

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 103 (DORSEY ROAD) AND COCA-COLA DRIVE IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A FOURTH LEG TO THE INTERSECTION. MD 103 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE, FULLY-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR EASTBOUND MD 103. THE INTERSECTION WILL NOW OPERATE IN A NEMA FIVE-PHASE, FULLY-ACTUATED MODE WITH AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR EASTBOUND MD 103 AND SIDE STREET SPLIT PHASING.

**CONTROLLER REQUIREMENTS**

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND ONE (1), FOUR-CHANNEL, 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. ROBERT SNYDER OF THE MSHA AT (410) 787-7631 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
3 CY	TEST PIT EXCAVATION
5305 LF	5 INCH HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
160 LF	12 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
110 LF	24 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
5 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING 'ONLY'
14 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
65 LF	REMOVE EXISTING PAVEMENT MARKING
1 EA	CONTROLLER AND CABINET - BASE MOUNT
1 EA	VIDEO INTERFACE EQUIPMENT
1 EA	FOUR-CHANNEL TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
32 EA	12 INCH LED SIGNAL HEAD SECTION
9 EA	8 INCH LED SIGNAL HEAD SECTION
12 CY	CONCRETE FOUNDATION FOR SIGNAL
2 EA	27 FT. TWIN MAST ARM POLE & 50FT/60 FT MAST ARMS
2 EA	15 FT. LIGHTING ARM WITH 250 WATT HPSV LUMINAIRE
10 EA	ELECTRICAL HANDHOLE
30 LF	2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
40 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
170 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT- BORED
735 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
170 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT- BORED
LS	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT
3 EA	VIDEO DETECTION CAMERA AND CABLE
165 LF	WOOD SIGN SUPPORTS 4 IN. X 4 IN.
15 LF	WOOD SIGN SUPPORTS 4 IN. X 6 IN.
650 LF	12-PAIR COMMUNICATION CABLE
50 LF	ELECTRICAL CABLE 1 - CONDUCTOR (NO. 4 A.W.G.) - THHN /THWN
130 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 A.W.G.)
1385 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 A.W.G.)
375 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 12 A.W.G.)
300 LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
5 EA	34 IN. X 10 FT. GROUND ROD
4 EA	NON-INVASIVE MICRO-LOOP PROBE
3 EA	D-3(1) (VAR X 16") DUAL FACE SIGN - MAST ARM MOUNT
2 EA	M1-5(6) (48" X 72") SIGN - POLE MOUNT
2 EA	M1-5(6) (30" X 48") SIGN - POLE MOUNT
1 EA	R3-5L (30" X 36") SIGN - MAST ARM MOUNT
1 EA	R3-6(1) (30" X 30") SIGN - MAST ARM MOUNT
2 EA	R3-5R (30" X 36") SIGN - MAST ARM MOUNT
2 EA	R4-7 (24" X 30") SIGN - GROUND MOUNT
1 EA	M3-3 (24" X 12") SIGN - GROUND MOUNT
1 EA	M1-5 (30" X 24") SIGN - GROUND MOUNT
1 EA	R3-5L /R3-6(1) (54" X 30") SIGN - GROUND MOUNT
2 EA	R3-7R (48" X 48") SIGN - GROUND MOUNT
2 EA	R3-7L (48" X 48") SIGN - GROUND MOUNT
6 EA	RELOCATE EXISTING GROUND MOUNTED SIGN AND SUPPORTS
1 EA	REMOVE EXISTING GROUND MOUNTED SIGN AND SUPPORTS
1 EA	METERED SERVICE PEDESTAL - EMBEDDED
1 EA	10 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS

**EQUIPMENT LIST "C"**

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION 7491 CONNELLEY DRIVE, HANOVER, MD 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST 3 TDAYS IN ADVANCE OF DELIVERY.

QUANTITY	DESCRIPTION
1 EA	CONTROLLER AND MMU/CONFLICT MONITOR

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

MR. MIKE HUBER UTILITY ENGINEER (410) 841-1039  
 MS. DANA GUIDRY ACCESS PERMIT INSPECTOR (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

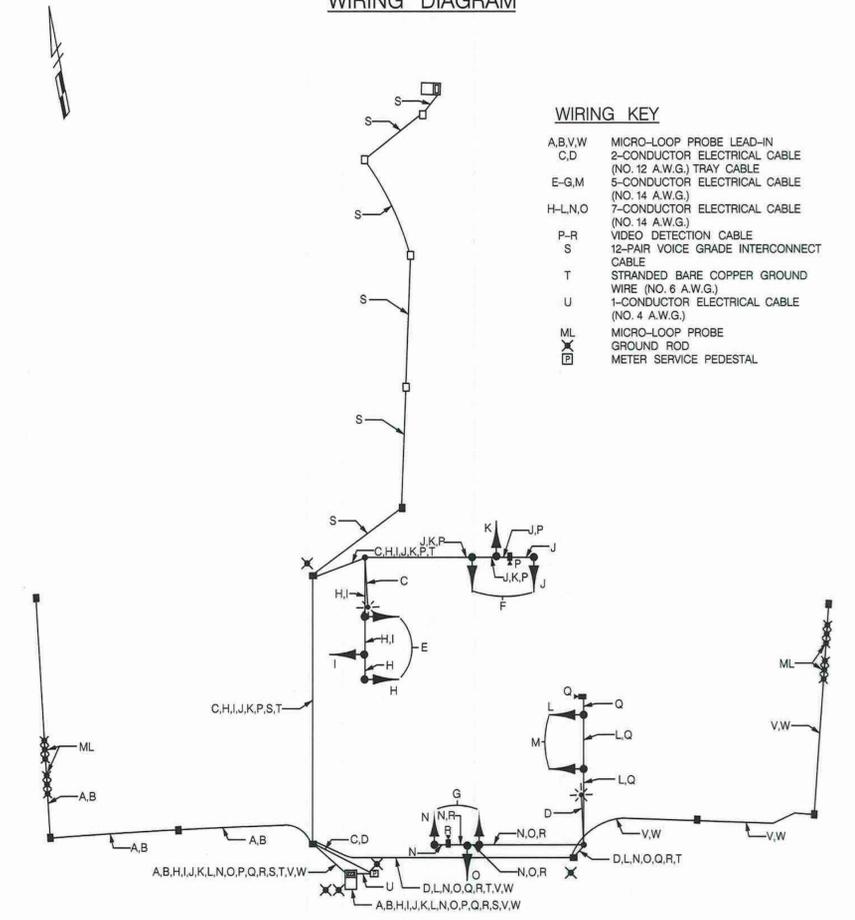
MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS (410) 787-7631  
 MS. DARLENE EIDE SUPPLY OFFICE SIGNAL SHOP WAREHOUSE (410) 787-7668

