

DRILL HOLES

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of US 1 (Baltimore Ave.) and MD 410 (East West Hwy.) in Prince George's County, Maryland. US 1 is considered to run in a north/south direction.

The signals being partially reconstructed due to widening on the east leg and modification to the island in the northwest quadrant.

II. INTERSECTION OPERATION

The intersection shall continue to run in a NEMA eight phase, full traffic-actuated mode. There is an exclusive/permissive left turn phase for both the North and Southbound movements of US 1. The US 1 through movements operate concurrently with actuated/concurrent pedestrian movements across the east and west legs. There is an exclusive left turn phase for both the East and Westbound movements of MD 410. The MD 410 through movements operate concurrently with actuated/concurrent pedestrian movements across the North and South Legs.

Existing cabinet/controller are to be utilized.

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	EA	818	27 ft. steel mast arm pole with a 50 ft. mast arm
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 tunnelvisors.
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 tunnelvisors.
4	EA	---	Video Detection cable. (3 - 300 LF, 1 - 400 LF)
1	EA	813	42 in. x 30 in. W 9-2(4) sign with mast arm mounting hardware.
8	EA	813	9 in. x 15 in. R 10-3(1) pedestrian pushbutton sign.
3	EA	---	Non-invasive probe (set of 3) with 500 ft. lead-in cable.
1	EA	---	Micro-Loop Probe (set of 3) with 500 ft. lead-in cable.
2	CY	205	Test pit excavation.
1	EA	811	Handhole.

Quantity	Units	Specification Section	Description
20	LF	815	Sawcut for signal loop detector.
875	LF	810	2-conductor electrical cable (No. 14 A.W.G.).
955	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1330	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
320	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
5	LF	805	1 in. liquid tight flexible non-metallic electrical conduit for loop detector lead-in.
15	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
190	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
85	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
175	LF	805	3 in. polyvinyl chloride (Schedule 80) electrical conduit - slotted in roadway.
150	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - slotted in roadway.
3.7	CY	801	Concrete foundation for traffic signal equipment.
1	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
1	EA	---	Relocate existing overhead sign.
2	EA	---	Relocate existing video detection camera.
1	EA	---	Cut, clean, cap and galvanize mast arm pole.
2	EA	---	Re-align video detection camera.
1	EA	---	Relocate existing pedestal pole and all attached equipment (to new base).
2	EA	---	Relocate pedestrian signal head.
6	EA	---	Replace pedestrian pushbutton sign.
2	EA	---	Remove overhead sign.
Lump Sum	LS	---	Disconnect, pullback, and relocated existing interconnect cable (approx. 600 LF).
Lump Sum	LS	---	Remove and dispose of existing signal equipment.

CONTACT LIST

The contact persons for District #3 are as follows:

PG - Mr. Brian Young
Assistant District Engineer - Traffic
PG - 301-513-7358

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

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

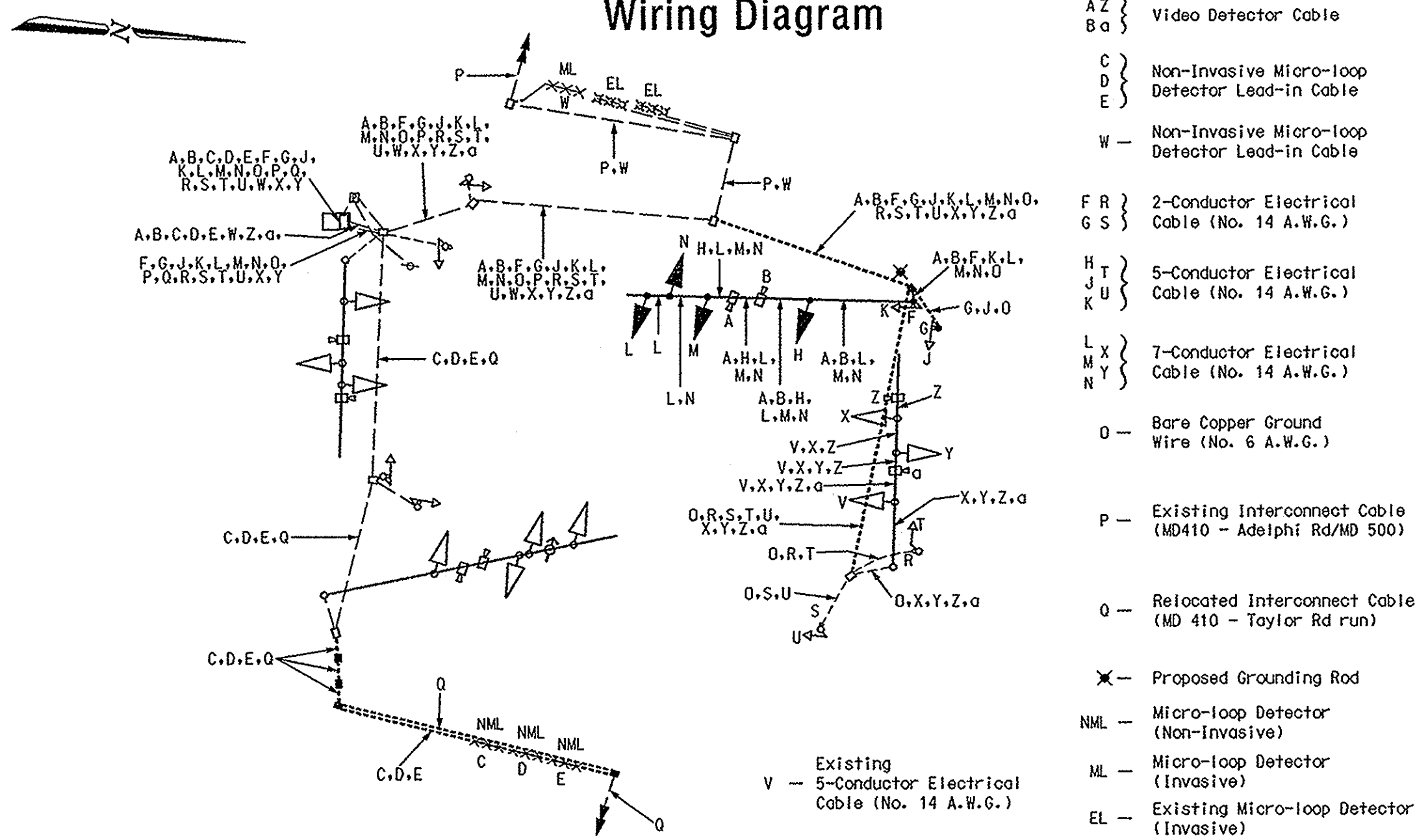
Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

