PROJECT DESCRIPTION

GENERAL THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF COUNTDOWN PEDESTRIAN SIGNALS AND ACCESSIBLE PEDESTRIAN SIGNALS FOR ALL LEGS AT THE INTERSECTION OF MD 650 (NEW HAMPSHIRE AVENUE) AT HOLTON LANE IN MONTGOMERY COUNTY. AS PART OF THE MODIFICATION, SELECTED SIDEWALK AND RAMP IMPROVEMENTS ARE INCLUDED TO MEET CURRENT ADA REQUIREMENTS.

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

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FIVE-PHASE, FULLY ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING FOR SB MD 650. THE EXISTING PEDESTRIAN PHASES ACROSS THE SOUTH AND EAST LEGS WILL BE REPLACED WITH APS. NEW PEDESTRIAN PHASES ARE PROPOSED TO CROSS THE NORTH AND WEST LEGS.

CONTROLLER REQUIREMENTS

THE EXISTING POLE-MOUNTED CABINET SHALL REMAIN.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MD 650 (NEW HAMPSHIRE AVENUE)

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

PHONE DROP

THE EXISTING PHONE DROP WILL REMAIN.

THE CONTACT PERSONS FOR DISTRICT #3/00TS ARE AS FOLLOWS:

District #3

Ms. Anyesha Mookherjee Assistant District Engineer - Traffic Phone: 301-513-7404

Mr. John Nesbitt District Utility Engineer Phone: 301-513-7350

Mr.Tom Fountain Assistant District Engineer - Maintenance Phone: 301-513-7304

Mr. Victor Grafton Assistant District Engineer - Construction Phone: 301-513-7385

Office of Traffic & Safety Ms. Corren Johnson Chief, Traffic Operations Division Phone: 410-787-7630

Ms. Kelly Caldwell-Harper Assistant Division Chief, Traffic Operations Division Phone: 410-787-7625

Mr. Edward Rodenhizer Chief, SHA Traffic Signal Shop Phone: 410-787-7650

Mr.Eugene Bailey Chief, SHA Sign Operation Phone: 410-787-7670 The Power Company Representative is:

8300 Old Marlboro Pike Upper Marlboro, MD 20442 Phone: 301-961-5325

City of Tacoma Park Ms. Daryl Braithwaite Phone: 301-891-7615

WMATA Mr. Jamie Cepler Phone: 202-962-6085

Montgomery RIDE ON Ms.Stacey Coletta Phone: 240-777-5836

EQUIPMENT LIST 'A'

EQUIPMENT LIST 'B'

NONE

APPROVED SHA EQUIPMENT TO BE FURNISHED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

<u>CAT CODE</u>	<u>QUANTITY</u>	DESCRIPTION
120500	ILS	MAINTENANCE OF TRAFFIC
201032	6 CY	CLASS 2 EXCAVATION
203030	4 CY	TEST PIT EXCAVATION
585412	500 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585424	105 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585700	200 LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES - ANY WIDTH
634100	70 LF	STANDARD TYPE A CURB 8 INCH X 16 INCH
634300	180 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
655105	1400 SF	5 INCH CONCRETE SIDEWALK
655120	80 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
800000	105 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM/GROUND MOUNT
		2 FA - D-3(1)(VAR×16")DHAL FACED "NEW HAMPSHIRE AVE"

2 EA - D-3(1)(VAR×16")DUAL FACED "NEW HAMPSHIRE AVE"

IEA - MI-5(6) SHIELD ASSEMBLY (48"×72") "NORTH, MD 650, LEFT ARROW"

IEA - MI-5(6) SHIELD ASSEMBLY (48"×72") "SOUTH, MD 650, LEFT ARROW"

IEA - MI-5(6) SHIELD ASSEMBLY (30"×48") "NORTH, MD 650, RIGHT ARROW"

IEA - MI-5(6) SHIELD ASSEMBLY (30"×48") "NORTH, MD 650, RIGHT ARROW"

IEA - R4-7 (24"×30") "KEEP RIGHT"

EQUIPMENT LIST 'B' (CONT'D)

