


SHEET NUM.												PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
2	4	6	8	9	10	04/S>2/21	EXT	TOTAL										
							1,000	832	30000	1,000	EACH	EROSION CONTROL						
												DRAINAGE						
20							20	611	00400	20	FT	4" CONDUIT, TYPE E						
	1						1	611	99655	1	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	4					
												TRAFFIC CONTROL						
	74						74	621	00100	74	EACH	RPM						
	32						32	621	54000	32	EACH	RAISED PAVEMENT MARKER REMOVED						
					13		13	630	03100	13	FT	GROUND MOUNTED SUPPORT, NO. 3 POST						
					1		1	630	72540	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-16.22, DESIGN 12						
					5		5	630	79100	5	EACH	SIGN HANGER ASSEMBLY, MAST ARM						
					64		64	630	80100	64	SF	SIGN, FLAT SHEET						
					1		1	630	84510	1	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION						
					2		2	630	84900	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL						
					2		2	630	86002	2	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL						
					1		1	630	87400	1	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL						
					0.22		0.22	646	10010	0.22	MILE	EDGE LINE, 6"						
					0.21		0.21	646	10110	0.21	MILE	LANE LINE, 6"						
					0.17		0.17	646	10200	0.17	MILE	CENTER LINE						
					227		227	646	10310	227	FT	CHANNELIZING LINE, 12"						
					98		98	646	10400	98	FT	STOP LINE						
												added						
					92		92	646	10600	92	FT	TRANSVERSE/DIAGONAL LINE						
					465		465	646	10601	465	FT	TRANSVERSE/DIAGONAL LINE, AS PER PLAN	10					
					140		140	646	10800	140	SF	ISLAND MARKING						
					6		6	646	20300	6	EACH	LANE ARROW						
					59		59	646	20500	59	FT	DOTTED LINE						
					4		4	646	50000	4	EACH	REMOVAL OF PAVEMENT MARKING						
					0.6		0.6	646	50300	0.6	MILE	REMOVAL OF PAVEMENT MARKING						
												TRAFFIC SIGNALS						
					21		21	625	25400	21	FT	CONDUIT, 2", 725.04						
					62		62	625	25500	62	FT	CONDUIT, 3", 725.04						
					87		87	625	25600	87	FT	CONDUIT, 4", 725.04						
					75		75	625	29000	75	FT	TRENCH						
					82		82	625	29401	82	FT	TRENCH IN PAVED AREAS, AS PER PLAN	5					
					2		2	625	30706	2	EACH	PULL BOX, 725.08, 24"						
					3		3	625	32000	3	EACH	GROUND ROD						
					70	1	70	625	36011	70	FT	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	2					
					1		1	625	76000	1	EACH	ARC FLASH CALCULATIONS AND LABEL (TRU-46 CONTROLLER)						
					6		6	632	05006	6	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK						
					1		1	632	05086	1	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK						
					7		7	632	25000	7	EACH	COVERING OF VEHICULAR SIGNAL HEAD						
					323		323	632	40500	323	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG						
					443		443	632	40700	443	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG						
					2		2	632	64010	2	EACH	SIGNAL SUPPORT FOUNDATION						
					30		30	632	69300	30	FT	POWER CABLE, 3 CONDUCTOR, NO. 4 AWG						
					1		1	632	70001	1	EACH	POWER SERVICE, AS PER PLAN	3					
					1		1	632	71244	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 6 POLE, WITH MAST ARMS TC-81.22 DESIGN 12 AND DESIGN 4						
					1		1	632	72110	1	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 4						
					1		1	633	65511	1	EACH	CABINET, TYPE TS-2, AS PER PLAN	3					
					1		1	633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	3					
					1		1	633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	3					
					1		1	633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	3					
					2		2	809	69001	2	EACH	ADVANCE RADAR DETECTION, AS PER PLAN	4					
					2		2	809	69101	2	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	4					
					1		1	809	69123	1	EACH	ATC CONTROLLER, AS PER PLAN (PROGRAM AND INSTALL ONLY)	3					
												MAINTENANCE OF TRAFFIC						
					100		100	614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE						
												INCIDENTALS						
								LS	108	10000	LS	CPM PROGRESS SCHEDULE						
								LS	614	11000	LS	MAINTAINING TRAFFIC						
								22	619	16010	22	MNTH	FIELD OFFICE, TYPE B					
								LS	623	10000	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING						
								LS	624	10000	LS	MOBILIZATION						

