PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF APS TO CROSS ALL LEGS AT THE INTERSECTION OF MD 97 (GEORGIA AVENUE) AND ARCOLA AVENUE IN MONTGOMERY COUNTY, DUE TO THE RESURFACING AND SAFETY IMPROVEMENTS TO MD 97. THE 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS WILL REPLACE THE EXISTING PEDESTRIAN SIGNAL HEADS. ALL EXISTING VEHICULAR TRAFFIC SIGNAL HEADS WILL REMAIN. MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/FLASHING RED ARROW LEFT TURN PHASING FOR THE SOUTHBOUND APPROACH. THE CONCURRENT MAINLINE AND ALTERNATE SIDE STREET PEDESTRIAN PHASES WILL REMAIN.

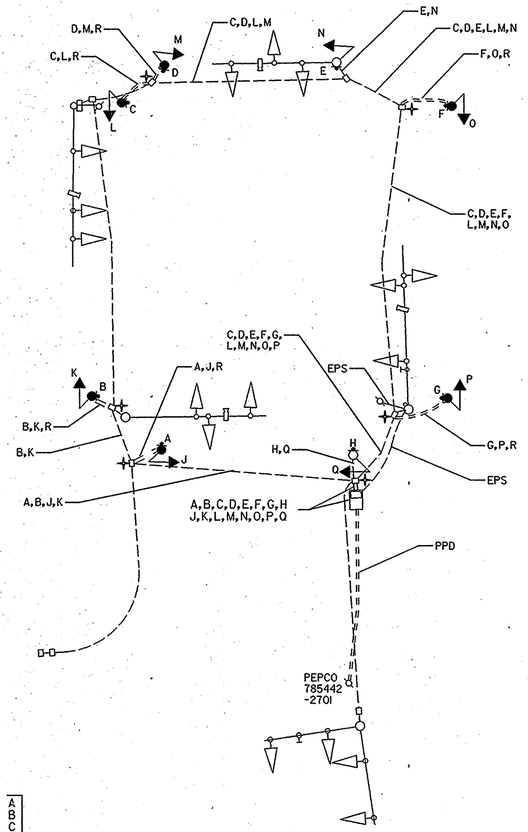
CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER SHALL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL THE 2-WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD OF MONTGOMERY COUNTY AT 240-777-8761 FOR THE PHONE DROP LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. HAMUD WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

WIRING DIAGRAM



A B C D E F G H — ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)

J K L M N O P Q — ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

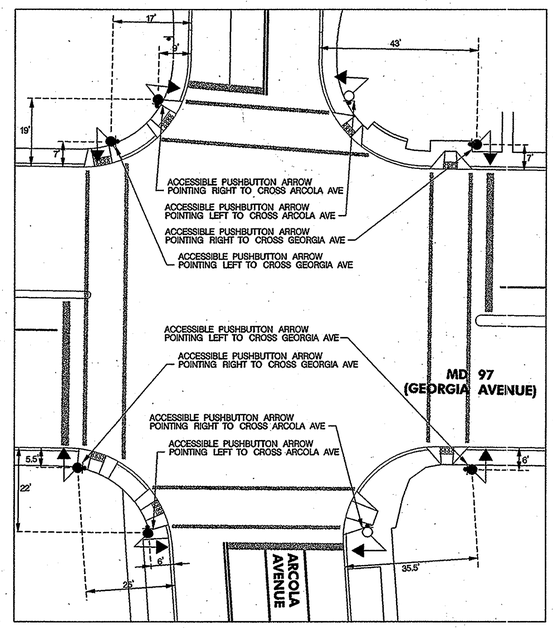
R — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

PPD — PROPOSED TELEPHONE SERVICE TO BE INSTALLED BY OTHERS

EPS — EXISTING POWER SOURCE

EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH.

