

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification to the phasing of an existing Traffic Control Signal at the intersection of MD 108 and Ten Mills Rd. / Centennial Park Entrance in Howard County. An additional luminaire shall be provided parallel to MD 108 due to overhead aerial conflicts.

MD 108 is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA four-phase, fully-actuated mode, with the MD 108 approaches running concurrently. The Ten Mills Rd. / Centennial Park Ent. approaches shall operate in a split phase operation.
- The existing full-traffic-actuated, eight-phase controller housed in pole-mounted cabinet shall be utilized and modified.

III. SPECIAL NOTES:

- The Contractor shall notify Mr. Edward Rodenhizer at (410) 787-7652 of SHA Signal Shop to arrange for the internal wiring to the controller cabinet. The Contractor is responsible to provide 48 hour advance notice and to have all new cables properly identified.

EQUIPMENT LISTS

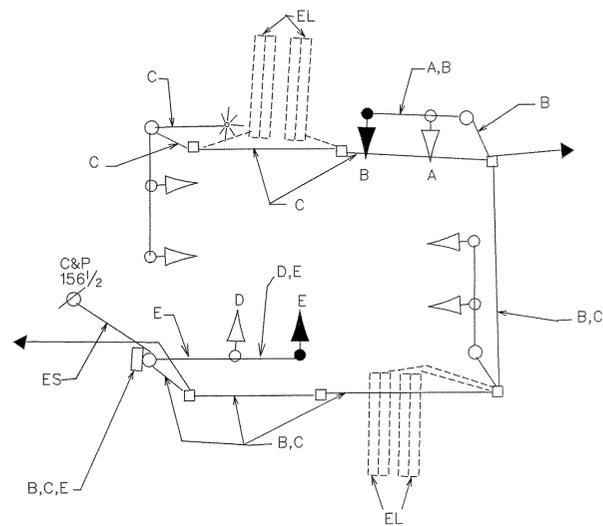
A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9015	2 EA.	12", one-way, four-section (R,Y,G,GA) traffic signal head with adjustable bracket for mast arm mounting.
9007	1 EA.	(cont/cab/add) NEMA Load Switch.
9089	72 S.F.	Flat sheet aluminum signs (silver) to consist of: 1 EA. Associated shield assembly "EAST, MD 108, RIGHT ARROW" (30" X 51") pole mounted sign and hardware. 1 EA. Associated shield assembly "EAST, MD 108, LEFT ARROW" (48" X 75") pole mounted sign and hardware. 1 EA. Associated shield assembly "WEST, MD 108, LEFT ARROW" (48" X 75") pole mounted sign and hardware. 1 EA. Associated shield assembly "WEST, MD 108, RIGHT ARROW" (30" X 51") pole mounted sign and hardware.
9090	6 S.F.	Flat sheet aluminum sign (green) to consist of: 1 EA. D3-2 sign "Centennial Park ENT(right arrow) , (left arrow) Centennial Park ENT" dual faced sign, mast arm mounted.

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA.	Maintenance of Traffic
8011	2 EA.	Install traffic signal heads.
8044	60 L.F.	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).
8045	410 L.F.	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).
8046	400 L.F.	Furnish and install 2-conductor electrical cable (No. 12 A.W.G.) type THHN tray cable
8053	81 S.F.	Install overhead mounted sheet aluminum sign.
8055	1 EA.	Furnish and install 250 WATT-HPS luminaire with photocell.
8056	1 EA.	Furnish and install <sup>15'</sup> lighting bracket arm for traffic signal structure.
8060	1 EA.	Remove and Dispose of existing material and equipment

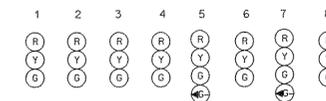
WIRING DIAGRAM



WIRING KEY

A	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TYPE THHN/ TRAY CABLE
EL	EXISTING LOOP WIRE
ES	EXISTING UNDERGROUND ELECTRICAL SERVICE BY BGE.

PHASE CHART



	1	2	3	4	5	6	7	8
PHASE 2 & 6	G	G	G	G	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R
PHASE 3	R	R	R	R	R	G	G	G
3 CHANGE	R	R	R	R	R	Y	Y	Y
PHASE 4	R	R	R	R	G	G	R	R
4 CHANGE	R	R	R	R	Y	Y	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

UTILITY LEGEND

— G —	GAS MAIN
— W —	WATER MAIN
— S —	SEWER MAIN
— E —	ELECTRIC CABLES
— A —	AERIAL CABLES
— T —	TELEPHONE CABLES

<p>STREET TRAFFIC STUDIES, LTD. Gateway International 1302 Concourse Drive, Suite 104 Linthicum, Maryland 21090 Ph (410) 859-3553 Fax (410) 859-3579 Task27GI.DGN</p>	<p>REVISIONS</p>	<p>APPROVALS</p> <p>ASST. CHIEF TRAFFIC SECTION</p> <p>ASST. DISTRICT ENGINEER, TRAFFIC</p> <p>CHIEF TRAFFIC ENGINEERING DESIGN DIVISION</p> <p>DIRECTOR, TRAFFIC &amp; SAFETY</p>	<p>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION</p> <p>Office of Traffic &amp; Safety</p> <p>TRAFFIC ENGINEERING DESIGN DIVISION</p> <p>MD 108 @ TEN MILLS RD./ CENTENNIAL PARK</p>
	<p>DRAWN BY: Milesky</p> <p>CHECK BY: EMM</p> <p>DATE: JUNE 24, 1999</p> <p>SCALE: N/A</p>	<p>COUNTY: HOWARD</p> <p>LOG MILE: 1301080084.93</p> <p>F.A.P. NO. AC-STPG-000S(687)E</p> <p>S.H.A. NO. XX1005785</p>	<p>TS NO. 2121A</p> <p>T.I.M.S. NO. D-250</p>