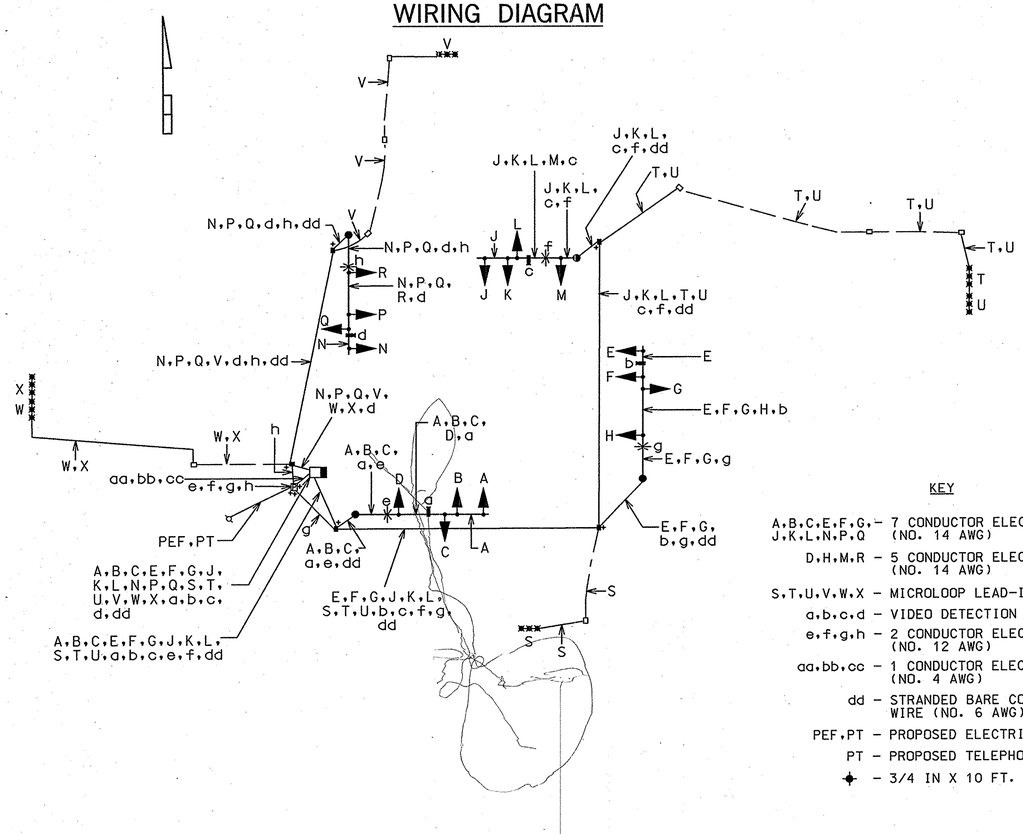
WIRING DIAGRAM



KEY

A,B,C,E,F,G,J,K,L,N,P,Q – 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

D,H,M,R – 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

S,T,U,V,W,X – MICROLOOP LEAD-IN CABLE

a,b,c,d – VIDEO DETECTION CABLE

e,f,g,h – 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG)

aa,bb,cc – 1 CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG)

dd – STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)

PEF,PT – PROPOSED ELECTRICAL SERVICE

PT – PROPOSED TELEPHONE SERVICE

✦ – 3/4 IN X 10 FT. GROUND ROD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	R	R
	◄Y–	◄Y–	Y	Y	◄Y–	◄Y–	Y	Y	◄Y–	◄Y–	Y	Y	◄Y–	◄Y–	Y	Y
	◄G–	◄G–	G	G	◄G–	◄G–	G	G	◄G–	◄G–	G	G	◄G–	◄G–	G	G
PHASE 1 AND 5	◄G–	◄G–	R	R	◄G–	◄G–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	R	R
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
1 AND 6 CHANGE	◄Y–	◄Y–	Y	Y	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	R	R
PHASE 2 AND 5	◄R–	◄R–	R	R	◄G–	◄G–	G	G	◄R–	◄R–	R	R	◄R–	◄R–	R	R
5 CHANGE	◄R–	◄R–	R	R	◄Y–	◄Y–	G	G	◄R–	◄R–	R	R	◄R–	◄R–	R	R
PHASE 2 AND 6	◄R–	◄R–	G	G	◄R–	◄R–	G	G	◄R–	◄R–	R	R	◄R–	◄R–	R	R
2 AND 6 CHANGE	◄R–	◄R–	Y	Y	◄R–	◄R–	Y	Y	◄R–	◄R–	R	R	◄R–	◄R–	R	R
PHASE 3 AND 7	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄G–	◄G–	R	R	◄G–	◄G–	R	R
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8																
PHASE 3 AND 8	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄G–	◄G–	G	G
3 AND 8 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄Y–	◄Y–	Y	Y
PHASE 4 AND 7	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄G–	◄G–	G	G	◄R–	◄R–	R	R
7 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄Y–	◄Y–	G	G	◄R–	◄R–	R	R
PHASE 4 AND 8	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	G	G	◄R–	◄R–	G	G
4 AND 8 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	◄R–	◄R–	Y	Y	◄R–	◄R–	Y	Y
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/R	FL/R	FL/RA	FL/RA	FL/R	FL/R

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 2 AND MD 258 IN ANNE ARUNDEL COUNTY MARYLAND. MD 2 IS ASSUMED TO RUN IN THE NORTH SOUTH DIRECTION.

