

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 22 (CHURCHVILLE ROAD) AND THOMAS RUN ROAD/SHUCKS ROAD IN HARFORD COUNTY. THE MODIFICATION INCLUDES ADDING THE EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THOMAS RUN ROAD AND SHUCKS ROAD.

MD 22 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA 5 PHASE, FULLY-TRAFFIC ACTUATED MODE. THERE IS AN EXCLUSIVE/PERMISSIVE LEFT-TURN FOR THE EASTBOUND APPROACH OF MD 22. THE THROUGH MOVEMENTS FOR MD 22 OPERATE CONCURRENTLY. THOMAS ROAD AND SHUCKS ROAD APPROACHES OPERATE CONCURRENTLY.

CONTACT PERSONS: MR. ED RODENHIZER, CHIEF SIGNAL OPERATIONS SECTION PHONE # (410) 787-7652
 MR. ROBERT SNYDER, ASST. CHIEF TRAFFIC OPERATIONS DIVISION PHONE # (410) 787-7631
 MR. DAVE M. RAMSEY, ASST. D. E. MAINTENANCE PHONE # (410) 321-2761

EQUIPMENT LIST A

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

ITEM NOS.	QUANTITY	SPEC. SECTION	DESCRIPTION
9089	85 S.F.	813	Flat sheet aluminum to consist of: - Two (2) 36"x42" R10-12 - LEFT TURN YIELD ON GREEN sign, mast-arm mounted. - One (1) associated shield assembly "WEST, MD 22, RIGHT ARROW" (24"x51"), pole mounted with hardware. - One (1) associated shield assembly "EAST, MD 22, RIGHT ARROW" (24"x51"), pole mounted with hardware. - One (1) associated shield assembly "WEST, MD 22, LEFT ARROW" (36"x75"), pole mounted with hardware. - One (1) associated shield assembly "EAST, MD 22, LEFT ARROW" (36"x75"), pole mounted with hardware.
9086	1 EACH	816,950	Cabinet with telemetry (system cable) - Size 6.
9087	1 EACH	816,950	Controller ASC II with telemetry.
9002	1 EACH	816,950	(Cont/Cab/Add) Detector amplifier 4-channel rack mount.

EQUIPMENT LIST B

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NOS.	QUANTITY	SPEC. SECTION	DESCRIPTION
1001	1 EACH	104	Maintenance of traffic.
5001	3 EACH	549	Furnish and install heat applied permanent preformed thermoplastic pavement marking arrow.
5003	1 EACH	549	Remove existing pavement marking arrow.
8011	36 EACH	814	Furnish and install 12-inch vehicular traffic signal head section (POLYCARBONATE and black-faced).
8019	9 EACH	814	Furnish and install 8-inch vehicular traffic signal head section (POLYCARBONATE and black-faced).
8048	1 EACH	-	Remove and dispose of existing material and equipment per assignment.
8051	15 L.F.	810,950	Furnish and install 3" PVC schedule 80 conduit - trenched.
8053	30 L.F.	810,950	Furnish and install 4" PVC schedule 80 conduit - trenched.
8058	18 L.F.	810,950	Furnish and install wood sign support 4"x4".
8074	64 S.F.	813	Install ground mounted sign.
8075	21 S.F.	813	Install overhead sign.
8084	10 L.F.	810,950	Furnish and install electrical cable - 5 conductor (No.14 AWG).
8085	775 L.F.	810,950	Furnish and install electrical cable - 7 conductor (No.14 AWG).
8091	36 L.F.	810,950	Furnish and install 2" PVC schedule 80 conduit - trenched.
8093	1 EACH	816,950	Install controller and cabinet - base-mounted.

