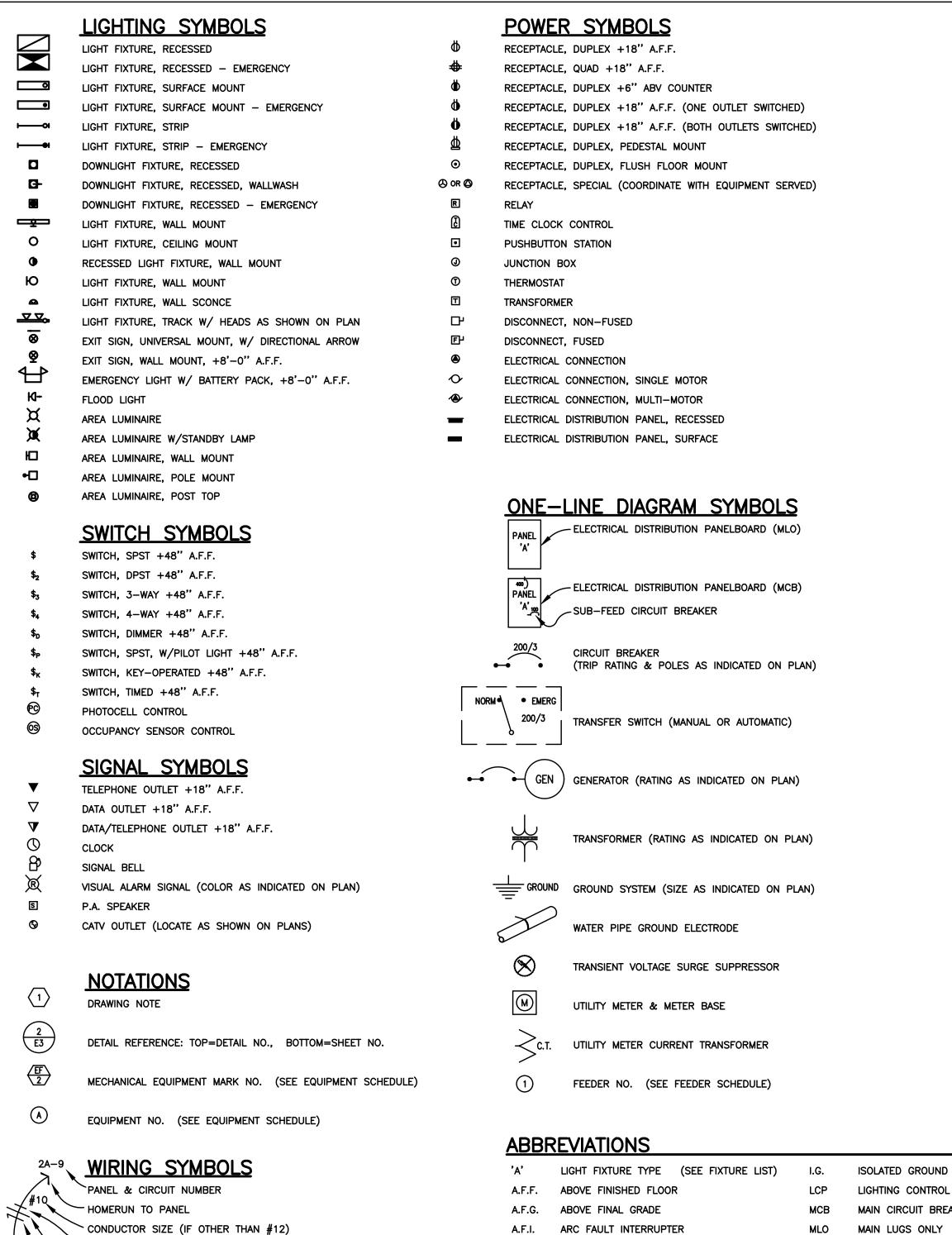
# ELECTRICAL SYMBOL LIST



	•		
A.F.F.	ABOVE FINISHED FLOOR	LCP	LIGHTING CONTROL PANEL
A.F.G.	ABOVE FINAL GRADE	MCB	MAIN CIRCUIT BREAKER
A.F.I.	ARC FAULT INTERRUPTER	MLO	MAIN LUGS ONLY
A.T.S.	TRANSFER SWITCH, AUTOMATIC	N.I.C.	NOT IN CONTRACT
С	CONDUIT	N.L.	NIGHT LIGHT
C.O.	CONDUIT ONLY	Р	POLE
CATV	CABLE TELEVISION	PC	PARTIAL CIRCUIT
СВ	CIRCUIT BREAKER	PH	PHASE
CCTV	CLOSED CIRCUIT TELEVISION	R.T.U.	REMOTE TELEMETRY UNIT
C.T.	CURRENT TRANSFORMER	U.G.	UNDERGROUND
(E)	EXISTING	U.O.N.	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	VFD	VARIABLE FREQUENCY DRIVE
G.F.I.	GROUND FAULT INTERRUPTER	W	WIRE
GND	GROUND	W.G.	WIRE GUARD
HP	HORSEPOWER	W.P.	WEATHERPROOF
