

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF US 29 ON/OFF RAMP AT RANDOLPH ROAD/CHERRY HILL ROAD INTERCHANGE 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 PEOPLE FOR THIS PROJECT ARE AS FOLLOWS:

- MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7300
- MR. DENNIS McMAHAN, 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: (301) 513-7300
- MR. RICHARD L. DAFF, Sr., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
- MR. BOBBY GONZALES, TRAFFIC ENGINEER MCDPWT
PHONE: (240) 777-8761
- MR. MIKE KINNEY, MCDPWT (FOR SURVEILLANCE CAMERA)
PHONE: (240) 777-8760

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL:

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

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CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE 6) CABINET (MSHA SPECIFICATIONS) WITH ECONOLITE ASC 2 2100 CONTROLLER, 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 R3-5(2) (54"X36") R3-6(1) MOD(54"X36")	SF EA EA	27 1 1

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	8
585624	24" HEAT APPL. WHT. PERM. PREF. THER. PVT. MARK.	LF	180
585620	12" HEAT APPL. WHT. PERM. PREF. THER. PVT. MARK.	LF	625
800000	MAST ARM POLE AND 40' MAST ARM-PAINTED GREEN	EA	2
800000	2" SCHED. 80 PVC CONDUIT - TRENCHED	LF	50
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	18
801607	INSTALL SHEET ALUMINUM SIGN	SF	27
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	710
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	500
807400	ELEC. UTILITY SER. EQUIP. 120/240V 60 AMP	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	7
816001	VIDEO DETECTOR CAMERA	EA	2
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
800000	10 FOOT BREAKAWAY PEDESTAL POLE-PAINTED GREEN	EA	5
800000	14 FOOT BREAKAWAY PEDESTAL POLE-PAINTED GREEN	EA	2
818036	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM-PAINTED GREEN	EA	1
818052	STEEL POLE WITH A SINGLE 70 FOOT MAST ARM-PAINTED GREEN	EA	2
831010	250 WATT HPSV LUMINAIRE W/PHOTOCELL-PAINTED GREEN	EA	4
832017	ELECTRICAL CABLE- 1 CONDUCTOR (NO. 4 AWG)	LF	50
832020	BARE COPPER GROUND WIRE, NO. 6 AWG	LF	1000
837001	GROUND ROD- 3 /4 INCH DIAMETER X 10 FOOT LENGTH	EA	8
860272	12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	12
860278	12 PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT	EA	6
860282	12 PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL POLE MOUNT	EA	6
861105	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 AWG)	LF	2305
861106	ELECTRICAL CABLE- 3 CONDUCTOR (NO. 14 AWG)	LF	2305
861107	ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)	LF	3135
861108	ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 AWG)	LF	3050
861116	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 12 AWG)	LF	1205
865001	PUSH BUTTON AND SIGN	EA	10
866103	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE PAINTED GREEN	EA	5
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
800000	ELECTRICAL CABLE- 3 CONDUCTOR (NO. 10 AWG)	LF	250

