PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 11/ MD 63 @ ARTIZAN STREET IN WASHINGTON COUNTY, MARYLAND. US 11 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE US 11/MD 63 APPROACHES OPERATING CONCURRENTLY AND THE MD 63/ARTIZAN STREET APPROACHES OPERATING CONCURRENTLY.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS BOTH LEGS OF US 11. PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS MD 63/ARTIZAN STREET APPROACHES

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

TYPICAL INTERSECTION, STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS POTOMAC STREET AT ARTIZAN STREET" *

WALK: RAPID TICK

WALK: "WALK SIGN ON TO CROSS POTOMAC STREET"

TYPICAL INTERSECTION, STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS ARTIZAN STREET AT POTOMAC STREET" *

WALK: RAPID TICK

WALK: "WALK SIGN ON TO CROSS ARTIZAN STREET"

* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPIDICULAR CROSSING IS < 10'
** MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING MINIMUM TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-03 (LANE SHIFT)

STANDARD NO. MD-104.02-14 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. GEORGE H. SMALL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 729-8444

MR. GEORGE FRANKENBERRY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8457

MR. DAVID LARRICK
DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8420

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

WIRING DIAGRAMS

WIRING KEY

A B C D L L — 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

E F G H J K Z L M N O P Q — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

R S T U V W X Y — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

AA BB CC — 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

DD EE HH JJ — VIDEO CAMERA DETECTION LEAD-IN CABLE

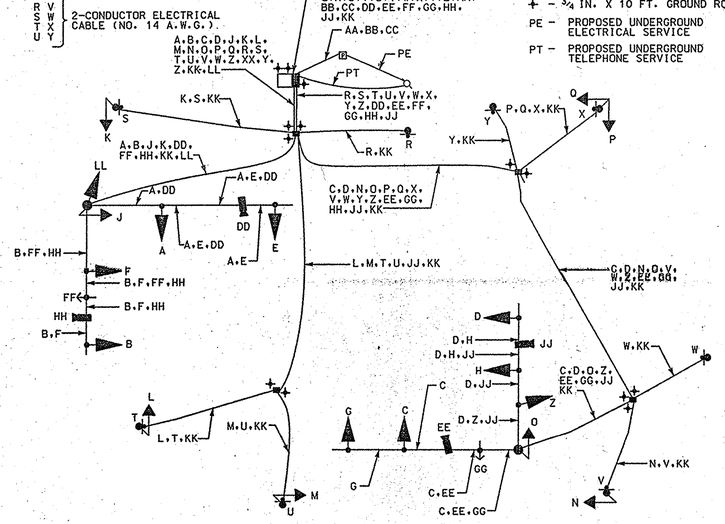
FF GG — 4-CONDUCTOR OPTICOM DETECTOR CABLE

KK — STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

+ - 3/4 IN. X 10 FT. GROUND ROD

PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE

PT - PROPOSED UNDERGROUND TELEPHONE SERVICE



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9086	1 EACH	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	121 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 4 EACH D3-2 (DUAL FACED) SIGNS (VARIABLE x 16 IN.)
		- 1 EACH R10-11b (30 IN. X 30 IN.) MAST ARM MOUNT
		- 4 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS POTOMAC STREET"
		- 4 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS ARTIZAN STREET"
		- 2 EACH M95-1 SIGN (78 IN. x 24 IN.)
		- 2 EACH M95-2 SIGN (36 IN. x 72 IN.)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G								
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEARANCE	Y	Y	Y	Y	Y	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 + 6 CHANGE	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED. CLEARANCE	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
EMERGENCY PRE-EMPTION #1	R	R	R	R	R	G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
	R	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
EMERGENCY PRE-EMPTION #2	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	15 C.Y.	CLASS 2 EXCAVATION
2002	10 C.Y.	TEST PIT EXCAVATION
5001	610 L.F.	5 INCH HEAT APPLIED WHT OR YEL PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5002	780 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LINE MARKINGS - ANY WIDTH
5004	390 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	100 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6002	5 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6003	1385 S.F.	4 INCH CONCRETE SIDEWALK
6004	110 S.F.	DETECTABLE WARNING SURFACES FOR CURB RAMPS
8001	30 EACH	12 INCH LED SIGNAL HEAD SECTION
8002	1 EACH	2 WIRE CENTRAL CONTROL UNIT
8008	8 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8009	8 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8014	8 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8022	1 EACH	REM & DISPOSE MAT & EQUIP PER ASSIGN
8023	1 EACH	TWIN MAST ARM POLE & 50 FT/60 FT MAST ARMS ANY T DIMENSION
8025	1 EACH	TWIN MAST ARM POLE & 50 FT/50 FT MAST ARMS ANY T DIMENSION
8027	4 EACH	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8035	180 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8036	220 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8040	121 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8042	380 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8044	1 EACH	METERED SERVICE PEDESTAL EMBEDDED
8046	100 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8048	4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8049	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8051	2 EACH	OPTICOM NO. 721 DETECTOR EYE
8052	190 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
8053	2 EACH	CUT, CLEAN, GALVANIZE, AND CAP TRAFFIC SIGNAL STRUCTURE
8055	1015 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	1335 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	750 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8065	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

TOD NO: AX142-15
SHA NO:WA337A52/B52
US 11/MD 63@ARTIZAN ST

Whitman, Requardt and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 11/MD 63 @ ARTIZAN STREET
WILLIAMSPORT, MD

GENERAL INFORMATION SHEET

SCALE NONE DATE 1-11-08 CONTRACT NO. AX1425185

DESIGNED BY B. DONOWAY COUNTY WASHINGTON
DRAWN BY B. DONOWAY LOGMILE
CHECKED BY N. LEARY TIMS NO. H955
FAP NO. TOD NO.

TS NO. DRAWING TSP - 2 OF 3 SHEET NO. 2 OF 3

PLOTTED: 03-11-2009
FILE: n:\31599-118\CADD\pSG-N001_US11.dgn

BY: jrasmussen