

PACKAGING CORPORATION OF AMERICA
441 SOUTH 53RD AVE
PHOENIX, ARIZONA 85043

PROPOSED ELECTRICAL SERVICE UPGRADE



1 PACKAGING CORPORATION OF AMERICA
E0.00 SCALE: NTS

E0.00	PROPOSED ELECTRICAL SERVICE UPGRADE COVER SHEET & INDEX
E1.01	ELECTRICAL SITE PLAN
E1.02	PROPOSED PHASE 1 SOUTH ELECTRICAL SERVICE ISOMETRIC
E1.03	PROPOSED PHASE 1 SOUTH ELECTRICAL 1-LINE DIAGRAM
E2.01	PROPOSED PHASE 2 SOUTH ELECTRICAL SERVICE ISOMETRIC
E2.02	PROPOSED PHASE 2 SOUTH ELECTRICAL 1-LINE DIAGRAM
E3.01	PROPOSED PHASE 3 SOUTH ELECTRICAL SERVICE ISOMETRIC
E3.02	PROPOSED PHASE 3 SOUTH ELECTRICAL 1-LINE DIAGRAM
E4.01	ELECTRICAL GROUNDING DETAILS
E4.02	EXISTING SOUTH ELECTRICAL SERVICE 1-LINE DIAGRAM

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Professional Engineer Seal for David A. [Signature]
65185
EXPIRES: 12/31/2017
NOV 10, 2017

PROJECT:
ELECTRICAL SERVICE UPGRADE
PACKAGING CORPORATION OF AMERICA
441 S 53RD AVE
PHOENIX, AZ. 85043

TITLE:
PROPOSED ELECTRICAL SERVICE UPGRADE COVER
SHEET & INDEX

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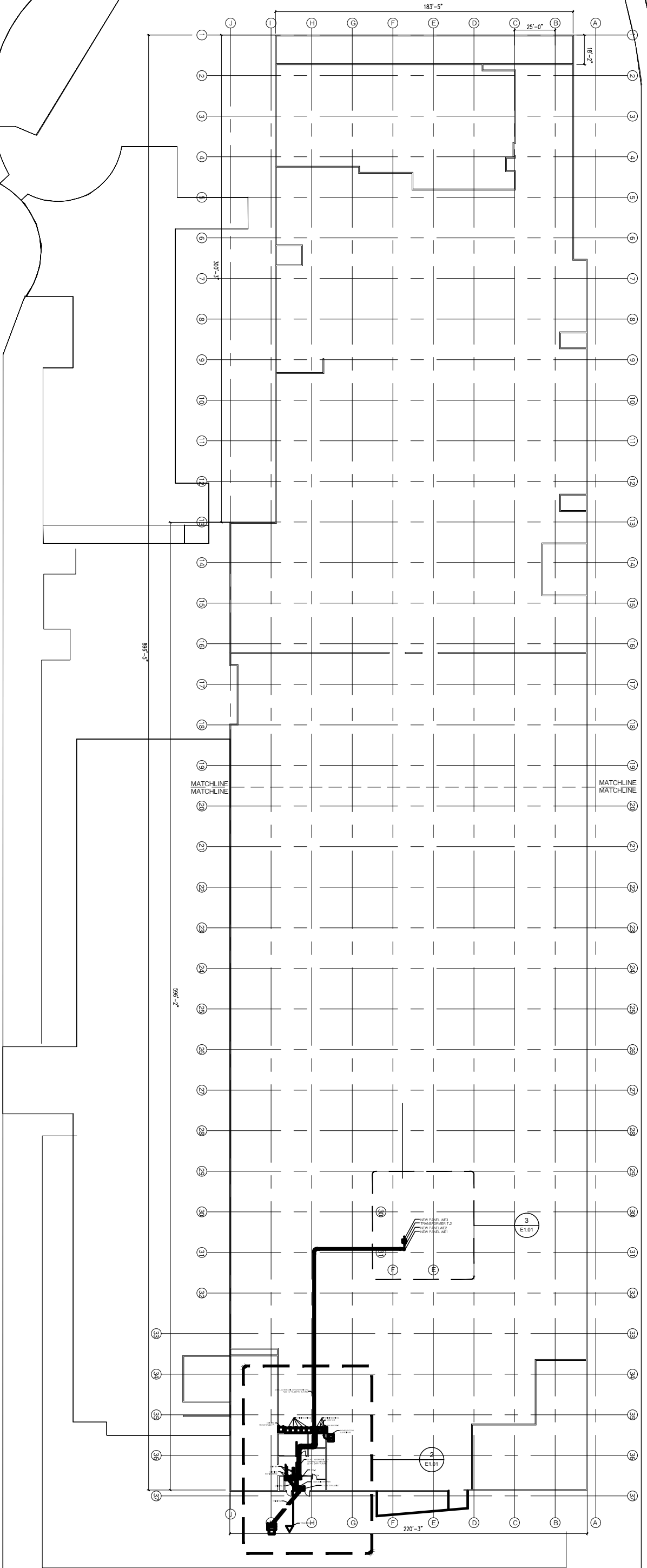
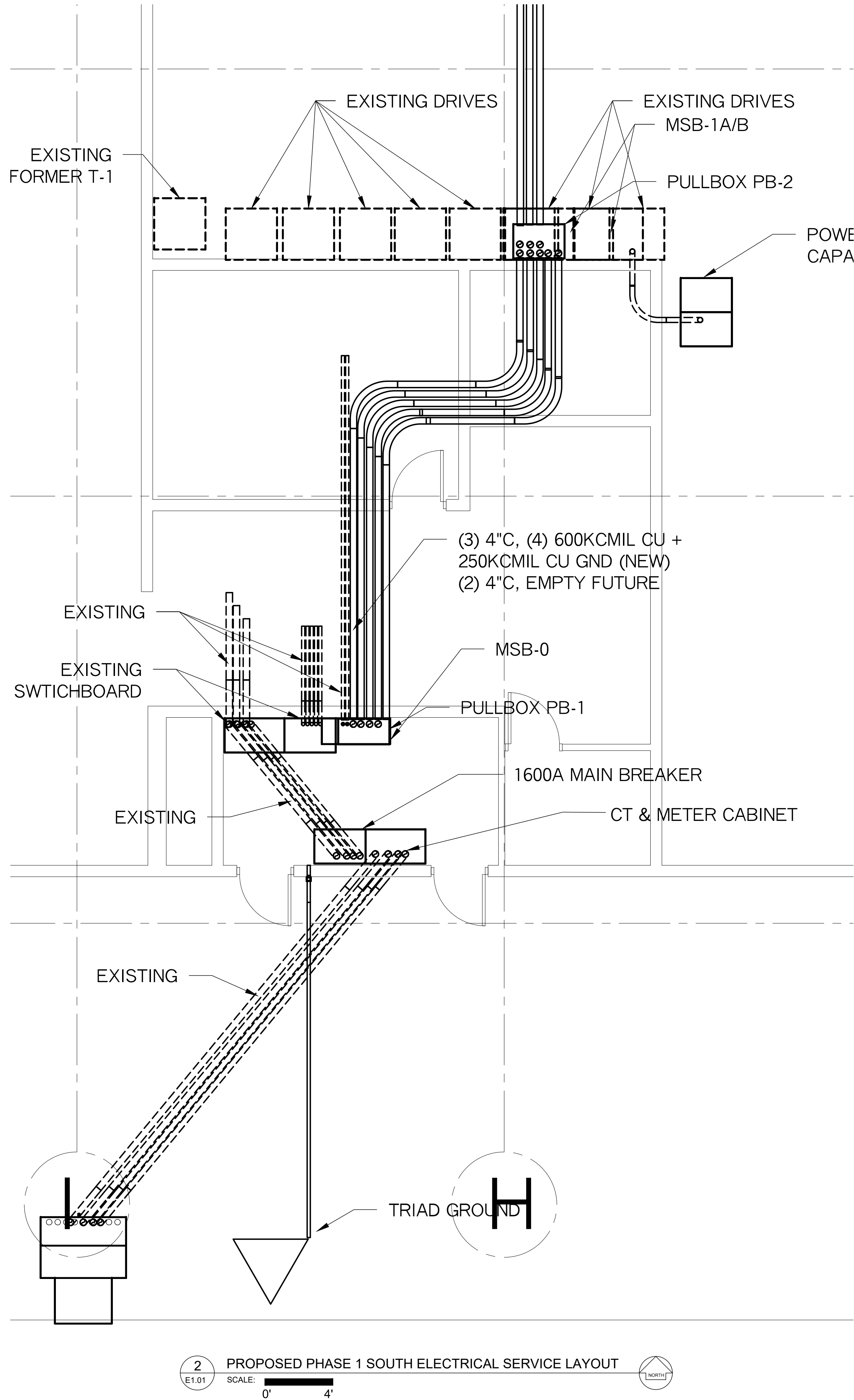
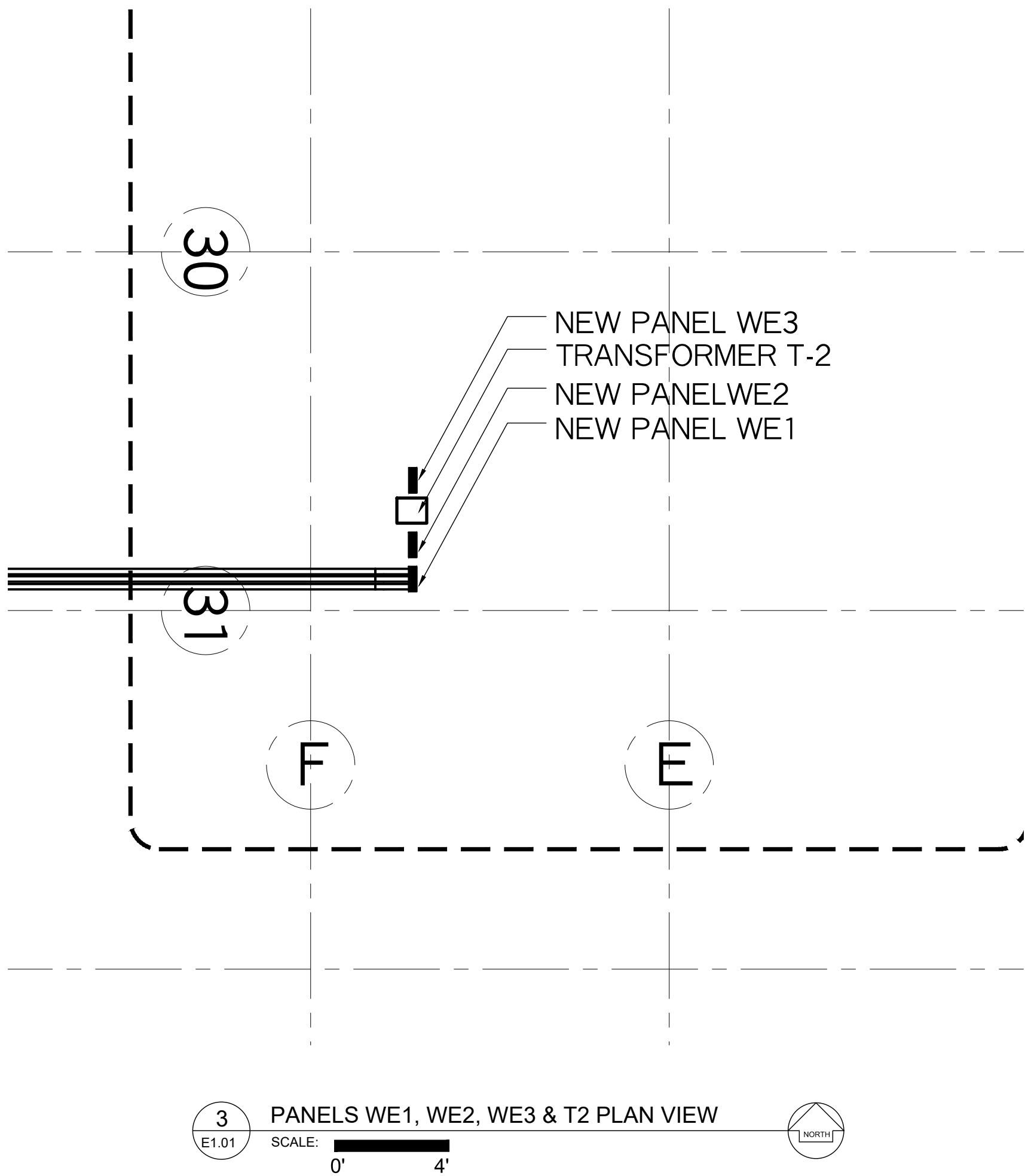
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441 S 53RD AVE
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TITLE:
PCA ELECTRICAL SITE PLAN

