

PROJECT DESCRIPTION

GENERAL
THIS PROJECT INVOLVES THE CONSTRUCTION OF A MAST ARM TRAFFIC SIGNAL WITH APS AND CPS AT THE INTERSECTION OF BRIGGS CHANEY ROAD AT MD 200 (INTERCOUNTY CONNECTOR) RAMP "B" AND GENTRY RIDGE COURT IN MONTGOMERY COUNTY.

BRIGGS CHANEY ROAD IS CONSIDERED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A SEMI-ACTUATED MODE USING 4 NEMA PHASES. AUDIBLE PEDESTRIAN SIGNALS SHALL BE INSTALLED IN THE NORTHEAST, SOUTHEAST, SOUTHWEST AND NORTHWEST QUADRANTS OF THE INTERSECTION AND SHALL CONTROL CROSSING ALONG THE EAST, SOUTH AND WEST LEGS OF THE INTERSECTION ONLY. NEW CURB AND GUTTER AND SIDEWALK WITH ADA RAMPS AND DETECTABLE WARNING SURFACE MATERIAL SHALL BE INSTALLED IN THE NORTHEAST, SOUTHEAST, SOUTHWEST AND NORTHWEST QUADRANTS OF THE INTERSECTION.

SPECIAL NOTES

- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES, EXCLUDING INTERCONNECT, TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.
- SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. THE CONTRACTOR SHALL RUN THE INTERCONNECT CABLE INTO THE BASE OF EACH CABINET AND PROPERLY TAG THE CABLE. ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY MONTGOMERY COUNTY FORCES. ALSO, ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE MONTGOMERY COUNTY SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT KAMAL HAMUD AT (240) 777-8761 SEVENTY-TWO HOURS IN ADVANCE OF INTENDED WORK.
- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL:
104.00 - 12, 104.04 - 01, 104.04 - 13, AND 104.04 - 15.
- APS WILL FUNCTION AS FOLLOWS:

- TO CROSS MD 200 RAMP "B"
- WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS MD 200 RAMP AT BRIGGS CHANEY"
 - WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
- TO CROSS BRIGGS CHANEY ROAD
- WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS BRIGGS CHANEY AT MD 200 RAMP"
 - WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
- TO CROSS GENTRY RIDGE COURT
- WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS GENTRY RIDGE AT BRIGGS CHANEY"
 - WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

7. THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

- MS. ANYESHA MOORE, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7498
- MR. VICTOR GRAFTON, ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (301) 513-7315
- MR. VERNON STINNETT, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304
- MR. RICHARD L. DAFF SR., CHIEF - TRAFFIC OPERATIONS DIVISIONS
PHONE: (410) 787-7630
- THE POWER COMPANY REPRESENTATIVE IS:
MR. ED STONEWORK
BALTIMORE GAS AND ELECTRIC POWER COMPANY
PHONE: (410) 859-9047
- MR. KAMAL HAMUD
MONTGOMERY COUNTY DPWT
PHONE: (240) 777-8761
- MR. KEITH LORD
MONTGOMERY COUNTY
PHONE: (301) 279-1291
- MR. EUGENE BAILEY
SIGN SHOP
PHONE: (410) 787-7676

EQUIPMENT LIST

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	4
800000	2-WIRE CENTRAL CONTROL UNIT	EA	1
800000	FURNISH AND INSTALL TWO SECTION 12 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	6
800000	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND SIGN	EA	6
800000	ELECTRICAL CABLE - 1 CONDUCTOR (NO. 4 AWG THHN/THWN)	LF	260
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	11
801605	SHEET ALUMINUM SIGN	SF	90
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	495
805118	4 INCH SCHED. 80 PVC CONDUIT-BORED	LF	330
805125	2 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	15
805135	3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	310
805140	4 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	430
807202	METERED SERVICE PEDESTAL	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	10
800000	SAW CUT FOR SIGNAL (LOOP DETECTOR)	LF	400
800000	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	50
800000	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)	LF	1400
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	4
818010	14 FOOT BREAKAWAY PEDESTAL POLE	EA	1
818021	STEEL POLE WITH TWIN 50 FOOT MAST ARMS	EA	1
818036	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM	EA	1
822002	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)	LF	880
831010	250 W HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	2
837001	GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH	EA	9
800000	FURNISH AND INSTALL 12 INCH VEHICULAR LED TRAFFIC SIGNAL HEAD (R,Y,G)	EA	7
800000	FURNISH AND INSTALL 12 INCH VEHICULAR LED TRAFFIC SIGNAL HEAD (R,Y,G,Y ARROW, G ARROW)	EA	2
800000	4 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)	EA	1100
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	1600
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	1700
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1600
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	550
866103	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	1
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	1
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
800000	NEMA SIZE "6" TRAFFIC SIGNAL CONTROLLER AND CABINET	EA	1

