PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF US 13 (OCEAN HWY) AND MD 363 (DEAL ISLAND RD / MANOKIN AVE) IN THE TOWN OF PRINCESS ANNE, SOMERSET COUNTY.

ALL EXISTING POLES, SPAN WIRE, AND SIGNAL EQUIPMENT ARE TO BE REMOVED, AND NEW POLES WITH MAST ARMS AND SIGNAL EQUIPMENT ARE TO BE CONSTRUCTED: VIDEO DETECTION IS TO BE USED ON THE SIDE STREETS AND US 13 LEFT TURNS. ADVANCE DETECTION AND RED SIGNAL AHEAD SIGNS ON US 13 SHALL BE RETAINED: US 13 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION SHALL CONTINUE TO OPERATE IN 6 PHASES. THE NORTHBOUND AND SOUTHBOUND APPROACHES HAVE PROTECTED ONLY LEFT TURN PHASES. THE EASTBOUND AND WESTBOUND THROUGH MOVEMENTS OPERATE AS SPLIT PHASED.

A NEMA EIGHT-PHASE, FULL-ACTUATED CONTROLLER WITH VIDEO DETECTOR INTERFACE UNIT AND ALL OTHER NECESSARY EQUIPMENT HOUSED IN A BASE-MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

PROJECT CONTACTS

DISTRICT: 1

MR. KENNETH CIMINO
ASSISTANT DISTRICT ENGINEER-TRAFFIC
410-677-4040

MR. WAYNE WEICHMAN
ASSISTANT DISTRICT ENGINEER-MAITAINENCE
410-677-4010

MR. BRUCE W. POOLE
DISTRICT UTILITY ENGINEER
410-677-4082

OOTS:

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

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7650

MR. MIKE STOCKER
CHIEF, SIGNAL WAREHOUSE
410-787-7696

MR. SONNY BAILEY
CHIEF, SIGN SHOP
410-787-7676

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

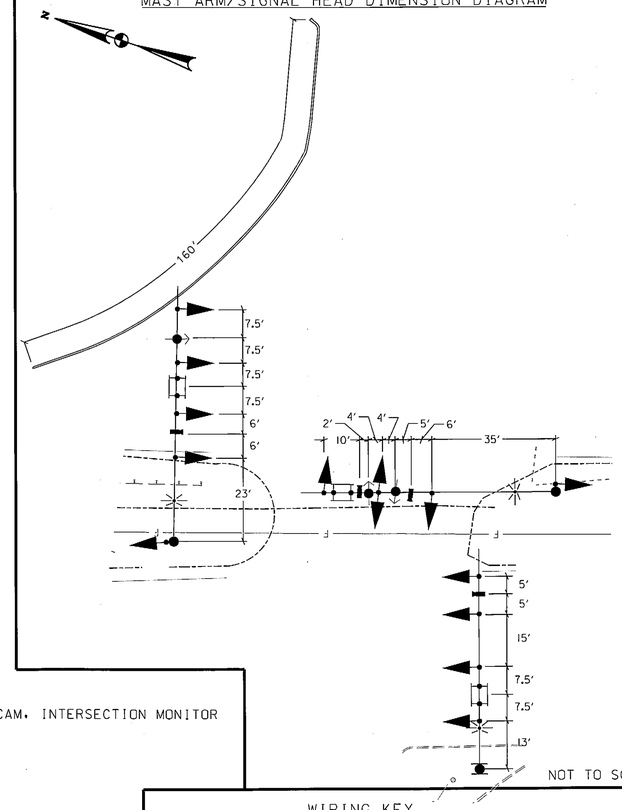
ITEM CODE	QTY	UNITS	DESCRIPTION
9104	1	EA	CONTROLLER CABINET, SIZE "S" W/ CTRL ASC III, VIDEO INT. 1-8 CAM, INTERSECTION MONITOR
9110	1	EA	UPS EQUIPMENT FOR "S" CABINET
9571	152	SF	SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGNS
			4 EA D3-(2) (VARX16")
			4 EA D3-(1) (VARX32")
			2 EA M1-5(6) US (30"X48")
			2 EA M1-5(6) US (36"X72")

