

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a Firehouse Emergency Traffic Control Signal approximately 125' east of the intersection of MD 97 (Georgia Ave) and Arcola Avenue in Montgomery County. This Emergency Signal shall be tied into the Traffic Control Signal located at MD 97 and Arcola Avenue. MD 97 (Georgia Ave) is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

- During normal operation the Firehouse Emergency Traffic Control Signal shall allow continuous movement along the westbound direction of Arcola Avenue. During the pre-emption phase, the Emergency Signal shall display "RED" for the westbound approach of Arcola Avenue and "8 inch YELLOW" for the Firestation Driveway approach. Additionally, the Traffic Control Signal for MD 97 (Georgia Avenue) and Arcola Avenue shall display "Green" for the westbound approach of Arcola Avenue and "RED" for all other approaches. Lastly, the fiber optic sign for the northbound approach of MD 97 (Georgia Avenue) shall indicate "No Right Turn".
- The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet located at the intersection of MD 97 (Georgia Avenue) and Arcola Avenue shall be utilized.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable.
- Contact Mr. Bob Gonzales at (240) 777-8761 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

A. EQUIPMENT TO BE SUPPLIED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
8088	W11-8 "FIREHOUSE (SYMBOLIC)" sign, (36"x36") ground mounted with hardware.	1 Each
8088	W11-8 (1)"FIREHOUSE SIGNAL" sign, (72"x36") mast arm mounted.	1 Each

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

ITEM NO.	DESCRIPTION	QUANTITY
2002	Test pit excavation.	11 C.Y.
5016	4" concrete sidewalk, mix No. 2.	20 S.F.
5022	Remove sidewalk.	20 S.F.
8001	Concrete foundation.	4 C.Y.
8023	3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).	200 L.F.
8043	Ground rod, 3/4" diameter x 10' length with clamp.	1 Each
8065	3-conductor electrical cable (No. 14 A.W.G.).	75 L.F.
8066	5-conductor electrical cable (No. 14 A.W.G.).	530 L.F.
8075	1-conductor electrical cable (No. 6 A.W.G.) stranded bare copper ground wire.	115 L.F.
8082	Wood sign supports (4" x 6").	16 L.F.
8131	Traffic signal handbox (pullbox).	2 Each
8143	Relocate sign.	1 Each
Neg.	24" white heat applied permanent preformed thermoplastic pavement marking.	30 L.F.
Neg.	12"/8", one-way, three-section 12"(R,Y) 8"(Y) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	4 Each
Neg.	Special 16'5" steel pole with twin 30'-30' mast arm, with a 15' "T". (Note: Anchor bolts will be 1 3/4" x 90").	1 Each
Neg.	Fiber optic ("NO RIGHT TURN (SYMBOLIC)") sign (30"x30").	1 Each

EQUIPMENT LIST (CONT.)

C. EQUIPMENT TO BE RETURNED TO SHA

THERE IS NO EQUIPMENT BEING REMOVED AND RETURNED FOR THIS PROJECT.

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

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

Mr. Wayne Mowdy  
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) 787-7630

SEQUENCE OF OPERATION SHEET

MD 97  
RUNS IN AN  
NORTH-SOUTH  
DIRECTION

TRAFFIC OPERATIONS SECTION  
DIVISION OF TRAFFIC ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

MD 97 (GEORGIA AVENUE) AND  
ARCOLA AVENUE

NO.

PHASING

INTERSECTION:

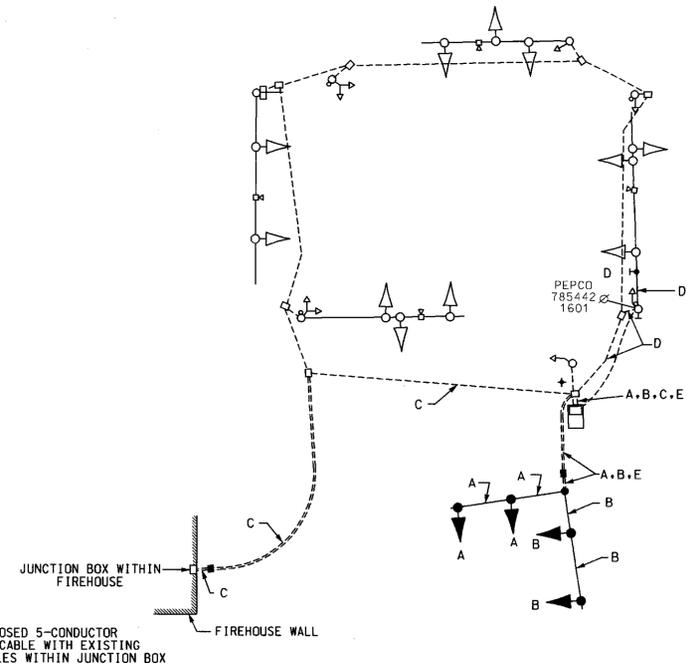
SIGNAL NO.	SIGNAL HEAD INDICATIONS				
	1,2,7,8,9,10,13,14	15	5,6	3,4,11,12	16-23
TOTAL:	8	1	2	4	8
LEGEND	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) 12" (Y) 12" (Y) 8"	(R) 12" (Y) 12" (Y) 8" 9" or 12" X
	12"	12"	12"		

SIGNAL NO.	SEQUENCE OF OPERATION																	
	INTERVAL																	
1	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/Y
2	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/Y
3	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/Y
4	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/Y
5	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/Y
6	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/Y
7	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/Y
8	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	FL/R
9	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	FL/R
10	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	FL/R
11	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R
12	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R
13	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	FL/R
14	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	FL/R
15	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	FL/R
16	WK	FL/DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	WK	DW	DW	DW	DW	DW	DARK
17	WK	FL/DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	WK	DW	DW	DW	DW	DW	DARK
18	WK	FL/DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	WK	DW	DW	DW	DW	DW	DARK
19	WK	FL/DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	WK	DW	DW	DW	DW	DW	DARK
20	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
21	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
22	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
23	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
25	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
PHASE	2 & 6		ALL RED		4 & 8		ALL RED		2 & 5		ALL CONC. A		ALL RED		PRE-EMPTY		ALL RED	

NOTES: 1.) NO. 25 IS A "NO RIGHT TURN" FIBER OPTIC SIGN.

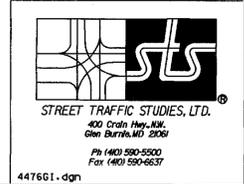
SUBMITTED: \_\_\_\_\_ CHECKED: \_\_\_\_\_ APPROVED: \_\_\_\_\_  
IN SERVICE BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

WIRING DIAGRAM



WIRING KEY

A	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
D	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
+	GROUND ROD



**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
MD 97 (GEORGIA AVE) AND ARCOLA AVENUE

DRAWN BY: <b>ROB CICCHINI</b>	F.A.P. NO. _____	TS NO. <b>209 B</b>	SHEET NO. <b>2 OF 2</b>
CHECKED BY: _____	S.H.A. NO. _____	COUNTY: <b>MONTGOMERY</b>	
SCALE: <b>NONE</b>	LOG MILE: <b>15009702.94</b>	T.I.M.S. NO. <b>6104</b>	
DATE: <b>12-8-03</b>			