

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF ZION ROAD AND KELLY ROAD IN WICOMICO COUNTY.

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 4 NEMA PHASES. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE WESTBOUND MOVEMENT OF ZION ROAD WITH A RIGHT TURN OVERLAP FOR NORTHBOUND KELLY ROAD TO EASTBOUND ZION ROAD. THE ZION ROAD THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE KELLY ROAD THROUGH MOVEMENTS WILL OPERATE SEPARATELY.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

NONE.

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

QUANTITY UNITS

QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MOBILIZATION.
LUMP SUM	LS	MAINTENANCE OF TRAFFIC.
1	EA	14 FT. STEEL PEDESTAL POLE WITH BREAK AWAY TRANSFORMER BASE.
1	EA	27 FT. STEEL TWIN MAST ARM POLE WITH TWO 50 FT. MAST ARMS.
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED CABINET, VIDEO DETECTION INTERFACE (Note: CONTROLLER AND CABINET SHALL BE PURCHASED FROM EDCOLITE 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.
1	EA	8 IN./12 IN., ONE-WAY, FIVE SECTION L.E.D. (8 IN. R,Y,G/ 12 IN. YA,GA) ADJUSTABLE BLACK FACED TRAFFIC SIGNAL WITH POST TOP MOUNTING HARDWARE AND TUNNEL VISORS.
2	EA	12 IN., ONE-WAY, FIVE SECTION L.E.D. (R,Y,YA,G,GA) ADJUSTABLE BLACK FACED TRAFFIC SIGNAL HEAD WITH MAST ARM MOUNTING HARDWARE AND TUNNEL VISORS.
2	EA	VIDEO DETECTION CAMERA AND CABLE. (2 - 300 LF.)
1	EA	16 IN. X VAR. D-3(1) SIGN (DUAL-FACED) WITH MAST ARM MOUNTING HARDWARE.
1	EA	16 IN. X VAR. D-3(1) SIGN WITH MAST ARM MOUNTING HARDWARE.
2	EA	36 IN. X 36 IN. W 3-3 NEW SIGN FOR GROUND MOUNTING.
2	EA	NON-INVASIVE PROBE (SET OF 3) WITH 1000 FT. LEAD-IN CABLE.
1	EA	20 FT. LUMINAIRE ARM.
1	EA	250 W.H.P.S. lamp and luminaire.
1	CY	TEST PIT EXCAVATION.
12	EA	HANDHOLE.
250	LF	2-CONDUCTOR ELECTRICAL TRAY CABLE (No. 12 A.W.G.).
50	LF	5-CONDUCTOR ELECTRICAL CABLE (No. 14 A.W.G.).
900	LF	7-CONDUCTOR ELECTRICAL CABLE (No. 14 A.W.G.).
150	LF	BARE COPPER STRANDED GROUND WIRE (No. 6 A.W.G.).
60	LF	2 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED.
750	LF	3 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED.
355	LF	3 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - BORED.
110	LF	4 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED.
200	LF	4 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - BORED.
7.5	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT.
7	EA	GROUND ROD - 3/4 IN. DIAMETER x 10 FT. LENGTH.
1	EA	ELECTRICAL UTILITY SERVICE EQUIPMENT (120/240 V. ONE PHASE, THREE WIRE SYSTEM) FOR AN UNDERGROUND ELECTRICAL POWER SERVICE AS PER MD-SHA TYPICAL NO. (807-05-01 (200 AMP. ELECTRICAL PEDESTAL)).
75	LF	24 IN. WIDE HEAT APPLIED PERMANENT PERFORMED THERMOPLASTIC PAVEMENT MARKING - WHITE FOR STOP LINE.
40	LF	4 IN. x 6 IN. WOOD SIGN SUPPORT.
1	EA	REMOVE EXISTING GROUND MOUNTED SIGN.
1	EA	CUT, CLEAN, AND CAP MAST ARM.

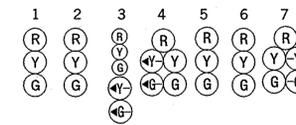
SPECIAL NOTES

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

PROJECT CONTACTS:

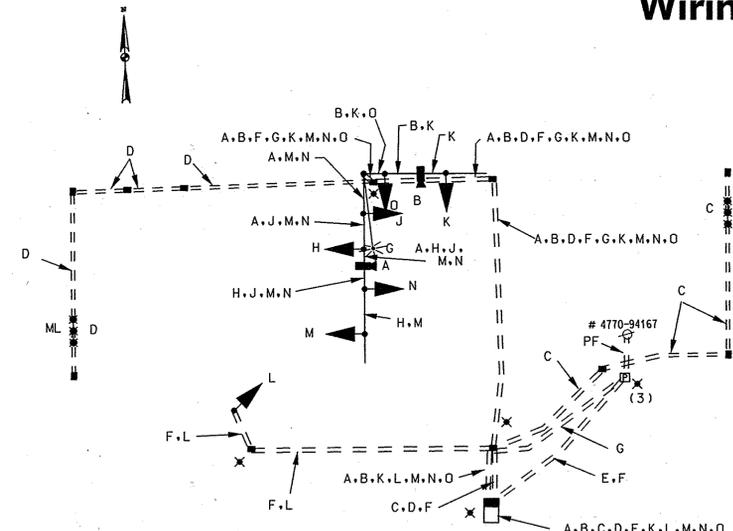
MR. GENE COFLELL, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 677-4040
RAVINDRA GANVIR, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 677-4020
MR. JAMES WRIGHT ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 676-4010
MR. BRUCE POOLE, UTILITY ENGINEER
PHONE: (410) 677-4082
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS
PHONE: (410) 787-7652
MR. JOHN REDDEN, WICOMICO COUNTY
PHONE: (410) 548-4810

Phase Chart



PHASE	1	2	3	4	5	6	7
PHASE 2 AND 5	R	R	+GG	+GG	G	R	R/G
5 CHANGE	R	R	+Y/G	+Y/G	G	R	R/Y
PHASE 2 AND 6	G	G	G	G	G	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	R	G	G
4 CHANGE	R	R	R	R	R	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R

Wiring Diagram



KEY

- A } VIDEO DETECTOR CABLE
- B } VIDEO DETECTOR CABLE
- C } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
- D } NON-INVASIVE MICRO-LOOP DETECTOR LEAD-IN CABLE
- E } 1-CONDUCTOR (NO. 4 A.W.G.) (3 PIECES) FOR TRAFFIC SIGNAL ELECTRICAL SERVICE
- F } BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- G } 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
- H } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- K } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- L } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- M } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- N } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- O } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- PF } PROPOSED UNDERGROUND ELECTRICAL SERVICE BY DELMARVA POWER COMPANY
- x } PROPOSED GROUNDING ROD
- ML } MICRO-LOOP DETECTOR (NON-INVASIVE)

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

ZION ROAD AND KELLY ROAD

GENERAL INFORMATION PLAN

SCALE NA DATE June 9, 2008 CONTRACT NO. BW996M82

DESIGNED BY FRANK HOECKEL COUNTY WICOMICO
DRAWN BY FRANK HOECKEL LOGMILE 22400603.41
CHECKED BY M. Fujii TMS NO. J030
F.A.P. NO. NA TOD NO. _____

TS NO. GI-4652 DRAWING - OF SHEET NO. 2 OF 2

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