PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE INTERSECTION OF 586 (VEIRS MILL ROAD) AT RANDOLPH ROAD 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 6 NEMA PHASES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE:

PROJECT CONTACTS:

MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7300
MR. RALEIGH MEDLEY, ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7300
MR. DENNIS McMAHON ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 413-7300
MR. AUDIE REBISH, ASSISTANT DISTRICT ENGINEER-UTILITY
PHONE: (310) 513-7300
MR. RICHARD L. DAFF, Sr., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. BOBBY GONZALES, TRAFFIC ENGINEER MCDPWT
PHONE: (240) 777-2190

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR USING THE SHA STANDARD PLATES FOR TRAFFIC CONTROL.

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 VIDEO INTERFACE EQUIPMENT, SSM 12 E CONFLICT MONITOR, POWER SUPPLY FOR RACK MOUNTED DETECTION, LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS.	EA	1
973023	FLAT SHEET ALUMINUM SIGNS.	SF	138
	D-3(1) (VAR. X 16")	EA	4
	R3-5(L) (30"X36")	EA	4
	R3-5(R) (30"x36")	EA	1
	R3-3(2) (30"x30")	EA	2
	GUIDE SHIELD ASSEMBLY (30"X51")	EA	2
	R10-4(1) MOD	EA	4

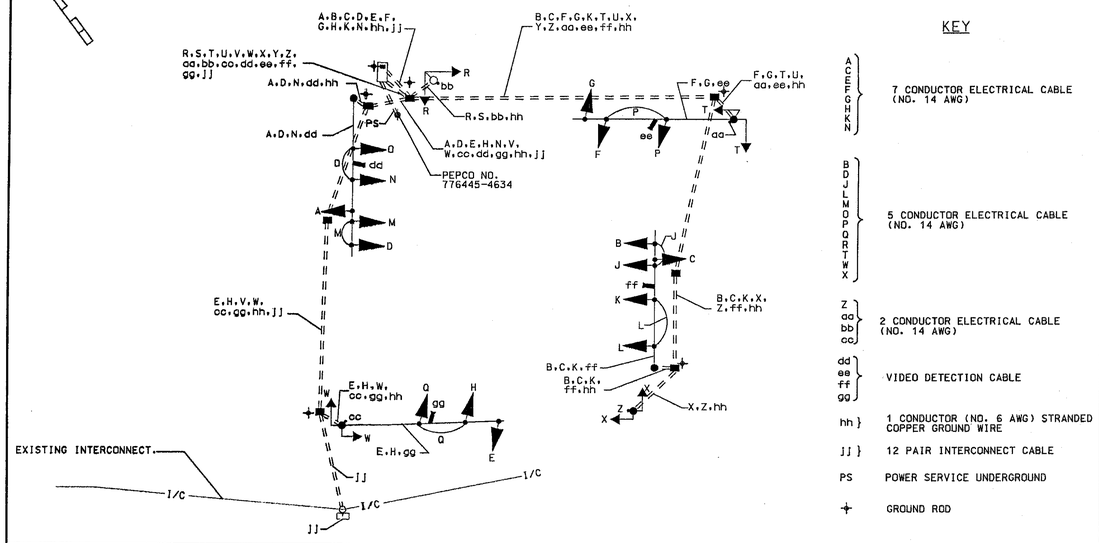
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	6
585452	24" WHITE HEAT APPL. THERMO. PAVEMENT MARK.	LF	250
585620	12" WHITE HEAT APPL. THERMO. PAVEMENT MARK.	LF	800
860272	12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	50
818052	STEEL POLE WITH A SINGLE 70' MAST ARM	EA	3
818041	STEEL POLE WITH A SINGLE 60' MAST ARM	EA	1
805125	2" SCHED. 80 PVC CONDUIT - TRENCHED	LF	50
805140	4" SCHED. 80 PVC CONDUIT - TRENCHED	LF	20
805135	3" SCHED. 80 PVC CONDUIT - TRENCHED	LF	120
805155	4" SCHED. 80 PVC CONDUIT - SLOTTED	LF	250
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	20
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	350
811001	HANDHOLE	EA	7
813015	INSTALL OVERHEAD SIGN	SF	138
822002	12 PAIR COMMUNICATION CABLE (JELLY FILLED)	LF	50
837001	GROUND ROD-3/4INCH X 10 FOOT LENGTH	EA	6
807400	ELEC. UTILITY SER. EQUIP. 120/240V 60 AMP	EA	1
861117	3-WIRE NO. 4 AWG ELECT. CABLE. POWER SERVICE	LF	50
861116	2-COND., NO. 12 AWG ELECT. CABLE	LF	430
861105	2-COND., NO. 14 AWG ELECT. CABLE	LF	710
861106	3-COND., NO. 14 AWG ELECT. CABLE	LF	1362
861107	5-COND., NO. 14 AWG ELECT. CABLE	LF	520
861108	7-COND., NO. 14 AWG ELECT. CABLE	LF	2307
871202	INSTALL CONTROLLER AND CABINET - BASE MT	EA	1
816001	VIDEO DETECTION CAMERA	EA	4
816010	CONTROL CABLE FROM CAMERA TO CONTROLLER (500' LENGTH CABLE)	EA	4
816004	10' PEDESTAL POLE WITH BREAKAWAY BASE	EA	1
860282	12" PEDESTRAIN SIGNAL HEAD PEDESTRIAN POLE MOUNT	EA	8
865001	PUSHBUTTON AND SIGN	EA	4
800000	REMOVE AND DISPOSE EXISTING SIGNAL EQUIP.	LS	1
860292	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	4
860278	12" PEDESTRIAN SIGNAL HEAD POLE MOUNT	EA	8
831009	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE WITH PHOTOCELL	EA	2
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2