	A.F.G. A.F.I. A.T.S. C C.O. CATV CB CCTV C.T. (E) FACP G.F.I. GND	A.F.G. ABOVE FINAL GRADE  A.F.I. ARC FAULT INTERRUPTER  A.T.S. TRANSFER SWITCH, AUTOMATIC  C CONDUIT  C.O. CONDUIT ONLY  CATV CABLE TELEVISION  CB CIRCUIT BREAKER  CCTV CLOSED CIRCUIT TELEVISION  C.T. CURRENT TRANSFORMER  (E) EXISTING  FACP FIRE ALARM CONTROL PANEL  G.F.I. GROUND FAULT INTERRUPTER  GND GROUND	A.F.G. ABOVE FINAL GRADE  A.F.I. ARC FAULT INTERRUPTER  MLO  A.T.S. TRANSFER SWITCH, AUTOMATIC  C CONDUIT  C.O. CONDUIT ONLY  CATV CABLE TELEVISION  CB CIRCUIT BREAKER  CCTV CLOSED CIRCUIT TELEVISION  C.T. CURRENT TRANSFORMER  U.G.  (E) EXISTING  U.O.N.  FACP FIRE ALARM CONTROL PANEL  GROUND GROUND  MCB  MCB  MCB  MCB  MCB  MCB  MCB  MC

NOTE: SOME OF THE SYMBOLS AND ABBREVIATIONS ON THIS LIST MAY NOT APPLY TO THIS PROJECT.

PHASE CONDUCTOR

NEUTRAL CONDUCTOR

GROUND CONDUCTOR CONCEALED CONDUIT

CONDUIT (UNDER SLAB OR FLOOR)

