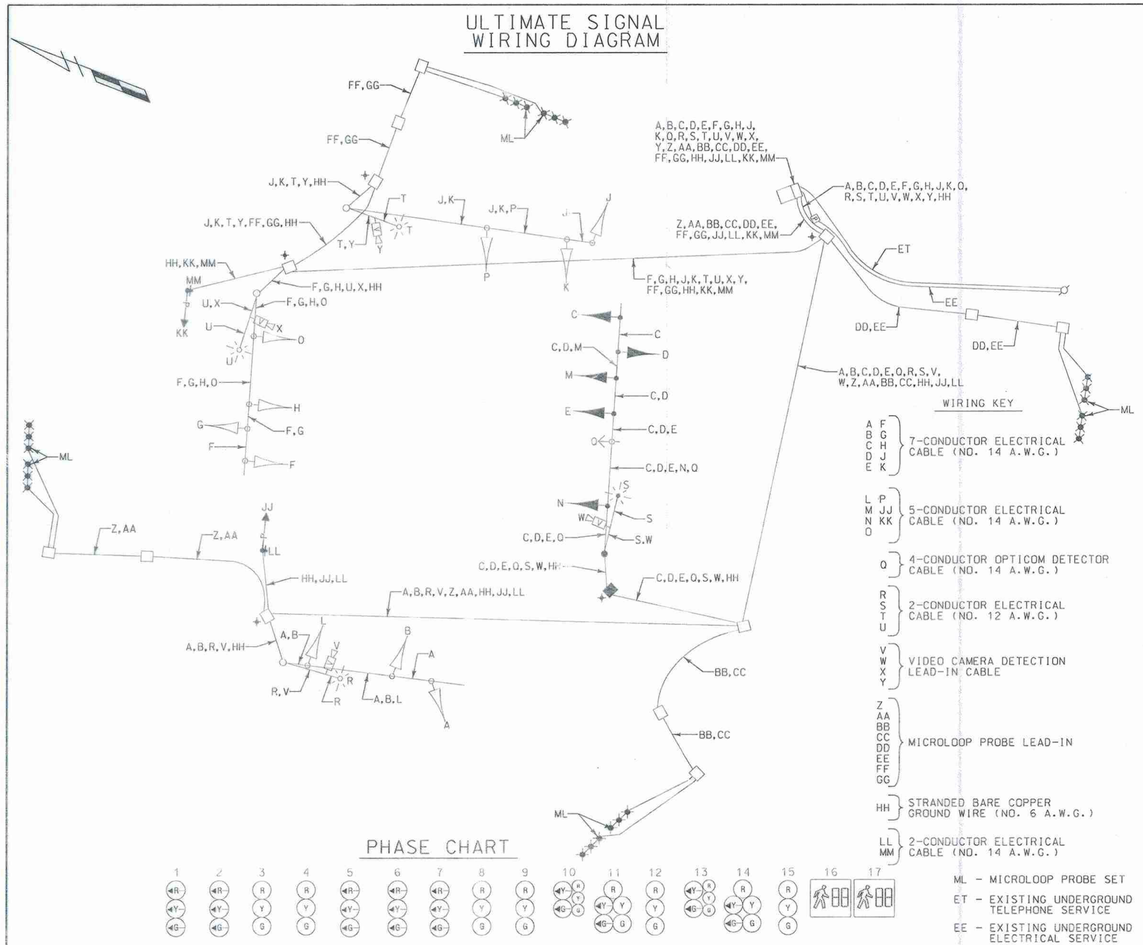
ULTIMATE SIGNAL WIRING DIAGRAM



WIRING KEY

A B C D E F G H J K	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
L M N O P JJ KK	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
Q	4-CONDUCTOR OPTICOM DETECTOR CABLE (NO. 14 A.W.G.)
R S T U	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
V W X Y	VIDEO CAMERA DETECTION LEAD-IN CABLE
Z AA BB CC DD EE FF GG	MICROLOOP PROBE LEAD-IN
HH	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
LL MM	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

ML - MICROLOOP PROBE SET

ET - EXISTING UNDERGROUND TELEPHONE SERVICE

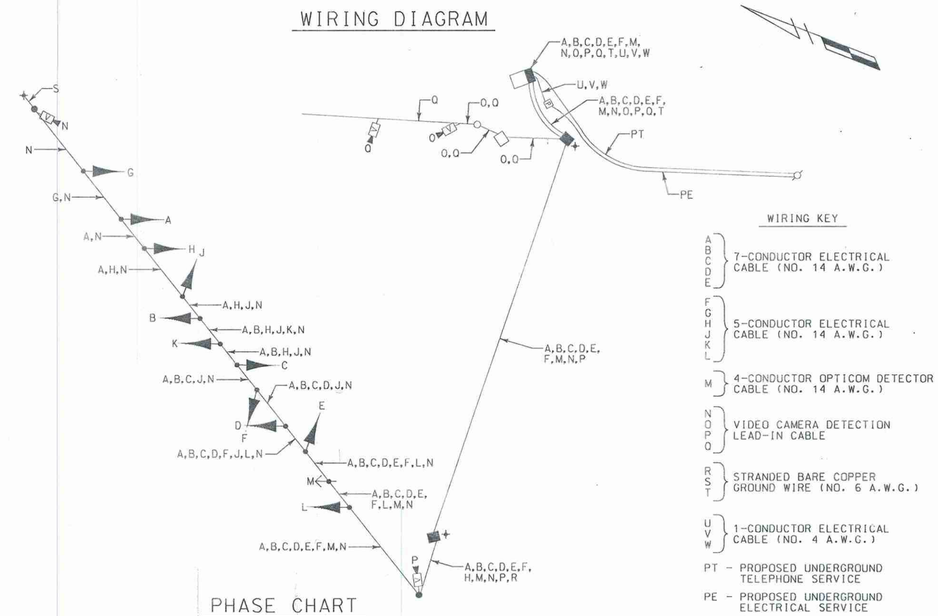
EE - EXISTING UNDERGROUND ELECTRICAL SERVICE