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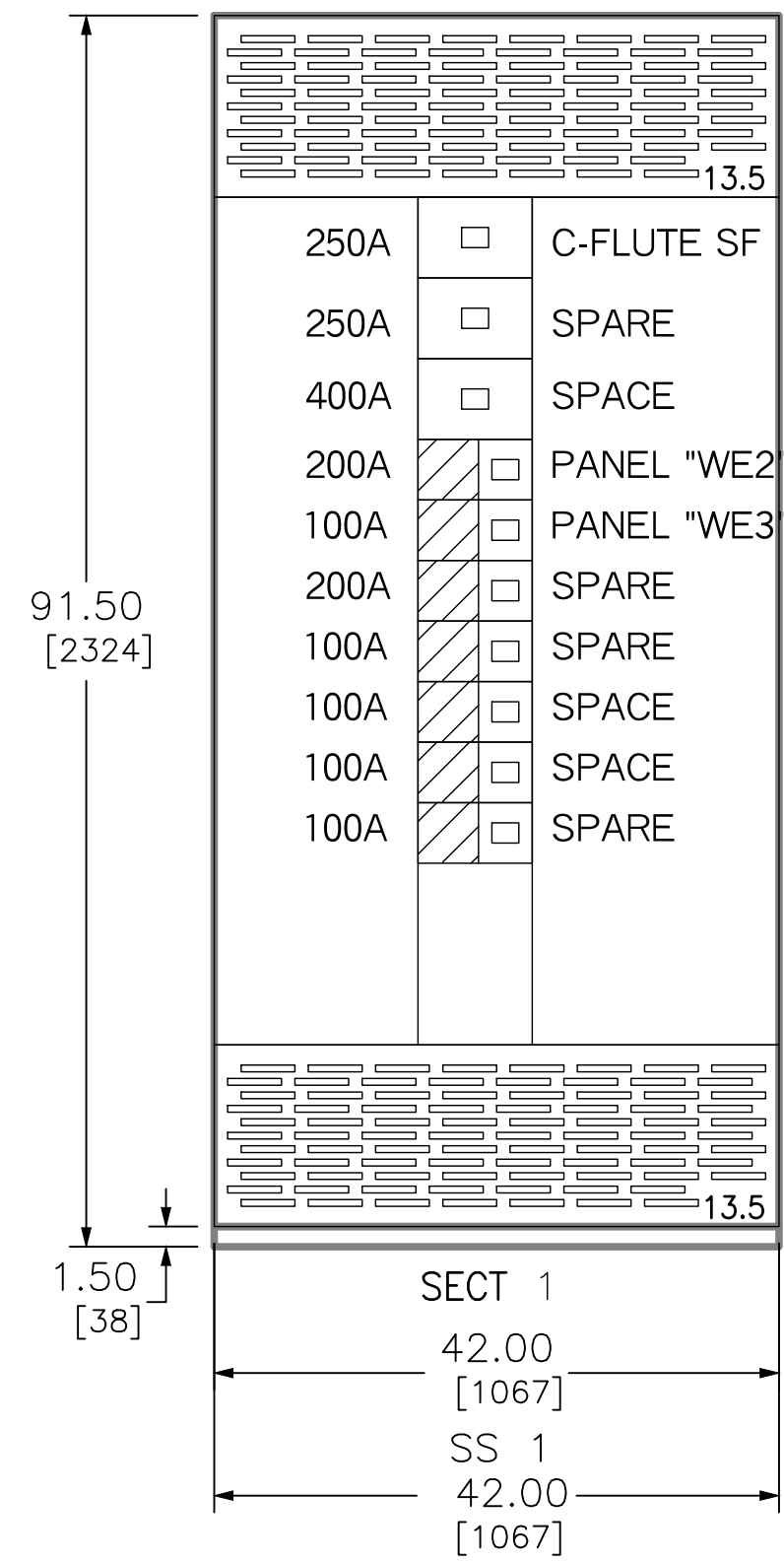
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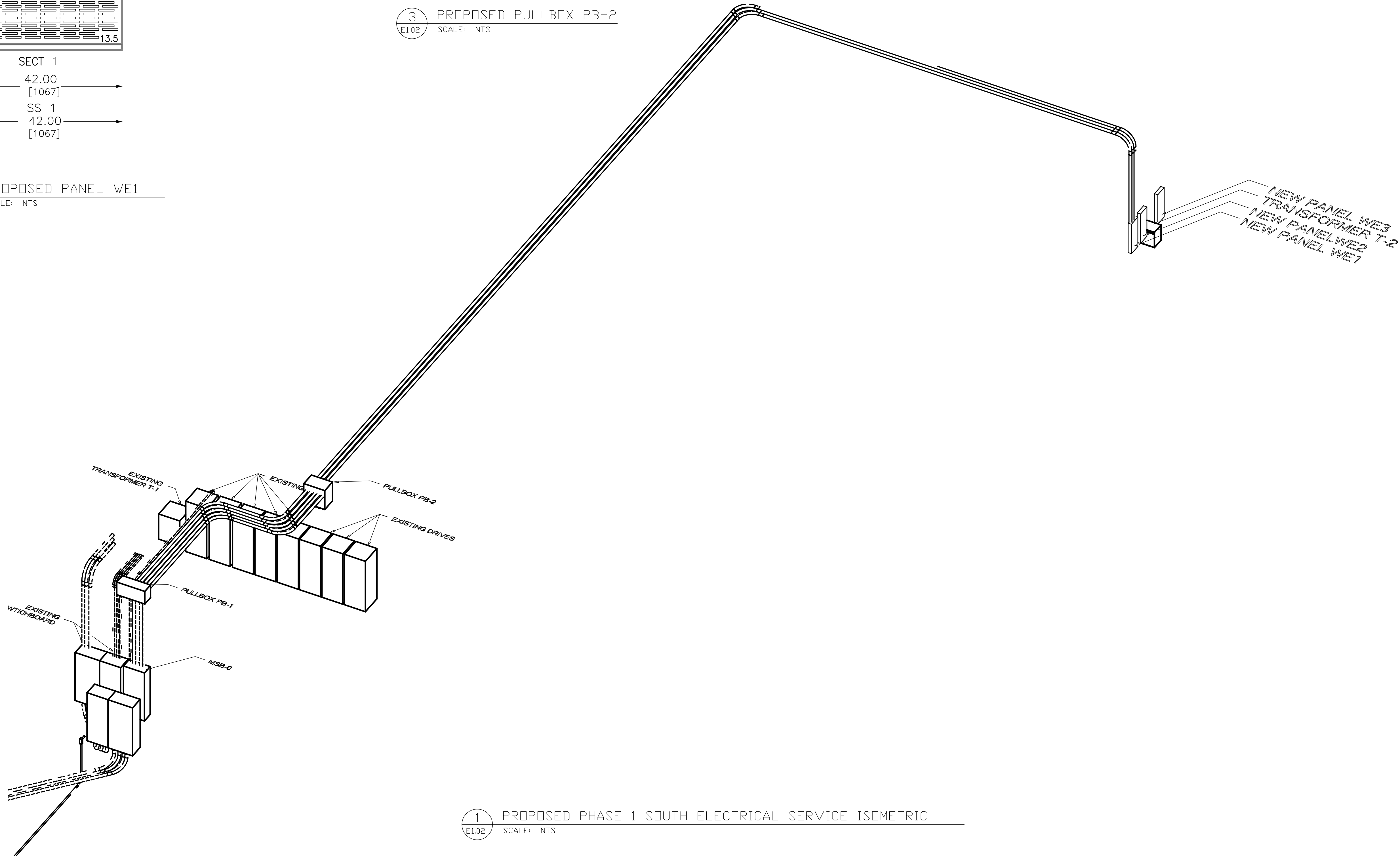
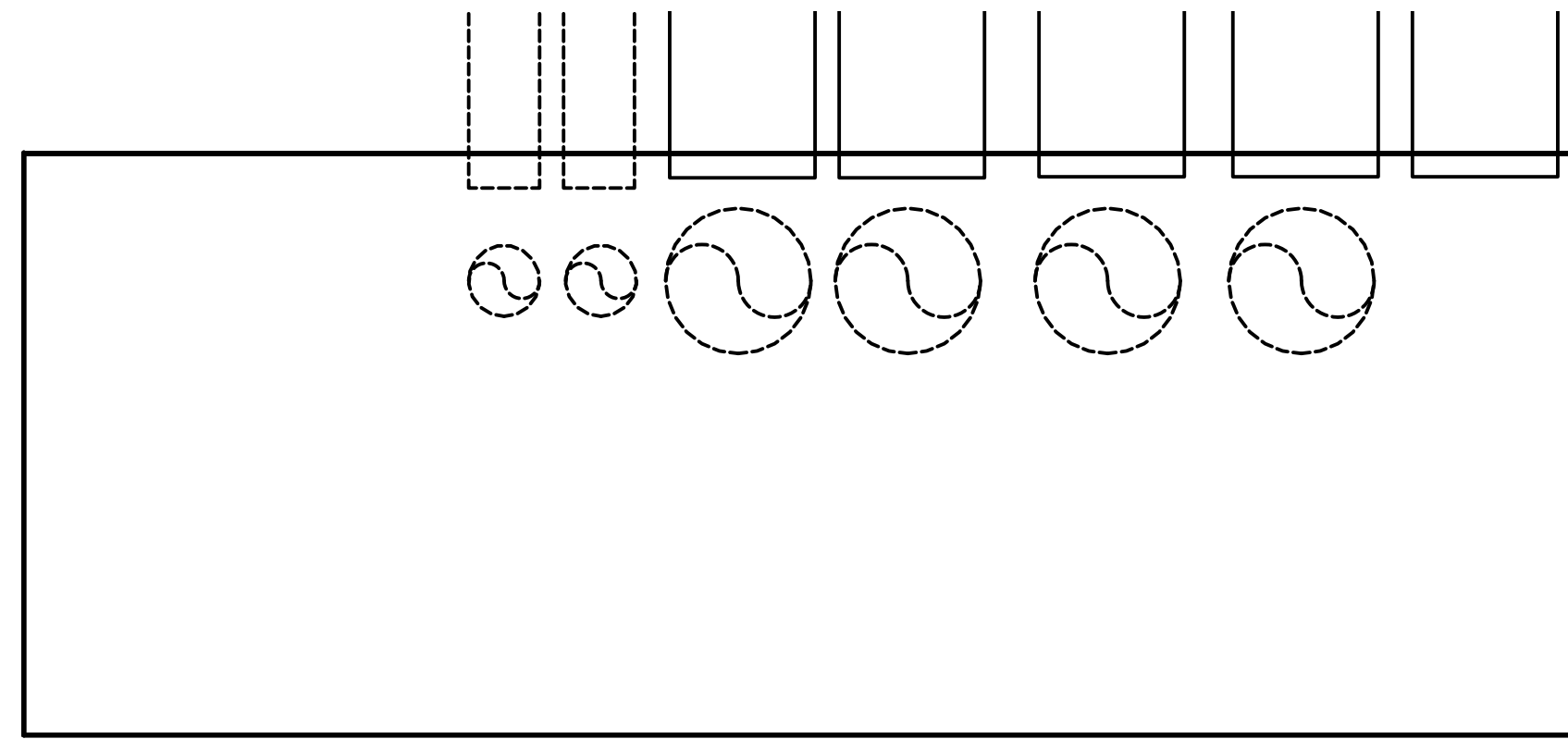
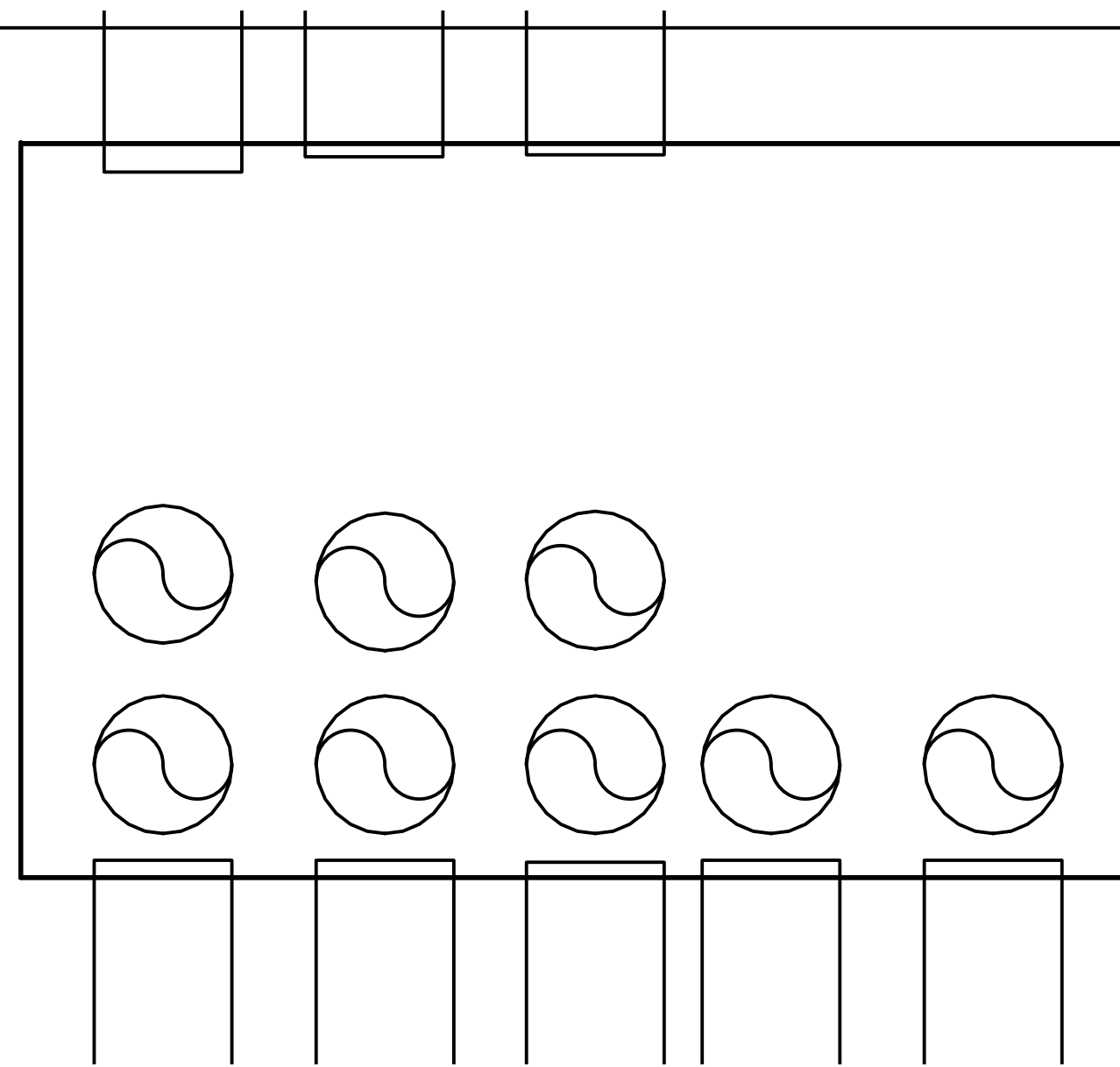
SHEET NO:

