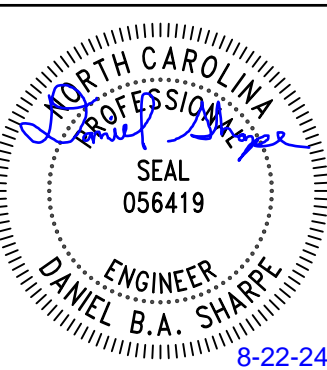


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DESIGN FOR:
BAUCOM BUSINESS PLAZA - BR3
11132 U.S. 401 N
FUQUAY-VARINA, NC 27526

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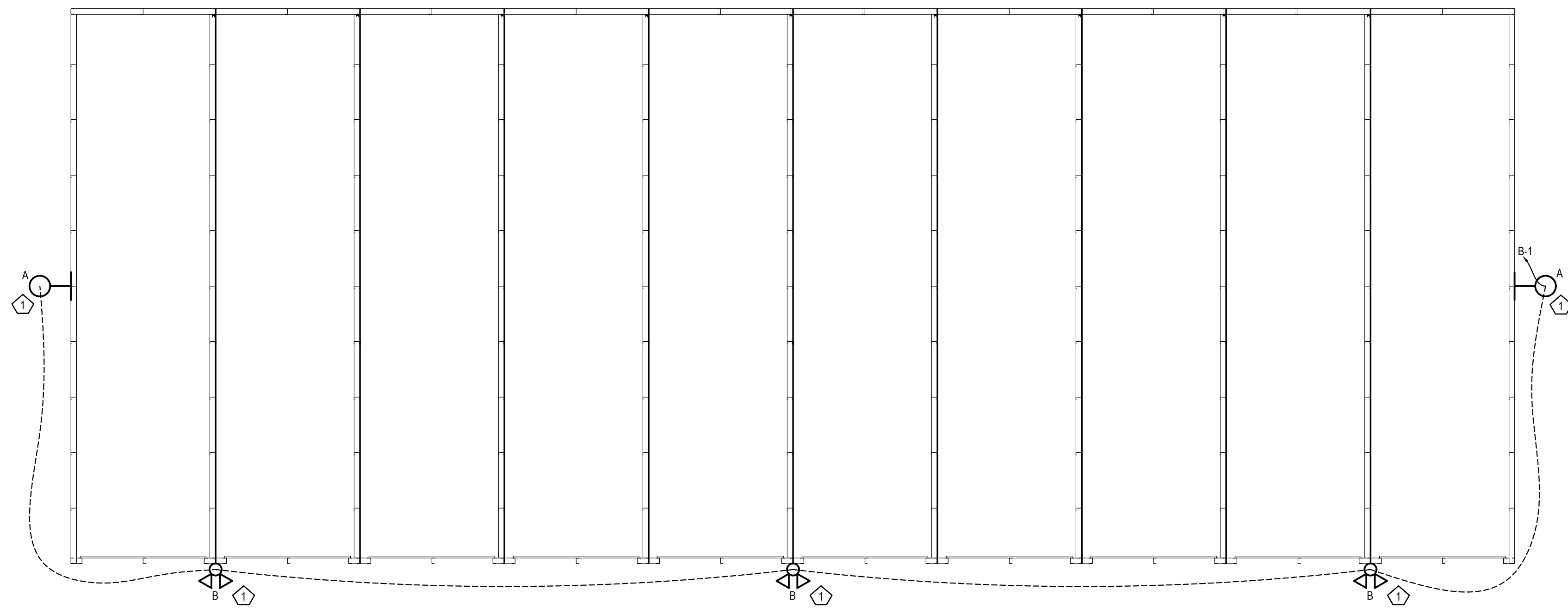
ISS. NO.	DATE	DESCRIPTION
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CHECKED BY: DBAS

LIGHTING PLAN

E1.1

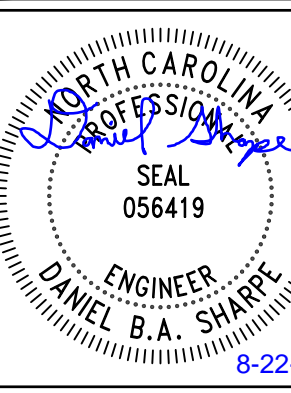
◇ LIGHTING KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
1	LIGHTING TO BE CONTROLLED BY INTEGRAL MOTION SENSORS TO FIXTURES.