CONDUIT SIZE

— — → CONDUIT, STUBBED & CAPPED

FLEXIBLE CONNECTION

/1-1/4"C

TYPE	LAMP	MANUFACTURER	LIGHTING FIXT	DESCRIPTION	OPTIONS
A1	LED	NEO RAY LIGHTING	S124DWC575D SERIES	TYPE :4FT GENERAL PURPOSE STRIP	FINISH PER ARCHITECT
	3000K 2300LM	(OR APROVED OTHER)		MOUNTING :SURFACE HOUSING :STEEL	A1E SHALL HAVE BATTERY BACKU
	ZJUULM			LENS/REFL :ACRYLIC	
	20W			VOLTAGE :MVOLT BALLAST :LED DRIVER	EQUIP, & STORAGE ROOMS
		LITHONIA LIQUITAIO	71.4N LAC CEDIEC		EQUIT, & STONAGE NOOMS
42	LED 3000K	LITHONIA LIGHTING (OR APROVED OTHER)	ZL1N-L46 SERIES	MOUNTING :SURFACE (+7'-0" MIN)	
	3000LM			HOUSING :STEEL LENS/REFL :ACRYLIC	
				VOLTAGE :MVOLT	
	31W			BALLAST :LED DRIVER	STAIRWELLS
43	LED 3000K	NEO RAY LIGHTING (OR APROVED OTHER)	S124RD1P SERIES	TYPE :4FT DIRECT/INDIRECT MOUNTING :SUSPENDED	FINISH PER ARCHITECT MOUNTING HEIGHT PER ARCHITECT
	2850LM	(OK AFROVED OTHER)		HOUSING :STEEL	MOUNTING HEIGHT FER ARCHITECT
				LENS/REFL:ACRYLIC VOLTAGE:MVOLT	
	24W			BALLAST :LED DRIVER	AMENITY SPACES
44	LED	LITHONIA LIGHTING	FEML48 SERIES	TYPE :4FT ENCLOSED STRIP	
	4000K 3000LM	(OR APROVED OTHER)		MOUNTING :SURFACE HOUSING :FIBERGLASS	
	OOOOLW			LENS/REFL :ACRYLIC	
	18W			VOLTAGE :MVOLT BALLAST :LED DRIVER	ELEVATOR PIT, TOP OF SHAFT
 31	LED	HYDREL LIGHTING	LOWELL SERIES	TYPE :EXTERIOR SCONCE (UP/DWN)	FINISH PER ARCHITECT
-1	3000K	(OR APROVED OTHER)	LUTTLE JEINEJ	MOUNTING :SURFACE	MOUNT AT+7'-0" ABOVE GRADE 1
				HOUSING :ALUMINUM LENS/REFL :CLEAR TEMPERED GLASS	CENTER OF FIXTURE
	100			VOLTAGE :MVOLT	UL LISTED WET LOCATION
	12W			BALLAST :LED DRIVER	BUILDING FACADE, ROOF
<b>32</b>	LED 3000K	LITHONIA LIGHTING (OR APROVED OTHER)	WXP1LED GERIES	TYPE :EXTERIOR WALL PACK MOUNTING :SURFACE (+7'-0")	TYPE III DISTRIBUTION
	2900LM	(S		HOUSING :ALUMINUM	
				LENS/REFL:ACRYLIC VOLTAGE:MVOLT	
	24W			BALLAST :LED DRIVER	ROOF
33	LED	LITHONIA LIGHTING	LDN6CYL SERIES	TYPE :6" DIA EXTERIOR CYLINDER	FINISH PER ARCHITECT
	3000K 750LM	(OR APROVED OTHER)		MOUNTING :SURFACE HOUSING :ALUMINUM	WIDE FLOOD
	7002			LENS/REFL:MATTE DIFFUSER	
	10W			VOLTAGE :MVOLT BALLAST :LED DRIVER	UL LISTED WET LOCATION ENTRY CANOPY
34	LED	GLOWBACK LED	LVLBP1.5 SERIES	TYPE :4FT LINEAR CEILING LIGHT	FINISH PER ARCHITECT
77	3000K	(OR APROVED OTHER)	LVEDI 1.5 SLINES	MOUNTING :SURFACE	THAIST I EN ANOTHEOT
	2420LM			HOUSING :ALUMINUM LENS/REFL :MATTE DIFFUSER	
	74111			VOLTAGE :MVOLT	UL LISTED WET LOCATION
	31W			BALLAST :LED DRIVER	ENTRY CANOPY
