

**PROJECT DESCRIPTION**

**I. GENERAL**

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 2/4 AND MD 524/COX ROAD IN CALVERT COUNTY, MARYLAND. MD 2/4 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

**II. INTERSECTION OPERATION**

THE INTERSECTION OPERATES IN NEMA SEVEN (7) PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS CURRENTLY AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 2/4. THE MD 2/4 THROUGH MOVEMENTS OPERATE CONCURRENTLY. THERE IS LEAD EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE EASTBOUND MOVEMENT OF MD 524. THE MD 524/COX ROAD THRU MOVEMENTS OPERATE CONCURRENTLY.

THE EXISTING NORTH AND SOUTHBOUND EXCLUSIVE/PERMISSIVE LEFT TURN PHASES TO BE CHANGED TO AN EXCLUSIVE LEFT TURN PHASE. SIGNAL HEADS WILL BE INSTALLED, REMOVED, OR RELOCATED AND THE SIGNAL PHASING ALTERED TO ACCOMMODATE THIS MODIFICATION.

**III. CONTROLLER REQUIREMENTS**

THE EXISTING BASE MOUNTED CONTROLLER, LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSES WILL REMAIN.

**CONTACT LIST**

The contact persons for District #5 are as follows:

Ms. Kimberly Tran  
Assistant District Engineer - Traffic  
410-841-1003

Mr. John Mays  
Assistant District Engineer - Utility  
410-841-1005

Mr. Charles George  
Assistant District Engineer - Maintenance  
410-841-1002

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

Mr. Ed Rodenhizer  
Chief, Signal Operations Division  
410-787-7652

The Power Company Representative is:  
Southern Maryland Electrical Cooperation  
Mr. Robert Trout  
P.O. Box 37  
Prince Frederick, Maryland 20678-9501  
410-535-4400

**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE FURNISHED BY THE SHA.

NONE

**EQUIPMENT LIST 'B'**

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

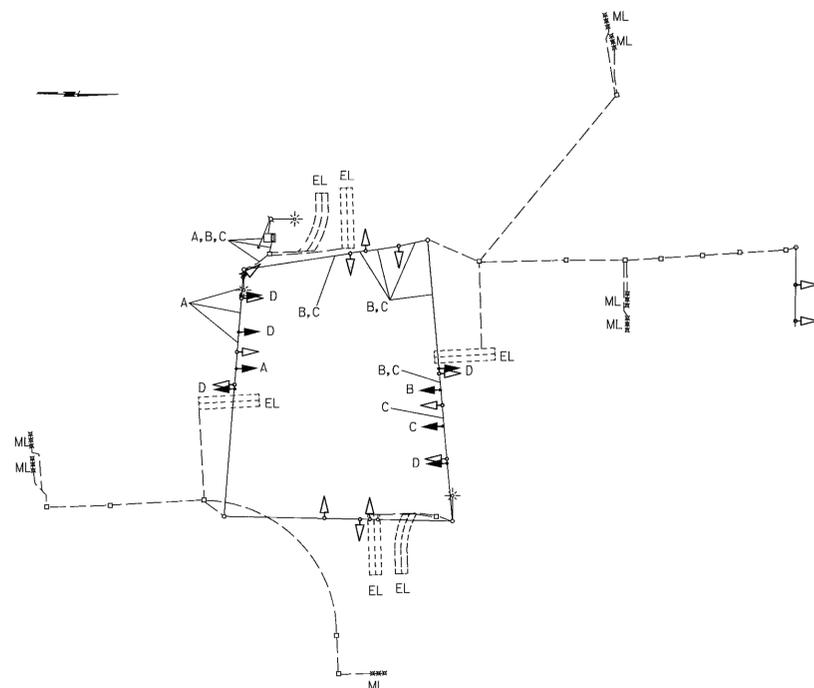
CAT_CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
800000	1 LS	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT
801106	64 LF	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
801605	76 SF	SHEET ALUMINUM SIGNS
813006	28 SF	RELOCATE SIGNS FROM EXISTING OVERHEAD STRUCTURES
860272	24 EA	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861107	700 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

**EQUIPMENT LIST 'C'**

EQUIPMENT TO BE SALVAGED AND RETURNED TO SHA.

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

**WIRING DIAGRAM**



- A, B, C } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- D } USE EXISTING ELECTRICAL CABLE
- EL } EXISTING LOOP DETECTOR WIRE
- ML } EXISTING MICRO-LOOP PROBE

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
PHASE 1 + 5	⊖	⊖	R	R	FL/Y	FL/Y	⊖	⊖	R	R	R	R	R	R	R	R	R	
PHASE 1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1 + 6, 2 + 5 OR 2 + 6																	
PHASE 1 + 6	⊖	⊖	G	G	FL/Y	FL/Y	+R	+R	R	R	R	R	R	R	R	R	R	
PHASE 1 + 6 CHANGE	+Y	+Y	Y	Y	FL/Y	FL/Y	+R	+R	R	R	R	R	R	R	R	R	R	
PHASE 2 + 5	+R	+R	R	R	FL/Y	FL/Y	⊖	⊖	G	G	R	R	R	R	R	R	R	
PHASE 2 + 5 CHANGE	+R	+R	R	R	FL/Y	FL/Y	+Y	+Y	Y	Y	R	R	R	R	R	R	R	
PHASE 2 + 6	+R	+R	G	G	FL/Y	FL/Y	+R	+R	G	G	R	R	R	R	R	R	R	
PHASE 2 + 6 CHANGE	+R	+R	Y	Y	FL/Y	FL/Y	+R	+R	Y	Y	R	R	R	R	R	R	R	
PHASE 4 + 7	+R	+R	R	R	FL/Y	FL/Y	+R	+R	R	R	G	G	G	G	G	G	G	
PHASE 4 + 7 CHANGE	+R	+R	R	R	FL/Y	FL/Y	+R	+R	R	R	G	G	G	G	G	G	G	
PHASE 4 + 8	+R	+R	R	R	FL/Y	FL/Y	+R	+R	R	R	Y	Y	Y	Y	Y	Y	Y	
PHASE 4 + 8 CHANGE	+R	+R	R	R	FL/Y	FL/Y	+R	+R	R	R	Y	Y	Y	Y	Y	Y	Y	
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R							

SP-2

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
MD 2/4 AND MD 524/COX ROAD  
GENERAL INFORMATION

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

DRAWN BY: R. KIPP	F.A.P. NO. CA4285177	SEE TITLE SHEET	TS NO. 3529B	SHEET NO. 2 OF 2
CHECKED BY: B. BIDDLE	COUNTY: CALVERT	LOG MILE: 04000226.31	T.I.M.S. NO. F799	
SCALE: N/A				
DATE: MAY 2003				