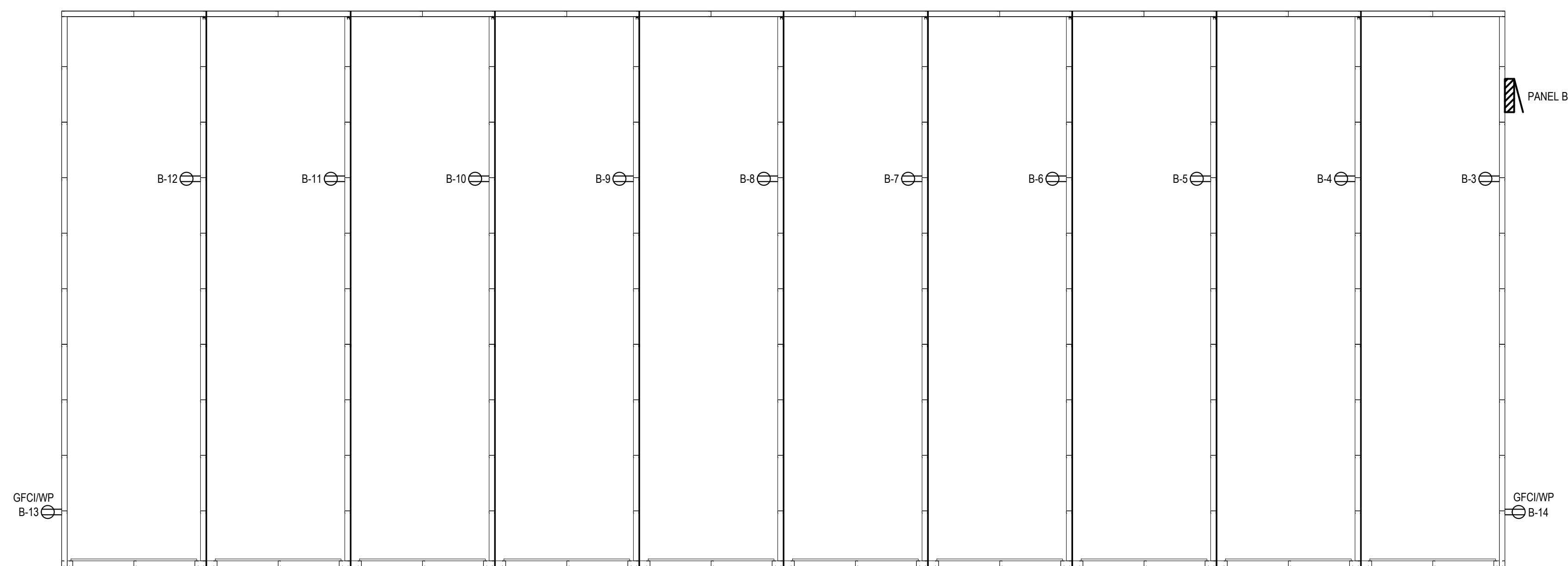
1 LIGHTING PLAN
SCALE - 1/8" = 1'0"

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1 POWER PLAN
SCALE - 1/8" = 1'0"

