

51ST AVENUE

BOONE AVENUE NORTH

12" D.I.P. CLASS S2

NO. 8624

Concrete

SITE PLAN ELECTRICAL KEYED NOTES
1 PROVIDE 3/4" EMPTY CONDUIT FOR FUTURE SIGNS.

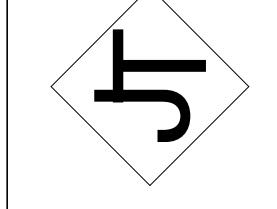
1 ELECTRICAL SITE PLAN
E2 1" = 20'-0"
0 10 20 40

COMM NO. 17143
DATE XXXX/XX/201X
REVISIONS

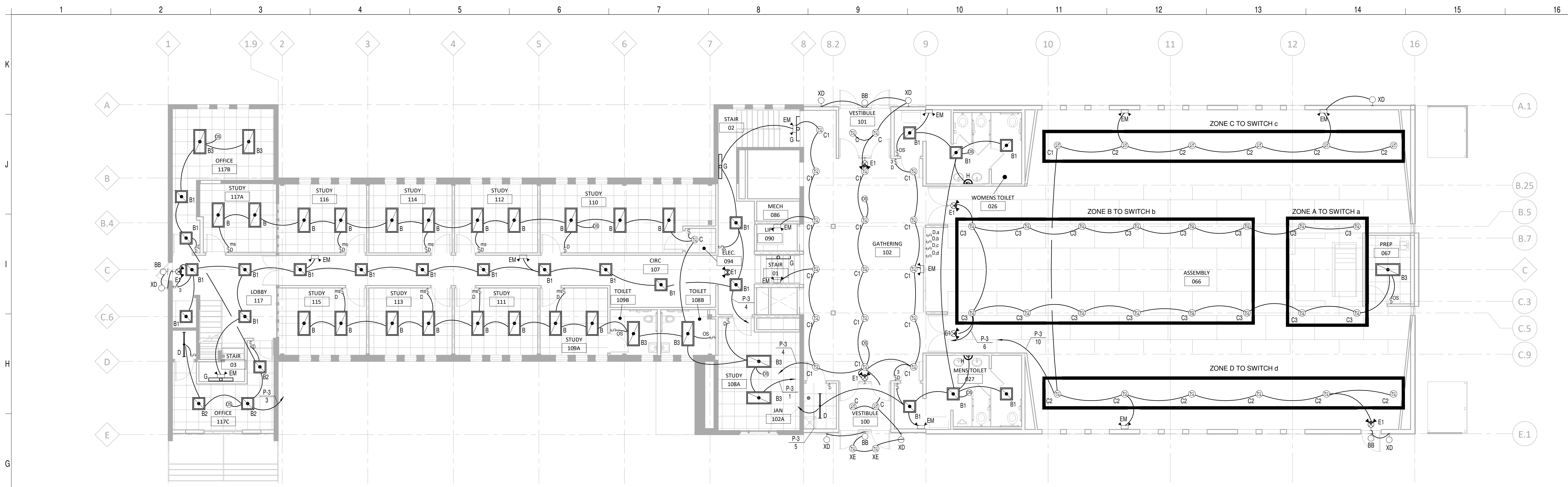
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR CONTRACT DOCUMENTS WERE PREPARED BY ME OR UNDER MY SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
Typed or Printed Name: Thomas A. Lovell P.E.
Date: 10/27/2011 REG. NO. 21111

