

**PROJECT DESCRIPTION**

**I. GENERAL**

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL WITH STREET LIGHTING AND INTERCONNECT AT THE INTERSECTION OF MD 124 (WOODFIELD RD) AND BRINK RD IN MONTGOMERY COUNTY. THE MODIFICATION WILL ADD AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE ON THE EASTBOUND DIRECTION ON BRINK RD. ADDITIONALLY, THE EXISTING DETECTION EQUIPMENT AND SIGNAL HEADS WILL BE UPGRADED TO CURRENT STANDARDS. MD 124 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**II. INTERSECTION OPERATION**

- THE INTERSECTION SHALL OPERATE IN A NEMA FIVE (5) PHASE, FULLY-ACTUATED MODE. THE MAINLINE MD 124 PHASES SHALL CONTINUE TO OPERATE CONCURRENTLY. A LEADING EXCLUSIVE-PERMISSIVE LEFT TURN PHASE SHALL BE ADDED TO THE EASTBOUND DIRECTION OF BRINK RD. THE BRINK RD PERMISSIVE THRU PHASES SHALL CONTINUE TO OPERATE CONCURRENTLY.
- AN EXISTING NEMA FULL-TRAFFIC-ACTUATED, EIGHT (8) PHASE CONTROLLER IN A NEMA SIZE "6" BASE MOUNTED CABINET SHALL BE UTILIZED AT THIS LOCATION. VIDEO DETECTION INTERFACE AND DETECTOR AMPLIFIERS SHALL BE INSTALLED INTO THE CABINET BY MONTGOMERY COUNTY FORCES.

**CONTACTS**

**DISTRICT**

MR. BRIAN YOUNG  
DISTRICT ENGINEER  
301-513-7311

MR. CEDRIC WARD  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
301-513-7318

MR. VICTOR GRAFTON  
ASSISTANT DISTRICT ENGINEER - UTILITIES  
301-513-7350

MR. KEVIN NOWAK & MR. DUANE BERNARD  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
301-513-7336

MR. VERNON STINNETT  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
301-513-7304

**MONTGOMERY COUNTY DOT**

MR. KAMAL HAMUD  
TRAFFIC ENGINEER  
240-777-8761

**OFFICE OF TRAFFIC AND SAFETY**

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
410-787-7650

MR. EUGENE BAILEY  
TEAM LEADER SIGN OPERATIONS  
410-787-7670

MS. DARLENE EIDE  
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)  
410-787-7668

**EQUIPMENT LIST**

**A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION**

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EA	[UPDATED] 4 CHANNEL DETECTOR AMPLIFIER
9046	1 EA	[UPDATED] DETECTOR RACK RETROFIT
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	63.5 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
	1 EA	R2-1 - SPEED LIMIT 35
	2 EA	M2-1 - JCT
	2 EA	M3-1 - NORTH
	2 EA	M3-3 - SOUTH
	6 EA	M1-5 - MD 124
	2 EA	M5-1(R) - ADVANCE ARROW (21"x15")
	2 EA	M5-1(L) - ADVANCE ARROW (21"x15")
9571	39 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
	1 EA	M1-5(4) - Woodfield Rd / <- NORTH - MD 124 - SOUTH -> (78"x36")
	1 EA	M1-5(4) - Woodfield Rd / <- SOUTH - MD 124 - NORTH -> (78"x36")