35	LED 3000K	FOCUS INDUSTRIES (OR APROVED OTHER)	DL-22 SERIES	TYPE :LANDSCAPE LIGHT MOUNTING :AT GRADE	FINISH PER ARCHITECT PROVIDE ALL COMPONENTS FOR
	COCON	(OK 78 KOVED OTHER)		HOUSING :BRASS	COMPLETE INSTALLATION.
				LENS/REFL: VOLTAGE:12V	FIELD ADJUST UL LISTED WET LOCATION
	20W			BALLAST :LED DRIVER	COURTYARD
36	LED	HYDREL LIGHTING	M9410C SERIES	TYPE :ADJUSTABLE IN-GROUND LIGHT	FINISH PER ARCHITECT
	3000K 2250LM	(OR APROVED OTHER)		MOUNTING :AT GRADE HOUSING :BRASS	FIELD ADJUST
				LENS/REFL: VOLTAGE:MVOLT	UL LISTED WET LOCATION
	20W			BALLAST :LED DRIVER	LANDSCAPE BED
C1	LED	USAI LIGHTING	P4RDF SERIES	TYPE :4.5" DIA DOWNLIGHT	FINISH PER ARCHITECT
	3000K	(OR APROVED OTHER)		MOUNTING :RECESSED	C1E SHALL HAVE BATTERY BACKU
	1075LM			HOUSING :STEEL LENS/REFL :NA	
	9W			VOLTAGE :MVOLT BALLAST :LED DRIVER	LOBBY, CORRIDORS
00		HOAL HOUTEN	D7DD 05050		
C2 C2E	LED 3000K	USAI LIGHTING (OR APROVED OTHER)	P3RD SERIES	TYPE :3" DIA DOWNLIGHT MOUNTING :RECESSED	FINISH PER ARCHITECT C2E SHALL HAVE BATTERY BACKU
	1175LM			HOUSING :STEEL LENS/REFL :NA	
				VOLTAGE :MVOLT	
	9W			BALLAST :LED DRIVER	LOBBIES
23	LED 3000K	SUNPARK LIGHTING (OR APROVED OTHER)	FL0324D-VT SERIES	TYPE :2FT VANITY LIGHT MOUNTING :SURFACE (+6" ABOVE MIRROR)	
	935LM	(ON MENOVED UITEK)		HOUSING :STEEL	
				LENS/REFL:ACRYLIC VOLTAGE:MVOLT	
	11W			BALLAST : LED DRIVER	RESTROOM
J1	LED	DESIGN CLASSICS	DFR615-H-927-WH	TYPE :6" DIA CEILING LIGHT	
	2700K 1000LM	(OR APPROVED OTHER)		MOUNTING :SURFACE HOUSING :ALUMINUM	
				LENS/REFL :ACRYLIC	III LICTED WET LOCATION
	15W			VOLTAGE :120V BALLAST :LED DRIVER (0–10 DIMMING)	UL LISTED WET LOCATION UNIT KITCHEN, BATH, HALL
J2	LED	KUZCO LIGHTING	FM3511 SERIES	TYPE :11" DIA CEILING LIGHT	FINISH PER ARCHITECT
-	3000K	(OR APPROVED OTHER)		MOUNTING :SURFACE	
	1600LM			HOUSING :STEEL LENS/REFL :FROSTED GLASS	
	20W			VOLTAGE :120V	IINIT DENDOOM
	20W			BALLAST :LED DRIVER (0-10 DIMMING)	UNIT BEDROOM
J3	LED 3000K	KUZCO LIGHTING (OR APPROVED OTHER)	VL62220 SERIES	TYPE :20" VANITY BAR MOUNTING :SURFACE (=6" ABOVE MIRROR)	FINISH PER ARCHITECT
	1600LM	(ON ALTHORED VIHER)		HOUSING :STEEL	
				LENS/REFL :ACRYLIC VOLTAGE :120V	
	20W			BALLAST :LED DRIVER (0–10 DIMMING)	UNIT BATHROOM
X1	LED	LITHONIA	LE EL N SERIES	TYPE :EXIT SIGN	X1=SINGLE SIDE
X2	(GREEN LETTERS)	DMF LIGHTING	DLED500EM-G	MOUNTING :UNIVERSAL	X2=DOUBLE SIDE
		(OR APROVED OTHER)		HOUSING :DIE—CAST ALUMINUM LENS/REFL :SINGLE FACE/DUAL FACE	

