PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF US 15/US 340 AT JEFFERSON STREET OFF RAMP IN FREDERICK 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. QUEUE DETECTORS SHALL BE INSTALLED ON THE ON RAMPS.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8141
MR. LEON KERNS, ASSISTANT DISTRICT ENGINEER- MAINTENANCE
PHONE: (301) 624-8106
MR. JAMES BUCLALEW, ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE:(301) 624-8116
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE:(410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.34, 104.81- 02

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	MASTER LOCAL CONTROLLER AND CABINET SIZE 6	EA	1
900000	FLAT SHEET ALUMINUM SIGNS. (BLUE OR GREEN)	SF	55.13
	R10-12 (36"X42")	EA	1
	GUIDE SHIELD ASSEMBLY (30"X51")	EA	1
	GUIDE SHIELD ASSEMBLY (48"X75")	EA	1

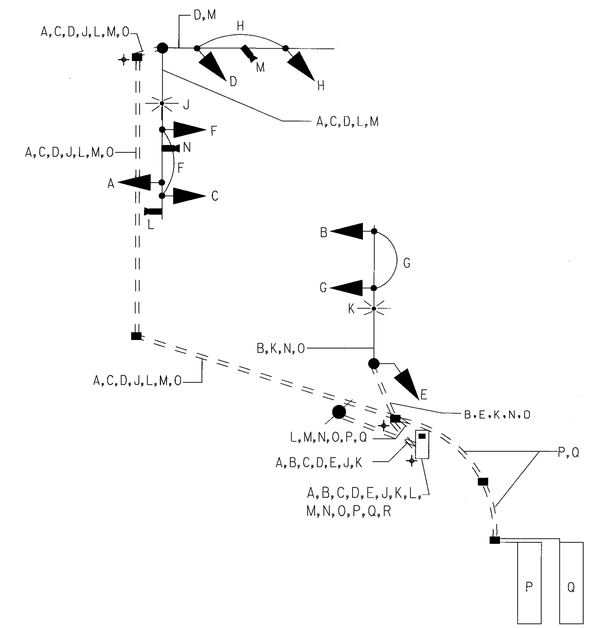
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	EA	3
585445	F&I 24" WHITE HEAT APPL. THERMO. PAVEMENT MARK.	LF	120
800000	F&I 8" SIGNAL HEAD SECTION	EA	3
800000	F&I 12" SIGNAL HEAD SECTION	EA	25
831010	F&I 15' LIGHTING ARM FOR SIGNAL STRUCTURE	EA	2
800000	F&I 250 WATT HPSV LUMINAIRE W/PHOTOCELL	EA	2
800000	F&I MAST ARM POLE AND 50' AND 50' TWIN MAST ARM	EA	1
800000	F&I MAST ARM POLE AND 40' MAST ARM	EA	1
802308	F&I 1" LIQUID-TIGHT, FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT	LF	20
870160	F&I 2" SCHED. 80 PVC CONDUIT - TRENCHED	LF	800
870166	F&I 4" SCHED. 80 PVC CONDUIT - TRENCHED	LF	40
870163	F&I 3" SCHED. 80 PVC CONDUIT - TRENCHED	LF	170
805155	F&I 4" SCHED. 80 PVC CONDUIT - SLOTTED	LF	120
861116	F&I 2 COND., NO. 12 AWG TRAY CABLE	LF	360
801004	F&I CONCRETE FOR SIGNAL FOUNDATIONS	CY	12
802501	F&I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	350
811003	F&I HANDHOLE	EA	9
800000	INSTALL OVERHEAD SIGN	SF	55.13
837001	F&I GROUND ROD	EA	3
838003	F&I CONTROL AND DISTRIBUTION EQUIPMENT	EA	1
861104	F&I 2-COND., ALUM. SHIELDED ELECT. CABLE	LF	420
861107	F&I 5-COND., NO. 14 AWG ELECT. CABLE	LF	60
861108	F&I 7-COND., NO. 14 AWG ELECT. CABLE	LF	1200
862101	F&I LOOPWIRE	LF	375
862102	F&I SAWCUT	LF	375
871202	INSTALL CONTROLLER AND CABINET - BASE MT	EA	1
800000	F&I VIDEO DETECTOR CAMERA SYSTEM	EA	1
800000	F&I PRE-MANUFACTURED CABLE FROM CARMERA TO CONTROLLER (250' LENGTH CABLE)	EA	3

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.
ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

NONE

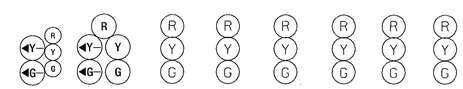
WIRING DIAGRAM



KEY

A B C D E	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
F G H	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J K	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
L M N	VIDEO DETECTION CABLE
O	1 CONDUCTOR (NO. 6 WAG) STRANDED COPPER GROUND WIRE
P Q	2 CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14 AWG)
PS	POWER SERVICE UNDERGROUND
LW	LOOP WIRE
	GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8
PHASE 1 AND 6	◄G/G	◄G/G	G	R	R	R	R	R
1 AND 6 CHANGE	◄Y/G	◄Y/G	G	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R
PHASE 4	R	R	R	R	R	G	G	G
4 CHANGE	R	R	R	R	R	Y	Y	Y
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
US 15 /US 340 @ JEFFERSON STREET ON RAMP

DRAWN BY: JAMES ALLEN Jr.	F.A.P. NO.		TS NO. 4143	SHEET NO.
CHECKED BY: S. R.	S.H.A. NO.	FR4095187		
SCALE: NTS	COUNTY:	FREDERICK	T.I.M.S. NO. E 753	39 OF 61
DATE: SEPTEMBER, 2001	LOG MILE:			

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