








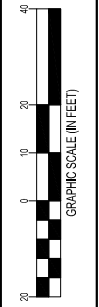


NOTES:

1. THE BOTTOM OF THE VEHICULAR SIGNAL HEAD BACK PLATES SHALL BE MINIMUM OF 17.0' AND A MAXIMUM OF 19.0' ABOVE THE ROADWAY PAVEMENT.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL UTILITIES AND EXISTING SIGNAL HARDWARE AND APPARATUSES PRIOR TO EXCAVATION.
3. CONTRACTOR TO MAINTAIN MINIMUM DISTANCE OF 10-FEET FROM ADJACENT POWER LINES DURING INSTALLATION OF TRAFFIC SIGNAL EQUIPMENT, PER OSHA MINIMUM CLEARANCE DISTANCE REQUIREMENTS FOR VOLTAGE UP TO 50kV (STANDARD 1926.1408, TABLE A).
4. ALL RADAR UNITS TO BE REMOVED AND REINSTALLED ON STRAIN POLES EXCEPT FOR THE RADAR UNIT LOCATED ON SP-2.

### LEGEND

-  EXISTING SIGNAL SUPPORT POLE
-  EX. CONTROLLER CABINET AND WORK PAD (TS-2)
-  EX. PULL BOX
-  EX. 3-SECTION VEHICLE HEAD
-  EX. DILEMMA ZONE RADAR DETECTION UNIT
-  EX. STOP BAR RADAR DETECTION UNIT
-  CONDUIT
-  PROPOSED 3-SECTION VEHICLE SIGNAL HEAD
-  PREEMPTION CONFIRMATION LIGHT AND RECEIVER

