

DRILL HOLES

BORDER REV: DATE: JUNE 1, 2004

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PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing Traffic Control Signal with street lighting and interconnect at the intersection of MD 3 Bus (Crain Hwy) and Aquahart Rd / Thelma Ave in Anne Arundel County. The existing span wire signal shall be replaced with a new mast arm traffic signal. APS / CPS along with video detection shall also be installed at this location. MD 3 Bus (Crain Hwy) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- 1. The intersection is to operate in a NEMA seven-eight, fully-actuated mode, with the MD 3 Bus (Crain Hwy) approaches continuing to run concurrently. New Exclusive left turn phases shall now be provided for both approaches of MD 3 Bus (Crain Hwy). New Countdown pedestrian phases with audible pushbutton actuation shall be provided across both legs of MD 3 Bus (Crain Hwy). New Countdown pedestrian phases with audible pushbuttons across Aquahart Rd and Thelma Ave shall be on recall. The Exclusive/Permissive left turn phase for the Aquahart Rd shall remain in operation. A new Exclusive/Permissive left turn phase shall be added for the Thelma Ave approach. The Aquahart Rd / Thelma Ave approaches shall also continue to run concurrently.
2. 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.
3. SHA signal shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming.

III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
2. 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.
3. 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.
4. All unused cables shall be removed from existing conduit.

The contact persons for District #5 and SHA are as follows:

Ms. Kim Tran, Assistant District Engineer - Traffic, Phone: (410) 841-1019; Mr. Richard L. Daff, Sr., Chief, Traffic Operations Division, Phone: (410) 787-7630; Mr. John Mays, Assistant District Engineer - Maintenance, Phone: (410) 841-1013; Mr. Ed Rodenhizer, Manager, Signal Operations Section, 410-787-7652; Mr. Sonny Bailey, Manager, Sign Shop Operations, 410-787-7676; Mr. Mike Huber, Assistant District Engineer - Utility, Phone: (410) 841-1039; The power company representative is: Baltimore Gas and Electric, 1068 N Front Street, Baltimore, MD 21202, 410-637-8713

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

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like Controller ASC II with telemetry (1 EA), Controller cabinet, size "6" (1 EA), Video detection interface equipment (1 EA), Sheet aluminum signs (48SF), GUIDE SIGN (1 EA), S1-1 "School" sign (2 EA), W16-7p(L) "Arrow" sign (1 EA), W16-7p(R) "Arrow" sign (1 EA), Sheet aluminum signs to consist of: (70SF), D-3(1) "Crain HWY" sign (2 EA), D-3(1) "Arrow" Aquahart Rd / Aquahart Rd sign (1 EA).

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

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like D-3(1) "Arrow" Thelma Ave / Thelma Ave sign (1 EA), R3-5L "LEFT TURN ONLY" sign (2 EA), R10-11b "NO TURN ON RED" sign (1 EA), M1-5(6) GUIDE SHIELD ASSEMBLY (1 EA), M1-5(6) GUIDE SHIELD ASSEMBLY (1 EA), Pedestrian education R10-3(1) sign (4 EA), Pedestrian education R10-3(1) sign (2 EA), Pedestrian education R10-3(1) sign (2 EA).

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like Maintenance of traffic per assignment (3 EA), Class 2 Excavation (7 C.Y.), Test Pit Excavation (11 C.Y.), Removal of existing permanent pavement line markings (1200 L.F.), 12" white heat applied permanent preformed thermoplastic pavement marking (1275 L.F.), 24" white heat applied permanent preformed thermoplastic pavement marking (125 L.F.), Standard type A combination curb and gutter (345 L.F.), 5" concrete sidewalk (1300 S.F.), Detectable warning surfaces (124 S.F.), 12" LED signal head section (44 EA), 2 wire Central Control unit (1 EA), 8" LED signal head section (6 EA), Any size lighting arm on signal pole w/ 250 watt HPS lamp & luminaire (1 EA), Audible/tactile pedestrian pushbutton station & signs (8 EA), Breakaway pedestal pole 10' (5 EA), Breakaway pedestal pole 5' (2 EA), Embedded Metered service pedestal (1 EA), LED 16" countdown pedestrian signal heads (8 EA), Mast arm pole & 38' mst arm any "T" dimension (1 EA), Mast arm pole & 50' mst arm any "T" dimension (1 EA), Microloop probe (any length lead in cable) (4 EA), Remove and dispose of existing material & equipment per assignment (1 EA), Twin mast arm pole & 50' / 70' mast arms any "T" dimension (1 EA), Video detection camera and cable any length (5 EA), 1" electrical conduit - galvanized sleeve or flexible liquid tight (45 L.F.), Disconnect, pull back and reroute cable (310 L.F.), Electrical cable - 2 conductor (No. 12 AWG), tray cable (175 L.F.).

EQUIPMENT LIST

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like Schedule 80 rigid PVC conduit up to 4" - bored (455 L.F.), Schedule 80 rigid PVC conduit up to 4" - trenched (510 L.F.), Wood sign supports up to 4"x6" (64 L.F.), Install overhead or ground mounted sign (169 SF), No. 6 AWG stranded bare copper ground wire (550 L.F.), Electrical cable 1-conductor No. 8 AWG THHN/THWN (90 L.F.), Furnish and install electrical handhole (7 EA), Electrical cable - 2 conductor (No. 14 AWG) (1015 L.F.), Electrical cable - 5 conductor (No. 14 AWG) (1500 L.F.), Electrical cable - 7 conductor (No. 14 AWG) (1425 L.F.), Saw cut for signal (loop detector and sidewalk bump out) (230 L.F.), 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.

TOD NO: XX647-04, SHA NO: AA127B51, MD 3 Bus. @ Aquahart Ave/Thelma Ave.

SHA DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION MD 3 BUSINESS (CRAIN HWY) AND AQUAHART RD/ THELMA AVE GLEN BURNIE, MARYLAND

GENERAL INFORMATION SHEET

Table with project details: SCALE NONE, DATE 05/12/2011, CONTRACT NO. XX6475185, DESIGNED BY R.R.Z., COUNTY ANNE ARUNDEL, DRAWN BY R.C., LOGMILE 02800301.99, CHECKED BY [Signature], TMS NO. K238, F.A.P. NO., TOD NO., TS NO. 744D, DRAWING NO. 4 OF 5, SHEET NO. OF

STREET TRAFFIC STUDIES, LTD. 400 Crain Hwy, NW Glen Burnie, MD 21061 Ph (410) 590-5500 Fax (410) 590-6637 593761.DGN T-98