LINDELL ENGINEERING, INC.
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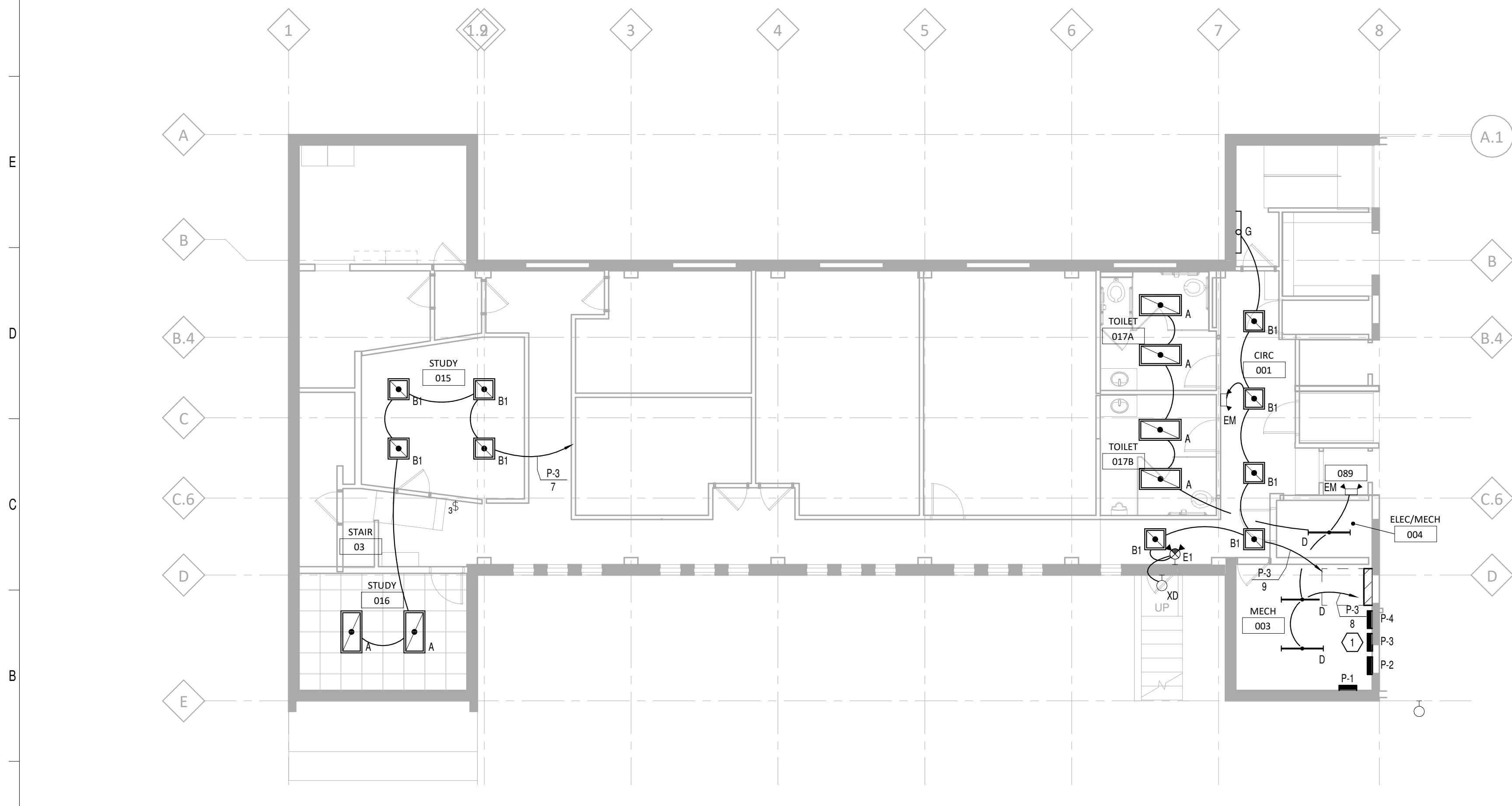
J T ELECTRIC SERVICE, INC.
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Phone (320) 845-4789
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NORTHWEST CHURCH OF CHRIST
8624 50th Ave N
New Hope, MN 55428



2 MAIN LEVEL LIGHTING PLAN
1/8" = 1'-0"



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

ELECTRICAL KEYED NOTES

1 PROVIDE A CONTRACTOR AND PHOTOCELL FOR CONTROL OF SITE LIGHTING. SITE LIGHTING TO BE CONTROLLED TO PANEL P-3, WITH MINIMUM #10 WIRE.

