PROJECT DESCRIPTION

This project involves the removal of all existing traffic signal cables and associated equipment attached to the I-495 bridge over MD 97.
A new base mounted cabinet and controller will replace the old pedestal mounted controller serving the reversible lane system along MD 97 south of I-495. New 50-pair interconnect cable will be installed underground from the proposed pole mounted splice cabinet located 175' north of the I-495 off ramp traffic signal.
This project also includes the installation of an additional 4" PVC conduit with 3- 1½" inner ducts throughout the limits of the project to be used for Montgomery County fiber optic cables. The existing fiber optic will be removed by the County and proposed fiber optic will be installed by Montgomery County's Contractor. There will be no operational changes to the existing signal system as a result of this project.

SPECIAL NOTES:

1. The contractor must contact Mr. Bruce Mangum of Montgomery County at (240) 770-8778 upon completion of the installation of the conduit system.
2. The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
3. The existing interconnect and fiber optic cables are to remain in service and undisturbed until the new conduit path is established and new interconnect and fiber optic cables are installed.
4. Disconnecting and splicing of interconnect cable shall be performed by Montgomery County Forces. The Contractor shall run the interconnect cable into each cabinet and properly tag the cable. Contact Mr. Bobby Gonzales at (240) 777-8761 seventy-two hours in advance of intended work.

EQUIPMENT LIST

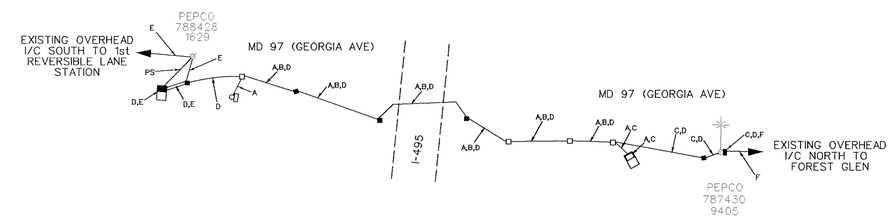
A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9076	Cabinet "G" type - pole mount	1 EA
9083	Eight-phase, full-traffic actuated, solid state digital controller with L.A.U., L.A.U. Panel and associated harnesses housed in a NEMA size " 6 "- base mounted cabinet.	1 EA

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

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic.	1 EA
2004	Test pit excavation	4 C.Y.
6004	4 in. concrete sidewalk	64 S.F.
8014	Furnish and install 3" weatherhead	2 EA
8037	Remove and dispose material and equipment per assignment	1 EA
8045	Furnish and install 3" schedule 80 PVC riser	60 LF
8046	Furnish and install 4" schedule 80 polyvinyl chloride - trenched	1085 L.F.
8049	Furnish and install concrete for signal foundation.	2 C.Y.
8052	Furnish and install No. 6 AWG stranded bare copper ground wire.	30 L.F.
8056	Furnish and install 4" schedule 80 polyvinyl chloride - bored	540 L.F.
8059	Furnish and install 4" schedule 80 polyvinyl chloride - slotted	330 L.F.
8061	Furnish and install electrical cable 1-conductor No. 4 AWG - THHN/THWN.	30 L.F.
8063	Furnish and install electrical handhole	6 EA
8071	Furnish and install ground rod -¾" x 10'.	1 EA
8072	Furnish and install control and distribution equipment (120/240 V, 1 Phase 3 wire system)	1 EA
8077	Furnish and install 7 conductor electrical cable (No. 14 AWG)	800 L.F.
8083	Install cabinet - pole mount	1 EA
8084	Install controller and cabinet - base mount.	1 EA
NEG.	Remove existing sidewalk	64 SF
NEG.	Furnish and install 1½" innerduct conduit (to be installed into 4" PVC conduit for future fiber).	2520 L.F.
NEG.	Furnish and install 50-pair, voice grade interconnect cable (No. 19 A.W.G.) (jelly-filled)	950 L.F.
NEG.	Furnish and install 6-pair, voice grade interconnect cable (No. 19 A.W.G.) (jelly-filled)	180 L.F.
NEG.	Cut and pull back existing interconnect cable	90 L.F.

WIRING DIAGRAM



WIRING KEY

A - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
C - 6-PAIR VOICE GRADE INTERCONNECT CABLE (JELLY FILLED) UNDERGROUND
D - 50-PAIR VOICE GRADE INTERCONNECT CABLE (JELLY FILLED) UNDERGROUND
E, F - EXISTING OVERHEAD VOICE GRADE INTERCONNECT CABLE
PS - PROPOSED UNDERGROUND ELECTRICAL SERVICE BY PEPCO

GEOMETRIC LEGEND

PROPOSED
EXISTING

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE — A — A —
ELECTRIC — E — E —
TELEPHONE — T — T —
GAS — G — G —
SEWER — S — S —
WATER — W — W —
CABLE TV — TV — TV —

STREET TRAFFIC STUDIES, LTD.
Gateway International
1302 Concourse Drive, Suite 104
Linthicum, Maryland 21090
Ph (410) 859-3553
Fax (410) 859-3579

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REVISIONS	APPROVALS
	ASST. CHIEF TEDD SECTION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 97 (GEORGIA AVE) AND I-495 RAMP

DRAWN BY: SB	COUNTY: MONTGOMERY	TS NO. TS 3636 IC-GI	SHEET NO. 2 OF 2
CHECK BY: RRZ	LOG MILE:		
DATE: 10-20-99	F.A.P. NO.	T.I.M.S. NO. D-445	
SCALE: NONE	S.H.A. NO. MD870A51/B51		

OCT 21 1999