

PROJECT DESCRIPTION

I. GENERAL

This portion of the project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of MD 170 (Aviation Blvd) and Northrop Grumman Driveway / Amtrak Way in Anne Arundel County. Nearside 5-section signal heads shall be added on both approaches of MD 170. All Traffic Signals controlling MD 170 traffic shall be replaced with black-faced heads. MD 170 (Aviation Blvd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 170 (Aviation Blvd) approaches continuing to run concurrently. Exclusive/Permissive left turn phases shall continue to be provided for both approaches of MD 170 (Aviation Blvd). Farside sampling stations shall be provided on both legs of MD 170 (Aviation Blvd) at this intersection. Northrop Grumman Driveway / Amtrak Way approaches shall also continue to run concurrently.
- A full-traffic-actuated, eight-phase controller with three (3) four channel, rack mount loop detector amplifiers, housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9086	Eight-phase, full-traffic actuated, solid state digital controller with (three) 4-channel, rack mount loop detector amplifiers, housed in a NEMA size "6" base mounted cabinet.	1 EA

The contact persons for District #6 are as follows:

Mr. George Small
Assistant District Engineer - Traffic
Phone: (301) 729-8444

Mr. George C. Frankenburg
Assistant District Engineer - Maintenance
Phone: (301) 729-8457

Mr. Larry Humberston
Assistant District Engineer - Utility
Phone: (301) 729-8439

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

The power company representative is:

EQUIPMENT LIST (CONT.)

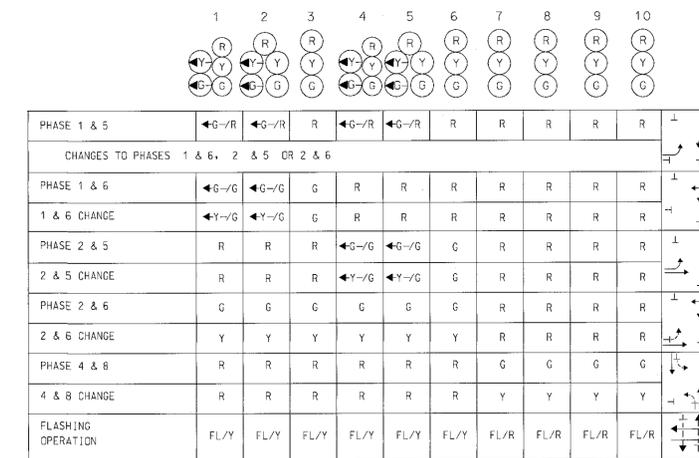
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
8011	Furnish and install 12" vehicular traffic signal head section	20 EA
8021	Furnish and install 8" vehicular traffic signal head section.	6 EA
8054	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	50 L.F.
8055	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	120 L.F.
8067	Furnish and install 1" electrical conduit galvanized sleeve.	15 L.F.
8073	Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeve.	10 L.F.
8076	Furnish and install electrical handhole.	2 EA
8084	Furnish and install electrical cable - 2 conductor (aluminum shielded).	475 L.F.
8087	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	50 L.F.
8088	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	530 L.F.
8090	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).	515 L.F.
8091	Furnish and install saw cut for signal (loop detector).	160 L.F.
8096	Install controller and cabinet base mount.	1 EA

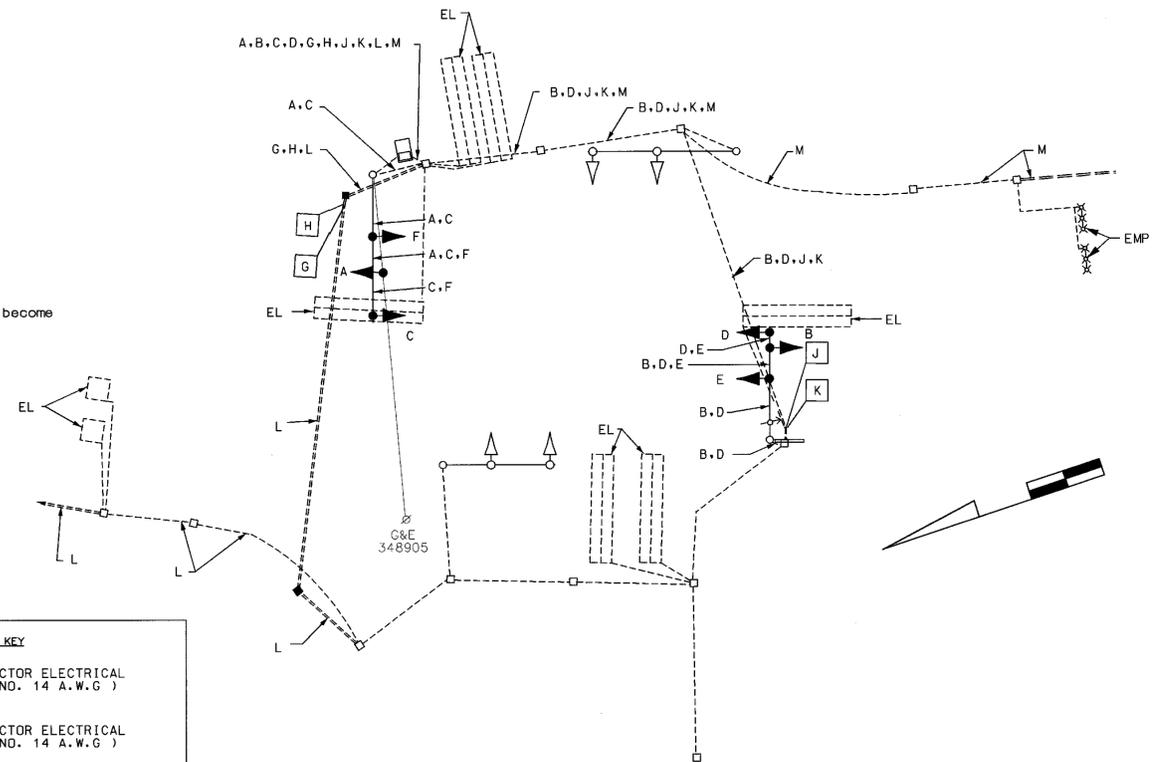
C. SHA Forces shall remove the controller and all auxiliary equipment from the controller cabinet.

The cabinet and all other materials to be removed by the contractor shall become the property of the contractor.

PHASE CHART



WIRING DIAGRAM



WIRING KEY

A, B, C, D	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E, F	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
G, H, J, K	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
L	PROPOSED 12 PAIR VOICE GRADE 1/C CABLE (JELLY FILLED) TO GATE 1A (NORTHROP GRUMMAN)
M	PROPOSED 12 PAIR VOICE GRADE 1/C CABLE (JELLY FILLED) TO GATE 3 (NORTHROP GRUMMAN)
EL	LOOP WIRE (NO. 14 A.W.G.) EXISTING
EMP	EXISTING MICRO PROBE
LW	LOOP WIRE (NO. 14 A.W.G.)

REVISION "B"

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. S.W.
Owens Crossings, MD 21050
Ph (410) 590-5500
Fax (410) 590-6537

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 170 & GATE 2 OF NORTHROP GRUMMAN AND AMTRAK WAY
GENERAL INFORMATION SHEET

DRAWN BY: RC	F.A.P. NO. 10268	TS NO. 10268	SHEET NO. 12 OF 23
CHECKED BY: RZ	S.H.A. NO. A228152/1862	T.L.M.S. NO. E 451	
SCALE: NONE	COUNTY: ANNE ARUNDEL		
DATE: 5/10/02	LOG MILE: 02017007.26		