DRILL HOLES

BORDER REV: DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a battery backup system and meter pedestal for the existing Traffic Control signal at the intersection of US 1 (Wahington Blvd) and MD 175 (Waterloo Rd) in Howard County. The signal heads shall be replaced with LED signal heads and Countdown pedestrian signals. US 1 (Washington Blvd Ave) is assumed to run in a north - south direction.

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA eight-phase, semi-actuated mode, with the US 1 (Wahington Blvd) approaches running concurrently. Exclusive left turn phases shall continue to be provided for both approaches of US 1 (Wahington Blvd). The pedestrian phase with pushbutton actuation across the south leg of US 1 (Wahington Blvd) shall now be a Countdown pedestrian phase. The pedestrian phases across the MD 175 (Waterloo Rd) approaches shall now be Countdown pedestrian phases on recall. The Exclusive left turn phases for both approaches of MD 175 (Waterloo Rd) shall continue to be provided.

2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

3. A new NEMA size "5" base-mounted cabinet with battery back-up shall be installed at this intersection.

III. SPECIAL NOTES

1. 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.

The contact persons for District #7 are as follows:

Mr. John Concannon
Assistant District Engineer - Traffic
Phone: (310) 624-8141

Mr. Ray Johnson
Assistant District Engineer - Maintenance
Phone: (310) 624-8106

Ms Andrea Abend
District Engineer - Utility
Phone: (301) 624-8115

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

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

Mr Sony Bailey
Sign Shop
410-787-7670

The power company representative is:

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

DRILL HOLES

EQUIPMENT LIST

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

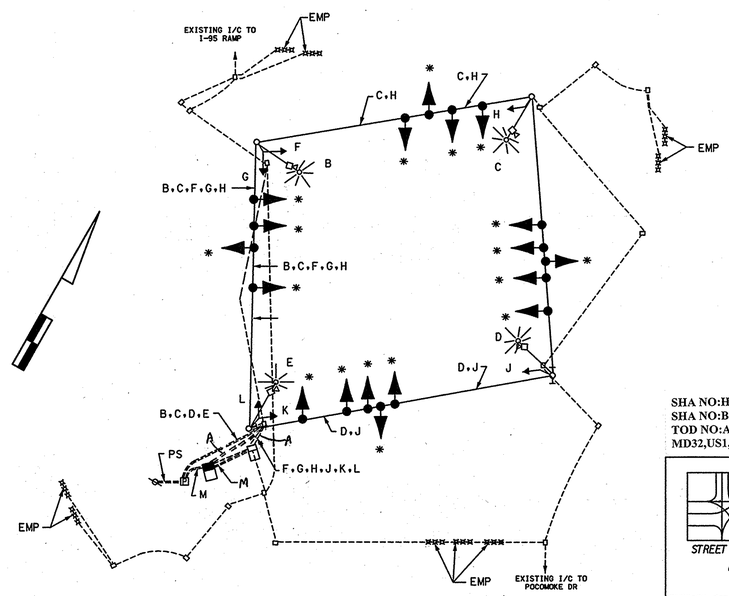
TEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	6 SF
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS WASHINGTON BLVD) (9" X 15").	2 EA
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS WATERLOO RD) (9" X 15").	4 EA

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

TEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic (paid for under 5353AGI)	
2002	Test Pit Excavation	1 C.Y.
8014	LED 16" countdown pedestrian signal head.	6 EA
8015	LED signal head modules	54 EA
8022	Remove and dispose of existing material and equipment (paid for under 5353AGI)	
8036	Schedule 80 rigid PVC conduit up tp 4" - trenched.	55 L.F.
8040	Install overhead or ground mounted sign (including hardware).	6 S.F.
8044	Metered service pedestal embedded.	1 EA
8046	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	75 L.F.
8057	Electrical cable - 5 conductor (No. 14 AWG).	810 L.F.
8058	Electrical cable - 7 conductor (No. 14 AWG).	20 L.F.
8059	Electrical cable - 2 conductor (No. 12 AWG) TC.	650 L.F.
8074A	Clary Universal Power Supply with NEMA size 5 cabinet.	1 EA

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PHASE 1 & 5	G	G	R	R	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																								
PHASE 1 & 6	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	WK	WK	DW	DW
1 & 6 CHANGE	R	R	R	R	Y	Y	Y	G	G	R	R	R	R	R	R	R	R	R	DW	DW	WK	WK	DW	DW
PHASE 2 & 5	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	WK	WK
2 & 5 CHANGE	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	WK	WK
PHASE 2 & 6	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R	R	R	R	DW	DW	WK	WK	WK	WK
PED CLEAR / COUNTDOWN	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
2 & 6 CHANGE	R	R	Y	Y	R	R	R	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 & 7	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	G	R	R	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 3 & 8, 4 & 7 OR 4 & 8																								
PHASE 3 & 8	R	R	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW	DW	DW
3 & 8 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	G	G	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 7	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	DW	DW
4 & 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	G	G	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 & 7 ALT	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	WK	WK	DW	DW	DW	DW
4 & 7 CHANGE ALT	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	G	G	WK	WK	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	WK	WK	DW	DW	DW	DW
PED CLEAR / COUNTDOWN	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	FL/DW	FL/DW	DW	DW	DW	DW
4 & 8 CHANGE ALT	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK



WIRING KEY

A - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G) FOR ALARM

B, C, D, E } 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G)

F, G, H, J, K, L } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

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

EMP - EXISTING MICROPROBE

* - USE EXISTING WIRING FOR SIGNAL

PS - PROPOSED UNDERGROUND SERVICE TO BE INSTALLED BY BGE

+ - GROUND ROD

SHA NO:HO407A53/B53/C53
SHA NO:BW602M84
TOD NO:AX142-09
MD32,US1,M103,MD108,MD175

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

5353cGI.dgn

PLOTTED: $DATETIME$
FILE: $FILE$

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

US 1 (WASH. BLVD)
AND MD 175 (WATERLOO ROAD)
JESSUP, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE	DATE 8/10/07	CONTRACT NO.	
DESIGNED BY JWA		COUNTY HOWARD	
DRAWN BY RC		LOGMILE 13000105.59	
CHECKED BY		TIMS NO. I544	
F.A.P. NO.		TOD NO.	
TS NO. 199GGI	DRAWING NO. 2 OF 2	SHEET NO. OF	

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