

**PROJECT DESCRIPTION**

**GENERAL**

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 2 (SOLOMONS ISLAND ROAD) AND THE SERVICE ROAD IN ANNE ARUNDEL COUNTY. IMPROVEMENTS ARE PROPOSED TO THE SERVICE ROAD TO SUPPORT THE DEVELOPMENT. VIDEO DETECTION IS PROPOSED FOR ALL PRESENCE DETECTION. ALL PROPOSED TRAFFIC SIGNAL HEADS WILL BE LED. MD 2 IS ASSUMED TO RUN IN AN NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL OPERATE IN A NEMA SEVEN-PHASE, FULL-TRAFFIC ACTUATED MODE. THE EXISTING FIRE HOUSE PRE-EMPTION WILL REMAIN. THE PEDESTRIAN PHASE WILL REMAIN. THE SIDE STREET WILL OPERATE CONCURRENTLY WITH AN EASTBOUND EXCLUSIVE LEFT TURN PHASE.

**CONTROLLER REQUIREMENTS**

THE EXISTING GROUND MOUNTED CABINET AND CONTROLLER WILL REMAIN.

THE CONTACT PERSONS FOR DISTRICT #5/OOTS ARE AS FOLLOWS:

District #5

Ms. Kim Tran  
Assistant District Engineer - Traffic  
Phone: 410-841-1019

Mr. Mike Huber  
District Utility Engineer  
Phone: 410-841-1039

Mr. John Mays  
Assistant District Engineer - Maintenance  
Phone: 410-841-1013

Mr. James Folden  
Assistant District Engineer - Construction  
Phone: 410-841-1004

Office of Traffic & Safety

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

Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
Phone: 410-787-7630

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

Mr. Eugene Bailey  
Chief, SHA Sign Operation  
410-787-7670

The Power Company Representative is:  
Baltimore Gas & Electric  
1068 N. Front Street  
Baltimore, MD 21202  
Phone: 1-800-265-6177

**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE SUPPLIED BY THE SHA

CAT CODE QUANTITY DESCRIPTION

NONE

**EQUIPMENT LIST 'B'**

APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE QUANTITY DESCRIPTION

800000	1 EA	VIDEO DETECTION CAMERA INTERFACE (1-4 CAMERAS)
800000	27 EA	LED VEHICULAR SIGNAL HEAD MODULE
800000	51 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM
	2 EA	R3-5L (30"x36")
	1 EA	SHIELD ASSEMBLY (48"x75") "NORTH, MD 2, LEFT ARROW"
	1 EA	SHIELD ASSEMBLY (30"x51") "SOUTH, MD 2, RIGHT ARROW"
816001	4 EA	VIDEO DETECTION CAMERA
816005	3 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
816010	1 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818041	1 EA	STEEL POLE WITH 60 FOOT MAST ARM
860270	3 EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860284	18 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

**EQUIPMENT LIST 'C'**

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE QUANTITY DESCRIPTION

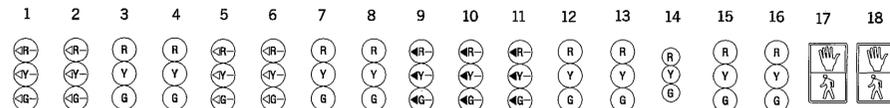
120500	1 LS	MAINTENANCE OF TRAFFIC
585462	130 LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585624	32 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
800000	1 LS	REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT
801004	5 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	100 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805118	90 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
805135	10 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
811011	1 EA	ELECTRICAL HANDHOLE
822500	1 EA	AS BUILT FOR SHA ON CADD
837001	1 EA	GROUND ROD - 3/4 INCH DIAMETER BY 10 FOOT LENGTH
860265	1 EA	RELOCATE EXISTING SIGNAL HEAD
860292	1 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861107	40 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	550 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

