

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of firehouse pre-emption for the Sandy Spring Volunteer Fire Department located on Brooke Road in Montgomery County. The pre-emption, when activated, will warn traffic traveling along MD 108 (Olney Sandy Spring Road) and approaching the intersection of MD 108 and Brooke Rd / Meeting House Rd to yield to fire emergency equipment exiting from the Sandy Spring Volunteer Fire Department. The firehouse pre-emption shall be interconnected to existing flashers located approximately 450' east and west of the Md 108 and Brooke Rd / Meeting House Rd intersection. MD 108 (Olney Sandy Spring Road) is assumed to run an east-west direction.

II. INTERSECTION OPERATION

- The intersection shall continue to operate as side street "Stop" sign controlled intersection. The pre-emption phase shall be added to slow traffic along both approaches of MD 108 (Olney Sandy Spring Road) during a fire emergency response.
- A full-traffic-actuated, eight-phase controller with an opticom discriminator module and all necessary equipment 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 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.

EQUIPMENT LIST (CONT.)

C. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR (EQUIPMENT LOCATED OFF SHA RIGHT OF WAY) THESE ITEMS ARE NOT ELIGIBLE FOR FEDERAL PARTICIPATION

ITEM NO.	DESCRIPTION	QUANTITY
8001	Furnish and install concrete for signal foundation.	2 CY
8039	Furnish and install 4" schedule 80 rigid polyvinyl chloride - trenched.	45 LF
8045	Furnish and install electrical utility service equipment (120/240 V, 1 phase 3 wire system).	1 EA
8052	Furnish and install electrical handhole.	1 EA
8057	Furnish and install 3M opticom #764 discrimination module-4 channel.	1 EA
8073	Furnish and install ground rod -3/4" x 10'.	1 EA
8094	Install controller and cabinet base mount.	1 EA

The contact persons for District #3 (Montgomery County) are as follows:

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

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

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

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7650

The power company representative is:
Steve Custer
PEPCO
4061 Powder Mill Road
Suite 600 Center Park II
Calverton, MD 20705
Phone: 301 931-2880

PHASE CHART



	1	2	3	4
NORMAL OPERATION	DARK	DARK	DARK	DARK
PRE-EMPT PHASE	FL/Y	FL/Y	FL/Y	FL/Y
FLASHING OPERATION	DARK	DARK	DARK	DARK

EQUIPMENT LIST

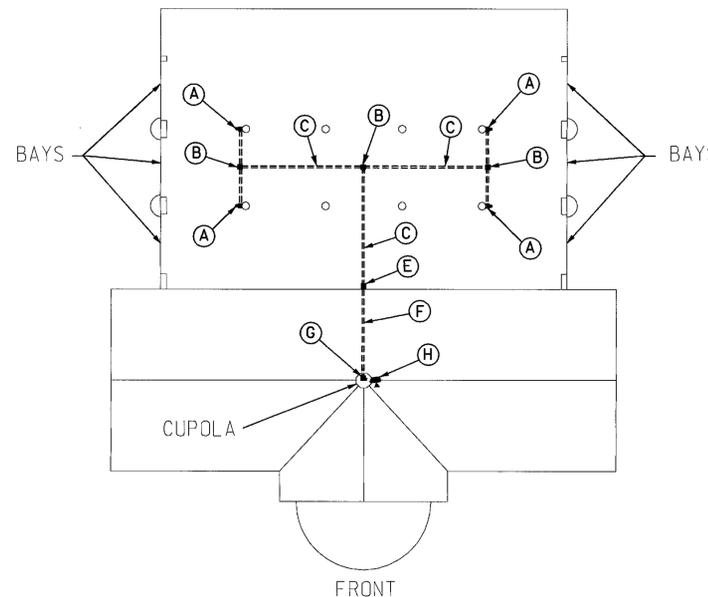
A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9042	Controller ASC II with telemetry	1 EA
9044	Controller cabinet, size "6"	1 EA

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

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
2002	Test Pit Excavation	2 C.Y.
8001	Furnish and install concrete for signal foundation.	1 C.Y.
8018	Furnish and install breakaway pedestal pole (14).	1 EA
8024	Disconnect, pull back and reroute cable.	320 L.F.
8025	Furnish and install firehouse pre-emption button (4 pushbuttons).	320 L.F.
8029	Furnish and install No. 6 AWG stranded bare copper ground wire.	465 L.F.
8038	Furnish and install 3" schedule 80 rigid polyvinyl chloride - trenched.	185 L.F.
8041	Furnish and install 3" schedule 80 rigid polyvinyl chloride - slotted.	220 L.F.
8052	Furnish and install electrical handhole.	2 EA
8058	Furnish and install 3M opticom emitter system 700 series, visible light filter and hardware.	1 EA
8059	Furnish and install 3M opticom #721 detector eye	1 EA
8073	Furnish and install ground rod -3/4" x 10'.	1 EA
8077	Furnish and install 4-conductor opticom detector cable.	460 L.F.
8082	Furnish and install electrical cable - 3 conductor (No. 14 AWG).	345 L.F.

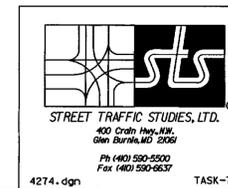
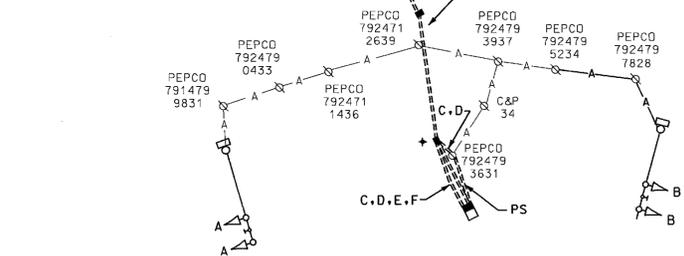
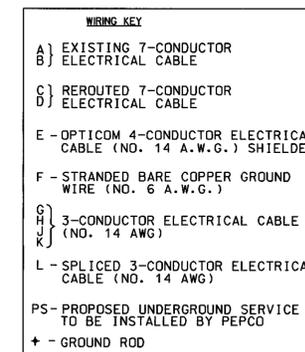
FIRE STATION OVERHEAD VIEW



CONSTRUCTION DETAILS

- Install pushbutton on existing column as shown. Install 1/2" EMT from pushbutton up column and across ceiling girders to proposed junction box.
- Install proposed junction box onto existing column.
- Install 1/2" EMT on existing ceiling girders.
- Install proposed junction box in ceiling area and install 1/2" EMT up into attic area of office area of firehouse.
- Install 1/2" EMT in existing attic area.
- Install junction box at base of cupola and feed 1/2" EMT through wall of cupola and into the proposed base mounted emitter.
- Install base mounted emitter at base of cupola at the roof level.

WIRING DIAGRAM



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 108 @ BROOKE RD/ MEETING HOUSE RD

DRAWN BY: ROB CICCHINI	F.A.P. NO. 4267-A	TS NO. 4267-A	SHEET NO. 2 OF 2
CHECKED BY: J. ALLEN	S.H.A. NO. MONTGOMERY	T.I.M.S. NO. F-412	
SCALE: none	COUNTY: MONTGOMERY	LOG MILE: 15010815.80	
DATE: 7-9-03			