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
AJN

REVIEWER
RMM 6-3-2024


PROJECT ID
109520

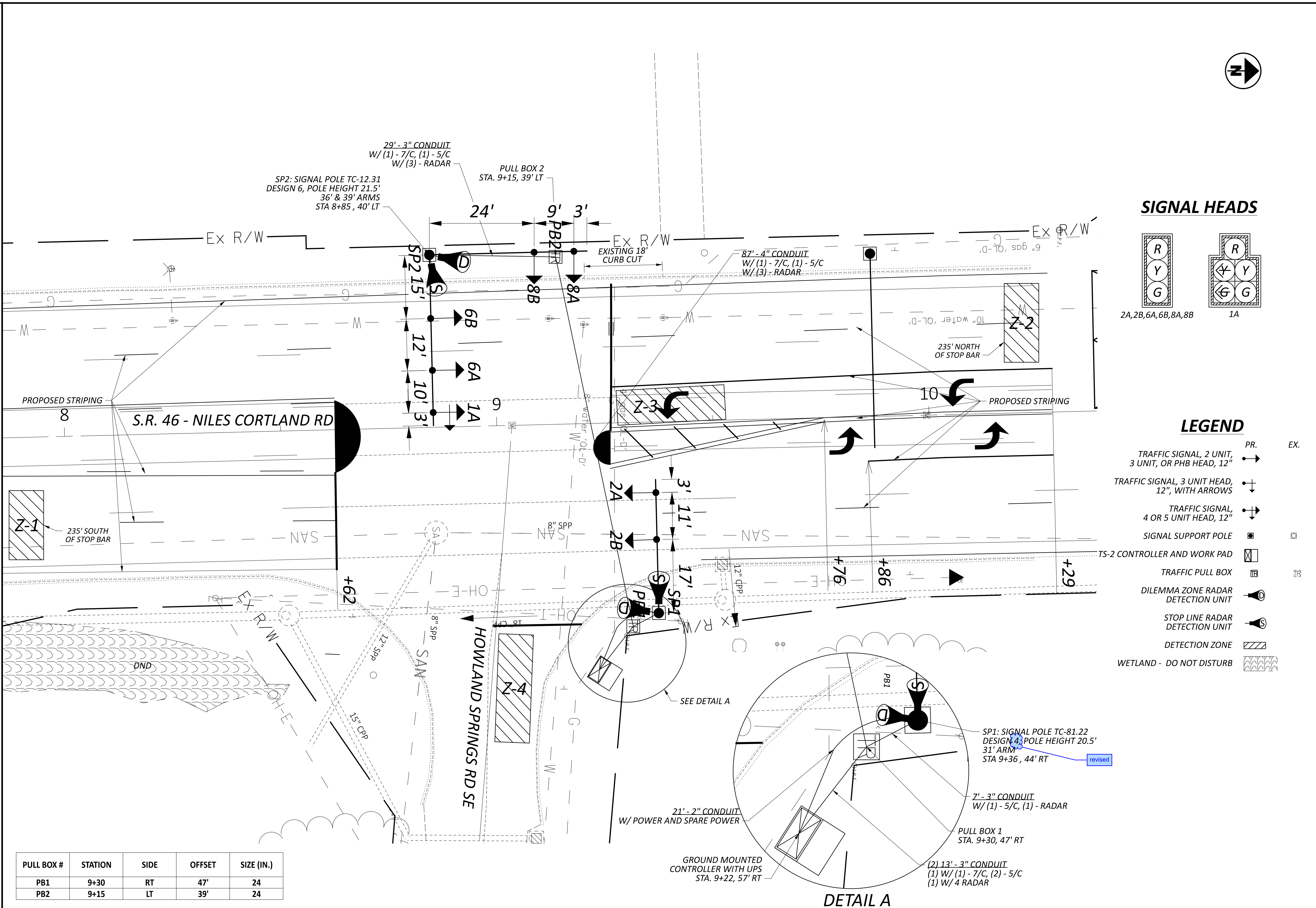
SHEET TOTAL
P.7 16

REF NO.	SHEET NO.	STATION TO STATION				625	625	625	625	625	625	625	625	625	625	632	632	632	632	632	632	632	633	633	633	633	809	809	809						
						CONDUIT, 2", 725.04	CONDUIT, 3", 725.04	CONDUIT, 4", 725.04	TRENCH	TRENCH IN PAVED AREAS, AS PER PLAN	PULL BOX, 725.08, 24"	PULL BOX REMOVED	GROUND ROD	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	ARC FLASH CALCULATIONS AND LABEL (TRU-46 CONTROLLER)	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	COVERING OF VEHICULAR SIGNAL HEAD	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	SIGNAL SUPPORT FOUNDATION	PEDESTAL FOUNDATION	SIGNAL SUPPORT, TYPE TC-81-22, DESIGN 4	SIGNAL SUPPORT, TYPE TC-12.31, DESIGN 6 POLE, WITH MAST ARMS TC-81.22 DESIGN 12 AND DESIGN 4	POWER CABLE, 3 CONDUCTOR, NO. 4 AWG	POWER SERVICE, AS PER PLAN	CABINET, TYPE TS-2, AS PER PLAN	CABINET FOUNDATION, AS PER PLAN	CONTROLLER WORK PAD, AS PER PLAN	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	ADVANCE RADAR DETECTION, AS PER PLAN	STOP LINE RADAR DETECTION, AS PER PLAN	ATC V6.24 CONTROLLER, AS PER PLAN (PROGRAM AND INSTALL ONLY)		
				FT	FT	FT	FT	FT	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH						
CONTR.		9+22	57' RT								1		1							30	1														
CONTR./PB1		9+22	57' RT	TO	9+30	47' RT							13																						
PB1		9+30	47' RT						1																										
CONTR./SP1		9+22	57' RT	TO	9+36	44' RT							21																						
PB1/SP1		9+30	47' RT	TO	9+36	44' RT							7																						
SP1		9+36	44' RT									1						2		102		1												1	
PB1/PB2		9+30	47' RT	TO	9+15	39' LT																													
PB2		9+15	39' LT																																
PB2/SP2		9+15	39' LT		8+85	40' LT																													
SP2		8+85	40' LT																																
TOTALS CARRIED TO GENERAL SUMMARY																																			
					21	62	87	75	82	2		3	70	1	6	1	7	323	443	2		1	1	30	1		1	1	1	1	1	2	2	1	

