

INTERSECTION OPERATION

THE RECONSTRUCTED INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASES FOR ALL APPROACHES.

CONTROLLER REQUIREMENTS

A NEW EIGHT-PHASE, FULLY-ACTUATED CONTROLLER WITH TWO (2) FOUR CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS HOUSED IN A NEMA "6" BASE MOUNTED CABINET WILL BE INSTALLED AT THE INTERSECTION.

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
1 EA	MAINTENANCE OF TRAFFIC
3 CY	TEST PIT EXCAVATION
135 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
2 EA	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE
2 EA	FURNISH AND INSTALL 500 FT. VIDEO DETECTION CABLE
48 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
1 EA	CUT, CLEAN, GALVANIZE AND CAP MAST ARM POLE
2 EA	FURNISH AND INSTALL 50 FT./70 FT. TWIN MAST ARMS AND POLE
3 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
LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
4 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
1200 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
280 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
20 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
12 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
68 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS (4 IN. X 6 IN.)
280 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
320 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
1 EA	FURNISH AND INSTALL METERED SERVICE PEDESTAL
60 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 A.W.G.)
16 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
6 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
140 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
2150 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
320 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 W9-2(4) SIGN (30" X 42") - MAST ARM MOUNT
6 EA	FURNISH AND INSTALL R3-5(L) SIGN (30" X 36") - MAST ARM MOUNT
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "NORTH322LT.ARROW" (48" X 75")-POLE MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "SOUTH322LT.ARROW" (48" X 75")-POLE MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "WEST33LT.ARROW" (48" X 75")-POLE MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "EAST33LT.ARROW" (48" X 75")-POLE MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "NORTH322DIAG.ARROW" (24" X 51")-GROUND MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "SOUTH322DIAG.ARROW" (24" X 51")-GROUND MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "WEST33DIAG.ARROW" (24" X 51")-POLE MOUNTED
1 EA	FURNISH AND INSTALL SHIELD ASSEMBLY "EAST33DIAG.ARROW" (24" X 51")-POLE MOUNTED
3800 LF	REMOVE AND RE-INSTALL EXISTING CABLE
16 EA	RELOCATE EXISTING SIGNAL HEAD
6 EA	RELOCATE EXISTING SIGN
140 LF	FURNISH AND INSTALL 3/8 IN. STEEL SPAN WIRE
1 EA	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM
1 EA	FURNISH AND INSTALL 250 WATT HPSV LUMINAIRE
3 EA	FURNISH AND INSTALL OPTICOM DETECTOR EYE W/MAST ARM MOUNTED HARDWARE, 721
600 LF	FURNISH AND INSTALL OPTICOM DETECTOR CABLE, 4-CONDUCTOR
1 EA	FURNISH AND INSTALL OPTICOM DETECTOR MODULE # 764, 4-CHANNEL

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

CONTACT PERSONS FOR DISTRICT 2 ARE AS FOLLOWS:

MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 778-3061

MR. TERRY WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 778-3061

MR. BARRY CLOTHIER
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 778-3061

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

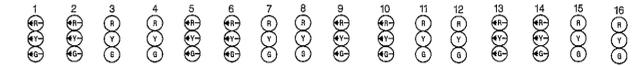
MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