E1.01

PANEL "WE1"



4 PROPOSED PANEL WE1
E1.02 SCALE: NTS



1 PROPOSED PHASE 1 SOUTH ELECTRICAL SERVICE ISOMETRIC
E1.02 SCALE: NTS

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TITLE: **PROPOSED PHASE 1 SOUTH ELECTRICAL SERVICE ISOMETRIC**

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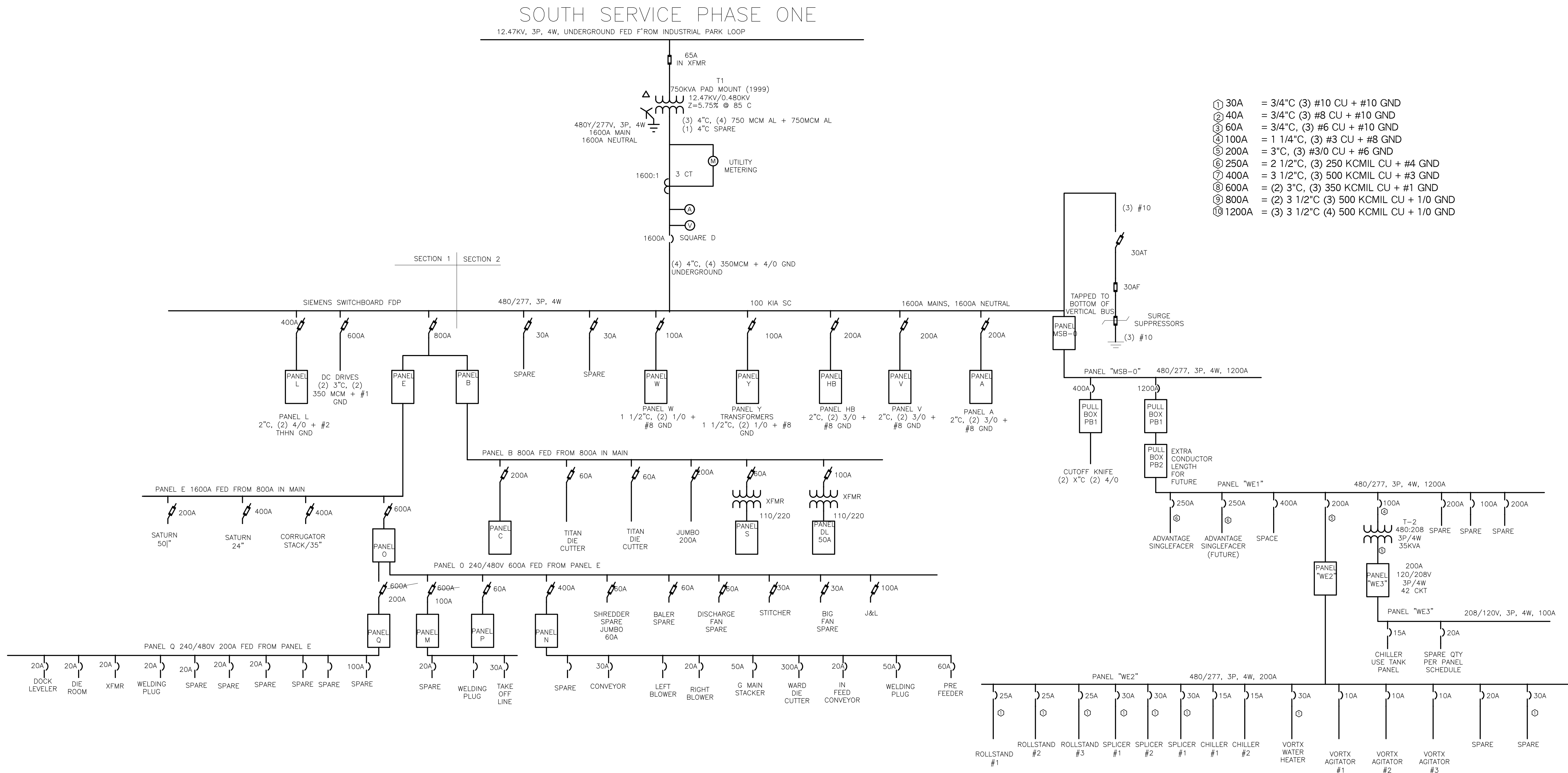
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TITLE:
PROPOSED PHASE 1 ELECTRICAL 1-LINE DIAGRAMS

