PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS AND COUNTDOWN PEDESTRIAN SIGNALS ALONG THE NORTH, SOUTH AND WEST LEGS OF THE INTERSECTION OF MD 4 (PENNSYLVANIA AVE.) AND FORESTSVILLE RD IN PRINCE GEORGES COUNTY. AN ADDITIONAL THROUGH SIGNAL IS PROPOSED FOR EASTBOUND AND WESTBOUND MD 4 AS WELL AS A NEARSIDE SIGNAL FOR WESTBOUND MD 4. MD 4 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX (6) PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS EXCLUSIVE LEFT TURN PHASING FOR BOTH THE EASTBOUND AND WESTBOUND MOVEMENTS OF MD 4. THE MD 4 THROUGH MOVEMENTS OPERATE CONCURRENTLY. THE FORESTVILLE RD. MOVEMENTS OPERATE IN SPLIT PHASE. PRE-EMPTION IS PROVIDED FOR THE SOUTHBOUND APPROACH OF FORESTVILLE RD. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED FOR CROSSING THE WEST LEG OF MD 4.

THE EXISTING CABINET/CONTROLLER WILL BE UTILIZED.

APS OPERATION

FOR MD 4 (PENNSYLVANIA AVE.)

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS PENNSYLVANIA AVENUE."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR FORESTVILLE RD.

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS FORESTVILLE RD."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

PROJECT CONTACTS

The contact persons for District #3 (Prince George's County) are as follows:

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: (301 513-7358

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Utility Engineer
Phone: (301) 513-7350

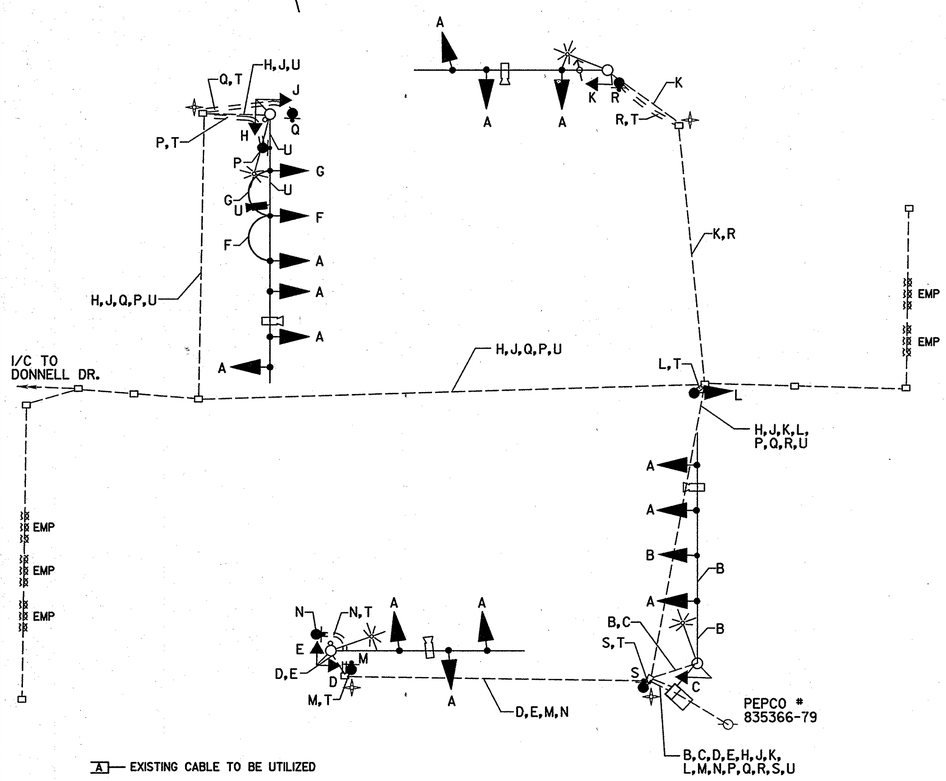
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	22	23	24	25	26	27
PHASE 1 + 5	←G—	←G—	R	R	R	←G—	←G—	←G—	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO: 1+6, 2+5, OR 2+6																	DW	DW	DW	DW	DW	DW
PHASE 1 + 6	←G—	←G—	G	G	G	←R—	←R—	←R—	R	R	R	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW
1 + 6 CHANGE	←Y—	←Y—	G	G	G	←R—	←R—	←R—	R	R	R	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW
PHASE 2 + 5	←R—	←R—	R	R	R	←G—	←G—	←G—	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	WK	WK
2 + 5 CHANGE	←R—	←R—	R	R	R	←Y—	←Y—	←Y—	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	WK	WK
PHASE 2 + 6	←R—	←R—	G	G	G	←R—	←R—	←R—	G	G	G	R	R	R	R	R	R	WK	WK	DW	DW	WK	WK
PED CLEARANCE	←R—	←R—	G	G	G	←R—	←R—	←R—	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	FL/DW	FL/DW
2 + 6 CHANGE	←R—	←R—	Y	Y	Y	←R—	←R—	←R—	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	G ←G—	G ←G—	G	R	R	R	DW	DW	DW	DW	DW	DW
3 CHANGE	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	G ←G—	G ←G—	G	DW	DW	DW	DW	DW	DW
4 CHANGE	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	G ←G—	G ←G—	G	DW	DW	WK	WK	DW	DW
PED CLEARANCE	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW	DW	DW
4 ALT CHANGE	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
EMERGENCY PRE-EMPTION	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	G ←G—	G ←G—	G	DW	DW	DW	DW	DW	DW
PRE-EMPTION CHANGE	←R—	←R—	R	R	R	←R—	←R—	←R—	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	←FL/R—	←FL/R—	FL/Y	FL/Y	FL/Y	←FL/R—	←FL/R—	←FL/R—	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



