PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the traffic control signal at the intersection of US 1 and Cherry Hill Road in Prince George's County, Maryland.
US 1 is considered to run in a north/south direction.

I. INTERSECTION OPERATION

The intersection is to operate in a NEMA Five (5) phase, full-traffic-actuated mode. There will be an exclusive left turn phase for the northbound movement of US 1. The US 1 through movements will operate concurrently. The Cherry Hill Road through movements will operate concurrently.

Existing controller and all necessary equipment are to be relocated to new base mounted cabinet to be installed at this location.

III. SPECIAL NOTE:

The Contractor shall notify Mr. Robert Snyder of SHA at 410-787-7635 to arrange for the phone drop installation. The Contractor is to provide Mr. Snyder with the nearest street number, zip code, and telephone number.

EQUIPMENT LIST

A. S.H.A. furnished equipment material.

None.

B. Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
1	CY	205	Test pit excavation.
3	EA	811	Handhole.
1	EA	818	14 ft. steel pedestal pole with break away transformer base.
[1] 1	EA	816	Standard S.H.A. size 6. base mounted cabinet, with Video Interface and Hardwire Telemetry Interconnect Equipment (Note: Cabinet shall be purchased from Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650).
3	EA	814	12 in., one-way, three section L.E.D. (RA,YA,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, three section L.E.D. (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
105	LF	815	Sawcut for signal loop detector.
4	EA	---	Micro-loop probe (set of 3) (Non-invasive) with 500 ft. lead-in cable.
2	EA	---	Micro-loop probe (set of 3) (Invasive) with 500 ft. lead-in cable.
2	EA	---	Micro-loop probe (set of 3) (Invasive) with 1000 ft. lead-in cable.
585	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1320	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
30	LF	810	Bare copper stranded ground wire (No. 6 A.W.G.).
[1] 3 ~~300'~~	EA	---	Video detection camera equipment with manufacture cable. (3 - 300' cables)
5	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
10	LF	805	1 in. galvanized steel electrical conduit for loop detector sleeve.
30	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
90	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
55	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
225	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
2.5	CY	801	Concrete foundation for traffic signal equipment.
5	EA	804	Ground rod - 5/8 in. diameter x 10 ft. length.
1	EA	807	Electrical utility service equipment (120/240 V, signal phase, three wire system) for an underground power service as per MD-SHA Typical No. 807.05.01 (200 amp. electrical pedestal).
Lump Sum	LS	---	Relocate existing interconnect cables (approx. 100 LF).
Lump Sum	LS	---	Remove and dispose of existing signal equipment.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

CONTACT LIST

The contact persons for District #3 are as follows:

Mr. Lee Starkloff
Assistant District Engineer - Traffic
301-513-7358

Mr. Augie Rebish
Assistant District Engineer - Utility
301-513-7350

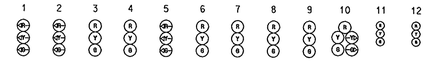
Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
301-513-7304

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:

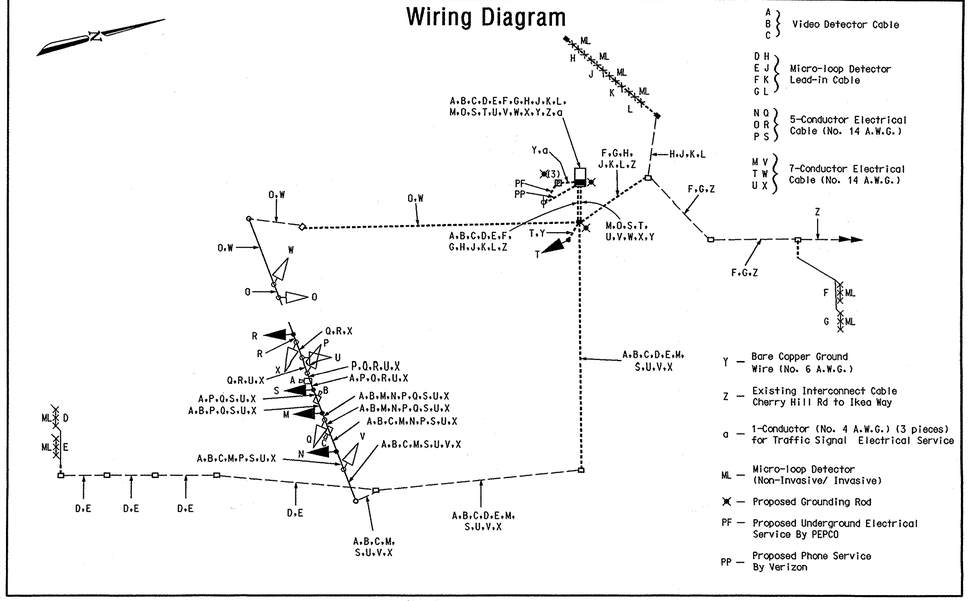
PEPCO
Richard Chilcoat
Customer Representative
Telephone: 1-301-967-5805
Address: 8300 Old Marlboro Pike
Upper Marlboro, MD 20772

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	12	
Phase 1 & 6	G	G	G	G	G	R	R	R	R	R G	R	R	
1 Change	Y	Y	G	G	Y	R	R	R	R	R Y	R	R	
Phase 2 & 6	R	R	G	G	R	G	G	R	R	R	R	R	
2 & 6 Change	R	R	Y	Y	R	Y	Y	R	R	R	R	R	
Phase 4 & 8	R	R	R	R	R	R	R	G	G	G	G	G	
4 & 8 Change	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	
Flashing Operation	FL/ R	FL/ R	FL/Y	FL/Y	FL/ R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	

Wiring Diagram



Red-Line Revision [1]
10-16-06

Red-Line Revision [1]

MDOT - SHA
O.O.T.S.

10/17/2006
S.H.A. Approval Date
T.S.- 564I Log Mile-1600106.15
T.I.M.S. No.- H248

The Traffic Group
The Traffic Group, Inc.
410-931-6600
Fax 410-931-6601

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
US 1 (Baltimore Avenue) at Cherry Hill Road

DRAWN BY: F. Brownley/ JES	F.A.P. NO. N/A	TS NO. 564I	SHEET NO. 2 OF 2
CHECKED BY: J. Dirndorfer	S.H.A. NO. BW996M82		
SCALE: 1" = 20'	COUNTY: Prince George's	T.I.M.S. NO. H248	
DATE: April 14, 2006	LOG MILE: 1600106.15		

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