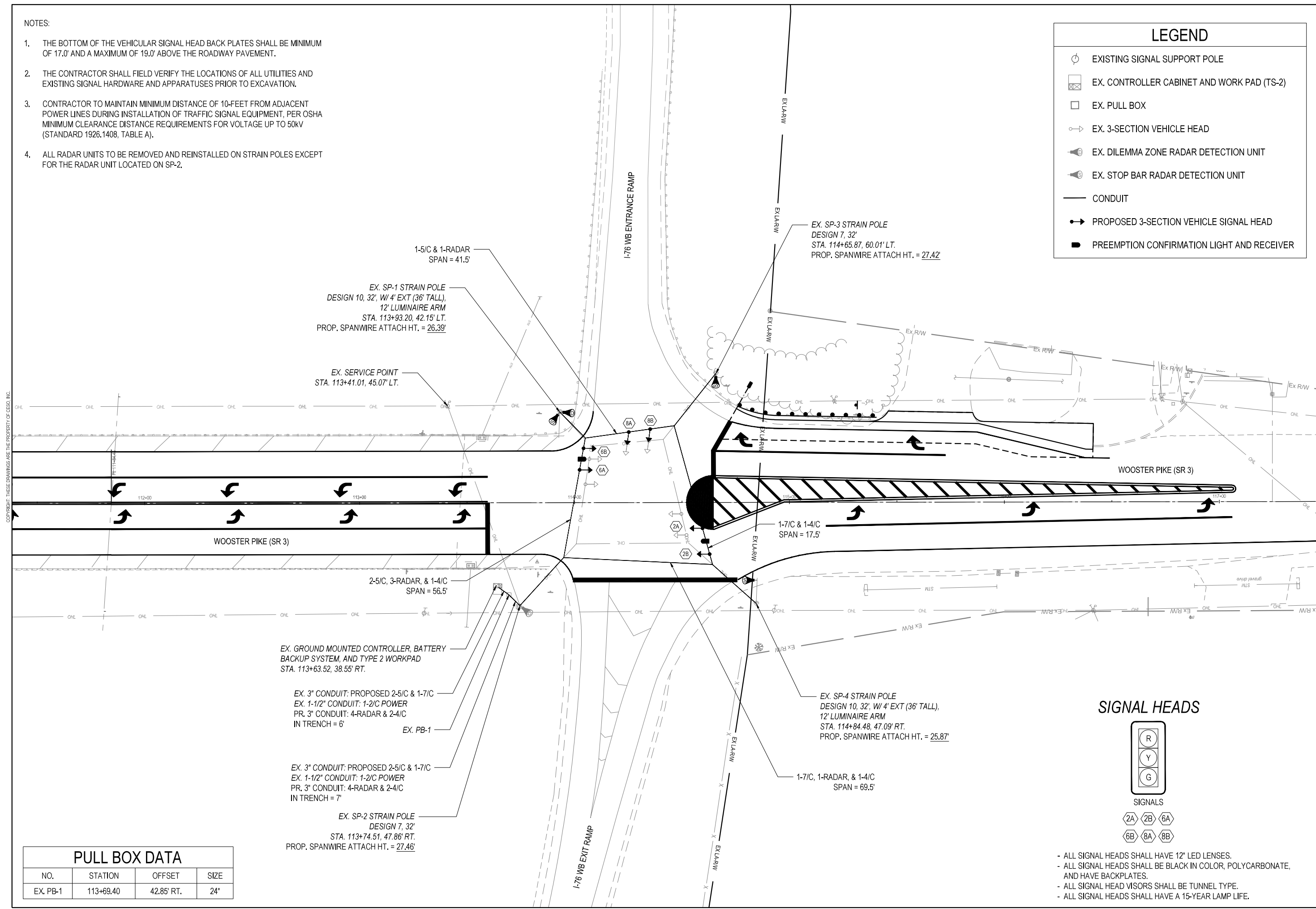


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1-5/C & 1-RADAR  
SPAN = 41.5'

EX. SP-1 STRAIN POLE  
DESIGN 10, 32', W/ 4' EXT (36' TALL),  
12' LUMINAIRE ARM  
STA. 113+93.20, 42.15' LT.  
PROP. SPANWIRE ATTACH HT. = 26.39'

EX. SERVICE POINT  
STA. 113+41.01, 45.07' LT.

EX. SP-3 STRAIN POLE  
DESIGN 7, 32'  
STA. 114+65.87, 60.01' LT.  
PROP. SPANWIRE ATTACH HT. = 27.42'

1-7/C & 1-4/C  
SPAN = 17.5'

2-5/C, 3-RADAR, & 1-4/C  
SPAN = 56.5'

EX. GROUND MOUNTED CONTROLLER, BATTERY  
BACKUP SYSTEM, AND TYPE 2 WORKPAD  
STA. 113+63.52, 38.55' RT.

EX. 3" CONDUIT: PROPOSED 2-5/C & 1-7/C  
EX. 1-1/2" CONDUIT: 1-2/C POWER  
PR. 3" CONDUIT: 4-RADAR & 2-4/C  
IN TRENCH = 6'

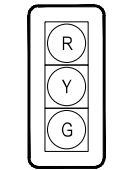
EX. 3" CONDUIT: PROPOSED 2-5/C & 1-7/C  
EX. 1-1/2" CONDUIT: 1-2/C POWER  
PR. 3" CONDUIT: 4-RADAR & 2-4/C  
IN TRENCH = 7'

EX. SP-2 STRAIN POLE  
DESIGN 7, 32'  
STA. 113+74.51, 47.86' RT.  
PROP. SPANWIRE ATTACH HT. = 27.46'

EX. SP-4 STRAIN POLE  
DESIGN 10, 32', W/ 4' EXT (36' TALL),  
12' LUMINAIRE ARM  
STA. 114+84.48, 47.09' RT.  
PROP. SPANWIRE ATTACH HT. = 25.87'

1-7/C, 1-RADAR, & 1-4/C  
SPAN = 69.5'

SIGNAL HEADS



SIGNALS



- ALL SIGNAL HEADS SHALL HAVE 12" LED LENSES.
- ALL SIGNAL HEADS SHALL BE BLACK IN COLOR, POLYCARBONATE, AND HAVE BACKPLATES.
- ALL SIGNAL HEAD VISORS SHALL BE TUNNEL TYPE.
- ALL SIGNAL HEADS SHALL HAVE A 15-YEAR LAMP LIFE.

