

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 223 (WOODYARD RD) AND MARLBORO PIKE IN PRINCE GEORGE'S COUNTY. THE MODIFICATION WILL UPGRADE THE EXISTING SIGNAL HEADS TO LED, ADD NEAR SIDE SIGNAL HEADS ON THE NORTHBOUND AND SOUTHBOUND APPROACHES OF MD 223, ADD VIDEO/NON-INVASIVE DETECTION, A NEW METERED SERVICE PEDESTAL AND UPGRADE INTERSECTION PAVEMENT MARKINGS. MD 223 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

- THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULLY ACTUATED MODE WITH THE MD 223 APPROACHES OPERATING CONCURRENTLY AND THE MARLBORO PIKE APPROACHES OPERATING CONCURRENTLY. PERMISSIVE-EXCLUSIVE LEADING LEFT-TURN PHASES EXIST FOR BOTH NORTHBOUND AND SOUTHBOUND MD 223.
- A FULL-TRAFFIC ACTUATED, EIGHT PHASE, CONTROLLER AND ALL NECESSARY EQUIPMENT HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET SHALL REMAIN AT THIS INTERSECTION. INSTALL VIDEO INTERFACE EQUIPMENT IN EXISTING CABINET.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9016	2 EA	4 CHANNEL DETECTOR AMPLIFIER
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT 1-4 CAMERAS
9571	75 SF	FURNISH SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN
	1 EA	M1-5(6) 'NORTH / MD 223 / ->' (30"x48")
	1 EA	M1-5(4) 'WOODYARD RD / NORTH <- / 223 / SOUTH ->' (78"x36")
	1 EA	M1-5(6) 'SOUTH / MD 223 / <- ' (48"x72")
	1 EA	R3-5(R) (30"x36")
	1 EA	D-3(1) 'WOODYARD RD' (VAR.X16")

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	1 CY	TEST PIT EXCAVATION
5003	155 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
5005	155 LF	F & I 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC MARKINGS
8001	35 EA	F & I 12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8004	6 EA	F & I 8" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8012	1 EA	F & I METERED SERVICE PEDESTAL EMBEDDED
8022	6 EA	F & I NON-INVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8023	1 EA	REMOVE & DISPOSE OF MATERIAL AND EXISTING EQUIPMENT PER ASSIGNMENT
8028	4 EA	F & I VIDEO DETECTION CAMERA AND CABLE UP TO 500'
8030	180 LF	F & I 1-CONDUCTOR, NO. 2 AWG/THHN
8033	40 LF	PULL BACK AND REROUTE EXISTING CABLE
8037	215 LF	F & I SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - BORED
8039	215 LF	F & I SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - TRENCHED
8041	75 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (AND ALL HARDWARE)
8046	15 LF	F & I ELECTRICAL CABLE - 1 CONDUCTOR NO. 8 AWG - THHN/THWN
8047	8 EA	F & I ELECTRICAL HAND HOLE
8051	30 LF	F & I 3 IN. SCHEDULE 80 PVC CONDUIT RISER
8057	750 LF	F & I ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)

C. IF THE CABINET IS TO BE REMOVED 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 SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATIONS.

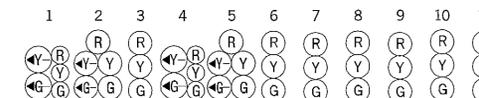
CONTACTS

DISTRICT (DISTRICT 3)	OFFICE OF TRAFFIC AND SAFETY
MR. BRIAN YOUNG DISTRICT ENGINEER 301-513-7311	MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630
MS. FELECIA MURPHY ASSISTANT DISTRICT ENGINEER - TRAFFIC 301-513-7409	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. VICTOR GRAFTON DISTRICT UTILITY ENGINEER 301-513-7350	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
MR. KEVIN NOWAK & MR. DUANE BERNARD ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 301-513-7336	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
MR. VERNON STINNETT ASSISTANT DISTRICT ENGINEER - MAINTENANCE 301-513-7304	MS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