Phase Chart

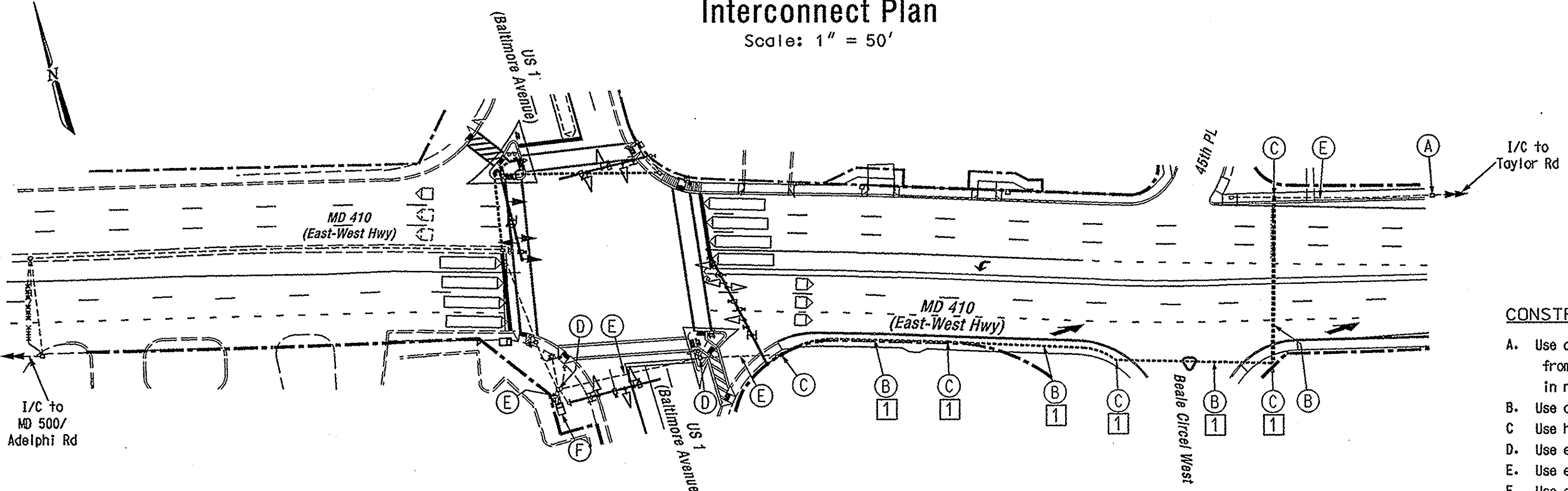
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15-18	19-22
Phase 1 & 5	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	DW	DW
Phase 1 & 6	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW
1 Change	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Phase 2 & 5	R	R	R	G	G	G	G	G	G	G	G	G	G	G	DW	DW
5 Change	R	R	R	G	G	G	G	G	G	G	G	G	G	G	DW	DW
Phase 2 & 6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	DW	DW
2 & 6 Change	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	DW	DW
Phase Alt 2 & Alt 6	G	G	G	G	G	G	G	G	G	G	G	G	G	G	WK	DW
Ped Clearance	G	G	G	G	G	G	G	G	G	G	G	G	G	G	FL/DW	DW
Alt 2 & Alt 6 Change	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	DW	DW
Phase 3 & 7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
3 & 7 Change to Phase 3 & 8 or Phase 4 & 7 or Phase 4 & 8	G	G	G	G	G	G	G	G	G	G	G	G	G	G	DW	DW
Phase 3 & 8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
3 Change	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Phase 4 & 7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
7 Change	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Phase 4 & 8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
4 & 8 Change	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Phase Alt 4 & Alt 8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	WK	DW
Ped Clearance	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/DW	DW
Alt 4 & Alt 8 Change	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Flashing Operation	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	DARK	DARK

Wiring Diagram



Interconnect Plan

Scale: 1" = 50'



CONSTRUCTION DETAILS

- A. Use closest existing handhole. Pull back existing interconnect cable from existing cabinet/controller. (US 1 and MD 410) and rerun in new conduit.
- B. Use conduit (installed as part of signal plan).
- C. Use handhole (installed as part of signal plan).
- D. Use existing handhole.
- E. Use existing conduit.
- F. Use existing cabinet/controller.

Red-Line Revision
September 12, 2007

MDOT - SHA
O.O.T.S.

S.H.A. Approval
T.S. - 299F Log Mile-16000102.61
T.I.M.S. No. - H641

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DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
Hyattsville
US 1 (Baltimore Ave.) at MD 410 (East West Hwy.)

GENERAL INFORMATION SHEET

SCALE N/A DATE 9/12/07 CONTRACT NO. BW996MB2

DESIGNED BY J. Storck COUNTY Prince George's
DRAWN BY J. Storck LOGMILE 16000102.61
CHECKED BY T.I.M.S. NO. H641
F.A.P. NO. N/A TOD NO.

TS NO. 299F- GI DRAWING NO. SHEET NO. 2 OF 3