

DRILL HOLES

DRILL HOLES

DRILL HOLES

BORDER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a mast arm Traffic Control Signal with interconnect, Countdown pedestrian signals and audible pushbuttons at the intersection of MD 198 (Talbot Ave) and 8th Street in Prince George's County. MD 198 (Talbot Ave) is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

- 1. The intersection is to operate in a NEMA three-phase, fully-actuated mode, with the MD 198 (Talbot Ave) approach running in its own phase. A Countdown pedestrian phase with audible pushbutton actuation shall be provided across the east leg of MD 198 (Talbot Ave). Countdown pedestrian phases with audible pushbuttons on recall shall be installed across both legs of 8th Street. The 8th Street approaches shall 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. APS will function as follows:

TO CROSS MD 198 (TALBOT AVE)

- a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "Wait to cross Talbot at 8th."
b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

TO CROSS 8th STREET

- a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "Wait to cross 8th at Talbot."
b. 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 #3 (Prince George's County) are as follows:

Mr. Brian Young, Assistant District Engineer - Traffic, Phone: (301) 513-7318
Mr. Richard L. Daff, Sr., Chief, Traffic Operations Division, Phone: (410) 787-7630
Mr. Wayne Mowdy, Assistant District Engineer - Maintenance, Phone: (301) 513-7304
Mr. Ed Rodenhizer, Signal Shop, 410-787-7652
Mr. Augie Rebish, Assistant District Engineer - Utility, Phone: (301) 513-7350
Mr. Sonny Bailey, 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

A. 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), Video detection Interface equipment (1 EA), Sheet aluminum signs (133 SF), Pedestrian education signs (4 EA), W3-3 NEW "SIGNAL AHEAD" sign (4 EA), GUIDE SIGN (1 EA), S4-4(3) "AHEAD" sign (2 EA), S1-1 "SCHOOL" sign (7 EA), W16-7P(L) "arrow" diagonal sign (7 EA), Sheet aluminum signs (124 SF), D3-2 "Talbot Ave" sign (2 EA).

EQUIPMENT LIST (cont.)

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

Table with columns: ITEM NO., DESCRIPTION, QUANTITY. Includes items like D3-2 "Eighth St" sign (1 EA), R3-2 "NO LEFT TURN" sign (1 EA), R3-2 "NO RIGHT TURN" sign (5 EA), S1-1 "SCHOOL" sign (5 EA), W16-7P(L) "arrow" diagonal sign (1 EA), GUIDE SHIELD ASSEMBLY (1 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 (6 C.Y.), Test Pit Excavation (11 C.Y.), Removal of existing permanent pavement line markings (490 L.F.), 12" white heat applied permanent preformed thermoplastic pavement marking (780 L.F.), 24" white heat applied permanent preformed thermoplastic pavement marking (85 L.F.), Standard type A combination curb and gutter (310 L.F.), 5" concrete sidewalk (1170 S.F.), 2 wire Central Control unit (1 EA), Any size lighting arm on signal pole (2 EA), Audible/tactile pedestrian pushbutton station & signs (6 EA), Breakaway Pedestal pole (20') (1 EA), Breakaway Pedestal pole (10') (4 EA), Breakaway Pedestal pole (5') (1 EA), LED 16" countdown pedestrian signal head (6 EA), Mast arm pole and 38' and any "T" dimension (1 EA), Mast arm pole and 50' (cut to 40') any "T" dimension (2 EA), Non-invasive detector (3 EA), Video detection camera & cable up to 500' (2 EA), 12-pair communication cable (700 L.F.), Schedule 80 rigid PVC conduit (340 L.F.), Schedule 80 rigid PVC conduit (750 L.F.), Wood sign supports up to 4"x6" (80 L.F.), Detectable warning surfaces for curb ramps (61 S.F.), Install overhead or ground mounted sign (257 S.F.), No. 6 AWG stranded bare copper ground wire (640 L.F.), Metered service pedestal embedded (1 EA), Electrical cable 1-conductor No. 4 AWG THHN/THWN (40 L.F.), Furnish and install electrical handhole (11 EA), 12" LED signal head section (27 EA), Electrical cable - 2 conductor (No. 14 AWG) (1210 L.F.), Electrical cable - 5 conductor (No. 14 AWG) (1910 L.F.), Electrical cable - 7 conductor (No. 14 AWG) (500 L.F.), Electrical cable - 2 conductor (No. 12 AWG) TC (365 L.F.), Install controller and cabinet base mount (1 EA).