#### GENERAL LIGHTING NOTES:

ARCHITECT PRIOR TO ROUGH IN.

- WHEREVER POSSIBLE, SELECTED LIGHT FIXTURES SHALL HAVE ENERGY EFFICIENT LAMPS, BALLASTS & DRIVERS AND/OR HAVE ENERGY COMPLIANT RATINGS SUCH AS DLC, ENERGY STAR, ETC.
- B. VERIFY ALL FIXTURE FINISHES WITH ARCHITECT PRIOR TO BID.
- C. VERIFY ALL FIXTURE LOCATIONS AND MOUNTING HEIGHTS WITH
- D. ALL LIGHTING SHALL BE 3000 KELVIN UNLESS OTHERWISE NOTED.
- E. ALL PRODUCT SUBSTITUTIONS AND VALUE ENGINEERING SHALL BE SUBMITTED DURING BID PHASE, SHALL MEET DESIGN INTENT AND ARE SUBJECT TO OWNER APPROVAL.
- F. EGRESS LIGHTING SHALL BE PROVIDED TO MEET MINIMUM LIGHT LEVELS AS DESCRIBED PER OREGON STRUCTURAL SPECIALTY CODE
- G. BUILDING EXTERIOR & SITE LIGHTING SHALL BE CONTROLLED VIA PHOTOCELL, EITHER INTEGRAL OR REMOTE, OR BY TIME CLOCK FOR DUSK-TILL-DAWN OPERATION.
- H. LIGHTING FIXTURES DESIGNATED AS NIGHT LIGHTS (N.L.) AND STAIRWELL LIGHTS SHALL BE ON 24/7.
- STAIRWELL LIGHTS SHALL BE PROVIDED WITH OCCUPANCY SENSOR(S), EITHER INTEGRAL OR REMOTE, TO PROVIDE 50% LIGHT REDUCTION DURING PERIODS OF INACTIVITY. ONCE ACTIVATED, LIGHTS ARE TO REMAIN AT 100% OUTPUT FOR A MINIMUM OF 20
- DESIGN INTENT FOR CORRIDOR LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.

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OREGON

EXPIRES 12-31-2023

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REFER TO DIVISION 26, SECTION 26 05 00, 2.4 FOR ELECTRICAL MATERIALS IN FIRE RATED ASSEMBLIES

| BALLAST :NICKLE CADMIUM BATTERY

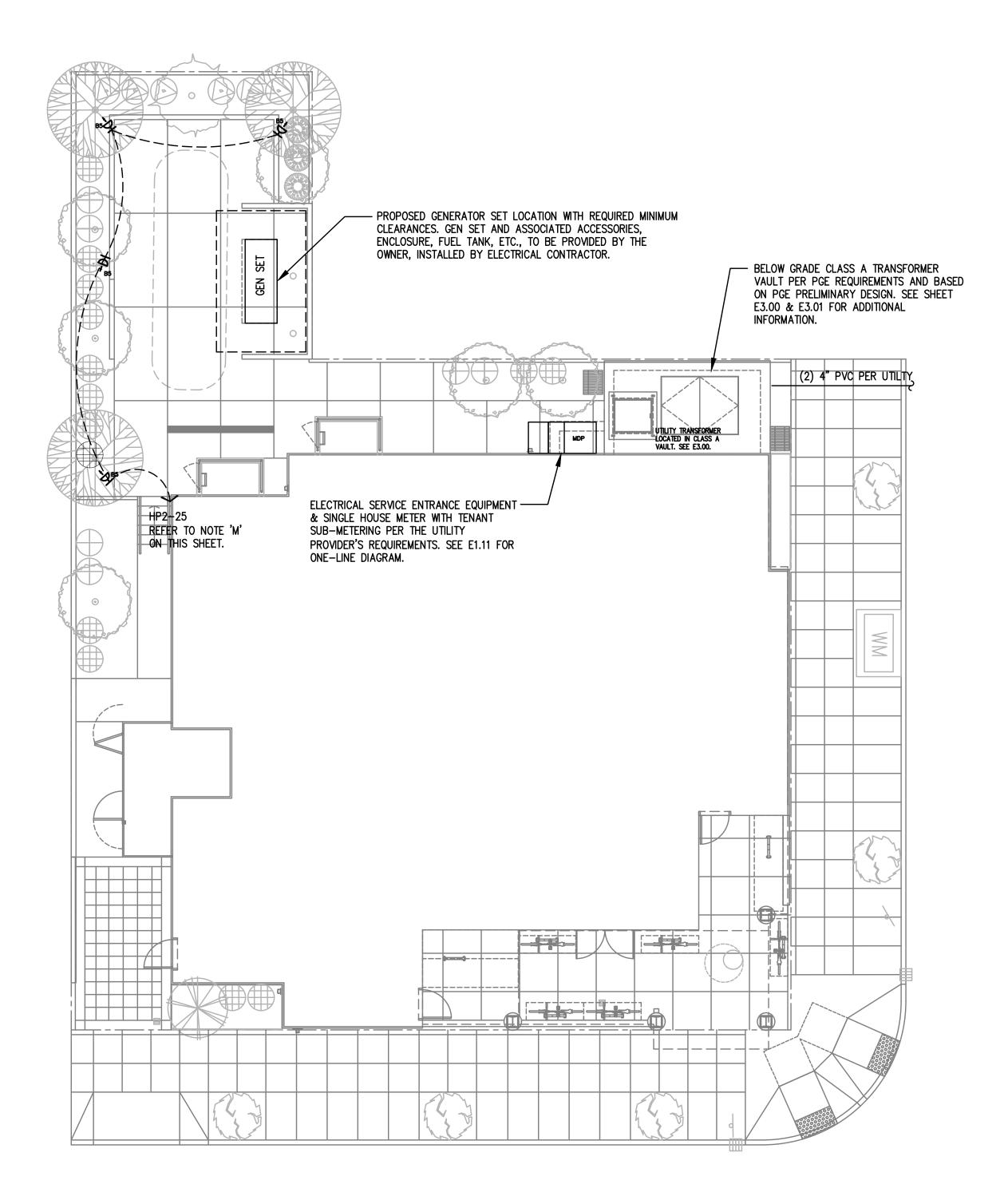
Provide separate on-line drawing detailing 2-hr protection of power and control circuits serving the stair pressurization system in accordance with OSSC, Section 909.20.6.1.

