PROJECT DESCRIPTION

I. GENERAL:

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF MD 424 (DAVIDSONVILLE ROAD) AND THE WESTBOUND US 50 RAMP IN ANNE ARUNDEL COUNTY.

MD 424 (DAVIDSONVILLE ROAD) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION:

THE INTERSECTION SHALL OPERATE IN A NEMA FOUR-PHASE, FULL- TRAFFIC-ACTUATED MODE. MD 424 THROUGH APPROACHES OPERATE CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING SHALL BE PROVIDED FOR THE SOUTHBOUND APPROACH OF MD 424. THE WESTBOUND US 50 RAMP APPROACH OPERATES INDEPENDENTLY.

VIDEO DETECTION CAMERAS AND PROBES SHALL PROVIDE THE TRAFFIC ACTUATION.

A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED LOCAL CONTROLLER AND ALL NECESSARY EQUIPMENT HOUSED IN A SIZE '6' BASE MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

III. SPECIAL NOTES:

THE CONTRACTOR SHALL CONTACT MR. ROBERT SNYDER, TOD, AT 410-787-7631, AT LEAST THREE (3) DAYS IN ADVANCE OF THE COMPLETION OF THE PROJECT TO ARRANGE FOR THE TELEPHONE DROP. THE CONTRACTOR SHALL PROVIDE THE NEAREST HOUSE ADDRESS.

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER
TRAFFIC - 410-842-1003

MR. JAMES FOLDEN
ASSISTANT DISTRICT ENGINEER
CONSTRUCTION - 410-841-1031

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER
MAINTENANCE - 410-841-1002

MR. JOHN S. MAYS
DISTRICT UTILITY ENGINEER
410-841-1039

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

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

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

MR. STEPHEN HOLLIE JR.
PROJECT MANAGER - TRAFFIC ENGINEERING
DESIGN DIVISION 410-787-4088

EQUIPMENT LIST "A"

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

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EA	4 CHANNEL DETECTOR AMPLIFIER
9044	1 EA	CONTROLLER CABINET, SIZE 6
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9570	49 SF	SHEET ALUMINIUM GROUND MOUNTED SIGNS
		1 EA M95-25 "NEW (24" X 24"), W3-3 "SIGNAL AHEAD SYMBOL" (48" X 48")
		1 EA M3-2"EAST"(30"x15"), M1-4"US 50"(48"x48"), M6-1"LEFT ARROW" (30" x 24") TOTAL SIZE 48"x87"
9571	32 SF	SHEET ALUMINIUM SIGNS MAST ARM/POLE MOUNTED
		1 EA D-3(2) "Davidsonville RD" (VAR x 16") SINGLE FACE
		ASSOCIATED SHIELD ASSEMBLY SIGN:
		1 EA "SOUTH,MD 424, LEFT ARROW" (48" x 75")

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA	MAINTENANCE OF TRAFFIC
2002	3 EA	TEST PIT EXCAVATION
5002	24 LF	REMOVE EXISTING PAVEMENT MARKING
5005	93 LF	24" WHITE PERMANENT THERMOPLASTIC PAVEMENT MARKING
8001	25 EA	12" LED SIGNAL HEAD SECTION
8004	3 EA	8" LED SIGNAL HEAD SECTION
8017	1 EA	MAST ARM POLE AND 60' MAST ARM
8021	4 EA	NON-INVASIVE DETECTORS WITH 1000' LEAD-IN CABLE
8024	1 EA	MAST ARM POLE AND TWIN 70' X 50' MAST ARM
8026	2 EA	VIDEO DETECTOR CAMERA AND CABLE
8035	730 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4"- TRENCHED
8036	650 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4"- BORED
8037	50 LF	F & I WOOD SIGN SUPPORT UP TO 4" X 6"
8039	81 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGNS
8041	1380 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8043	1 EA	METERED SERVICE PEDESTAL EMBEDDED
8045	75 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG
8047	11 EA	ELECTRICAL HANDHOLE
8056	90 LF	ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG
8057	1375 LF	ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG
8065	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

