DRILL HOLES

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BORDER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing Traffic Control Signal with interconnect at the intersection of US 50 (Ocean Gateway) and Inlet Isle Lane in Worcester County. The existing strain pole Traffic Signal shall be replaced with a new mast arm Traffic Signal Poles with Lighting. Additionally, video detection shall be used for all approaches. Countdown pedestrian signals with audible pushbuttons shall be installed across the east leg of this intersection. US 50 (Ocean Gateway) is assumed to run a east-west direction.

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA six-phase, semi-actuated mode, with the US 50 (Ocean Gateway) approaches running concurrently. The Exclusive/Permissive left turn phases shall remain in operation for both approaches of US 50 (Ocean Gateway). Countdown pedestrian phases with audible pushbutton actuation shall be provided across east leg of this intersection US 50 (Ocean Gateway). The Inlet Isle Lane approaches shall also run concurrently.

2. A full-traffic-actuated, eight-phase controller with video interface and all necessary equipmentg 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. Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

5. APS will function as follows:

TO CROSS US 50 (OCEAN GATEWAY)

a. When pedestrian locates and presses the pushbutton for an extended time, the pushbutton unit will announce the following message " Wait to cross Ocean Gateway at Inlet Isle Lane."

b. When the WALK phase begins, the pushbutton unit will provide a rapid tick which will last for the duration of the WALK phase.

The contact persons for District #1 are as follows:

Mr. Gene Cofiell
Assistant District Engineer - Traffic
Phone: (410) 677-4040

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

Mr. Jimmy Wright
Assistant District Engineer - Maintenance
Phone: (410) 543-6715

Mr. Sonny Bailey
Chief Sign Shop
410-787-7670

Mr. Bruce Poole
Assistant District Engineer - Utility
Phone: (410) 677-4082

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

The power company representative is:

Rodney Bain
Conectiv
2530 N. Salisbury Blvd
Salisbury, MD 21802
Phone: 410 860-6242

EQUIPMENT LIST

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

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)	137 SF
	D-3(1) "Inlet Isle La." sign (variable x 16") dual faced mast arm.	2 EA
	D-3(1) "Ocean Gateway." sign (variable x 16") dual faced mast arm.	2 EA
	R3-5L "LEFT TURN ONLY" sign, (30" x 36") mast arm.	1 EA
	R3-5R "RIGHT TURN ONLY" sign, (30" x 36") mast arm.	3 EA
	R3-6 "LEFT TURN AND THRU" sign, (30" x 36") mast arm.	1 EA
	GUIDE SHIELD ASSEMBLY (36"x75") pole mounted. M3-2 "EAST"(30"X15") M1-4 "US 50"(36"X36") M6-1 "left arrow "(30"X24")	1 EA
	GUIDE SHIELD ASSEMBLY (36"x75") pole mounted. M3-4 "WEST"(30"X15") M1-4 "US 50"(36"X36") M6-1 "left arrow "(30"X24")	1 EA
	GUIDE SHIELD ASSEMBLY (24"x51") pole mounted. M3-2 "EAST"(24"X12") M1-4 "US 50"(24"X24") M6-1 "right arrow "(21"X15")	1 EA

EQUIPMENT LIST (CON'T)

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

ITEM NO.	DESCRIPTION	QUANTITY
	GUIDE SHIELD ASSEMBLY (24"x51") pole mounted. M3-4 "WEST"(24"X12") M1-4 "US 50"(24"X24") M6-1 "right arrow "(21"X15")	1 EA
	Pedestrian education R10-3(1) (Note: Sign to read "PUSHBUTTON TO CROSS OCEAN GATEWAY")	2 EA
	W11-2 "PEDESTRIAN CROSSING (SYMBOLIC)" sign, (30" x 30") ground mounted with hardware	1 EA
	W16-7P(L) "arrow (symbolic)" diagonal sign, (24" x 12") ground mounted.	1 EA

