

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF GEORGE CLAUSS BLVD. AND QUARTERFIELD PARK ROAD IN ANNE ARUNDEL COUNTY. GEORGE CLAUSS BLVD. IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR NORTHBOUND GEORGE CLAUSS BLVD, SIDE STREET SPLIT PHASING AND AN EASTBOUND RIGHT TURN OVERLAP PHASE. VIDEO DETECTION WILL BE USED. THIS INTERSECTION WILL BE INTERCONNECTED TO THE INTERSECTION OF MD 174 AND THE I-97 SOUTHBOUND RAMPS.

**CONTROLLER REQUIREMENTS**

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND TWO (2), FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS 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.

**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
5 CY	TEST PIT EXCAVATION
220 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
2 EA	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE
1 EA	FURNISH AND INSTALL 500 FT. VIDEO DETECTION CABLE
3 EA	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
34 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
2 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM
2 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE
9 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
2 EA	FURNISH AND INSTALL 50 FT. MAST ARM AND POLE
2 EA	FURNISH AND INSTALL 70 FT. MAST ARM AND POLE
4 EA	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN
3 EA	FURNISH AND INSTALL NON-INVASIVE MICRO-LOOP PROBE SET WITH 500 FT. LEAD-IN
1 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
210 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
150 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
230 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
380 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
18 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
420 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
1 EA	FURNISH AND INSTALL METERED SERVICE PEDESTAL
50 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 A.W.G.)
11 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
280 LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE - UNDERGROUND
8 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
100 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
1400 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
380 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 A.W.G.) - TRAY CABLE
1 EA	FURNISH AND INSTALL BASE MOUNTED CABINET AND CONTROLLER
2 EA	FURNISH AND INSTALL 4-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
4 EA	FURNISH AND INSTALL D3-2 DUAL FACE SIGN (VAR. X 16") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL R3-S(L) SIGN (30" X 36") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL R3-S(R) SIGN (30" X 36") - MAST ARM MOUNT

**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. CHARLES GEORGE  
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

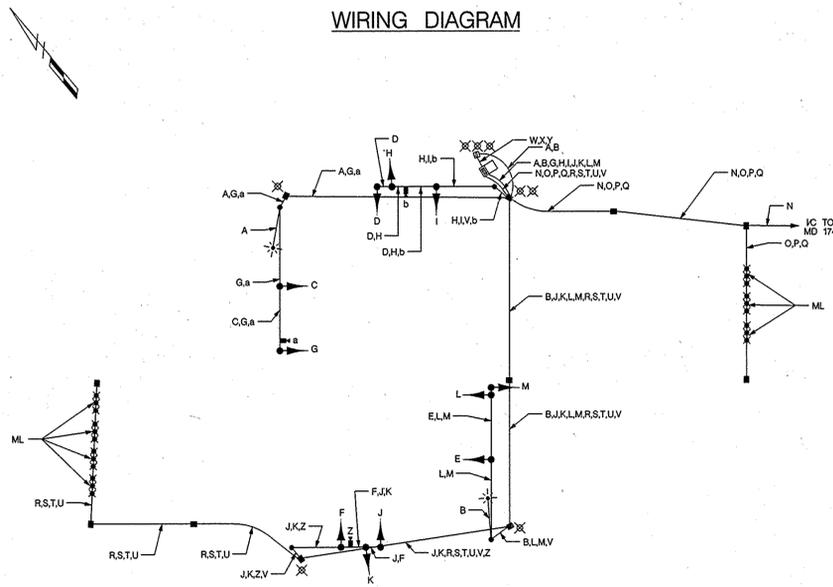
MS. DARLENE EIDE  
SUPPLY OFFICE  
SIGNAL SHOP WAREHOUSE  
(410) 787-7668

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
(410) 787-7652

**PHASING CHART**

	1	2	3	4	5	6	7	8	9	10	11
PHASE 1 & 6	←	←	R	R	R	R	R	R	R	R	R
1 & 6 CHANGE	←	←	R	R	R	R	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	R	R	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	G	G	G
3 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y
PHASE 4	R	R	R	R	←	←	←	←	R	R	R
4 CHANGE	R	R	R	R	←	←	←	←	R	R	R
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR

**WIRING DIAGRAM**



**WIRING KEY**

A-B	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
C-F	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
G-M	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
N	12-PAIR VOICE GRADE INTERCONNECT CABLE
O-U	MICRO-LOOP PROBE LEAD-IN
V	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
W-Y	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
Z-B	VIDEO DETECTION CABLE
ML	MICRO-LOOP PROBE
X	GROUND ROD

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

**GENERAL INFORMATION PLAN**  
GEORGE CLAUSS BLVD. AND  
QUARTERFIELD PARK ROAD

SCALE NONE DATE 1-21-05 CONTRACT NO. BW 996M82

DESIGNED BY T. ZAYDEL COUNTY ANNE ARUNDEL  
DRAWN BY T. ZAYDEL LOGMILE 02C.GE000.079  
CHECKED BY K. SCHMID T.I.M.S. NO. H788  
F.A.P. NO. NA TOD NO.

DRAWING NO. TS-4491 GI SHEET NO. OF

**TRAFFIC CONCEPTS, INC.**  
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