

PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing Traffic Control Signal at the intersection of Stevenson Road and MD 129A (Brooks Robinson Drive) / I-695 On Ramp in Baltimore County. The existing strain pole traffic signal shall be replaced by a new mast arm traffic signal. Video detection shall be used on all approaches. A new northbound left turn phase shall be installed at this location. Stevenson Road is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA four-phase, fully-actuated mode, with the Stevenson Road approaches running concurrently. An Exclusive/Permissive left turn phase shall be provided for the northbound approach of Stevenson Road. The MD 129A (Brooks Robinson Drive) approach shall run in its own phase.
- A full-traffic-actuated, eight-phase controller with video interface and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- 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.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer (Dave Swartz) at (410) 787-7652 seventy-two hours in advance of intended work.

The contact persons for District #4 are as follows:

Ms. Erin Kuhn
Assistant District Engineer - Traffic
Phone: (410) 321-2781

Mr. Andre Futrell
Assistant District Engineer - Maintenance
Phone: (410) 321-2761

Mr. Mike Pasqualello
Assistant District Engineer - Utility
Phone: (410) 321-2841

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Chief, Signal Operations Section
410-787-7652

Mr. Sonny Bailey
Chief Sign Shop
410-787-7676

The power company representative is:

Baltimore Gas and Electric
7317 Parkway Drive South
Hanover, MD 21076
410-850-4620

EQUIPMENT LIST

ITEM NO.	DESCRIPTION	QUANTITY
9042	Controller ASC II with telemetry	1 EA
9044	Controller cabinet, size "6"	1 EA
9086	Video detection interface equipment: 1-4 cameras (To be installed by signal shop).	1 EA
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	42 SF
	D3-2 "Brooks Robinson Dr (arrow) / (arrow) Brooks Robinson Dr" sign, (Dual Faced) (variable x 16")	1 EA
	D3-2 "Stevenson RD" sign (variable x 16")	1 EA
	R3-5R "RIGHT ONLY" sign (30" x 36")	1 EA

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1003	Maintenance of traffic per assignment.	3 EA
2002	Test Pit Excavation	4 C.Y.
1-5004	12" white heat applied permanent-preformed thermoplastic pavement marking	220 L.F.
1-5005	24" white heat applied permanent-preformed thermoplastic pavement marking	130 L.F.
1-5007	Removal of existing permanent pavement line markings	300 L.F.
8003	8" LED signal head section.	6 EA
8006	15' lighting arm on signal pole with 250 watt HPS lamp & luminaire.	2 EA