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

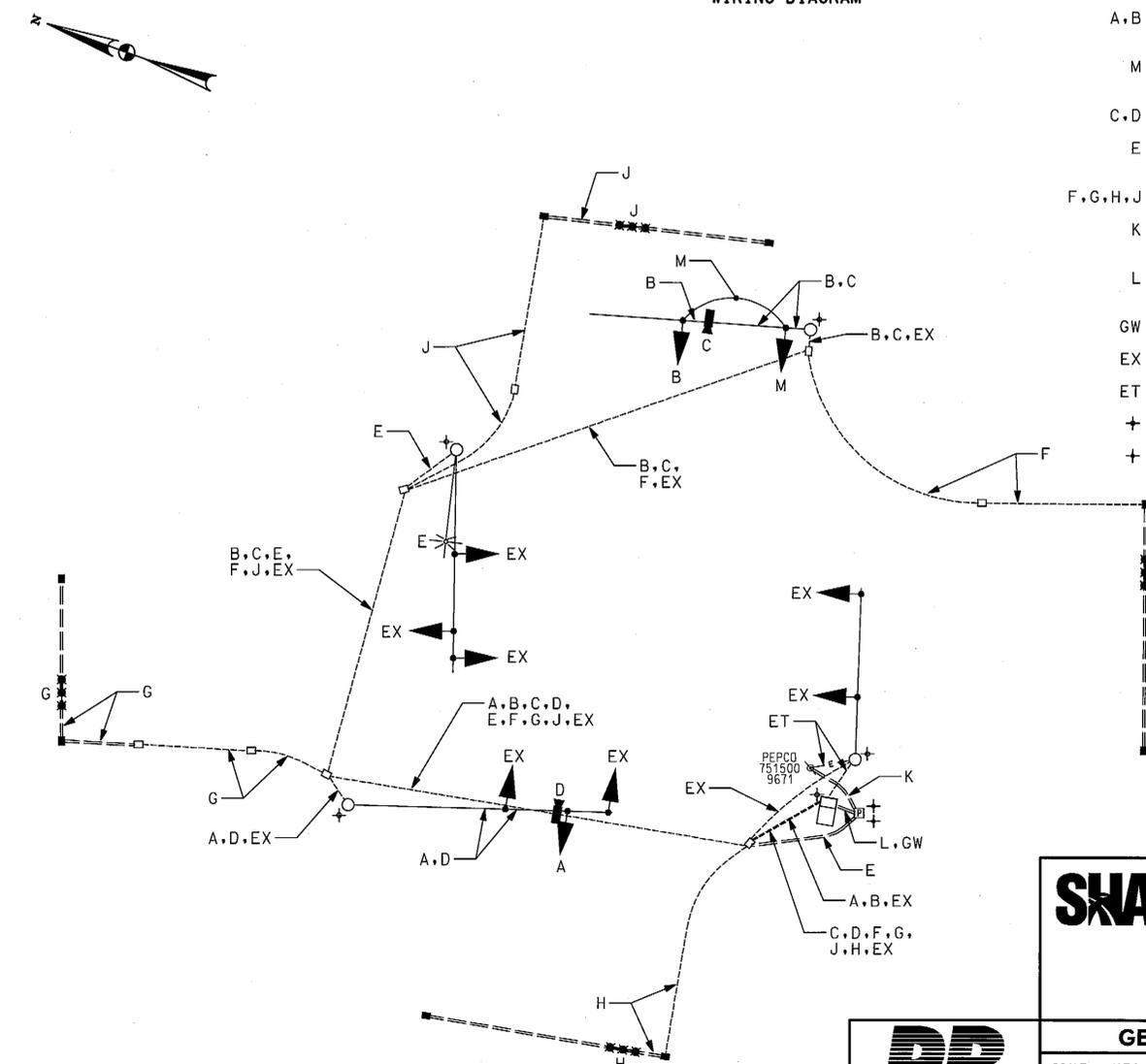
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
8001	34 EA	12 INCH LED SIGNAL HEAD SECTION
8011	1 EA	EMBEDDED METERED SERVICE PEDESTAL
8027	4 EA	NONINVASIVE DETECTOR, UP TO 1000 FOOT LEAD IN CABLE
8029	1 EA	REM & DISPOSE MAT & EQUIP PER ASSIGN
8034	2 EA	VIDEO DETECTION CAMERA & CABLE
8038	250 LF	CABLE-1 CONDUCTOR, 250 KCML, CU, USE 600V
8041	230 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8043	130 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8044	115 LF	WOOD SIGN SUPPORTS UP TO 4 X 6 INCHES
8046	102.5 SF	INSTALL GROUND MOUNT AND/OR OVERHEAD SIGN
8048	20 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8053	60 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8054	8 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8064	30 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8065	615 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8066	300 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC

**C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.**

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R
PHASE 4 & 7	R	R	R	R	R	G-G	G-G	G	R	R
7 CHANGE	R	R	R	R	R	Y-G	Y-G	G	R	R
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	G
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR

**WIRING DIAGRAM**



**WIRING KEY**

- A,B - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- M - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C,D - VIDEO DETECTION CABLE
- E - 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG TRAY)
- F,G,H,J - NON-INVASIVE PROBE LEAD-IN
- K - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 250 KCML)
- L - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 8 AWG THHN/THWN)
- GW - GROUND WIRE
- EX - EXISTING CABLE
- ET - EXISTING PHONE DROP
- + - EXISTING GROUND ROD
- + - PROPOSED GROUND ROD

TOD NO: XX631-06  
SHA NO: HA363A54/D54  
MD 124 @ Brink Road

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

**MD 124 AT BRINK RD  
PHASE CHANGE**  
GAITHERSBURG, MD

**GENERAL INFORMATION SHEET**

SCALE: N.T.S. DATE: FEBRUARY 15, 2011 CONTRACT NO.: XX6315185

DESIGNED BY: MF COUNTY: MONTGOMERY  
DRAWN BY: MF LOGMILE: 15012410.92  
CHECKED BY: KMP TMS NO.: K577  
F.A.P. NO.: TOD NO.:

TS NO. 2460A-GI DRAWING **SG-02** OF 02 SHEET NO. OF

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