EQUIPMENT LIST (cont.)

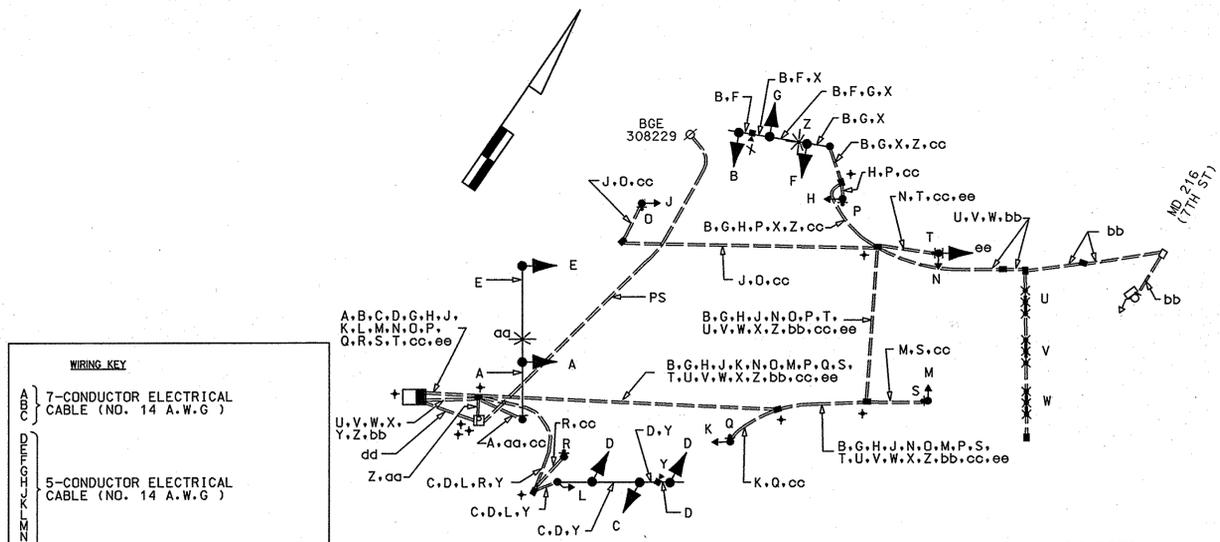
C. EQUIPMENT TO BE REMOVED

There are no signal equipment to be removed for this project.

PHASE CHART

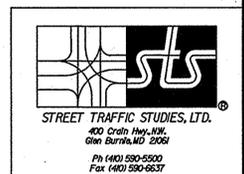
Phase chart table showing signal phases (G, R, Y, W, DW, FL/DW) for various phases (PHASE 2, PED CLEAR / COUNTDOWN, 2 CHANGE, PHASE 4 & 8, 4 & 8 CHANGE, PHASE 4 & 8 ALT, PED CLEAR / COUNTDOWN, 4 & 8 ALT CHANGE, FLASHING OPERATION) across 14 lanes.

WIRING DIAGRAM



WIRING KEY table defining symbols for cable types (7-CONDUCTOR ELECTRICAL CABLE, 5-CONDUCTOR ELECTRICAL CABLE, 2-CONDUCTOR ELECTRICAL CABLE, NON-INVASIVE MICROLOOP LEAD-IN CABLE, CONTROL CABLE, 2-CONDUCTOR TRAY CABLE, 12-PAIR VOICE GRADE INTERCONNECT CABLE, STRANDED BARE COPPER GROUND WIRE, 3-1 CONDUCTOR ELECTRICAL CABLE, PROPOSED UNDERGROUND SERVICE, GROUND ROD).

TOD # XX444-04 SHA# PG718A51/C51



SHA STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION
MD 198 (TALBOT AVE) AND 8TH ST LAUREL, MARYLAND
GENERAL INFORMATION SHEET
SCALE NONE DATE 6/4/08 CONTRACT NO. XX4445185
DESIGNED BY JAMES ALLEN COUNTY PRINCE GEORGE'S
DRAWN BY ROB CICCHINI LOGMILE 16C198.01.37
CHECKED BY CSW TMS NO. 1647
F.A.P. NO. TOD NO.
TS NO. 4663 DRAWING NO. 2 OF 2 SHEET NO. OF

5469.dgn T-139 PLOTTED: TUESDAY, JUNE 10, 2008 AT 11:24:22 AM FILE: 546901.DGN