

PROJECT DESCRIPTION

GENERAL
 THIS PROJECT INVOLVES THE INSTALLATION OF THE NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 124 (WOODFIELD ROAD) AND HAWKINS CREAMERY ROAD IN MONTGOMERY COUNTY, MARYLAND. MD 124 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION
 THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 124 APPROACHES OPERATING CONCURRENTLY AND THE HAWKINS CREAMERY ROAD APPROACH OPERATING ALONE.

A LEFT-TURN LEADING PHASE IS PROVIDED FOR SOUTHBOUND MD 124.

CONTROLLER REQUIREMENTS
 INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR-CHANNEL, TIME-DELAY OUTPUT LOOP DETECTOR AMPLIFIER, VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS) AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.

PHONE DROP
 UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET
9086	2 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	69 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 1 EACH D-3(1) SIGN (VARIABLE X 16 IN.) DUAL FACED - MAST ARM MOUNT - 1 EACH MD 95-1 (78 IN. X 24 IN.) - POLE MOUNT - 3 EACH W3-3 SIGN (36 IN. X 36 IN.) WITH "NEW" PANEL (24 IN. X 24 IN.) AND FLAG - GROUND MOUNT - 1 EACH R10-6 SIGN (36 IN. X 24 IN.) - GROUND MOUNT

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EACH	MAINTENANCE OF TRAFFIC
2002	2 C.Y.	TEST PIT EXCAVATION
5002	140 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	40 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	25 EACH	12 INCH LED SIGNAL HEAD SECTION (R,Y,G)
8008	1 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8016	1 EACH	MAST ARM POLE & 38 FT MAST ARM ANY 'T' DIMENSION
8021	2 EACH	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT
8022	1 EACH	REM & DISPOSE MAT & EQUIP PER ASSIGN
8026	2 EACH	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8031	225 L.F.	CABLE- 1 CONDUCTOR, 250 KCML. CU, USE
8035	710 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8036	230 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8037	54 L.F.	WOOD SIGN SUPPORTS UP TO 4 IN. X 6 IN.
8039	69 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8041	230 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	1 EACH	METERED SERVICE PEDESTAL EMBEDDED
8045	60 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8047	9 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8056	55 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	240 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8064	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.02-01 (SHOULDER WORK)
 STANDARD NO. MD-104.02-09 (FLAGGING OPERATION)
 STANDARD NO. MD-104.02-13 (INTERSECTION FLAGGING OPERATION)

EQUIPMENT LIST "C"

NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. JEFF WENTZ, MONTGOMERY
 PHONE: (301) 513-7318
 ASSISTANT DISTRICT ENGINEER - TRAFFIC

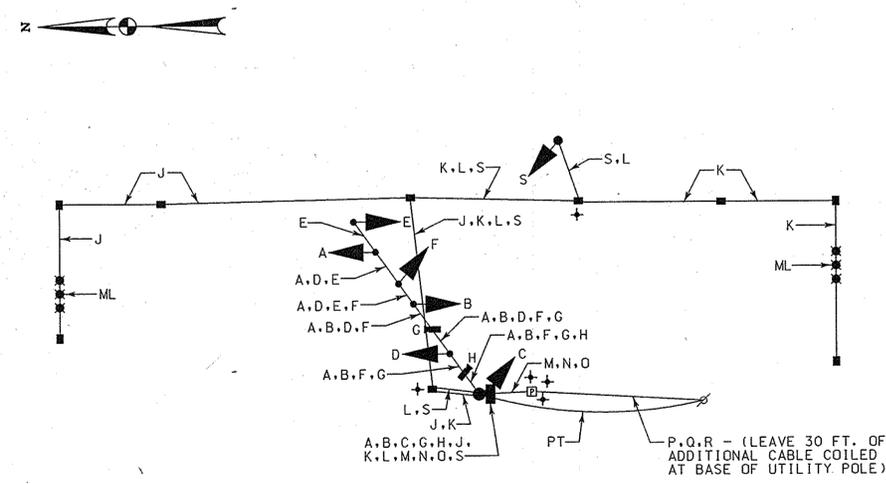
MR. WAYNE MOWDY
 ASSISTANT DISTRICT ENGINEER - MAINTENANCE
 PHONE: (301) 513-7305

