

**PROJECT DESCRIPTION**

**GENERAL**

THIS PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 7 (PHILADELPHIA ROAD) AND MD 7J (INDUSTRIAL PARK ROAD) / NOTTINGHAM DRIVE, IN BALTIMORE COUNTY. THE NORTH- AND SOUTHBOUND APPROACHES WILL BE MODIFIED TO RUN ON SPLIT PHASING AND THE LANE UTILIZATION FOR THE NORTHBOUND APPROACH WILL BE MODIFIED TO INCLUDE A LEFT TURN LANE, SHARED THROUGH/LEFT TURN LANE, AND A RIGHT TURN LANE. MAINLINE DETECTION WILL BE UPDATED TO NON-INVASIVE PROBES AND SIDE STREET DETECTION WILL BE UPDATED TO VIDEO.

**ALL SIDEWALK RAMPS AT THE INTERSECTION WILL BE UPGRADED TO BE ADA COMPLIANT.** MD 7 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL OPERATE IN A NEMA FOUR PHASE, FULL TRAFFIC ACTUATED MODE. THE NORTH- AND SOUTHBOUND APPROACHES WILL BE SPLIT PHASED.

**CONTROLLER REQUIREMENTS**

THE EXISTING BASE MOUNTED CABINET, CONTROLLER EQUIPMENT, AND ASSOCIATED HARNESSES SHALL REMAIN. THE SHA SIGNAL SHOP SHALL INSTALL ONE (1) VIDEO DETECTION INTERFACE EQUIPMENT: I-4 CAMERAS WITHIN THE CABINET.

THE CONTACT PERSONS FOR DISTRICT #4 / OOTS ARE AS FOLLOWS:

District #4

Ms. Erin Kuhn  
Assistant District Engineer - Traffic  
Phone: 410-321-2761

Mr. Michael Pasquarillo  
District Utility Engineer  
Phone: 410-321-2841

Mr. Andre Futrell  
Assistant District Engineer - Maintenance  
Phone: 410-321-2761

Mr. Donald Schaefer  
Assistant District Engineer - Construction  
Phone: 410-321-2821

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  
410-787-7630

Mr. Edward Rodenhizer  
Team Leader Signal Operations  
Phone: 410-787-7650

Mr. Eugene Bailey  
Team Leader Sign Operations  
410-787-7670

The Power Company Representative is:  
Baltimore Gas & Electric Company  
7317 Parkway Drive South  
Hanover, MD 21076  
Phone: 410-859-9062

**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: I-4 CAMERAS
9571	55 SF	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN: 1 EA - R3-6L (30 IN. X 36 IN.) 1 EA - M1-5(6) 'WEST, MD 7, RIGHT ARROW' (24 IN. X 48 IN.) 1 EA - M1-5(6) 'EAST, MD 7, LEFT ARROW' (36 IN. X 72 IN.) 1 EA - D-3(1) 'PHILADELPHIA RD' DUAL FACED (96 IN. X 16 IN.) 1 EA - D-3(1) 'INDUSTRIAL PK RD' DUAL FACED (96 IN. X 16 IN.)

**EQUIPMENT LIST 'B'**

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

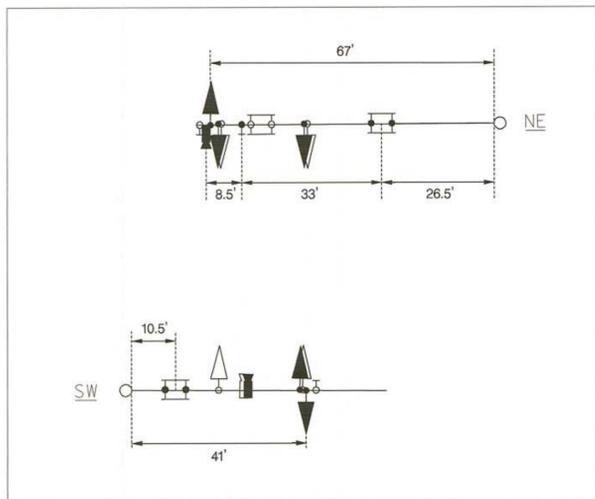
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC (PER ASSIGNMENT)
2002	2 CY	TEST PIT EXCAVATION
5002	33 LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS
5003	40 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS
5004	50 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	40 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	26 SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS
1 6001	230 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
1 6002	675 SF	5 INCH CONCRETE SIDEWALK
1 6003	75 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8001	31 EA	12 INCH LED SIGNAL HEAD SECTION
8004	6 EA	8 INCH LED SIGNAL HEAD SECTION
8022	4 EA	NON-INVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1,000 FEET
8023	1 EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8028	2 EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8036	80 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8037	80 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8038	340 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8040	66 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8046	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8056	960 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

