PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 64 (JEFFERSON BOULEVERD) AT EASTERN BOULEVARD IN WASHINGTON COUNTY. MD 64 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE EXISTING SYSTEM CONTROLLER HOUSED IN A POLE MOUNTED CABINET SHALL BE UTILIZED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 8 COUNT NEMA PHASING.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. GEORGE H. SMALL, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 729-8444
MR. JOHN TRUE, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 729-8140
MR. ANTHONY CRAWFORD, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8455
MR. ROBERT ROWAN, DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8480
MR. SONNY BAILEY, CHIEF, SIGNAL OPERATIONS
PHONE: (410) 787-7676

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

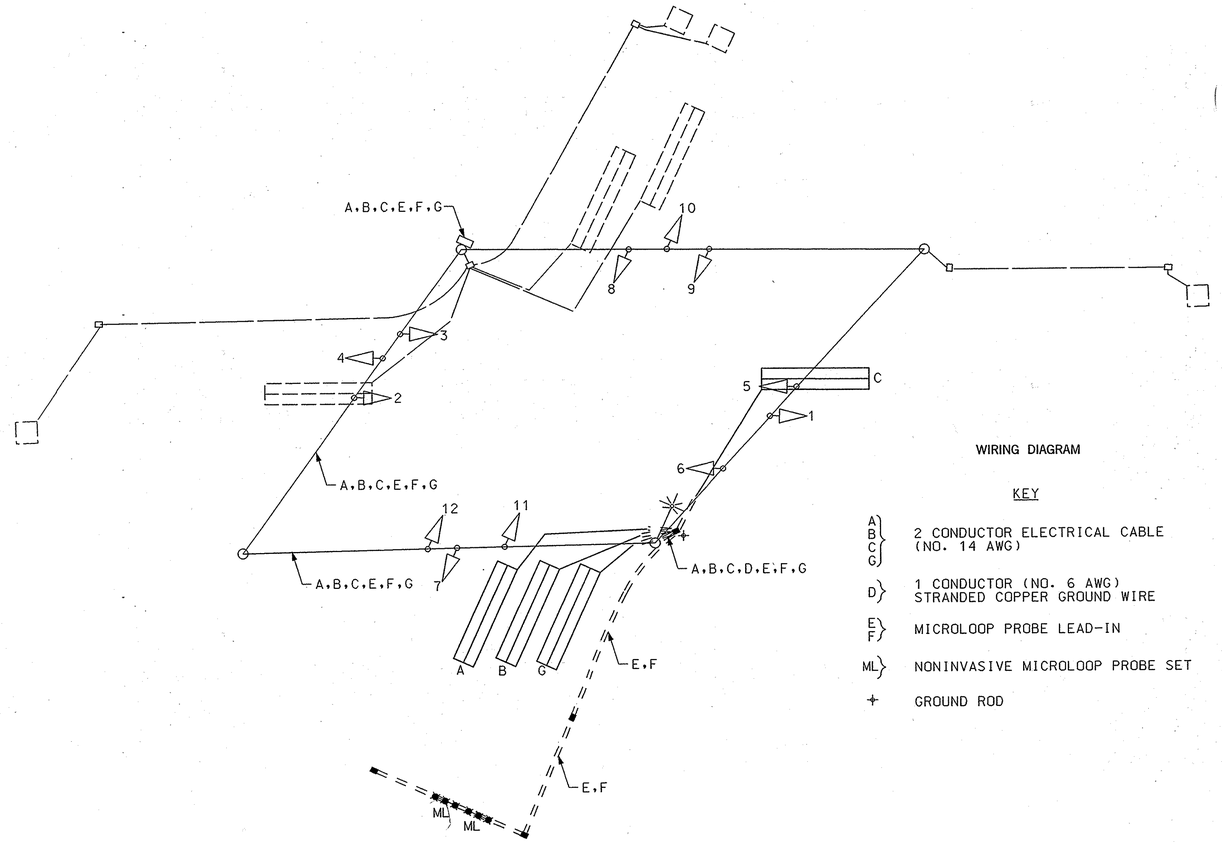
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:	SF	132
	R3-5 (30"X36") SPAN WIRE MOUNT	EA	5
	D-3(2) (VAR. x 16") SPAN WIRE MOUNT	EA	4
	GUIDE SHIELD ASSEMBLY (24"X51")	EA	2
	GUIDE SHIELD ASSEMBLY (36"X75")	EA	2
	M1-5 (24"X24") GROUND MOUNT	EA	2
	M2-1 (21"X15") GROUND MOUNT	EA	2