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

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

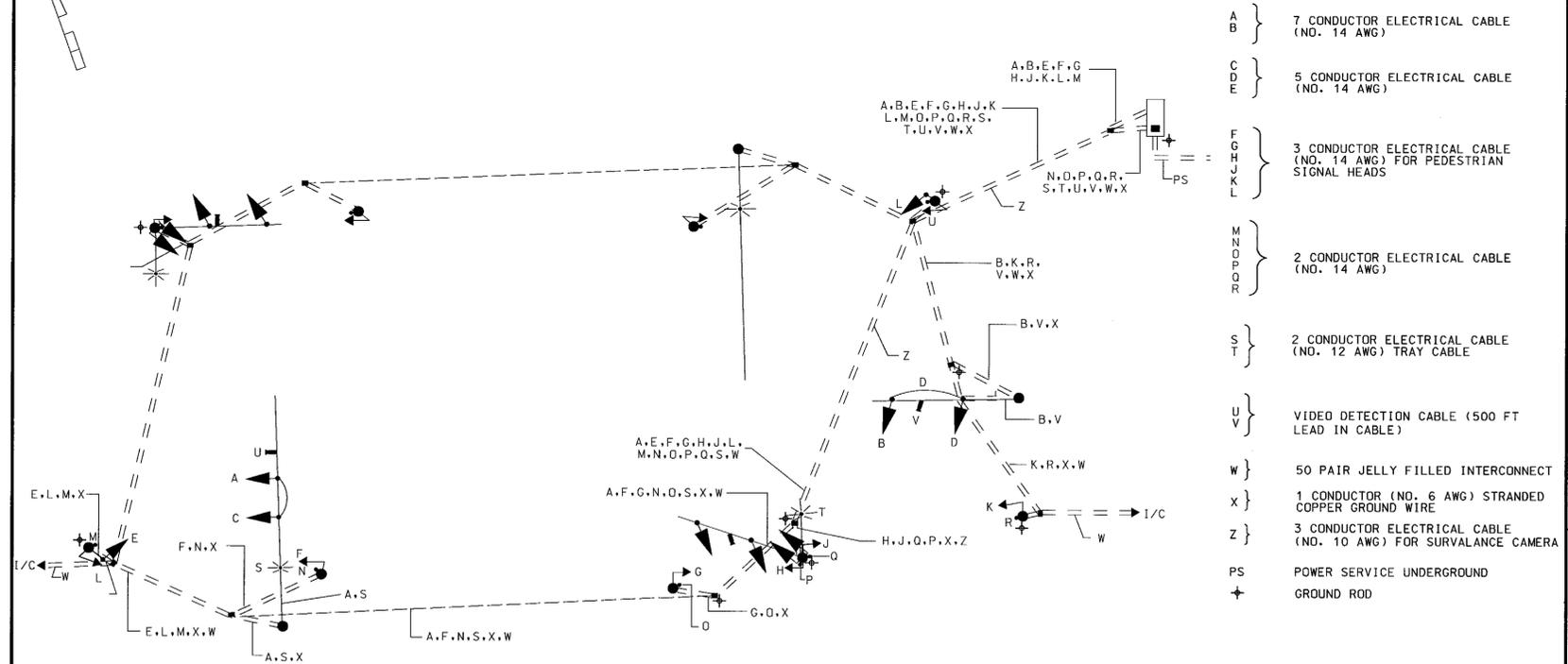
NONE

D. EQUIPMENT TO BE SUPPLIED BY MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS.

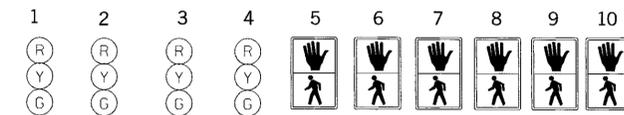
900000	SURVEILLANCE CAMERA (RELOCATED FROM SIGNAL AT US 29 AT DETOUR ROAD)	EA	1
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WIRING DIAGRAM

KEY



PHASE CHART



	1	2	3	4	5	6	7	8	9	10	
PHASE 5	R	R	G	G	DW	DW	DW	DW	DW	DW	↶
5 CHANGE	R	R	Y	Y	DW	DW	DW	DW	DW	DW	↶
PHASE 6	G	G	R	R	WK	WK	WK	WK	WK	WK	↷
PED CLEAR	G	G	R	R	FL\DW	FL\DW	FL\DW	FL\DW	FL\DW	FL\DW	↷
6 CHANGE	Y	Y	R	R	DW	DW	DW	DW	DW	DW	↷
FLASHING OPERATION	FL /Y	FL /Y	FL /R	FL /R	DARK	DARK	DARK	DARK	DARK	DARK	↷

PHASE 4

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

US 29 AT RANDOLPH ROAD
INTERCHANGE IMPROVEMENTS

SABRA, WANG & ASSOCIATES, INC.
1506 JOH AVENUE
SUITE 180
BALTIMORE, MD 21227
WWW.SABRA-WANG.COM

DRAWN BY: JAMES ALLEN Jr.	F.A.P. NO. M08365170	TS NO. 4191	SHEET NO.
CHECKED BY: NTS	COUNTY: MONTGOMERY	T.L.M.S. NO. P142	OF
SCALE: NTS	LOG MILE:		
DATE: APRIL, 2002			