PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 201 (KENILWORTH AVENUE) AND MD 410 (EAST-WEST HIGHWAY) IN PRINCE GEORGE'S COUNTY. THE MODIFICATION INCLUDES THE INSTALLATION OF ACCESSIBLE PUSHBUTTONS AND COUNTDOWN PEDESTRIAN SIGNALS AT ALL PEDESTRIAN CROSSINGS AS WELL AS THE INSTALLATION OF VIDEO DETECTION AND LED SIGNAL HEAD MODULES FOR ALL APPROACHES.

MD 201 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT PHASE, FULL-ACTUATED TRAFFIC MODE. THE EXISTING MAINLINE AND SIDE STREET EXCLUSIVE PHASING WILL REMAIN.THE EXISTING MAINLINE AND SIDE STREET ALTERNATE PEDESTRIAN PHASES WILL REMAIN. THE EXISTING EASTBOUND AND WESTBOUND PRE-EMPTION PHASES WILL REMAIN.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET, CONTROLLER, EQUIPMENT AND ASSOCIATED HARNESSES SHALL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT AND ONE (1) VIDEO DETECTION INTERFACE EQUIPMENT; 1-4 CAMERAS WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

FOR KENILWORTH AVENUE

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS KENILWORTH AT EAST-WEST HIGHWAY."

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

FOR EAST-WEST HIGHWAY

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS EAST-WEST HIGHWAY AT KENILWORTH."

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

THE CONTACT PERSONS FOR DISTRICT #3 / OOTS/ ARE AS FOLLOWS:

District #3

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: 301-513-7404

Mr. Augie Rebish
District Utility Engineer
Phone: 301-513-7350

Mr. Vernon Stinnett, Jr.
Assistant District Engineer - Maintenance
Phone: 301-513-7304

Mr. Kevin Nowak
Assistant District Engineer - Construction
Phone: 301-513-7336

Office Of Traffic & Safety

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
410-787-7630

Mr. Edward Rodenhizer
Team Leader Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader Sign Operations
410-787-7670

The Power Company Representative is:
Potomac Electric Power Company
8300 Old Marlboro Pike
Upper Marlboro, Maryland 20772
Phone: 301-961-5325

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

CATEGORY CODE	QUANTITY	DESCRIPTION
900000	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
973023	164 SF	SHEET ALUMINUM SIGNS:
		4 EA - W13-4(I) (24 IN. x 36 IN.) FY
		4 EA - M6-2(L) (21 IN. x 15 IN.) FY
		4 EA - M6-2(R) (21 IN. x 15 IN.) FY
		12 EA - W11-2 (30 IN. x 30 IN.) FY
		2 EA - R1-2 (36 IN. x 36 IN.)
		1 EA - D-3(I) (96 IN. x 16 IN.) "EAST-WEST HWY" (DUAL FACED)
		1 EA - D-3(I) (96 IN. x 16 IN.) "KENILWORTH AVE" (DUAL FACED)
		4 EA - R10-3(I) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS KENILWORTH AVENUE"
		4 EA - R10-3(I) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS EAST-WEST HIGHWAY."

