

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of MD 140 (Reisterstown Rd) and Cherry Valley Road/Hammershire Road in Baltimore County. The existing signal heads shall be replaced with LED signal heads and existing pedestrian signal heads with Countdown pedestrian signals. MD 140 (Reisterstown Rd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 140 (Reisterstown Rd) approaches running concurrently. The Exclusive/Permissive left turn phases for the northbound and southbound approaches of MD 140 (Reisterstown Rd) will continue to operate as normal. A Countdown pedestrian phase with audible pushbutton actuation shall be provided across all four legs of the intersection. The Countdown pedestrian phase with audible pushbuttons across Cherry Valley Road and Hammershire Road shall be on recall. The side street approaches shall continue to operate concurrently.
- A proposed full-traffic-actuated eight-phase controller with proposed 2-wire Central Control Unit and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.
- SHA signal shop shall install APS central control unit into controller cabinet. The Contractor shall deliver the Central Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- APS will function as follows:
 - FOR MD 140 (REISTERSTOWN RD)
 - When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Reisterstown at Hammershire"
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
 - When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Reisterstown at Cherry Valley Road"
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
- FOR HAMMERSHIRE ROAD
 - When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Hammershire at Reisterstown."
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
- FOR CHERRY VALLEY ROAD
 - When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Cherry Valley at Reisterstown."
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

The contact persons for District #4 are as follows:

- | | |
|---|---|
| Ms. Erin Kuhn
Assistant District Engineer - Traffic
Phone: (410) 321-2781 | Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630 |
| Mr. Andre Futrell
Assistant District Engineer - Maintenance
Phone: (410) 321-2761 | Mr. Ed Rodenhizer
Manager, Traffic Signal Operations
410-787-7652 |
| Mr. Mike Pasqualello
Assistant District Engineer - Utility
Phone: (410) 321-2841 | Mr. Sonny Bailey
Manager, Sign Shop Operations
410-787-7670 |

EQUIPMENT LIST

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

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (mast arm)	8 SF
	R10-3(1) (9"x15") sign. (Note: To read "PUSH BUTTON TO CROSS REISTERSTOWN ROAD)."	4 EA
	R10-3(1) (9"x15") sign. (Note: To read "PUSH BUTTON TO CROSS CHERRY VALLEY ROAD)."	2 EA
	R10-3(1) (9"x15") sign. (Note: To read "PUSH BUTTON TO CROSS HAMMERSHIRE ROAD)."	2 EA

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
2002	Test Pit Excavation	7 C.Y.
5001	Removal of existing permanent pavement line markings any width	825 L.F.
5004	5" heat applied yellow permanent preformed thermoplastic pavement marking.	15 L.F.
5005	12" white preformed thermoplastic pavement marking lines	510 L.F.
5006	24" white preformed thermoplastic pavement marking lines.	25 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	100 L.F.
6002	5" concrete sidewalk.	365 S.F.
8001	12" LED signal head section.	38 EA
8002	2 wire Central Control unit	1 EA
8004	8" LED signal head section.	6 EA
8007	Audible/tactile pedestrian pushbutton station & signs.	8 EA
8008	Breakaway pedestal pole (ANY SIZE)	7 EA
8010	LED 16" countdown pedestrian signal head.	8 EA
8013	Remove and dispose of equipment (per assignment)	1 EA
8018	Schedule 80 rigid PVC conduit up to 4" - trenched.	100 L.F.
8019	Detectable warning surface for curb ramps	44 S.F.
8023	Electrical cable - 2 conductor (No. 14 AWG).	1025 L.F.
8025	Electrical cable - 5 conductor (No. 14 AWG).	1030 L.F.
8026	Electrical cable - 7 conductor (No. 14 AWG).	745 L.F.
8033	No. 6 AWG stranded bare copper ground wire.	120 L.F.

