PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 100 AND CATHERINE AVENUE IN ANNE ARUNDEL COUNTY.

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION AND OPERATE IN A FULLY ACTUATED MODE USING 4 NEMA PHASES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. LAWRENCE E. ELLIOTT, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019
MR. CHUCK E. GEORGE, ASSISTANT DISTRICT ENGINEER- MAINTENANCE
PHONE: (410) 841-1013
MR. JOHN S. MAYS, DISTRICT ENGINEER - UTILITY
PHONE:(410) 841-1039
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 STANDARD PLATES FOR TRAFFIC CONTROL:

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

CATEGORY CODE NO.	DESCRIPTION			UNITS	QUANTITY
971017	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET- BASE MOUNT			EA	1
973023	FLAT SHEET ALUMINUM SIGNS			SF	51.2
		R3-5 (30"X 36")	EA	1	
		R3-6L(30"X 36")	EA	1	
		D3-2 (VAR.X16")	EA	2	
		R5-1 (30"X 36")	EA	1	
		R3-1 (30"X 36")	EA	1	

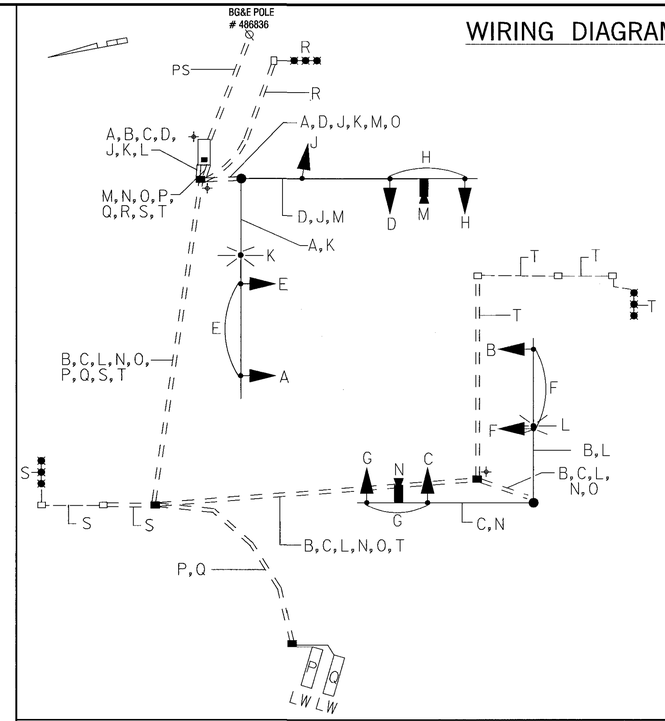
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	3
585424	24" WHITE HEAT APPL. THERMO. PAVEMENT MARK.	LF	187
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	11.3
801607	INSTALL SHEET ALUMINUM SIGN	SF	51.2
805125	2" SCHED. 80 PVC CONDUIT - TRENCHED	LF	50
805135	3" SCHED. 80 PVC CONDUIT - TRENCHED	LF	1300
805140	4" SCHED. 80 PVC CONDUIT - TRENCHED	LF	65
805155	4" SCHED. 80 PVC CONDUIT - SLOTTED	LF	350
805160	1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	35
807400	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLT, 60 AMPS	EA	1
810555	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE	EA	3
811001	HANDHOLE	EA	7
816001	VIDEO DETECTOR CAMERA	EA	2
816005	PRE-MANUFACTURED CABLE FROM CAMERA TO CONTROLLER (250' LENGTH CABLE)	EA	2
816015	VIDEO INTERFACE EQUIPMENT	EA	1
818021	MAST ARM POLE AND 50' TWIN MAST ARMS	EA	2
800000	250 WATT HPS LAMP AND LUMINAIRE (WITH PHOTOCELL)	EA	2
832016	1-COND., NO. 6 AWG ELECT. CABLE	LF	45
832020	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	210
837001	GROUND ROD	EA	3
860272	12" SIGNAL HEAD SECTION	EA	29
862292	CUT,CLEAN,GALVANIZE, AND CAP TRAFFIC SIGNAL STURCTURE	EA	1
861107	5-COND., NO. 14 AWG ELECT. CABLE	LF	150
861108	7-COND., NO. 14 AWG ELECT. CABLE	LF	750
861116	2-COND., NO. 12 AWG ELECT. CABLE	LF	300
861104	2-COND., NO. 14 AWG ALUMINUM SHIELDED ELECT. CABLE	LF	2000
862101	LOOPWIRE ENCASED IN FLEXIBLE TUBING (NO. 14AWG)	LF	500
862102	SAWCUT FOR SIGNAL	LF	300
866103	15' LIGHTING ARM	EA	2
871202	INSTALL CONTROLLER AND CABINET - NEMA SIZE 6 BASE MT	EA	1
805011	1" ELECTRICAL CONDUIT GALVANIZED SLEEVE	LF	50
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1

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.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	MASTARM AND POLE	EA	1
	SIGNAL HEADS	EA	8

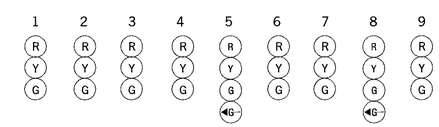
WIRING DIAGRAM



KEY

A, B, C, D	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
E, F, G, H, J	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
K, L	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
M, N	VIDEO DETECTION CABLE (250 FT CABLE LENGTH)
O	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
P, Q	2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 AWG)
R, S, T	MICROLOOP PROBE 1000 FT LEAD IN
PS	POWER SERVICE UNDERGROUND
LW	LOOP WIRE
✦	GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8	9
PHASE 2 AND 6	G	G	G	G	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R
PHASE 3	R	R	R	R	G / G	G	R	R	R
3 CHANGE	R	R	R	R	Y	Y	R	R	R
PHASE 4	R	R	R	R	R	R	G	G / G	G
4 CHANGE	R	R	R	R	R	R	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	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 SHEET

MD 100 (OFF RAMP) AND CATHERINE AVENUE

DRAWN BY: ANGELUS BULLOCK	F.A.P. NO.		TS NO. 2599	SHEET NO.
CHECKED BY:	S.H.A. NO. AA6925187			
SCALE: NTS	COUNTY: ANNE ARUNDEL		T.I.M.S. NO. F-231	72 OF 84
DATE: APRIL, 2002	LOG MILE:			

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