

PROJECT DESCRIPTION

GENERAL
 THIS PROJECT INVOLVES THE INSTALLATION OF APS AND LED COUNTDOWN PEDESTRIAN SIGNALS ON ALL APPROACHES OF THE INTERSECTION OF US 13 BUSINESS (S. SALISBURY BOULEVARD) AND CARROLL STREET IN WICOMICO COUNTY. US 13 BUSINESS IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION
 THE INTERSECTION WILL OPERATE IN A NEMA SEVEN-PHASE, FULL TRAFFIC-ACTUATED MODE. THE EXISTING PRE-EMPTION PHASE WILL REMAIN. MAIN LINE AND SIDE STREET ALTERNATE PEDESTRIAN PHASE ARE PROPOSED.

APS WILL FUNCTION AS FOLLOWS:
 FOR SOUTH SALISBURY BOULEVARD

A. WHEN A PEDESTRIAN LOCATES AND PASSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS SOUTH SALISBURY AT CARROLL".

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

FOR CARROLL STREET

A. WHEN A PEDESTRIAN LOCATES AND PASSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS CARROLL AT SOUTH SALISBURY".

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

CONTROLLER REQUIREMENTS

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

THE CONTACT PERSONS FOR DISTRICT #1 ARE AS FOLLOWS:

Mr. Gene Coffell
 Assistant District Engineer - Traffic
 Phone: 410-677-4040

Mr. Bruce Poole
 District Utility Engineer
 Phone: 410-677-4082

Mr. James Wright
 Assistant District Engineer - Maintenance
 Phone: 410-677-4010

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

Mr. Edward Rodenhizer
 Chief, SHA Signal Shop
 Phone: 410-787-7650

The Power Company Representative is:
 Delmarva Power
 2530 N Salisbury Blvd.
 Salisbury, Maryland
 1-800-375-7117

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9571	4 SF	(UPDATED) SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:
	2 EA	- R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS S. SALISBURY BLVD."
	2 EA	- R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS CARROLL ST."

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO. QUANTITY DESCRIPTION

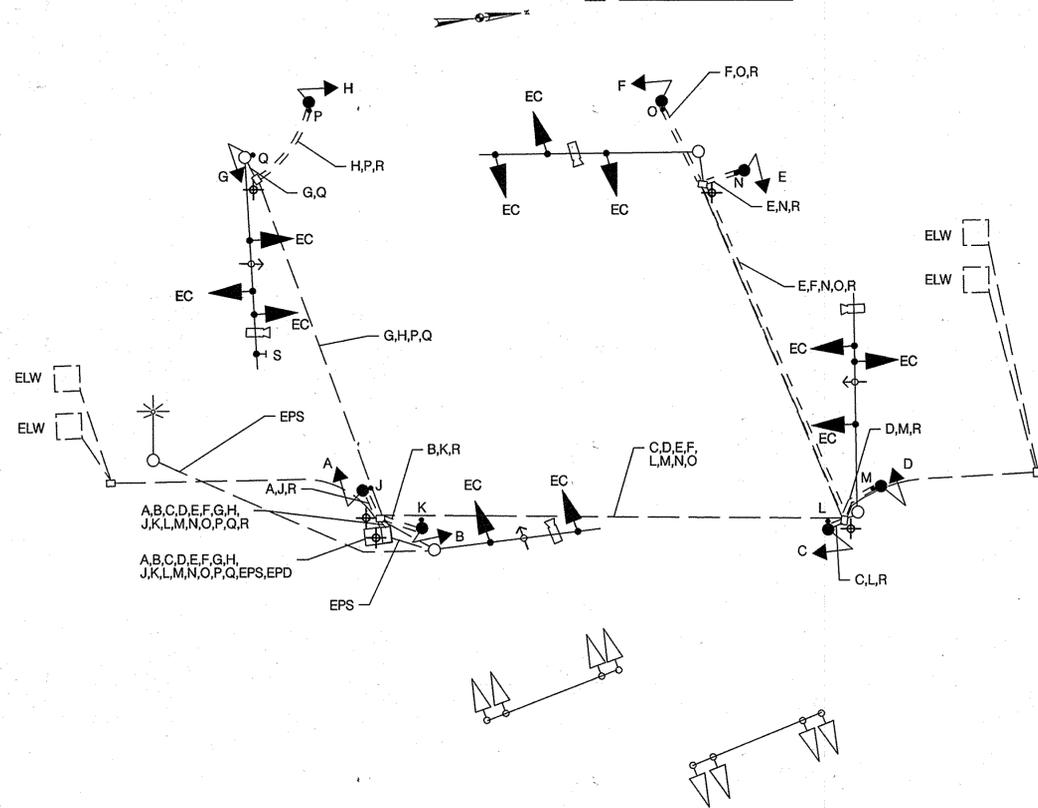
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	3 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	7 CY	TEST PIT EXCAVATION
5003	650 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	635 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
6001	350 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH CURB
6002	1500 SF	5 INCH CONCRETE SIDEWALK
8002	1 EA	2 WIRE CENTRAL CONTROL UNIT
8006	2 EA	ADJUST HANDHOLE TO GRADE
8007	8 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8008	7 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8009	1 EA	CONDUIT BEND IN EXISTING BASE
8011	8 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8014	1 EA	REMOVE AND DISPOSE OF EQUIPMENT PER ASSIGNMENT
8019	100 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8020	110 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8021	80 SF	DETECTABLE WARNING SURFACES
8022	3 SF	RELOCATE EXISTING SIGN
8025	14 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8027	210 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8032	4 SF	INSTALL OVERHEAD SIGN
8037	1020 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8039	980 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
NEG.	1 EA	LED SIGN (NO LEFT TURN)
NEG.	2 EA	ASTRO BRAC MOUNTING BRACKETS WITH FORM TUBES
8001	36	12 INCH LED SIGNAL HEAD SECTION
8004	9	8 INCH LED SIGNAL HEAD SECTION

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	DW							
THE CONTROLLER MAY SKIP TO PHASE 1 AND 6 OR 2 AND 5 OR 2 AND 6																			
PHASE 1 AND 6	R	R	R	R	R	R	R	R	R	R	R	DW							
1 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 2 AND 5	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	W	W	W	W	DW	DW	DW	DW
PHASE 2 AND 6 PED. CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW							
PHASE 4 AND 7	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW							
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	DW							
PHASE 4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW							
PHASE 4 AND 8 ALT.	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	W	W	W	W
PHASE 4 AND 8 ALT. PED. CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 4 AND 8 ALT. CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW							
PRE-EMPTION 02	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 02 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 04	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 04 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 06	R	R	R	R	R	R	R	R	R	R	R	DW							
PRE-EMPTION 06 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW							
RAILROAD CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	DW							
RAILROAD CLEARANCE CHANGE	R	R	R	R	R	R	R	R	R	R	R	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							

1 TEDD RED LINE #1 - UPGRADE TO LED SIGNALS 3/2008

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 US 13 BUSINESS (S. SALISBURY BOULEVARD)
 AT CARROLL STREET

GENERAL INFORMATION

SCALE	NONE	ADVERTISED DATE	12008	CONTRACT NO.	XX3405185
DESIGNED BY	MCG	COUNTY	WICOMICO		
DRAWN BY	AMT	LOGMILE	22801305.27		
CHECKED BY	BAB	TMS NO.	1457		
F.A.P. NO.	SEE TITLE SHEET	TOD NO.			
TS NO.	1939D-GI	DRAWING	SG-02 OF 2	SHEET NO.	2 OF 2

PLOTTED: Thursday, March 27, 2008 AT 03:08 PM
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