**EQUIPMENT LIST 'D'**

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE QUANTITY DESCRIPTION

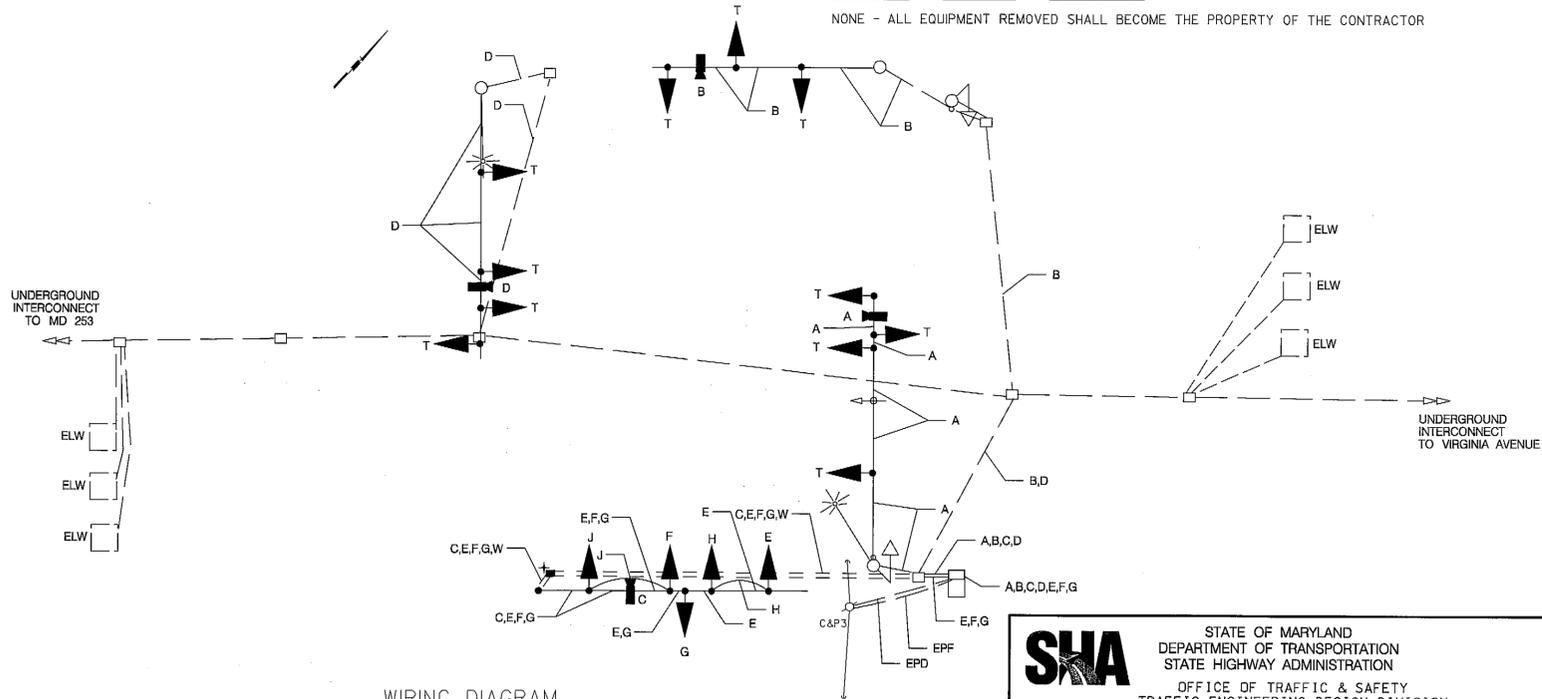
NONE - ALL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR



PHASE 1 AND 5	<G-	<G-	R	R	<G-	<G-	R	R	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																			
PHASE 1 AND 6	<G-	<G-	G	G	<R-	<R-	R	R	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
1 AND 6 CHANGE	<Y-	<Y-	G	G	<R-	<R-	R	R	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
PHASE 2 AND 5	<R-	<R-	R	R	<G-	<G-	G	G	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
2 AND 5 CHANGE	<R-	<R-	R	R	<Y-	<Y-	G	G	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
PHASE 2 AND 6	<R-	<R-	G	G	<R-	<R-	G	G	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
PHASE 2 AND 6 CHANGE	<R-	<R-	Y	Y	<R-	<R-	Y	Y	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
PHASE 4 AND 7	<R-	<R-	R	R	<G-	<G-	G	G	<R-	<R-	<R-	R	R	R	R	R	R	DW	DW
7 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	<Y-	<Y-	<Y-	G	G	R	R	R	R	DW	DW
PHASE 4 AND 8	<R-	<R-	R	R	<R-	<R-	R	R	<R-	<R-	<R-	G	G	G	G	G	G	DW	DW
PHASE 4 AND 8 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	<R-	<R-	<R-	Y	Y	Y	Y	Y	Y	DW	DW
PHASE 4 AND 8 ALT	<R-	<R-	R	R	<R-	<R-	R	R	<R-	<R-	<R-	G	G	G	G	G	G	WK	WK
PED CLEARANCE	<R-	<R-	R	R	<R-	<R-	R	R	<R-	<R-	<R-	G	G	G	G	G	G	FL/DW	FL/DW
PHASE 4 AND 8 ALT CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	<R-	<R-	<R-	Y	Y	Y	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/<R	FL/<R	FL/Y	FL/Y	FL/<R	FL/<R	FL/Y	FL/Y	FL/R	DARK	DARK								

**FIRE HOUSE PRE-EMPTION**

PRE-EMPTION PHASE 1 AND 6	<G-	<G-	G	G	<R-	<R-	R	R	R	R	R	R	R	R	R	R	R	DW	DW
PRE-EMPTION CLEARANCE 1 AND 6 CHANGE	<Y-	<Y-	G	G	<R-	<R-	R	R	R	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 AND 6 NORMAL OPERATION	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R	R	R	R	R	R	DW	DW



**WIRING DIAGRAM**

- A B C D - CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
- D - CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
- H J - ELECTRICAL CABLE, 7 CONDUCTOR (NO. 14 AWG)
- H J - ELECTRICAL CABLE, 5 CONDUCTOR (NO. 14 AWG)
- T - USE EXISTING WIRING
- W - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- + - PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
- ELW - EXISTING LOOP WIRE
- EPD - EXISTING PHONE DROP
- EPF - EXISTING POWER FEED



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 2 (SOLOMONS ISLAND ROAD) AT  
SERVICE ROAD

**GENERAL INFORMATION**

SCALE	NONE	DATE	NOVEMBER 2009	CONTRACT NO.	BW996M82
DESIGNED BY	MMI	COUNTY	ANNE ARUNDEL		
DRAWN BY	MMI	LOGMILE	02000217.50		
CHECKED BY	MMI	T. I. M. S. NO.	K010		
F. A. P. NO.	NA	TOD NO.			
DRAWING NO.	TS-3891-C-G1	OF		SHEET NO.	OF

**LENHART TRAFFIC CONSULTING**  
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING  
331 Redwood Grove Court Millersville, Maryland 21108  
Tel: (410) 987-3888 Fax: (443) 782-2288

**NOTE:**

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

EAPD PERMIT NO. \_\_\_\_\_