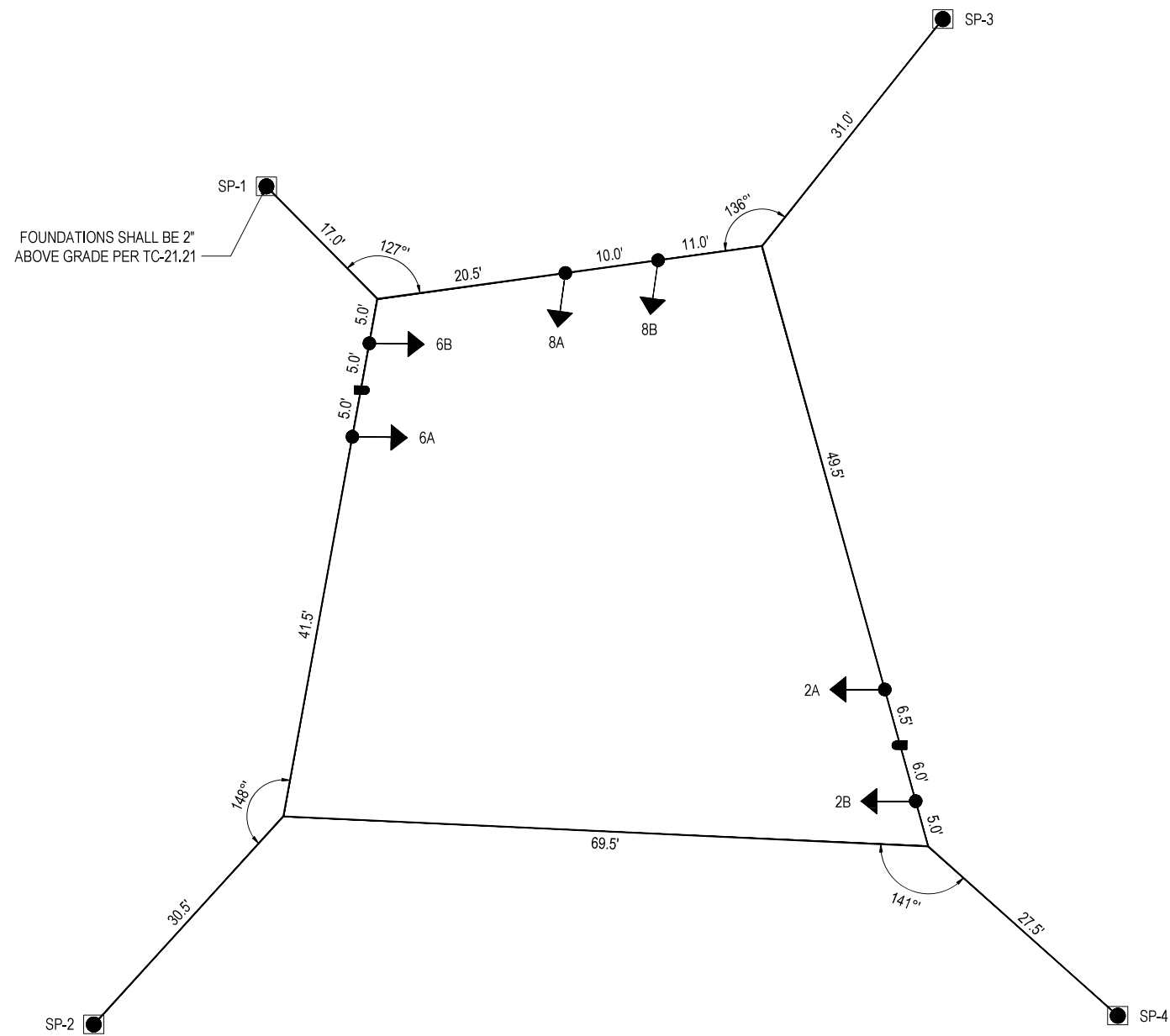
PULL BOX DATA			
NO.	STATION	OFFSET	SIZE
EX. PB-1	113+69.40	42.85' RT.	24"

