

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the reconstruction of the existing traffic signal at the intersection of MD 202 and 57th Ave in Prince George's County Maryland. MD 202 runs in an East-West direction.

II. INTERSECTION OPERATION

The traffic signal will operate in a NEMA five (5) phase, semi-traffic actuated mode with northbound and southbound approaches operating concurrently and a westbound exclusive/permissive left turn phase.

III. SPECIAL NOTES

- It is the responsibility of the contractor to confirm geometrics prior to placing signal equipment.
- The signal shop will be notified to perform internal wiring of the cabinet at MD 202 @ 57th Ave. All cable shall be identified and brought into the controller by the contractor. The contractor shall notify Mr. Edward Rodenhizer, SHA Signal Shop at (410) 787-7650 seventy-two (72) hours in advance of this work.
- The Maryland State Highway Administration District #3 will be given at least seven (7) days notice to perform striping through the intersection area. Contact Mr. Majid Shakib at (301) 513-7358 to initiate this operation.
- The project shall follow the Standard MOT Plates.
- Upon completion of this project the contractor shall notify Mr. Robert Snyder of SHA at 410-787-7635 to arrange for the phone line installation. The contractor is to provide Mr. Snyder with the nearest street address, zip code, and phone.
- The contractor shall furnish and deliver the video detection control cabinet equipment a minimum of three (3) weeks prior to picking up the signal control cabinet from SHA Signal Shop, 7491 Connelley Drive. The contact person is Mr. Ed Rodenhizer for SHA. (410) 787-7650.

THE FOLLOWING CONTACT PERSONS FOR DISTRICT # 3 ARE AS FOLLOWS:

Mr. Lee Starkloff  
District Engineer  
Phone: (301) 513-7318

Mr. Raleigh Medley  
Asst. District Engineer - Maintenance  
Phone: (301) 513-7304

Mr. Augie Reblsh  
Engineer-Utility  
Phone: (301) 513-7350

Mr. Richard L. Doff  
Chief Traffic Operations Division  
Phone: (410) 787-7630

Mr. Majid Shakib  
Assistant District Engineer-Traffic  
Phone: (301) 513-7358

The Power Company Representative is:

POTOMAC ELECTRIC POWER COMPANY

8300 OLD MARLBORO PIKE  
UPPER MARLBORO MARYLAND, 20772  
(301) 961-5325

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. #	QUANTITY	DESCRIPTION
900000	900000	1 EA.	FURNISH NEMA 6 BASE MOUNTED CABINET AND CONTROLLER
900000	900000	1 EA.	FURNISH VIDEO DETECTION INTERFACE EQUIPMENT

CATEGORY CODE NO.	SPEC. #	QUANTITY	DESCRIPTION
900000	813	168.26 S.F.	SHEET ALUMINUM SIGNS
		2 EA.	R3-5L SIGN 30"x36"
		1 EA.	R10-12 SIGN 36"x42"
		4 EA.	D3-2 SIGN 96"x16" (DUEL FACED)
		1 EA.	R3-6 SIGN 30"x36"
		1 EA.	ASSOCIATED SHIELD ASSEMBLY *EAST, MD 202, RIGHT ARROW* (30" X 51") - POLE MOUNT
		1 EA.	ASSOCIATED SHIELD ASSEMBLY *WEST, MD 202, LEFT ARROW* (48" X 75") - POLE MOUNT
		1 EA.	ASSOCIATED SHIELD ASSEMBLY *WEST, MD 202, RIGHT ARROW* (30" X 51") - POLE MOUNT
		1 EA.	ASSOCIATED SHIELD ASSEMBLY *EAST, MD 202, LEFT ARROW* (48" X 75") - POLE MOUNT

