PROJECT DESCRIPTION

I. GENERAL

This project involves the replacement of Que detection for the US.50 off ramp at MD 450 and Riva Road in Anne Arundel County, Maryland.
MD 450 is considered to run in an east/west direction.

II. INTERSECTION OPERATION

The intersection operation is to remain unchanged.

Existing cabinet and controller to be utilized.

EQUIPMENT LIST

A. A. S.H.A. furnished equipment material.

None.

B. B. Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	LS	1001	Maintenance of Traffic
4	CY	2002	Test Pit Excvation
100	LF	8026	F&I Up to 4" Schedule 80 Rigid PVC Conduit - Bored
120	LF	8028	F&I Up to 4" Schedule 80 Rigid PVC Conduit - Trenched
240	LF	8055	F&I Electrical Cable - 2 Conductor (Aluminum Shielded)
650	LF	8060	F&I Loop Wire Encased In Flexable Tubing (No. 14 AWG)
210	LF	8061	F&I Saw Cut for Signal Loop Detector
3	EA	Neg	F&I Fiber Optic Modem
3	EA	Neg	F&I Fiber Optic Modem Cable
3	EA	Neg	F&I Fiber Optic Telemetry Interface Cable
3	EA	Neg	F&I Fiber Optic Telemetry Interface Panel
3	EA	Neg	F&I Fiber Optic telemetry Module
2,100	EA	Neg	F&I 6 Pair Fiber Optic Cbcle (Single Mode)

CONTACT LIST

The contact persons for District #5 are as follows:

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

Mr. Joe Horty
Assistant District Engineer - Utility
410-841-1039

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

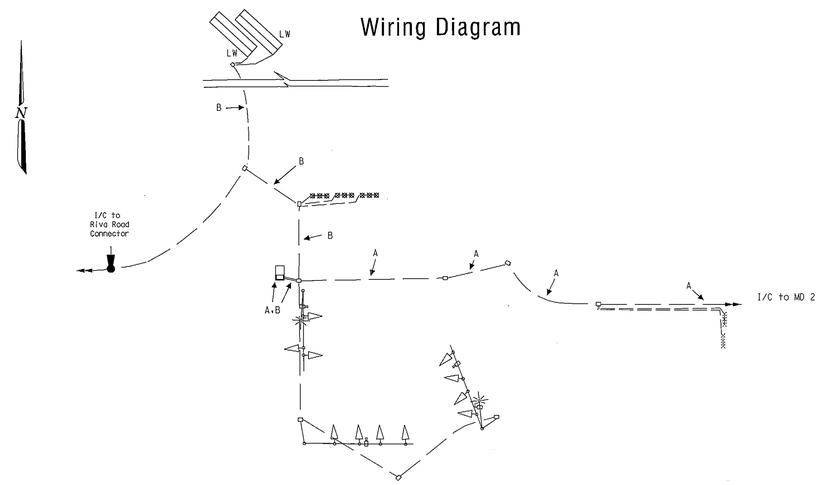
Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

Mr. Edward Rodenhizer - Signal Operations
Signal Operations Supervisor
410-787-7652

Phase Chart

	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 & 5	R G	R G	R	R G	R G	R	R	R	R	R	R	R G
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6												
Phase 1 & 6	G G	G G	G	R	R	R	R	R	R	R	R	R
1 Change	G Y	G Y	G	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	G G	G G	G	R	R	R	R	R	R G
5 Change	R	R	R	G Y	G Y	G	R	R	R	R	R	R Y
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
Phase 4	R	R	R	R	R	R	R	R	R	R	G	G Y
4 Change	R	R	R	R	R	R	R	R	R	R	Y	Y Y
Phase 8	R	R	R	R	R	R	G	G	G	G	R	R
8 Change	R	R	R	R	R	R	Y	Y	Y	Y	R	R
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



A } 6 PAIR FIBER OPTIC CABLE WITH TRACER WIRE

B } 2 Conductor Electrical Cable (aluminum shielded) No. 14 AWG

LW — Loop Detector Cable

TOD NO:XX448-32
SHA NO:AA254A54/B54
MD 450 MD 2 TO RIVA RD

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 and Riva Road/US 50 Ramps

APPROVALS	REVISIONS	GENERAL INFORMATION
TEAM LEADER	(F) Replace Que detector Contract # XX4485185 03/15/2008 FJA	SCALE 1" = 20' DATE 03/11/2009 CONTRACT NO. XX4485185
ASST. DIV. CHIEF	(E) Signal Modification- NB Dlb RT Only S.H.A. No.:BW996M82 10/03/06 FDB	DESIGNED BY C. Cook COUNTY Anne Arundel
DIVISION CHIEF	(D) Reconstruction and systemization S.H.A. No.:XX1005885 07/13/01 EMM JAH DAZ BCK	DRAWN BY S. Renzi LOGMILE 02045009.67
OFFICE DIRECTOR		CHECKED BY TIMS NO. J781
ORIGINAL ON FILE		FAP NO. TOD NO.
		TS NO.864E-GI DRAWING -- OF SHEET NO. 2 OF 2

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