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

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

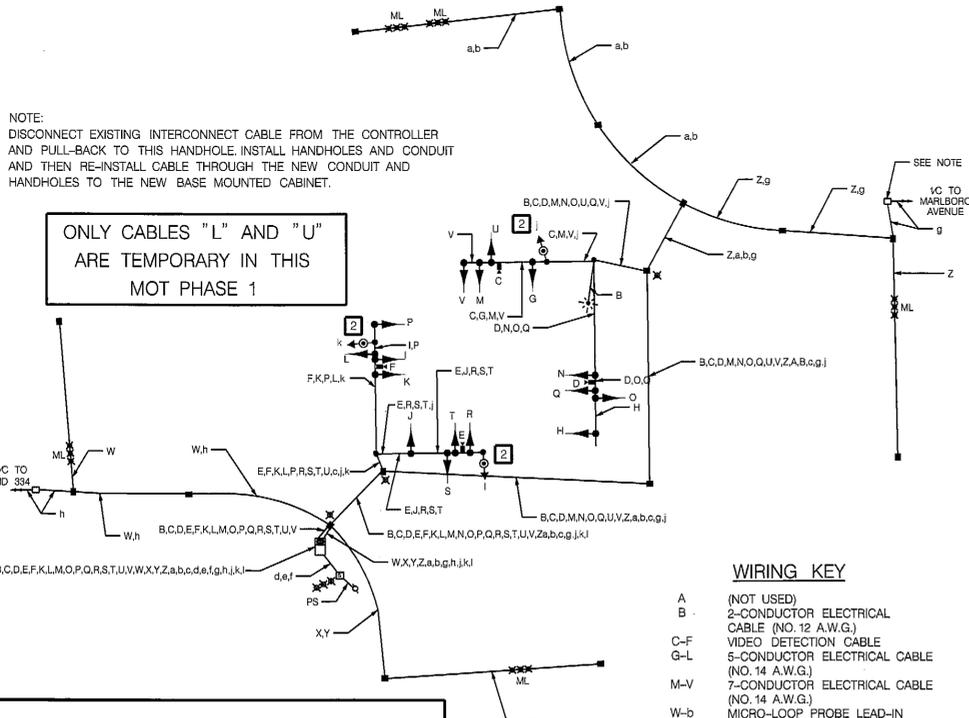
MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

PHASING CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
PHASE 1 & 5	←G-	←G-	R	R	←G-	←G-	R	R	R	R	R	R	R	R	R	R	
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	R	R	
1 CHANGE	←Y-	←Y-	G	G	R	R	R	R	R	R	R	R	R	R	R	R	
PHASE 2 & 5	R	R	R	R	←G-	←G-	G	G	R	R	R	R	R	R	R	R	
5 CHANGE	R	R	R	R	←Y-	←Y-	G	G	R	R	R	R	R	R	R	R	
PHASE 2 & 6	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	
2 & 6 CHANGE	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R	R	R	
PHASE 3 & 7	R	R	R	R	R	R	R	R	←G-	←G-	R	R	←G-	←G-	R	R	
3 & 7 CHANGE	PHASE 3 & 7 MAY CHANGE TO PHASE 3 & 8, 4 & 7, OR 4 & 8																
PHASE 3 & 8	R	R	R	R	R	R	R	R	R	R	R	R	R	←G-	←G-	G	G
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	←Y-	←Y-	G	G
PHASE 4 & 7	R	R	R	R	R	R	R	R	←G-	←G-	G	G	R	R	R	R	
7 CHANGE	R	R	R	R	R	R	R	R	←Y-	←Y-	G	G	R	R	R	R	
PHASE 4 & 8	R	R	R	R	R	R	R	R	R	R	R	R	G	G	R	G	G
4 & 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	Y	Y
FLASHING OPERATION	FLR	FLR	FLY	FLY	FLR	FLR	FLY	FLY	FLR								

WIRING DIAGRAM



NOTE:
DISCONNECT EXISTING INTERCONNECT CABLE FROM THE CONTROLLER AND PULL-BACK TO THIS HANDHOLE. INSTALL HANDHOLES AND CONDUIT AND THEN RE-INSTALL CABLE THROUGH THE NEW CONDUIT AND HANDHOLES TO THE NEW BASE MOUNTED CABINET.

ONLY CABLES "L" AND "U" ARE TEMPORARY IN THIS MOT PHASE 1

WIRING KEY

- A (NOT USED)
- B 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- C-F VIDEO DETECTION CABLE
- G-L 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- M-V 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- W-b MICRO-LOOP PROBE LEAD-IN
- c STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- d-f 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- g-h EXISTING INTERCONNECT CABLE
- PS PROPOSED ELECTRIC SERVICE
- ML GROUND ROD
- ML MICRO-LOOP PROBE
- i,j,k OPTICOM DETECTOR CABLE

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

MOT TEMPORARY CONSTRUCTION PHASE 1

RED LINE REVISION NO. 2
JANUARY 23, 2008

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

GENERAL INFORMATION SHEET
MD 322 AND MD 33

SCALE	NONE	DATE	1-10-08	CONTRACT NO.	BW-996M82
DESIGNED BY	T. ZAYDEL	COUNTY	TALBOT		
DRAWN BY	T. ZAYDEL	LOGMILE	20003322.98		
CHECKED BY	K. SCHMID	T.I.M.S. NO.	G697		
F.A.P. NO.		TOD NO.			
DRAWING NO.	TS-1349G GI	SHEET NO.	3 OF 3		