PROJECT DESCRIPTION

This project involves the installation of a new fully actuated traffic signal at MD 5 Bus. and Vivian Adams Drive in Charles Co.The signal will operate in a two phase fully actuated mode with a pushbutton actuated pedestrian movement to cross MD 5 Business

PROJECT CONTACTS DISTRICT 5

MR. LARRY ELLIOTT
ASST. DIST. ENGR. TRAFFIC
410-841-1003

MR. CHARLES GEORGE
ASST. DIST. ENGR. MAINTENANCE
410-841-1002

MR. JOHN MAYS
UTILITIES ENGR.
410-841-1005

MR. ERNIE HODSHON
ASST. DIST. ENGR. CONSTRUCTION
410-841-1004

CONTACTS FOR THE OFFICE OF TRAFFIC

MR. RICHARD DAFF
CHIEF TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
TEAMLEADER SIGNAL OPERATION
410-787-7650

MR. EUGENE BAILEY
TEAMLEADER SIGN OPERATIONS
410-787-7676

MR. DAVE SCHWARTZ
SUPPLY OFFICER SIGNAL WAREHOUSE
410-787-7666

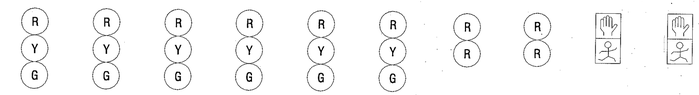
A. EQUIPMENT TO BE FURNISHED AND / OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
0	500 PA	UTILITY UNIT
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	1 CY	TEST PIT EXCAVATION
2004	1 CY	CLASS 2 EXCAVATION
5001	400 LF	5 INCH YELLOW HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5002	350 LF	5 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5004	120 LF	24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5007	740 LF	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH
6001	180 SF	4 INCH CONCRETE SIDEWALK
6009	35 LF	FURNISH AND INSTALL DEPRESSED CURB AND GUTTER
8001	8 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8003	2 EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE (ANY SIZE)
8006	1 EA	CUT, CLEAN GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8016	2 EA	FURNISH AND INSTALL MICROLOP PROBE SET WITH 500 FOOT LEAD-IN
8017	2 EA	FURNISH AND INSTALL MICROLOP PROBE SET WITH 1000 FOOT LEAD-IN
8018	2 EA	INSTALL PUSHBUTTON AND SIGN
8020	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8021	360 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	40 LF	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	690 LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8025	125 LF	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8030	80 LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8031	120 LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8033	9 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	4 EA	FURNISH AND INSTALL GROUND ROD $\frac{3}{4}$INCH DIAMETER X 10 FOOT LENGTH
8040	1400 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8041	380 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8042	200 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 14 AWG)
8043	200 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO 14 AWG)
8044	250 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8045	630 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO 14 AWG)
8046	400 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 12 AWG) TYPE IN. TC IN.
8048	300 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8050	80 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8052	39 SF	INSTALL GROUND MOUNTED SIGN
8053	51.5 SF	INSTALL OVERHEAD SIGN
8055	2 EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8056	2 EA	FURNISH AND INSTALL 15 FOOT LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8057	2 EA	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 INCH BELOW GRADE
8058	2 EA	REMOVAL OF EXISTING CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE
8059	2 EA	DELIVERY OF REMOVED CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE
8060	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8066	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V, 1 PHASE 3 WIRE SYSTEM)
8080	2 EA	FURNISH AND INSTALL MAST ARM POLE AND TWIN 50 FOOT/ 50 FOOT MAST ARMS
8084	24 EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8087	4 EA	FURNISH AND INSTALL 12 INCH PEDESTRIAN SIGNAL HEAD SECTION

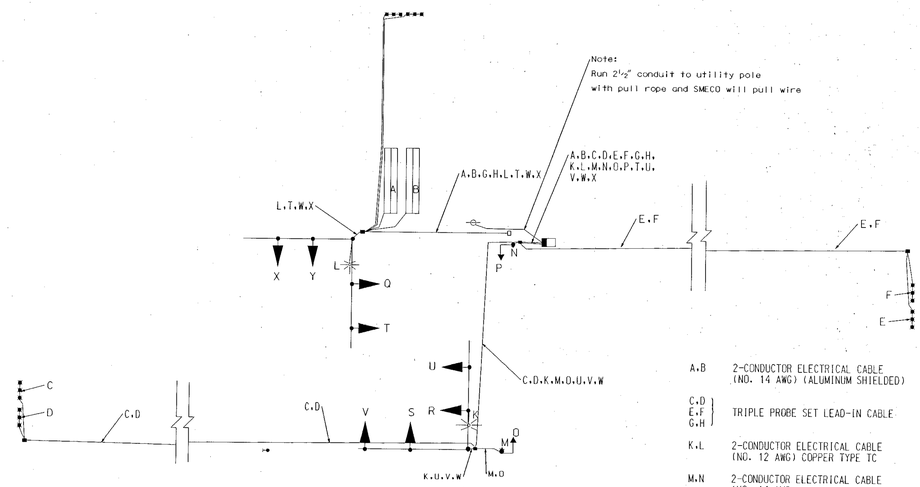
B. EQUIPMENT TO BE FURNISHED BY SHA

TEM NO.	QUANTITY	DESCRIPTION
9081	1 EA	CABINET INTERSECTION MONITOR, SIZE 6
9087	1 EA	CONTROLLER ASC II W/ TELEMETRY
9089	99 SF	FLAT SHEET ALUM SIGN-YELLOW, ORANGE, & SILVER (SF)
9090	16 SF	FLAT SHEET ALUM. SIGN-BLUE OR GREEN (SF)
9096	2 EA	PUSHBUTTON

PHASE CHART



	1	2	3	4	5	6	7	8	9	10
PHASE 2&6	G	G	G	G	R	R	R / DARK	R / DARK	DW	DW
PHASE 2&6 CHANGE	Y	Y	Y	Y	R	R	R / DARK	R / DARK	DW	DW
PHASE 4	R	R	R	R	G	G	DARK / FL/R	DARK / FL/R	DW	DW
PHASE 4 CHANGE	R	R	R	R	Y	Y	R / DARK	R / DARK	DW	DW
PHASE 4 ALT.	R	R	R	R	G	G	DARK / FL/R	DARK / FL/R	FL/W	FL/W
PED CLEAR	R	R	R	R	G	G	DARK / FL/R	DARK / FL/R	FL/DW	FL/DW
PHASE 4 ALT CHANGE	R	R	R	R	Y	Y	R / DARK	R / DARK	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R / DARK	FL/R / DARK	DARK	DARK



A.B	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) (ALUMINUM SHIELDED)
C.D, E.F, G.H	TRIPLE PROBE SET LEAD-IN CABLE
K.L	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) COPPER TYPE TC
M.N	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG
O.P	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
O.R, S.X.Y	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
T.U, V	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
W	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
LW	LOOP WIRE

REVISIONS

(A) Rebuild into a fully actuated traffic signal TMS # D 500

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

INFORMATION FILE

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

MD 5 Bus. at Vivian Adams Road

DRAWN BY: J. Henkel	F.A.P. NO.	TS NO. 3144A-01	SHEET NO.
CHECKED BY: MAR	S.H.A. NO. CH634A52		
SCALE: Not To Scale	COUNTY: Charles	T.I.M.S. NO. D 500	02 OF 02
DATE: 2/00	LOG MILE: 0800511.23		