Project Description

This project involves the installation of a new Traffic Control Signal and interconnect at the intersection of US 50 and Phillip Morris Drive in Wicomico County.

Controller Operation

An eight-phase fully actuated, solid state digital NEMA controller with intersection monitor and harness, battery back-up, and 5 four-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

The intersection is to operate in a NEMA six (6) phase, full-traffic-actuated mode. The US 50 approaches shall operate concurrently with US 50 westbound operating as the lead left and US 50 eastbound operating as the lagging left. The Phillip Morris Drive approaches shall operate concurrently.

CONTACT PERSONS FOR DISTRICT 1 ARE AS FOLLOWS

MR. DONNIE DREWER
DISTRICT ENGINEER
410-543-6715

MR. GENE COFIELL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
410-543-6715

MR. BRUCE POOLE
ASSISTANT DISTRICT ENGINEER
410-543-6715

MR. JAMES WRIGHT
UTILITIES ASSISTANT DISTRICT ENGINEER - MAINTENANCE
410-543-6715

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
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TEAM LEADER SIGN OPERATIONS
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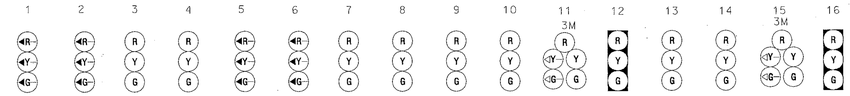
MR. DAVE SCHWARTZ
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase 2 & 5	◁-R-	◁-R-	R	R	◁-G-	◁-G-	G	G	R	R	R	R	R	R	◁-G-	R
5 Change	◁-R-	◁-R-	R	R	◁-Y-	◁-Y-	G	G	R	R	R	R	R	R	◁-Y-	R
Phase 2 & 6	◁-R-	◁-R-	G	G	◁-R-	◁-R-	G	G	R	R	R	R	R	R	R	R
2 Change	◁-R-	◁-R-	G	G	◁-R-	◁-R-	Y	Y	R	R	R	R	R	R	R	R
Phase 1 & 6	◁-G-	◁-G-	G	G	◁-R-	◁-R-	R	R	R	R	◁-G-	G	R	R	R	R
1 & 6 Change	◁-Y-	◁-Y-	Y	Y	◁-R-	◁-R-	R	R	R	R	◁-Y-	Y	R	R	R	R
Phase 4 & 8	◁-R-	◁-R-	R	R	◁-R-	◁-R-	R	R	G	G	◁-G-	G	G	G	◁-G-	G
4 & 8 Change	◁-R-	◁-R-	R	R	◁-R-	◁-R-	R	R	Y	Y	◁-Y-	Y	Y	Y	◁-Y-	Y
Flashing Operation	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

