PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE CONSTRUCTION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF BRIGGS CHANEY ROAD AND THE OFF / ON RAMPS TO US 29 RAMP IN MONTGOMERY COUNTY.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION.
THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 4 NEMA PHASES WITH FIRE HOUSE PRE-EMPTION.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:
   MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER-TRAFFIC
   PHONE: (301) 513-7300
   MR. RALEIGH MEDLEY, ASSISTANT DISTRICT ENGINEER-MAINTENANCE
   PHONE: (301) 513-7300
   MR. DENNIS McMAHAN, ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
   PHONE: (301) 513-7345
   MR. AUGIE REBISH, UTILITY ENGINEER
   PHONE: (301) 513-7300
   MR. RICHARD L. DAFF, Sr., CHIEF TRAFFIC OPERATIONS DIVISION
   PHONE: (410) 787-7630
   MR. BOBBY GONZALES, TRAFFIC ENGINEER MCDPW&T
   PHONE: (240) 777-2190
2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL.
3. CONTACT MONTGOMERY COUNTY TMC AT LEAST 72 HOURS PRIOR TO ANY WORK TO LOCATE EXISTING EQUIPMENT.
   TMC - 240-777-2100

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE 6) CABINET (MSHA SPECIFICATIONS) WITH ECONOLITE ASC II 2100 CONTROLLER, SSM 12 E CONFLICT MONITOR, VIDEO INTERFACE EQUIPMENT, LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS.	EA	1
973023	FLAT SHEET ALUMINUM SIGNS,	SF	50
	D-3(1) (VAR. X 16")	EA	1
	R3-2 (L) (36"X36")	EA	1
	R3-5 (L) (30"X36")	EA	2
	R10-4C MOD (12"X9")	EA	4
	R10-12 (36"X42")	EA	1
	R10-11(B) (24"X24")	EA	1

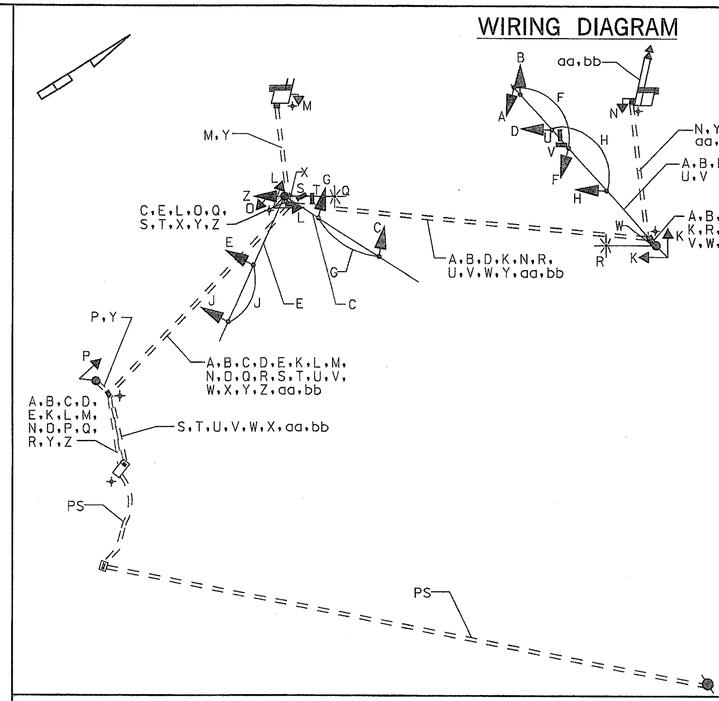
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	4
585620	12 INCH WHITE HEAT APPLIED PERM. PREFORMED THERMO. PAVEMENT MARKINGS	LF	420
585624	24 INCH WHITE HEAT APPLIED PERM. PREFORMED THERMO. PAVEMENT MARKINGS	LF	140
800000	10 FOOT BREAKAWAY PEDESTAL POLE (PAINTED FED BROWN)	EA	1
800000	STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARM (PAINTED FED BROWN)	EA	1
800000	STEEL POLE WITH A SINGLE 70 FOOT MAST ARM (PAINTED FED BROWN)	EA	1
800000	15 FOOT LIGHTING ARM FOR SIGNAL STRUCTURE (PAINTED FED BROWN)	EA	2
800000	INSTALL BGE ELECTRICAL SERVICE HANDHOLE	EA	1
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	8
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	165
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	265
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	480
807400	ELEC. UTILITY SER. EQUIP. 120/240V 60 AMP	EA	1
811001	FURNISH AND INSTALL HANDHOLE	EA	5
813015	INSTALL OVERHEAD SIGN	SF	50
816001	VIDEO DETECTION CAMERA	EA	4
816005	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
831010	250 WATT HPSV LUMINAIRE W/PHOTOCELL (PAINTED FED BROWN)	EA	2
832017	ELECTRICAL CABLE- 1 CONDUCTOR (NO. 4 AWG)	LF	15
802501	STRANDED BARE COPPER GROUND WIRE, NO. 6 AWG	LF	890
837001	GROUND ROD - 3 /4 INCH DIAMETER X 10 FOOT LENGTH	EA	6
860278	12 INCH PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT	EA	10
860282	12 INCH PEDESTRIAN SIGNAL HEAD SECTION PED POLE MOUNT	EA	2
800000	12 INCH PEDESTRIAN SIGNAL HEAD SECTION PILASTER WALL MOUNT	EA	4
860272	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	34
861105	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 AWG)	LF	480
861106	ELECTRICAL CABLE- 3 CONDUCTOR (NO. 14 AWG)	LF	760
861107	ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)	LF	730
861108	ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 AWG)	LF	1470
861116	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 12 AWG)	LF	530
865001	PUSH BUTTON AND SIGN	EA	2
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

