

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE INSTALLATION OF OPTICOM DETECTORS FOR 10 INTERSECTIONS IN HARFORD COUNTY, MD. THE LOCATIONS ARE ALONG MD 924 AT WHEEL ROAD, ABINGDON/SINGER RD, AND BOX HILL SOUTH PARKWAY, MD 24 AT EDGEWOOD ROAD, SINGER ROAD, AND MD 7. MD 7 AT ABINGDON ROAD, AND MD 543. US 40 AT ABINGDON ROAD AND OTTER CREEK RAMP.

MD 924 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION  
 MD 24 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION  
 MD 7 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION  
 US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

**INTERSECTION OPERATION**

THE INTERSECTION OPERATIONS WILL REMAIN THE SAME EXCEPT FOR THE INSTALLATION OF AN EMERGENCY PRE-EMPT PHASE.

**CONTROLLER REQUIREMENTS**

- MD 924 (EMMORTON RD) AND ABINGDON RD/SINGER RD  
THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 924 (EMMORTON RD) AND WHEEL RD  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 924 (EMMORTON RD) AND BOX HILL SOUTH PKWY/PORTER DR  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) AND SINGER RD  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 24 (VIETNAM VETERANS MEMORIAL HIGHWAY) AND MD 755 (EDGEWOOD RD)/VAN BIBBER RD  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 7 (PHILADELPHIA RD) AND MD 24 (VIETNAM VETERANS MEMORIAL HWY)  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 7 (PHILADELPHIA RD) AND ABINGDON RD  
THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED
- MD 7 (PHILADELPHIA RD) AND MD 543 (RIVERSIDE PKWY/CRESWELL RD)  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED
- US 40 (PULASKI HWY) AND ABINGDON RD/OTTER POINT RD  
THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED
- US 40 (PULASKI HWY) AND MD 24 RAMP (VIETNAM VETERANS MEMORIAL HWY)  
THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED

**MAINTENANCE OF TRAFFIC**

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

- STANDARD NO. MD-104.04-02 (SHOULDER WORK)
- STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
- STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)

**PROJECT CONTACTS**

THE CONTACT PERSONS FOR THE SHA ARE AS FOLLOWS:

MS. ERIN KUHN  
 ASSISTANT DISTRICT ENGINEER - TRAFFIC  
 PHONE: (410) 229-2381

MR. ROBERT SNYDER  
 ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION  
 PHONE: (410) 787-7631

MR. ANDRE FUTRELL  
 ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
 PHONE: (410) 229-2361

MR. RICHARD L. DAFF, SR.  
 CHIEF, TRAFFIC OPERATIONS DIVISION  
 PHONE: (410) 787-7630

MR. MICHAEL PASOUARIELLO  
 DISTRICT UTILITY ENGINEER  
 PHONE: (410) 229-2341

**EQUIPMENT LIST "A"**

A. NO EQUIPMENT TO BE SUPPLIED BY THE SHA.

**EQUIPMENT LIST "C"**

C. NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

**EQUIPMENT LIST "B"**

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

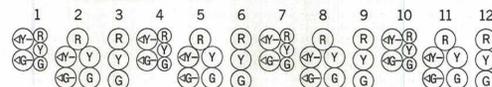
ITEM CODE	CATEGORY CODE	QTY	UNITS	DESCRIPTION
1001	100000	2	EA	MAINTENANCE OF TRAFFIC
<del>8033</del> <del>8032</del>	800000	3820	LF	4 CONDUCTOR OPTICOM CABLE
<del>8049</del> <del>8047</del>	816201	10	EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
<del>8051</del> <del>8049</del>	816215	23	EA	OPTICOM NO. 721 DETECTOR EYE

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T3 DESIGN CORP  
 3927 OLD LEE HWY  
 SUITE 101-C  
 FAIRFAX, VA 22030  
 PHONE: 703-359-5861  
 www.t3design.us

MD 924 AND ABINGDON RD/SINGER RD  
 TS NO. 1904 H  
 LOGMILE 12092401.01

**PHASING CHART**

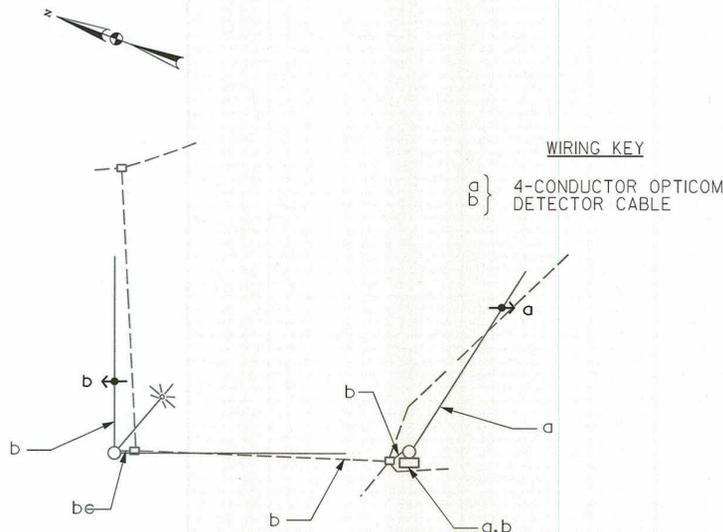


PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	↑
1 AND 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6											↑
PHASE 1 AND 6	R	R	R	G	G	R	R	R	R	R	R	↑
1 AND 6 CHANGE	R	R	R	G	G	R	R	R	R	R	R	↑
PHASE 2 AND 5	G	G	R	R	R	R	R	R	R	R	R	↑
2 AND 5 CHANGE	G	G	R	R	R	R	R	R	R	R	R	↑
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	R	R	↑
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	↑
PHASE 3 AND 7	R	R	R	R	R	R	R	R	R	R	R	↑
3 AND 7 CHANGE	PHASE 3 + 7 MAY CHANGE TO PHASE 3 + 8, PHASE 4 + 7 OR PHASE 4 + 8											↑
PHASE 3 AND 8	R	R	R	R	R	R	R	R	G	G	G	↑
3 AND 8 CHANGE	R	R	R	R	R	R	R	R	G	G	G	↑
PHASE 4 AND 7	R	R	R	R	R	R	R	R	G	G	R	↑
4 AND 7 CHANGE	R	R	R	R	R	R	R	R	G	G	R	↑
PHASE 4 AND 8	R	R	R	R	R	R	R	R	G	G	G	↑
4 AND 8 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	↑
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	↑