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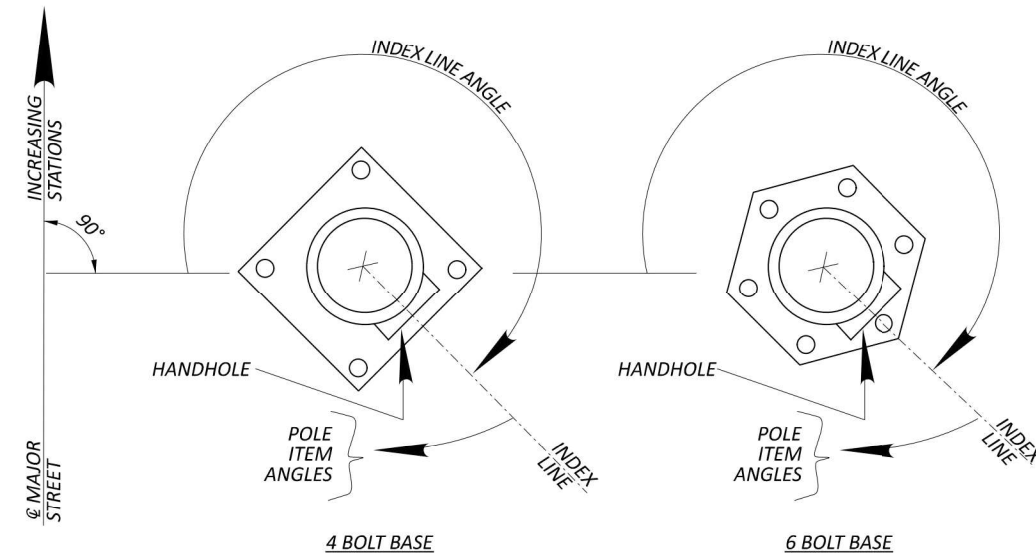
TEM Fig. 498-36: Plan Details for Strain Poles													
TYPE	REFERENCE SHEET NO.*	STATION & OFFSET*	POLE NO.	DESIGN NO.	POLE HEIGHT (FT.)	FOUNDATION ELEV.*	SPAN WIRE ATTACHED HEIGHT*	CABLE ENTRANCE DISTANCE FROM TOP (IN.)	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE			
										SIGNAL CABINET	POWER SERVICE	CABLE ENTRANCE	BRACKET ARM
EX.	T8	113+93.20, 42.15' LT.	SP-1	10	36	1109.92	26.39'	12	135	-	-	-	0
EX.	T8	113+74.51, 47.86' RT.	SP-2	7	32	1108.56	27.46'	12	225	85	115	115	-
EX.	T8	114+65.87, 60.01' LT.	SP-3	7	32	1109.82	27.42'	12	225	-	-	-	-
EX.	T8	114+84.48, 47.09' RT.	SP-4	10	36	1111.17	25.87'	12	135	-	-	-	0

NOTES:

- EX. = EXISTING SIGNAL



SPAN WIRE PLAN VIEW DETAIL



Note:

- Index line passes through the center of the handhole

POLE ORIENTATION

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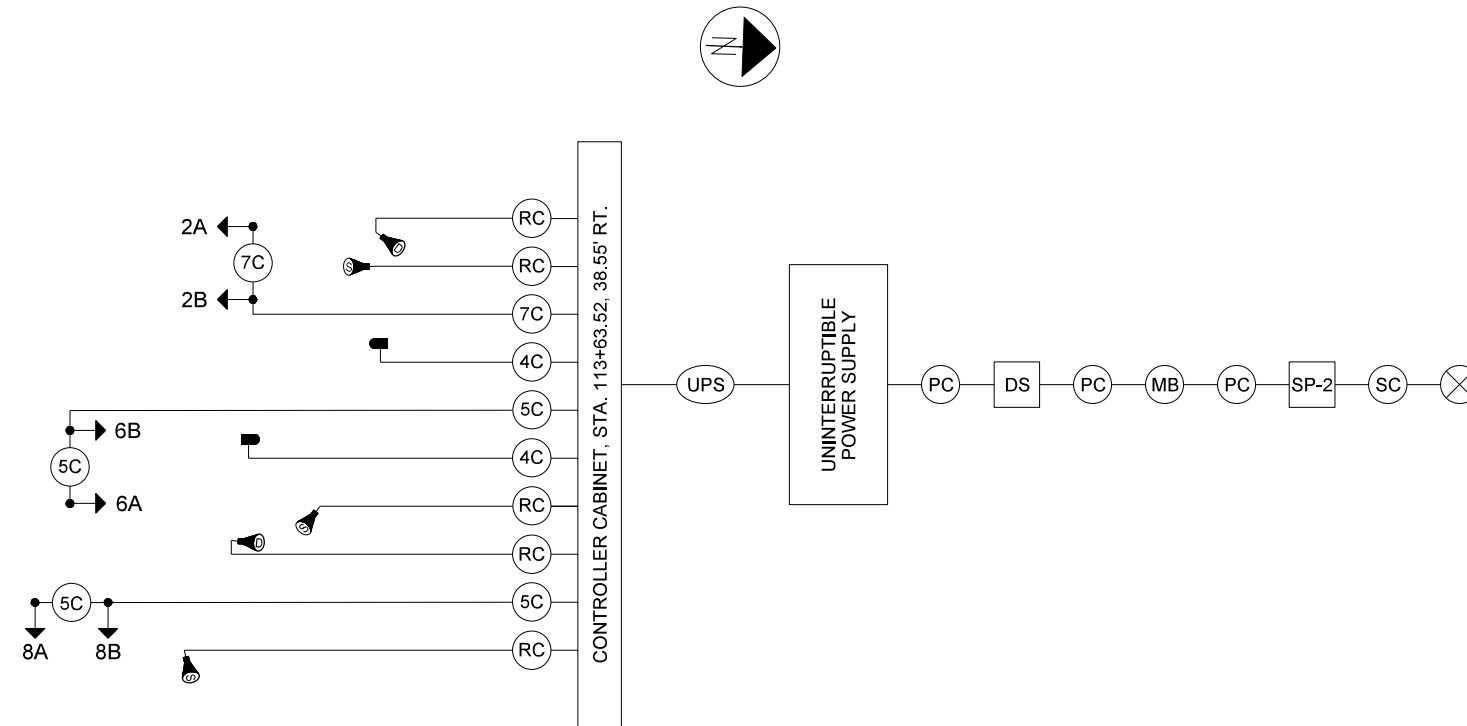
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### TRAFFIC SIGNAL QUANTITIES

ITEM NO.	DESCRIPTION	QTY.	UNIT
625	CONDUIT, 3", 725.051	13	L.F.
632	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE	6	EACH
632	COVERING OF VEHICULAR SIGNAL HEAD	6	EACH
632	TETHER WIRE W/ ACCESSORIES	343	L.F.
632	MESSENGER WIRE, 7-STRAND, 3/8" DIAMETER W/ ACCESSORIES	343	L.F.
632	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	370	L.F.
632	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	200	L.F.
809	EMERGENCY VEHICLE PREEMPTION, AS PER PLAN	1	EACH
809	PREEMPTION RECEIVING UNIT	2	EACH
809	PREEMPTION DETECTOR CABLE, 4 CONDUCTOR, NO. 14 AWG	318	L.F.
809	PREEMPTION PHASE SELECTOR	1	EACH
809	PREEMPTION CONFIRMATION LIGHT	2	EACH

### WIRING DIAGRAM



### FIELD WIRING HOOK-UP CHART

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
2A, 2B (NB)	R	Ø2 R	R
	Y	Ø2 Y	
	G	Ø2 G	
6A, 6B (SB)	R	Ø6 R	R
	Y	Ø6 Y	
	G	Ø6 G	
8A, 8B (WB)	R	Ø8 R	R
	Y	Ø8 Y	
	G	Ø8 G	

### LEGEND

	TRAFFIC SIGNAL, 3 UNIT HEAD, 12"		SIGNAL CABLE, 4 CONDUCTOR, NO. 14 AWG		SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG
	DILEMMA ZONE RADAR DETECTION UNIT		SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG		POWER CABLE, 2 CONDUCTOR, NO. 6 AWG
	STOP LINE RADAR DETECTION UNIT		SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG		METER BASE
	SIGNAL SUPPORT POLE NO. __		RADAR DETECTION CABLE		UNINTERRUPTIBLE POWER SUPPLY CABLE
	SIGNAL DISCONNECT SWITCH		POWER SOURCE		

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