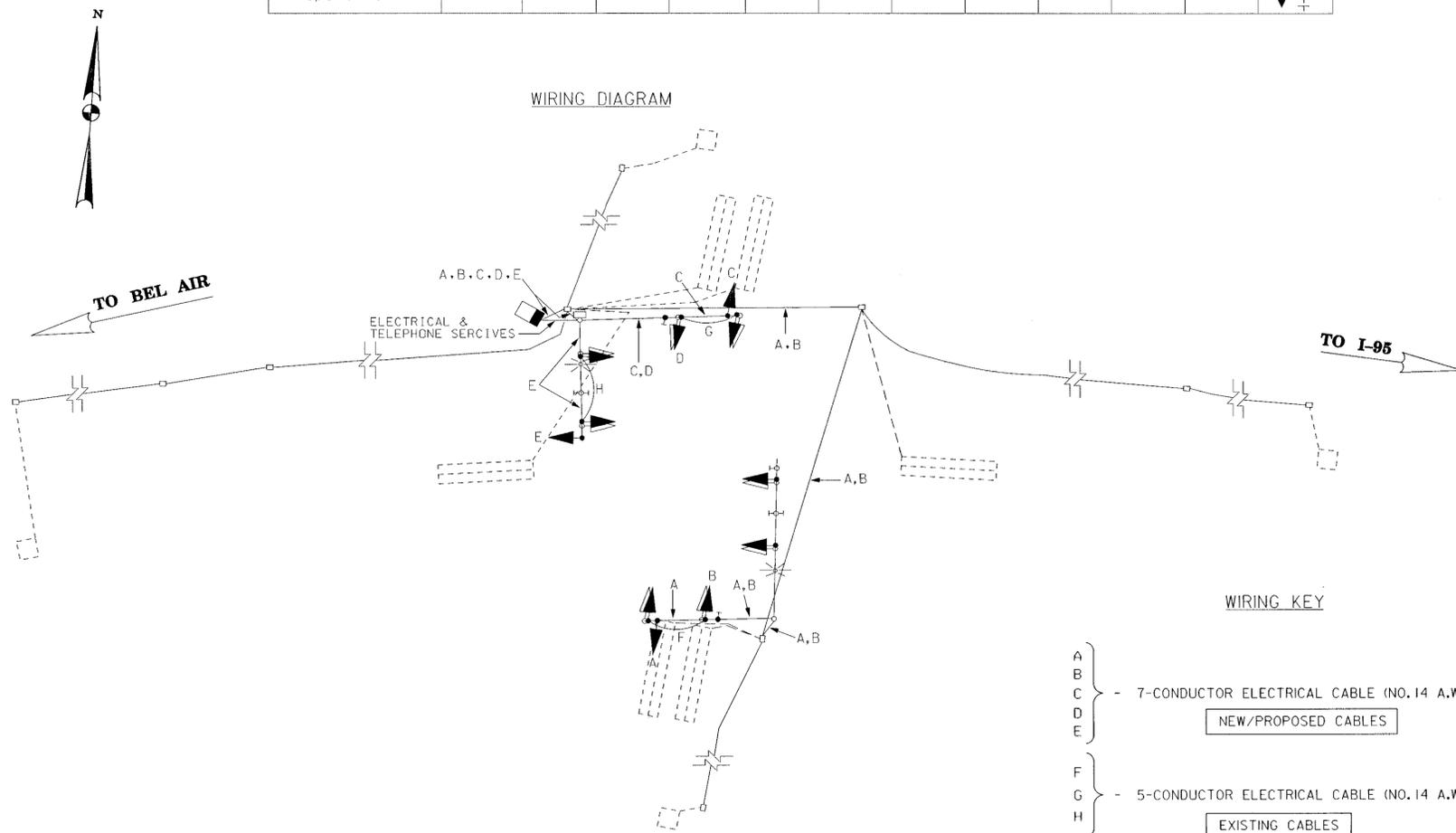
EQUIPMENT LIST C

EQUIPMENT TO BE REMOVED AND RETURNED TO S.H.A.

SHA 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.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	
Phase 1 & 6	◀G-G	◀G-G	G	R	R	R	R	R	R	R	R	↔
1 & 6 Change	THE CONTROLLER MAY SKIP TO PHASE 2 & 6											↔
Phase 2 & 6	G	G	G	G	G	R	R	R	R	R	R	↔
2 & 6 Change	Y	Y	Y	Y	Y	R	R	R	R	R	R	↔
Phase 3 & 7	R	R	R	R	R	◀G-R	◀G-R	R	◀G-R	◀G-R	R	↔
3 & 7 Change	THE CONTROLLER MAY SKIP TO PHASES 3 & 8 OR 4 & 7 OR 4 & 8											↔
Phase 3 & 8	R	R	R	R	R	◀G-G	◀G-G	G	R	R	R	↔
3 & 8 Change	R	R	R	R	R	◀Y-G	◀Y-G	G	R	R	R	↔
Phase 4 & 7	R	R	R	R	R	R	R	R	◀G-G	◀G-G	G	↔
4 & 7 Change	R	R	R	R	R	R	R	R	◀Y-G	◀Y-G	G	↔
Phase 4 & 8	R	R	R	R	R	G	G	G	G	G	G	↔
4 & 8 Change	R	R	R	R	R	Y	Y	Y	Y	Y	Y	↔
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	↔



REVISIONS	APPROVALS
S.H.A. NO. XX1065185 INSTALL E/P LEFT TURN PHASE FOR THOMAS RUN RD & SHUCKS RD. 2-28-2002	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
S.H.A. NO. H-893-501-471 RELOCATE SIGNAL IN NW QUADRANT DUE TO GEOMETRIC CHANGES 5-17-1989	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
S.H.A. NO. H-893-501-471 REBUILD EXISTING SIGNAL 2-25-1988	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
S.H.A. NO. H-893-501-471 REBUILD EXISTING SIGNAL 2-25-1988	DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 22 (Churchville Road) @ Thomas Run Road / Shucks Road

DRAWN BY: M. KABENGELE	F.A.P. NO.:	TS NO.:	SHEET NO.:
CHECKED BY: D. DODA	S.H.A. NO.:	265(E)	
SCALE: NONE	COUNTY: HARFORD	T.I.M.S. NO.:	
DATE: 3-27-2002	LOG MILE: 12002203.59	F-050	2 OF 2