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

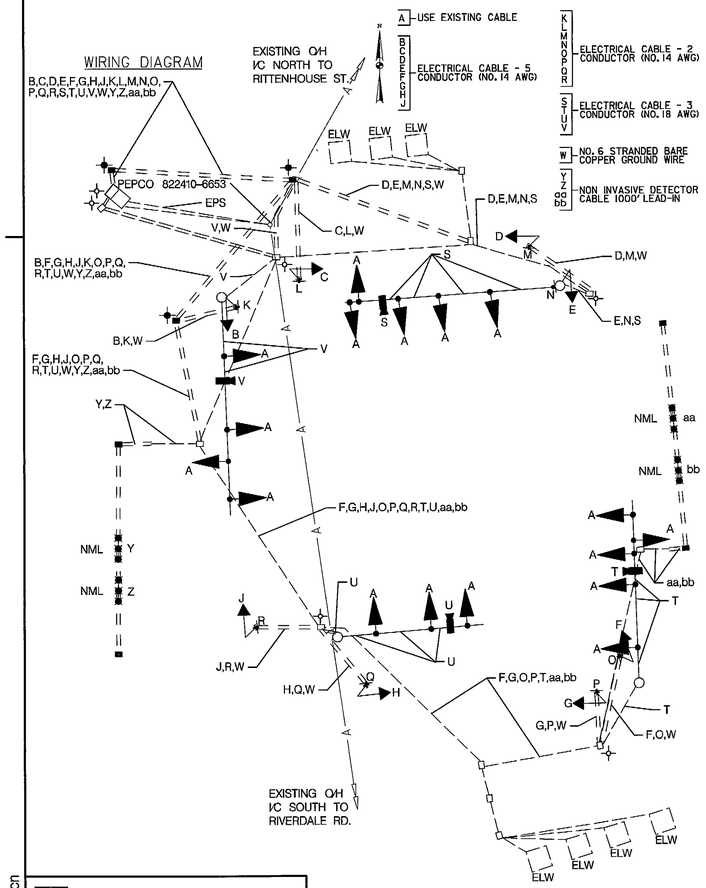
ITEM NO.	QUANTITY	DESCRIPTION
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.		

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	4 CY	TEST PIT EXCAVATION
585621	1215 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585625	195 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
655105	70 SF	5 INCH CONCRETE SIDEWALK
800000	1 EA	2 WIRE CENTRAL CONTROL UNIT
800000	8 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	8 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT
800000	1 LS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
800000	45 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION MODULES
800000	1 EA	4 INCH PVC 90 DEGREE BEND IN EXISTING BASE MOUNTED CABINET
801004	6 CY	CONCRETE FOR SIGNAL FOUNDATION
801106	231 LF	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
801711	71 SF	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS
802501	440 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805115	140 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
805135	300 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805155	110 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
810605	2 EA	NON INVASIVE DETECTOR, 1000 FOOT LEAD-IN CABLE
811001	7 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
811002	2 EA	REMOVE ELECTRICAL HANDHOLE
813014	135 SF	INSTALL GROUND MOUNTED SIGN
813015	29 SF	INSTALL OVERHEAD SIGN
816001	4 EA	VIDEO DETECTION (TERRA) CAMERA
818004	7 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	3 EA	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
860284	6 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861105	2010 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	2050 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

WIRING DIAGRAM



EPS - EXISTING POWER SERVICE

ELW - EXISTING LOOP WIRE

NML - PROPOSED NON-INVASIVE MICROLOOP PROBE SET

PROPOSED GROUND ROD - 3/4 IN. DIAMETER X 10 FOOT LENGTH

EXISTING GROUND ROD - 3/4 IN. DIAMETER x 10 FT. LENGTH

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
PHASE 1 AND 5	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																									
PHASE 1 AND 6	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	R	G	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	R	R	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 6 CHANGE	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6 ALT	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEARANCE COUNTDOWN	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 ALT CHANGE	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 AND 7	R	R	R	R	R	R	R	R	G	G	G	R	R	G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8																									
PHASE 3 AND 8	R	R	R	R	R	R	R	R	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 AND 8 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 7	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 AND 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8 ALT	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE COUNTDOWN	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 AND 8 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION 1	R	R	R	R	R	R	R	R	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION 1 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION 2	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION 2 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/RA	FL/R	FL/R	FL/RA	FL/RA	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

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

MD 201 (KENILWORTH AVENUE) AT
MD 410 (EAST-WEST HIGHWAY)

TRAFFIC SIGNALIZATION PLAN

SCALE NONE ADVERTISED DATE 05/2009 CONTRACT NO. PG7415168

DESIGNED BY MCG
DRAWN BY MCG
CHECKED BY BAB CJW
F.A.P. NO.

COUNTY PRINCE GEORGE'S
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TOD NO.

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BY: dribanon

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