

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE REMOVAL OF EXISTING CROSSWALKS, PEDESTRIAN SIGNALS, AND PUSHBUTTONS FOR THE SOUTH & WEST LEGS AND THE INSTALLATION OF CROSSWALKS, LED COUNTDOWN PEDESTRIAN SIGNAL HEADS AND APS PUSHBUTTONS FOR THE EAST AND NORTH LEGS OF THE INTERSECTION OF MD 586 (VEIRS MILL ROAD) AND NEWPORT MILL ROAD. MD 586 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE EAST LEG OF THE INTERSECTION. EXCLUSIVE/PREMISSIVE LEFT TURNS ARE PROVIDED FOR THE EAST AND WEST LEGS OF THE INTERSECTION.

**CONTROLLER REQUIREMENTS**

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE CONTROLLER HOUSED IN A POLE MOUNTED CABINET WILL BE USED. A 2-WIRE CENTRAL CONTROL UNIT SHALL BE FURNISH BY THE CONTRACTOR AND INSTALLED BY MONTGOMERY COUNTY.

**SPECIAL NOTE**

APS WILL FUNCTION AS FOLLOWS:

TO CROSS VEIRS MILL ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS VEIRS MILL AT NEWPORT MILL. WAIT."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS NEWPORT MILL ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS NEWPORT MILL AT VEIRS MILL. WAIT."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT #3 (MONTGOMERY COUNTY) ARE AS FOLLOWS:

MR. CEDRIC WARD  
ASSISTANT DISTRICT ENGINEER-TRAFFIC  
PHONE: (301)513-7498

MR. VERNON STINNETT  
ASSISTANT DISTRICT ENGINEER-MAINTENANCE  
PHONE: (301)513-7304

MR. KEITH LORD  
MONTGOMERY COUNTY SIGNAL SHOP  
PHONE: (301)674-8965

MR. VICTOR GRAFTON  
UTILITY ENGINEER  
PHONE: (301)513-7350

MR. KAMAL HAMUD  
MONTGOMERY COUNTY TMC  
PHONE: (240)777-8761

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

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

MR. ED RODENHEIZER  
CHIEF, SIGNAL OPERATIONS  
PHONE: (410)787-7650

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF  
TRAFFIC OPERATIONS  
PHONE: (410)787-7630

MR. EUGENE BAILEY  
CHIEF, SIGNAL OPERATIONS  
PHONE: (410)787-7676

**EQUIPMENT LIST "A"**

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9571	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN 4 - R10-3(1) (9"X15")	SF	4

**WIRING KEY**

A,C,E,G	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
B,D,F,H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	EPS	EXISTING POWER SOURCE
✱	PROPOSED GROUND ROD		