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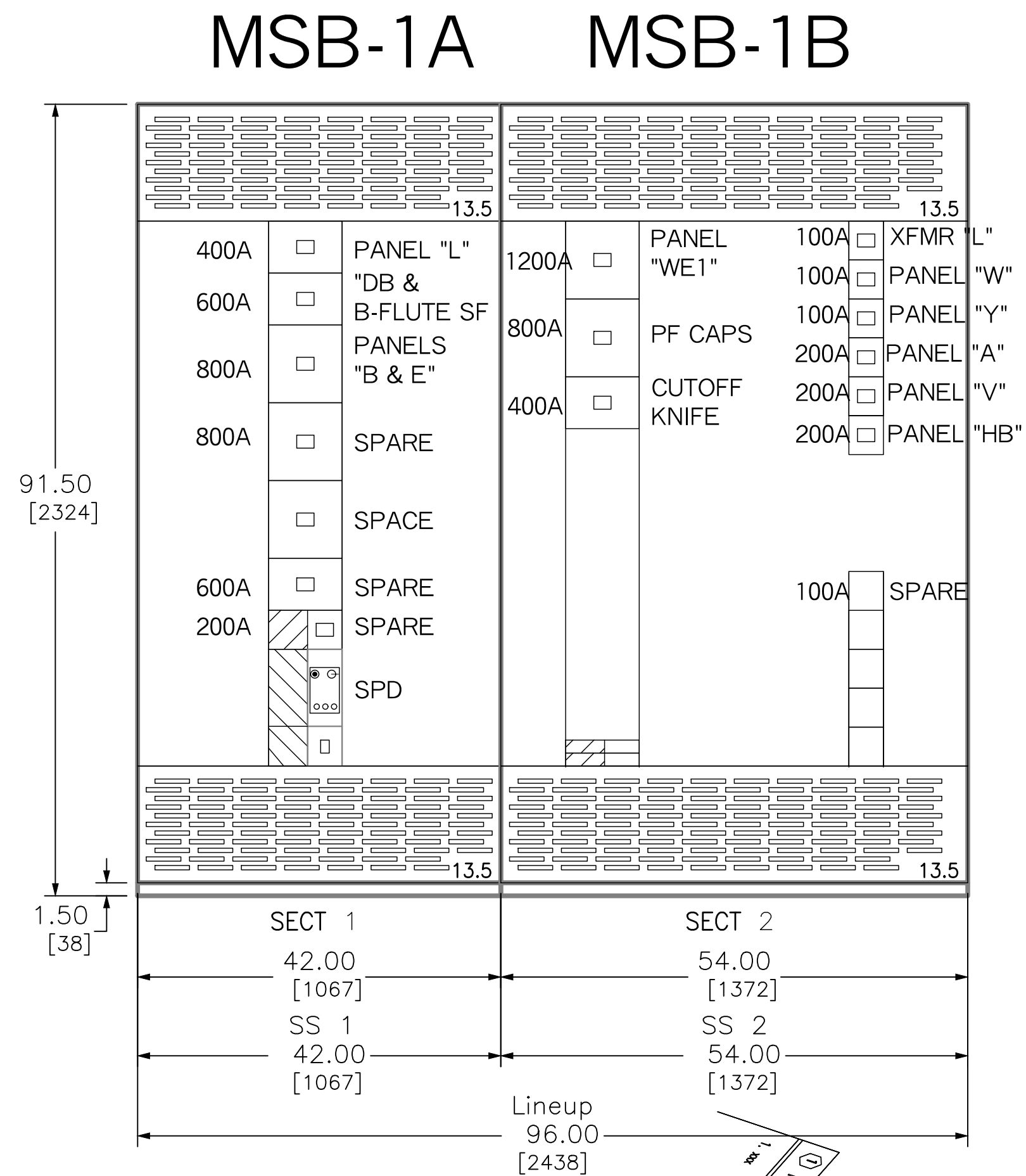
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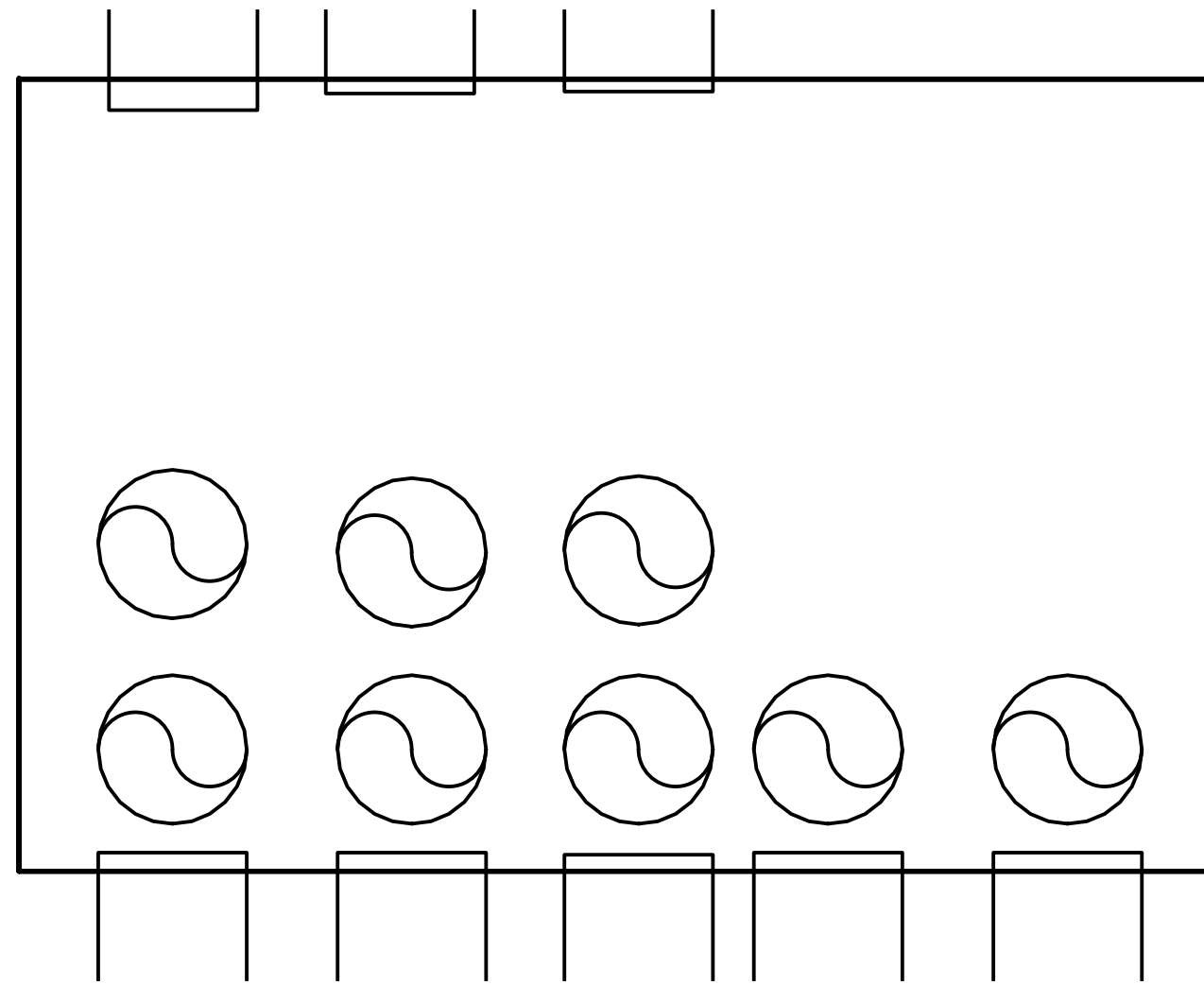
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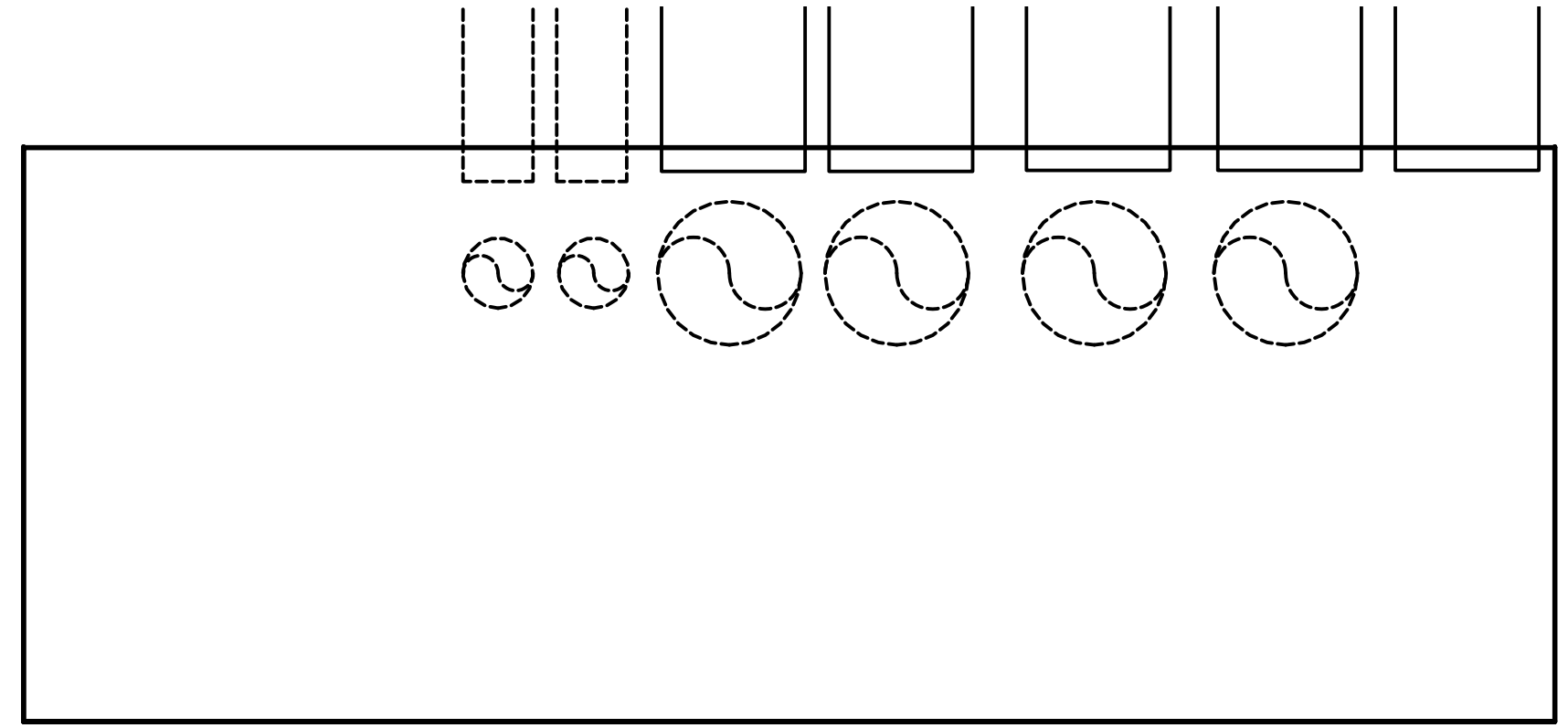
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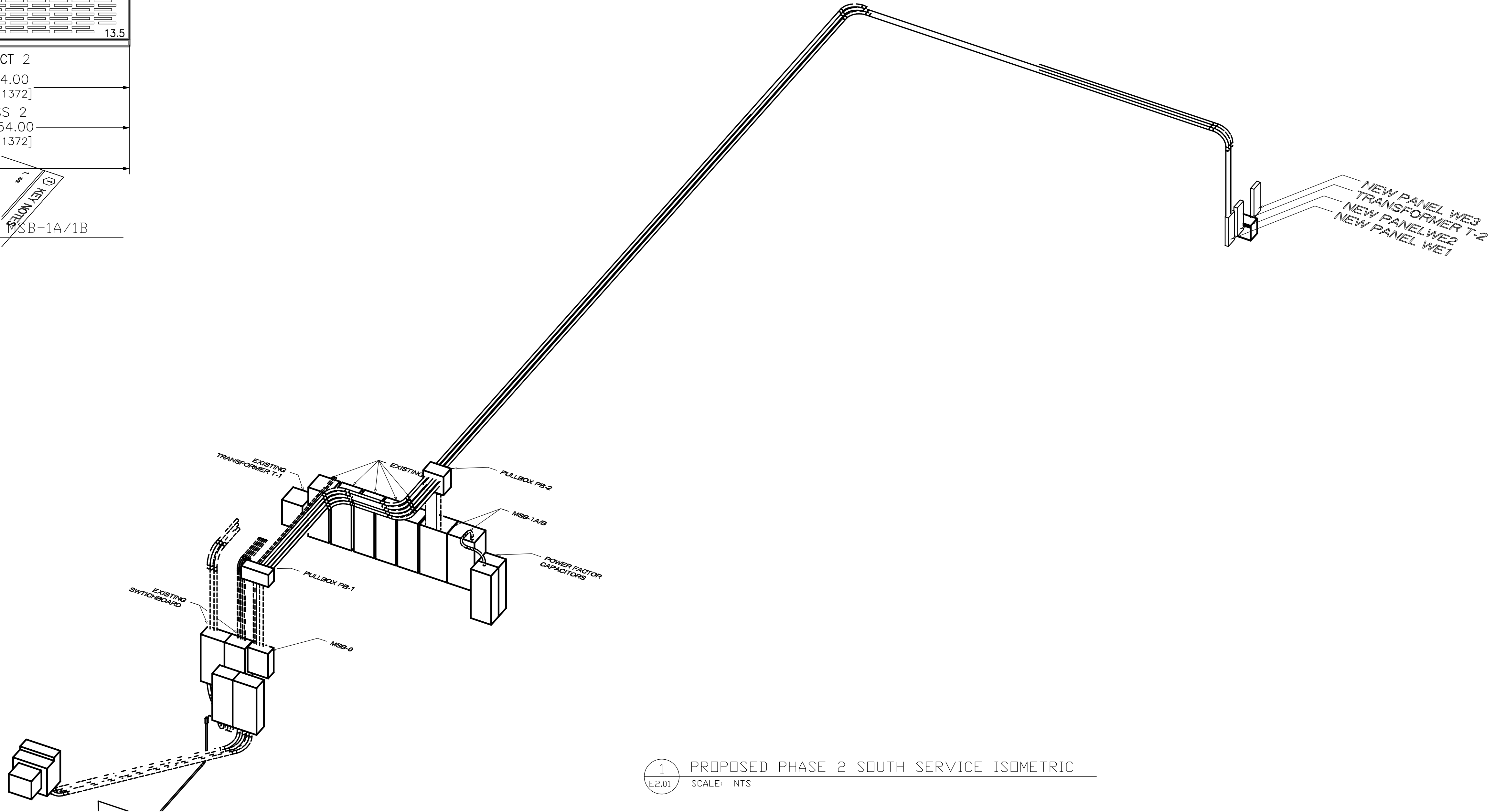
4 PROPOSED PHASE 2 SWITCHBOARD MSB-1A/1B
E2.01 SCALE: NTS