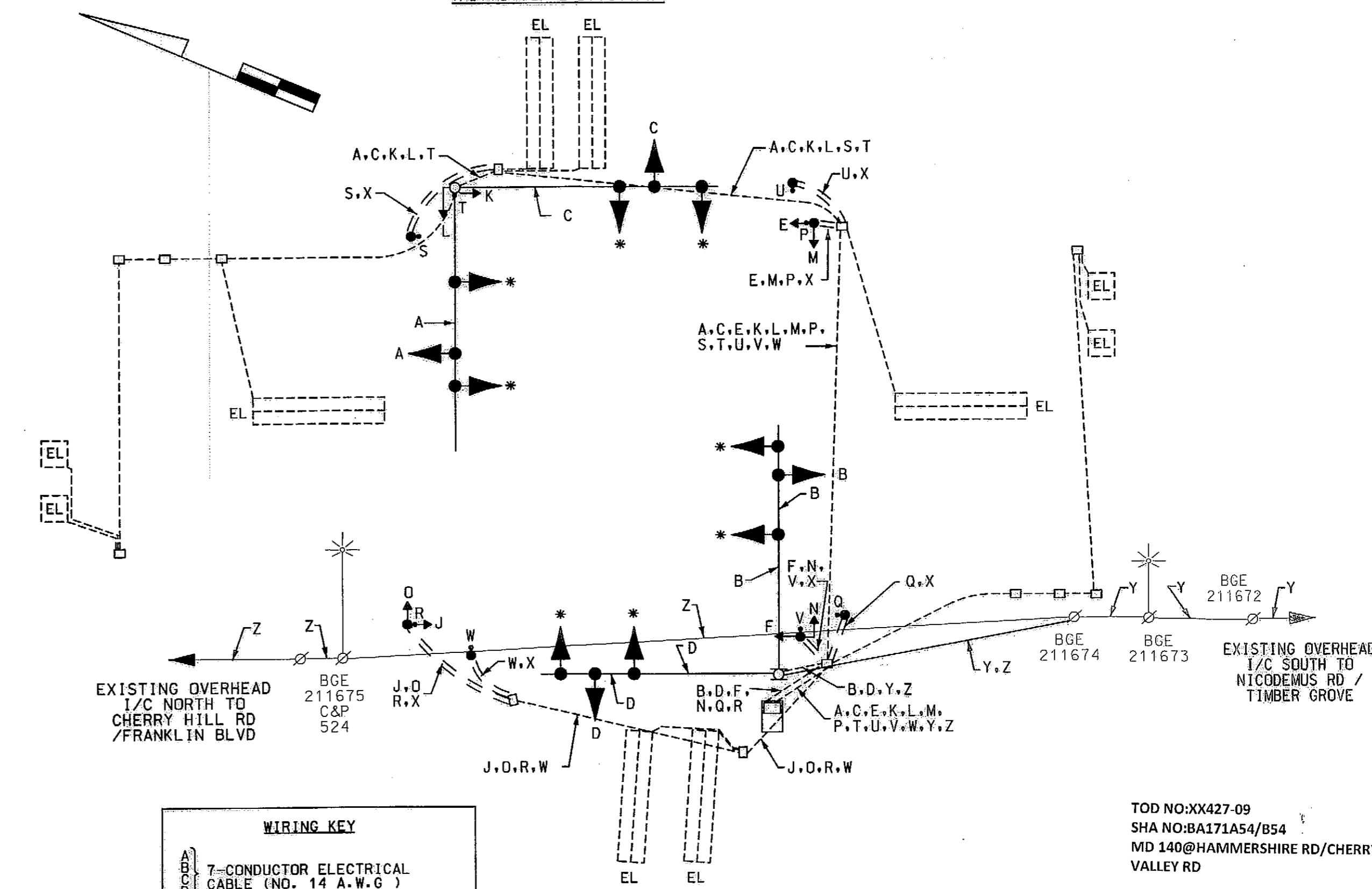
C. EQUIPMENT TO BE REMOVED

All signal materials removed are to become the property of the contractor.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 & 5	←G-R	←G-R	R	←G-R	←G-R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																				
PHASE 1 & 6	R	R	R	←G-G	←G-G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 & 6 CHANGE	R	R	R	←Y-Y	←Y-Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	←G-G	←G-G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 & 5 CHANGE	←Y-Y	←Y-Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEAR / COUNTDOWN	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEAR / COUNTDOWN	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



TOD NO:XX427-09
SHA NO:BA171A54/B54
MD 140@HAMMERSHIRE RD/CHERRY VALLEY RD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 140 (REISTERSTOWN ROAD) AND CHERRY VALLEY ROAD/HAMMERSHIRE ROAD
REISTERSTOWN, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 8-13-09 CONTRACT NO. XX4465185

DESIGNED BY JAMES ALLEN Jr. COUNTY BALTIMORE
DRAWN BY JAMES ALLEN Jr. LOGMILE 03014007.61
CHECKED BY _____ TIMS NO. J341
F.A.P. NO. _____ TOD NO. _____

TS NO. 664D DRAWING NO. 2 OF 2 SHEET NO. OF

STJ
STREET TRAFFIC STUDIES, LTD.
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Glen Burnie, MD 21061
Ph (410) 550-5500
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