

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE UPGRADING OF THE CROSSWALKS AND THE INSTALLATION APS/CPS FOR ALL PEDESTRIAN CROSSINGS, AND A NEW RAMP IS TO BE ADDED ACROSS THE NORTH END OF MEDIAN SOUTH OF MITCHELLVILLE ROAD ALONG MD 197 (COLLINGTON ROAD). MD 197 (COLLINGTON RD) IS CONSIDERED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX PHASE, FULL ACTUATED MODE, WITH THE MD 197 (COLLINGTON RD.) APPROACHES RUNNING CONCURRENTLY. MITCHELLVILLE RD. OPERATES AS A SPLIT PHASE. THERE IS A CONCURRENT PEDESTRIAN PHASE ACROSS THE EAST AND WEST LEGS OF MITCHELLVILLE RD. AND ALTERNATE PEDESTRIAN PHASES ACROSS THE SOUTH LEG OF MD 197 (COLLINGTON RD.).

APS NOTES

- PUSH BUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSH BUTTONS IS TO BE MEASURED FROM FACE OF PUSH BUTTON TO FACE OF PUSH BUTTON, NOT CENTER TO CENTER OF POLE
- PUSH BUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSH BUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- THE DETECTABLE WARNING SURFACE SHALL BE ALIGNED WITH THE CROSSWALK.
- APS WILL FUNCTION AS FOLLOWS:
 - A. MD 197 (COLLINGTON ROAD) WAIT MESSAGE:
 - WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS COLLINGTON AT MITCHELLVILLE"
 - WHEN THE "WALK" PHASE BEGINS, THE PUSHBUTTON UNIT WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.
 - B. MITCHELLVILLE ROAD WAIT MESSAGE
 - WHEN A PEDESTRIAN LOCATED AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS MITCHELLVILLE AT COLLINGTON".
 - WHEN THE "WALK" PHASE BEGINS, THE PUSHBUTTON UNIT WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

EQUIPMENT LIST FOR AREA WIDE CONTRACT # XX4495185

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

ITEM	QUANTITY	UNIT	DESCRIPTION
9000	1	EA	[UPDATED] SOLO TERRA INTERFACE PANEL
9000	1	EA	[UPDATED] SOLO TERRA ACCESS PORT

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

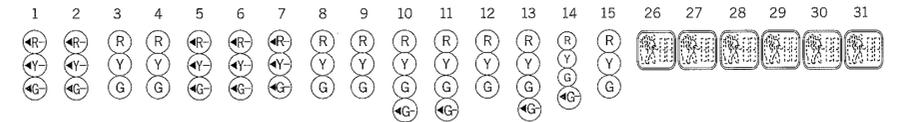
ITEM	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
1002	1000	LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
2001	13	CY	CLASS 2 EXCAVATION
2002	1	CY	TEST PIT EXCAVATION
5002	800	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5003	200	LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
6001	175	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	975	SF	5 INCH CONCRETE SIDEWALK
8003	1	EA	2 WIRE CENTRAL CONTROL UNIT
8008	4	EA	ADJUST AND RE-RING EXISTING SPAN WIRE
8009	2	EA	ADJUST HANDHOLE TO GRADE
8010	6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8011	5	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8013	1	EA	EMBEDDED METERED SERVICE PEDESTAL
8014	6	EA	LED 16 INCH COUNTDOWN PEDESTRIAN HEAD
8015	49	EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8016	1	EA	REMOVE & DISPOSE OF EQUIPMENT PER ASSIGNMENT
8022	300	LF	DISCONNECT, PULL-BACK & REROUTE CABLE
8023	1100	LF	ELECTRICAL CABLE-2 CONDUCTOR (NO 12 AWG) TRAY CABLE
8025	300	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8027	125	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8028	100	SF	DETECTABLE WARNING SURFACES
8029	10	SF	RELOCATE EXISTING SIGN
8033	125	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8038	75	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8044	2	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8055	1500	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	1500	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
NEG	4	EA	VIDEO DETECTION CAMERA-SOLO TERRA
NEG	4	EA	500 FEET VIDEO DETECTION CABLE, ROUND, 3- CONDUCTOR- 18AWG (POLYETHYLENE JACKET)

