

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS, COUNTDOWN PEDESTRIAN SIGNALS AND ADA SIDEWALK RAMPS AT THE INTERSECTION OF MD 28 (DARNESTOWN ROAD) AND TSCHEFFELY SQUARE ROAD IN MONTGOMERY COUNTY. MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL TRAFFIC-ACTUATED MODE. EXISTING MAINLINE EXCLUSIVE/PERMISSIVE LEFT-TURN AND PEDESTRIAN PHASES TO REMAIN. THE EXISTING PRE-EMPTION PHASES SHALL REMAIN.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET, CONTROLLER AND ASSOCIATED HARNESSSES SHALL REMAIN. THE MONTGOMERY COUNTY SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS DARNESTOWN ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS DARNESTOWN AT TSCHEFFELY SQUARE, WAIT".

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

TO CROSS TSCHEFFELY SQUARE ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS TSCHEFFELY SQUARE AT DARNESTOWN, WAIT".

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

SPECIAL NOTES

1. THE MONTGOMERY COUNTY SIGNAL SHOP SHALL INSTALL THE APS CONTROL UNIT INTO THE CONTROLLER CABINET. THE APS PUSH BUTTONS SHALL BE PROGRAMMED BY THE MANUFACTURER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.
3. 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.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Cedric Ward
Assistant District Engineer - Traffic
Phone: 301-513-7498

Mr. Victor Grafton
District Utility Engineer
Phone: 301-513-7351

Mr. Vernon Stinnett
Assistant District Engineer - Maintenance
Phone: 301-513-7304

OFFICE OF TRAFFIC AND SAFETY:

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
410-787-7630

Mr. Edward Rodenhizer
Chief Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Chief Signal Operations
410-787-7670

MONTGOMERY COUNTY:

Mr. Kamal Hamud
Traffic Engineering
240-777-8761

Mr. Bob Ricketts
Signal Shop
301-279-1975

The Power Company Is:
Peppo
8300 Old Marlboro Pike
Upper Marlboro, MD 20442
Phone: 301-961-5325

TOD NO: XX655-07
SHA NO: M0972855
MD 28 @ Quince Orchard HS, Potomac
Valley Shopping Ctr, Tschiffely Square

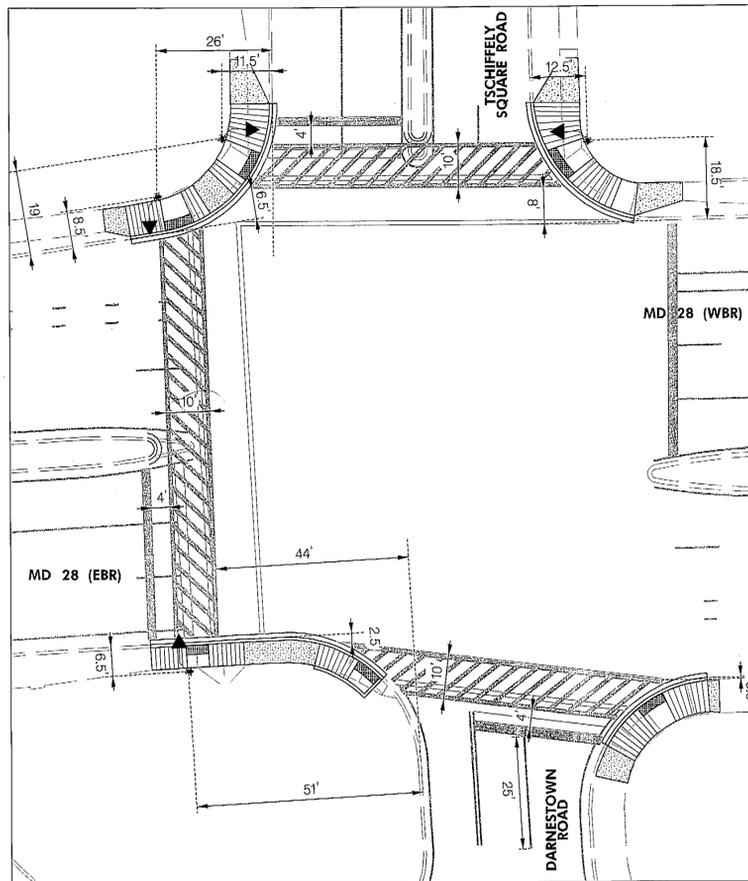
EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9570	109 SF	UPDATED SHEET ALUMINIUM GROUND MOUNTED SIGN 11 EA - SI-1 (30 IN. X 30 IN.) 4 EA - W16-7DR FYG (24 IN. X 12 IN.) 7 EA - W16-7DL FYG (24 IN. X 12 IN.) 1 EA - R4-7 (24 IN. X 30 IN.) 2 EA - R5-1 (30 IN. X 30 IN.)
9571	48 SF	UPDATED SHEET ALUMINIUM MAST ARM/POLE MOUNTED SIGN: 2 EA - R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS DARNESTOWN ROAD" 2 EA - R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS TSCHEFFELY SQUARE ROAD" 1 EA - M1-5(6) (36 IN. X 72 IN.) "EAST, MD 28, LEFT ARROW" 1 EA - M1-5(6) (36 IN. X 72 IN.) "WEST, MD 28, LEFT ARROW" 1 EA - M1-5(6) (24 IN. X 48 IN.) "WEST, MD 28, RIGHT ARROW"

