PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting and interconnect at the intersection of MD 118 (Germantown Rd) and Richter Farm Rd in Montgomery County. MD 118 (Germantown Rd) is assumed to run a north-south direction. Vehicle detection and sampling is provided by existing video detection .

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA seven-phase, semi-actuated mode, with theMD 118 (Germantown Rd) approaches running concurrently. Exclusive/Permissive left turn phases shall continue to be provided for both approaches of MD 118 (Germantown Rd). The pedestrian phase with pushbutton actuation shall across the north leg of MD 118 (Germantown Rd) shall remain in operation. A new pedestrian phase across the south leg of MD 118 (Germantown Rd) shall be provided. The pedestrian phases across Richter Farm Rd shall remain on recall. Farside sampling stations shall be provided on both legs of MD 118 (Germantown Rd) at this intersection. An Exclusive/Permissive left turn phase shall remain in operation for the westbound approach of Richter farm Rd. The Richter Farm Rd approaches shall also continue to run concurrently.

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

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.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	MAINTENANCE OF TRAFFIC	1 EA
5005	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	320 LF
8002	12 IN PED SIG HEAD SECTION	4 EA
8019	REM & DISPOSE MAT & EQUIP PER ASSIGN	1 EA
8029	WOOD SIGN SUPPORTS 4 INCH X 6 INCH	40 LF
8055	INSTALL GROUND MOUNT SIGN	41 SF
8082	ELECTRICAL CABLE - 2 CONDUCTOR NO. 14 AWG	430 LF
8083	ELECTRICAL CABLE - 3 CONDUCTOR NO. 14 AWG	440 LF
8089	PUSHBUTTON AND SIGN (NOTE: SIGN TO READ PUSH BUTTON TO CROSS GERMANTOWN RD)	2 EA

The contact persons for District #3 (Montgomery County) are as follows:

Mr. Lee Starkloff
Assistant District Engineer - Traffic
Phone: (301) 513-7318

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350

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

SEQUENCE OF OPERATION SHEET

NORBECK ROAD RUNS IN AN EAST-WEST DIRECTION

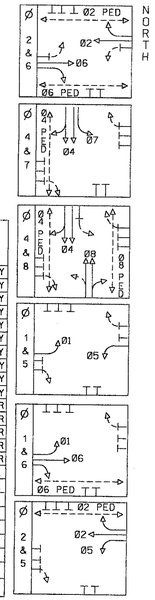
TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

INTERSECTION: MD 118 (GERMANTOWN RD) AND RICHTER FARM RD

NO. _____

SIGNAL HEAD INDICATIONS					
SIGNAL NO.	1,2,6,7	5,10,13,14,15	3,4,8,9 11,12		16-23
TOTAL:	4	5	6		8
LEGEND					
▭ OPTICALLY LIMITED					
R RED		R	R	R	
Y YELLOW	Y	Y	◄Y Y	Y	
G GREEN		G	◄G G	G	
◄ ARROW				◄G	
F FLASHING	12"	12"	12"	12"	9"or12" X

PHASING

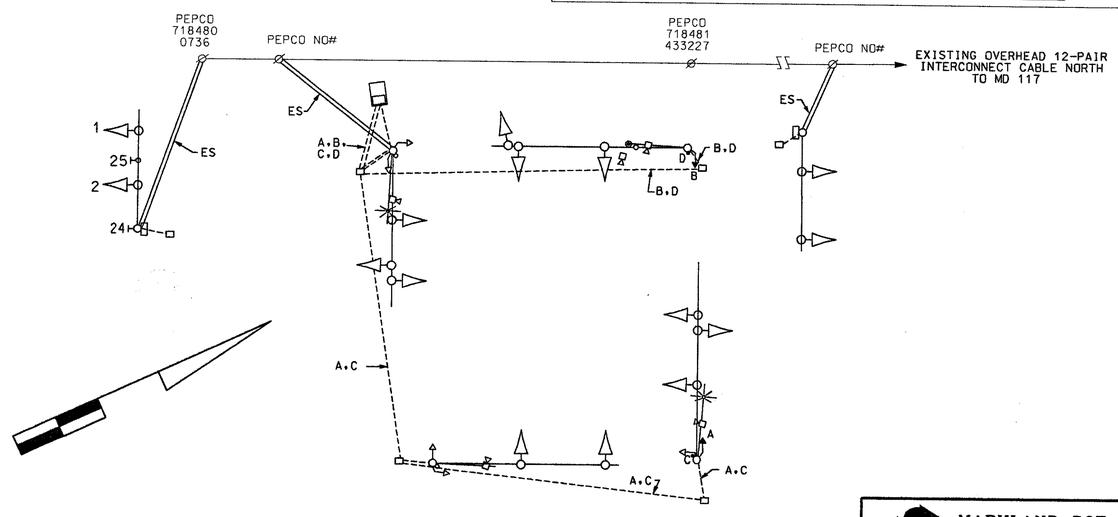


SEQUENCE OF OPERATION

SIGNAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	FLASH
1	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y
2	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y
3	G	G	Y	R	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	◄G/G	◄Y/G	G	R	R	R	FL/Y
4	G	G	Y	R	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	◄G/G	◄Y/G	G	R	R	R	FL/Y
5	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	FL/Y
6	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y
7	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y
8	G	G	Y	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	R	R	R	◄G/G	◄Y/G	G	FL/Y	FL/Y
9	G	G	Y	R	R	R	R	R	R	R	R	◄G/R	◄Y/R	R	R	R	R	◄G/G	◄Y/G	G	FL/Y	FL/Y
10	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	FL/Y	FL/Y
11	R	R	R	R	◄G/G	◄Y/G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
12	R	R	R	R	◄G/G	◄Y/G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
13	R	R	R	R	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
14	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
15	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
16	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
17	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DW	DW	DW	DARK
18	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DW	DW	DW	DARK
19	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
20	DW	DW	DW	DW	WK	WK	WK	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
21	DW	DW	DW	DW	WK	WK	WK	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
22	DW	DW	DW	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
23	DW	DW	DW	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
PHASE	2 & 6			ALL RED	4 & 7		ALL RED	4 & 8				ALL RED	1 & 5		ALL RED	1 & 6		ALL RED	2 & 5		ALL RED	

NOTES:

SUBMITTED: _____ CHECKED: _____ APPROVED: _____
IN SERVICE BY: _____ DATE: _____ TIME: _____



WIRING KEY

A, B } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

C, D } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

ES- EXISTING OVERHEAD SERVICE TO BE MAINTAINEDED BY PEPCO

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. N.W.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-0537

4672g1.DGN WT-55

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 118 (GERMANTOWN ROAD)
AND RICHTER FARM ROAD
GENERAL INFORMATION

DRAWN BY: R.C.	F.A.P. NO.		TS NO. 4102	SHEET NO. 2 OF 2
CHECKED BY: J.A.	S.H.A. NO. AT3565185			
SCALE: NONE	COUNTY: MONTGOMERY		T.I.M.S. NO. G-510	
DATE: 8/18/04	LOG MILE: 15011804.64			

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