

BORDER REV. DATE: M04M1127200907



BY: \$USER\$

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE CONVERSION OF AN EXISTING PEDESTRIAN SIGNAL TO A TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 650 (NEW HAMPSHIRE AVE.) AND LEBANON STREET.

MD 650 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA 4 PHASE, FULL TRAFFIC ACTUATED MODE. PEDESTRIAN SIGNALIZATION WILL REMAIN ALONG THE SOUTH LEG OF THE INTERSECTION. PEDESTRIAN SIGNALIZATION IS PROPOSED FOR THE EAST AND WEST LEGS OF THE INTERSECTION.

CONTROLLER REQUIREMENTS

INSTALL A NEW EIGHT PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER, VIDEO DETECTION INTERFACE AND ASSOCIATED HARNESSSES WITHIN THE EXISTING CONTROL CABINET. INSTALL NEW TWO-WIRE CENTRAL CONTROL UNIT.

SHA FORCES SHALL PERFORM ALL INTERNAL CABINET WIRING.

APS OPERATION

FOR MD 650 (NEW HAMPSHIRE AVE.)

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS NEW HAMPSHIRE AT LEBANON, WAIT"
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR LEBANON STREET

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS LEBANON AT NEW HAMPSHIRE, WAIT"
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

THE CONTRACTOR SHALL CONTACT ED RODENHIZER AT THE SIGNAL SHOP 410-787-7650 TO DELIVER APS EQUIPMENT FOR TESTING.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Felecia Murphy
Assistant District Engineer - Traffic (Prince George's County)
Phone: 301-513-7404

Victor Grafton
District Utility Engineer
Phone: 301-513-7350

Vernon Stinnett
Assistant District Engineer - Maintenance
Phone: 301-513-7304

Duane Bernard
Assistant District Engineer - Construction
Phone: 301-513-7341

THE CONTACT PERSONS FOR OFFICE OF TRAFFIC AND SAFETY ARE AS FOLLOWS:

Mr. Edward Rodenhizer
SHA Signal Operations Manager
Phone: 410-787-7652

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7650

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 NO.	QUANTITY	DESCRIPTION
NONE	NONE	NONE

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CONTRACT NO: T-1164-0140

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
203030	4 CY	TEST PIT EXCAVATION
800000	1 EA	2-WIRE CENTRAL CONTROL UNIT
800000	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	LUMP	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT
800000	4 EA	VIDEO DETECTION CAMERA AND CABLE (ANY LENGTH)
801004	1 CY	CONCRETE FOR SIGNAL FOUNDATION
801106	38 LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
801605	98 SF	SHEET ALUMINUM SIGNS
802501	185 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805135	70 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	30 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805155	70 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
811001	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
816015	1 EA	VIDEO INTERFACE EQUIPMENT
818004	4 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	2 EA	GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH
860284	24 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861105	613 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	745 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	693 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
865001	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

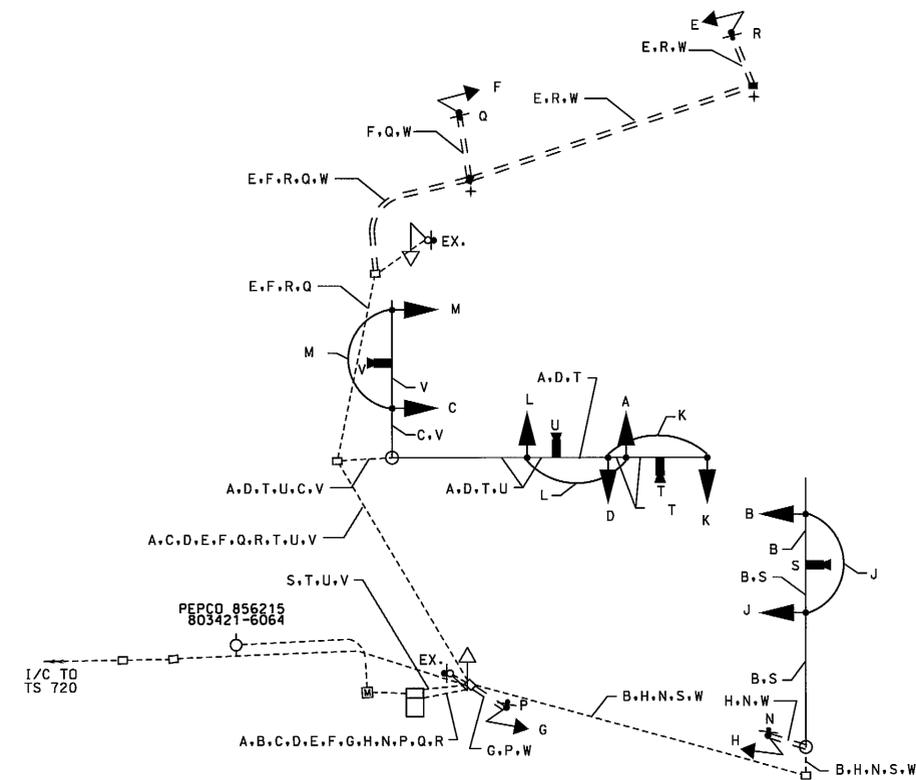
CATEGORY CODE NO.	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 2 + 8	G	G	G	G	R	R	R	R	DW	DW	WK	WK	WK	WK
PED CLEARANCE	G	G	G	G	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 2 + 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT.	R	R	R	R	G	G	G	G	DW	DW	WK	WK	DW	DW
PED CLEARANCE	R	R	R	R	G	G	G	G	FL/DW	FL/DW	DW	DW	DW	DW
4 + 8 ALT. CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



- A,B,C,D - ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- E,F,G,H,J,K,L,M - ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- N,P,Q,R - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
- S,T,U,V - VIDEO DETECTION CAMERA LEAD IN CABLE
- W - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- EX - EXISTING ELECTRICAL CABLE
- + - 3/4 IN. X 10 FT. GROUND ROD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
LANGLEY PARK TRANSIT CENTER
MD 650 AT LEBANON ST.

GENERAL INFORMATION SHEET

SCALE	N.T.S.	ADVERTISED DATE	APRIL 2012	CONTRACT NO.	T-1164-0140
DESIGNED BY	P.WESTCOTT	COUNTY	PRINCE GEORGE'S		
DRAWN BY	P.WESTCOTT	LOGMILE	16065002.03		
CHECKED BY	J.PANNIEE	TIMS NO.	L026		
F.A.P. NO.	SEE TITLE SHEET	TOD NO.			
TS NO.	4473A	DRAWING	SG-08	OF 11	SHEET NO. 106 OF

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

11019 7/19/2012
License No. Expiration Date



RJM ENGINEERING, INC.
CONSULTING ENGINEERS
ELLICOTT CITY, MARYLAND

PLOTTED: 8/24/2012 10:58 AM
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