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
585624	24 INCH HEAT APPL. WHITE PERMANENT PREFORMED THERMO. PAVEMENT MARKING	LF	40
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1
801104	WOOD SIGN SUPPORTS 4 INCH X 4 INCH	LF	30
801607	INSTALL SHEET ALUMINUM SIGN	SF	132
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	50
805011	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE	LF	45
805115	3 INCH SCHED. 80 PVC CONDUIT-BORED	LF	75
805135	3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	250
805150	3 INCH SCHED. 80 PVC CONDUIT-SLOTTED	LF	60
810605	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE	EA	2
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	4
837001	GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH	EA	1
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	875
862101	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)	LF	1900
862102	SAWCUT FOR SIGNAL (LOOP DETECTOR)	LF	520

C. ALL REMOVED SIGNAL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		



WIRING DIAGRAM

KEY

A, B, C, G — 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
D — 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
E, F — MICROLOOP PROBE LEAD-IN
ML — NONINVASIVE MICROLOOP PROBE SET
+ — GROUND ROD

PHASE CHART

PHASE	1+5			1+6			2+5			2+6			3+7			3+8			4+7			4+8			EMERGENCY FLASH
INTERVAL	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
NOTE: PHASE 1+5 MAY CHANGE TO PHASE 1+6 OR PHASE 2+5 PHASE 3+7 MAY CHANGE TO PHASE 3+4 OR PHASE 4+7																									
Fixed		4	1								5	1		4	1								5	1	
Minimum	5									10			5									15			
Added Initial																									
Max. Initial																									
Passage	3									5			3									5			
Time to Reduce																									
Time Before Red.																									
Min. Gap																									
Max. I	15									26			17									42			
Walk																									
Ped Clear																									
Memory	NON-LOCK									NON-LOCK			NON-LOCK									MIN-RECALL			

OFFSET = 77 SECONDS FROM MASTER CONTROLLER

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 AND 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	R	R	R	←G/G	←G/G	G	R	R	R	R	R	R
1 AND 6 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	R	R
PHASE 2 AND 5	←G/G	←G/G	G	R	R	R	R	R	R	R	R	R
2 AND 5 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3 AND 7	R	R	R	R	R	R	←G/R	←G/R	R	←G/R	←G/R	R
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8												
PHASE 3 AND 8	R	R	R	R	R	R	←G/G	←G/G	G	R	R	R
3 AND 8 CHANGE	R	R	R	R	R	R	←Y/G	←Y/G	G	R	R	R
PHASE 4 AND 7	R	R	R	R	R	R	R	R	R	←G/G	←G/G	G
4 AND 7 CHANGE	R	R	R	R	R	R	R	R	R	←Y/G	←Y/G	G
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
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

JOHNSON, MIRMIRAN & THOMPSON
Engineering A Brighter Future

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 64 (JEFFERSON BOULEVARD) AT EASTERN BOULEVARD

TRAFFIC SIGNAL PLAN

REVISIONS

A 191	ASBUILT, ADD EP LEFT TURN PHASING FOR SIDE ROAD.	
B 599 JAH	ADD NEAR SIDE 5-SECTION SIGNALS ON ALL APPROACHES.	TIMS D386
C 506 DSU	ADD NEW CONDUIT AND LOOPS SW QUAD DUE TO EASTERN BLVD WIDENING.	

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE REDRAWN 1-10-91 CONTRACT NO. WAXXXXXXX

DESIGNED BY
DRAWN BY BRUCE THOMPSON TZ
CHECKED BY
FAP NO.

COUNTY WASHINGTON
LOGMILE 210064011.17
TIMS NO. 1403
TOD NO.

TS NO. 2123 C | DRAWING - OF | SHEET NO. 48 OF 79

PLOTTED: Thursday, May 17, 2007 AT 06:55 PM
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BY: FARVER