LE - LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	INPUT	MANUFACTURES	NOTES
A	2X4 TROFFER MODEL NUMBER 2GTL4400LM.P835	40 W	LITHONIA LIGHTING	
B	2X4 TROFFER MODEL NUMBER LCAT24 - 35MLG-EDU	40 W	COLUMBIA LIGHTING	
B1	2X2 TROFFER MODEL NUMBER LCAT22 - 35MLG-EDU	30 W	COLUMBIA LIGHTING	
B2	2X2 TROFFER MODEL NUMBER LCAT22 - 35HLG-EDU	30 W	COLUMBIA LIGHTING	
B3	2X4 TROFFER MODEL NUMBER LCAT24 - 35HLG-EDU	44 W	COLUMBIA LIGHTING	
BB	1 HEAD REMOTE EMERGENCY LIGHT. 6V. THERMOPLASTIC HOUSING. UL LISTED FOR WET LOCATIONS. DLC RATED	2 W	DUAL LITE EVO SERIES EMERGH/LITE EF12D-LED SERIES ISOLITE R/LED SERIES LSI INDUSTRIES EPM SERIES	(1) REMOTE HEADS
C	6" RECESSED CAN MODEL NUMBER LDN6 35/10 L06AR LD MVOLT EZ10	15 W	LITHONIA LIGHTING	
C1	6" RECESSED CAN MODEL NUMBER LDN6 35/20 L06AR LD MVOLT EZ10	15 W	LITHONIA LIGHTING	
C2	6" RECESSED CAN MODEL NUMBER LDN6 35/50 L06AR LD MVOLT EZ10	15 W	LITHONIA LIGHTING	
C3	6" RECESSED CAN MODEL NUMBER LDN6 35/50 L06AR LD MVOLT EZ10 SCA6 30D	15 W	LITHONIA LIGHTING	
D	4" LED STRIP MODEL NUMBER ZL1NL243500LMFSTMVOLT40K80CRWH	30 W	LITHONIA LIGHTING	
E1	EMERGENCY COMBO MODEL NUMBER E09LEDM6	2 W	LITHONIA LIGHTING	
EM	EMERGENCY LIGHT MODEL NUMBER EL2LEDM12	2 W	LITHONIA LIGHTING	
G	STAIRWELL LIGHT MODEL NUMBER 4SWLED-LD4-40SL-LW-UNV-L835-CD1	40 W	COOPER LIGHTING	
H	30" WALL VANITY LIGHT			
XA	PARKING LOT LIGHTING SINGLE SHOEBOX RAB LIGHTING ALED3785F	78 W	RAB LIGHTING	
XA2	PARKING LOT LIGHTING DOUBLE SHOEBOX RAB LIGHTING ALED3785F 12	156 W	RAB LIGHTING	
XC	PARKING LOT LIGHTING SINGLE SHOEBOX RAB LIGHTING ALED2278	80 W	RAB LIGHTING	
XD	LED SLIM WALLPACK RAB SLIM18	13 W	RAB LIGHTING	
XE	LED REMOLDER DOWN LIGHT RAB R0LED4R20-80NHC S-W	40 W	RAB LIGHTING	