SEQUENCE OF OPERATION SHEET
TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

INTERSECTION: MD 200 EB RAMP B AT BRIGGS CHANEY ROAD

SIGNAL NO.	SIGNAL HEAD INDICATIONS		
	4,5	1,2,3,6,7,8,9	10,11,12,13,14,15
TOTAL:	2	7	6
LEGEND			
	12"	12"	12"

NOTES:

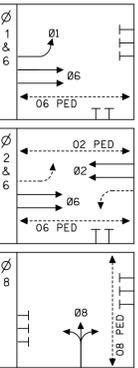
SUBMITTED: _____ CHECKED: _____ APPROVED: _____
IN SERVICE BY: _____ DATE: _____ TIME: _____

SIGNAL NO.	SEQUENCE OF OPERATION											FLASH
	INTERVAL											
1	R	R	R	G	G	Y	R	R	R	R	R	FLY
2	R	R	R	G	G	Y	R	R	R	R	R	FLY
3	R	R	R	G	G	Y	R	R	R	R	R	FLY
4	G	G	G	G	G	Y	R	R	R	R	R	FLY
5	G	G	G	G	G	Y	R	R	R	R	R	FLY
6	G	G	G	G	G	Y	R	R	R	R	R	FLY
7	R	R	R	R	R	R	R	G	G	Y	R	FLR
8	R	R	R	R	R	R	R	G	G	Y	R	FLR
9	R	R	R	R	R	R	R	G	G	Y	R	FLR
10	DW	DW	DW	DW	DW	DW	DW	WK	FDW	DW	DW	DARK
11	DW	DW	DW	DW	DW	DW	DW	WK	FDW	DW	DW	DARK
12	WK	WK	WK	WK	FDW	DW	DW	DW	DW	DW	DW	DARK
13	WK	WK	WK	WK	FDW	DW	DW	DW	DW	DW	DW	DARK
14	DW	DW	DW	DW	WK	FDW	DW	DW	DW	DW	DW	DARK
15	DW	DW	DW	DW	WK	FDW	DW	DW	DW	DW	DW	DARK
PHASE	1 & 6	ALL RED	2 & 6	ALL RED	8	ALL RED						

SHEET NO.

