DRILL HOLES

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BORDER REV DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 157 (Merritt Blvd) and German Hill Road in Baltimore County. Countdown pedestrian signal with audible pushbuttons and new crosswalks shall be istalled at this location. MD 157 (Merritt Blvd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA six-phase, full-actuated mode, with the MD 157 (Merritt Blvd) approaches running concurrently. The Exclusive left turn phases for both approaches of MD 157 (Merritt Blvd) shall remain in operation. A new Countdown pedestrian phase with pushbutton audible pushbuttons across the west leg of German Hill Road shall be on recall. A new Countdown pedestrian phase with audible pushbutton actuation across the south leg of MD 157 (Merritt Blvd) shall be provided. The pedestrian across the north leg of MD 157 (Merritt Blvd) shall now be a Countdown pedesrian phase with audible pushbutton actuation. The German Hill Road approaches shall continue to run as a side street split phase

2. The existing full-traffic-actuated, eight-phase controller with video interface and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized 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, 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) 787-7650 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:

FOR MD 157 (MERRITT BLVD)

a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross Merritt Boulevard."

b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

FOR GERMAN HILL ROAD

a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross German Hill Road."

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 #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
Phone: (410) 321-2781

Mr. Steve Marciszewski
Assistant District Engineer - Maintenance
Phone: (410) 321-2761

Mr. Michael Pasquariello
Assistant District Engineer - Utility
Phone: (410) 321-2841

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

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

Mr. Sonny Bailey
Sign Shop
410-787-7670

EQUIPMENT LIST

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

ITEM NO.	DESCRIPTION	QUANTITY	
973023	SHEET ALUMINIUM SIGNS	6	SF
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS MERRITT BLVD") (9"X15")	4	EA
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS GERMAN HILL RD") (9"X15")	2	EA

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY	
120662	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH	250	LF
203030	TEST PIT EXCAVATION	6	CY
585621	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	620	LF
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	120	LF
800000A	AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	6	EA
800000A	2-WIRE CONTROL UNIT	1	EA
800000A	16" COUNTDOWN PEDESTRIAN SIGNAL HEAD	6	EA
801004	CONCRETE FOR SIGNAL FOUNDATION	4.2	CY
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	100	LF
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	70	LF
813015	INSTALL OVERHEAD SIGN	6	SF
818004	10 FOOT BREAKAWAY PEDESTAL POLE	6	EA
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	850	LF
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	900	LF
873001	REMOVE AND SALVAGE EXISTING EQUIPMENT	1	LS

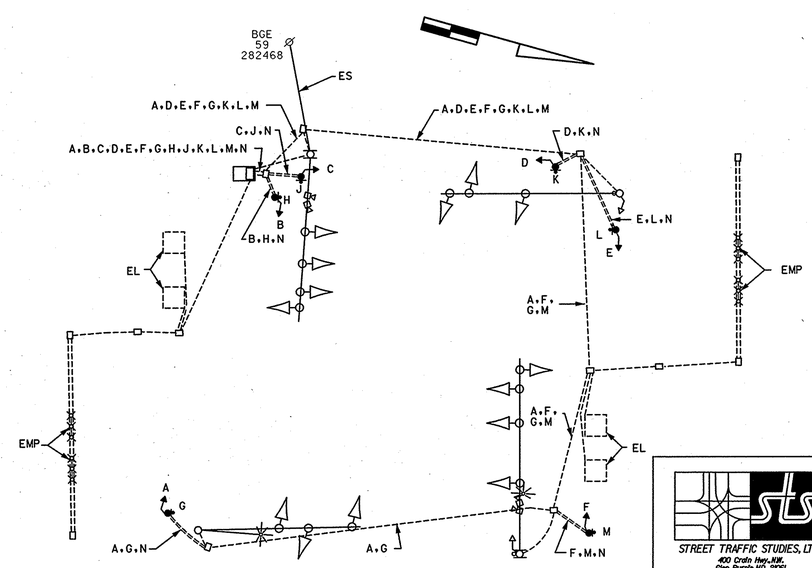
C. EQUIPMENT TO BE REMOVED

ANY EQUIPMENT REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 AND 5	←G–	←G–	R	R	←G–	←G–	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																				
PHASE 1 AND 6	←G–	←G–	G	G	←R–	←R–	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←Y–	←Y–	G	G	←R–	←R–	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←R–	←R–	R	R	←G–	←G–	G	G	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW
2 AND 5 CHANGE	←R–	←R–	R	R	←Y–	←Y–	G	G	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW
PHASE 2 AND 6	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEAR /COUNTDOWN	←R–	←R	G	G	←R–	←R–	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 CHANGE	←R–	←R–	Y	Y	←R–	←R–	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	←R–	←R–	R	R	←R–	←R–	R	R	R	R	R	G ←G–	G ←G–	G	DW	DW	DW	DW	DW	DW
PHASE 3 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4	←R–	←R–	R	R	←R–	←R–	R	R	G ←G–	G ←G–	G	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	←R–	←R	R	R	←R–	←R–	R	R	R	R	R	G ←G–	G ←G–	G	DW	DW	WK	DW	DW	WK
PED CLEARANCE	←R–	←R	R	R	←R–	←R–	R	R	R	R	R	G ←G–	G ←G–	G	DW	DW	FL/DW	DW	DW	FL/DW
PHASE 3 ALT CHANGE	←R–	←R	R	R	←R–	←R–	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R–	←R–	R	R	←R–	←R–	R	R	G ←G–	G ←G–	G	R	R	R	DW	DW	DW	WK	WK	DW
PED CLEARANCE	←R–	←R–	R	R	←R–	←R–	R	R	G ←G–	G ←G–	G	R	R	R	DW	DW	DW	FL/DW	FL/DW	DW
PHASE 4 ALT CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/←R-	FL/←R-	FL/Y	FL/Y	FL/←R-	FL/←R-	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A, B, C, D, E — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

G, H, J, K, L, M — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

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

EMP - MICROLOOP LEAD-IN CABLE

EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING

ES - EXISTING OVERHEAD SERVICE TO BE INSTALLED BY BGE

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 157 (MERRITT BOULEVARD) AT GERMAN HILL ROAD

GENERAL INFORMATION SHEET

SCALE NONE DATE 5/16/07 CONTRACT NO.

DESIGNED BY JWA
DRAWN BY RC
CHECKED BY
F.A.P. NO.

COUNTY BALTIMORE
LOGMILE 0315704.26
TIMS NO. I-450
TOD NO.

TS NO. 4602 G | DRAWING NO. 2 OF 2 | SHEET NO. OF

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

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PLOTTED: $DATETIME$
FILE: $FILE$

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