

BORNER REV. DATE: MAR 27, 2007



BY: \$USERNAMES

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES REMOVING THE BULBS FROM THE EXISTING TRAFFIC SIGNAL HEADS AND REPLACING THEM WITH NEW LED TRAFFIC SIGNAL MODULES AS WELL AS, INSTALLING 4" BORED CONDUIT AND HANDHOLES IN THE WEST LEG MEDIAN TO THE NORTHWEST QUADRANT AND ACROSS THE ENTIRE EAST LEG AT THE INTERSECTION OF MD 193 (UNIVERSITY BLVD) AT EAST AVENUE IN MONTGOMERY COUNTY.

MD 193 IS CONSIDERED TO RUN IN AN EAST/WEST DIRECTION.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET IS INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A SEMI-ACTUATED MODE USING 8 NEMA PHASES WITH THE NORTH APPROACH RUNNING SEPARATELY AND THE SOUTH APPROACH RUNNING AS A FREE FLOW RIGHT-IN/RIGHT-OUT.

SPECIAL NOTES

1. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.81 - 02.

3. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

MR. JEFFREY WENZ, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7318

MR. AUGIE REBISH, ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (301) 513-7350

MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

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

THE POWER COMPANY REPRESENTATIVE IS:

MR. STEVE CUSTER
POTOMAC ELECTRIC POWER COMPANY
8300 OLD MARLBORO PIKE
UPPER MARLBORO, MARYLAND 20772
PHONE: (301) 548-4333

KAMAL HAMUD, CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (240) 777-8761

MR. KEITH LORD
MONTGOMERY COUNTY
PHONE: (301) 279-1291

MR. EUGENE BAILEY
SIGN SHOP
PHONE: (410) 787-7676

SPECIAL NOTES

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
NONE			

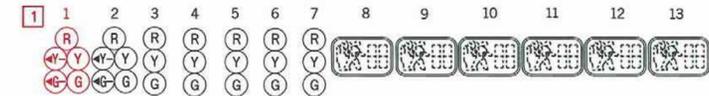
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
805118	4 INCH SCHED. 80 PVC CONDUIT-BORED	LF	165
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	4
800000	REMOVE EXISTING BULB AND INSTALL 8 INCH LED VEHICULAR TRAFFIC SIGNAL MODULE	EA	2
800000	REMOVE EXISTING BULB AND INSTALL 12 INCH LED VEHICULAR TRAFFIC SIGNAL MODULE	EA	20
805011	1 INCH ELECTRICAL CONDUIT GALVANIZED SLEEVE	LF	175
805160	1 INCH LIQUID TIGHT NON-METALLIC CONDUIT SLEEVE	LF	5
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL SECTION	EA	5
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO 14 AWG)	LF	125
862101	LOOP DETECTOR CABLE ENCLOSED IN FLEXIBLE TUBING	LF	1320
862102	SAWCUT	LF	400

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.

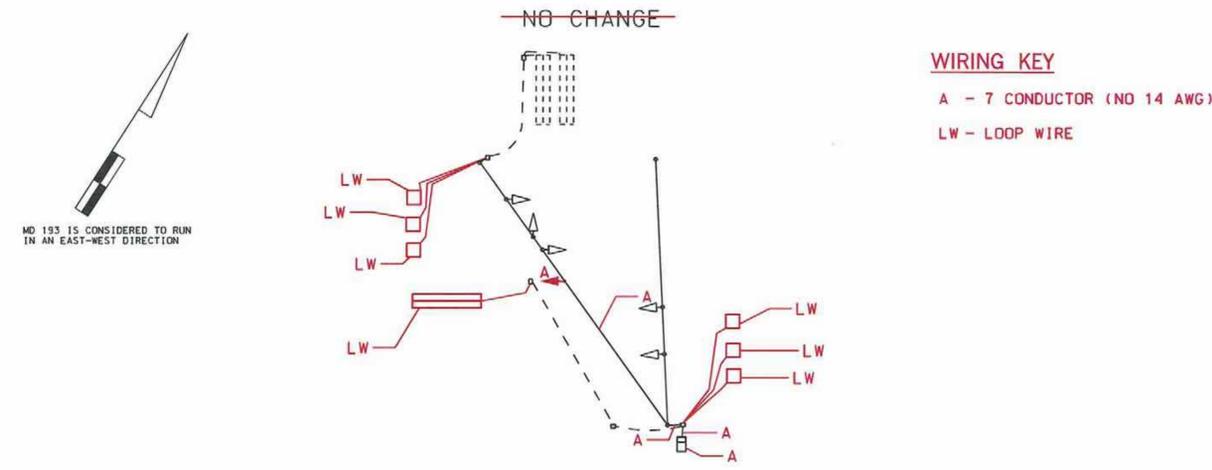
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
NONE			

PHASE CHART



PHASE 1 AND 6	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	↑
01 CHANGE	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	↑
PHASE 2 AND 6	G	G	G	G	G	R	R	WK	WK	DW	DW	DW	DW	DW	↑
PED CLEARANCE	G	G	G	G	G	R	R	FL/DW	FL/DW	DW	DW	DW	DW	DW	↑
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	↑
PHASE 4	R	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	↑
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	↑
PHASE 4 ALT.	R	R	R	R	R	G	G	DW	DW	WK	DW	DW	WK	DW	↑
PED CLEARANCE	R	R	R	R	R	G	G	DW	DW	FL/DW	DW	DW	FL/DW	DW	↑
4 ALT. CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	↑
PHASE 8 ALT.	R	R	R	R	R	G	G	DW	DW	DW	WK	WK	DW	DW	↑
PED CLEARANCE	R	R	R	R	R	G	G	DW	DW	DW	FL/DW	FL/DW	DW	DW	↑
8 ALT. CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	↑
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	↑

1 WIRING DIAGRAM



1 TEDD RED LINE #2 - MAY 2009

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 193 (UNIVERSITY BLVD) - FARRAGUT AVE TO MD 586
MD 193 (UNIVERSITY BLVD) @ EAST AVE

WBCM
ARCHITECTURE ENGINEERING CONSTRUCTION
WHITNEY BAILEY COX & MAGNANI, LLC
849 Falmouth Ave., Suite 100, Baltimore, MD 21206
Tel. 410-812-4500 Fax. 410-324-4100
www.wbcm.com

TRAFFIC SIGNAL - GENERAL INFORMATION

SCALE: NTS ADVERTISED DATE: 05/02/2008 CONTRACT NO.: M05785177

DESIGNED BY: JEH COUNTY: MONTGOMERY
DRAWN BY: JEH LOGMILE: 15019301.13
CHECKED BY: DSU TMS NO.: 1786
F.A.P. NO.: SEE TITLE SHEET TOD NO.:

TS NO. 2285A DRAWING SG-6 OF 8 SHEET NO. 43 OF 45

PLOTTED: 04/21/2009
FILE: SFILES