

DRILL HOLES

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of MD 187 (Old Georgetown Rd) and Huntington Pkwy in Montgomery County. The existing signal heads shall be replaced with LED signal heads and existing pedestrian signal heads with Countdown pedestrian signals. MD 187 (Old Georgetown Rd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA five-phase, semi-actuated mode, with the MD 187 (Old Georgetown Rd) approaches running concurrently. The Exclusive/Permissive left turn phase for the northbound approach of MD 187 (Old Georgetown Rd) will continue to operate as normal. A Countdown pedestrian phase with audible pushbutton actuation shall be provided across the south leg of MD 187 (Old Georgetown Rd). The Countdown pedestrian phase with audible pushbuttons across Huntington Pkwy shall be on recall. The Huntington Pkwy approaches shall continue to operate as a side street split phase.
- A full-traffic-actuated, existing eight-phase controller with existing video interface, proposed 2-wire Control Unit and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.
- Montgomery County signal shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the Montgomery County Signal Shop for testing and programming.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the Montgomery County Signal Shop. Contact Mr. Kamal Hamud at (240) 777-8761 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- APS will function as follows:
 FOR MD 187 (OLD GEORGETOWN RD)
 a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "Wait to cross Old Georgetown at Huntington"
 b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
 FOR HUNTINGTON PARKWAY
 a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "Wait to cross Huntington at Old Georgetown (Crosswalk angles left.)"
 b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

The contact persons for District #3 (Montgomery County) are as follows:

- | | |
|---|---|
| Mr. Jeff Wentz
Assistant District Engineer - Traffic
Phone: (301) 513-7358 | Mr. Keith Lord
Chief, Montgomery County Signal Shop
301-279-1291 |
| Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304 | Mr. Sonny Bailey
Chief, Sign Shop
410-787-7676 |
| Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350 | The power company representative is: |
| Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630 | Mr. Steve Custer
PEPCO Customer Design
201 W Gude Dr.
Rockville, MD 20850
Phone: 301 548-4333 |

EQUIPMENT LIST

CAT NO.	DESCRIPTION	QUANTITY
973023	SHEET ALUMINIUM SIGNS	4 SF
	Pedestrian education R10-3(1) mod sign. (Note: Sign to read "PUSHBUTTON TO CROSS OLD GEORGETOWN ROAD").	2 EA
	Pedestrian education R10-3(1) mod sign. (Note: Sign to read "PUSHBUTTON TO CROSS HUNTINGTON PKWY").	2 EA

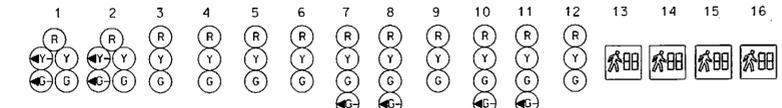
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT NO.	DESCRIPTION	QUANTITY
203030	TEST PIT EXCAVATION	3 CY
585405	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING	150 LF
585612	PERMANENT PREFORMED PATTERNED REFLECTIVE PAVEMENT MARKINGS ARROWS	3 EA
585621	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	150 SF
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	100 SF
800000A	16" COUNTDOWN PEDESTRIAN SIGNAL HEAD	4 EA
800000A	2 WIRE CONTROL UNIT	1 EA
800000A	AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	4 EA
801004	CONCRETE FOR SIGNAL FOUNDATION	4 CY
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	275 LF
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	120 LF
813014	INSTALL GROUND MOUNTED SIGN	4 SF
818004	10 FOOT BREAKAWAY PEDESTAL POLE	3 EA
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	3 EA
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	44 EA
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	635 LF
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	650 LF
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	275 LF
800000	REMOVE AND DISPOSE EXISTING EQUIPMENT	1 EA

C. EQUIPMENT TO BE REMOVED

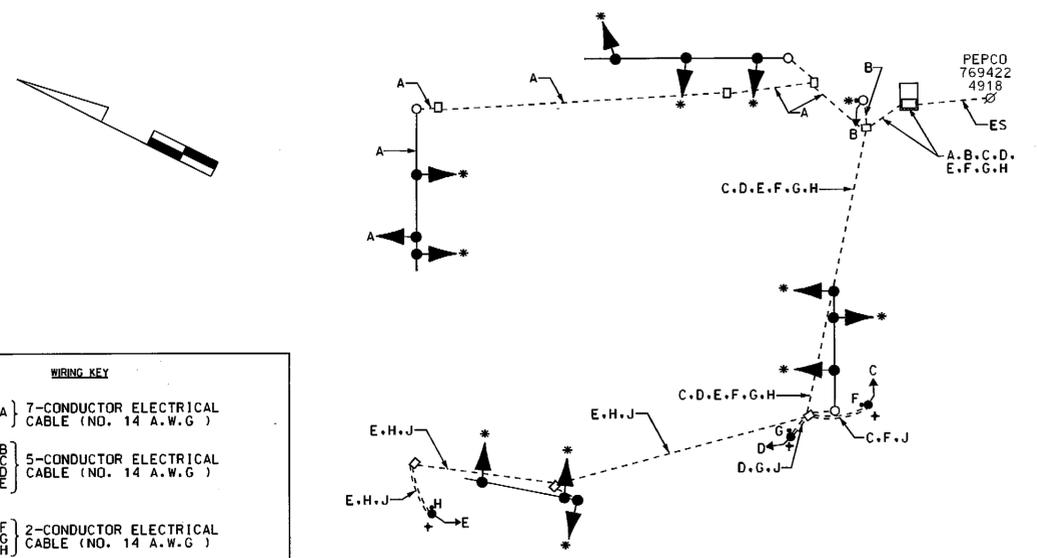
All removed signal materials are to become property of the contractor.

PHASE CHART



PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 2 & 5	←G-←G	←G-←G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
5 CHANGE	←Y-←G	←Y-←G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR / COUNTDOWN	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	G	G	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	WK	WK
PED CLEAR / COUNTDOWN	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	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

WIRING DIAGRAM



WIRING KEY

A	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B, C, D, E	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F, G, H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
ES	EXISTING POWER SERVICE
*	USE EXISTING WIRING
+	GROUND ROD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

**MD 187 AND (OLD GORGETOWN RD)
HUNTINGTON PARKWAY**

BETHESDA, MARYLAND

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	12/22/08	CONTRACT NO.	MD4295186
DESIGNED BY	James Allen Jr.	COUNTY	MONTGOMERY		
DRAWN BY	James Allen Jr.	LOGMILE	15018700.91		
CHECKED BY		TMS NO.	J511		
F.A.P. NO.		TOD NO.			

sts
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