

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of I-695 Inner Loop Ramp/ Len Stoler Entrance and West Road in Baltimore County, Maryland. I-695 Inner Loop Ramp is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA FIVE (5) phase, full-traffic-actuated mode. The I-695 Inner Loop Ramp/ Len Stoler Entrance will operate in a main street split phase mode with a westbound right turn overlap phase. There will be an exclusive/permisive left turn phase for the eastbound movement of West Road. The West Road through movements will operate concurrently.

The existing controller shall be utilized and reprogrammed to accommodate the new phasing.

EQUIPMENT LIST

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

None.

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

Quantity	Units	Specification Section	Description
2	EA	818	27 ft. steel mast arm pole with a 50 ft. mast arm.
4	EA	814	12 in., one-way, three section (R,Y,G) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, four section (R,Y,G,G,A) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in./8 in., one-way, four section (8 in. R,Y,G, 12 in. G,A) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, five section (R,Y,YA,G,G,A) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in./8 in., one-way, five section (8 in. R,Y,G, 12 in. YA,G,A) adjustable black faced traffic signalhead with mast arm mounting hardware and tunnel visors.
1	EA	813	18 in. x 24 in. R 4-7 sign for ground mounting.
1	EA	813	30 in. x 30 in. R 3-2 sign with mast arm mounting hardware.
1	EA	813	30 in. x 36 in. R 3-5(R) sign with mast arm mounting hardware.
2	EA	813	30 in. x 36 in. R 3-6(L) sign with mast arm mounting hardware.
1	EA	806	15 ft. luminaire arm.
1	EA	806	250 W H.P.S. lamp and luminaire.
1	EA	---	NEMA load switch.
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	CY	205	Test pit excavation.
2	EA	811	Handhole.
240	LF	815	Sawcut for signal loop detector.
880	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
155	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
300	LF	810	2-conductor tray cable (No. 14 A.W.G.).
60	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
950	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
250	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
10	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
70	LF	805	3 in. polyvinylchloride (Schedule 80) electrical conduit - trenched.
6	CY	801	Concrete foundation for traffic signal equipment.
2	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
30	LF	549	5 in. wide pavement marking - white (paint).
125	LF	549	24 in. wide HAPPTPM - white for stop line.
1	EA	549	HAPPTPM symbol - white "Left Through"
15	LF	812	4 in. x 4 in. wood sign support.
1	EA	822	Relocate existing mast arm sign.
1	EA	---	Remove existing pavement marking symbol by grinding.
Lump Sum	LS	---	Remove existing signal equipment.
Lump Sum	LS	---	Cap and abandon existing conduit.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

CONTACT LIST

The contact persons for District #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
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Ms. Suenette Pope
Assistant District Engineer - Utility
410-321-3460

Mr. Steve Markiszewski
Assistant District Engineer - Maintenance
410-321-2761

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

The Power Company Representative is:
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Mr. Keith Mayle
7317 Parkway Drive South
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410-859-9070

