

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 85 (BUCKEYSTOWN PK.) AT ENGLISH MUFFIN WAY IN FREDERICK COUNTY.

MD 85 IS BEING WIDENED ON THE EAST AND WEST SIDES NORTH OF ENGLISH MUFFIN WAY. DUE TO THE WIDENING A NEW CABINET, POLE, AND HANDHOLE NEED TO BE INSTALLED IN THE NE QUADRANT. NEW SETBACK PROBES ARE BEING INSTALLED FOR THE SB DIRECTION.

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION OPERATION IS NOT CHANGING AT THIS TIME. THE INTERSECTION WILL CONTINUE TO OPERATE IN A FULLY ACTUATED MODE USING 4 NEMA PHASES. THE MD 85 THROUGH MOVEMENTS OPERATE CONCURRENTLY. THE ENGLISH MUFFIN WAY THROUGH MOVEMENTS OPERATE CONCURRENTLY.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140
MR. JOHN HUCHROWSKI, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 624-8200
MR. RAYMOND F. JOHNSON, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 624-8105
MS. ANDREA ABEND, UTILITY ENGINEER
PHONE: (301) 624-8115
MR. RICHARD L. DAFF, SR., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS
PHONE: (410) 787-7652

THE POWER COMPANY REPRESENTATIVE IS:

POTOMAC EDISON ELECTRICAL
MR. STEVE ELKINS
421 E. PATRICK STREET
FREDERICK, MD 21701
301-694-4472
WMS# 72527379

2. THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7635 TO ARRANGE FOR THE PHONE DROP INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

NONE.

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

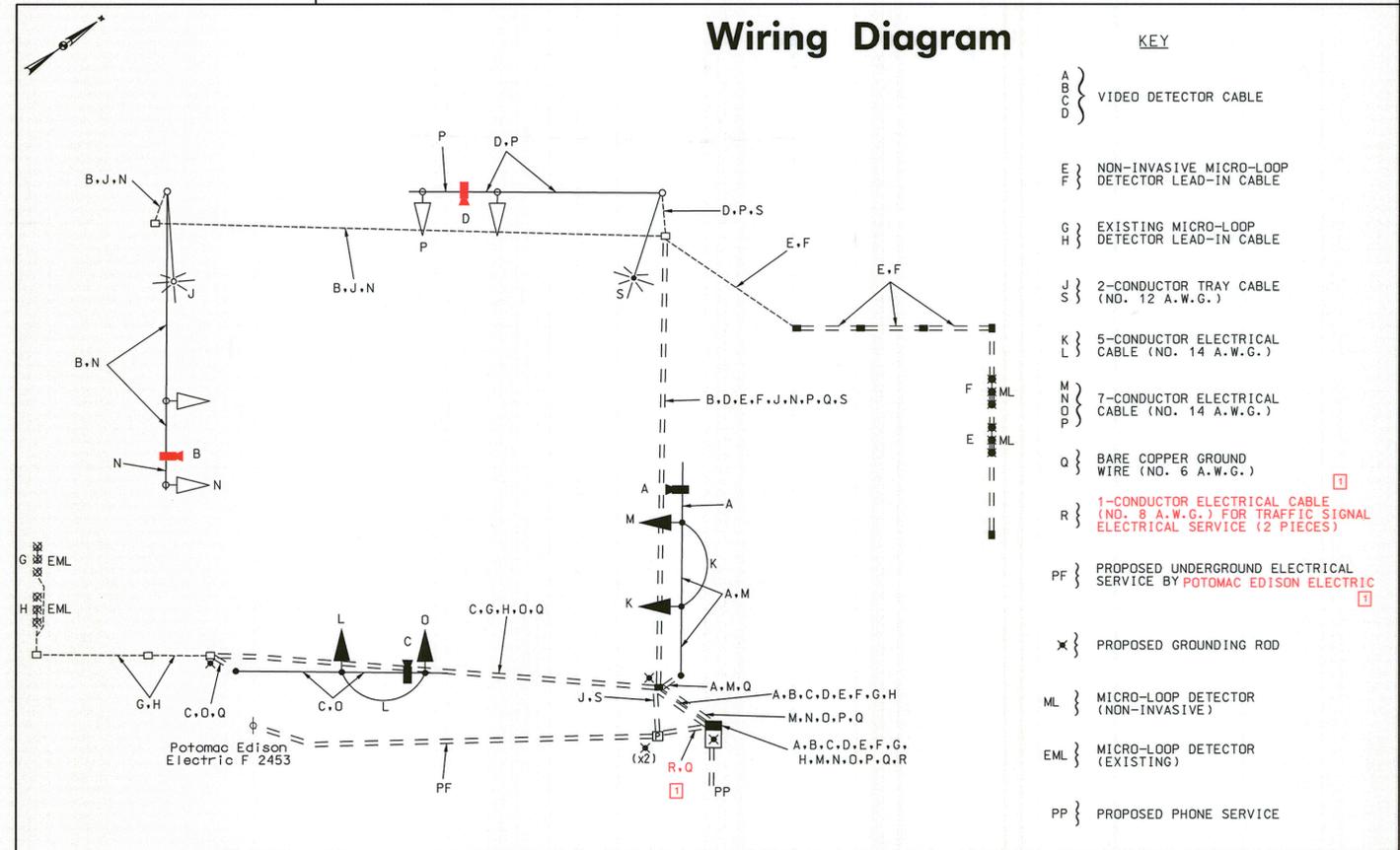
QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MOBILIZATION.
LUMP SUM	LS	MAINTENANCE OF TRAFFIC.
2	EA	27 FT. STEEL MAST ARM POLE WITH A 50 FT. MAST ARM.
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED CABINET, VIDEO DETECTION INTERFACE, AND 4-CHANNEL RACK MOUNTED LOOP DETECTOR AMPLIFIER [NOTE: CONTROLLER AND CABINET SHALL BE PURCHASED FROM ECNOLITE AND DELIVERED TO THE S.H.A. SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650].
4	EA	12 IN. ONE-WAY, THREE SECTION L.E.D. (R,Y,G) ADJUSTABLE BLACK FACED TRAFFIC SIGNAL HEAD WITH MAST ARM MOUNTING HARDWARE AND TUNNEL VISORS.
4	EA	VIDEO DETECTOR CAMERA (TERRA)
1200	LF	VIDEO DETECTOR CAMERA CABLE
1	EA	20 FT. LUMINARIES ARM
1	EA	250W HPS LAMP AND LUMINARIES
1	EA	30 IN. X 51 IN. SHIELD ASSEMBLY SIGN FOR GROUND MOUNTING.
1	EA	48 IN. X 75 IN. SHIELD ASSEMBLY SIGN FOR GROUND MOUNTING.
2	EA	NON-INVASIVE PROBE (SET OF 3) WITH 1000 FT. LEAD-IN CABLE.
3	CY	TEST PIT EXCAVATION.
6	EA	HANDHOLE.
75	LF	1-CONDUCTOR ELECTRICAL CABLE (NO. 8 A.W.G.)
540	LF	2-CONDUCTOR ELECTRICAL TRAY CABLE (NO. 12 A.W.G.)
55	LF	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
890	LF	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
265	LF	BARE COPPER STRANDED GROUND WIRE (NO. 6 A.W.G.)
1	EA	2 IN. WEATHERHEAD.
100	LF	2 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED.
360	LF	3 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED.
80	LF	3 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - BORED.
105	LF	4 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED.
75	LF	4 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - BORED.
150	LF	4 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - SLOTTED IN THE ROADWAY.
9.25	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT.
5	EA	GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH.
1	EA	EMBEDDED ELECTRICAL SERVICE PEDESTAL (100 AMPS)
40	LF	24 IN. WIDE HAPPTM - WHITE FOR STOP LINE.
38	LF	4 IN. X 4 IN. WOOD SIGN SUPPORT.
2	EA	CUT, CLEAN AND CAP MAST ARM POLE.
3	EA	RELOCATE EXISTING OVERHEAD SIGN.
2	EA	REMOVE AND DISPOSE OF EXISTING CONCRETE FOUNDATION 12 INCHES BELOW GRADE.
Lump Sum	LS	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT.