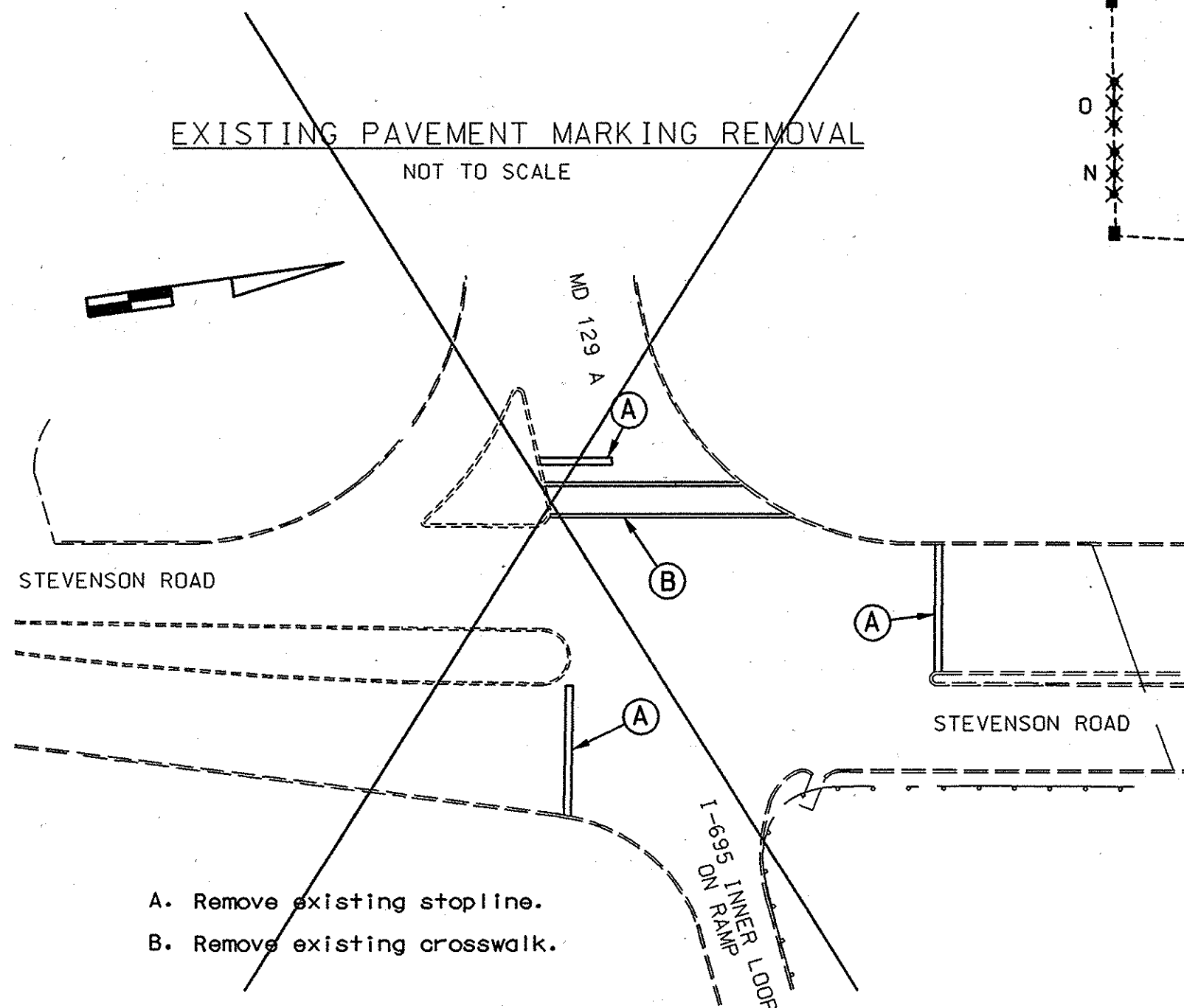
EQUIPMENT LIST

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
8009	Class II wood pole.	1 EA
1 8016	Mast arm pole and 60' mast arm any "T" dimension	1 EA
8020	Non-invasive detector (any length) lead-in cable up to 1000'.	2 EA
8021	Remove and dispose of material & equipment per assignment.	1 EA
8024	Twin mast arm pole & 50' (cut to 40') / 70' mast arms any "T" dimension.	1 EA
8025	Video detection camera & cable up to 500'	4 EA
8032	Schedule 80 rigid PVC conduit up to 4" - bored.	340 L.F.
8034	Schedule 80 rigid PVC conduit up to 4" - trenched.	175 L.F.
8036	Install overhead or ground mounted sign (including hardware).	42 S.F.
8038	No. 6 AWG stranded bare copper ground wire.	310 L.F.
8041	Metered service pedestal embedded.	1 EA
8043	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	60 L.F.
8045	Furnish and install electrical handhole.	7 EA
8050	12" LED signal head section.	26 EA
8052	Cut, clean, galvanize and cap traffic signal structure.	1 EA
8056	Electrical cable - 5 conductor (No. 14 AWG).	75 L.F.
8057	Electrical cable - 7 conductor (No. 14 AWG).	985 L.F.
8058	Electrical cable - 2 conductor (No. 12 AWG) TC.	370 L.F.
8065	Install controller and cabinet base mount.	1 EA

C. EQUIPMENT TO BE REMOVED

SHA Forces shall remove the controller and all auxiliary equipment from the controller cabinet. The cabinet and all other removed signal materials are to become property of the contractor.

