

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AND INTERCONNECT AT THE INTERSECTION OF MD 174 (QUARTERFIELD ROAD) AND PAMELA ROAD /LANDMARK DRIVE IN ANNE ARUNDEL COUNTY. MD 174 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE TRAFFIC SIGNAL WILL OPERATE IN A NEMA SIX-PHASE, SEMI-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR EASTBOUND AND WESTBOUND MD 174.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE, ONE (1), FOUR-CHANNEL, TIME-DELAY-OUTPUT DETECTOR AMPLIFIER AND VIDEO DETECTION INTERFACE EQUIPMENT HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE MSHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SNYDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1003

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1002

MR. JOE HORTY
UTILITY ENGINEER
(410) 841-1005

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

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

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

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
CHIEF - SIGNAL OPERATIONS SECTION
(410) 787-7652

PHASE CHART

PHASE 1 & 6	G	R	R	R	R	R	R	R
1 CHANGE	G	R	R	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R
PHASE 4 & 8	R	R	R	R	G	G	G	G
4 & 8 CHANGE	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR

EQUIPMENT LIST "A"

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

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
1 LS	MAINTENANCE OF TRAFFIC
3 CY	TEST PIT EXCAVATION
80 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
1 EA	CONTROLLER AND CABINET - BASE MOUNT
1 EA	VIDEO INTERFACE EQUIPMENT
1 EA	FOUR-CHANNEL, TIME- DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
30 EA	12 INCH LED SIGNAL HEAD SECTION
3 EA	8 INCH LED SIGNAL HEAD SECTION
12 CY	CONCRETE FOUNDATION FOR SIGNAL
1 EA	27 FT. TWIN MAST ARM POLE & 50FT/60 FT MAST ARMS
1 EA	27 FT. TWIN MAST ARM POLE & 50FT/70 FT MAST ARMS
2 EA	CUT, CLEAN, GALVANIZE, AND CAP TRAFFIC SIGNAL STRUCTURE
1 EA	ELECTRICAL HANDHOLE
80 LF	2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
75 LF	2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
55 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
75 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
50 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
75 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT- BORED
3 EA	VIDEO DETECTION CAMERA AND CABLE
75 LF	WOOD SIGN SUPPORTS 4 IN. X 6 IN.
1 EA	METERED SERVICE PEDESTAL EMBEDDED
1000 LF	12-PAIR COMMUNICATION CABLE
75 LF	ELECTRICAL CABLE 1 - CONDUCTOR (NO. 4 A.W.G.) - THHN /THWN
350 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 12 A.W.G.)
100 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 A.W.G.)
900 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 A.W.G.)
270 LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
30 LF	DISCONNECT, PULL BACK AND REROUTE CABLE
5 EA	3/4 IN. X 10 FT. GROUND ROD
2 EA	D3-1 (VAR X 16") DUAL FACE SIGN - MAST ARM MOUNT
2 EA	SHIELD ASSEMBLY SIGN (30" X 51") - POLE MOUNT
2 EA	SHIELD ASSEMBLY SIGN (48" X 75") - POLE MOUNT
2 EA	R3-SL (30" X 36") SIGN - MAST ARM MOUNT
2 EA	W3-3 (48" X 48") WITH "NEW" PANEL (30" X 30") D-3(1) (VAR. X 32") SIGN -GROUND MOUNT
120 LF	REMOVE EXISTING PAVEMENT MARKING LINE
2 EA	15 FT. STREET LIGHTING ARM WITH 250 WATT HPSV LUMINAIRE
1 LS	REMOVE AND DISPOSE OF EXISTING STREET LIGHTING

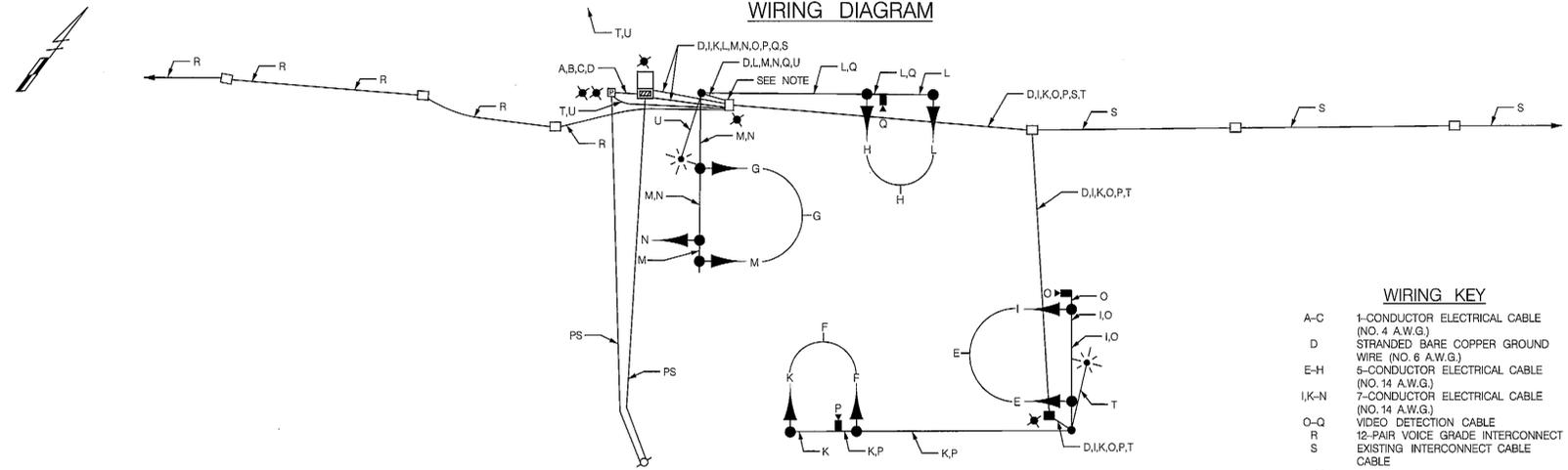
EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



WIRING KEY

A-C	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
D	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
E-H	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I-J-N	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
O-Q	VIDEO DETECTION CABLE
R	12-PAIR VOICE GRADE INTERCONNECT
S	EXISTING INTERCONNECT CABLE
T-U	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
ML	MICRO-LOOP PROBE
PS	PROPOSED ELECTRIC SERVICE GROUND ROD
X	GROUND ROD
□	METER SERVICE PEDESTAL

NOTES
DISCONNECT THE EXISTING INTERCONNECT CABLE FROM THE EXISTING CONTROLLER AT MD 174 AND OLD STAGE ROAD AND PULL BACK TO THIS POINT. REINSTALL IT THROUGH THE NEW CONDUIT TO THE CONTROLLER AT THIS INTERSECTION.

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

GENERAL INFORMATION PLAN
MD 174 (QUARTERFIELD ROAD) AND
PAMELA ROAD /LANDMARK DRIVE

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite B
Gambrills, MD 21054
(410) 923-7101
FAX: (410) 923-6473
EMAIL: TRAFFIC@TRAFFIC-CONCEPTS.COM

SCALE	NONE	DATE	7-24-09	CONTRACT NO.	BW996MB2
DESIGNED BY	T.ZAYDEL	COUNTY	ANNE ARUNDEL		
DRAWN BY	J.K. SCHMID /T. ZAYDEL	LOGMILE	02017405.24		
CHECKED BY	K. SCHMID	T.I.M.S. NO.	J - 834		
F.A.P. NO.	NR	TOD NO.			
DRAWING NO.	TS - 4721 GI	SHEET NO.	2	OF	2