3 PROPOSED PULLBOX PB-2
E2.01 SCALE: NTS



2 PROPOSED PULLBOX PB-1
E2.01 SCALE: NTS



1 PROPOSED PHASE 2 SOUTH SERVICE ISOMETRIC
E2.01 SCALE: NTS



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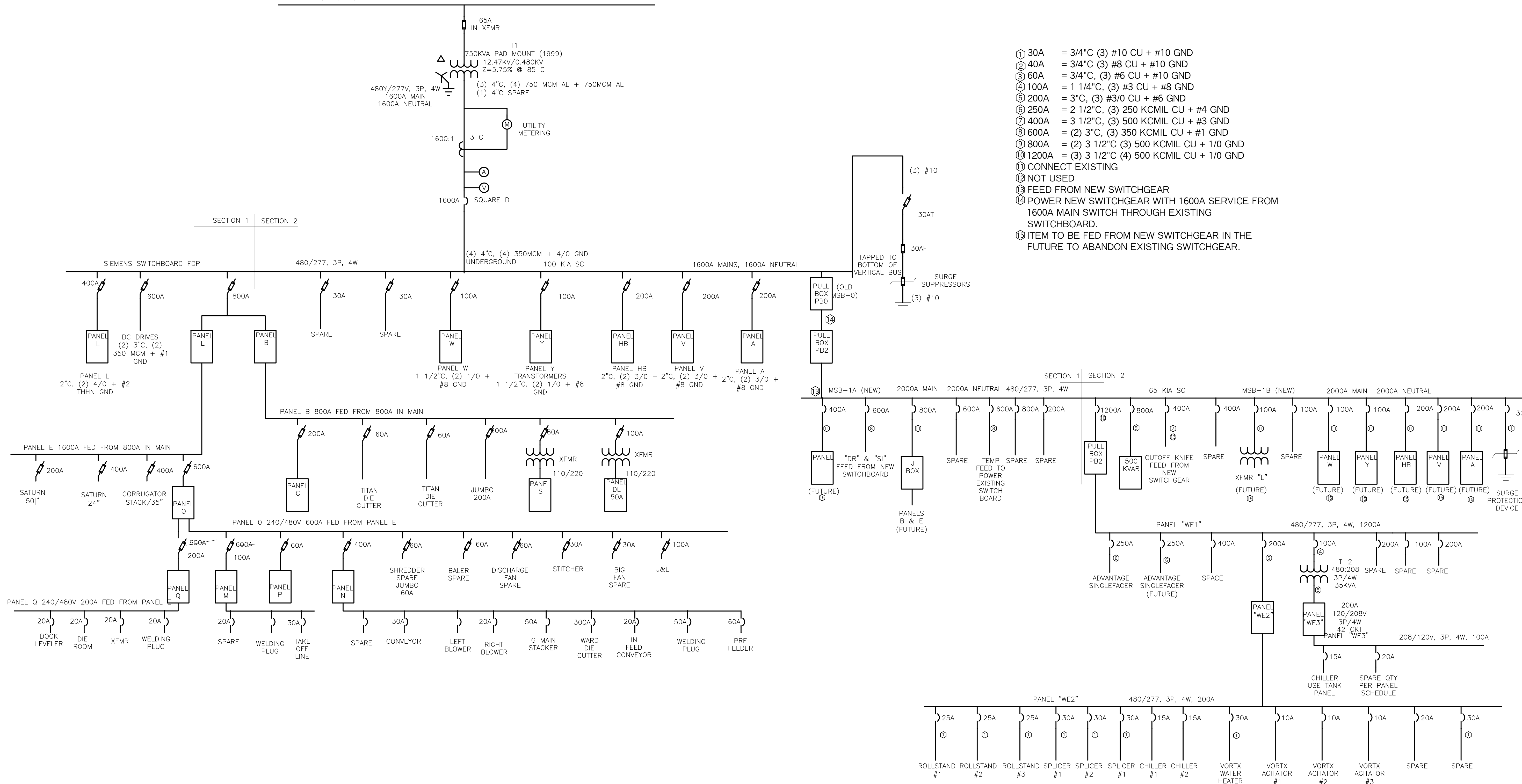
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NOV 10, 2017

12.47KV, 3P, 4W, UNDERGROUND FED FROM INDUSTRIAL PARK LOOP



- ① 30A = 3/4" C (3) #10 CU + #10 GND
- ② 40A = 3/4" C (3) #8 CU + #10 GND
- ③ 60A = 3/4" C, (3) #6 CU + #10 GND
- ④ 100A = 1 1/4" C, (3) #3 CU + #8 GND
- ⑤ 200A = 3" C, (3) #3/0 CU + #6 GND
- ⑥ 250A = 2 1/2" C, (3) 250 KCMIL CU + #4 GND
- ⑦ 400A = 3 1/2" C, (3) 500 KCMIL CU + #3 GND
- ⑧ 600A = (2) 3" C, (3) 350 KCMIL CU + #1 GND
- ⑨ 800A = (2) 3 1/2" C (3) 500 KCMIL CU + 1/0 GND
- ⑩ 1200A = (3) 3 1/2" C (4) 500 KCMIL CU + 1/0 GND
- ⑪ CONNECT EXISTING
- ⑫ NOT USED
- ⑬ FEED FROM NEW SWITCHGEAR
- ⑭ POWER NEW SWITCHGEAR WITH 1600A SERVICE FROM 1600A MAIN SWITCH THROUGH EXISTING SWITCHBOARD.
- ⑮ ITEM TO BE FED FROM NEW SWITCHGEAR IN THE FUTURE TO ABANDON EXISTING SWITCHGEAR.

