PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF CHERRY HILL ROAD AT PROSPERITY DRIVE 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.

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. AUGIE 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) 777-8761
   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.

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

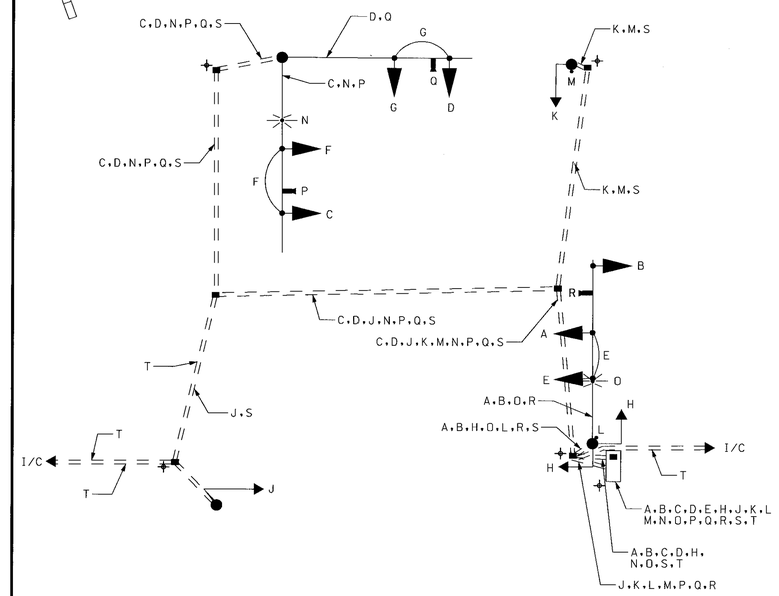
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE-6) CABINET (MSHA SPECIFICATIONS) WITH ECONOLITE ASC 2 2100 CONTROLLER, SSM 12 E CONFLICT MONITOR, POWER SUPPLY FOR RACK MOUNTED DETECTION, LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS.	EA	1
973023	FLAT SHEET ALUMINUM SIGNS,	SF	68
	R3-5(L) (30" x 36")	EA	1
	R3-5(R) (30" x 36")	EA	1
	R10-12 (36" x 42")	EA	1
	D3-2 (VAR. X 16")	EA	3
	R10-4C (12" x 9")	EA	2

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	5
585642	24" HEAT APPL. WHT. PERM. PREF. THER. PVT. MARK.	LF	115
585620	12" HEAT APPL. WHT. PERM. PREF. THER. PVT. MARK.	LF	375
805125	2" SCHED. 80 PVC CONDUIT - TRENCHED	LF	50
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	6
801607	INSTALL SHEET ALUMINUM SIGN	SF	68
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	595
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	50
807400	ELEC. UTILITY SER. EQUIP. 120/240V 60 AMP	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	5
816001	VIDEO DETECTOR CAMERA	EA	3
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	3
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	2
818021	STEEL POLE WITH TWIN 50 FOOT MAST ARM	EA	1
818036	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM	EA	1
831010	250 WATT HPSV LUMINAIRE W/PHOTOCELL	EA	2
832020	BARE COPPER GROUND WIRE, NO. 6 AWG	LF	350
837001	GROUND ROD- 3 /4 INCH DIAMETER X 10 FOOT LENGTH	EA	5
832017	CABLE- 1 CONDUCTOR, NO. 4 AWG, TYPE USE 600V	LF	47
860278	12 PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT	EA	4
860282	12 PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL POLE MOUNT	EA	4
860272	12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	27
832017	ELECTRICAL CABLE- 1 CONDUCTOR (NO. 14 AWG)	LF	100
861105	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 AWG)	LF	350
861106	ELECTRICAL CABLE- 3 CONDUCTOR (NO. 14 AWG)	LF	325
861107	ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)	LF	625
861108	ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 AWG)	LF	665
861116	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 12 AWG)	LF	311
865001	PUSH BUTTON AND SIGN	EA	2
866103	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	LS

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

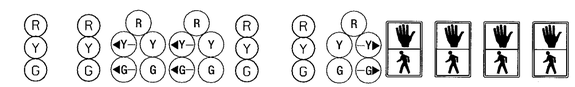
WIRING DIAGRAM



KEY

A B C D	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
E F G H	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J K	3 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) TRAY CABLE
L M	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
N O	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG)
P Q R	VIDEO DETECTION CABLE (500 FT LEAD IN CABLE)
S	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
T	50 PAIR JELLY FILLED INTERCONNECT
PS	POWER SERVICE UNDERGROUND
⏚	GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11
PHASE 2 AND 5	R	R	◄G/G	◄G/G	G	R	R/G►	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	◄Y/Y	◄Y/Y	Y	R	R/Y►	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	R	R	WK	WK	DW	DW
PED CLEARANCE	Y	Y	Y	Y	Y	R	R	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G/G►	DW	DW	WK	WK
4 CHANGE	R	R	R	R	R	Y	Y/Y►	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	Y	Y	DW	DW	FL/DW	FL/DW
PHASE 4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	DARK	DARK	DARK	DARK

SABRA, WANG & ASSOCIATES, INC.
1506 30th AVENUE
SUITE 180
BALTIMORE, MD 21227
WWW.SABRA-WANG.COM

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

CHERRY HILL ROAD AT PROSPERITY DRIVE

DRAWN BY: JAMES ALLEN Jr.	F.A.P. NO.		TS NO. 4116C	Ultimate SHEET NO.
CHECKED BY:	S.H.A. NO. M08365170			
SCALE: NTS	COUNTY: MONTGOMERY		T.I.M.S. NO. F142	OF
DATE: APRIL, 2002	LOG MILE:			

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