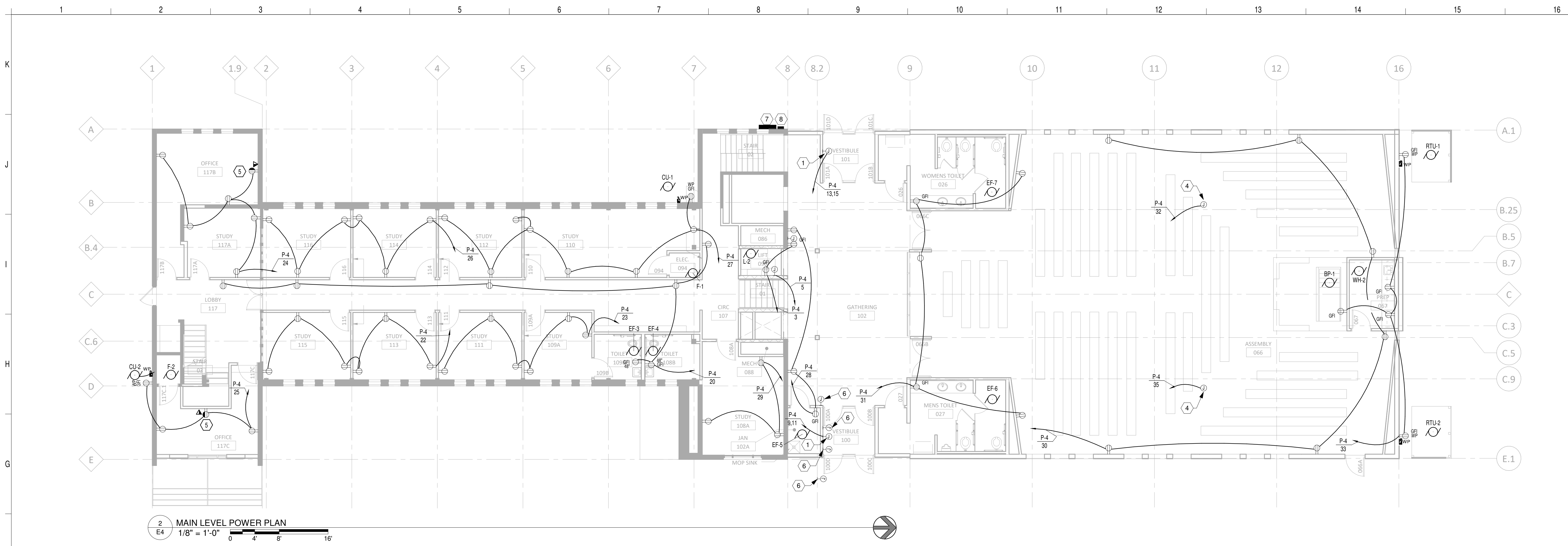
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Typed or Printed Name: Richard A. Lindell P.E.
REG. NO. 27111
DATE: 10/27/2011

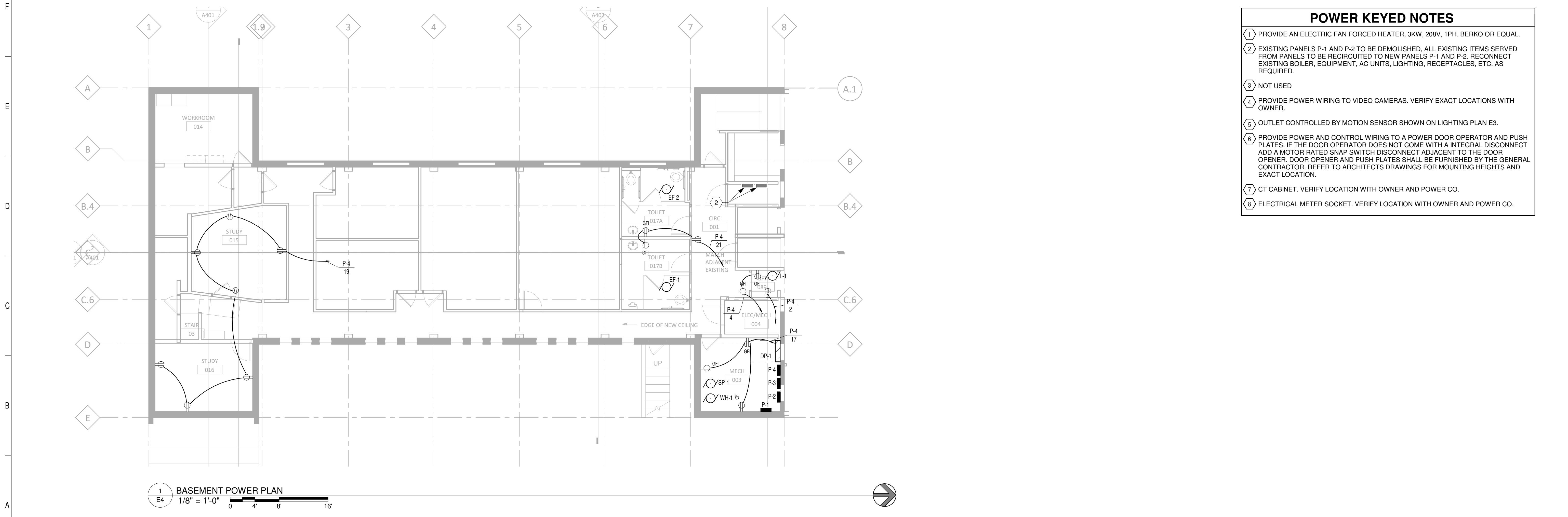
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2 MAIN LEVEL POWER PLAN
1/8" = 1'-0"