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

ITEM CODE	QTY	UNITS	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	3	CY	TEST PIT EXCAVATION
6001	160	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
8000	2	EA	LED LUMINAIRE
8001	44	EA	12" LED SIGNAL HEAD SECTION
8002	1	EA	2 WIRE CENTRAL CONTROL UNIT
8007	2	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE
8012	1	EA	EMBEDDED METERED SERVICE PEDESTAL
8019	1	EA	MAST ARM POLE & 60' MAST ARM ANY 'T' DIMENSION
8020	2	EA	MAST ARM POLE & 70' MAST ARM ANY 'T' DIMENSION
8023	1	EA	REMOVE AND DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8028	4	EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8032	500	LF	4 CONDUCTOR OPTICOM CABLE
8033	290	LF	DISCONNECT, PULL-BACK & REROUTE CABLE
8034	450	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TYPE T/C
8036	400	LF	UP TO 4" SCHEDULE 80 RIGID PVC CONDUIT- BORED
8037	100	LF	UP TO 4" SCHEDULE 80 RIGID PVC CONDUIT- SLOTTED
8038	150	LF	UP TO 4" SCHEDULE 80 RIGID PVC CONDUIT- TRENCHED
8040	152	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8042	500	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	7,800	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8046	3	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8047	1	EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8049	3	EA	OPTICOM NO. 721 DETECTOR EYE
8053	75	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8055	150	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8056	3,200	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8062	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT (ANY SIZE)

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND AUXILLIARY EQUIPMENT FROM THE CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR. EXISTING VIDEO DETECTION CAMERAS TO BE RETURNED TO SHA.

