

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 313 (FEDERALSBURG HWY) AND MD 315 (BLOOMINGDALE AVENUE)/MD 318 (PRESTON ROAD) IN CAROLINE COUNTY.

MD 313 (FEDERALSBURG HWY) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE PROPOSED TRAFFIC SIGNAL SHALL HAVE A BASE-MOUNTED CABINET AND CONTROLLER WITH ALL THE NECESSARY EQUIPMENT AT THE INTERSECTION. THE INTERSECTION WILL OPERATE IN A FULLY-ACTUATED MODE USING 4 NEMA PHASES. THE MD 313 APPROACHES SHALL OPERATE CONCURRENTLY FOR NORTHBOUND AND SOUTHBOUND APPROACHES. THE MD 315/MD 318 APPROACHES SHALL OPERATE CONCURRENTLY FOR EASTBOUND AND WESTBOUND APPROACHES.

VIDEO CAMERAS SHALL PROVIDE THE PRESENCE DETECTION FOR ALL APPROACHES. NON-INVASIVE MICRO-LOOP PROBES SHALL BE INSTALLED ON BOTH MD 313 APPROACHES FOR PASSAGE DETECTION. STREET NAME SIGNS SHALL BE UPDATED TO CURRENT STANDARDS.

PROJECT CONTACTS:

1. THE FOLLOWING ARE THE CONTACT PERSONS FOR THIS PROJECT:

MR. JEFFERY WENTZ, ASST. DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3240

MR. NORRIS EMBERT, ASST. DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 810-3270

MR. MIKE LEWIS, ASST. DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 810-3250

MR. BARRY CLOTHIER, UTILITY ENGINEER
PHONE: (410) 810-3275

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

MR. EDWARD RODENHIZER, CHIEF - SIGNAL SHOP
PHONE: (410) 787-7652

MR. SONNY BAILEY, CHIEF - SIGN SHOP
PHONE: (410) 787-7676

THE POWER COMPANY REPRESENTATIVE:

CHOPTANK ELECTRIC
P.O. BOX 430
DENTON, MD 21629
1(410)479-0380 EXT. 3223

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE SHA BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.

3. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE	QUANTITY	DESCRIPTION
900000	1 EA	ASC CONTROLLER WITH NECESSARY EQUIPMENT AND VIDEO INTERFACE FOR 1-8 CAMERAS HOUSED IN A NEMA SIZE 6 BASE MOUNTED CABINET
900000	48 SF	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
	1 EA	D-3(1) (16" x VAR.) BACK-TO-BACK, MAST ARM-MOUNTED LEFT ARROW, "Bloomingdale AVE", "Bloomingdale AVE", RIGHT ARROW
	1 EA	D-3(1) (16" x VAR.) BACK-TO-BACK, MAST ARM-MOUNTED Preston RD, " RIGHT ARROW, LEFT ARROW, "Preston RD"
	2 EA	D-3(1) (16" x VAR.) DUAL-FACED, MAST ARM-MOUNTED "Federalsburg Hwy"
	152 SF	SHIELD ASSEMBLY SIGNS CONSISTING OF:
	1 EA	M1-5(6) (48"x72") POLE-MOUNTED "NORTH, MD 313, LEFT ARROW"
	1 EA	M1-5(6) (48"x72") POLE-MOUNTED "SOUTH, MD 313, LEFT ARROW"
	1 EA	M1-5(6) (30"x48") POLE-MOUNTED "WEST, MD 318, THRU ARROW"
	1 EA	M1-5(6) (30"x48") POLE-MOUNTED "EAST, MD 315, THRU ARROW"
	2 EA	M1-5 (30"x24") GROUND-MOUNTED "MARYLAND, MD 315"
	2 EA	M1-5 (30"x24") GROUND-MOUNTED "MARYLAND, MD 313"
	4 EA	M1-5 (30"x24") GROUND-MOUNTED "MARYLAND, MD 318"
	1 EA	M3-1 (30"x15") GROUND-MOUNTED "NORTH"
	4 EA	M3-2 (30"x15") GROUND-MOUNTED "EAST"
	1 EA	M3-3 (30"x15") GROUND-MOUNTED "SOUTH"
	2 EA	M3-4 (30"x15") GROUND-MOUNTED "WEST"
	1 EA	M5-1 (21"x15") GROUND-MOUNTED "DOG LEG LEFT ARROW"
	2 EA	M6-1(L) (21"x15") GROUND-MOUNTED "LEFT ARROW"
	5 EA	M6-2 (21"x15") GROUND-MOUNTED "DIAGONAL ARROW"