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

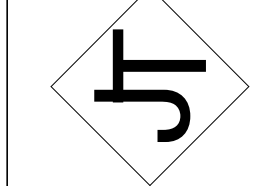
- POWER KEYED NOTES**
- 1 PROVIDE AN ELECTRIC FAN FORCED HEATER, 3KW, 208V, 1PH. BERKO OR EQUAL.
 - 2 EXISTING PANELS P-1 AND P-2 TO BE DEMOLISHED, ALL EXISTING ITEMS SERVED FROM PANELS TO BE RECIRCUITED TO NEW PANELS P-1 AND P-2. RECONNECT EXISTING BOILER, EQUIPMENT, AC UNITS, LIGHTING, RECEPTACLES, ETC. AS REQUIRED.
 - 3 NOT USED
 - 4 PROVIDE POWER WIRING TO VIDEO CAMERAS. VERIFY EXACT LOCATIONS WITH OWNER.
 - 5 OUTLET CONTROLLED BY MOTION SENSOR SHOWN ON LIGHTING PLAN E3.
 - 6 PROVIDE POWER AND CONTROL WIRING TO A POWER DOOR OPERATOR AND PUSH PLATES. IF THE DOOR OPERATOR DOES NOT COME WITH AN INTEGRAL DISCONNECT ADD A MOTOR RATED SNAP SWITCH DISCONNECT ADJACENT TO THE DOOR OPENER. DOOR OPENER AND PUSH PLATES SHALL BE FURNISHED BY THE GENERAL CONTRACTOR, REFER TO ARCHITECTS DRAWINGS FOR MOUNTING HEIGHTS AND EXACT LOCATION.
 - 7 CT CABINET. VERIFY LOCATION WITH OWNER AND POWER CO.
 - 8 ELECTRICAL METER SOCKET. VERIFY LOCATION WITH OWNER AND POWER CO.

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Typed or Printed Name: Robert A. Linnell P.E.
Date: X/12/XX
REG. NO. 2111

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ID	DESCRIPTION	LOAD		VOLT	PHASE	DISCONNECT	CIRCUIT PROTECTION	SERVED FROM	WIRE SIZE	NOTES
		HP	AMPS							
BP-1	BAPTISTRY HEATER		10999 W	208 V	1	2P-70	2P-70	P-4	1" C. 2#6	F
CU-1	COND UNIT TO F-1	32.00 A		208 V	1	2P-50	2P-50	P-4	3/4" C. 2#8	A
CU-2	COND UNIT TO F-2	19.10 A		208 V	1	2P-30	2P-30	P-4	3/4" C. 2#8	A
EF-1	EXHAUST FAN	1.30 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
EF-2	EXHAUST FAN	1.30 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
EF-3	EXHAUST FAN	0.29 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
EF-4	EXHAUST FAN	0.29 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
EF-5	EXHAUST FAN	0.29 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
EF-6	EXHAUST FAN	2.10 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
EF-7	EXHAUST FAN	2.10 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	B
F-1	FURNACE	13.70 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	C
F-2	FURNACE	13.70 A		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	C
L-1	L-1			120 V	1	1P-60	1P-35	P-4	3/4" C. 2#10	D
L-2	L-2			120 V	1	1P-60	1P-35	P-4	3/4" C. 2#10	D
RTU-1	RTU-1	52.60 A		208 V	3	3P-60	3P-60	DP-1	1" C. 3#6	E
RTU-2	RTU-2	52.60 A		208 V	3	3P-60	3P-60	DP-1	1" C. 3#6	E
SP-1	SUMP PUMP	23		120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	C
WH-1	WATER HEATER		3900 W	208 V	1	2P-60	2P-60	P-4	1" C. 2#6	G
WH-2	WATER HEATER		1440 W	120 V	1	1P-20	1P-20	P-4	1/2" C. 2#12	G