**EMERGENCY PRE-EMPTION**

EMERGENCY PRE-EMPTION 1	R	R	R	R	R	R	G	G	R	R	R	↑
PRE-EMPTION CLEARANCE	R	R	R	R	R	R	Y	Y	Y	R	R	↑
EMERGENCY PRE-EMPTION 2 AND 3	G	G	G	G	G	G	R	R	R	R	R	↑
PRE-EMPTION CLEARANCE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	↑
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	R	R	R	R	R	R	↑

**WIRING DIAGRAM**



MD 924 AND WHEEL RD  
 TS NO. 3481 C  
 LOGMILE 12092402.28

**PHASING CHART**

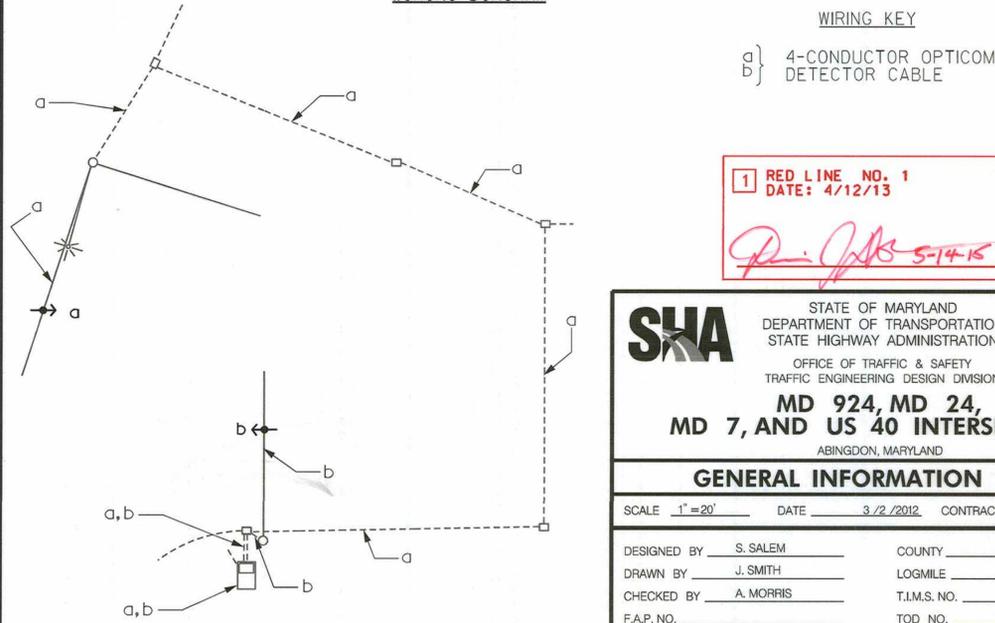


PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	↑
1 AND 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6											↑
PHASE 1 AND 6	R	R	R	G	G	R	R	R	R	R	R	↑
1 AND 6 CHANGE	R	R	R	G	G	R	R	R	R	R	R	↑
PHASE 2 AND 5	R	R	R	G	G	R	R	R	R	R	R	↑
2 AND 5 CHANGE	R	R	R	G	G	R	R	R	R	R	R	↑
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	R	R	↑
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	↑
PHASE 3 AND 7	R	R	R	R	R	R	R	R	R	R	R	↑
3 AND 7 CHANGE	PHASE 3 + 7 MAY CHANGE TO PHASE 3 + 8, PHASE 4 + 7 OR PHASE 4 + 8											↑
PHASE 3 AND 8	R	R	R	R	R	R	R	R	R	G	G	↑
3 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	G	G	↑
PHASE 4 AND 7	R	R	R	R	R	R	R	R	R	G	R	↑
4 AND 7 CHANGE	R	R	R	R	R	R	R	R	R	G	R	↑
PHASE 4 AND 8	R	R	R	R	R	R	R	R	R	G	G	↑
4 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	↑
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	↑

**EMERGENCY PRE-EMPTION**

EMERGENCY PRE-EMPTION 1 AND 2	G	G	G	G	G	G	R	R	R	R	R	↑
PRE-EMPTION CLEARANCE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	↑
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	G	R	R	R	R	R	↑

**WIRING DIAGRAM**



1 RED LINE NO. 1  
 DATE: 4/12/13

*Signature* 5-14-13

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION

**MD 924, MD 24,  
 MD 7, AND US 40 INTERSECTIONS**  
 ABINGDON, MARYLAND

**GENERAL INFORMATION SHEET**

SCALE 1" = 20' DATE 3/2/2012 CONTRACT NO. XY1255185

DESIGNED BY S. SALEM COUNTY HARFORD  
 DRAWN BY J. SMITH LOGMILE  
 CHECKED BY A. MORRIS T.I.M.S. NO. J977  
 F.A.P. NO. TOD NO.

TS NO. DRAWING TSP-11 OF 15 SHEET NO. 11 OF 15