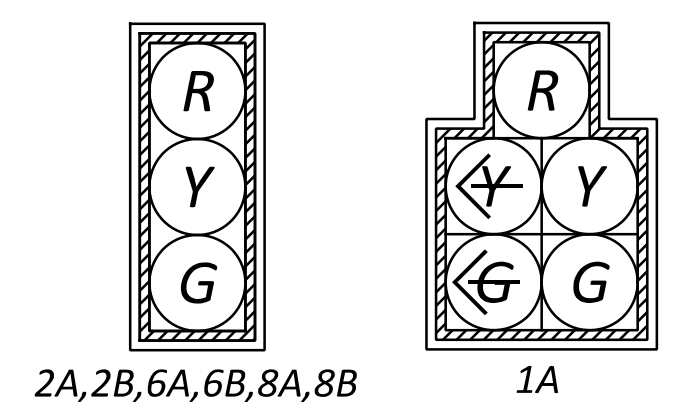
revised

SIGNAL SUBSUMMARY

DESIGN AGENCY

 DESIGNER
 AJN
 REVIEWER
 RMM 6-3-2024
 PROJECT ID
 109520
 SHEET TOTAL
 P.11 | 16



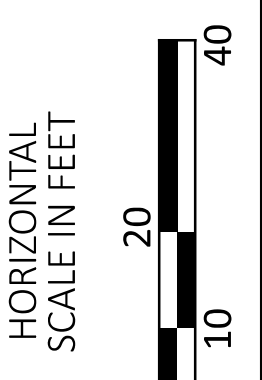
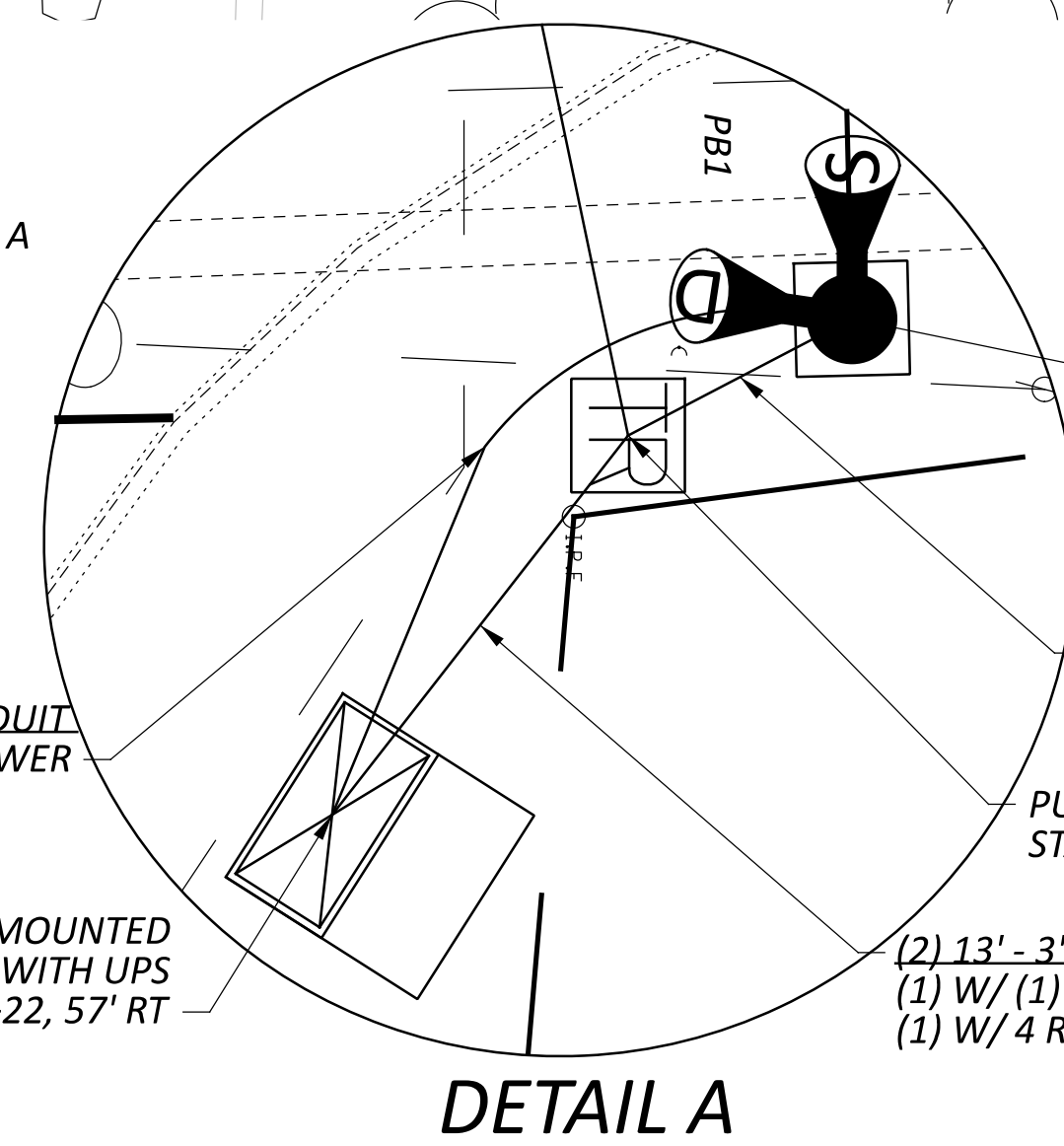
SIGNAL HEADS



LEGEND

- PR. EX. TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD, 12"
- TRAFFIC SIGNAL, 3 UNIT HEAD, 12", WITH ARROWS
- TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"
- SIGNAL SUPPORT POLE
- TS-2 CONTROLLER AND WORK PAD
- TRAFFIC PULL BOX
- DILEMMA ZONE RADAR DETECTION UNIT
- STOP LINE RADAR DETECTION UNIT
- DETECTION ZONE
- WETLAND - DO NOT DISTURB

