

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE INSTALLATION OF BATTERY BACK-UP AT THE INTERSECTION OF MD 3 AND S. WAUGH CHAPEL RD. IN ANNE ARUNDEL COUNTY. MD 3 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULLY-ACTUATED MODE WITH AN EXCLUSIVE LEFT TURN PHASE FOR NORTHBOUND MD 3.

**CONTROLLER REQUIREMENTS**

USE THE EXISTING FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE TIME-DELAY-OUTPUT LOOP 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. EDWARD RODENHIZER OF THE MSHA AT (410) 787-7652 72 HOURS IN ADVANCE TO ENERGIZE THE BATTERY BACK-UP SYSTEM.

**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. MIKE HUBER  
UTILITY ENGINEER  
(410) 841-1005

**CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY**

CHIEF, TRAFFIC OPERATIONS  
(410) 787-7630

MR. EUGENE BAILEY  
CHIEF - SIGN OPERATIONS SECTION  
(410) 787-7676

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

MR. MIKE 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	14	15	16
PHASE 1 & 6	G	G	G	G	G	G	R	R	R	R	R	R	R	R	R	G
1 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	Y
PHASE 2 & 6	R	R	R	G	G	G	G	G	G	R	R	R	R	R	R	R
2 & 6 CHANGE	R	R	R	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	G
4 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FLR	FLR	FLR	FLY	FLY	FLY	FLY	FLY	FLY	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.

ITEM	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	1 CY	TEST PIT EXCAVATION
8013	1 EA	F&UPS SYSTEM
8038	30 LF	UP TO 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8042	45 LF	No. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	90 LF	1 CONDUCTOR ELECTRICAL CABLE No. 8 AWG THHN/THWN
8056	30 LF	7 CONDUCTOR ELECTRICAL CABLE No. 14 AWG

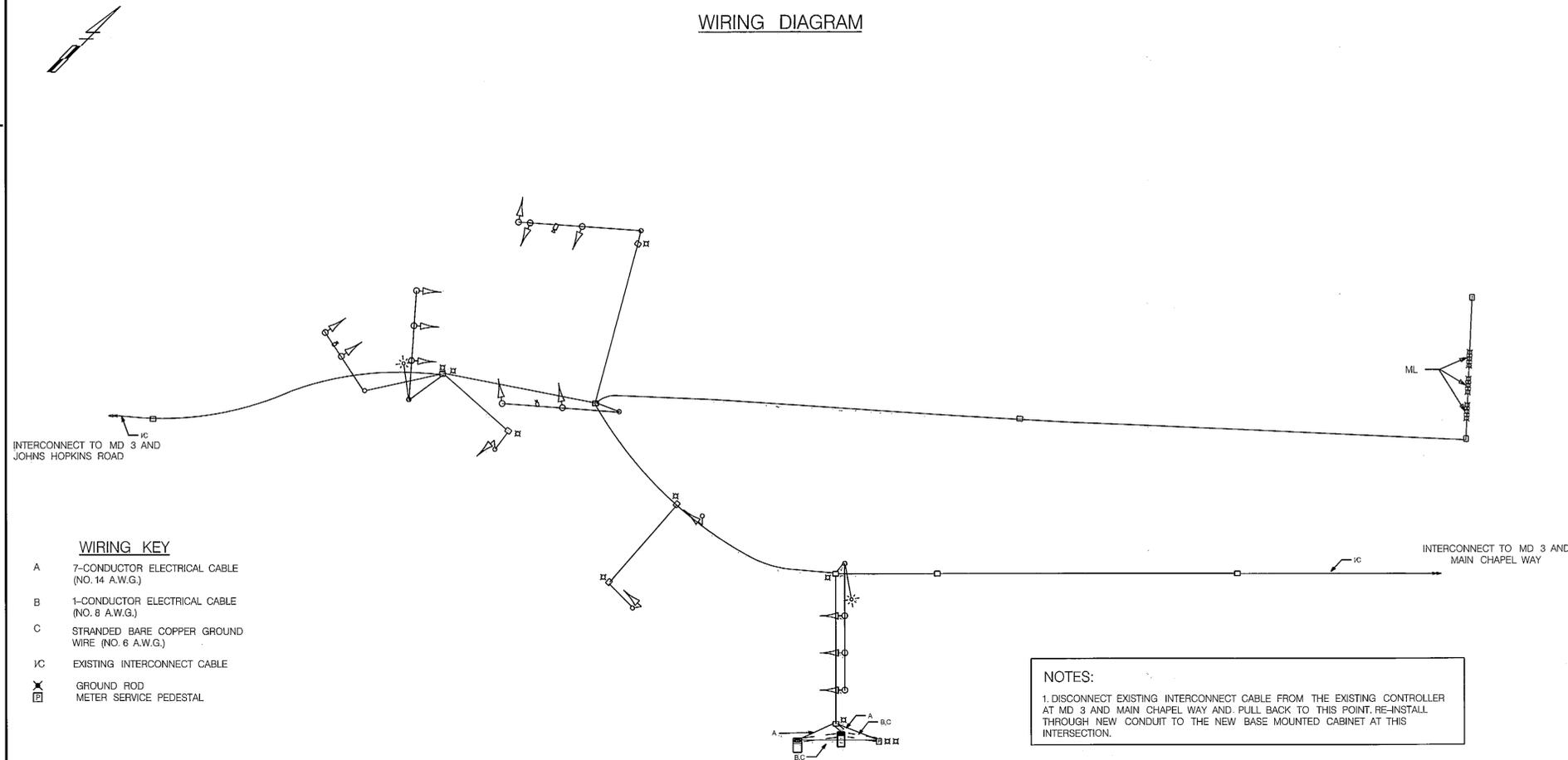
**EQUIPMENT LIST "C"**

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**



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

**MD 3 AND MAIN CHAPEL WAY**

**GENERAL INFORMATION PLAN**

SCALE	NONE	DATE	1/31/2013	CONTRACT NO.	XY1395185
DESIGNED BY	FJA	COUNTY	ANNE ARUNDEL		
DRAWN BY	FJA	LOGMILE	02000303.28		
CHECKED BY		T.I.M.S. NO.	L477		
F.A.P. NO.	NA	TOD NO.			

DRAWING NO. TS-4724 A GI SHEET NO. 2 OF 2

FILE PATH: \$FILES  
DATE: \$DATES

DRILL HOLES

DRILL HOLES

DRILL HOLES