**EQUIPMENT LIST "B"**

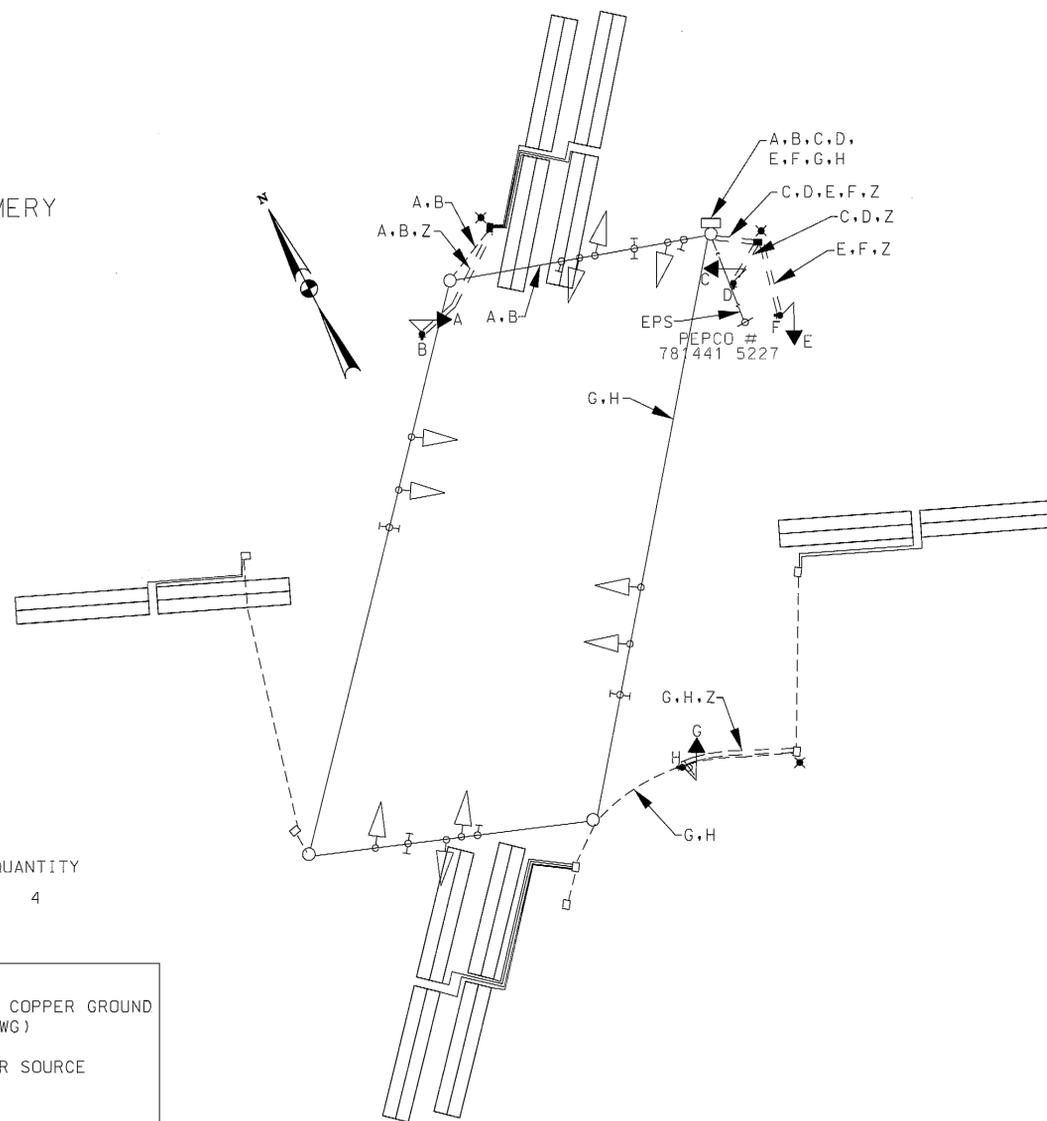
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	DESCRIPTION	UNIT	QUANTITY
585621	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	910
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	150
800000	REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT	LS	1
800000	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	EA	4
800000	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION	EA	4
800000	2 WIRE CENTRAL CONTROL UNIT	EA	1
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	1
801106	WOOD SIGN SUPPORTS 4 INCH X 6 INCH	LF	138
801605	SHEET ALUMINUM SIGNS	SF	104
801711	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS	SF	36
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	130
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	120
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	2
813014	INSTALL GROUND MOUNTED SIGN	SF	4
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	4
837001	FURNISH AND INSTALL GROUND ROD 3/4IN. DIAMETER X 10 FT. LENGTH	EA	3
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	710
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	710

**EQUIPMENT LIST "C"**

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.

ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



**PHASING CHART**

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

**GENERAL NOTES**

- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
- ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- UNDERGROUND 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.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK GRADE.
- ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE MONTGOMERY COUNTY SIGNAL SHOP FOR TESTING PRIOR TO INSTALLATION. CONTACT MR. KEITH LORD AT 301-674-8965 TO COORDINATE. MONTGOMERY COUNTY SIGNAL SHOP SHALL INSTALL APS CONTROL UNIT INTO CONTROLLER CABINET. THE APS PUSH BUTTONS SHALL BE PROGRAMMED BY THE MANUFACTURER.
- LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM 60"X60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA, DOES NOT HAVE TO REACH MORE THAN 18".
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- REFER TO PLAN SG-2 FOR SIGNAL LOOP INSTALLATION DETAILS.
- ALL SIGNS INSTALLED IN BRICK OR CONCRETE SHALL HAVE SLEEVED FOUNDATIONS AND CONFORM TO STANDARDS MD 812.05-01 & MD 812.05-02. THE SLEEVED FOUNDATION SHALL BE INCIDENTAL TO THE WOOD SIGN SUPPORTS.
- REFER TO PAVEMENT MARKING PLANS FOR PAVEMENT MARKING DETAILS OTHER THAN THOSE DETAILED ON THE SIGNAL PLAN.
- ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY MONTGOMERY COUNTY FORCES. CONTACT KAMAL HAMUD AT (240) 777-8761 72 HOURS IN ADVANCE OF INTENDED WORK.



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 586 (VEIRS MILL ROAD) AT  
NEWPORT MILL ROAD

REVISIONS		GENERAL INFORMATION SHEET	
SCALE	NONE	DATE	JANUARY 2011
CONTRACT NO.	M02125177	DESIGNED BY	AMR
COUNTY	MONTGOMERY	DRAWN BY	AMR
LOGMILE	15058604.72	CHECKED BY	BJG
TIMS NO.	I-353	FAP NO.	
TOD NO.		TS NO.	2024C-GI
DRAWING	SP-2	OF	2
SHEET NO.		OF	

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