A — EXISTING CABLE TO BE UTILIZED

B,C,D,E,F, G,H,J,K,L — ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

M,N,P Q,R,S — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

T — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

U — VIDEO DETECTION LEAD-IN CABLE

EMP — EXISTING MICROLOOP PROBE

EXISTING GROUND ROD

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9570	30 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN: 2 EACH - W11-2 (30 IN. x 30 IN.), W16-7P (21 IN. x 15 IN.) 1 EACH - W11-2 (30 IN. x 30 IN.), W13-4(1) (36 IN. x 24 IN.) "ACROSS RAMP"
9571	6 SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN: 4 EACH - R10-3(1) (9 IN. x 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS FORESTVILLE RD." 2 EACH - R10-3(1) (9 IN. x 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS PENNSYLVANIA AVE."

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

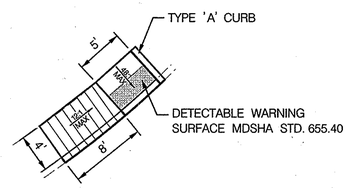
ITEM NO	QUANTITY	DESCRIPTION
1001	3 EA	MAINTENANCE OF TRAFFIC
2002	5 CY	TEST PIT EXCAVATION
5004	551 LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	167 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	95 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER 8 INCH DEPTH
6002	425 SF	4 INCH CONCRETE SIDEWALK
8001	9 EA	12 INCH LED SIGNAL HEAD SECTION (R,Y,G)
8002	1 EA	2 WIRE CENTRAL CONTROL UNIT
8008	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
8009	7 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8014	6 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8015	46 EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8022	1 EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
8026	1 EA	VIDEO DETECTION CAMERA & CABLE
8035	105 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8037	45 LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8038	80 SF	DETECTABLE WARNING SURFACE
8039	36 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8041	115 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8052	6 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8054	950 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	1430 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

EQUIPMENT LIST 'C'

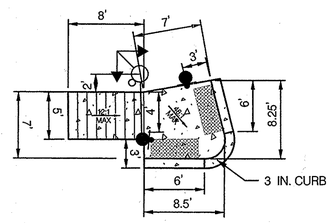
EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE	NONE	NONE

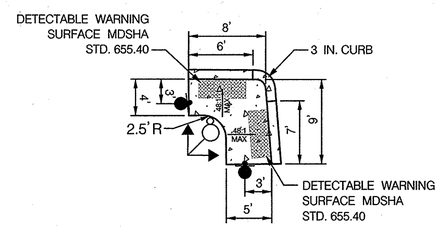
ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR



DETAIL - 1



DETAIL - 2



DETAIL - 3

TOD NO:AT910-22
SHA NO:PG573A57/C57
MD 4@FORESTVILLE RD

RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 4 (PENNSYLVANIA AVE.) AT FORESTVILLE ROAD

GENERAL INFORMATION SHEET

SCALE NONE DATE 8/2007 CONTRACT NO. AT9105185

DESIGNED BY P.WESTCOTT COUNTY PRINCE GEORGES
DRAWN BY P.WESTCOTT LOGMILE 16000409.83
CHECKED BY B.BIDDLE CJW TIMS NO. 1172
FAP NO. TOD NO.

TS NO. 4F-GI | DRAWING GI-01 OF 01 | SHEET NO. 2 OF 2

PLOTTED: Wednesday, October 10, 2007 AT 11:17 AM
FILE: P:\SHA\MD 4 at Forestville Rd\PSE Submittal\pSG-N000_MD4.dgn

BY: Phil