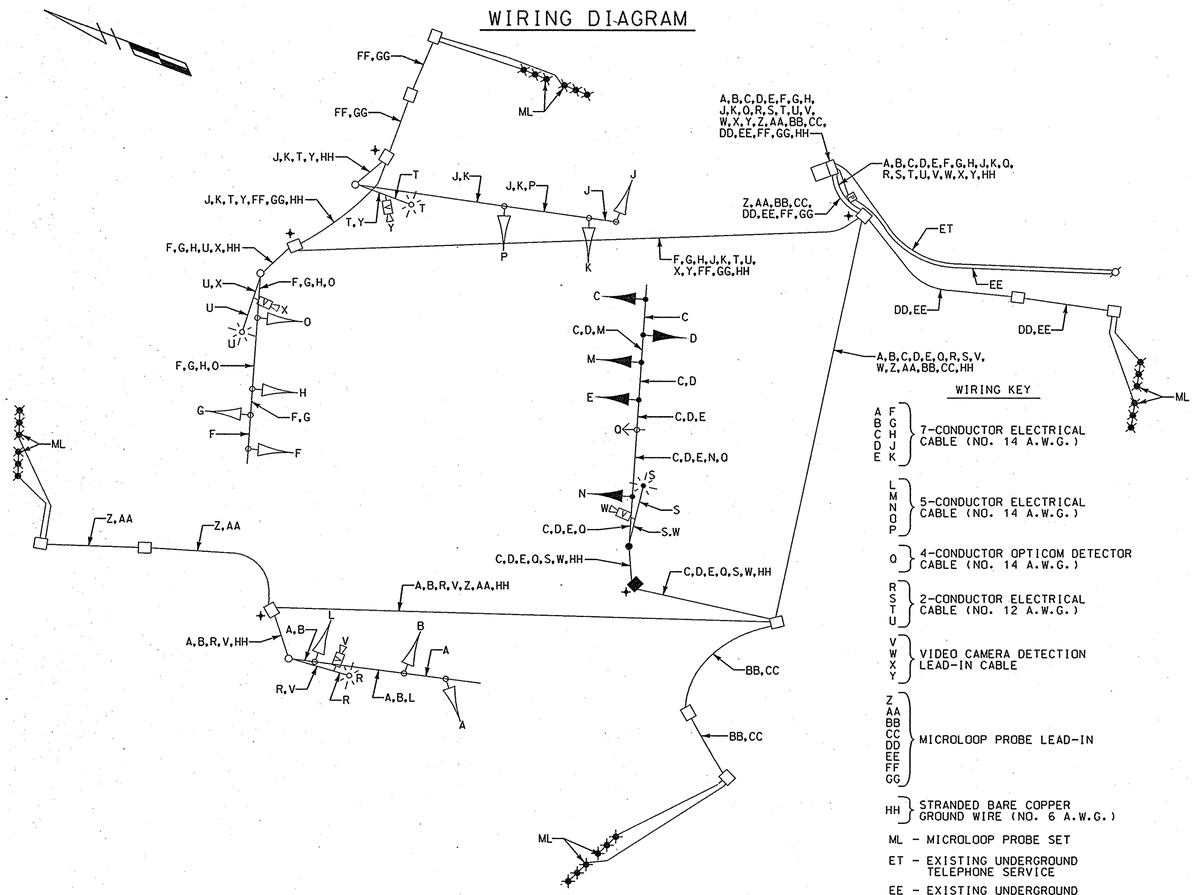
ULTIMATE SIGNAL WIRING DIAGRAM



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	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.)