MR. AUGIE REBISH
 DISTRICT UTILITY ENGINEER
 PHONE: (301) 513-7350

MR. KAMAL HAMUD
 MONTGOMERY COUNTY TMC
 PHONE: (240) 777-8761

MR. RICHARD L. DAFF, SR.
 CHIEF, TRAFFIC OPERATIONS DIVISION
 PHONE: (410) 787-7630

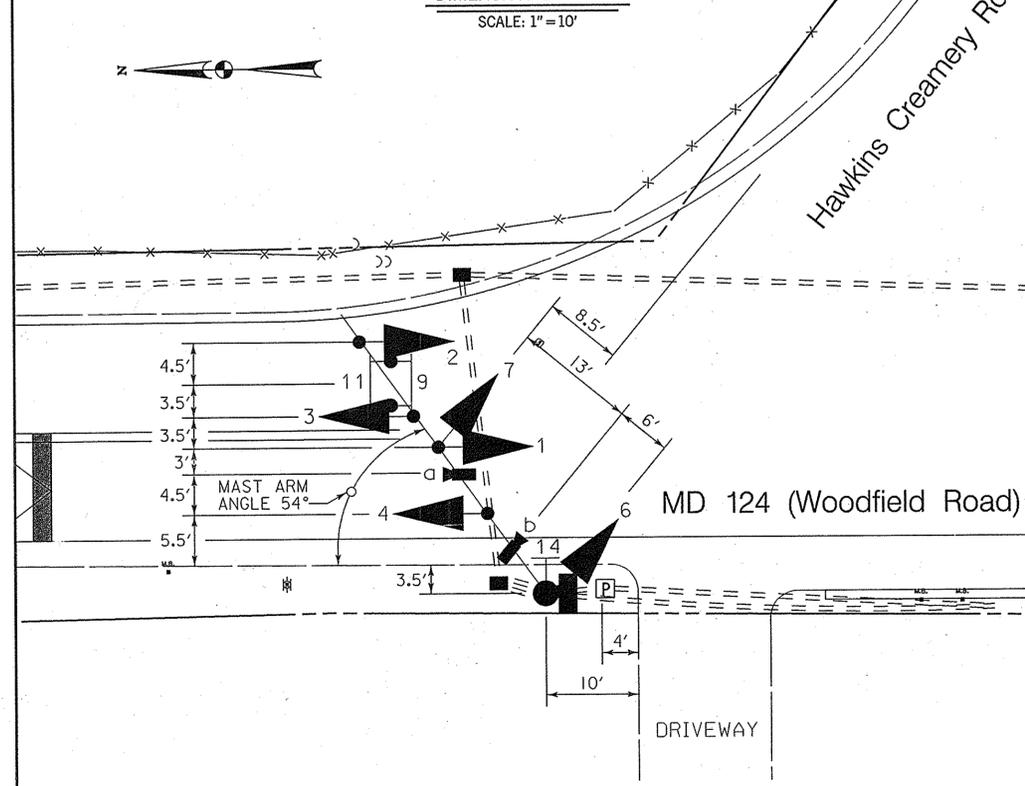
WIRING DIAGRAM



WIRING KEY

- A } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- B } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- C } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- F } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- G } VIDEO CAMERA DETECTION LEAD-IN CABLE
- H } VIDEO CAMERA DETECTION LEAD-IN CABLE
- J } MICROLOOP PROBE LEAD-IN
- K } MICROLOOP PROBE LEAD-IN
- L } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- M } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- N } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- O } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- P } 1-CONDUCTOR, 250 KCML. CU, USE
- Q } 1-CONDUCTOR, 250 KCML. CU, USE
- R } 1-CONDUCTOR, 250 KCML. CU, USE
- ML - MICROLOOP PROBE SET
- PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
- + - 3/4 IN. X 10 FT. GROUND ROD

DIMENSION DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7
PHASE 2 AND 5	R	R	+G	G	+G	R	R
2 AND 5 CHANGE	R	R	+G	G	+G	R	R
PHASE 2 AND 6	G	G	G	G	G	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	R	G	G
4 CHANGE	R	R	R	R	R	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

SHA NO: MO579A57/CS7/M57
 TOD NO: AT910-14M
 MD 124 @ HAWKINS CREAMERY ROAD

WR&A
 Whitman, Reardon and Associates, LLP
 Engineers, Architects and Planners
 801 South Caroline Street
 Baltimore, Maryland 21231
 410-235-3450

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 MD 124 (Woodfield Road) at Hawkins Creamery Road
 Damascus, Maryland

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	3/02/2007	CONTRACT NO.	AT9105185
DESIGNED BY	S. Bloss	COUNTY	Montgomery		
DRAWN BY	S. Bloss	LOGMILE	15012415.99		
CHECKED BY	N. Leary	TIMS NO.	H948		
FAP NO.		TOD NO.			
TS NO.	4558	DRAWING	OF	SHEET NO.	2 OF 2