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TITLE:
PROPOSED PHASE 2 SOUTH ELECTRICAL 1-LINE
DIAGRAM

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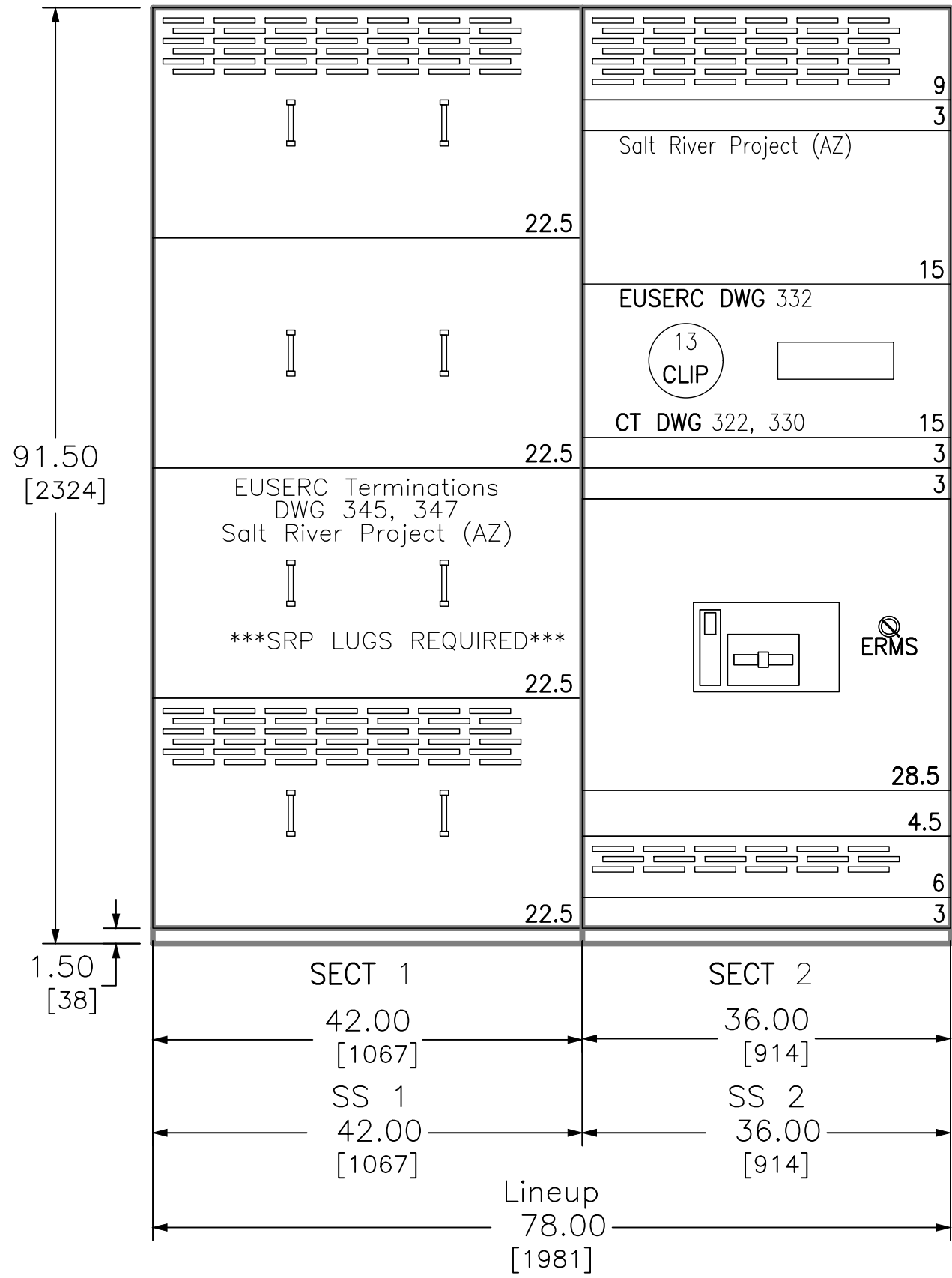
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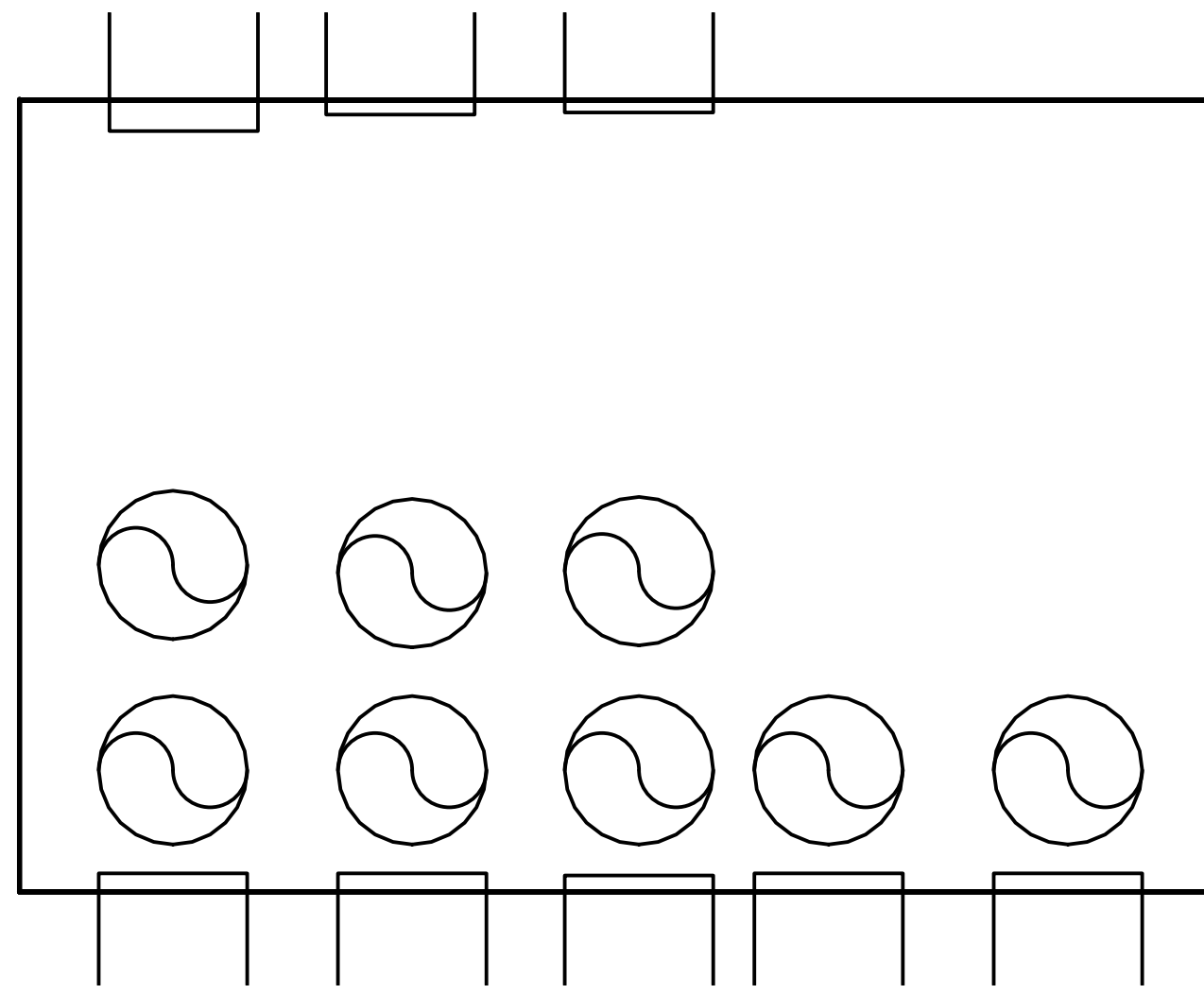
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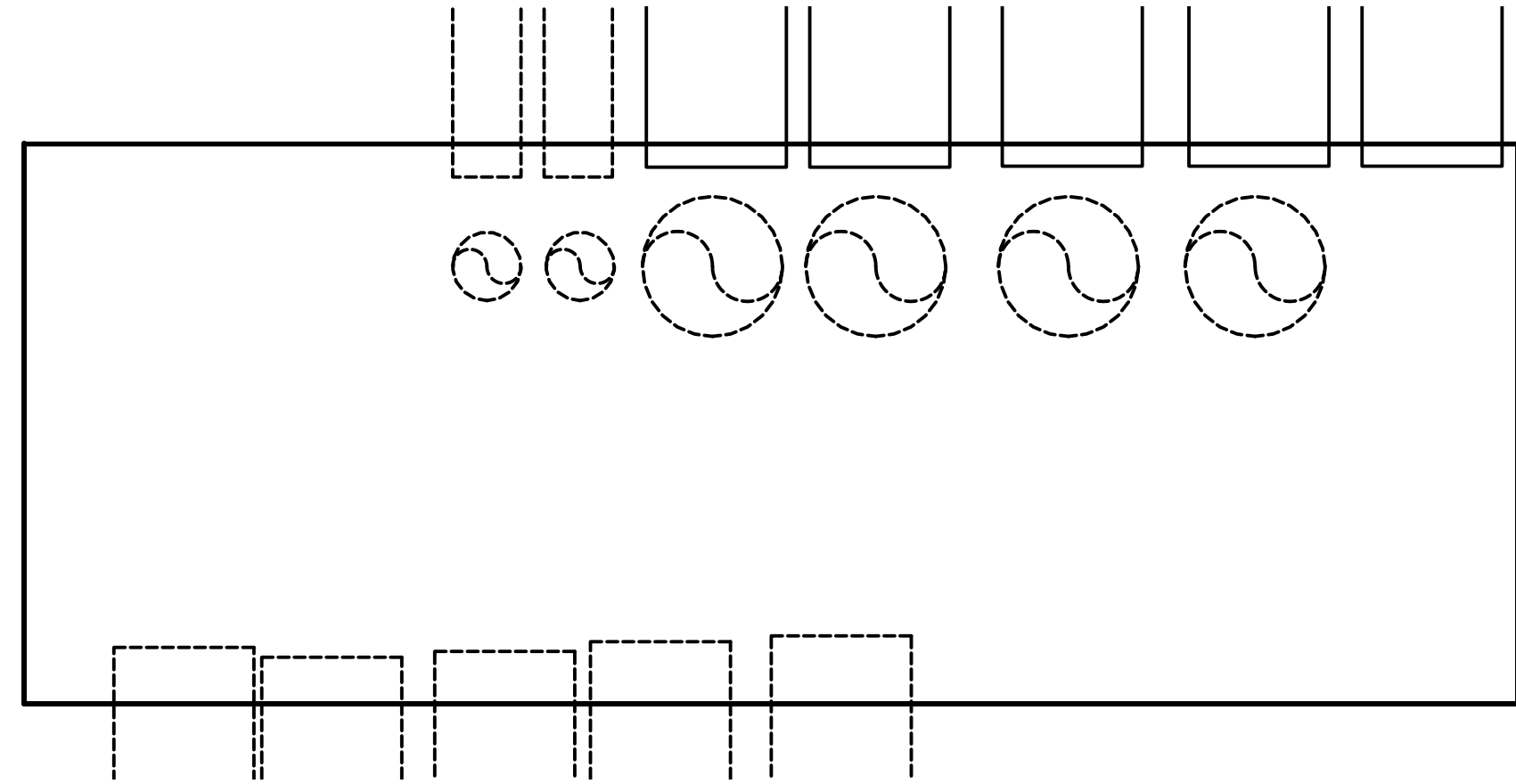
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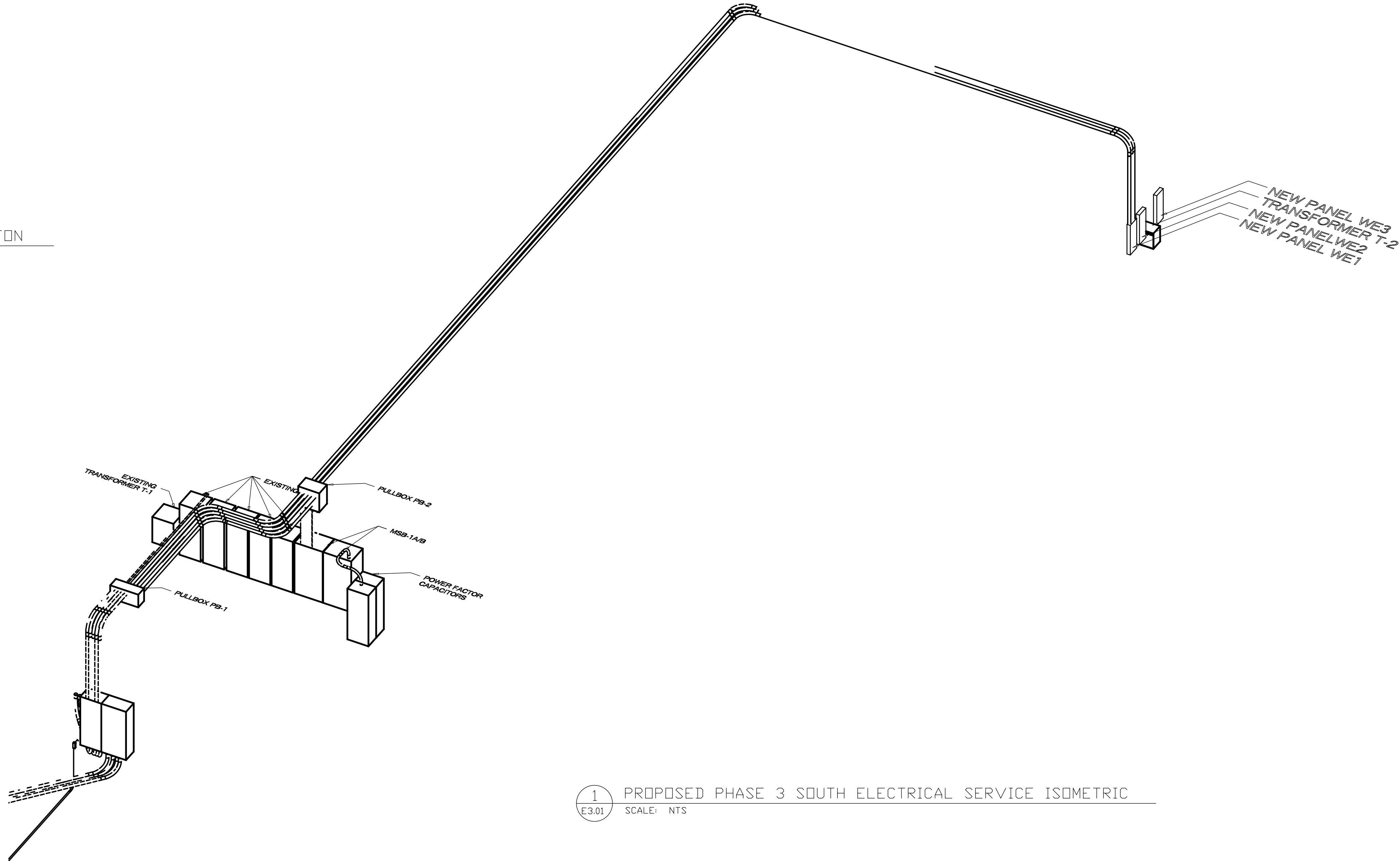
4 PROPOSED PHASE 3 CT, METERING & MAIN SWITCHGEAR ELEVATION
E3.01 SCALE: NTS