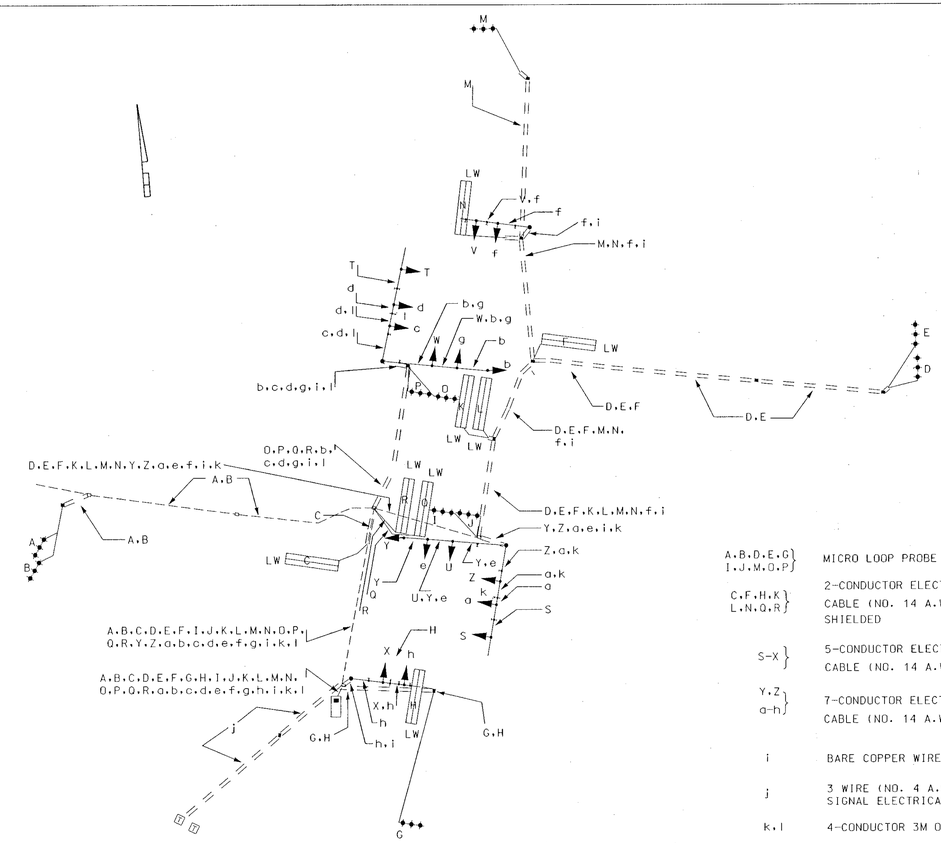
Equipment List

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9014	12 EA	(MAST ARM MOUNT) 12 INCH 1-WAY, 3-SECTION SIGNAL-BLACK FACE-POLYCARBONATE
9017	2 EA	(MAST ARM MOUNT) 3M OPTICALLY PROGRAMMED 12" 1-WAY, 3 SECTION SIGNAL (ALUMINUM)
9018	2 EA	(MAST ARM MOUNT) 3M OPTICALLY PROGRAMMED 12" 1 WAY, 5 SECTION SIGNAL (ALUMINUM)
9086	1 EA	CABINET W/ TELEMETRY (SYSTEM CAB) SIZE 6
9087	1 EA	CONTROLLER ASC II W/ TELEMETRY
9089	322 SF	FLAT SHEET ALUM SIGN-YELLOW, ORANGE, & SILVER (SF)
		W3-3 "SIGNAL AHEAD" SYMBOL 48"X48" QUANT-4
		W3-3 "SIGNAL AHEAD" SYMBOL 36"X36" QUANT-2
		D3-1 "Ocean Gateway Var X 16" QUANT-4
		D3-1 "Phillip Morris Drive" Var X 16" QUANT-2
		D3-2 "Phillip Morris Drive" Var X 12" QUANT-4
		R3-5L "LEFT TURN ONLY" SYMBOL 30"X36" QUANT-4
		ASSOCIATED SHEILD ASSEMBLY 48"X75" QUANT-4

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	4 CY	TEST PIT EXCAVATION
5004	72 LF	FURNISH AND INSTALL 24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5006	4 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
8001	15 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8011	16 EA	INSTALL SIGNAL HEAD (ANY TYPE)
8012	2 EA	FURNISH AND INSTALL 3M OPTICOM #721 DETECTOR EYE
8014	1 EA	FURNISH AND INSTALL 3M OPTICOM #752 DISCRIMINATOR MODULE
8017	10 EA	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FT LEAD-IN
8020	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8021	2808 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8022	540 LF	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT GALVANIZED SLEEVE
8024	635 LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8027	180 LF	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8032	180 LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8033	8 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	5 EA	FURNISH AND INSTALL GROUND ROD 3/4 INCH DIAMETER X 10 FOOT LENGTH
8037	540 LF	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM DETECTOR CABLE NO. 20 AWG
8040	5470 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8041	6175 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8044	100 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8045	2750 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO 14 AWG)
8048	500 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8049	720 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1 CONDUCTOR NO. 4 AWG - THHN/THWN
8051	200 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCH X 6 INCH
8052	337 SF	INSTALL GROUND MOUNTED SIGN
8058	1 EA	REMOVAL OF EXISTING CONTROLLER AND CABINET
8059	1 EA	DELIVERY OF REMOVED CONTROLLER AND CABINET
8066	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V, 1 PHASE 3 WIRE SYSTEM)
8076	2 EA	FURNISH AND INSTALL STEEL POLE AND SINGLE MAST ARM POLE AND 38 FOOT MAST ARM
8080	2 EA	FURNISH AND INSTALL STEEL POLE AND TWIN 50FT / 50FT MAST ARM



A,B,D,E,G, I,J,M,O,P	MICRO LOOP PROBE WIRE
C,F,H,K, L,N,Q,R	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
S-X	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
Y,Z, a-h	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
i	BARE COPPER WIRE (NO. 6 A.W.G.)
j	3 WIRE (NO. 4 A.W.G.) FOR TRAFFIC SIGNAL ELECTRICAL SERVICE
k,l	4-CONDUCTOR 3M OPTICOM DETECTOR WIRE
LW	LOOP WIRE (NO. 14 A.W.G.)

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION

US 50 AT PHILLIP MORRIS DRIVE

DRAWN BY: DCG	F.A.P. NO. AC-STPG-000S(683)E	TS NO. 3980	SHEET NO.
CHECKED BY: TMH	S.H.A. NO. XX1005185		
SCALE: Not to Scale	COUNTY: Wicomico	T.I.M.S. NO. D578	02 OF 02
DATE: 12/99	LOG MILE: 22050018.41		

WI707A55/B55