PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF VIDEO DETECTION CAMERAS FOR THE SERVICE ROADS AT THE INTERSECTION OF MD 210 (INDIAN HEAD HIGHWAY) AND AUDREY LANE. IN ADDITION, APS AND COUNTDOWN PEDESTRIAN SIGNALS WILL REPLACE THE EXISTING PUSHBUTTONS AND PEDESTRIAN SIGNALS, AND THE EXISTING TRAFFIC SIGNALS WILL BE UPGRADED TO LED. MD 210 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

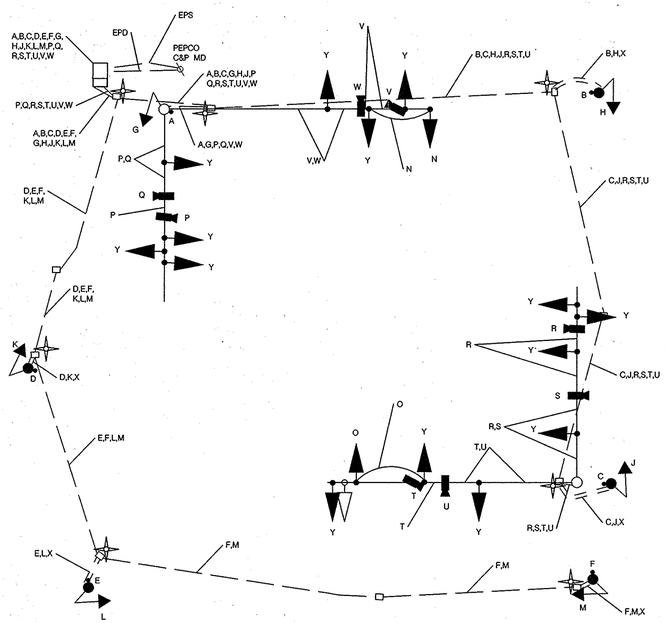
INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASING FOR THE NORTH- AND SOUTHBOUND APPROACHES. THE SIDE STREET SPLIT PHASING, AND CONCURRENT MAINLINE AND ALTERNATE SIDE STREET PEDESTRIAN PHASES WILL REMAIN.

CONTROLLER REQUIREMENTS

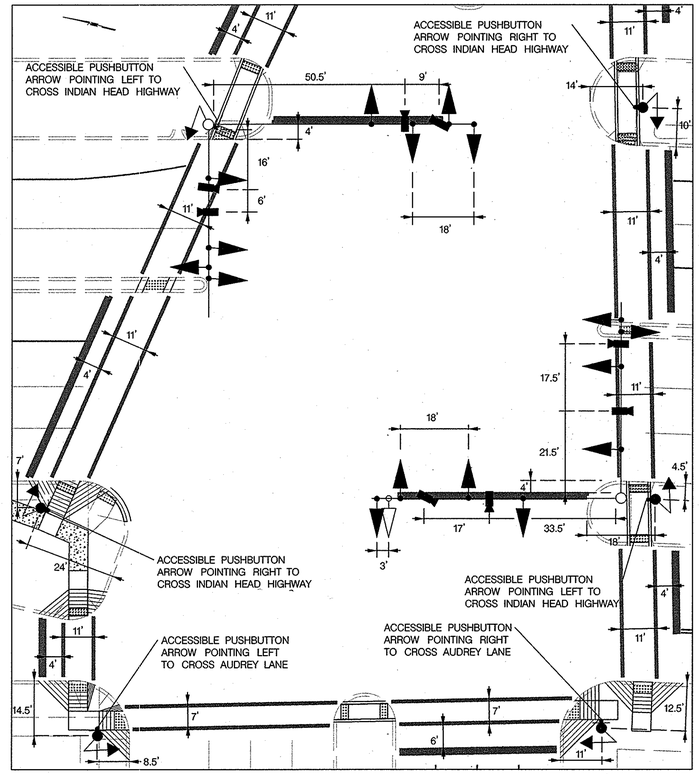
THE EXISTING BASE MOUNTED CONTROLLER SHALL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) 2-WIRE CENTRAL CONTROL UNIT AND ONE (1) VIDEO INTERFACE EQUIPMENT WITHIN THE CABINET.

