

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 5 AND GOLDEN BEACH ROAD IN ST. MARY'S COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A LEFT TURN ONLY LANE FOR WESTBOUND GOLDEN BEACH ROAD. GOLDEN BEACH ROAD WILL BECOME SPLIT PHASED, EASTBOUND AND WESTBOUND, AND THE LANE USE FOR EASTBOUND GOLDEN BEACH ROAD WILL BECOME A LEFT AND SHARED THRU-RIGHT. MD 5 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH LEAD-LAG EXCLUSIVE-PERMISSIVE LEFT TURN PHASES AND PRE-EMPTION FOR BOTH DIRECTIONS OF MD 5. THE INTERSECTION WILL NOW OPERATE IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR BOTH DIRECTIONS OF MD 5 AND SIDE STREET SPLIT PHASING. PRE-EMPTION WILL NOT CHANGE.

**CONTROLLER REQUIREMENTS**

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED.

**CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:**

MRS. KIM TRAN  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
(410) 841-1019

MR. JOHN MAYES  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
(410) 841-1013

MR. MIKE HUBER  
UTILITY ENGINEER  
(410) 841-1039

**CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY**

MR. AVIJIT MAJI  
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

MR. MICHAEL STOCKER  
SUPPLY OFFICE  
SIGNAL SHOP WAREHOUSE  
(410) 787-7668

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

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 1 & 6	←R	←R	←R	R	R	←G	←G	G	G	R	R	R	R
1 & 6 CHANGE	←R	←R	←R	R	R	←Y	←Y	Y	Y	R	R	R	R
PHASE 2 & 6	←R	←R	←R	G	G	←R	←R	G	G	R	R	R	R
2 & 6 CHANGE	←R	←R	←R	Y	Y	←R	←R	Y	Y	R	R	R	R
PHASE 2 & 5	←G	←G	←G	G	G	←R	←R	R	R	R	R	R	R
2 & 5 CHANGE	←Y	←Y	←Y	Y	Y	←R	←R	R	R	R	R	R	R
PHASE 3	←R	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R
4 CHANGE	←R	←R	←R	R	R	←R	←R	R	R	Y	Y	R	R
PHASE 4	←R	←R	←R	R	R	←R	←R	R	R	R	R	←G	←G
4 CHANGE	←R	←R	←R	R	R	←R	←R	R	R	R	R	Y	Y
PRE-EMPTION "A"	←R	←R	←R	R	R	←G	←G	G	G	R	R	R	R
PHASE "A" CHANGE	←R	←R	←R	R	R	←Y	←Y	G	G	R	R	R	R
PRE-EMPTION "B"	←R	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R
PHASE "B" CHANGE	←R	←R	←R	R	R	←R	←R	R	R	Y	Y	R	R
FLASHING OPERATION	←FLR	←FLR	←FLR	FLY	FLY	←FLR	←FLR	FLY	FLY	FLR	FLR	FLR	FLR

**EQUIPMENT LIST "A"**

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

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
1320 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
2 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS OR ARROWS
545 LF	5 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
635 LF	5 IN. YELLOW HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
11 EA	12 IN. L.E.D. SIGNAL HEAD SECTION
130 LF	24 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING
2 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
1 EA	ELECTRICAL HANDHOLE
50 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
20 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
75 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
LS	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT
85 SF	DETECTABLE WARNING SURFACE
3 EA	R3-SL (30" X 36") SIGN - MAST ARM MOUNT
280 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 A.W.G.)
1 EA	3/4 IN. X 10 FT. GROUND ROD
90 LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
2200 LF	DISCONNECT, PULL BACK AND REROUTE CABLE