Identify that all fire alarm circuits are to be installed in continuous raceways in accordance with OSSC, Section 909.12.2

SEE MECHANICAL PLANS FOR STAIR PRESSURIZATION DETAILS.

SEE ARCHITECTURAL/STRUCTURAL DETAILS FOR 2-HR PENETRATION DETAILS.

SEE 'T' SERIES SHEETS FOR FIRE ALARM **PLANS** 





## GENERAL NOTES:

- A. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.
- B. ELECTRICAL PLANS ARE DIAGRAMMATIC AND MAY OR MAY NOT REFLECT ACTUAL FIELD CONDITIONS.
- C. REFER TO LIGHTING PLANS FOR BUILDING MOUNTED LIGHT FIXTURE LOCATIONS.
- D. COORDINATE WITH LOCAL UTILITY PROVIDER FOR EXACT SERVICE CONDUIT AND CONDUCTORS REQUIREMENTS.
- E. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH CLARK PUBLIC UTILITIES ELECTRICAL SERVICE REQUIREMENTS.
- F. U.G. PRIMARY FEEDER SHALL HAVE A MINIMUM 48 INCH BURY.
- G. U.G. SECONDARY FEEDER SHALL HAVE A MINIMUM 36 INCH BURY.
- H. REFER TO SHEET E1.11 FOR ONE-LINE DIAGRAM, LOAD SUMMARY INFORMATION AND TYPICAL FEEDER SCHEDULE.
- I. SECONDARY CONDUIT SWEEPS SHALL BE MINIMUM 60 INCH RADIUS WITH A MINIMUM OF 7'-0" STRAIGHT CONDUIT RUN BETWEEN SWEEPS.
- J. CONTRACTOR SHALL REVIEW THE UTILITY PROVIDER'S ELECTRICAL SERVICE REQUIREMENTS PRIOR TO THE START OF ANY WORK.
- K. LOCATION AND INSTALLATION OF THE PRIMARY AND SECONDARY CONDUITS, TRANSFORMER, ETC. SHALL BE PROVIDED PER UTILITY PROVIDER'S ELECTRICAL SERVICE REQUIREMENTS.
- L. CONTRACTOR SHALL REVIEW ALL PROJECT DOCUMENTS AND SPECIFICATIONS IN DETAIL AND REFER TO THE DOCUMENTS THROUGHOUT THE CONSTRUCTION.
- M. VERIFY LOW VOLTAGE LANDSCAPE LIGHTING FIXTURES & LOCATIONS AND PROVIDE POWER CONNECTIONS AS REQUIRED PER THE LANDSCAPE PLAN SET.