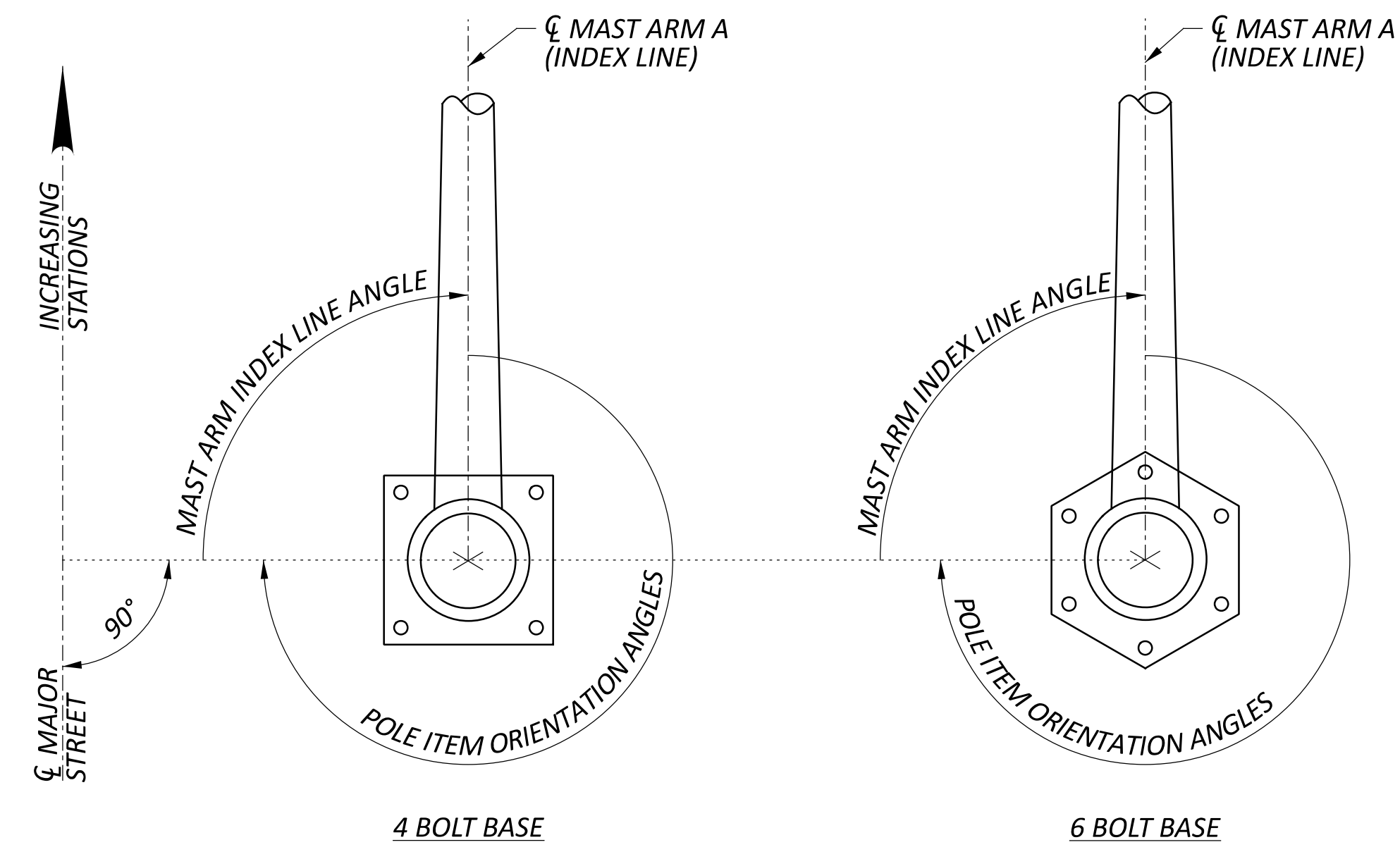
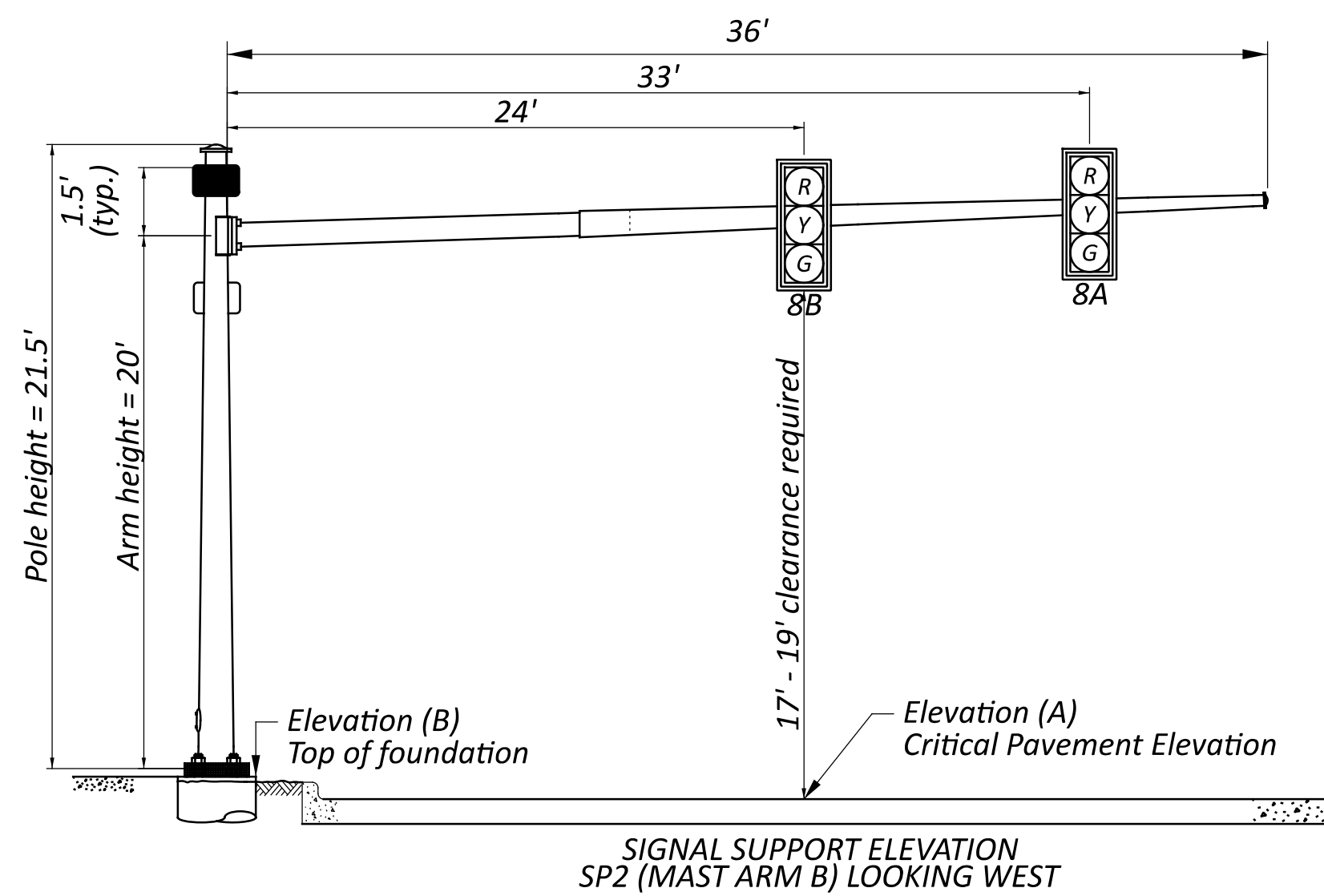
