



PAVEMENT MARKING LEGEND

A. INSTALL 5 IN. SOLID WHITE PAVEMENT MARKING
 B. INSTALL 5 IN. SKIP WHITE PAVEMENT MARKING (3 FT. LINE-9 FT. GAP)
 C. INSTALL PAVEMENT MARKING ARROW
 D. REMOVE EXISTING PAVEMENT MARKING
 E. INSTALL 5 IN. SKIP WHITE PAVEMENT MARKING LINE (10' LINE- 30' GAP)

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 650 AND BONIFANT ROAD /GOOD HOPE ROAD IN MONTGOMERY COUNTY. MD 650 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA EIGHT-PHASE, SEMI-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR ALL APPROACHES. THE INTERSECTION WILL NOW OPERATE IN A NEMA SIX-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR THE MD 650 APPROACHES AND SIDE STREET SPLIT PHASING. THE ALTERNATE PEDESTRIAN PHASE ON THE NORTH LEG OF MD 650 AND THE CONCURRENT PEDESTRIAN PHASES ACROSS EAST AND WEST LEGS OF THE INTERSECTION WILL REMAIN.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A NEMA "6" BASE MOUNTED CABINET WILL BE USED.
 INSTALL ONE (1) FOUR CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
1 EA	FURNISH AND INSTALL HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING ARROW
410 LF	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
870 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKING - ANY WIDTH
22 EA	FURNISH AND INSTALL 12 IN. L.E.D. VEHICULAR SIGNAL HEAD SECTION
LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
5 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
470 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED)
130 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN 1/4 IN. FLEXIBLE TUBING (NO. 14 A.W.G.)
30 LF	FURNISH AND INSTALL SAW CUT FOR LOOP DETECTOR
1 EA	FURNISH AND INSTALL 4-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
1 EA	FURNISH AND INSTALL R3-5(L) SIGN (30" X 36") - SPAN MOUNT
1 EA	FURNISH AND INSTALL W9-2 (4) SIGN (30" X 42") - SPAN MOUNT
*275 LF	FURNISH AND INSTALL 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
1 EA	FURNISH AND INSTALL W9-1R SIGN WITH W5-3R (1) SIGN (30" X 24") - GROUND MOUNT
32 LF	FURNISH AND INSTALL 4 IN. X 6 IN. WOOD SIGN SUPPORT
6 EA	REMOVE EXISTING PAVEMENT MARKING "ARROW"

* DENOTES CONTINGENT ITEM

PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 & 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G	DW	WK	WK	DW	DW	DW
PHASE 1 & 6	G	G	G	R	R	R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW
1 & 6 CHANGE	G	G	G	R	R	R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW
PHASE 2 & 5	R	R	R	R	R	R	R	R	R	R	R	R	R	WK	DW	WK	DW	DW
2 & 5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	WK	DW	WK	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	R	WK	WK	WK	DW	DW
2 & 6 CHANGE	G	G	G	G	G	G	R	R	R	R	R	R	R	WK	WK	WK	DW	DW
PED CLEAR	G	G	G	G	G	G	R	R	R	R	R	R	FL-DW/FL-DW/FL-DW/FL-DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW
PHASE 3 ALT	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW
3 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. JEFF WENTZ
 ASSISTANT DISTRICT ENGINEER - TRAFFIC
 (301) 513-7318

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 ASSISTANT DISTRICT ENGINEER - MAINTENANCE
 (301) 513-7304

MR. AUGIE REBISH
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CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

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 CHIEF, TRAFFIC OPERATIONS
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CONTACTS FOR MONTGOMERY COUNTY

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

GENERAL INFORMATION PLAN
 MD 650 (NEW HAMPSHIRE AVE.) AND
 BONIFANT ROAD /GOOD HOPE ROAD

SCALE 1"=20' DATE 6-20-06 CONTRACT NO. BW99M82

DESIGNED BY T ZAYDEL COUNTY MONTGOMERY
 DRAWN BY T ZAYDEL LOGMILE 15065006.62
 CHECKED BY K SCHMID T.M.S. NO. H 651
 F.A.P. NO. N/A TOD NO.

DRAWING NO. 3399 B GI SHEET NO. 2 OF 2