INTERSECTION OPERATION

THERE IS NO CHANGE IN THE OPERATION OF THIS TRAFFIC CONTROL SIGNAL.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THE PROJECT ARE AS FOLLOWS:
PROJECT CONTACTS:
MRS. KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER – TRAFFIC
PHONE: (410) 841–1019
MR. JOHN S. MAYS, UTILITY ENGINEER
PHONE: (410) 841–1039
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787–7630
MR. CHUCK E. GEORGE, ASSISTANT DISTRICT ENGINEER – MAINTENANCE
PHONE: (410) 841–1013
MR. EDWARD RODENHIZER, CHIEF OF SIGNAL SHOP
PHONE: (410) 787–7652
2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR FOLLOWING MSHA STANDARD PLATES FOR TRAFFIC CONTROL.

EQUIPMENT LIST

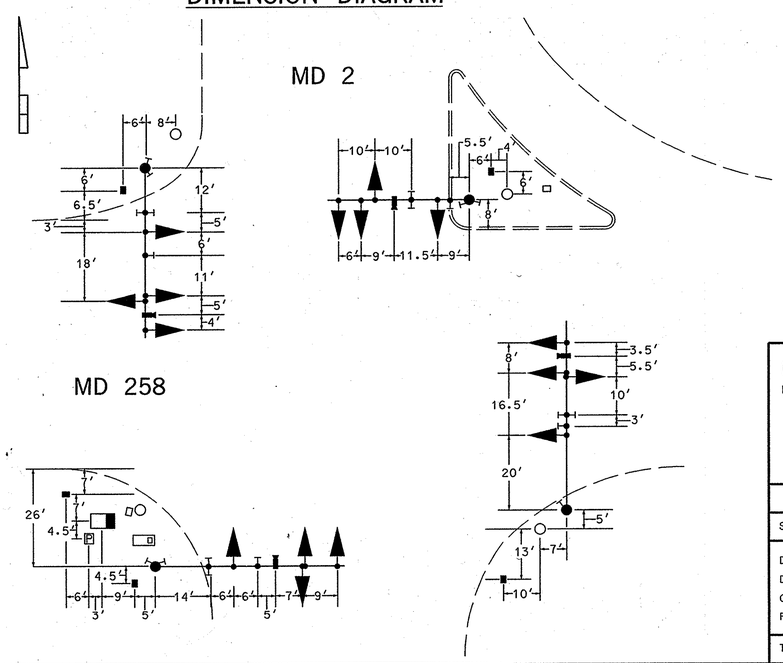
A. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE SHA

ITEM	QUANTITY	DESCRIPTION
9571	224 SF	SHEET ALUMINUM SIGNS CONSISTING OF
	3 EA	GUIDE SHIELD ASSEMBLY (24"x51") POLE MT.
	4 EA	GUIDE SHIELD ASSEMBLY (36"x75") POLE MT.
	1 EA	GUIDE SHIELD ASSEMBLY (24"x51") GRND MT.
	4 EA	W9–2(4) (30"x42") POLE MT.
	4 EA	D–3(1) SIGN (VARIABLE x 16") DUAL FACED – POLE MT.
9044	1 EA	CONTROLLER CABINET SIZE "6" WITH TELEMETRY AND CONTROL MONITOR
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR

1001	1 EA	MAINTENACE OF TRAFFIC
2002	2 CY	TEST PIT EXCAVATION
8001	48 EA	FURNISH AND INSTALL 12 INCH LED SIGNAL HEAD SECTION
8007	4 EA	FURNISH AND INSTSALL ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE
8019	4 EA	FURNISH AND INSTALL MAST ARM POLE & 50 MAST ARM ANY 'T' DIMENSION
8021	6 EA	FURNISH AND INSTALL MICROLOOP PROBE LEAD IN CABLE UP TO 1000 FT
8022	1 EA	REMOVE AND DISPOSE MATERIALS AND EQUIPMENT PER ASSIGNMENT.
8026	4 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA & CABLE UP TO 500 FT.
8027	25 LF	FURNISH AND INSTALL 1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE LIQUID TIGHT
8036	370 LF	FURNISH AND INSTALL SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES – BORED
8037	17 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS UP TO 4 X 6
8039	110 SF	FURNISH AND INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8041	550 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	1 EA	FURNISH AND INSTALL METERED SERVICE PEDESTAL EMBEDDED
8045	35 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1–CONDUCTOR NO.4 AWG–THHN/THWN
8047	6 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8052	2 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8056	90 LF	FURNISH AND INSTALL ELECTRICAL CABLE – 5 CONDUCTOR (NO. 14 AWG)
8057	1600 LF	FURNISH AND INSTALL ELECTRICAL CABLE – 7 CONDUCTOR (NO. 14 AWG)
8058	800 LF	FURNISH AND INSTALL ELECTRICAL CABLE – 2 CONDUCTOR (NO. 12 AWG)
8060	190 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8065	1 EA	FURNISH AND CONTROLLER AND CABINET – BASE MOUNT

DIMENSION DIAGRAM



TOD No.: AT915-01
SHA No.:AA487A51/B51

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

MD 2 (SOLOMON'S ISLAND ROAD) AND MD 258 (BAY FRONT ROAD)

GENERAL INFORMATION SHEET

SCALE NONE DATE 04/01/2006 CONTRACT NO. AT9155185

DESIGNED BY CEDRIC WARD
DRAWN BY CEDRIC WARD
CHECKED BY MICKEY RUCKER
FAP NO.
COUNTY ANNE ARUNDEL
LOGMILE 02000204.75
TIMS NO. H152
TOD NO.

TS NO. 470 G-GI | DRAWING -—- OF - | SHEET NO. 2 OF 2

PLOTTED: Thursday, May 25, 2006 at 8:50:15 AM
FILE: HIS20G02single.dgn

BY: cward