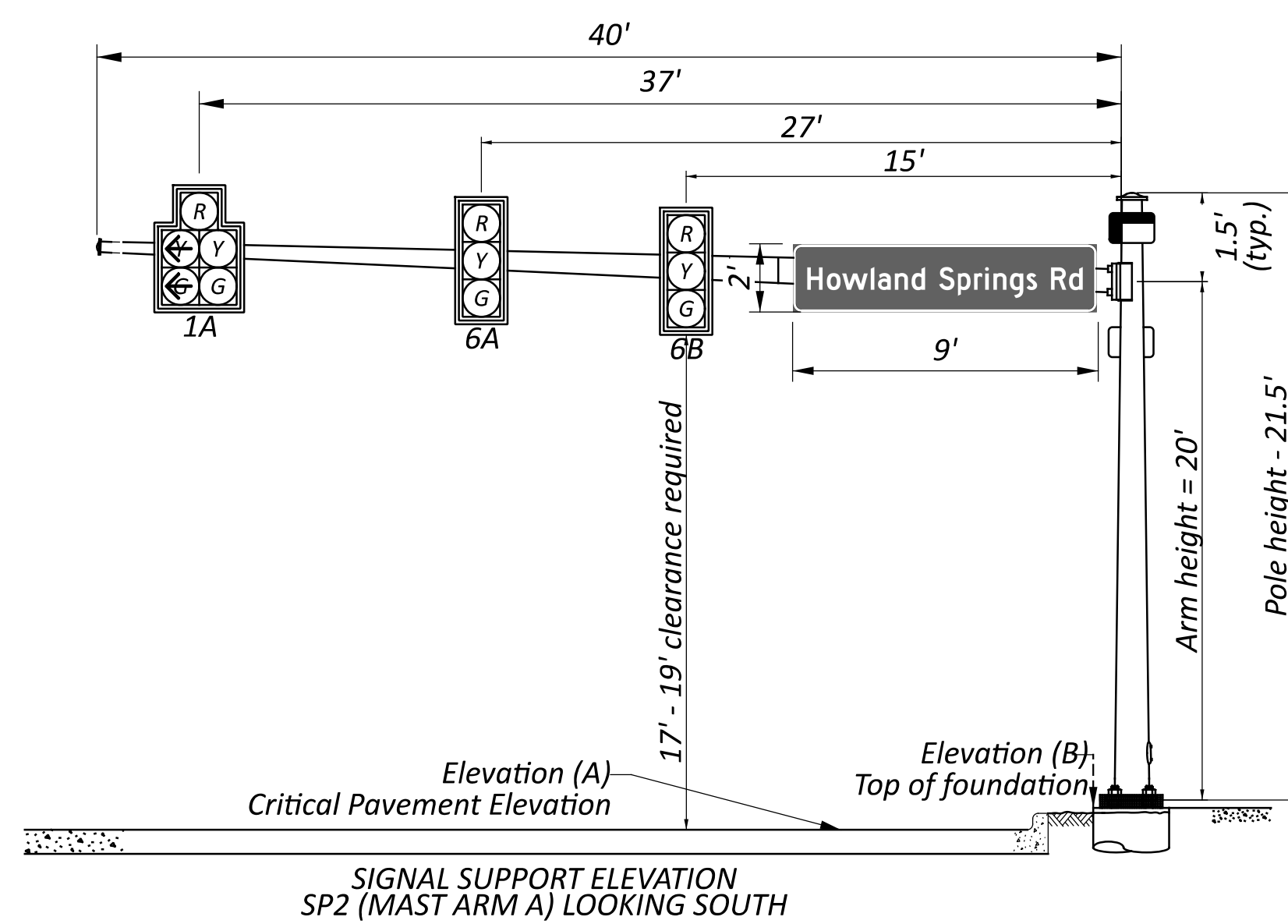