⏚ - 3/4 IN. X 10 FT. GROUND ROD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PHASE 1 + 5	←G—	←G—	R	R	←G—	←G—	←G—	R	R	R	R	R	R	R	R	DW	DW
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6																
PHASE 1 + 6	←G—	←G—	G	G	←R—	←R—	←R—	R	R	R	R	R	R	R	R	DW	DW
1 + 6 CHANGE	←Y—	←Y—	G	G	←R—	←R	←R—	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 + 5	←R—	←R—	R	R	←G—	←G—	←G—	G	G	R	R	R	R	R	R	DW	DW
2 + 5 CHANGE	←R—	←R—	R	R	←Y—	←Y—	←Y—	G	G	R	R	R	R	R	R	DW	DW
PHASE 2 + 6	←R—	←R—	G	G	←R—	←R—	←R—	G	G	R	R	R	R	R	R	DW	DW
2 + 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	←R—	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 3 + 7	←R—	←R—	R	R	←R—	←R—	←R—	R	R	R/G—	R/G—	R	R/G—	R/G—	R	DW	DW
3 + 7 CHANGE	PHASE 3 + 7 MAY CHANGE TO PHASE 3 + 8, PHASE 4 + 7 OR PHASE 4 + 8																
PHASE 3 + 8	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G/G—	G/G—	G	R	R	R	DW	DW
3 + 8 CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G/Y—	G/Y—	G	R	R	R	DW	DW
PHASE 4 + 7	←R—	←R—	R	R	←R—	←R—	←R—	R	R	R	R	R	G/G—	G/G—	G	WK	WK
4 + 7 CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	R	R	R	G/Y—	G/Y—	G	WK	WK
PHASE 4 + 8	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G	G	G	G	G	G	DW	DW
4 + 8 CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	Y	Y	Y	Y	Y	Y	DW	DW
PHASE 4 + 8 ALT	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G	G	G	G	G	G	WK	WK
PED CLEARANCE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G	G	G	G	G	G	FL/DW	FL/DW
4 + 8 ALT CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	Y	Y	Y	Y	Y	Y	DW	DW
EMERGENCY PRE-EMPTION	←R—	←R—	R	R	←G—	←G—	←G—	G	G	R	R	R	R	R	R	DW	DW
	←R—	←R—	R	R	←G—	←G—	←G—	G	G	R	R	R	R	R	R	DW	DW
FLASHING OPERATION	←FL/R—	←FL/R—	FL/Y	FL/Y	←FL/R—	←FL/R—	←FL/R—	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

STAGE 1 CONSTRUCTION WIRING DIAGRAM



WIRING KEY

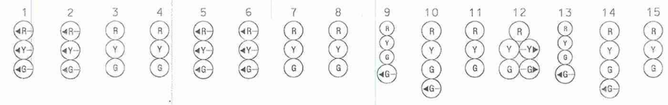
A B C D E	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F G H J K L	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
M	4-CONDUCTOR OPTICOM DETECTOR CABLE (NO. 14 A.W.G.)
N O P Q	VIDEO CAMERA DETECTION LEAD-IN CABLE
R S T	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
U V W	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

PT - PROPOSED UNDERGROUND TELEPHONE SERVICE

PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE

⏚ - 3/4 IN. X 10 FT. GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 + 5	←G—	←G—	R	R	←G—	←G—	R	R	R	R	R	R/G→	R	R	R
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6														
PHASE 1 + 6	←G—	←G—	G	G	←R—	←R—	R	R	R	R	R	R/G→	R	R	R
1 + 6 CHANGE	←Y—	←Y—	G	G	←R—	←R—	R	R	R	R	R	R/G→	R	R	R
PHASE 2 + 5	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	R	R	R
2 + 5 CHANGE	←R—	←R—	R	R	←Y—	←Y—	G	G	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
2 + 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	Y	Y	R	R	R	R	R	R	R
PHASE 3	←R—	←R—	R	R	←R—	←R—	R	R	←G/G—	←G/G—	G	G	R	R	R
3 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	Y	Y	R	R	R
PHASE 4	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	←G/G—	←G/G—	G
4 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	R	Y	Y	Y
EMERGENCY PRE-EMPTION	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	R	R	R
	←R—	←R—	R	R	←Y—	←Y—	G	G	R	R	R	R	R	R	R
FLASHING OPERATION	←FL/R—	←FL/R—	FL/Y	FL/Y	←FL/R—	←FL/R—	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

TSP-16

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 355 AND MD 914 (NEW DESIGN RD.)/MONOCACY BLVD.

FREDERICK, MD

GENERAL INFORMATION SHEET

SCALE 1"=20' ADVERTISED DATE 10/20/2008 CONTRACT NO. FR4265172

DESIGNED BY S. BLOSS
DRAWN BY S. BLOSS
CHECKED BY N. LEARY
F.A.P. NO. SEE TITLE SHEET

COUNTY FREDERICK
LOGMILE 10035510.11
TIMS NO. G813
TOD NO.

TS NO. 3929G-64 DRAWING TSP -16 OF 24 SHEET NO. 259 OF 634

10 REDLINE REVISION NO. 10
SHEET ADDED
6/15/2009

WR&A
Whitman, Requardt and Associates, LLP
Engineers, Architects and Planners
801 South Caroline Street
Baltimore, Maryland 21231
410-235-3450

PLOTTED: $DATETIME$
FILE: $FILE$

BY: $USERNAME$