PROJECT DESCRITION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY SIGNAL WITH INTERSECTION LIGHTING FOR MAINTENANCE OF TRAFFIC AT THE INTERSECTION OF MD 2 (SOLOMON'S ISLAND ROAD) AT MD 253 IN ANNE ARUNDEL COUNTY. MD 2 IS ASSUMED TO RUN IN A N ORTH/SOUTH DIRECTION.

INTERESECTION OPERATION

AN EIGHT (8) PHASE (FULLY ACTUATED) SYSTEM READY CONTROLLER WITH FOUR (4) RACK MOUNTED LOOP DETECTOR AMPLIFIERS HOUSES IN A SIZE SIX (6) BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS INTERSECTION. FOR THIS STAGE OF M.O.T., NORTHBOUND AND SOUTHBOUND MD 2 SHALL OPERATE CONCURRENTLY. EASTBOUND MD 253 SHALL OPERATE IN AN EXCLUSIVE PHASE. THE SIGNAL SHALL REST IN PHASE 2 AND 6.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TEMPORARY WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THIS PROJECT.

104.00-30	104.33-02
104.02-02	104.39-02
104.32-02	104.41-02

PROJECT CONTACTS:

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SHA. TRAFFIC SIGNAL SHOP
MR. EDWARD RODENHIZER.CHIEF
PHONE: (410) 787-7650

MR. RICHARD L. DAFF SR., CHIEF. TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

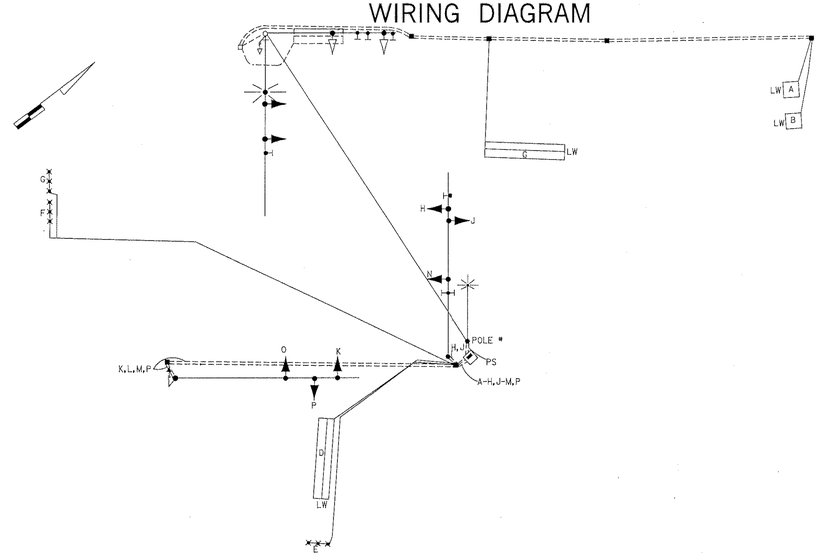
A. Equipment to be supplied by the Administration.

CATEGORY CODE NO.	QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
971017	1	EA	816	Eight phase (fully actuated) controller and cabinet - base mount
900000	6	EA	817	Four channel rack mounted loop detector amplifier (delay output)
973023	21	SF	813	Sheet aluminum signs consisting of: "2 EA D3-2 (16"" x var)"