- ELECTRICAL EQUIPMENT SCHEDULE NOTES**
- PROVIDE POWER WIRING. PROVIDE A FUSED NEMA 3R DISCONNECT.
 - PROVIDE POWER WIRING AND AN ON/OFF MOTOR RATED SNAP SWITCH. VERIFY CONTROL WIRING WITH MECHANICAL CONTRACTOR. INTERLOCK WITH LIGHTING.
 - PROVIDE POWER WIRING AND A MOTOR RATED ON/OFF DISCONNECT SWITCH.
 - PROVIDE POWER WIRING AND DISCONNECT SWITCH SIEMENS GF321N OR EQUAL. INSTALL AND WIRE CONTROLS FURNISHED BY LIFT SUPPLIER. PROVIDE LANDING LIGHT AT EACH LANDING AND SHAFT LIGHTING AT TOP OF SHAFT.
 - PROVIDE POWER WIRING AND A FUSED NEMA 3R DISCONNECT.
 - PROVIDE POWER WIRING. GFI CIRCUIT BREAKER.
 - PROVIDE POWER WIRING. FURNISH, INSTALL AND WIRE A FUSED DISCONNECT SWITCH. MAKE FINAL CONNECTION TO WATER HEATER CONTROL BOX. VERIFY SIZE WITH MECHANICAL CONTRACTOR.

PANELBOARD: P-3

LOCATION: SURFACE NEMA1
 MOUNTING: SURFACE NEMA1
 MAIN DEVICE: 225.00 A MAIN CB
 BUS AMPS: 225 AMPS

VOLTAGE: 120/208 Wye V. 3 ø 4 W.
 A.I.C. RATING: 100,000 AMPS SYMMETRICAL
 SPECIAL:

LOAD DESCRIPTION	BREAKER	CK T	A	B	C	A	B	C	CKT	BREAKER	LOAD DESCRIPTION
Study Lighting	20.00 A/1	1	951 VA			80 VA			2	20.00 A/1	Lobby/Circ Lighting
Office Lighting	20.00 A/1	3	268 VA			902 VA			4	20.00 A/1	Gathering/Vestibule Lighting
Men & Women Toilet/Jan Lighting	20.00 A/1	5		252 VA		288 VA			6	20.00 A/1	Lighting
Lighting	20.00 A/1	7	200 VA			252 VA			8	20.00 A/1	Lighting
Lighting	20.00 A/1	9		207 VA		217 VA			10	20.00 A/1	Lighting
SITE LIGHTING	20.00 A/1	11				611 VA			12	20.00 A/1	SITE LIGHTING
		13	524 VA						14		
		15							16		
		17							18		
		19							20		
		21							22		
		23							24		
		25							26		
		27							28		
		29							30		
		31							32		
		33							34		
		35							36		
		37							38		
		39							40		
		41							42		
TOTAL LOAD:			2 kVA		2 kVA		1 kVA				
TOTAL AMPS:			17 A		13.88 A		9 A				

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS
Lighting	3616 VA	125.00%	4520 VA	CONNECTED LOAD: 4673 VA
Other	0 VA	0.00%	0 VA	ESTIMATED DEMAND: 5573 VA
MOTORS	3644 VA	111.28%	4055 VA	CONNECTED CURRENT: 12.97 A
MTR	30446 VA	114.44%	34843 VA	EST. DEMAND CURRENT: 15.47 A

NOTES:

PANELBOARD: P-4

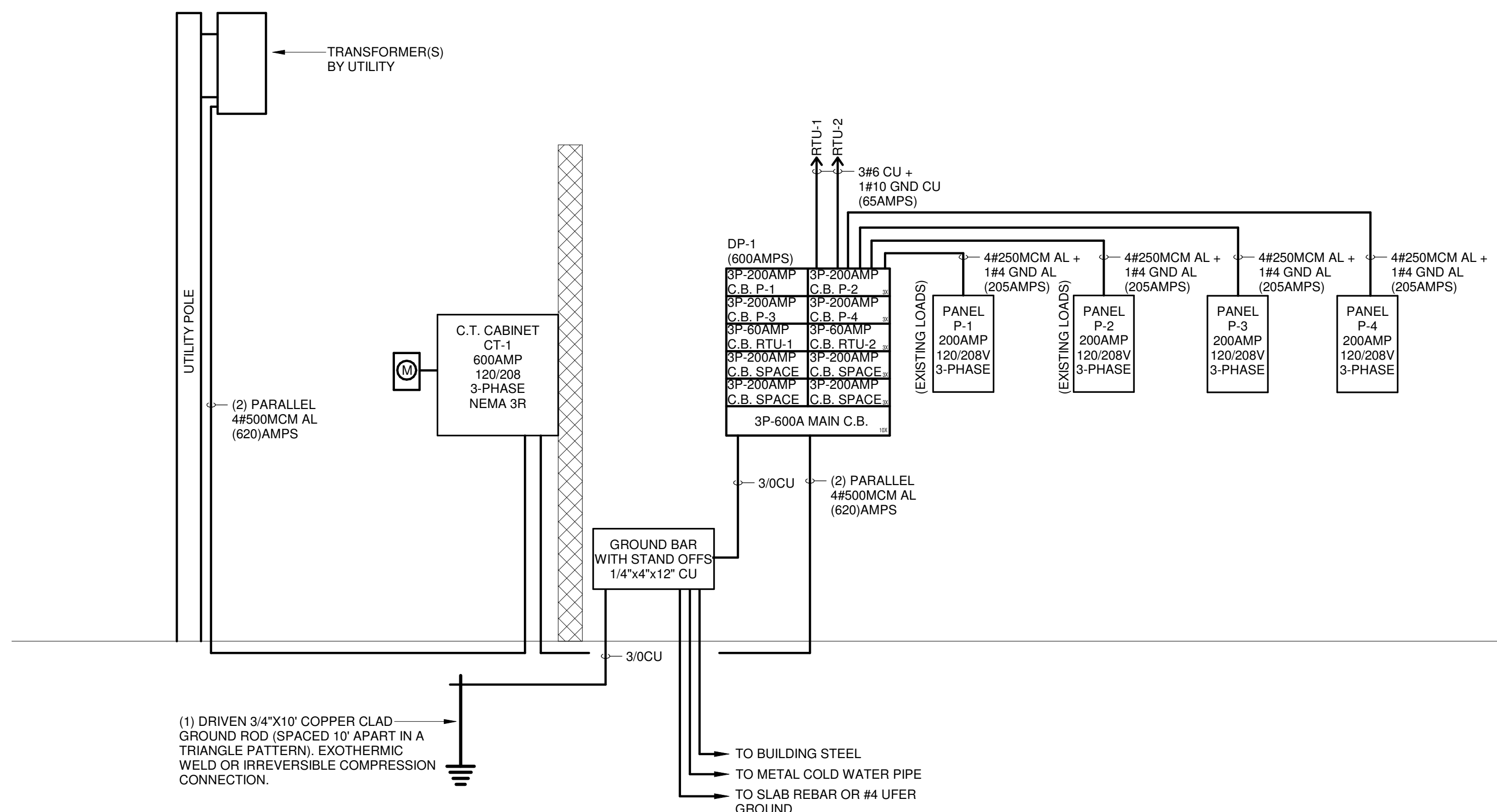
LOCATION: SURFACE NEMA1
 MOUNTING: SURFACE NEMA1
 MAIN DEVICE: 225.00 A MAIN CB
 BUS AMPS: 225 AMPS