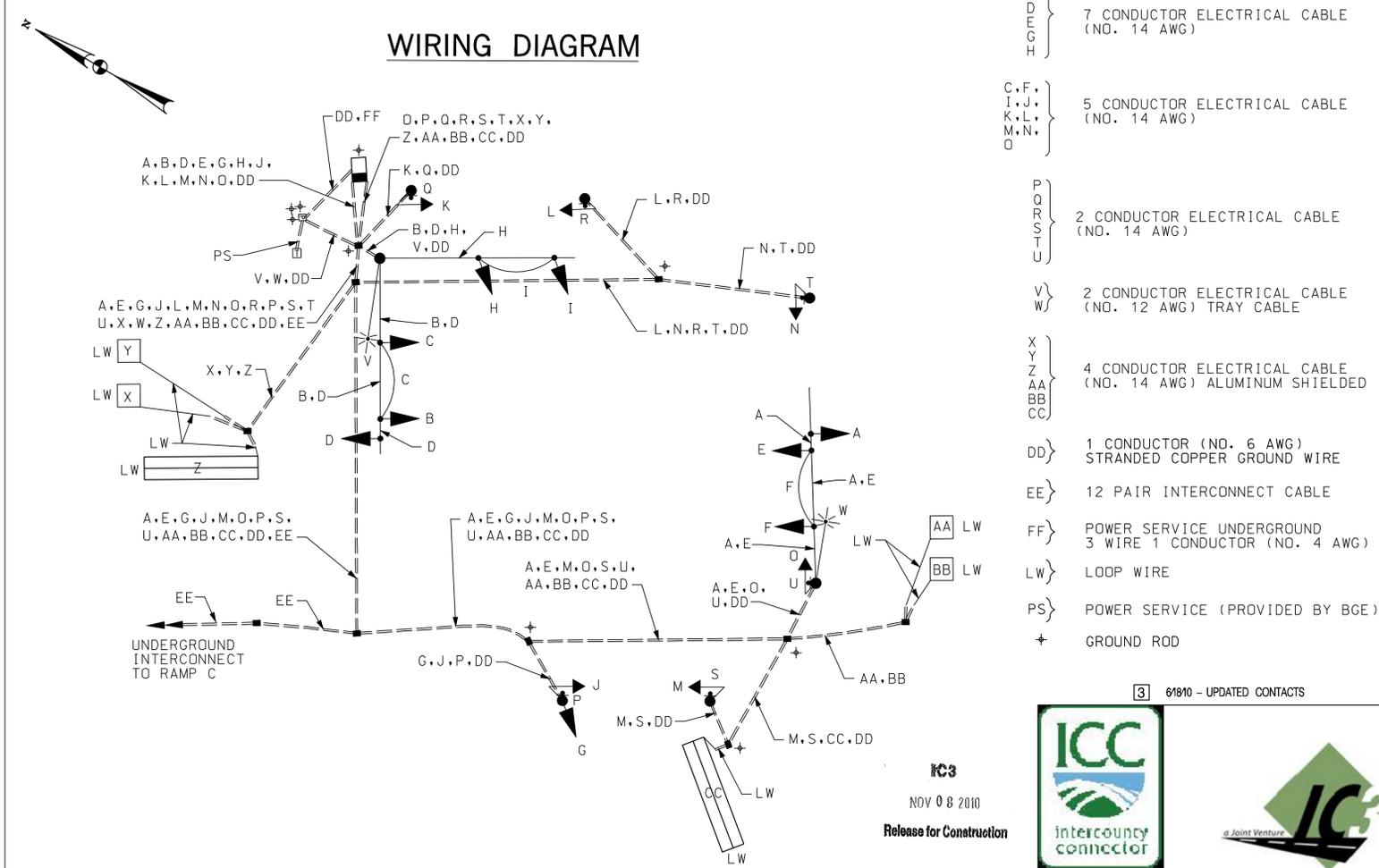
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PHASING



KEY

- A, B, D, E, G, H, J } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C, F, I, J, K, L, M, N, O } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- P, Q, R, S, T, U } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- V, W } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
- X, Y, Z, AA, BB, CC } 4 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) ALUMINUM SHIELDED
- DD } 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
- EE } 12 PAIR INTERCONNECT CABLE
- FF } POWER SERVICE UNDERGROUND 3 WIRE 1 CONDUCTOR (NO. 4 AWG)
- LW } LOOP WIRE
- PS } POWER SERVICE (PROVIDED BY BGE)
- + } GROUND ROD



61810 - UPDATED CONTACTS



IC3
NOV 08 2010
Release for Construction

NO.	REVISION	BY	APP'D	DATE	DESIGNED BY: JRS	DATE 09-28-09
					DRAWN BY: JRS	DATE 09-28-09
					CHECKED BY: DSU	DATE 09-28-09
					DRAWING NO.: SG-1-2	
					Approved: _____ Chief, Div. of Traffic Engineering and Operations	
					Reviewed: _____ Manager, Traffic Engineering Studies	
					Reviewed: _____ Manager, Transportation Systems Engineering	
					Recommended: _____ Engineer, Transportation Systems Engineering	

DEPARTMENT OF TRANSPORTATION
DIVISION OF TRAFFIC ENGINEERING & OPERATIONS
MONTGOMERY COUNTY, MARYLAND

MD 200 EB RAMP "B" AT
BRIGGS CHANEY ROAD

NOT TO SCALE

TS - 10697