WIRING DIAGRAM



KEY

A B C D E	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
bb	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) FOR FIREHOUSE PRE-EMPTION
F G H J K L Z	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
M N O P	3 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) FOR PEDESTRIAN SIGNAL HEADS
W X	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
Q R	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
S T	VIDEO DETECTION CABLE (250 FT LEAD IN CABLE)
U V	VIDEO DETECTION CABLE (500 FT LEAD IN CABLE)
aa	12 PAIR JELLY FILLED INTERCONNECT (SEE INTERCONNECT PLAN)
Y	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
PS	POWER SERVICE UNDERGROUND
⏚	GROUND ROD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 2 AND 5	R	R	←G/G-	←G/G-	G	←R-	←R-	R	R	R	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE	R	R	←G/G-	←G/G-	G	←R-	←R-	R	R	R	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
2 AND 5 CHANGE	R	R	←Y/G-	←Y/G-	G	←R-	←R-	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	←R-	←R-	R	R	R	DW	DW	WK	WK	WK	WK	WK	WK
PED CLEARANCE	G	G	G	G	G	←R-	←R-	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	Y	←R-	←R-	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	←G-	←G-	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	←Y-	←Y-	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	←G-	←G-	G	G	G	WK	WK	DW	DW	DW	DW	DW	DW
PED CLEARANCE	R	R	R	R	R	←G-	←G-	G	G	G	FL/DW	FL/DW	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	←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	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

FIRE HOUSE PRE-EMPTION

FIRE HOUSE PRE-EMPTION PHASE 2 AND 5	R	R	←G/G-	←G/G-	G	←R-	←R-	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PRE-EMPTION CHANGE	R	R	←Y/G-	←Y/G-	G	←R-	←R-	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	←R-	←R-	R	R	R	DW	DW	WK	WK	WK	WK	WK	WK

GP 04

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN

US 29 RAMP C & D AT BRIGGS CHANEY ROAD INTERCHANGE IMPROVEMENTS

DRAWN BY: S. SMITH	F.A.P. NO. SEE TITLE SHEET	TS NO. 1485C	SHEET NO.
CHECKED BY:	S.H.A. NO. M06685170		
SCALE: NTS	COUNTY: MONTGOMERY	T.I.M.S. NO. F-357	
DATE: MAY, 2003	LOG MILE: I5002907.64		439 OF 504

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