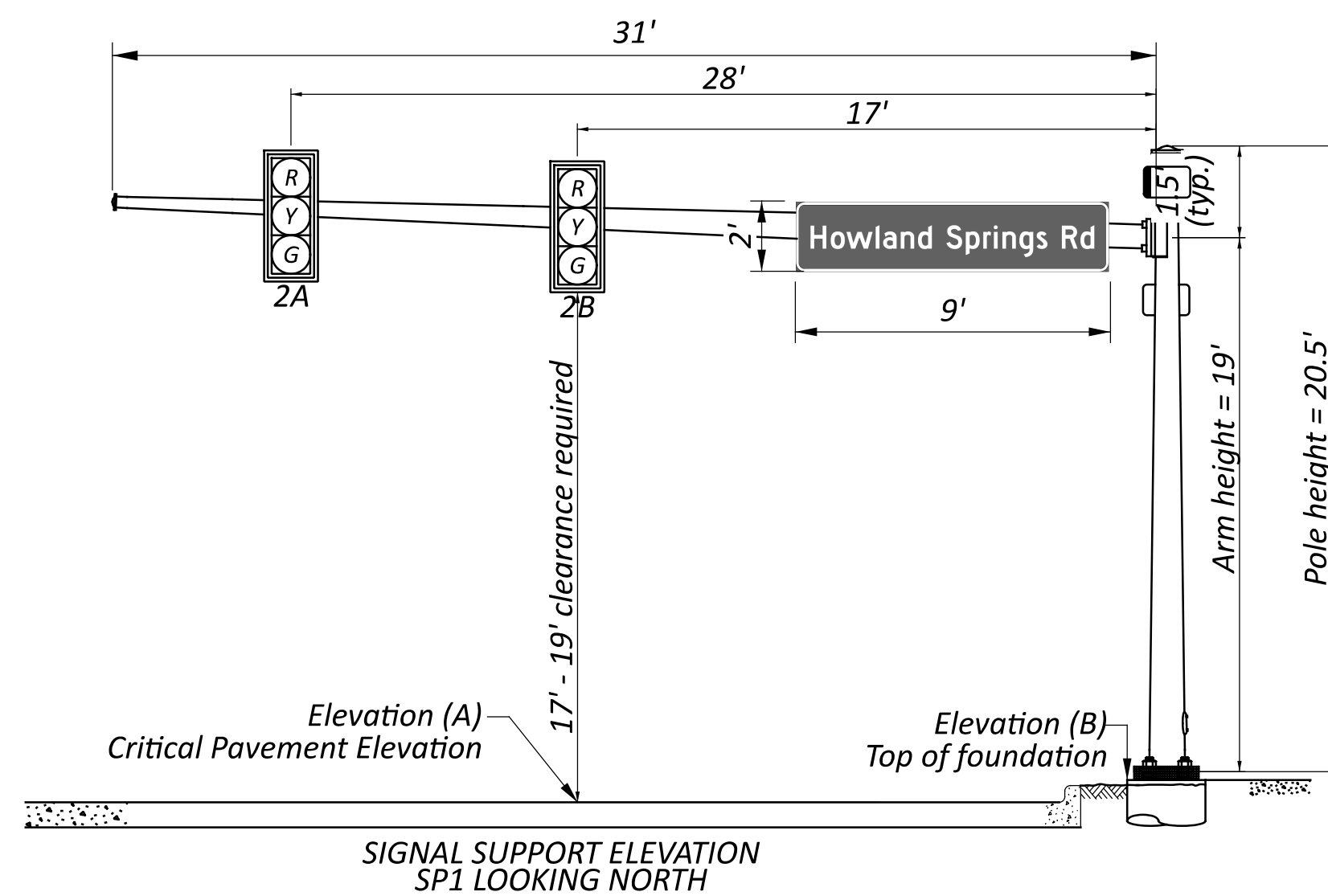
PULL BOX #	STATION	SIDE	OFFSET	SIZE (IN.)
PB1	9+30	RT	47'	24
PB2	9+15	LT	39'	24