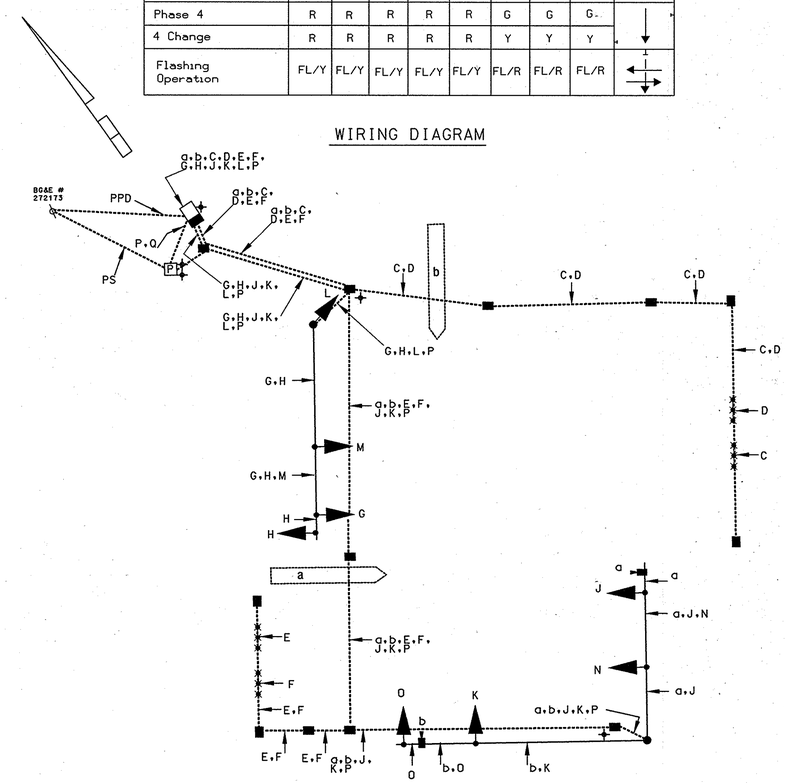
EQUIPMENT LIST "C"

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

PHASE CHART

	1	2	3	4	5	6	7	8
Phase 2 + 5	R	R	G G	G G	G G	R	R	R
5 Change	R	R	G Y	G Y	G Y	R	R	R
Phase 2 + 6	G	G	G	G	G	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	R	R	R
Phase 4	R	R	R	R	R	G	G	G
4 Change	R	R	R	R	R	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY

a,b – VIDEO CAMERA WITH 400' LEAD TO CONTROLER

C,D,E,F – NON-INVASIVE MICRO LOOP PROBE WITH 1000' LEAD-IN CABLES

G,H,J,K,L – ELECTRICAL CABLE 7-CONDUCTOR (NO.14 AWG)

M,N,O – ELECTRICAL CABLE 5-CONDUCTOR (NO.14 AWG)

P – NO.6 AWG BARE COPPER GROUND WIRE STRANDED

Q – ELECTRICAL CABLE 1-CONDUCTOR (NO.4 AWG THHN/THWN) 3 WIRES

PS – PROPOSED OVERHEAD SERVICE FEED BY BG&E

PPD – PROPOSED TELEPHONE DROP

+ – GROUND ROD (3/4" DIA. X 10' LENGTH)

P – METERED SERVICE PEDESTAL

TOD NO: AT915-19
SHA No.: AA487A53/C53
MD 424 @ US 50 EB and WB ramps

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

MD 424(DAVIDSONVILLE ROAD)
AT WB US 50 RAMP
DAVIDSONVILLE, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 1-22-07 CONTRACT NO. AT 9155185

DESIGNED BY H.O. COUNTY ANNE ARUNDEL
DRAWN BY H. O. LOGMILE 020042403.44
CHECKED BY T.M.H. TIMS NO. G932
FAP NO. TOD NO.

TS NO. 4539-GI DRAWING 2 OF 2 SHEET NO. 4 OF 4

CENTURY ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031
Phone: (410) 823-8070 Fax: (410) 823-2184

PLOTTED: Wednesday, January 31, 2007 at 3:22:55 PM
FILE: mSG-P002_MD424 @ WB US 50 Ramp.dgn
BY: shollie1