

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal due to geometric improvements providing a second left turn lane for westbound US 40 (Baltimore National Pike). MD 144 (Frederick Road) right turn lane is also being widened at the intersection of US 40 at MD 144/Pebble Beach Drive in Howard County. US 40 is assumed to run in an East-West direction.

II. INTERSECTION OPERATION

The intersection shall operate as a NEMA Six-Phase, Fully-Traffic-Actuated Mode with lead lag double Exclusive Left Turns for Westbound US 40 and an Exclusive Left Turn for Eastbound US 40. Md 144 (Frederick Road), and Pebble Beach Drive shall run concurrently. Existing Loop Detection shall be replaced due to the widening. The Eastbound Interconnect shall be modified due to widening. Existing Street Lighting and Shield Assembly Sign shall remain.

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
585624	120 LF	FURNISH AND INSTALL 24 INCH HEAT APPLIED WHITE PERMANENT THERMOPLASTIC PAVEMENT MARKINGS
585462	125 LF	REMOVE EXISTING THERMOPLASTIC PAVEMENT MARKINGS
801706	21 SF	REMOVE OVERHEAD MOUNTED SIGN
805011	106 LF	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805135	610 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805118	180 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
811001	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	15 SF	INSTALL OVERHEAD SIGN
861104	3500 LF	ELECTRICAL CABLE 2-CONDUCTOR (NO.14 AWG)ALUMINUM SHIELDED
861107	490 LF	ELECTRICAL CABLE 5-CONDUCTOR (NO.14 AWG)
861108	875 LF	ELECTRICAL CABLE 7-CONDUCTOR (NO.14 AWG)
862101	2790 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	775 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
860284	45 EA	FURNISH AND INSTALL 12" SIGNAL HEAD LED W/MOUNTING HARDWARE
800000	2 EA	FURNISH AND INSTALL 8" SIGNAL HEAD LED W/MOUNTING HARDWARE
800000	1655 LF	DISCONNECT, PULL-BACK AND RE-ROUTE EXISTING CABLE
805160	6 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE

EQUIPMENT LIST "A"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
973023	15 SF	SHEET ALUMINUM FOR SPAN WIRE MOUNTING
	2 EA	R3-5L "LEFT ONLY SYMBOL" 30" x36"

EQUIPMENT LIST "C"

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

PROJECT CONTACT

CONTACT PERSONS FOR DISTRICT 7 ARE AS FOLLOWS:

MR. DAVID COYNE
DISTRICT ENGINEER
PHONE: (301) 624-8101

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140

MR. ERIC ECKHARDT
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 624-8200

MS. ANDREA ABEND
ASSISTANT DISTRICT ENGINEER - UTILITIES
PHONE: (301) 624-8115

CONTACT FOR OFFICE OF TRAFFIC AND SAFETY:

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

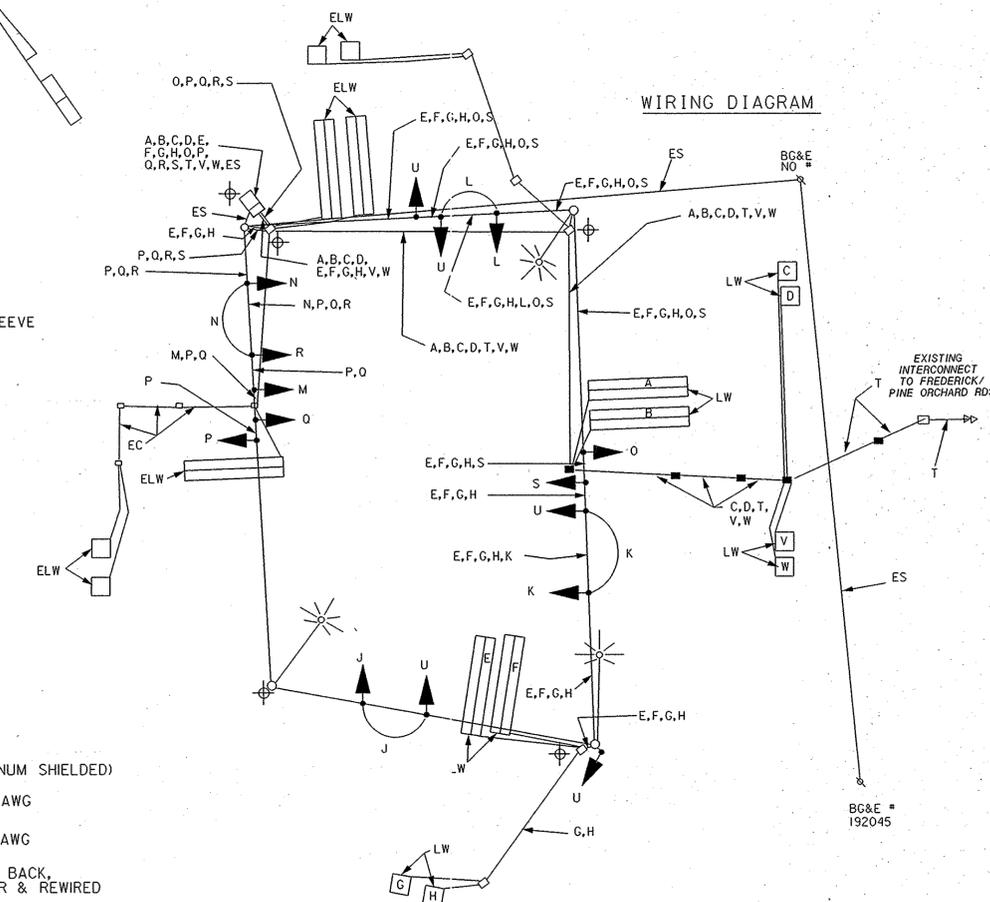
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF - TRAFFIC OPERATIONS DIVISION
(410) 787-7630

