

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW PART TIME (TIME OF DAY) TRAFFIC SIGNAL AT THE INTERSECTION OF MD 139 AT GREENWOOD ROAD/TOWSON WEST ELEMENTARY SCHOOL IN BALTIMORE COUNTY, MD. MD 139 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 139. THE MD 139 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE GREENWOOD ROAD/TOWSON WEST ELEMENTARY SCHOOL MOVEMENTS WILL OPERATE CONCURRENTLY.

SPECIAL NOTES

- THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:
PROJECT CONTACTS:

MS. ERIN KUHN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 410-229-2381
MR. DONALD SCHAEFFER, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: 410-229-2421
MR. ANDRE FUTRELL, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 410-229-2361
MR. MICHAEL PASGARIELLO, UTILITY ENGINEER
PHONE: 410-229-2341
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:

BALTIMORE GAS & ELECTRIC
7317 PARKWAY DRIVE SOUTH
HANOVER, MD 21076
410-859-9070
WMS# 000188903

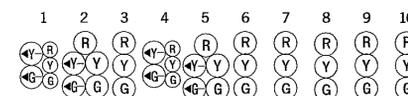
- ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP. CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7635 TO ARRANGE FOR THE PHONE DROP INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER. THE PHONE NUMBER WILL BE USED TO ACTIVATE/DEACTIVATE THE SIGNAL FOR SPECIAL EVENTS.

EQUIPMENT LIST

- A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.
NONE.
- B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

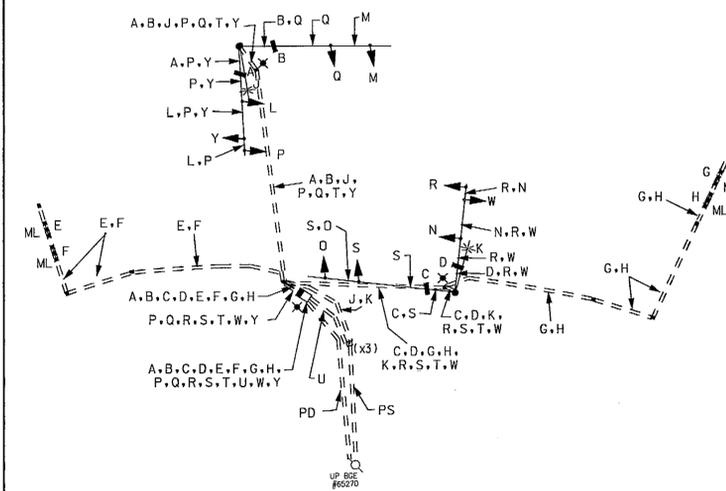
QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
2	EA	27 FT. STEEL TWIN MAST ARM POLE WITH 50 FT. AND 70 FT. MAST ARMS
2	EA	20 FT. LUMINARIE ARM
2	EA	250W HPS LAMP AND LUMINARIE
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED NEMA 6 CABINET, VIDEO DETECTION INTERFACE, TELEMETRY INTERFACE EQUIPMENT, AND ONE FOUR-CHANNEL LOOP DETECTOR AMPLIFIER [Note: CONTROLLER AND CABINET SHALL BE PURCHASED FROM ECONOLITE AND DELIVERED TO THE S.H.A. SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650]
4	EA	TERRA VIDEO DETECTOR CAMERA
600	EA	TERRA VIDEO DETECTOR CAMERA CABLE
4	EA	NON-INVASIVE PROBE (SET OF 3) WITH 500 FT. LEAD-IN CABLE
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST
4	EA	12 IN. 5-SECTION LED SIGNAL HEAD - MAST
5	EA	36 IN. X 36 IN. W3-3 "NEW" SIGN - GROUND
2	EA	16 IN. X VAR. D-3-2 SIGN WITH MAST ARM MOUNTING HARDWARE.
2	EA	30 IN. X 48 IN. SHIELD ASSEMBLY SIGN - GROUND MOUNT/POLE MOUNT
2	EA	48 IN. X 72 IN. SHIELD ASSEMBLY SIGN - GROUND MOUNT/POLE MOUNT
190	EA	4 IN. X 6 IN. WOOD SIGN SUPPORTS
4	CY	TEST PIT EXCAVATION
9	EA	HANDHOLE
75	LF	1-CONDUCTOR CABLE (NO. 8 AWG)
325	LF	2-CONDUCTOR TRAY CABLE (NO.12 AWG)
175	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
865	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
240	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
210	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
650	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
150	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - BORED
65	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
200	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - BORED
15.0	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
6	EA	GROUND ROD - 3/4 IN. X 10 FT. LENGTH
1	EA	CONTROL & DISTRIBUTION EQUIPMENT FOR ELECTRICAL SERVICE
100	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE
2	EA	REMOVE EXISTING GROUND MOUNTED SIGN.

Phase Chart



PHASE 1 AND 5	+GR	+GR	R	+GR	+GR	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6											
PHASE 1 AND 6	+GG	+GG	G	R	R	R	R	R	R	R	R
1 CHANGE	+YG	+YG	G	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	+GG	+GG	G	R	R	R	R	R
5 CHANGE	R	R	R	+YG	+YG	G	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	R	G	G	G	G	G
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

Wiring Diagram



- KEY**
- A } VIDEO DETECTOR CABLE
 - B } VIDEO DETECTOR CABLE
 - C } VIDEO DETECTOR CABLE
 - D } VIDEO DETECTOR CABLE
 - E } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
 - F } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
 - G } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
 - H } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
 - J } 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
 - K } 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
 - L } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - M } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - N } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - O } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - P } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - Q } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - R } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - S } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - T } BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
 - U } 1-CONDUCTOR (NO. 8 A.W.G.) (3 PIECES) FOR TRAFFIC SIGNAL ELECTRICAL SERVICE
 - PS } PROPOSED UNDERGROUND ELECTRICAL SERVICE BY BGE
 - PD } PROPOSED PHONE DROP BY VERIZON
 - X } PROPOSED GROUNDING ROD
 - ML } MICRO-LOOP DETECTOR (NON-INVASIVE)

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"®

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 139 (CHARLES STREET) AT GREENWOOD ROAD/
TOWSON WEST ELEMENTARY SCHOOL
Ruxton Ridge, MD

GENERAL INFORMATION PLAN

SCALE: NA DATE: MARCH 2, 2010 CONTRACT NO.: BW996M82

DESIGNED BY: FRANK HOECKEL COUNTY: BALTIMORE
DRAWN BY: FRANK HOECKEL LOGMILE: 03013902.61
CHECKED BY: _____ TIMS NO.: K-156
F.A.P. NO.: NA TOD NO.: _____

TS NO. GI-4741 DRAWING: **GI-01** OF 01 SHEET NO. 2 OF 2