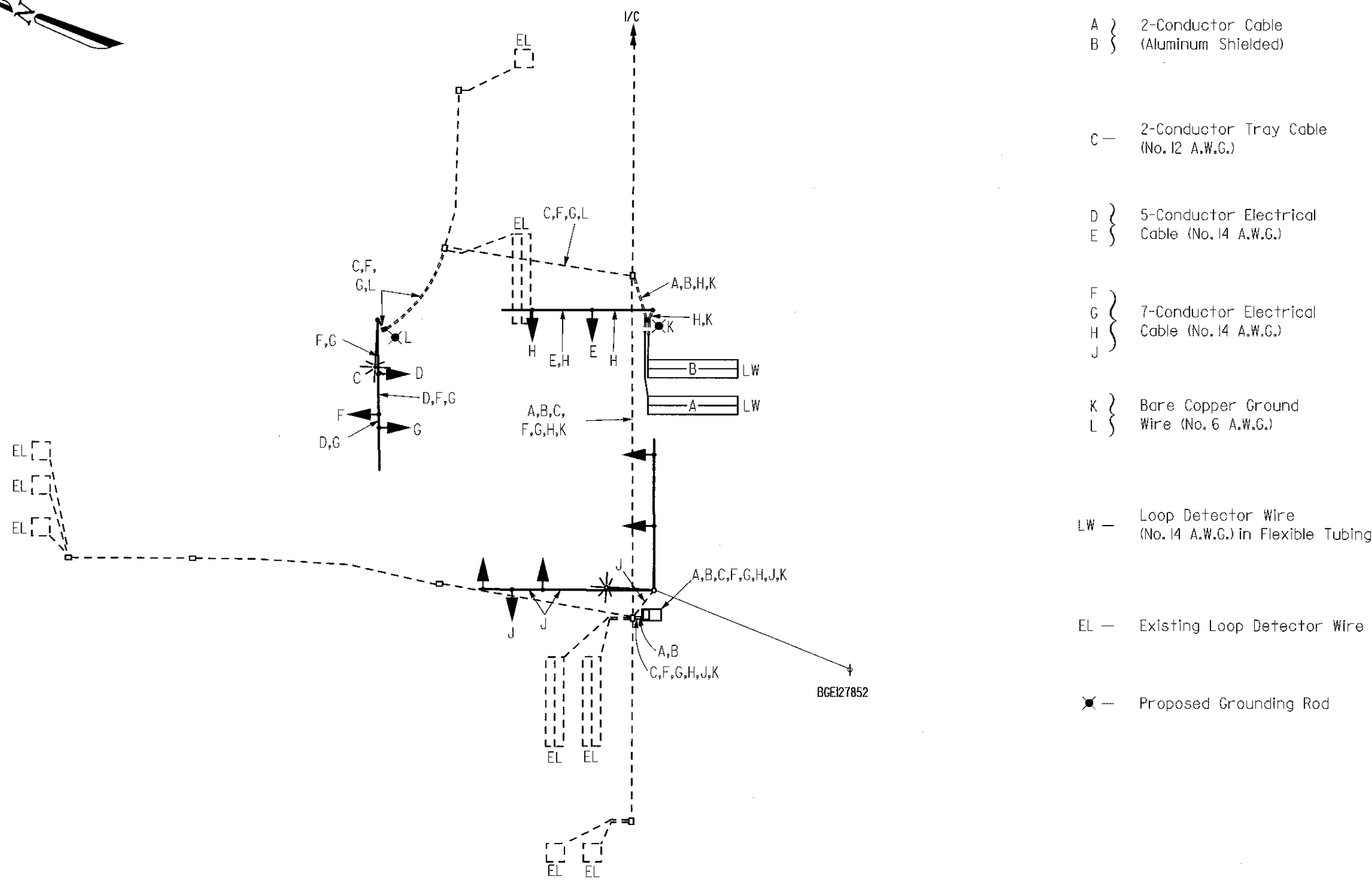
C. S.H.A. forces shall remove the controller and all auxiliary equipment from the controller cabinet.
The cabinet and all other materials to be removed by the contractor shall become the property of the contractor.

Quantity	Units	Description
4	EA	12 in. 3-section traffic signalhead.
2	EA	12 in. 5-section traffic signalhead.
1	EA	R 3-5 sign.
1	EA	Steel mast arm pole.

Phase Chart

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

Wiring Diagram



Revision 'B'



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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)

I-695 Inner Loop Ramp/ Len Stoler Entrance
at West Road

DRAWN BY: J. Storck	F.A.P. NO. N/A	TS NO. 1450B	SHEET NO. 2 OF 2
CHECKED BY: Dennis Doda	S.H.A. NO. BW996M82	T.I.M.S. NO. G465-GI	
SCALE: N/A	COUNTY: Baltimore		
DATE: April 21, 2004	LOG MILE: 03A04500.11		