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

- Mr. Brian Young
Assistant District Engineer - Traffic
Phone: (301) 513-7358
- Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304
- Mr. Augie Rebish
Utility Engineer
Phone: (301) 513-7350
- Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630
- Mr. Ed Rodenhizer
Supervisor, Signal Operations
Phone: (410)-787-7650

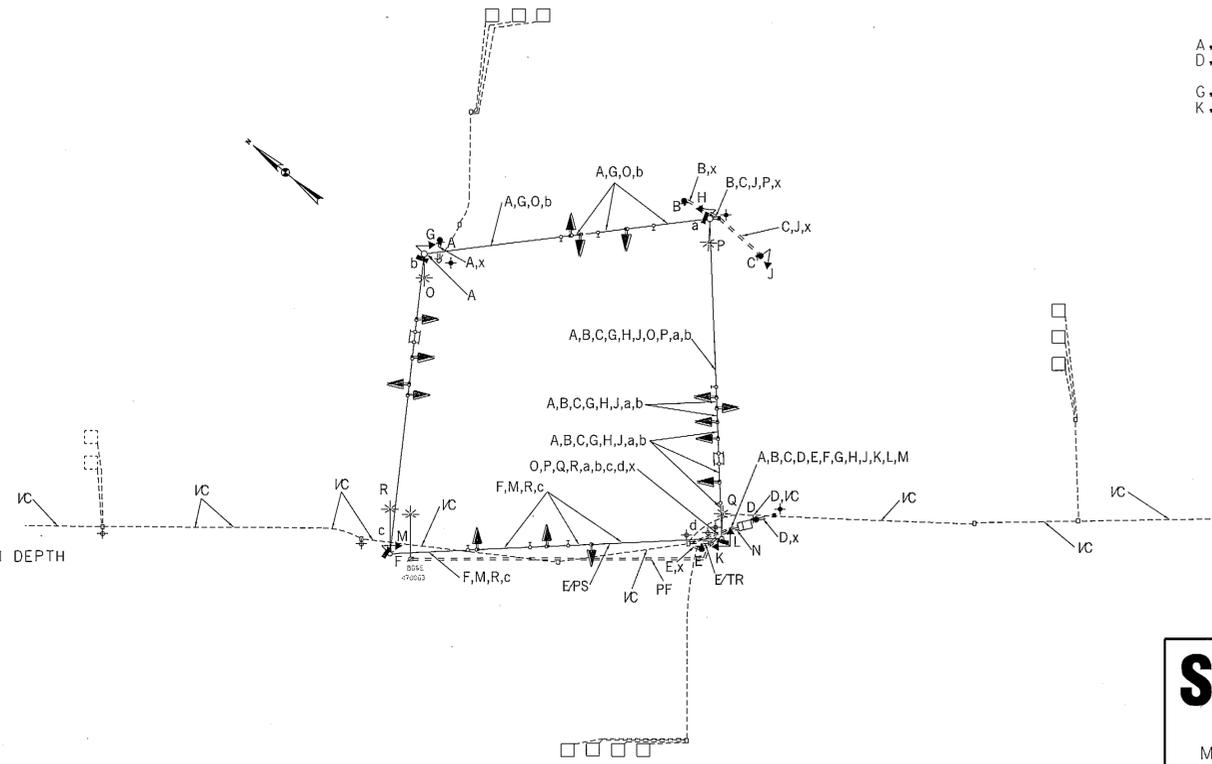
PHASE CHART



PHASE 1 AND 5	←G-←G-	R	R	←G-←G-	←G-	←G-	R	R	←R-←R-	R	←R-	←R-	R	DW	DW	DW	DW	DW	DW	
CHANGES TO PHASES 1&6 AND 2&5 OR 2&6																				
PHASE 1 AND 6	←G-←G-	G	G	←R-←R-	←R-	←R-	R	R	←R-←R-	R	←R-	←R-	R	DW	DW	DW	WK	WK	DW	
1 AND 6 CHANGE	←Y-←Y-	Y	Y	←R-←R-	←R-	←R-	R	R	←R-←R-	R	←R-	←R-	R	DW	DW	DW	DW	DW	DW	
PHASE 2 AND 5	←R-←R-	R	R	←G-←G-	←G-	←G-	G	G	←R-←R-	R	←R-	←R-	R	DW	WK	WK	DW	DW	DW	
2 AND 5 CHANGE	←R-←R-	R	R	←Y-←Y-	←Y-	←Y-	Y	Y	←G-←G-	G	←R-	←R-	R	DW	DW	DW	DW	DW	DW	
PHASE 2 AND 6	←R-←R-	G	G	←R-←R-	←R-	←R-	G	G	←R-←R-	R	←R-	←R-	R	DW	WK	WK	WK	WK	DW	
PED CLEARANCE	←R-←R-	G	G	←R-←R-	←R-	←R-	G	G	←R-←R-	R	←R-	←R-	R	DW	FLDW	FLDW	FLDW	FLDW	DW	
2 AND 6 CHANGE	←R-←R-	Y	Y	←R-←R-	←R-	←R-	Y	Y	←R-←R-	R	←R-	←R-	R	DW	DW	DW	DW	DW	DW	
PHASE 3	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←G-←G-	G	←R-	←R-	R	DW	DW	DW	DW	DW	DW	
3 CHANGE	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←Y-←Y-	Y	←R-	←R-	R	DW	DW	DW	DW	DW	DW	
PHASE 4	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←R-←R-	R	←G-←G-	G	←R-	DW	WK	DW	DW	DW	WK	
4 CHANGE	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←R-←R-	R	←Y-←Y-	Y	←R-	DW	DW	DW	DW	DW	DW	
PHASE 4 ALT	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←G-←G-	G	←R-←R-	R	←R-	WK	DW	DW	DW	DW	WK	