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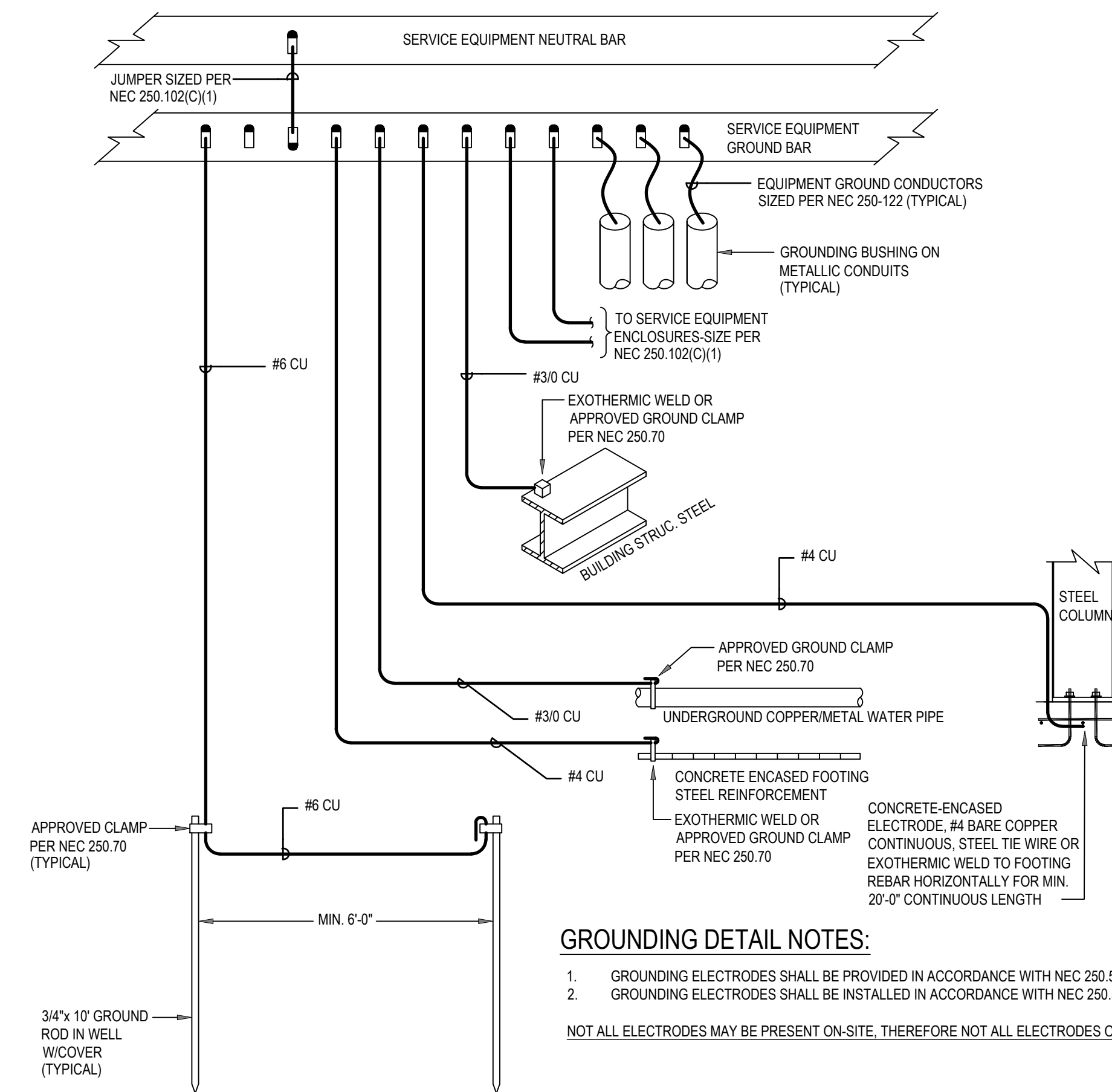