CAT CODE	<u>QUANTITY</u>	DESCRIPTION
801004	2 CY	CONCRETE FOR SIGNAL FOUNDATION
801104	15 LF	WOOD SIGN SUPPORTS, 4 INCH X 4 INCH
802146	3 EA	ADJUST HANDHOLE TO GRADE AND REPLACE FRAME AND COVER
802501	450 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
805125	100 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHE
805140	30 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHE
805155	225 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - SLOTTED
811001	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
816010	3 EA	CONTROL CABLE, 500 FOOT, CAMERA TO CONTROLLER
818004	8 EA	IO FOOT BREAKAWAY PEDESTAL POLE
822500	ΙEA	AS-BUILT FOR TRAFFIC SIGNAL
837001	6 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860285	8 EA	16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
861105	1450 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	1500 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
861108	1000 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
865210	8 EA	AUDIBLE/TACTILE PEDESTRIAN PUSH BUTTON STATION AND SIGN
865300	IEA	2 WIRE APS CENTRAL CONTROL UNIT
873002	ILS	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT

EQUIPMENT LIST 'C'

NONE

PHASE CHART

H,Q,R -WIRING DIAGRAM ♦ PEPCO 811412–388 / H,Q,R A,B,C,D,E,F,G,H,J,K,L,M,NO,P,Q,S,T,U,V,W,X,EPS,EPD PEPCO 803419-430680 C,D,E,F,G,L,M,N O,P,S,T,U,V,W,XU,W — S,T,U,V,W,X ---E,F,G,N,O,P,R S,T,U,V,W,X

WIRING LEGEND

-ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

-ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

R -NO.6 AWG STRANDED BARE COPPER GROUND WIRE

CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER

W ⊢ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

Y -USE EXISTING WIRING

→ EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

→ PROPOSED GROUND ROD - 3/4 INCH DIAMETER X IO FOOT LENGTH

EXISTING VIDEO DETECTION CAMERA

EPS - EXISTING POWER SOURCE

EPD - EXISTING PHONE DROP

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (I) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

AMD PERMIT NO. I5APM039XX

		2	3	4	5	6	7	8	9	10		12	13	14	15	16	17	18	19		
	R Y G	R Y G	(R) (QY) (Y) (GG) (G	(Y) Y (G) G	R Y G					W H	₩H										
PHASE 2 + 5	R	R	G/G	G G	G	R	R	R	R	R	R	W	DW	DW	W	DW	DW	DW	DW	• — —	_
PHASE 5 CHANGE	R	R	G +	G +	G	R	R	R	R	R	R	W	DW	DW	W	DW	DW	DW	DW	\dashv	_
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	R	R	W	W	W	W	DW	DW	DW	DW	• — —	
PEDESTRIAN CLEARANCE	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW	V	
PHASE 2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW	<u> </u>	$\overline{}$
PHASE 4 + 8	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW		
PHASE 4 + 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	⊢	
PHASE 4 + 8 ALT	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	W	W	W	W	φ 	• -
PED CLEARANCE	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW		,
PHASE 4 + 8 ALT CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW		
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	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 650 (NEW HAMPSHIRE AVENUE) AT HOLTON LANE

(LANGLEY PARK, MARYLAND)

	(GENERAL I	NFORMA	TION-01	
	SCALE NTS	DATEM	ARCH 2016 (CONTRACT NO	BW966M82
	DESIGNED BY	LTC/BAB	COUNTY	MONTGO	DMERY
	DRAWN BY	LTC/BAB	LOGMILE	150650	00.83
	CHECKED BY	LTC/BAB	TIMS NO	N42	23
ESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE MENTS WERE PREPARED OR APPROVED BY ME. AND	F.A.P. NO		TOD NO.		
I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER AWS OF THE STATE OF MARYLAND. SE NO. 200354, EXPIRATION DATE; 03/19/2017."	TS NO.TS-3390B	DRAWING SG-	02 OF	SHEET NO.	02 OF 03

LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214 SEVERNA PARK, MD 21146 TEL: (410) 216-3333 FAX: (443) 782-2288 www.lenharttraffic.com

LOTTED: Friday, March 11, 2016 AT 12:04 PM