PROPOSED SIGNAL EQUIPMENT AND PAVEMENT MARKING LAYOUT

1"=20'

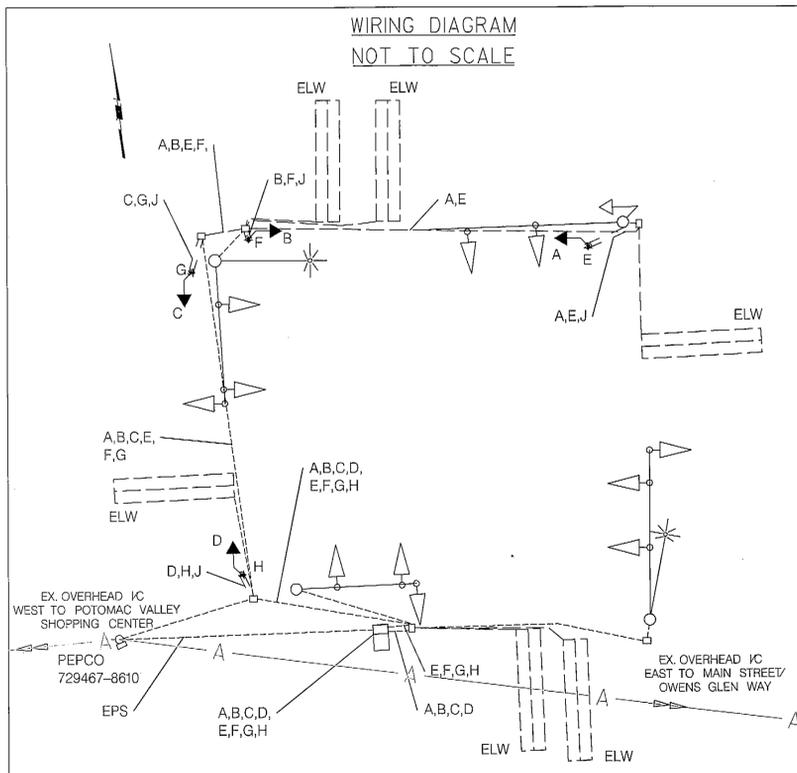


EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

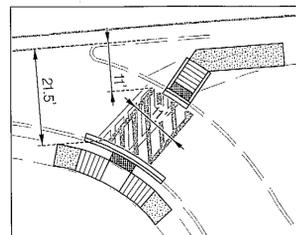
ITEM NO	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC
2002	2 CY	TEST PIT EXCAVATION
5002	30 LF	5' HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS
5003	860 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	1,250 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	170 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	300 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	1,800 SF	5 INCH CONCRETE SIDEWALK
6003	110 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8002	1 EA	2-WIRE CENTRAL CONTROL UNIT
8008	4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	4 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8015	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8023	1 EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8039	40 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8040	245 LF	WOOD SIGN SUPPORTS UP TO 4' X 6'
8041	157 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8043	40 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8054	770 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	780 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

WIRING DIAGRAM NOT TO SCALE



CHANNELIZED RIGHT PROPOSED PAVEMENT MARKING LAYOUT

1"=20'



PHASE CHART	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 & 5	G-R	G-R	R	G-R	G-R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 & 5 CHANGE TO PHASE 1 & 6 OR PHASE 2 & 5 OR PHASE 2 & 6															
PHASE 1 & 6	G-R	G-R	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 CHANGE	Y-G	Y-G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	G-R	G-R	G	R	R	R	R	R	WK	WK	DW	DW
PHASE 5 CHANGE	R	R	R	Y-G	Y-G	G	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	FLDW	FLDW	DW	DW
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW
PHASE 4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 & 8 ALT.	R	R	R	R	R	R	G	G	G	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	DW	DW	FLDW	FLDW
PHASE 4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
PRE-EMPTION PHASE 1	G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPTION PHASE 1 CHANGE	Y	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPTION PHASE 2	G	G	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPTION PHASE 2 CHANGE	G	G	G	G	G	G	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	DARK	DARK	DARK	DARK

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO QUANTITY DESCRIPTION

NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (DARNESTOWN ROAD)
AT TSCHEFFELY SQUARE ROAD
GAITHERSBURG, MD

GENERAL INFORMATION SHEET

SCALE	NONE	ADVERTISED DATE	05/2011	CONTRACT NO.	XX6558185
DESIGNED BY	KXT	COUNTY	MONTGOMERY		
DRAWN BY	KXT	LOGMILE	15002816.06		
CHECKED BY	MIS	TIMS NO.	K542		
F.A.P. NO.		TOD NO.			
TS NO. 3609B-GI	DRAWING	SG-6	OF 6	SHEET NO.	6 OF 6

STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

- J - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- EPS - EXISTING POWER SOURCE
- ELW - EXISTING LOOP WIRE