VOLTAGE: 120/208 Wye V. 3 ø 4 W.
 A.I.C. RATING: 100,000 AMPS SYMMETRICAL
 SPECIAL:

LOAD DESCRIPTION	BREAKER	CK T	A	B	C	A	B	C	CKT	BREAKER	LOAD DESCRIPTION
L-2 LIFT	35.00 A/1	1	1920 VA			0 VA			2	20.00 A/1	L-1 GFI CKT FOR LIGHTS/RECEP
L-2 RCPT GFI CKT	20.00 A/1	3	360 VA			360 VA			4	20.00 A/1	L-1 RCPT GFI CKT
L-2 GFI CKT FOR LIGHTS/RECEP	20.00 A/1	5		0 VA		312 VA			6	35.00 A/1	L-1 LIFT
SP-1	20.00 A/1	7	720 VA			0 VA			8	20.00 A/1	EF-1 / EF-2
EH-1	20.00 A/2	9		0 VA		70 VA			10	20.00 A/1	EF-3 / EF-4
		11		0 VA		0 VA			12	20.00 A/1	EF-5 / EF-6 / EF-7
EH-2	20.00 A/2	13	0 VA			1950 VA			14	20.00 A/2	WH-1
		15		0 VA		1950...			16		
MECH RM 003 RCPT	20.00 A/1	17				540 VA			18	20.00 A/1	WH-2
STUDY O15/016 RCPT	20.00 A/1	19	1260 VA			1260 VA			20	20.00 A/1	TOILETS, CORRIDOR RCPT
TOILETS 017A/B RCPT	20.00 A/1	21		540 VA		1080...			22	20.00 A/1	STUDY 113/115 RCPT
STUDY 109/111 RCPT	20.00 A/1	23		1080 VA		1080 VA			24	20.00 A/1	STUDY/OFFICE 117A/B RCPT
OFFICE 117C RCPT	20.00 A/1	25	720 VA			1080 VA			26	20.00 A/1	STUDY 114/116 RCPT
STUDY 110 RCPT	20.00 A/1	27	1440...			540 VA			28	20.00 A/1	GATHERING 102 RCPT
STUDY 108A RCPT	20.00 A/1	29		540 VA		1080 VA			30	20.00 A/1	ASSEMBLY RCPT
TOILETS 026/027 ASSEMBLY RCPT	20.00 A/1	31	900 VA			0 VA			32	20.00 A/1	VIDEO CAMERA
PREP/EXTERIOR RCPT	20.00 A/1	33		900 VA		5500...			34	60.00 A/2	BP-1
VIDEO CAMERA	20.00 A/1	35		0 VA		5500 VA			36	20.00 A/1	F-2
F-1	20.00 A/1	37	1644 VA			1644 VA			38	20.00 A/1	CU-2
		39		3328...		1986...			40		
CU-1	20.00 A/2	41		3328 VA		1986 VA			42	20.00 A/2	
TOTAL LOAD:			13 kVA		17 kVA	18 kVA					
TOTAL AMPS:			109 A		150.04 A	158 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS
Other	0 VA	0.00%	0 VA	CONNECTED LOAD: 48625 VA
RCPT	14760 VA	83.88%	12380 VA	ESTIMATED DEMAND: 51036 VA
MOTORS	3644 VA	111.28%	4055 VA	CONNECTED CURRENT: 134.97 A
MTR	30446 VA	114.44%	34843 VA	EST. DEMAND CURRENT: 141.66 A

NOTES:

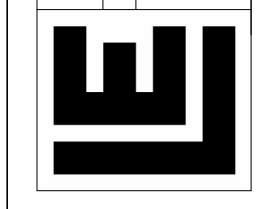


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E5
ELECTRICAL SERVICE RISER DIAGRAM
NO SCALE

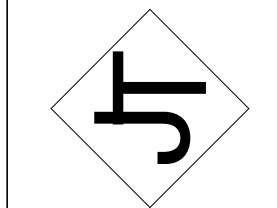
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 Ryan A. Johnson
 LICENSE NO. 1000000000
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