SIGNAL PLAN
TRU-46 AT HOWLAND-SPRINGS ROAD

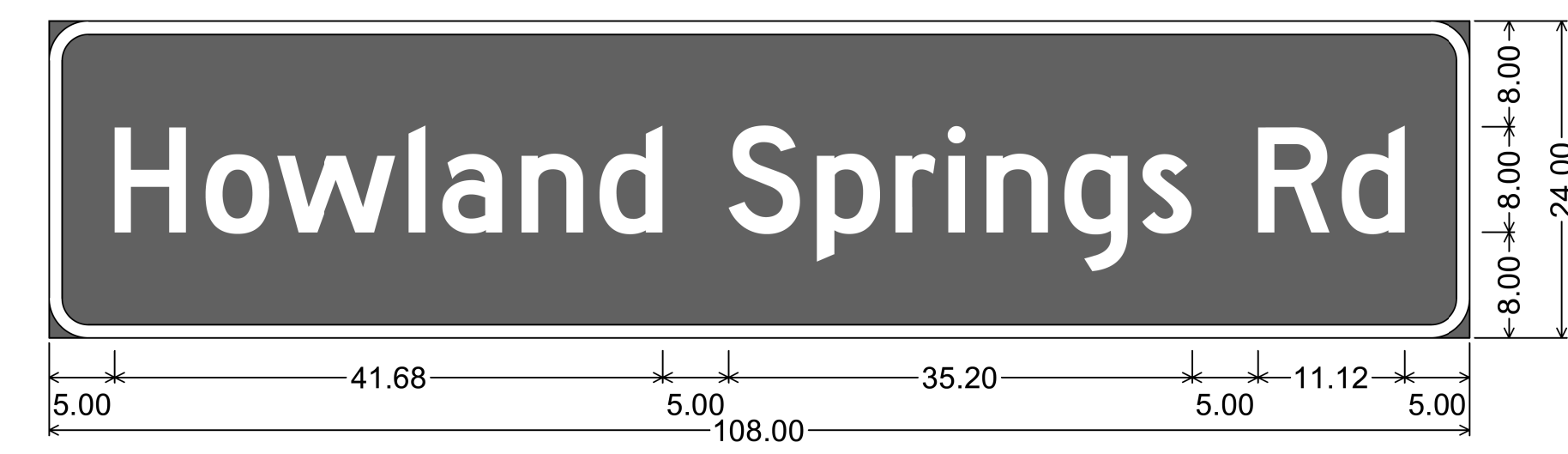
SUPPORT NO.	ARM DESIGNATION	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS											MAST ARM A INDEX LINE ANGLE	ANGLES (DEG.) FROM INDEX LINE							
				A (Pavement Elevation)	B (Top of Foundation)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	D1	D2	X		MAST ARM B	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	POWER SERVICE	SIGNAL CABINET	BRACKET ARM	HANDHOLE	CABLE ENTRANCE 12" FROM TOP OF POLE EXTENSION
SP-1	-	9+36	44' RT	939.21	939.38	TC-81.22	4	20.5	19	31	17	28	-	-	-	-	0	-	-	-	90	-	-	135	-
SP-2	A	8+85	40' LT	937.24	937.41	TC-12.31	6	21.5	20	40	15	27	37	-	-	-	0	-	-	-	-	-	-	-	
	B									36	24	33	-	-	-	-	-	-	270	-	-	-	-	-	-

revised



- Note:
- All angles are measured clockwise.
 - Base plate is oriented square to Mast Arm A, even if the support has two arms.

POLE ORIENTATION



3.00" Radius, 1.00" Border, White on Green;
 "Howland Springs Rd", D 2K;

DESIGN AGENCY	
DESIGNER	AJN
REVIEWER	
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	109520
SHEET	TOTAL
P.14	16