PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 28 (Key West Ave.) and MD 119 (Great Seneca Hwy.) in Montgomery County, Maryland. MD 28 is considered to run in an east/west direction.

The median on the west leg (MD 28) will be modified to accomodate an eastbound double left turn movement.

II. INTERSECTION OPERATION

The existing cabinet and controller shall be utilized. Two (2) new NEMA load switches shall be installed.

The intersection shall be modified to operate in a NEMA eight (8) phase, semi-traffic-actuated mode. There will be an exclusive left turn phase for both the east and westbound movements of MD 28. The MD 28 through movements operate concurrently with concurrent pedestrian movements across both the north and south legs of the intersection. There is an exclusive left turn phase for both the north and southbound movements of MD 119. The MD 119 through movements operate concurrently with an actuated pedestrian movement across both the east and west legs of the intersection.

III. SPECIAL NOTES

The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.

EQUIPMENT LIST

A. S.H.A. furnished equipment material.

None.

B. Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
2	EA		NEMA load switch.
1	EA	818	4 ft. pedestal pole with breakaway base.
5	EA	814	12 in., one-way, three section (RA,YA,GA) adjustable black faced traffic signal head with span wire mounting hardware and tunnel visors.
4	EA	813	30 in. x 36 in. R 3-5(L) sign with span wire mounting hardware.
1	EA		Pedestrian pushbutton and sign, to read "Push Button To Cross Key West Ave."
1	EA	811	Handhole.
590	LF	815	Sawcut for signal loop detector.
1315	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
395	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
180	LF	810	2-conductor electircal cable (No. 14 A.W.G.)
930	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
15	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
15	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
145	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
265	LF	549	12 in. wide HAPPTPM - white for crosswalk.
65	LF	549	24 in. wide HAPPTPM - white for stop line.
30	LF	812	4 in. x 4 in. wood sign support.
2	EA	---	Relocate existing ground mounted sign.
Lump Sum	LS	---	Pull back/ reinstall existing signal cables. (Approximately 1200 LF/ 10 pieces)
Lump Sum	LS	---	Remove and dispose of existing signal equipment.
Lump Sum	LS	---	As-built for S.H.A. [on CADD].

CONTACT LIST

The contact persons for District #3 are as follows:

MO - Mr. Lee Storkloff
Assistant District Engineer - Traffic
MO - 301-513-7318

Mr. Augie Rebish
Assistant District Engineer - Utility
301-513-7350

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
301-513-7304

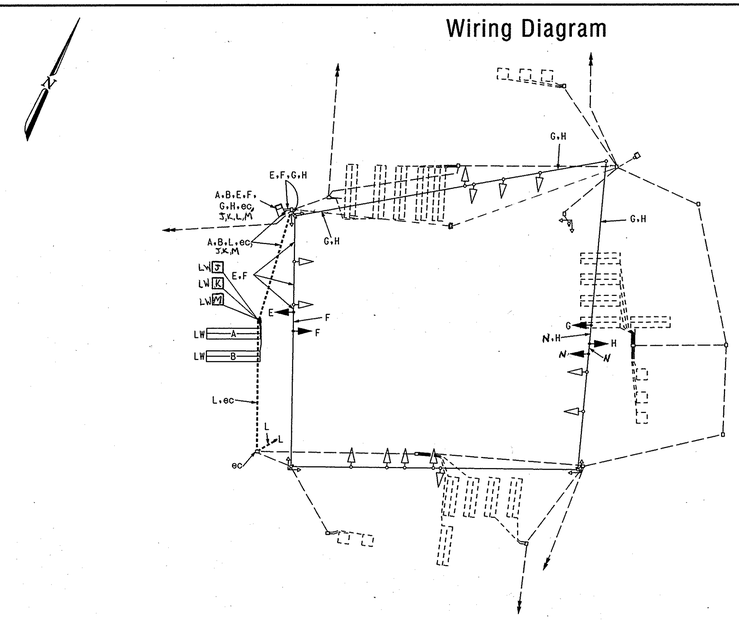
Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

Dr. Wilhelm DerMinassian
Montgomery County DPW
240-777-3795

Phase Chart

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19-22	23-26
Phase 1 & 5	G	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6																				
Phase 1 & 6	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
1 Change	Y	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW
Phase 2 & 5	R	R	R	R	R	G	G	G	G	R	R	G	G	R	R	R	R	R	DW	DW
5 Change	R	R	R	R	R	Y	Y	G	G	R	R	G	G	R	R	R	R	R	DW	DW
Phase 2 & 6	R	R	R	G	G	R	R	G	G	R	R	G	G	R	R	R	R	R	WK	DW
Ped Clearance	R	R	R	G	G	R	R	G	G	R	R	G	G	R	R	R	R	R	FL/DW	DW
2 & 6 Change	R	R	R	Y	Y	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	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
3 & 7 Change to Phase 3 & 8 or Phase 4 & 7 or Phase 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
3 Change	R	R	R	R	R	R	R	R	R	Y	Y	G	G	R	R	R	R	R	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
7 Change	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	G	G	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
4 & 8 Change	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	R	Y	Y	DW	DW
Phase Alt 4 & Alt 8	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	DW	WK
Ped Clearance	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	DW	FL/DW
Alt 4 & Alt 8 Change	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	R	Y	Y	DW	DW
Flashing Operation	FL/R	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	FL/R	FL/R	FL/R	DARK	DARK

Wiring Diagram



A, B, J, K, L, M } 2-Conductor Cable (Aluminum Shielded)

E, F, G, H, N } 7-Conductor Electrical Cable (No. 14 A.W.G.)

L — 2-Conductor Electrical Cable (No. 14 A.W.G.)

ec — Existing signal cables. (approximately 8 pieces)

LW — Loop Detector Wire (No. 14 A.W.G.) in Flexible Tubing

Revision "E"

The Traffic Group
The Traffic Group, Inc.
410-931-6600
Fax 410-931-6601

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information Plan)
MD 28 (Key West Ave.) at MD 119 (Great Seneca Hwy.)

DRAWN BY:	J. Storck	F.A.P. NO.	N/A	TS NO. 3803E-GI	SHEET NO. 2 OF 2
CHECKED BY:		S.H.A. NO.	BW996M82		
SCALE:	N/A	COUNTY:	Montgomery	T.I.M.S. NO. G524	
DATE:	August, 2005	LOG MILE:	15002.818.62		

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