3 PROPOSED PULLBOX PB-2
E3.01 SCALE: NTS

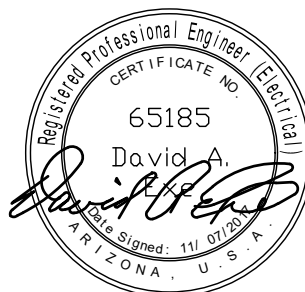


2 PROPOSED PULLBOX PB-1
E3.01 SCALE: NTS



1 PROPOSED PHASE 3 SOUTH ELECTRICAL SERVICE ISOMETRIC
E3.01 SCALE: NTS

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PROPOSED PHASE 3 SOUTH ELECTRICAL SERVICE ISOMETRIC

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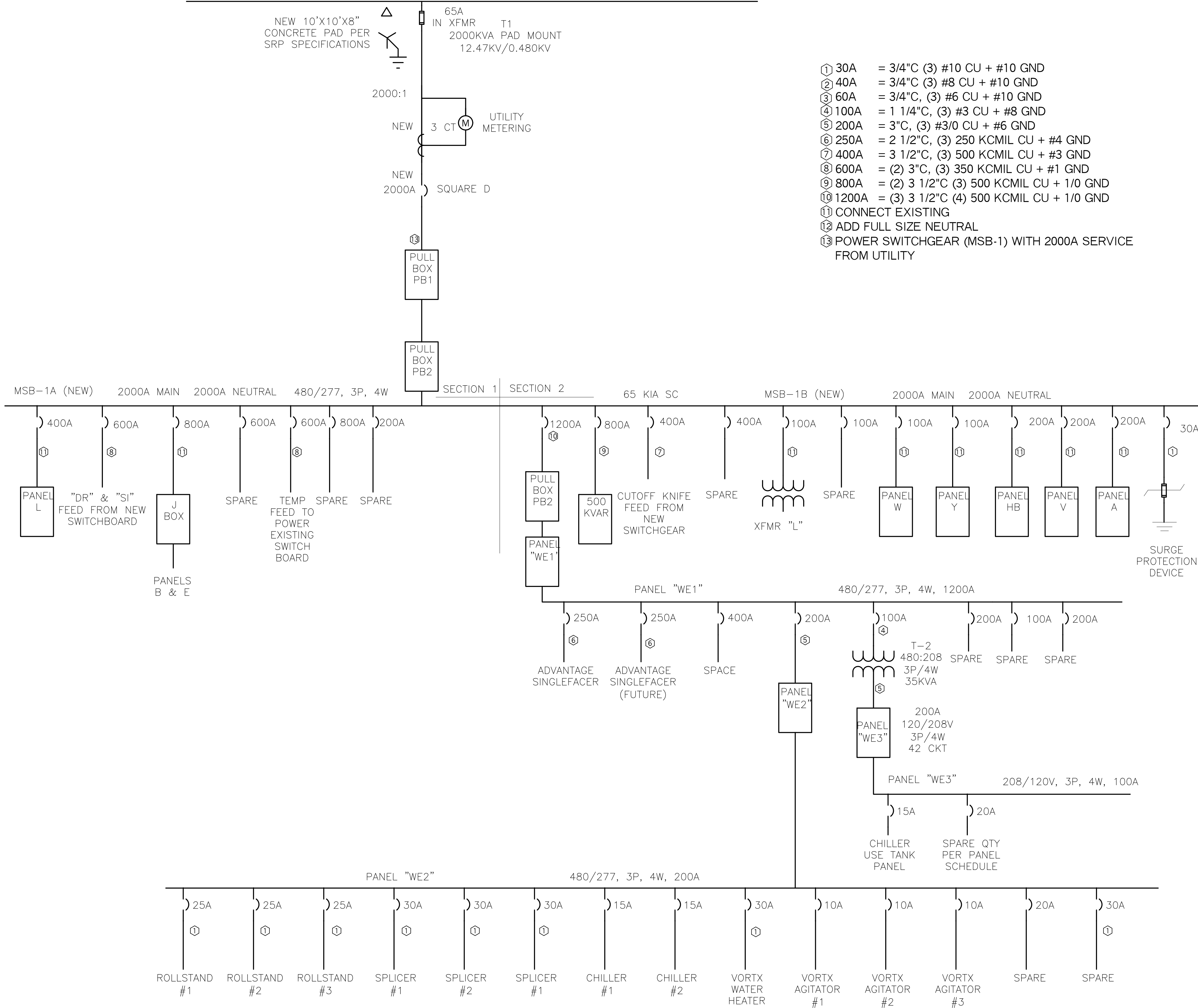
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SOUTH SERVICE PHASE 3

12.47KV, 3P, 4W, UNDERGROUND FED F'ROM INDUSTRIAL PARK LOOP



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TITLE:
**PROPOSED PHASE 2 SOUTH ELECTRICAL 1-LINE
DIAGRAM**

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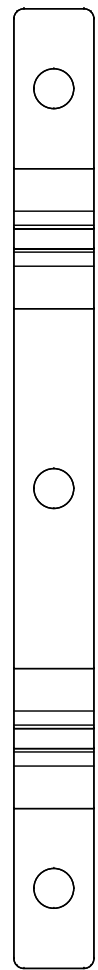
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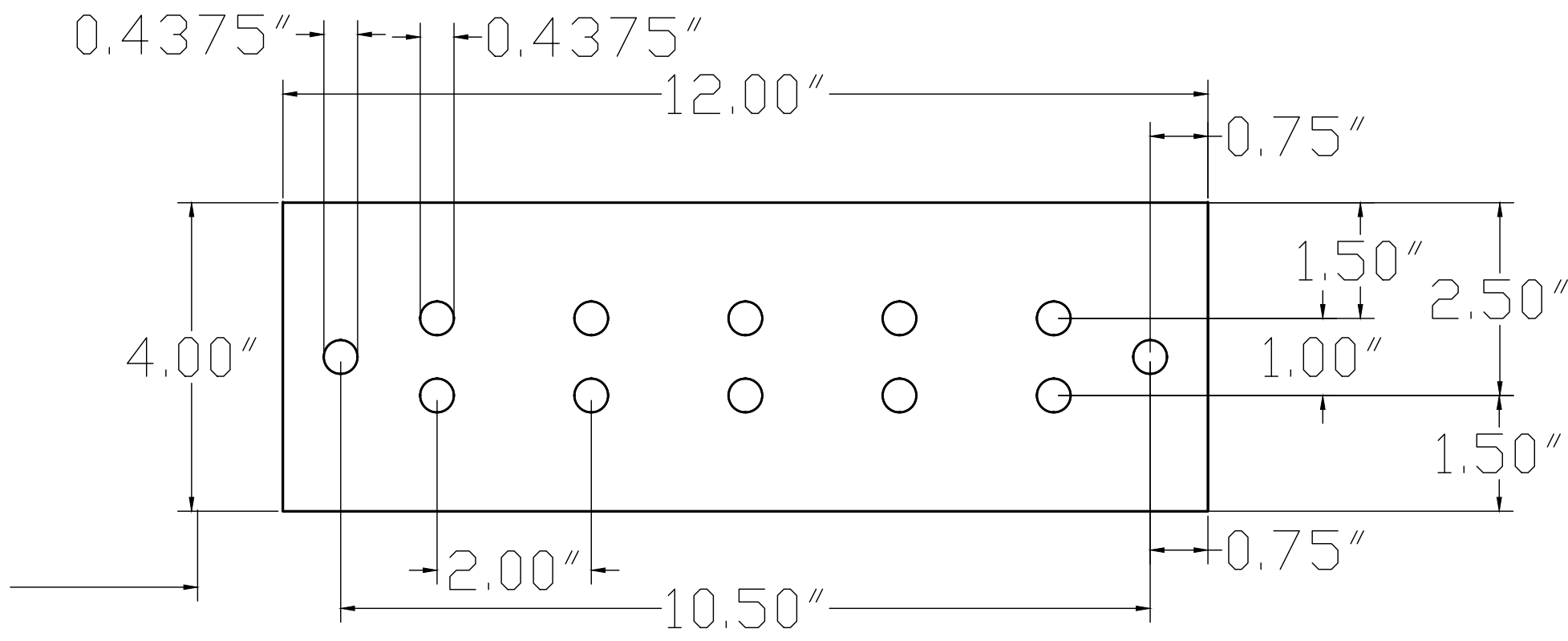
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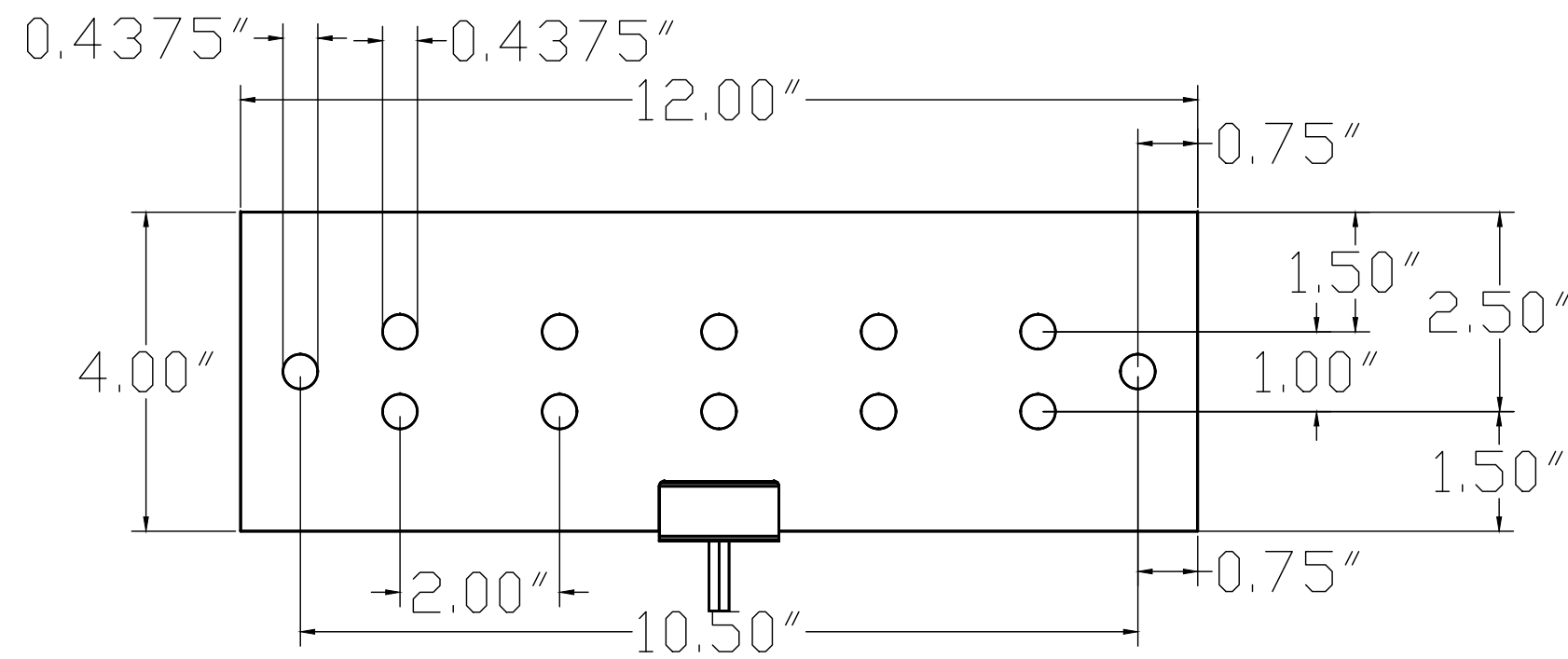
PANEL WE2											
VOLTAGE (L-N): 277				ENCLOSURE TYPE: -----							
VOLTAGE (L-L): 480				MOUNTING: SURFACE							
PHASES, WIRES: 3 ϕ 4 W				AIC RATING (A): 22000							
MINIMUM BUS CAPACITY (A): 200 A				NOTES: -----							
MAIN O.C. DEVICE (A): 200 A											
CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA)			POLE	TRIP AMPS	DESCRIPTION	CKT NO	
				A	B	C					
1,3,5	ROLLSTAND #1 MODEL MRC-4	20	3	4000	4500		3	30	SPUCER #1 MODEL 1X	2,4,6	
1,3,5	ROLLSTAND #1 MODEL MRC-4	20	3		4000	4500	3	30	SPUCER #1 MODEL 1X	2,4,6	
1,3,5	ROLLSTAND #1 MODEL MRC-4	20	3			4000 4500	3	30	SPUCER #1 MODEL 1X	2,4,6	
7,9,11	ROLLSTAND #2 MODEL MRC-4	20	3	4000	4500		3	30	SPUCER #2 MODEL 1X	8,10,12	
7,9,11	ROLLSTAND #2 MODEL MRC-4	20	3		4000	4500	3	30	SPUCER #2 MODEL 1X	8,10,12	
7,9,11	ROLLSTAND #2 MODEL MRC-4	20	3			4000 4500	3	30	SPUCER #2 MODEL 1X	8,10,12	
13,15,17	ROLLSTAND #3 MODEL MRC-4	20	3	4000	4500		3	30	SPUCER #3 MODEL 1X	14,16,18	
13,15,17	ROLLSTAND #3 MODEL MRC-4	20	3		4000	4500	3	30	SPUCER #3 MODEL 1X	14,16,18	
13,15,17	ROLLSTAND #3 MODEL MRC-4	20	3			4000 4500	3	30	SPUCER #3 MODEL 1X	14,16,18	
19,21,23	CHILLER #1 3 TON	20	3	2800	5500		3	30	VOTRX WATER HEATER	20,22,24	
19,21,23	CHILLER #1 3 TON	20	3		2800	5500	3	30	VOTRX WATER HEATER	20,22,24	
19,21,23	CHILLER #1 3 TON	20	3			2800 5500	3	30	VOTRX WATER HEATER	20,22,24	
25,27,29	CHILLER #2 3 TON	20	3	2800	2000		3	10	VORTX AGITATOR #1 USE TANKS	26,28,30	
25,27,29	CHILLER #2 3 TON	20	3		2800	2000	3	10	VORTX AGITATOR #1 USE TANKS	26,28,30	
25,27,29	CHILLER #2 3 TON	20	3			2800 2000	3	10	VORTX AGITATOR #1 USE TANKS	26,28,30	
31,33,35	SPARE	60	3	0	2000		3	10	VORTX AGITATOR #2 USE TANKS	32,34,36	
31,33,35	SPARE	60	3		0	2000	3	10	VORTX AGITATOR #2 USE TANKS	32,34,36	
31,33,35	SPARE	60	3			0 2000	3	10	VORTX AGITATOR #2 USE TANKS	32,34,36	
37,39,41	SPARE	60	3	0	2000		3	10	VORTX AGITATOR #3 USE TANKS	38,40,42	
37,39,41	SPARE	60	3		0	2000	3	10	VORTX AGITATOR #3 USE TANKS	38,40,42	
37,39,41	SPARE	60	3			0 2000	3	10	VORTX AGITATOR #3 USE TANKS	38,40,42	
				CONNECTED LOAD PHASE TOTALS (VA)							
				42600	42600	42600					
				CONNECTED LOAD (KVA)			DEMAND FACTOR			DEMAND LOAD (KVA)	
Receptacles (0 - 10 KVA)				10.0			1.00			10.0	
Receptacles (Over 10 KVA)				117.8			0.50			58.9	
										DEMAND LOAD	
										SPARE CAPACITY	
										SPARE CAPACITY	
										PHASE BALANCE	
										A TO B	
										B TO C	
										C TO A	
										100 %	
										100 %	
										100 %	
TOTAL:				127.8						68.9	
LOAD (AMPS):				153.7						82.9	