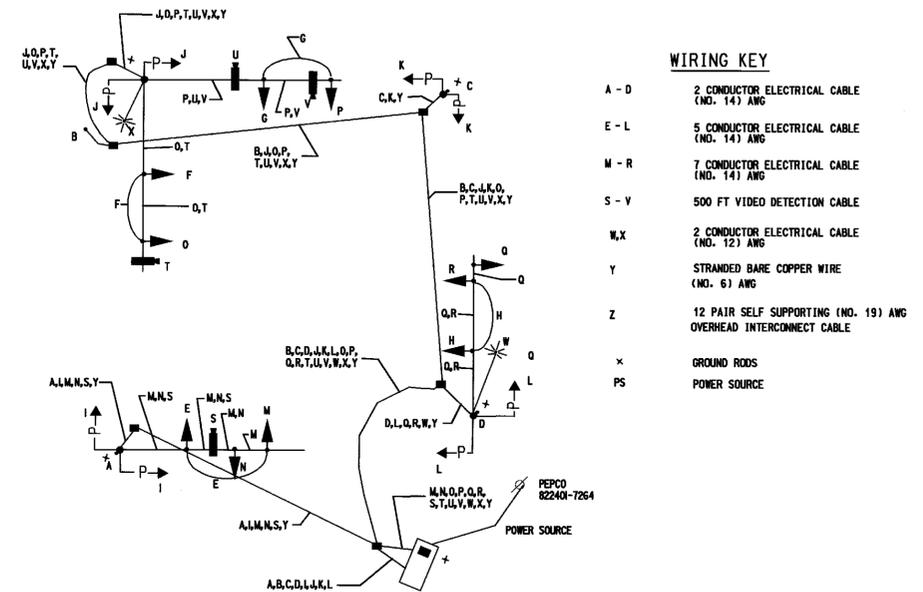
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	SPEC. NO.	QUANTITY	DESCRIPTION
203030	205	4 C.Y.	TEST PIT
585624	SP-556	100 L.F.	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE)
800000		2 EA.	CUT CLEAN AND GALVANIZE AND CAP SIGNAL STRUCTURE.
800000		4 EA.	FURNISH AND INSTALL VIDEO CAMERA.
800000		4 EA.	FURNISH AND INSTALL 500 FT VIDEO DETECTION CABLE.
801004	801	15.35 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION.
802501	810	850 L.F.	FURNISH AND INSTALL STRANDARD BARE COPPER GROUND WIRE (NO. 6 AWG).
810010	810	50 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG THHN/TWLN.
811001	811	6 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE.
813014	813	71.25 S.F.	INSTALL GROUND MOUNTED SIGN.
813015	813	97.01 S.F.	INSTALL OVERHEAD SIGN.
818004	818	2 EA.	FURNISH AND INSTALL 10 FT. BREAKAWAY PEDESTAL POLE.
818041	818	1 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE W/ 60 FT MAST ARM.
818050	818	1 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE W/ 50 FT AND 60 FT MAST ARMS
818052	818	1 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE W/ 70 FT MAST ARM.
831010	806	2 EA.	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
837001	804	5 EA.	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIA. X 10 FT. LENGTH.
838003	807	1 EA.	FURNISH AND INSTALL CONTROL AND DISTRIBUTION (120/240, 1 PHASE 3 WIRE SYSTEM).
860270	814	3 EA.	FURNISH AND INSTALL 8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION (BLACK FACED)
860272	814	31 EA.	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION (BLACK FACED)
860278	814	12 EA.	FURNISH AND INSTALL 12 IN. PEDESTRAIN SIGNAL HEAD SECTION POLE MOUNT
860282	814	4 EA.	FURNISH AND INSTALL 12 IN. PEDESTRAIN SIGNAL HEAD SECTION PEDESTAL POLE MOUNT
861105	810	550 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	810	650 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	810	1250 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	810	400 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
865001	817	4 EA.	FURNISH AND INSTALL PUSH BUTTON AND SIGN.
866104	808	2 EA.	FURNISH AND INSTALL 20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
870163	805	125 L.F.	FURNISH AND INSTALL 3 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED
870166	805	50 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED
870167	805	260 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - BORED
871202	805	1 EA.	INSTALL CONTROLLER AND CABINET - BASE MOUNTED

C. EQUIPMENT TO BE RETURNED TO SHA 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 AND SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

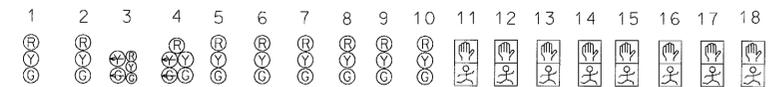
WIRING DIAGRAM



WIRING KEY

- A - D 2 CONDUCTOR ELECTRICAL CABLE (NO. 14) AWG
- E - L 5 CONDUCTOR ELECTRICAL CABLE (NO. 14) AWG
- M - R 7 CONDUCTOR ELECTRICAL CABLE (NO. 14) AWG
- S - V 500 FT VIDEO DETECTION CABLE
- W, X 2 CONDUCTOR ELECTRICAL CABLE (NO. 12) AWG
- Y STRANDED BARE COPPER WIRE (NO. 6) AWG
- Z 12 PAIR SELF SUPPORTING (NO. 19) AWG OVERHEAD INTERCONNECT CABLE
- X GROUND RODS
- PS POWER SOURCE

PHASE CHART



PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 2 & 5	R	R	+G-G	+G-G	G	R	R	R	R	R	WALK	DONT WALK	DONT WALK	WALK	DONT WALK	DONT WALK	DONT WALK	DONT WALK
PHASE 5 CHANGE	R	R	+Y-G	+Y-G	G	R	R	R	R	R	WALK	DONT WALK	DONT WALK	WALK	DONT WALK	DONT WALK	DONT WALK	DONT WALK
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R	WALK	DONT WALK	WALK	WALK	DONT WALK	DONT WALK	DONT WALK	DONT WALK
PED CLEAR	G	G	G	G	G	R	R	R	R	R	FLSH DT WK	FLSH DT WK	FLSH DT WK	FLSH DT WK	DONT WALK	DONT WALK	DONT WALK	DONT WALK
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	DONT WALK							
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	G	DONT WALK							
PHASE 4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	DONT WALK							
PHASE 4 & 8 ALT	R	R	R	R	R	G	G	G	G	G	DONT WALK							
PED CLEAR	R	R	R	R	R	G	G	G	G	G	DONT WALK	DONT WALK	DONT WALK	DONT WALK	FLSH DT WK	FLSH DT WK	FLSH DT WK	FLSH DT WK
PHASE 4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	DONT WALK							
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK							



72 Loveton Circle Baltimore, Maryland 21152-0948

REVISIONS		<b>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION</b> Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION MD 202 / 57th STREET GENERAL INFORMATION	
8-02 RECONSTRUCT SIGNAL DUE TO GEOMETRICS P0425184 C. MANZ 8/1/02			
D 11-96 AS BUILT; ADDED PED. SIGNALS TO SOUTH & EAST LEGS		DRAWN BY: H. KILIAN CHECKED BY: ROBERT W. TYSON SCALE: N.T.S. DATE:	F.A.P. NO. T-8006 (24) S.H.A. NO. P-368-385 COUNTY: PRINCE GEORGE'S LOG MILE: 16020213.66
C 8-73 REDRAWN		TS NO. TS-70 E T.I.M.S. NO. E 691	SHEET NO. 59 OF 92