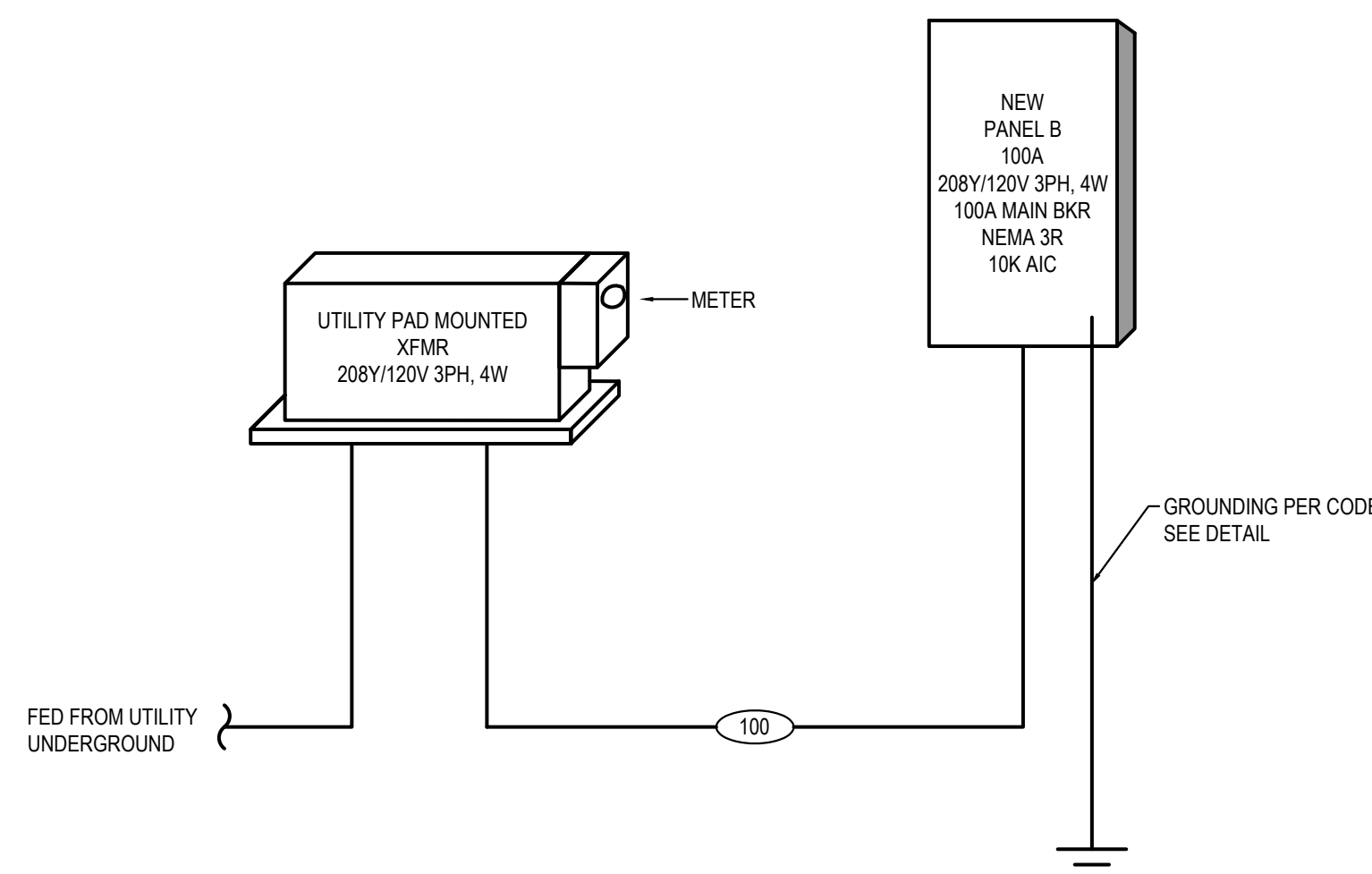
POWER PLAN