PROPOSED PEDESTAL POLE, APS AND PAVEMENT MARKING DETAIL LAYOUT



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PHASE 2 & 5	R	R	FL/R	FL/R	~~G~~	~~G~~	G	G	R	R	R	FL/Y	FL/Y	R	R	R/~~G~~	W	DW	DW	W	DW	DW	DW	DW
PHASE 5 CHANGE	R	R	FL/R	FL/R	~~Y~~	~~Y~~	G	G	R	R	R	FL/Y	FL/Y	R	R	R/~~Y~~	W	DW	DW	W	DW	DW	DW	DW
PHASE 2 & 6	G	G	FL/R	FL/R	FL/RA	FL/RA	G	G	R	R	R	FL/Y	FL/Y	R	R	R	W	W	W	W	DW	DW	DW	DW
PED. CLEARANCE / COUNTDOWN	G	G	FL/R	FL/R	FL/RA	FL/RA	G	G	R	R	R	FL/Y	FL/Y	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
PHASE 2 & 6 CHANGE	Y	Y	FL/R	FL/R	FL/RA	FL/RA	Y	Y	R	R	R	FL/Y	FL/Y	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	FL/R	FL/R	~~R~~	~~R~~	R	R	G	G	G	FL/Y	FL/Y	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8 CHANGE	R	R	FL/R	FL/R	~~R~~	~~R~~	R	R	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8 ALT.	R	R	FL/R	FL/R	~~R~~	~~R~~	R	R	G	G	G	FL/Y	FL/Y	G	G	G	DW	DW	DW	DW	W	W	W	W
PED. CLEARANCE / COUNTDOWN	R	R	FL/R	FL/R	~~R~~	~~R~~	R	R	G	G	G	FL/Y	FL/Y	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 4 & 8 ALT. CHANGE	R	R	FL/R	FL/R	~~R~~	~~R~~	R	R	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION	R	R	Y	Y	~~R~~	~~R~~	R	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION CLEARANCE	R	R	FL/Y	FL/Y	~~R~~	~~R~~	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6 POST PRE-EMPTION	G	G	FL/R	FL/R	FL/RA	FL/RA	G	G	R	R	R	FL/Y	FL/Y	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6 POST PRE-EMPTION CHANGE	Y	Y	FL/R	FL/R	FL/RA	FL/RA	Y	Y	R	R	R	FL/Y	FL/Y	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	DARK	DARK	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Jeff Wentz
Assistant District Engineer - Traffic
Phone: 301-513-7358

Mr. Augie Rebish
Assistant District Engineer - Utility
Phone: 301-513-7350

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

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

The Power Company Representative is:
Potomac Electric Power Company
8300 Old Marlboro Pike
Upper Marlboro, Maryland 20772
Phone: 301-861-5325

Mr. Kamal Hamud
Montgomery County Department of Public Works
Phone: 240-777-8761

Mr. Keith Lord
Montgomery County
Phone: 301-279-1291

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
973023	62 SF	SHEET ALUMINUM SIGNS: 4 EA - R10-4(I)MOD, (9 IN. X 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS GEORGIA AVENUE" 4 EA - R10-4(I)MOD, (9 IN. X 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS ARCOLA AVENUE" 1 EA - ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 97, LEFT ARROW" (36 IN. X 75 IN.) 1 EA - ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 97, LEFT ARROW" (36 IN. X 75 IN.) 1 EA - ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 97, RIGHT ARROW" (24 IN. X 51 IN.) 1 EA - ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 97, LEFT ARROW" (24 IN. X 51 IN.)

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
203030	6 CY	TEST PIT EXCAVATION
585412	550 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585424	145 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
800000	1 EA	2-WIRE CENTRAL CONTROL UNIT
800000	8 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	8 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT
800000	1 LS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
801004	6 CY	CONCRETE FOR SIGNAL FOUNDATION
801104	34 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
802501	90 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805125	70 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805135	90 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
813015	62 SF	INSTALL OVERHEAD SIGN
818004	6 EA	10 FOOT BREAKAWAY PEDESTAL POLE
861105	930 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	1010 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

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		

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

MD 97 (GEORGIA AVENUE) AND ARCOLA AVENUE

GENERAL INFORMATION

SCALE NONE DATE 12/2006 CONTRACT NO. MO5665177

DESIGNED BY SBS COUNTY MONTGOMERY
DRAWN BY SBS LOGMILE 15009703.27
CHECKED BY BAB T.I.M.S. NO. H326
F.A.P. NO. TOD NO.

DRAWING NO. TS- 209D OF SHEET NO. OF

STV Incorporated
engineers / architects / planners / construction managers
7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-5112

PLOTTED: THURSDAY, DECEMBER 14, 2006 AT 10:27 AM
FILE: I:\PROJECTS\0312513\0312513.0010\DRAWINGS\TRA\TRAFFIC\ARCOLA AVE\PSG-P001_ARCOLA.DGN

BY: WEAVERCC