B. Equipment to be furnished and /or installed by the Contractor.

203030	3	CY	205	Test pit excavation
585416	290	LF	555	Furnish and install 24 in. white reflective thermoplastic pavement markings
801004	12	CY	801	Furnish and install concrete for signal foundation
837001	2	EA	804	Furnish and install ground rod -¾in. diameter x 10 ft.
800000	40	LF	805	Furnish and install 4 in. schedule 80 rigid PVC conduit - trenched
805155	120	LF	805	Furnish and install 4 in. schedule 80 rigid PVC conduit - slotted
800000	160	LF	805	Furnish and install 3 in. schedule 80 rigid PVC conduit - trenched
805150	220	LF	805	Furnish and install 3 in. schedule 80 rigid PVC conduit - slotted
805160	50	LF	805	Furnish and install 1 in. liquid tight flexible non-metallic conduit for detector wire sleeve
800000	20	LF	805	Furnish and install 1 in. galvanized steel conduit
807205	1	EA	807	Furnish and install Control & Distribution Equipment
861104	210	LF	810	Furnish and install electrical cable - 2 conductor (aluminum shielded)
861107	220	LF	810	Furnish and install electrical cable - 5 conductor (No. 14 AWG)
861108	815	LF	810	Furnish and install electrical cable - 7 conductor (No. 14 AWG)
862101	1190	LF	810	Furnish and install loop wire encased in flexible tubing (No. 14 AWG)
811001	6	EA	811	Furnish and install electrical handhole
813014	21	SF	813	Install ground mounted signs
800000	17	EA	814	Furnish and install 12 in. standard aluminum traffic signal head section
800000	2	EA	814	Furnish and install 8 in. standard aluminum traffic signal head section
862102	1126	LF	815	Furnish and install sawcut for signal
800000	3	EA	815	Furnish and install microloop probe set with 500 ft. lead-in cable
871117	1	EA	816	Install eight phase (fully actuated) controller and cabinet - base mount
816001	1	EA	816	Remove and salvage of controller and cabinet (any type)
865001	1	EA	817	Furnish and install pushbutton and sign
800000	2	EA	818	Furnish and install steel pole with a single 70 ft. mast arm
800000	LS	LS	xxx	Remove and dispose of existing equipment
800000	2	EA	814	Furnish and install 12" pedestrian traffic signal head

WIRING DIAGRAM



WIRING KEY

- A, B, C, D — 2 CONDUCTOR ALUMINUM SHIELDED CABLE (NO. 14 AWG)
- E, F, G — MICROLOOP PROBE LEAD-IN CABLE
- H, J, K, L, F — 7 CONDUCTOR CABLE (NO. 14 AWG)
- M — 1 CONDUCTOR NO. 6 STRANDED BARE COPPER GROUND WIRE
- N, O — 5 CONDUCTOR CABLE (NO. 14 AWG)
- LW – LOOP DETECTOR WIRE (NO. 14 AWG) IN FLEXIBLE TUBING
- PS–
- ✦ – GROUND ROD

PHASE SEQUENCE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 2 AND 5	R	R	◄G/G	◄G/G	G	R	R	R	R	◄G-	DW	DW
2 AND 5 CHANGE	R	R	◄Y/G	◄Y/G	G	R	R	R	R	◄Y-	DW	DW
PHASE 2 AND 6	G	G	G	G	G	R	R	R	R	R	DW	DW
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW
PHASE 3	R	R	R	R	R	◄G/G	G	R	R	R	DW	DW
PHASE 3 CHANGE	R	R	R	R	R	Y	Y	R	R	R	DW	DW
PHASE 4	R	R	R	R	R	R	R	◄G/G	◄G/G	◄G/G	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	R	R	Y	Y	◄Y/G	DW	DW
ALT PHASE 3	R	R	R	R	R	◄G/G	G	R	R	R	WK	WK
PED CLEARENCE	R	R	R	R	R	◄G/G	G	R	R	R	FL/DW	FL/DW
ALT PHASE 3 CHANGE	R	R	R	R	R	Y	Y	R	R	R	DW	DW
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	FL /R	FL /R	DARK	DARK

STAGE II

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

GENERAL INFORMATION

MD 2 (SOLOMON'S ISLAND ROAD) AND MAYO ROAD

SABRA, WANG & ASSOCIATES, INC.
1506 16TH AVENUE
SUITE 160
BALTIMORE, MD 21227
(410) 737-6564

DRAWN BY:	A.FORNARO	F.A.P. NO.		GI NO. 3891	SHEET NO.
CHECKED BY:	D. PETERS	S.H.A. NO.			
SCALE:	NONE	COUNTY:	ANNE ARUNDEL	T.I.M.S. NO.	OF
DATE:	OCTOBER, 1999	LOG MILE:	02002017.35		