EQUIPMENT LIST 'B'

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

ITEM NO.	QUANTITY	DESCRIPTION
1003	3 EA	MAINTENANCE OF TRAFFIC
2002	8 CY	TEST PIT EXCAVATION
5005	96 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH
5007	110 LF	24" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
8006	2 EA	ANY SIZE LIGHTING ARM ON SIGNAL STRUCTURE WITH 250 WATT HPS LUMINAIRE
8020	2 EA	NON-INVASIVE PROBES ANY LENGTH LEAD-IN CABLE
8021	1 EA	REMOVE & DISPOSE MATERIAL & EQUIPMENT PER JOB
8023	2 EA	TWIN MAST ARM POLE & 50'/50' ARMS ANY "T" DIM.
8025	5 EA	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8032	360 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - BORED
8034	900 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - TRENCHED
8035	72 LF	WOOD SIGN SUPPORTS UP TO 4"X 6"
8036	118 SF	INSTALL OVERHEAD OR GROUND-MOUNTED SIGNS INCLUDING HARDWARE
8038	270 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8041	1 EA	METERED SERVICE PEDESTAL EMBEDDED (100 AMP/ 200 AMP)
8044	60 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG - THHN/THWN
8045	12 EA	FURNISH & INSTALL ELECTRICAL HANDHOLE
8050	36 EA	12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8056	100 LF	ELECTRICAL CABLE 5 - CONDUCTOR NO. 14 AWG
8057	1670 LF	ELECTRICAL CABLE 7 - CONDUCTOR NO. 14 AWG
8058	350 LF	ELECTRICAL CABLE 2 - CONDUCTOR NO. 12 AWG TYPE TC
8065	1 EA	INSTALL CONTROLLER AND CABINET, BASE-MOUNTED