MAST ARM/SIGNAL HEAD DIMENSION DIAGRAM



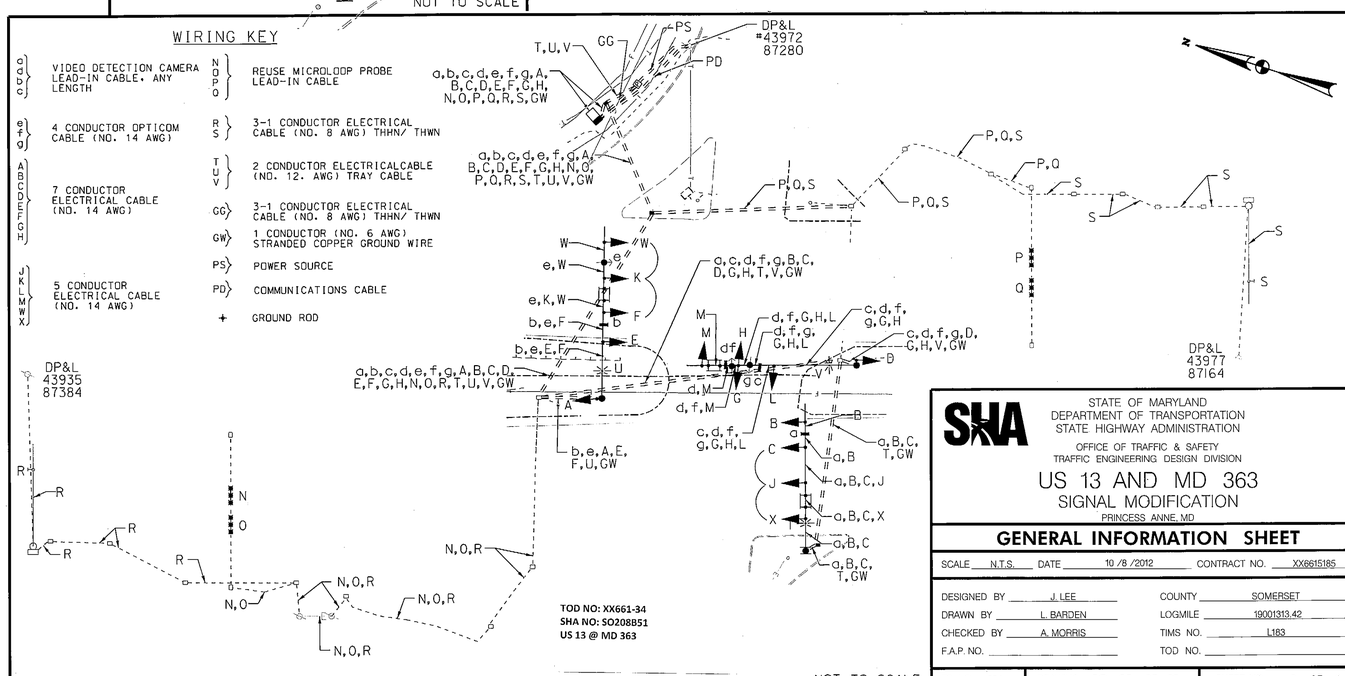
NOT TO SCALE

PHASE DIAGRAM

	1	2	3	4	42	5	6	7	8	43	9	10	11	12
PHASE 1 AND 5	◄G–	◄G–	R	R	R	◄G–	◄G–	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	◄R–	◄R–	R	R	R	◄G–	◄G–	G	G	G	R	R	R	R
1 AND 6 CHANGE	◄R–	◄R–	R	R	R	◄Y–	◄Y–	G	G	G	R	R	R	R
PHASE 2 AND 5	◄G–	◄G–	G	G	G	◄R–	◄R–	R	R	R	R	R	R	R
2 AND 5 CHANGE	◄Y–	◄Y–	G	G	G	◄R–	◄R–	R	R	R	R	R	R	R
PHASE 2 AND 6	◄R–	◄R–	G	G	G	◄R–	◄R–	G	G	G	R	R	R	R
2 AND 6 CHANGE	◄R–	◄R–	Y	Y	Y	◄R–	◄R–	Y	Y	Y	R	R	R	R
PHASE 3	◄R–	◄R–	R	R	R	◄R–	◄R–	R	R	R	R	R	G ◄G–	G
3 CHANGE	◄R–	◄R–	R	R	R	◄R–	◄R–	R	R	R	R	R	Y	Y
PHASE 4	◄R–	◄R–	R	R	R	◄R–	◄R–	R	R	R	G ◄G–	G	R	R
4 CHANGE	◄R–	◄R–	R	R	R	◄R–	◄R–	R	R	R	Y	Y	R	R
PREMPTION 1	◄R–	◄R–	R	R	R	◄G–	◄G–	G	G	G	R	R	R	R
PREMPTION 2	◄R–	◄R–	R	R	R	◄R–	◄R–	R	R	R	R	R	G ◄G–	G
PREMPTION 3	◄R–	◄R–	R	R	R	◄R–	◄R–	R	R	R	G ◄G–	G	R	R
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

WIRING KEY

a, b, c, d	VIDEO DETECTION CAMERA LEAD-IN CABLE, ANY LENGTH	N, O, P, Q	REUSE MICROLOOP PROBE LEAD-IN CABLE
e, f, g	4 CONDUCTOR OPTICOM CABLE (NO. 14 AWG)	R, S	3-1 CONDUCTOR ELECTRICAL CABLE (NO. 8 AWG) THHN/ THWN
A, B, C, D, E, F, G, H	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	T, U, V	2 CONDUCTOR ELECTRICALCABLE (NO. 12. AWG) TRAY CABLE
		GC	3-1 CONDUCTOR ELECTRICAL CABLE (NO. 8 AWG) THHN/ THWN
		GW	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
J, K, L, M, W, X	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	PS	POWER SOURCE
		PD	COMMUNICATIONS CABLE
		+	GROUND ROD



NOT TO SCALE

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 13 AND MD 363
SIGNAL MODIFICATION
PRINCESS ANNE, MD

GENERAL INFORMATION SHEET

SCALE N.T.S. DATE 10 /8 /2012 CONTRACT NO. XX6615185

DESIGNED BY J. LEE COUNTY SOMERSET
DRAWN BY L. BARDEN LOGMILE 19001313.42
CHECKED BY A. MORRIS TIMS NO. L183
F.A.P. NO. TOD NO.

TS NO. 384J | DRAWING SG-02 OF 02 | SHEET NO. 2 OF 2

PLOTTED: $DATETIME$
FILE: $FILE$

BORDER REV: DATE: June 1, 2004

DRILL HOLES

BY: $USERNAME$