

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 99 AND WOODFORD DRIVE IN HOWARD COUNTY. MD 99 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LAG LEFT TURN PHASE FOR WESTBOUND MD 99. VIDEO DETECTION WILL BE USED.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1), FOUR-CHANNEL LOOP DETECTOR AMPLIFIER AND VIDEO DETECTION INTERFACE EQUIPMENT HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

SPECIAL NOTE

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

EQUIPMENT LIST "A"

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

CATEGORY CODE NO	QUANTITY	DESCRIPTION
9016	1 EA	[UPDATED] FOUR-CHANNEL DETECTOR AMPLIFIER
9044	1 EA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	80 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN 2 EA - W3-3 SIGN (48" X 48") WITH D95-25 (24" X 24") GROUND MOUNT 2 EA - D-3(3) SIGN (96" X 30") - GROUND MOUNT
9571	43 SF	[UPDATED] SHEET ALUMINUM MAST ARM /POLE MOUNTED SIGN 2 EA - D3-2 DUAL FACED SIGN (VAR X16") - MAST ARM MOUNT 1 EA - M95-1D-3(1) SIGN (78" X 24" + 78" X 16") - MAST ARM MOUNT

CONTACT PERSONS FOR DISTRICT 7 ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 624-8141

MR. RAY JOHNSON
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 624-8105

MS. ANDREA ABEND
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 624-8110

CONTACT PERSONS FOR OFFICE OF TRAFFIC AND SAFETY

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

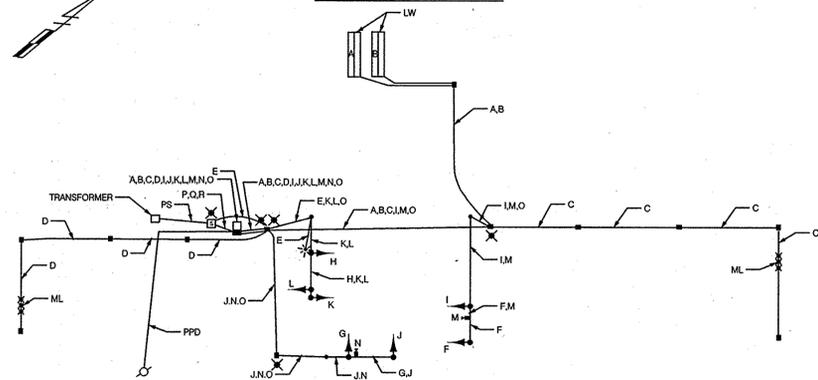
MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

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

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

WIRING DIAGRAM



WIRING KEY

A,B	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
C,D	MICRO-LOOP PROBE LEAD-IN
E	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TRAY CABLE
F,G,H	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I,J,K,L	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
M,N	VIDEO DETECTION CABLE
O	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
P,Q,R	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
LW	LOOP WIRE (NO. 14 A.W.G.)
ML	NON-INVASIVE MICRO-LOOP PROBE
PS	PROPOSED ELECTRIC SERVICE
PPD	PROPOSED PHONE DROP
X	GROUND ROD

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.

ITEM NO.	QUANTITY	DESCRIPTION
1001	3 EA	MAINTENANCE OF TRAFFIC
2002	4 CY	TEST PIT EXCAVATION
5001	50 LF	5 IN. YELLOW HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
5002	300 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5004	150 LF	10 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
5005	80 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
8001	22 EA	12 INCH LED SIGNAL HEAD SECTION
8004	3 EA	8 INCH LED SIGNAL HEAD SECTION
8007	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE
8016	1 EA	MAST ARM POLE & 38 FT. MAST ARM
8018	1 EA	MAST ARM POLE & 70 FT. MAST ARM
8019	1 EA	MAST ARM POLE & 50 FT. MAST ARM
8021	2 EA	NON-INVASIVE MICRO-LOOP PROBE (ANY LENGTH)
8022	1 EA	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT PER ASSIGNMENT
8027	2 EA	VIDEO DETECTION CAMERA AND CABLE
8028	20 LF	1 IN DETECTOR SLEEVE, FLEXIBLE LIQUID-TIGHT CONDUIT
8036	1230 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN. - TRENCHED
8037	380 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN. - BORED
8038	130 LF	WOOD SIGN SUPPORTS 4 IN. X 6 IN.
8040	123 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8042	300 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8044	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8046	70 LF	ELECTRICAL CABLE 1 - CONDUCTOR NO. 4 AWG - THIN /THWN
8048	12 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8054	340 LF	ELECTRICAL CABLE 2 - CONDUCTOR (ALUMINUM SHIELDED)
8057	80 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 AWG)
8058	620 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 AWG)
8059	125 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 12 AWG) - TRAY CABLE
8060	660 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8061	230 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
NEG.	425 SF	HEAT APPLIED SAND COLORED PERMANENT PAVEMENT MARKING

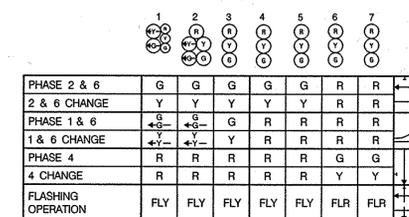
EQUIPMENT LIST "C"

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.

PHASING CHART



TOD NO: AX142-03
SHA No: HO407A51/CS1/M51
MD 99 @ Woodford Drive

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 99 (OLD FREDERICK ROAD)
AND WOODFORD DRIVE

TRAFFIC **C**ONCEPTS INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473
EMAIL TRAFFIC.CONCEPTS@COMCAST.NET

SCALE	NONE	DATE	3-1-07	CONTRACT NO.	AX1425185
DESIGNED BY	T. ZAYDEL	COUNTY	HOWARD		
DRAWN BY	T. ZAYDEL	LOGMILE	13008900.82		
CHECKED BY	K. SCHMID	T.I.M.S. NO.	1 010		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS-4559-GI	SHEET NO.	2	OF	2