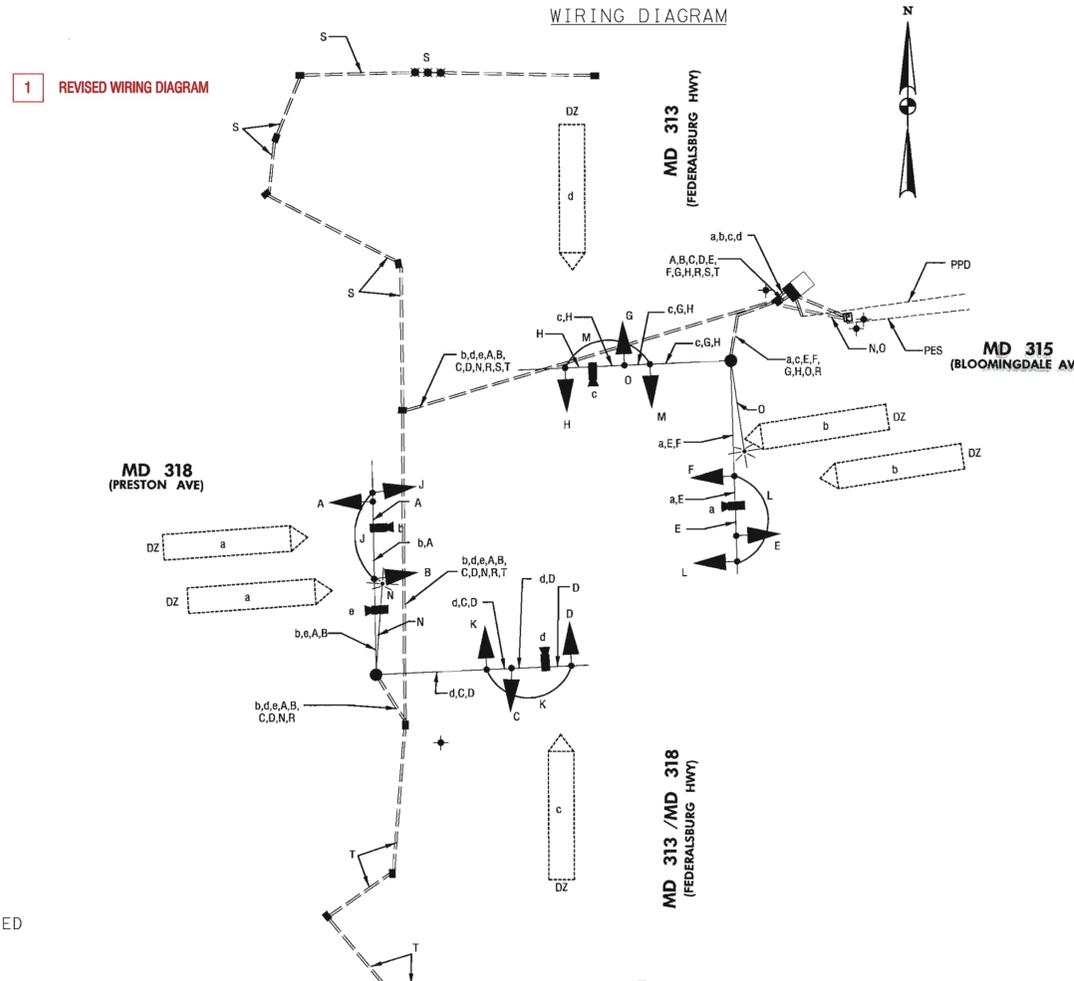
EQUIPMENT LIST 'C'

C. 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
	(R)											
	(Y)											
	(G)											
	12'	12'	12'	12'	12'	12'	12'	12'	12'	12'	12'	12'
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 & 8	R	R	R	R	R	R	G	G	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
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



1 RED LINE 1 TEDD APPROVAL RELOCATE CABINET, PHONE AND POWER FEED 6/6/2011

- a,b,c,d - VIDEO DETECTION CAMERA LEAD-IN CABLE
- A,B,C,D, E,F,G,H - 7 CONDUCTOR NO. 14 AWG ELEC. CABLE
- J,K,L,M - 5 CONDUCTOR NO. 14 AWG ELEC. CABLE (JUMPER)
- N,O - 2 CONDUCTOR NO. 12 AWG ELEC. CABLE (TRAY)
- P - 1 CONDUCTOR NO. 8 AWG ELEC. CABLE - THHN/THWN
- R - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- S,T - NON-INVASIVE PROBES LEAD-IN
- PES - PROPOSED ELECTRICAL SERVICE
- PPD - PROPOSED PHONE DROP (POLE/SOURCE LOCATION TO BE DETERMINED)
- ⊕ - GROUND ROD (3/4" DIA. x 10' LENGTH)
- DZ - DETECTION ZONE
- ⊞ - EXISTING ELECTRICAL POWER TRANSFORMER

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 313 (FEDERALSBURG HWY) AND
MD 315 (BLOOMINGDALE AVE)/MD 318 (PRESTON RD)
FEDERALSBURG, MD

GENERAL INFORMATION SHEET

SCALE: _____ NTS. ADVERTISED DATE: APRIL 26, 2011. CONTRACT NO.: XX4435185

DESIGNED BY: ENB COUNTY: CAROLINE
DRAWN BY: JKB LOGMILE: 05031303.99
CHECKED BY: NFR TMS NO.: K-870
F.A.P. NO.: _____ TOD NO.: _____

TS NO. 38D-GI DRAWING SG- 2 OF 2 SHEET NO. 2 OF 2

BY: Jhenkel

CENTURY
ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

Revision 'D' CEI # 101195.36