**EQUIPMENT LIST 'C'**

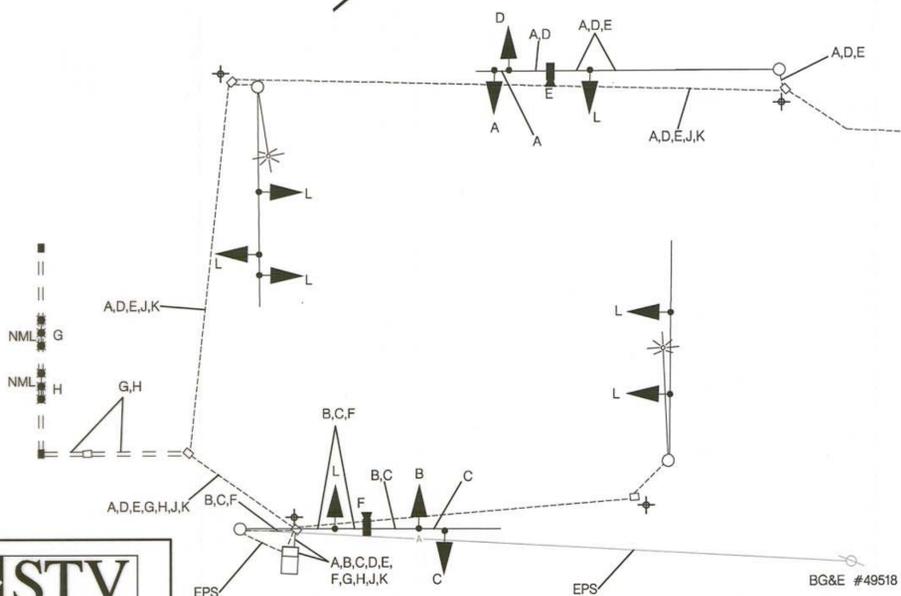
EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO.	QUANTITY	DESCRIPTION
	1 EA	VIDEO DETECTION CAMERA

**SIGNAL EQUIPMENT LAYOUT**



**WIRING DIAGRAM**



**WIRING LEGEND**

- A B C D - ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- E F - VIDEO DETECTION CAMERA TO CONTROLLER CONTROL CABLE
- G H J K - NON-INVASIVE MICROLOOP PROBE LEAD IN CABLE
- L - USE EXISTING WIRING
- NML - NON-INVASIVE MICROLOOP PROBE SET
- EPS - EXISTING POWER SERVICE
- ⊕ - EXISTING GROUND ROD

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	11
PHASE 2 AND 6	(R) (Y) (G)										
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	G	G	G
PHASE 3 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y
PHASE 4	R	R	R	R	R	G	G	G	R	R	R
PHASE 4 CHANGE	R	R	R	R	R	Y	Y	Y	R	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

1 REDLINE REVISION NO. 1 JULY 2011  
TEDD APPROVAL SHA NO. XX6455185

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 7J (INDUSTRIAL PARK ROAD) / NOTTINGHAM DRIVE  
NOTTINGHAM, MARYLAND

**GENERAL INFORMATION**

SCALE NONE ADVERTISED DATE 04 / 2011 CONTRACT NO. XX6455185

DESIGNED BY SBS COUNTY BALTIMORE  
DRAWN BY SBS LOGMILE 03000706.43  
CHECKED BY SDY TMS NO. K437  
F.A.P. NO. TOD NO.

TS NO. 3561B-G1 DRAWING SG - 02 OF 02 SHEET NO. 2 OF 2

**STV**  
STV Incorporated  
7125 Ambassador Road, Suite 200  
Baltimore, MD 21244  
www.stvinc.com