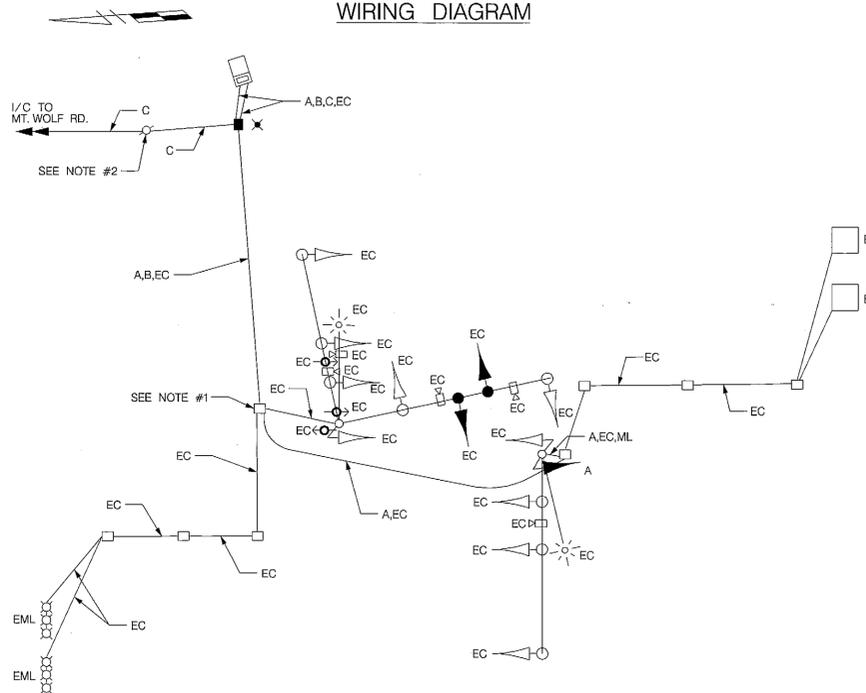
**EQUIPMENT LIST "C"**

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.

QUANTITY	DESCRIPTION
NONE	

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

**WIRING DIAGRAM**



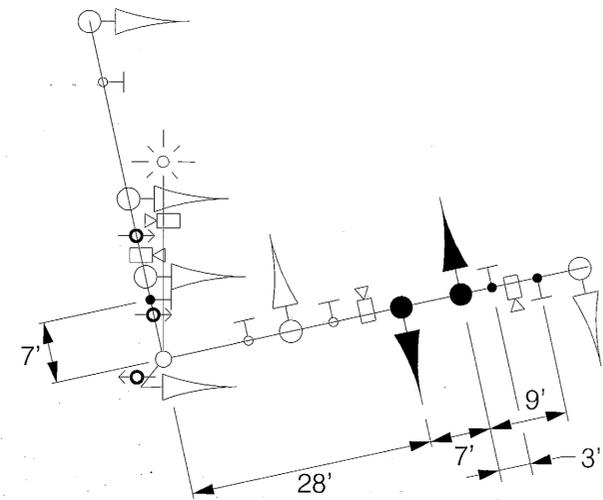
**WIRING KEY**

- A 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- B STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- C EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE
- EML EXISTING MICRO-LOOP PROBE
- ML MICRO-LOOP PROBE
- X GROUND ROD

**WIRING NOTE**

1. DISCONNECT THE EXISTING NORTHBOUND LOOP DETECTOR, SOUTHBOUND MICRO-LOOP, SIGNAL HEAD, VIDEO DETECTION, OPTICOM, AND LIGHTING CABLES FROM THE EXISTING CONTROLLER AT MD 5 & GOLDEN BEACH ROAD AND PULL THEM BACK TO THIS POINT. REINSTALL THESE CABLES THROUGH THE NEW CONDUIT & HANDHOLE TO THE EXISTING BASE MOUNTED CABINET.
2. DISCONNECT THE EXISTING INTERCONNECT CABLE FROM THE EXISTING CONTROLLER AT MD 5 & GOLDEN BEACH ROAD AND PULL IT BACK TO THIS POINT. REINSTALL THIS CABLE THROUGH THE NEW CONDUIT & HANDHOLE TO THE EXISTING BASE MOUNTED CABINET.

**SIGNAL AND SIGNING DIMENSIONS (DETAIL)**



SHA TRACKING NO. - 08-AP-SM-024-XX

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
**MD 5 AND GOLDEN BEACH ROAD**  
CHARLOTTE HALL, MARYLAND

**GENERAL INFORMATION PLAN**

SCALE	NONE	DATE	11-8-2012	CONTRACT NO.	BW996M82
DESIGNED BY	T.ZAYDEL	COUNTY	ST. MARY'S		
DRAWN BY	M. ROSEN	LOGMILE	18000546.66		
CHECKED BY	K. SCHMID	T.I.M.S. NO.	L-282		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS-2285 F GI	SHEET NO.	2	OF	2

**TRAFFIC CONCEPTS, INC.**

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