POWER COMPANY

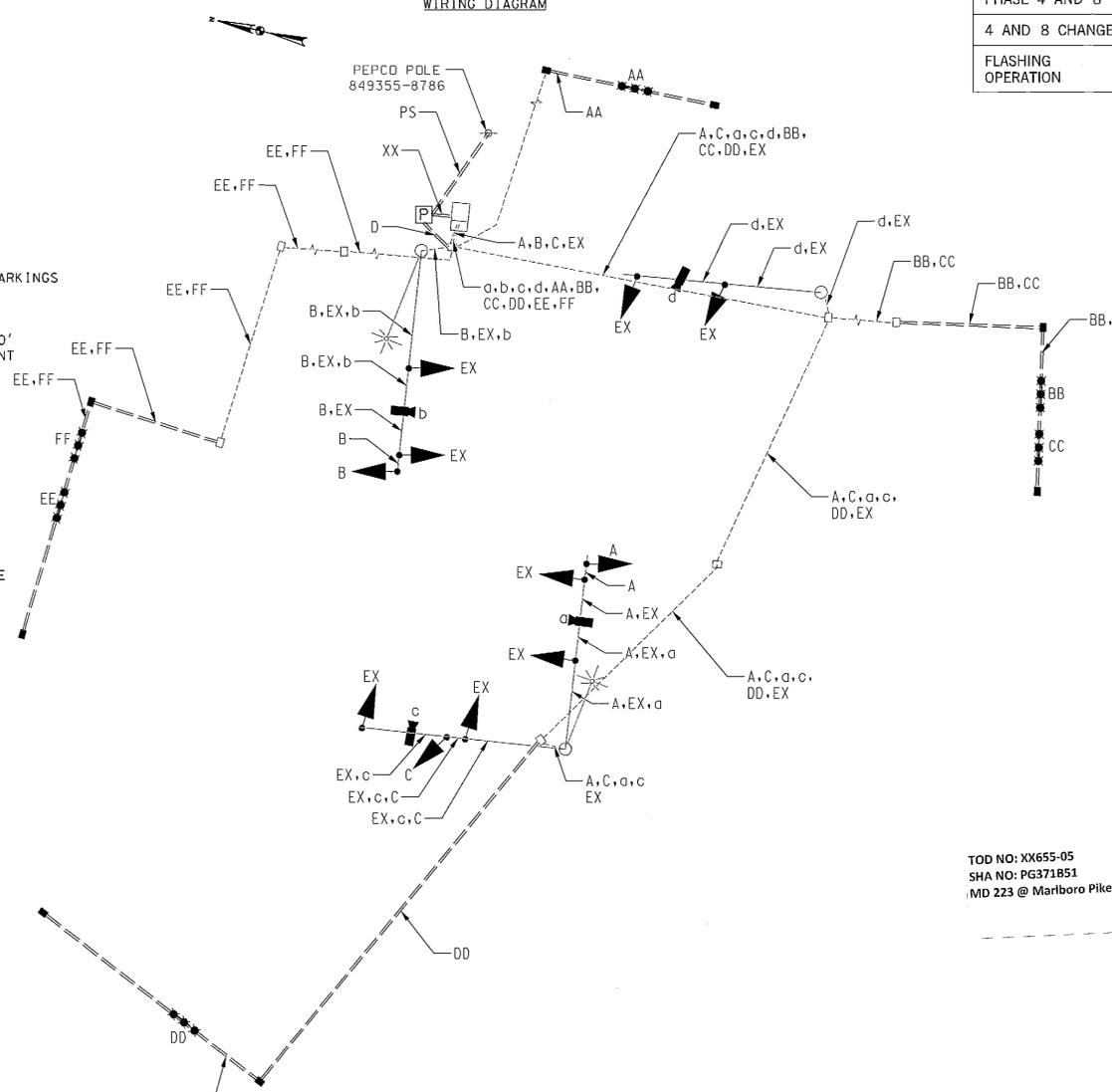
MR. RICHARD CHILCOAT  
PEPCO POWER  
301-967-5805

PHASE CHART



PHASE 1 AND 5	←G/R	←G/R	R	←G/R	←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	←G/G	←G/G	G	R	R	R	R	R	R	R	R
1 AND 6 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	←G/G	←G/G	G	R	R	R	R	R
2 AND 5 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	R	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

WIRING DIAGRAM



WIRING KEY

- A, B, C - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D - REROUTE EXISTING 2 CONDUCTOR ALUMINUM SHIELDED (TC) FOR LIGHTING
- AA, BB, CC, DD, EE, FF - MICROLOOP PROBE LEAD-IN CABLE
- a, b, c, d - VIDEO DETECTION LEAD-IN CABLE
- PS - 3 WIRE, 1 CONDUCTOR ELECTRICAL CABLE (NO. 2 AWG/THHN)
- XX - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 8 A.W.G. THHN/THWN)
- EX - EXISTING SIGNAL CABLE

TOD NO: XX655-05  
SHA NO: PG371B51  
MD 223 @ Marlboro Pike



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

MD 223 AT MARLBORO PIKE

UPPER MARLBORO, MD

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE 7/2011 CONTRACT NO. XX655185

DESIGNED BY KMP COUNTY PRINCE GEORGE'S

DRAWN BY JEK LOGMILE 16022312.24

CHECKED BY KMP TIMS NO. J202

F.A.P. NO. TOD NO.

TS NO. 2130B-GI DRAWING SG-02 OF 02 SHEET NO. 2 OF 2

