONCURRENT PEDESTRIAN PHASES WILL BE PROVIDED ACROSS THE EAST AND WEST LEGS OF MD 187.

A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO TRAFFIC DETECTION SYSTEM, 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 187 AT TUCKERMAN LANE AND MD 187 AT ROCK SPRING DRIVE IS TO BE MAINTAINED AND REWIRED AS SHOWN ON THE WIRING DIAGRAM.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE, EXCLUDING INTERCONNECT, TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE. DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. THE CONTRACTOR SHALL RUN THE INTERCONNECT CABLE INTO THE BASE OF CABINET AND PROPERLY TAG. CONTACT MR BOB GONZLES AT (240) 777-8761 SEVENTY TWO HOURS IN ADVANCE OF THE INTENDED WORK.

IV. PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT THREE ARE AS FOLLOWS:

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

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

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

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

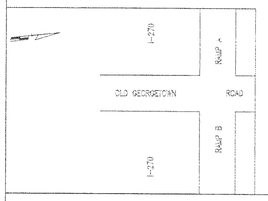
MR. ROBERT GONZALES
TRAFFIC ENGINEER
MONTGOMERY COUNTY DPWT
PHONE: (240) 777-8761

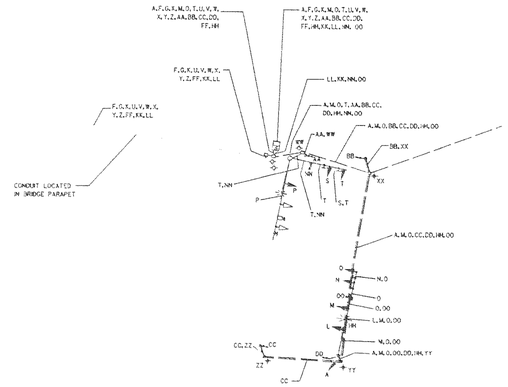
THE POWER COMPANY REPRESENTATIVE IS
POTOMAC ELECTRIC POWER COMPANY
ELZA HEWOWALA
PHONE: (202) 872-2000

V. MAINTENANCE OF TRAFFIC

THE FOLLOWING STANDARD TRAFFIC CONTROL NUMBERS SHALL BE REFERENCED:

STANDARD NO. 104.00
STANDARDS NO. 104.37, 104.38 (LANE CLOSURE)
STANDARD NO. 104.45 (UNDERGROUND WORK)





WIRING LEGEND:

A,E,F,G,H,J,K, L,M,N,O,P,S,T	— 5-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
U,V,W,X,Y,Z, AA,BB,CC,DD	— 3-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
FF,HH	— 2-CONDUCTOR ELECTRICAL CABLE (NO.12 A.W.G.)
KK,LL,NN,OO,	— VIDEO TRAFFIC DETECTION CABLE 7-CONDUCTOR (NO.18 A.W.G.)
PP,QQ,SS,TT,UU, WW,XX,YY,ZZ	— STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
+	— 3/4" x 10' GROUND ROD

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
67	SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
			- 3 EACH R3-5L (30" X 36") - MAST ARM MOUNT
			- 1 EACH R3-5 (30" X 36") - MAST ARM MOUNT
			- 1 ASSOCIATED WD 187 SHIELD ASSEMBLY (24" X 75")
			- 1 EACH M4-5 (24" X 12") - POLE MOUNT
			- 1 EACH M3-4 (24" X 12") - POLE MOUNT
			- 1 EACH M1-1 (30" X 24") - POLE MOUNT
			- 1 EACH M6-3 (21" X 15") - POLE MOUNT

5

EQUIPMENT LIST 'B'

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

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
330	LF	556	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
160	LF	556	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
7	CY	801	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
1	EA	SP	FURNISH AND INSTALL 27-FOOT STEEL POLE WITH SINGLE 70-FOOT MAST ARM
24	EA	814	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
67	SF	813	INSTALL OVERHEAD SIGN
1	EA	818	FURNISH AND INSTALL 20-FOOT LIGHTING ARM ON SIGNAL STRUCTURE
1	EA	806	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINARE WITH PHOTOCELL
4	EA	804	FURNISH AND INSTALL GROUND ROD-3/4 INCH DIAMETER X 10-FOOT LENGTH
3	EA	SP	FURNISH AND INSTALL 10-FOOT BREAKWAY PEDESTAL POLE
2	EA	814	FURNISH AND INSTALL 12-INCH PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT
6	EA	814	FURNISH AND INSTALL 12-INCH PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL MOUNT
2	EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
355	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO 12 AWG)
900	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 3 CONDUCTOR (NO 14 AWG)
1360	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)
560	LF	SP	FURNISH AND INSTALL VIDEO TRAFFIC DETECTION CABLE
90	LF	810	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
100	LF	805	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
150	LF	805	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT- BORED
4	EA	SP	CUT, CLEAN AND CAP TRAFFIC SIGNAL STRUCTURE
1	LS	SP	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
2	EA	SP	FURNISH AND INSTALL VIDEO TRAFFIC DETECTION SYSTEM

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 & 6	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
1 CHANGE	Y	Y	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	R	R	G	G	G	G	G	R	R	R	W	W	W	W
PED CLEAR	R	R	G	G	G	G	G	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW
2 & 6 CHANGE	R	R	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

REVISION "C"

KCI TECHNOLOGIES

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

REVISIONS

5 REDLINE REVISION NO. 5 NEW SHEET 9/4/2001

A ADDENDUM NO. 2 REPLACEMENT SHEET 11/30/00

C NEW MD 187 GEOMETRICS 10-00 SHA CONT. NO. WB995172

B REVISED SIGNAL HEAD DISPLAY 10/14/75

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ORIGINAL

ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

ON

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

FILE

DIRECTOR, TRAFFIC & SAFETY

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

I-270 INTERCHANGES AT ROCKLEDGE DRIVE AND MD 187
GENERAL INFORMATION SHEET (ULTIMATE PHASE)
I-270 RAMP A/RAMP B AT MD 187 (OLD GEORGETOWN ROAD)

TS-148

DRAWN BY: STEVE RENZI	F.A.P. NO.	TS NO. 1259C-01	SHEET NO.
CHECKED BY: STEVE RENZI	S.H.A. NO.		
SCALE: NONE	COUNTY: MONTGOMERY	T.I.M.S. NO. D-311	265B OF 404
DATE: 12/27/74	LOG MILE: 15018703.80		

M:\1999\3138078\TRAFFIC\

8/24/01 8:57:28 AM G:\PLOTTING\PS7\OCF\MDLAN_HP.pgt McGendy, Pierre Division: Transportation m:\1998\0198078\TRAFFIC\spmotl0a.prt