PED CLEARANCE	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←G-←G-	G	←R-←R-	R	←R-	FLDW	DW	DW	DW	DW	FLDW	
4 ALT CHANGE	←R-←R-	R	R	←R-←R-	←R-	←R-	R	R	←R-←Y-	Y	←R-←R-	Y	←R-	DW	DW	DW	DW	DW	DW	
FLASHING OPERATION	FL/←R-	FL/←R-	FL/Y	FL/Y	FL/←R-	FL/←R-	FL/←R-	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK

WIRING KEY

- A,B,C } ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
- D,E,F } ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- G,H,J } ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG THHN/THWN
- K,L,M } ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG THHN/THWN
- N } VIDEO DETECTION CABLE
- Q,D } NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- X } EXISTING INTERCONNECT CABLE
- E/PS } EXISTING POWER FEED TO BE REMOVED BY OTHERS
- O,P } EXISTING TRAY CABLE (NO 12 AWG) TO EXISTING STREETLIGHT
- Q,R } POWER FEED
- PF } EXISTING GROUND ROD
- + } PROPOSED GROUND ROD



- NOTE:**
- THE CONTRACTOR SHALL REMOVE ALL UNUSED CABLE.
 - ALL EXISTING HEADS ARE TO USE EXISTING CABLES.

TOD NO: XX449-18
SHA NO: PG556A55/B55
MD 197@ MITCHELLVILLE RD

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

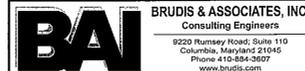
MD 197 (COLLINGTON RD) @ MITCHELLVILLE ROAD
TRAFFIC SIGNAL MODIFICATION

GENERAL INFORMATION PLAN

SCALE: N.T.S. ADVERTISED DATE: _____ CONTRACT NO. XX4495185

DESIGNED BY: JOHN BOLING COUNTY: PRINCE GEORGE'S
DRAWN BY: RICHARD SCOTT LOGMILE: 16019700.33
CHECKED BY: JOHN BOLING TMS NO. J228
F.A.P. NO. _____ TOD NO. _____

TS NO.	DRAWING	OF	SHEET NO. 3 OF 3
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DRILL HOLES

DRILL HOLES

DRILL HOLES

BY: nitesh