E1.2

100 AMP MAIN BREAKER		PANELBOARD B						LOCATION: BR3	
100 AMP BUS RATING		30 POLES		10 KA SHORT CIRCUIT RATING		ENCLOSURE RATING: NEMA 3R		MOUNTING: SURFACE	
208Y/120 VOLTS		3 PHASE 4 WIRE		60 HZ					
CIRCUIT NO.	DESCRIPTION	BREAKER AMPS/POLES	LOAD KVA			BREAKER AMPS/POLES	DESCRIPTION	CIRCUIT NO.	
			PHASE A	PHASE B	PHASE C				
1	LIGHTING	20/1	0.18			20/1	SPARE	2	
3	RV RECEPTACLE	20/1		0.18	0.18	20/1	RV RECEPTACLE	4	
5	RV RECEPTACLE	20/1			0.18	20/1	RV RECEPTACLE	6	
7	RV RECEPTACLE	20/1	0.18	0.18		20/1	RV RECEPTACLE	8	
9	RV RECEPTACLE	20/1		0.18	0.18	20/1	RV RECEPTACLE	10	
11	RV RECEPTACLE	20/1			0.18	20/1	RV RECEPTACLE	12	
13	EXTERIOR RECEPTACLE	20/1	0.18	0.18		20/1	EXTERIOR RECEPTACLE	14	
15	SPARE						SPARE	16	
17	SPARE						SPARE	18	
19	SPARE						SPARE	20	
21	SPARE						SPARE	22	
23	SPARE						SPARE	24	
25	SPARE						SPARE	26	
27	SPARE						SPARE	28	
29	SPARE						SPARE	30	
TOTAL PHASE KVA PER PHASE			0.9	0.72	0.72	DEMAND KVA: 9.75			
TOTAL CONNECTED KVA			2.34			DEMAND AMPS: 27			
AMPS PER PHASE			8	6	6				

NOTES:
1
2
3
4

SUMMARY OF LOADS			
DESCRIPTION	CONNECTED (kVA)	DEMAND FACTOR	DEMAND (kVA)
LIGHTING	0.18	1.00	7.59
RECEPTACLES (17* 10 kVA)	2.16	1.00	2.16
(REMAINING)	0.00	0.50	0.00
(TOTAL)	2.16	1.00	2.16
TOTAL KVA	2.3		9.8
TOTAL AMPS	6		27



GROUNDING DETAIL NOTES:
1. GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC 250.52(A).
2. GROUNDING ELECTRODES SHALL BE INSTALLED IN ACCORDANCE WITH NEC 250.53
NOT ALL ELECTRODES MAY BE PRESENT ON-SITE, THEREFORE NOT ALL ELECTRODES ON THIS DETAIL MAY APPLY. DETAIL IS DIAGRAMMATIC ONLY.

