DRILL HOLES

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PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING FIREHOUSE TRAFFIC SIGNAL TO A FULL COLOR TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 175 AND CLARK ROAD/BLOBS PARK ROAD IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY THE WIDENING OF MD 175 AND CLARK ROAD. MD 175 IS ASSUMED TO RUN IN A NORTH–SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES AS A PART TIME SIGNAL AND IS ONLY OPERATIONAL WHEN ACTUATED BY THE PUSHBUTTON IN THE JESSUP VOLUNTEER FIRE DEPARTMENT. THE RECONSTRUCTED TRAFFIC SIGNAL WILL NOW OPERATE IN A NEMA SIX–PHASE, FULLY–ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASES FOR N.B. AND S.B. MD 175 AND SIDE STREET SPLIT PHASING. THE SIGNAL WILL BE INTERCONNECTED TO THE PROPOSED TRAFFIC SIGNAL AT THE INTERSECTION OF THE N.B. MD 295 OFF RAMP AND MD 175.

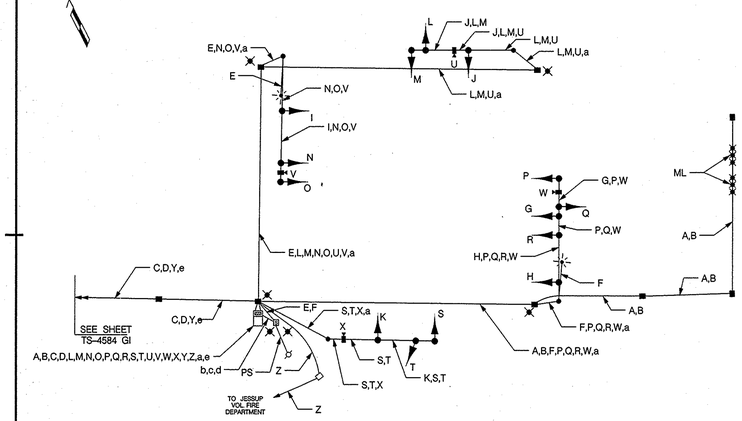
CONTROLLER REQUIREMENTS

A NEW EIGHT–PHASE, FULLY–ACTUATED CONTROLLER WITH ONE (1) FOUR CHANNEL, TIME–DELAY–OUTPUT LOOP DETECTOR AMPLIFIER, VIDEO INTERFACE EQUIPMENT SYSTEM PACKAGE AND SPECIAL RELAY PACKAGE FOR FIREHOUSE PRE–EMPTION HOUSED IN A NEMA "6" BASE MOUNTED CABINET WILL BE INSTALLED AT THE INTERSECTION.

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.

WIRING DIAGRAM



WIRING KEY

A–D	MICRO–LOOP PROBE LEAD–IN
E–F	2–CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) TRAY CABLE
G–K	5–CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
L–T	7–CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
U–X	VIDEO DETECTION CABLE
Y	12–PAIR VOICE GRADE INTERCONNECT CABLE
Z	3–CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
a	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
b–d	1–CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
e	5–CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
ML	MICRO–LOOP PROBE
PS	PROPOSED ELECTRIC SERVICE
⊠	GROUND ROD

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
LS	MAINTENANCE OF TRAFFIC
6 CY	TEST PIT EXCAVATION
170 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
40 EA	12 INCH LED SIGNAL HEAD SECTION
6 EA	8 INCH LED SIGNAL HEAD SECTION
2 EA	15 FT. LIGHTING ARM WITH 250 WATT LUMIAIRE
2 EA	MAST ARM POLE & 60 FT. MAST ARM
2 EA	MAST ARM POLE & 50 FT. MAST ARM
2 EA	NON–INVASIVE MICRO–LOOP PROBE (ANY LENGTH)
LS	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT
4 EA	VIDEO DETECTION CAMERA AND CABLE
520 LF	12 – PAIR COMMUNICATION CABLE
600 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN – TRENCHED
640 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN. – BORED
475 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
1 EA	METERED SERVICE PEDESTAL EMBEDDED
50 LF	ELECTRICAL CABLE 1 – CONDUCTOR NO. 4 AWG – THHN /THWN
9 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
500 LF	ELECTRICAL CABLE 3 – CONDUCTOR (NO 14 AWG)
630 LF	ELECTRICAL CABLE 5 – CONDUCTOR (NO 14 AWG)
1950 LF	ELECTRICAL CABLE 7 – CONDUCTOR (NO 14 AWG)
380 LF	ELECTRICAL CABLE 2 – CONDUCTOR (NO 12 AWG)
1 EA	EIGHT–PHASE CONTROLLER AND CABINET WITH SYSTEM PACKAGE – BASE MOUNT (MASTER /LOCAL)
22 CY	CONCRETE FOUNDATION FOR SIGNAL
1 EA	VIDEO INTERFACE EQUIPMENT
6 EA	3/4 IN. X 10 FT. GROUND ROD
4 EA	D3–2 (VAR X 16") DUAL FACE SIGN – MAST ARM MOUNT
2 EA	SHIELD ASSEMBLY (48" X 75") – POLE MOUNT
2 EA	SHIELD ASSEMBLY (30" X 51") – POLE MOUNT
4 EA	R3–5L (30" X 36") SIGN – MAST ARM MOUNT
1 EA	R3–6 (30" X 36") SIGN – MAST ARM MOUNT
2 EA	R3–5R (30" X 36") SIGN – MAST ARM MOUNT
1 EA	FOUR–CHANNEL, TIME– DELAY–OUTPUT LOOP DETECTOR AMPLIFIER
1 EA	ASC 2 MASTER CONTROLLER AND INTERFACE