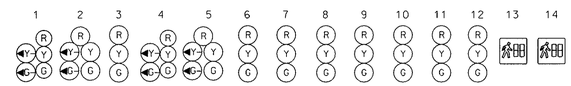
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1003	Maintenance of traffic per assignment.	3 EA
2002	Test Pit Excavation	3 C.Y.
5004	5" white or yellow heat applied permanent preformed thermoplastic pavement marking.	40 L.F.
5006	12" white heat applied permanent preformed thermoplastic pavement marking.	450 L.F.
5007	24" white heat applied permanent preformed thermoplastic pavement marking.	80 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	330 L.F.
6002	5" concrete sidewalk.	750 S.F.
6003	Detectable warning surface for curb ramps	130 S.F.
8001	2 wire Central Control unit	1 EA
8003	8" LED signal head section.	6 EA
8006	Any size lighting arm on signal pole with 250 watt HPS lamp & luminaire.	2 EA
8007	Audible/tactile pedestrian pushbutton station & signs.	2 EA
8013	LED 16" countdown pedestrian signal head.	2 EA
8016	Mast arm pole and 60' mast arm any "T" dimension	2 EA
8021	Remove and dispose of material & equipment per assignment.	1 EA
8022	Twin mast arm pole & 50'/60' mast arms any "T" dimension.	1 EA
8025	Video detection camera & cable up to 500'	4 EA
8030	Disconnect, pull back and reroute cable.	375 L.F.
8032	Schedule 80 rigid PVC conduit up to 4" - bored.	500 L.F.
8034	Schedule 80 rigid PVC conduit up to 4" - trenched.	300 L.F.
8035	Wood sign supports up to 4"x6".	25 L.F.
8036	Install overhead or ground mounted sign (including hardware).	137 S.F.
8037	Remove - install decorative brick sidewalk	70 S.F.
8038	No. 6 AWG stranded bare copper ground wire.	725 L.F.
8041	Metered service pedestal embedded.	1 EA
8043	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	100 L.F.
8045	Furnish and install electrical handhole.	4 EA
8050	12" LED signal head section.	38 EA
8054	Electrical cable - 2 conductor (No. 14 AWG).	625 L.F.
8056	Electrical cable - 5 conductor (No. 14 AWG).	850 L.F.
8057	Electrical cable - 7 conductor (No. 14 AWG).	2150 L.F.
8058	Electrical cable - 2 conductor (No. 12 AWG) TC.	460 L.F.
8065	Install controller and cabinet base mount.	1 EA

C. EQUIPMENT TO BE REMOVED

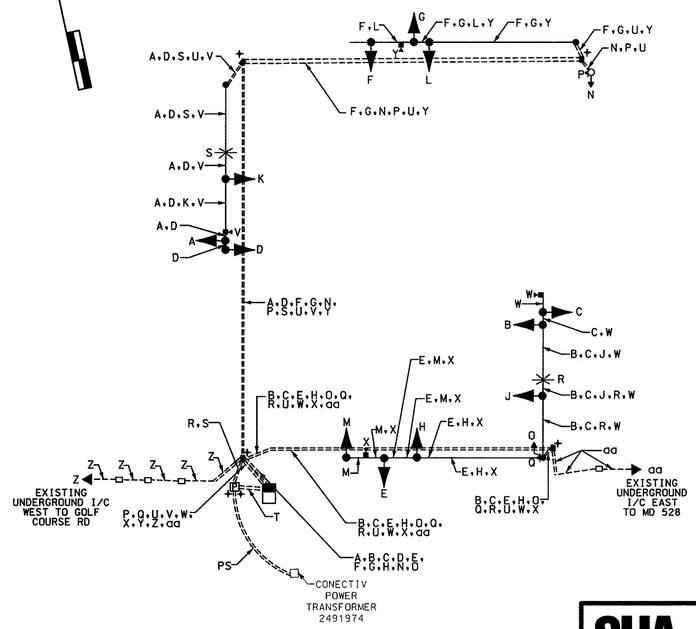
SHA Forces shall remove the controller and all auxiliary equipment from the controller cabinet. Contractor shall return existing video camera to the SHA Signal Shop. The cabinet and all other removed signal materials are to become the property of the contractor.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 & 5	◄G-/G	◄G-/G	R	◄G-/G	◄G-/G	R	R	R	R	R	R	R	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6														
PHASE 1 & 6	◄G-/G	◄G-/G	G	R	R	R	R	R	R	R	R	R	DW	DW
1 & 6 CHANGE	◄Y-/G	◄Y-/G	G	R	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 & 5	R	R	R	◄G-/G	◄G-/G	G	R	R	R	R	R	R	DW	DW
2 & 5 CHANGE	R	R	R	◄Y-/G	◄Y-/G	G	R	R	R	R	R	R	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW
PHASE 8 ALT	R	R	R	R	R	R	G	G	G	R	R	R	WK	WK
PED CLEAR / COUNTDOWN	R	R	R	R	R	R	G	G	G	R	R	R	FL/DW	FL/DW
8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	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

WIRING DIAGRAM



WIRING KEY

A, B, C, D, E, F, G, H — 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

K, L, M, N, O — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

P, Q — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

R, S — 2-CONDUCTOR ELECTRICAL TRAY CABLE (NO. 12 A.W.G)

T - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

U - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

V, W, X, Y — CONTROL CABLE (CAMERA TO CONTROLLER) UP TO 500'

Z, aa — EXISTING 12-PAIR INTERCONNECT CABLE

PS - PROPOSED UNDERGROUND SERVICE TO BE INSTALLED BY CONECTIV

+ - GROUND ROD

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. NW.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-6637
5595AGI.DGN T-186

PLOTTED: $DATETIME$
FILE: $FILE$

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

US 50 (Ocean Gateway) and Inlet Isle Lane

WEST OCEAN CITY, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 12/16/08 CONTRACT NO. XX4435185

DESIGNED BY James Allen Jr. COUNTY Worcester
DRAWN BY James Allen Jr. LOGMILE 23005013.51
CHECKED BY TIMS NO. J143
F.A.P. NO. TOD NO.

TS NO. 2424E | DRAWING NO. 2 OF 2 | SHEET NO. OF

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