PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 650 (NEW HAMPSHIRE AVENUE) AND US 29 SOUTHBOUND ON-RAMP IN MONTGOMERY COUNTY.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THIS INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 2 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. DENNIS MCMAHON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7336
MR. RALEIGH MEDLEY, ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7300
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 MDSHA 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 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 CONSISTING OF	SF	38 △1
	R10-12 (4) (36"X42")	EA	1
	R3-1 (30"X30")	EA	1
	R3-3 (2) (30"x30")	EA	1
	R3-5L (30"x36")	EA	2

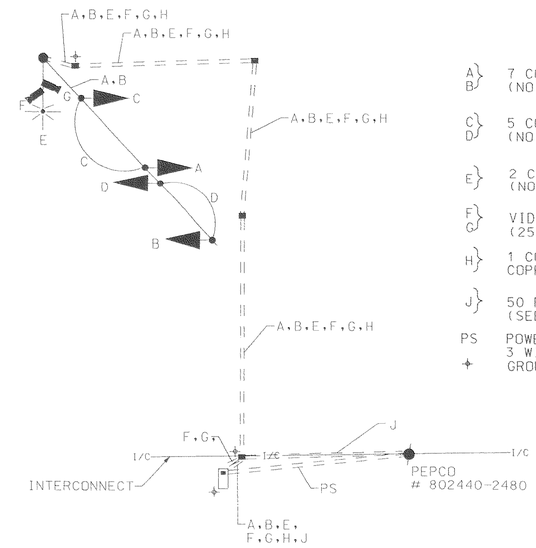
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	2
585624	24 INCH HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	50
585620	12 INCH HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS	LF	350
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	7
813015	INSTALL OVERHEAD SIGN	SF	38 △1
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	70
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	170
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	15
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	70
807400	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	4
816001	VIDEO DETECTION CAMERA	EA	2
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
818052	STEEL POLE WITH SINGLE 70 FOOT MAST ARM	EA	1
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE WITH PHOTOCELL	EA	1
802501	STRANDED BARE COPPER GROUND WIRE, NO 6 AWG	LF	250
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	3
860272	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	12
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	60
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	550
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	250
861117	ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG)	LF	100
866101	10 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	1
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
800000	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT	LS	1

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

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

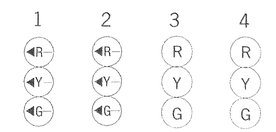
WIRING DIAGRAM



KEY

- A, B — 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C, D — 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- E — 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
- F, G — VIDEO DETECTION CABLE (250 FT. LEAD IN)
- H — 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
- J — 50 PAIR INTERCONNECT CABLE (SEE INTERCONNECT PLAN)
- PS — POWER SERVICE UNDERGROUND 3 WIRE 1 - CONDUCTOR # 4 AWG
- ⏚ — GROUND ROD

PHASE CHART



PHASE 1	FL/R	FL/R	G	G	
1 CHANGE	R	R	Y	Y	
PHASE 2	G	G	R	R	
2 CHANGE	Y	Y	R	R	
FLASHING OPERATION	FL /R	FL /R	FL /Y	FL /Y	

SG 10

△1 ADDENDUM NO. 1
6/4/2003

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 650 (NEW HAMPSHIRE AVENUE) AND
US 29 SOUTHBOUND ON RAMP

DRAWN BY: S. SMITH	F.A.P. NO. SEE TITLE SEE	TS NO.	SHEET NO.
CHECKED BY:	S.H.A. NO. M0900517i		
SCALE: NTS	COUNTY: MONTGOMERY	T.I.M.S. NO.	67 OF 223
DATE: MARCH 2003	LOG MILE: 15065003.65		

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