STANDARD OVERCURRENT PROTECTION SIZE	FEEDER WIRE - # SETS (CONDUCTOR SIZE, EQUIP. GND., CONDUIT SIZE) CONDUCTOR TYPE: THHN - DRY, THWN - WET			
	COPPER WIRE		ALUMINUM WIRE	
	GEK	CONDUIT SIZE	GEK	CONDUIT SIZE
30	1 [4 #10, #10G, 3/4"C]		1 [4 #8, #8G, 3/4"C]	
35	1 [4 #8, #10G, 3/4"C]		1 [4 #6, #8G, 1"C]	
40	1 [4 #8, #10G, 3/4"C]		1 [4 #6, #8G, 1"C]	
45	1 [4 #6, #10G, 1"C]		1 [4 #4, #8G, 1-1/4"C]	
50	1 [4 #6, #10G, 1"C]		1 [4 #4, #8G, 1-1/4"C]	
60	1 [4 #4, #10G, 1-1/4"C]		1 [4 #3, #8G, 1-1/4"C]	
70	1 [4 #4, #8G, 1-1/4"C]		1 [4 #2, #6G, 1-1/4"C]	
80	1 [4 #3, #8G, 1-1/4"C]		1 [4 #1, #6G, 1-1/2"C]	
90	1 [4 #2, #8G, 1-1/4"C]		1 [4 #1/0, #6G, 2"C]	
100	1 [4 #1, #6G, 1-1/2"C]	#8	1 [4 #1/0, #6G, 2"C]	#6
110	1 [4 #1, #6G, 1-1/2"C]	#8	1 [4 #1/0, #4G, 2"C]	#6
125	1 [4 #1, #6G, 1-1/2"C]	#6	1 [4 #2/0, #4G, 2"C]	#4
150	1 [4 #1/0, #6G, 2"C]	#6	1 [4 #3/0, #4G, 2"C]	#4
175	1 [4 #2/0, #6G, 2"C]	#4	1 [4 #4/0, #4G, 2-1/2"C]	#2
200	1 [4 #3/0, #6G, 2"C]	#4	1 [4 #250KCMIL, #4G, 2-1/2"C]	#2
225	1 [4 #4/0, #4G, 2-1/2"C]	#2	1 [4 #300KCMIL, #2G, 3"C]	#1/0
250	1 [4 #250KCMIL, #4G, 2-1/2"C]	#2	1 [4 #350KCMIL, #2G, 3"C]	#1/0
300	1 [4 #300KCMIL, #4G, 3"C]	#2	1 [4 #500KCMIL, #2G, 3"C]	#1/0
350	2 [4 #2/0, #3G, 2"C]	#2	2 [4 #4/0, #1G, 2-1/2"C]	#1/0
400	2 [4 #3/0, #3G, 2"C]	#2	2 [4 #250KCMIL, #1G, 2-1/2"C]	#1/0
450	2 [4 #4/0, #2G, 2-1/2"C]	#1/0	2 [4 #300KCMIL, #1/0G, 3"C]	#3/0
500	2 [4 #250KCMIL, #2G, 2-1/2"C]	#1/0	2 [4 #350KCMIL, #1/0G, 3"C]	#3/0
600	2 [4 #350KCMIL, #1G, 3"C]	#2/0	2 [4 #500KCMIL, #2/0G, 3"C]	#4/0
700	2 [4 #500KCMIL, #1/0G, 3"C]	#2/0	3 [4 #350KCMIL, #3/0G, 3"C]	#4/0
800	3 [4 #300KCMIL, #1/0G, 3"C]	#3/0	3 [4 #400KCMIL, #3/0G, 3"C]	#4/0
1000	3 [4 #400KCMIL, #2/0G, 3"C]	#3/0	4 [4 #350KCMIL, #4/0G, 3"C]	#4/0
1200	4 [4 #350KCMIL, #3/0G, 3"C]	#3/0	4 [4 #500KCMIL, #250KCMIL G, 3"C]	#250 KCMIL
1600	5 [4 #400KCMIL, #4/0G, 3"C]	#3/0	6 [4 #400KCMIL, #350KCMIL G, 3"C]	#250 KCMIL
2000	6 [4 #400KCMIL, #250KCMIL G, 3"C]	#3/0	7 [4 #500KCMIL, #400KCMIL G, 3"C]	#250 KCMIL
2500	7 [4 #500KCMIL, #350KCMIL G, 3"C]	#3/0	9 [4 #500KCMIL, #600KCMIL G, 3"C]	#250 KCMIL
3000	8 [4 #500KCMIL, #400KCMIL G, 3"C]	#3/0	10 [4 #500KCMIL, #600KCMIL G, 3"C]	#250 KCMIL
4000	11 [4 #500KCMIL, #500KCMIL G, 3"C]	#3/0	13 [4 #500KCMIL, #750KCMIL G, 3"C]	#250 KCMIL

FEEDER SCHEDULE NOTES:
1. ALL FEEDER SIZES MAY NOT BE LISTED IN ONE-LINE DIAGRAM
2. ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED. REFER TO APPLICABLE TABLE IN ANNEX C OF NEC.
3. IF CONDUIT OTHER THAN EMT IS REQUIRED, BASE BID ON NEXT TRADE SIZE ABOVE THAT INDICATED.
4. 'GEC' DENOTES GROUNDING ELECTRODE CONDUCTOR PER NEC TABLE 250.66.
* EC SHALL VERIFY WITH AUTHORITY HAVING JURISDICTION AND UTILITY COMPANY THAT ALUMINUM CONDUCTORS ARE ACCEPTABLE FOR USE AS UTILITY TRANSFORMER SECONDARIES AND FEEDER CIRCUITS.

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SEAL
056419
D. W. B. A. SHARPE
ENGINEER
8-22-24

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PANEL SCHEDULE AND ONE-LINE DIAGRAM

E2.1