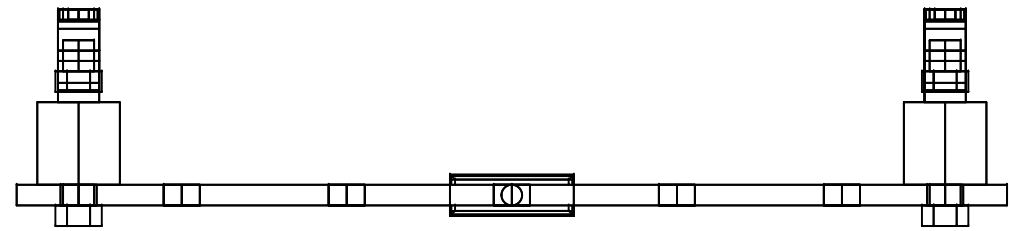
5 GROUND BAR MOUNTING BRACKET
SCALE: NTS



3 SWITCHGEAR LOCATION GROUND BAR DIMENSIONS
SCALE: NTS

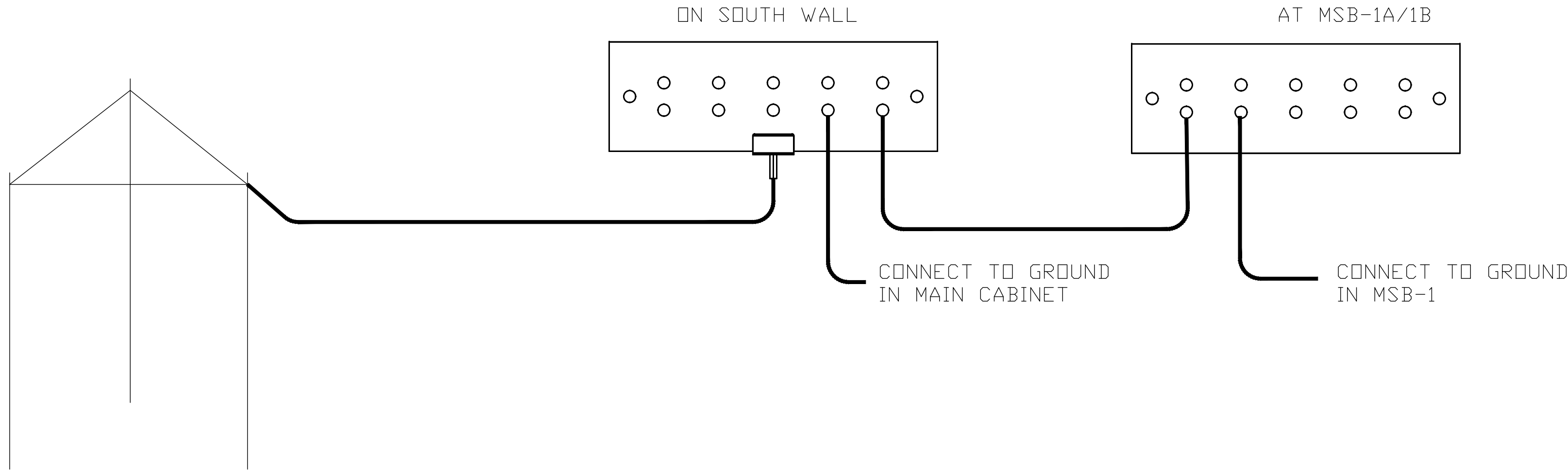


2 SOUTH WALL GROUNDING BAR DIMENSIONS
SCALE: NTS



4 GROUND BAR TOP VIEW
SCALE: NTS

- GENERAL NOTES
- TRIAD GROUND. PROVIDE (3) 10'X5/8" GROUND RODS 10' APART. CONNECT WITH # 4/0 COPPER CONDUCTOR TO INTERNAL GROUND BAR. VERIFY LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
 - STORM COPPER COMPONENTS SCGB-7 4'X16' GROUND BAR ON STANDOFFS. VERIFY LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. TIE GROUND BARS TOGETHER WITH 3/0 CU AND TIE TO BUILDING GROUND.



1 GROUNDING WIRING DETAIL
SCALE: NTS

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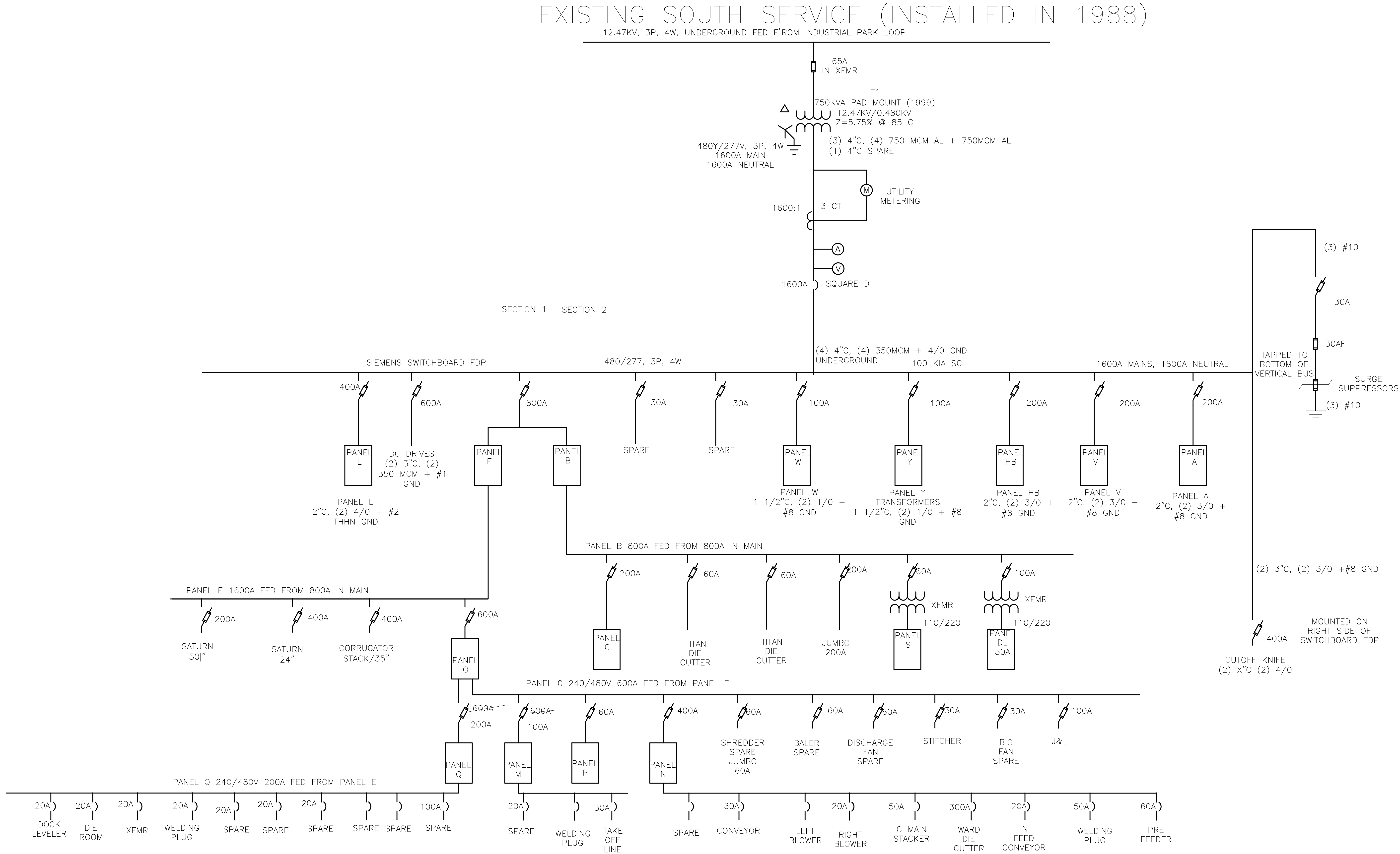
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EXISTING SOUTH ELECTRICAL 1-LINE DIAGRAM

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