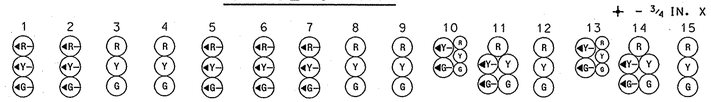
ML - MICROLOOP PROBE SET

ET - EXISTING UNDERGROUND TELEPHONE SERVICE

EE - EXISTING UNDERGROUND ELECTRICAL SERVICE

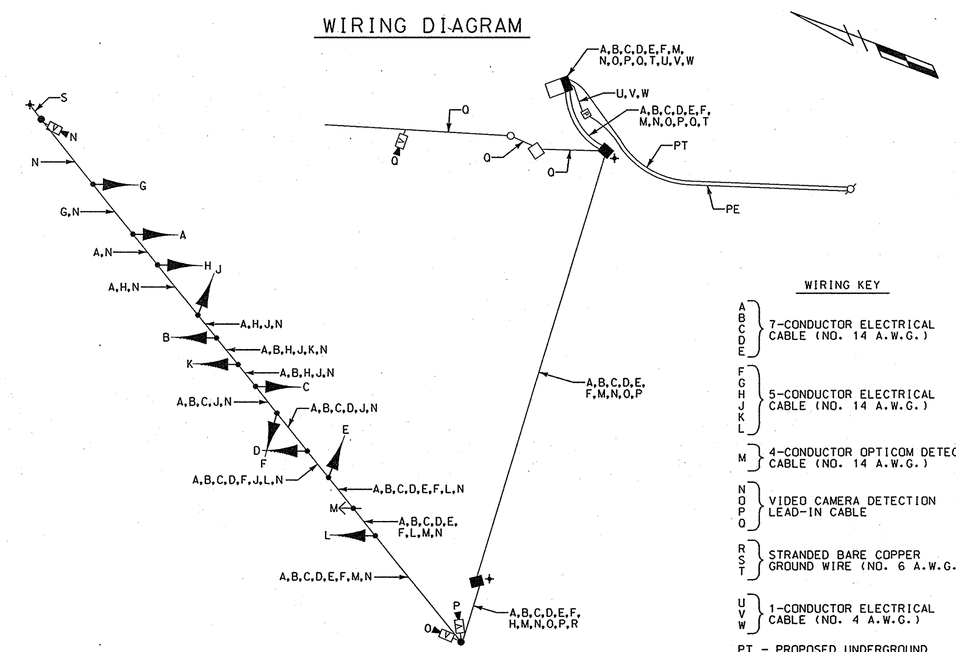
+ - 3/4 IN. X 10 FT. GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 + 5	←G—	←G—	R	R	←G—	←G—	←G—	R	R	R	R	R	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	R	R	R
1 + 6 CHANGE	←Y—	←Y—	G	G	←R—	←R—	←R—	R	R	R	R	R	R	R	R
PHASE 2 + 5	←R—	←R—	R	R	←G—	←G—	←G—	G	G	R	R	R	R	R	R
2 + 5 CHANGE	←R—	←R—	R	R	←Y—	←Y—	←Y—	G	G	R	R	R	R	R	R
PHASE 2 + 6	←R—	←R—	G	G	←R—	←R—	←R—	G	G	R	R	R	R	R	R
2 + 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	←R—	Y	Y	R	R	R	R	R	R
PHASE 3 + 7	←R—	←R—	R	R	←R—	←R—	←R—	R	R	R ←G—	R ←G—	R	R ←G—	R ←G—	R
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
3 + 8 CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G ←Y—	G ←Y—	G	R	R	R
PHASE 4 + 7	←R—	←R—	R	R	←R—	←R—	←R—	R	R	R	R	R	G ←G—	G ←G—	G
4 + 7 CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	R	R	R	G ←Y—	G ←Y—	G
PHASE 4 + 8	←R—	←R—	R	R	←R—	←R—	←R—	R	R	G	G	G	G	G	G
4 + 8 CHANGE	←R—	←R—	R	R	←R—	←R—	←R—	R	R	Y	Y	Y	Y	Y	Y
EMERGENCY PRE-EMPTION	←R—	←R—	R	R	←G—	←G—	←G—	G	G	R	R	R	R	R	R
	←R—	←R—	R	R	←G—	←G—	←G—	G	G	R	R	R	R	R	R
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

STAGE 1 CONSTRUCTION WIRING DIAGRAM



WIRING KEY

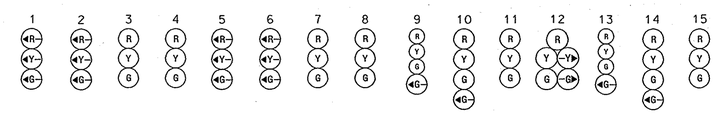
A B C D E	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F G H J K L	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
M	4-CONDUCTOR OPTICOM DETECTOR CABLE (NO. 14 A.W.G.)
N O P Q	VIDEO CAMERA DETECTION LEAD-IN CABLE
R S T	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
U V W	1-CONDUCTOR ELECTRICAL CABLE (NO.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

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

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DATE: 4/20/2005	LOG MILE:			

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