Phase Chart

1	2	3	4	5	6	7	8
R	R	R	R	R	R	R	R
Y	Y	Y	Y	Y	Y	Y	Y
G	G	G	G	G	G	G	G

PHASE 2 AND 6	G	G	G	G	R	R	R	R	←
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	←
PHASE 4 AND 8	R	R	R	R	G	G	G	G	↑
4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	Y	↑
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	↑

Wiring Diagram



KEY

- A B C D } VIDEO DETECTOR CABLE
- E F } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
- G H } EXISTING MICRO-LOOP DETECTOR LEAD-IN CABLE
- J S } 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
- K L } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- M N O P } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- Q } BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- R } 1-CONDUCTOR ELECTRICAL CABLE (NO. 8 A.W.G.) FOR TRAFFIC SIGNAL ELECTRICAL SERVICE (2 PIECES)
- PF } PROPOSED UNDERGROUND ELECTRICAL SERVICE BY POTOMAC EDISON ELECTRIC
- X } PROPOSED GROUNDING ROD
- ML } MICRO-LOOP DETECTOR (NON-INVASIVE)
- EML } MICRO-LOOP DETECTOR (EXISTING)
- PP } PROPOSED PHONE SERVICE

Redline Revision
May 1, 2012

SHA MDOT - SHA
O.O.T.S.

SHA Approval Date
TS# 3664-G TMS# J-100

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

MD 85 (BUCKEYSTOWN PK.) AT ENGLISH MUFFIN WAY

GENERAL INFORMATION PLAN

SCALE: NA DATE: APRIL 20, 2012 CONTRACT NO.: BW996M82

DESIGNED BY: J. STORCK/KH COUNTY: FREDERICK
DRAWN BY: J. STORCK LOGMILE: 10085007.25
CHECKED BY: TMS NO.: J100
F.A.P. NO.: NA TOD NO.:

TS NO. 3664-GI DRAWING - OF SHEET NO. 2 OF 2

The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600
1-800-583-8411
Fax 410-931-6601
"Merging Innovation and Excellence"