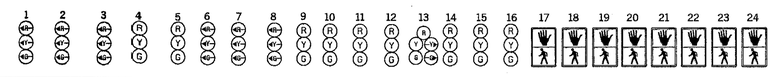
C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM



PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PHASE 1 AND 5	←G	←G	←G	R	R	←G	←G	←G	R	R	R	R	R/G→	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6,2 AND 5,OR 2 AND 6																								
PHASE 1 AND 6	←G	←G	←G	G	G	←R	←R	←R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←Y	←Y	←Y	G	G	←R	←R	←R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←R	←R	←R	R	R	←G	←G	←G	G	G	R	R	R/G→	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	←R	←R	←R	R	R	←Y	←Y	←Y	G	G	R	R	R/Y→	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	←R	←R	←R	G	G	←R	←R	←R	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEARANCE	←R	←R	←R	G	G	←R	←R	←R	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 CHANGE	←R	←R	←R	Y	Y	←R	←R	←R	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	←R	←R	←R	R	R	←R	←R	←R	R	R	G	G	G/G→	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	←R	←R	←R	R	R	←R	←R	←R	R	R	Y	Y	Y/G→	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8 ALT	←R	←R	←R	R	R	←R	←R	←R	R	R	G	G	G/G→	G	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE	←R	←R	←R	R	R	←R	←R	←R	R	R	G	G	G/G→	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 4 AND 8 CHANGE	←R	←R	←R	R	R	←R	←R	←R	R	R	Y	Y	Y/Y→	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 586 (VEIRS MILL ROAD) AND RANDOLPH ROAD

DRAWN BY: S. SMITH	F.A.P. NO. SEE TITLE SHEET	TS NO. 4035A	SHEET NO.
CHECKED BY: K. RINKER	S.H.A. NO. M0817517I		
SCALE: NTS	COUNTY: MONTGOMERY	T.I.M.S. NO. E905	
DATE: MARCH 2003	LOG MILE: I5058630.48		OF

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