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

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

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 + 5	◀G-	◀G-	R	G	◀G-	◀G-	◀G-	R	R	R	R	R	R	R	R
1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 2 + 5 OR 2 + 6														
PHASE 2 + 5	◀R-	◀R-	R	G	◀G-	◀G-	◀G-	G	R	R	R	R	R	R	R
2 + 5 CHANGE	◀R-	◀R-	R	Y	◀Y-	◀Y-	◀Y-	G	R	R	R	R	R	R	R
PHASE 2 + 6	◀R-	◀R-	G	R	◀R-	◀R-	◀R-	G	R	R	R	R	R	R	R
2 + 6 CHANGE	◀R-	◀R-	Y	R	◀R-	◀R-	◀R-	Y	R	R	R	R	R	R	R
PHASE 4 + 8	◀R-	◀R-	R	R	◀R-	◀R-	◀R-	R	G	G	G	G	G	G	G
4 + 8 CHANGE	◀R-	◀R-	R	R	◀R-	◀R-	◀R-	R	Y	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/◀R-	FL/◀R-	FL/Y	FL/R	FL/◀R-	FL/◀R-	FL/◀R-	FL/Y	FL/R						



WIRING KEY

- A-H,V,W - 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- J-N - 5-CONDUCTOR ELECTRICAL CABLE NO.14 AWG
- O-S - 7-CONDUCTOR ELECTRICAL CABLE NO.14 AWG
- T - EXISTING COMMUNICATION CABLE, PULLED BACK, STORED AND RE-ROUTED TO CONTROLLER & REWIRED
- U - PROPOSED SIGNAL HEADS (IN THE SAME LOCATION AS THE SIGNAL HEAD BEING REPLACED IS TO BE REWIRED W/ EXISTING CABLE)
- ES - EXISTING SERVICE FEED
- ELW - EXISTING LOOP WIRE
- LW - LOOP WIRE
- ⊕ - EXISTING GROUND ROD

ADDENDUM NO. 1
10/ /06
REPLACES SHEET 12

MM CENTURY
ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
US 40 AT MD 144 (FREDERICK RD)/
PEBBLE BEACH DR.
ELLICOTT CITY, MARYLAND

SCALE N/A DATE 9/26/06 CONTRACT NO. H03205176

DESIGNED BY EMM COUNTY HOWARD
DRAWN BY EMM LOGMILE 13004015.33
CHECKED BY TMH T.I.M.S. NO. H159
F.A.P. NO. TOD NO.

TS NO: 3391B 61 DRAWING NO. 2 OF 2 SHEET NO. 12 OF 16

REVISION 'B' JOB NO. 23075.12
PLOTTED: TUESDAY, OCTOBER 03, 2006 AT 06:35 AM
FILE: G:\TRANS\DWG\23025.12\MSC-P001\MD144PEB.DGN

BY: DANDEWS