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

**PHASE CHART**

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

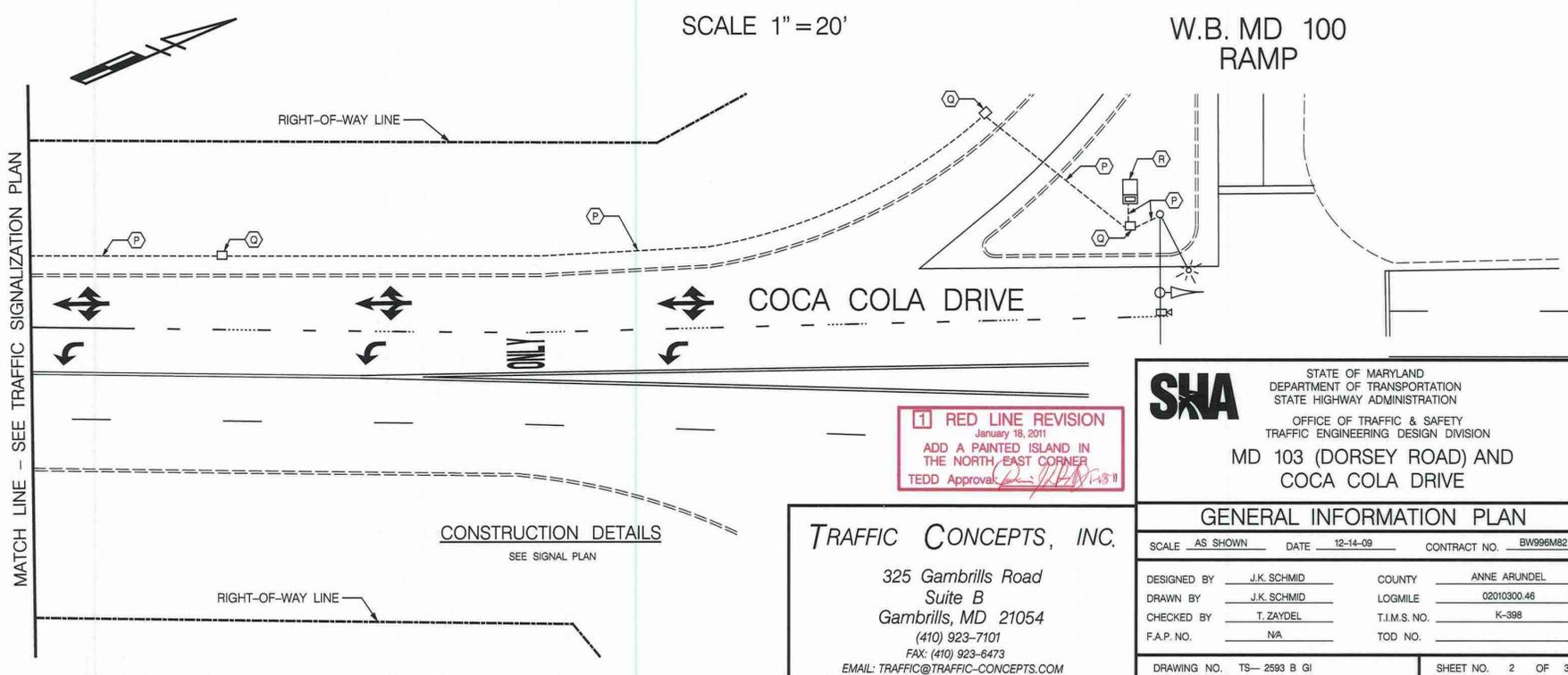
**WIRING DIAGRAM**



DRILL HOLES

DRILL HOLES

DRILL HOLES



**1 RED LINE REVISION**  
 January 18, 2011  
 ADD A PAINTED ISLAND IN THE NORTH-EAST CORNER  
 TEDD Approval: [Signature]

**TRAFFIC CONCEPTS, INC.**  
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**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
**MD 103 (DORSEY ROAD) AND COCA COLA DRIVE**

**GENERAL INFORMATION PLAN**

SCALE	AS SHOWN	DATE	12-14-09	CONTRACT NO.	BW996M82
DESIGNED BY	J.K. SCHMID	COUNTY	ANNE ARUNDEL		
DRAWN BY	J.K. SCHMID	LOGMILE	02010300.46		
CHECKED BY	T. ZAYDEL	T.I.M.S. NO.	K-398		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS-2593 B GI	SHEET NO.	2	OF	3