WIRING DIAGRAM



A B C D E F	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
G H J K L M N O	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
P Q R S T U V W	CONTROL CABLE, 500 FOOT - VIDEO DETECTION CAMERA TO CONTROLLER
X	NO. 6 BARE STRANDED COPPER GROUND WIRE
Y	USE EXISTING CABLE
EPD	EXISTING TELEPHONE DROP
EPS	EXISTING POWER SERVICE
	EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

PROPOSED PEDESTAL POLE & SIGNAL HEAD LOCATIONS, PUSHBUTTON DETAIL, CROSSWALK, AND STOPLINE DIMENSIONS



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	←R→ ←Y→ ←G→	←R→ ←Y→ ←G→	R Y G	R Y G	←R→ ←Y→ ←G→	←R→ ←Y→ ←G→	R Y G	R Y G	R Y G ←G→	R Y G	R Y G ←G→	R Y G	R Y G ←G→	R Y G	R Y G ←G→	R Y G	⁂	⁂	⁂	⁂	⁂	⁂
PHASE 1 AND 5	←G—	←G—	R	R	←G—	←G—	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 5 CHANGE	THE CONTROLLER MAY SKIP TO: 1+6, 2+5, OR 2+6																					
PHASE 1 AND 6	←G—	←G—	G	G	←R—	←R—	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 1 CHANGE	←Y—	←Y—	G	G	←R—	←R—	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	R	R	R	R	W	W	DW	DW	DW	DW
PED CLEARANCE	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
PHASE 5 CHANGE	←R—	←R—	R	R	←Y—	←Y—	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	←R—	←R—	G	G	←R—	←R—	G	G	R	R	R	R	R	R	R	R	W	W	DW	DW	DW	DW
PED CLEARANCE	←R—	←R—	G	G	←R—	←R—	G	G	R	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	←R—	←R—	R	R	←R—	←R—	R	R	G ←G—	G	G ←G—	G	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	←R—	←R—	R	R	←R—	←R—	R	R	G ←G—	G	G ←G—	G	R	R	R	R	DW	DW	DW	W	W	DW
PED CLEARANCE	←R—	←R—	R	R	←R—	←R—	R	R	G ←G—	G	G ←G—	G	R	R	R	R	DW	DW	DW	FL/DW	FL/DW	DW
PHASE 3 ALT CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	G ←G—	G	G ←G—	G	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	G ←G—	G	G ←G—	G	DW	DW	W	DW	DW	W
PED CLEARANCE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	G ←G—	G	G ←G—	G	DW	DW	FL/DW	DW	DW	FL/DW
PHASE 4 ALT CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: 301-513-7404

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

Mr. Wayne Mowdy
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Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
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Mr. Edward Rodenhizer
SHA Signal Shop
Phone: 410-787-7650

The Power Company Representative is:
Potomac Electric Power Company
8300 Old Marlboro Pike
Upper Marlboro, Maryland 20772
Phone: 301-961-5325

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9087	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 5-8 CAMERAS
9570	35 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN:
		2 EA - R10-6 (24 IN. x 36 IN.)
		2 EA - R4-7 (24 IN. x 30 IN.)
		2 EA - R5-1 (30 IN. x 30 IN.)
9571	57 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN:
		4 EA - R10-3(1) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS INDIAN HEAD HWY"
		2 EA - R10-3(1) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS AUDREY LANE"
		2 EA - D-3(2) (96 IN. x 16 IN.) "INDIAN HEAD HWY" (DUAL FACED)
		1 EA - ASSOCIATED SHIELD ASSEMBLY (48 IN. x 75 IN.) "SOUTH, MD 210, LEFT ARROW"
		1 EA - R4-7 (24 IN. x 30 IN.)

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	5 CY	TEST PIT EXCAVATION
5003	940 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5004	375 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5005	1190 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
6001	80 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER
		12 INCH GUTTER PAN 8 INCH DEPTH
6002	2000 SF	4 INCH CONCRETE SIDEWALK
8001	6 EA	12 INCH (R,Y,G) LED SIGNAL HEAD SECTION
8003	1 EA	2 WIRE CENTRAL CONTROL UNIT
8009	1 EA	ADJUST HANDHOLE TO GRADE
8010	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
8011	5 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8014	6 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8015	46 EA	LED SIGNAL HEAD MODULES
8017	1 EA	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
8019	4 EA	REMOVE FOUNDATION 12 IN. BELOW GRADE
8026	80 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
8027	170 SF	DETECTABLE WARNING SURFACES
8030	4 CY	CONCRETE FOR SIGNAL FOUNDATION
8031	78 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8033	80 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	35 SF	INSTALL GROUND MOUNTED SIGN
8046	57 SF	INSTALL OVERHEAD SIGN
8047	8 EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
8058	1140 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	1210 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 210 (INDIAN HEAD HIGHWAY)
AT AUDREY LANE

GENERAL INFORMATION

SCALE NONE DATE 04/2007 CONTRACT NO. AT9255185

DESIGNED BY MCG COUNTY PRINCE GEORGE'S
DRAWN BY MCG LOGMILE 16021014.31
CHECKED BY BAB T.I.M.S. NO. H226
F.A.P. NO. TOD NO.

DRAWING NO. TS-586B-GI OF SHEET NO. 2 OF 2

STV Incorporated
engineers/architects/planners/construction managers
7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

BY: thompsma

PLOTTED: Friday, May 04, 2007 AT 09:10 AM
FILE: I:\PROJECTS\0312513\0312513_0048\Drawings\TRA\p3G-N001_md210.dgn