PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES A TRAFFIC SIGNAL MODIFICATION IN CONJUNCTION WITH GEOMETRIC IMPROVEMENTS ALONG EASTBOUND WISTERIA DRIVE TO ACCOMMODATE DUAL LEFT TURN LANES. GERMANTOWN ROAD (MD 118) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA EIGHT-PHASE, FULL TRAFFIC ACTUATED MODE. GERMANTOWN ROAD (MD 118) WILL OPERATE WITH EXCLUSIVE/PERMISSIVE PHASING AND WISTERIA DRIVE WILL OPERATE WITH EXCLUSIVE PHASING.

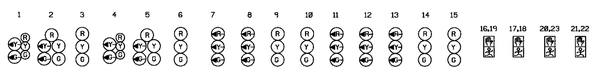
III. CONTROLLER REQUIREMENTS

UTILIZE EXISTING FULL-TRAFFIC ACTUATED, EIGHT PHASE CONTROLLER WITH SYSTEM PACKAGE, AND ALL MISCELLANEOUS EQUIPMENT HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

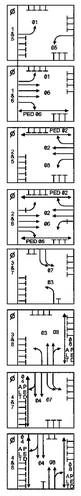
IV. SPECIAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00-13, 104.00-19, 104.00-21-104.00-24, 104.17-01, 104.17-02, 104.39-02, 104.41-02, 104.48-01, 104.48-02, 104.49-01, 104.49-02, 104.81-01, 104.81-02.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING ALL CABLE TO THE CABINET AND SHALL PROPERLY LABEL EACH CABLE.
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.

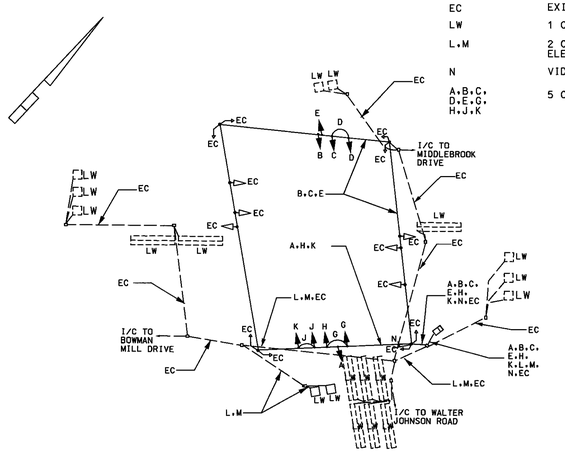
PHASE CHART AND PHASING DIAGRAM



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16,19	17,18	20,23	21,22
Phase 1 & 5	◄G-R	◄G-R	R	◄G-R	◄G-R	R	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	DW	DW	DW	DW
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6																		
Phase 1 & 6	◄G-G	◄G-G	G	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	DW	W	DW	DW
1 Change	◄Y-G	◄Y-G	G	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	DW	W	DW	DW
Phase 2 & 5	R	R	R	◄G-G	◄G-G	G	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	W	DW	DW	DW
5 Change	R	R	R	◄Y-G	◄Y-G	G	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	W	DW	DW	DW
Phase 2 & 6	G	G	G	G	G	G	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	W	W	DW	DW
Ped. Clear	G	G	G	G	G	G	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	FL/DW	FL/DW	DW	DW
2 & 6 Change	Y	Y	Y	Y	Y	Y	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	DW	DW	DW	DW
Phase 3 & 7	R	R	R	R	R	R	◄G-	◄G-	R	R	◄G-	◄G-	◄G-	R	R	DW	DW	DW	DW
3 & 7 Change	THE CONTROLLER MAY SKIP TO PHASES 3 & 8 OR 4 & 7 OR 4 & 8																		
Phase 3 & 8	R	R	R	R	R	R	◄G-	◄G-	G	G	◄R-	◄R-	◄R-	R	R	DW	DW	DW	DW
Phase 3 & 8 Alt.	R	R	R	R	R	R	◄G-	◄G-	G	G	◄R-	◄R-	◄R-	R	R	DW	DW	DW	W
3 Change	R	R	R	R	R	R	◄Y-	◄Y-	G	G	◄R-	◄R-	◄R-	R	R	DW	DW	DW	W
Phase 4 & 7	R	R	R	R	R	R	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	G	G	DW	DW	DW	DW
Phase 4 & 7 Alt.	R	R	R	R	R	R	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	G	G	DW	DW	W	DW
7 Change	R	R	R	R	R	R	◄R-	◄R-	R	R	◄Y-	◄Y-	◄Y-	G	G	DW	DW	W	DW
Phase 4 & 8	R	R	R	R	R	R	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	G	G	DW	DW	DW	DW
4 & 8 Change	R	R	R	R	R	R	◄R-	◄R-	Y	Y	◄R-	◄R-	◄R-	Y	Y	DW	DW	DW	DW
4 & 8 Alt.	R	R	R	R	R	R	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	G	G	DW	DW	W	W
Ped. Clear	R	R	R	R	R	R	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	G	G	DW	DW	FL/DW	FL/DW
4 & 8 Change	R	R	R	R	R	R	◄R-	◄R-	Y	Y	◄R-	◄R-	◄R-	Y	Y	DW	DW	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	FL/R	FL/R	FL/R	Dark	Dark	Dark	Dark



WIRING DIAGRAM



WIRING DIAGRAM

EC	EXISTING CABLE
LW	1 CONDUCTOR ELECTRICAL CABLE (#14 AWG)
L,M	2 CONDUCTOR ALUMINUM SHIELDED ELECTRICAL CABLE (#14 AWG)
N	VIDEO DETECTION CONTROL CABLE
A,B,C, D,E,G, H,J,K	5 CONDUCTOR ELECTRICAL CABLE (#14 AWG)

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE STATE HIGHWAY ADMINISTRATION

QUANTITY	UNITS	SPECIFICATION SECTION	DESCRIPTION
	NONE		

EQUIPMENT LIST "B"

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

QUANTITY	UNITS	SPECIFICATION SECTION	DESCRIPTION
1	LS	104	Maintenance of Traffic.
1	LS	108	Mobilization.
1	EA	800	Video detection camera.
1	EA	800	Video detection control cable, 250'
1	EA	800	Video interface equipment with mini-hub and all associated cables.
5	LF	805	1" liquid tight flexible non-metallic electrical conduit.
2	EA	811	Remove electrical handhole
1	EA	811	Electrical handhole
2	EA	803	Spanwire mounted sign
27	EA	814	12 in. vehicle signal head section
260	LF	810	2 Conductor shielded electrical cable (#14 AWG)
150	LF	810	1 Conductor electrical cable (#14 AWG)
75	LF	815	Saw cut for loop detectors
1150	LF	810	5-conductor (#14 AWG) electrical cable
1	LS	SP	Remove and dispose of existing equipment
15	SF	800	Furnish sheet aluminum signs consisting of: 2 ea. R3-5(l) 30"x36"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION. 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

QUANTITY	UNITS	SPECIFICATION SECTION	DESCRIPTION
	NONE		

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNAL MODIFICATION PLAN
GERMANTOWN ROAD (MD 118)
AT WISTERIA DRIVE

DRAWN BY: VLG/WT	F.A.P. NO. ---	TS NO. 2002E - GI	SHEET NO.
CHECKED BY: CT/WT	S.H.A. NO. 23854T2502821		
SCALE: 1":20'	COUNTY: MONTGOMERY	T.I.M.S. NO. G194	2 OF 2
DATE: 04-21-04	LOG MILE: 15011805.32		