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.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

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

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER – MAINTENANCE
(410) 841–1002

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER – UTILITIES
(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
TEAM LEADER SIGNAL OPERATIONS
(410) 787–7652

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	SEE TS – 4584	
	RR, RY, RG	RR, RY, RG	R, Y, G	R, Y, G	RR, RY, RG	RR, RY, RG	R, Y, G	R, Y, G	R, Y, G, RG	R, Y, G, RG	R, Y, G	R, Y, G, RG	R, Y, G, RG	R, Y, G	Y	Y
PHASE 1 & 5	◄G–	◄G–	R	R	◄G–	◄G–	R	R	R	R	R	R	R	R	DARK	DARK
1 & 5 CHANGE	PHASE 1 & 5 MAY CHANGE TO PHASE 1 & 6, 2 & 5, OR 2 & 6															
PHASE 1 & 6	◄G–	◄G–	G	G	◄R–	◄R–	R	R	R	R	R	R	R	R	DARK	DARK
1 & 6 CHANGE	◄Y–	◄Y–	Y	Y	◄R–	◄R–	R	R	R	R	R	R	R	R	DARK	DARK
PHASE 2 & 5	◄R–	◄R–	R	R	◄G–	◄G–	G	G	R	R	R	R	R	R	DARK	DARK
2 & 5 CHANGE	◄R–	◄R–	R	R	◄Y–	◄Y–	Y	Y	R	R	R	R	R	R	DARK	DARK
PHASE 2 & 6	◄R–	◄R–	G	G	◄R–	◄R–	G	G	R	R	R	R	R	R	DARK	DARK
2 & 6 CHANGE	◄R–	◄R–	Y	Y	◄R–	◄R–	Y	Y	R	R	R	R	R	R	DARK	DARK
PHASE 3	◄R–	◄R–	R	R	◄R–	◄R–	R	R	G ◄G–	G ◄G–	G	R	R	R	FLY	FLY
3 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	Y	Y	Y	R	R	R	FLY	FLY
PHASE 4	◄R–	◄R–	R	R	◄R–	◄R–	R	R	R	R	R	G ◄G–	G ◄G–	G	FLY	FLY
4 CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	R	R	R	Y	Y	Y	FLY	FLY
PRE–EMPTION	◄R–	◄R–	R	R	◄R–	◄R–	R	R	G ◄G–	G ◄G–	G	R	R	R	FLY	FLY
CHANGE	◄R–	◄R–	R	R	◄R–	◄R–	R	R	Y	Y	Y	R	R	R	FLY	FLY
FLASHING OPERATION	◄FLR–	◄FLR–	FLY	FLY	◄FLR–	◄FLR–	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	FLR	FLR

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923–7101
FAX (410) 923–6473
EMAIL TRAFFIC.CONCEPTS@COMCAST.NET

2060 SIS SIG

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN
MD 175 AND CLARK ROAD/ BLOBS PARK ROAD

SCALE NONE DATE 8–8–07 CONTRACT NO. BW996M82

DESIGNED BY T. ZAYDEL COUNTY ANNE ARUNDEL
DRAWN BY T. ZAYDEL LOGMILE 02017508.19
CHECKED BY K. SCHMID T.I.M.S. NO.
F.A.P. NO. N/A TOD NO.

DRAWING NO. TS–1419C GI SHEET NO. 2 OF 2