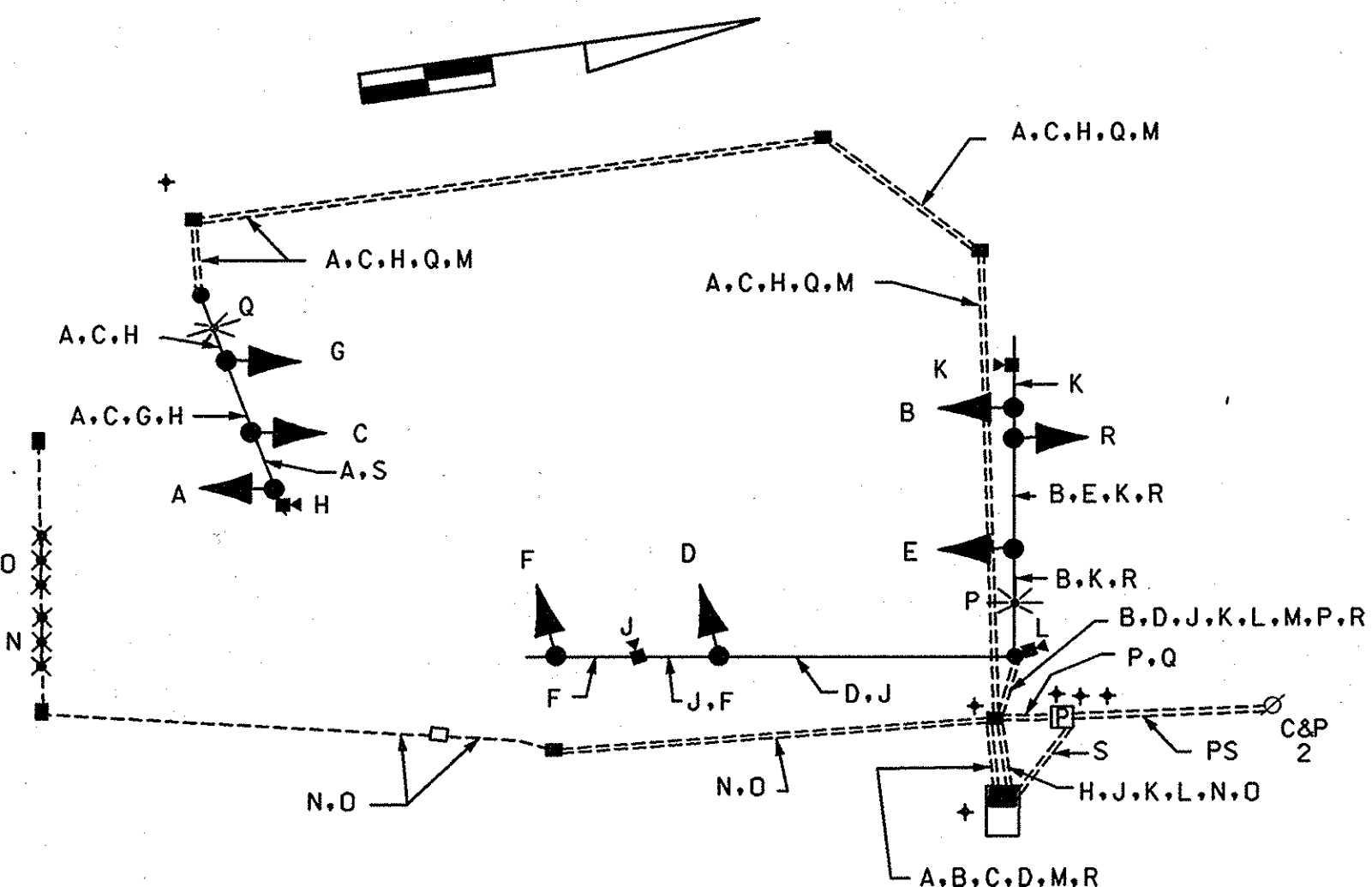


- A. Remove existing stopline.
B. Remove existing crosswalk.

PHASE CHART

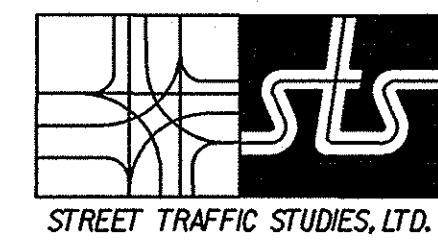
	1	2	3	4	5	6	7	8	
PHASE 1 & 5	←G-R	←G-R	R	←G-R	←G-R	R	R	R	↓
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6									↔
PHASE 1 & 6	←G-G	←G-G	G	R	R	R	R	R	↓
1 & 6 CHANGE	←Y-G	←Y-G	G	R	R	R	R	R	↔
PHASE 2 & 5	R	R	R	←G-G	←G-G	G	R	R	↓
2 & 5 CHANGE	R	R	R	←Y-G	←Y-G	G	R	R	↔
PHASE 2 & 6	G	G	G	G	G	G	R	R	↓
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	↔
PHASE 4	R	R	R	R	R	R	G	G	↓
4 CHANGE	R	R	R	R	R	R	Y	Y	↔
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	↓

WIRING DIAGRAM



WIRING KEY	
A	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
G	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
H	CONTROL CABLE (CAMERA TO CONTROLLER) UP TO 500'
M	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
N	MICROLOOP LEAD-IN CABLE (UP TO 1000')
P	2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
Q	(3) 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
PS	PROPOSED UNDERGROUND SERVICE TO BE INSTALLED BY BGE
+	GROUND ROD

1 GREENLINE REVISION 9/30/08
TEDD APPROVAL *[Signature]*



5461g10L1.DGN

T-136

PLOTTED: *DATE*
FILE: *FILE*

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

STEVENS ROAD AND
MD 129A (BROOKS ROBINSON DRIVE) /
I-695 INNER LOOP ON RAMP
GENERAL INFORMATION SHEET

SCALE NONE DATE 7/24/08 CONTRACT NO. XX4455185

DESIGNED BY RRZ COUNTY BALTIMORE
DRAWN BY RC LOGMILE 03012901.37
CHECKED BY TIMS NO. I-811
F.A.P. NO. TOD NO.

TS NO. 1399B DRAWING NO. 2 OF 2 SHEET NO. OF