# UTILITY REQUIREMENTS

1. CUSTOMER TO PROVIDE ALL TRENCHING AND BACKFILLING. TRENCH TO BE 36 INCHES DEEP AND 30 INCHES WIDE, MEASURED FROM FINAL GRADE.

2. ALL UTILITY CONDUCTORS TO BE INSTALLED IN GRAY SCHEDULE 40, ELECTRICAL GRADE, PVC CONDUIT WITH NYLON PULL STRINGS (MIN 500 LBS. TEST). CLARK PUBLIC UTILITIES TO DETERMINE THE SIZE AND NUMBER OF CONDUITS REQUIRED. ALL ELBOWS TO BE 36 INCH (MIN) RADIUS. ALL BENDS MAY BE FACTORY MADE. IF MORE THAN 270 DEGREES OF BENDS OR IF RUN IS LONGER THAN 150 FEET, BENDS MUST BE RIGID STEEL.

3. CONSULT WITH UTILITY REPRESENTATIVE 2 WEEKS BEFORE STARTING MAIN POWER TRENCHING FOR A PRE-CONSTRUCTION CONFERENCE. INCLUDED IN THIS CONFERENCE WILL BE EXCAVATOR, CPU, TELCO, CATV, AND GAS.

4. CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING.

# CLASS A TRANSFORMER VAULT ROOM GENERAL NOTES:

- 1. ALL MATERIALS AND PRODUCTS USED WITHIN THE CLASS A VAULT IS SUBJECT TO THE UTILITY PROVIDER'S APPROVAL.
- 2. PRIMARY SERVICE CONDUCTORS FROM THE PROPERTY LINE TO THE VAULT SHALL BE IN SCHEDULE 40 PVC PER THE UTILITY PROVIDER'S DIRECTION. ALL CONDUIT PENETRATIONS MUST BE SEALED WITH A FLEXIBLE NON-SHRINK HYDROPHOBIC GROUT TO PREVENT WATER INTRUSION.
- 3. NON-METALIC SEISMIC-APPROVED CABLE TRAY WITH GALVANIZED HARDWARE SHALL BE INSTALLED IN VAULT ROOMS WITH CEILING GREATER THAN 10 FEET HIGH.
- 4. VAULT ROOM DOORS SHALL BE BLAST-RATED METAL DOORS. DOORS AND VENT SHUTTERS MUST HAVE A THREE HOUR BLAST & FIRE RATING PER NFPA 450.43.
- 5. ALL OPENING, GAPS & CRACKS MUST BE SEALED WITH THREE—HOUR RATED FIRE CAULKING. CONSULT UTILITY PROVIDER FOR APPROVED PRODUCTS.6. PROVIDE TWO "RATE TO RISE" HEAT DETECTORS PER THE UTILITY PROVIDER'S
- REQUIREMENTS. LOCATE ONE ABOVE THE TRANSFORMER AND ONE OTHER WITHIN THE ROOM.

  7. VAULT VENTS MUST HAVE SHUTTERS THAT ARE AUTOMATICALLY CLOSED BY THE HEAT DETECTOR IN THE FIRE SUPPRESSION SYSTEM HEAT DETECTORS SHALL MEET NFPA 72

REQUIREMENTS.

8. REFER TO SHEETS E3.00 & E3.01 FOR MORE INFORMATION REGARDING THE CLASS 'A' TRANSFORMER VAULT ROOM.



Drawn By: DMT
Chkd By: RLC
DSGN By: DMT
Acad File:

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PARK AVE. SITE PLAN

M PARK APAI RYSTADT 2057 SW PARK

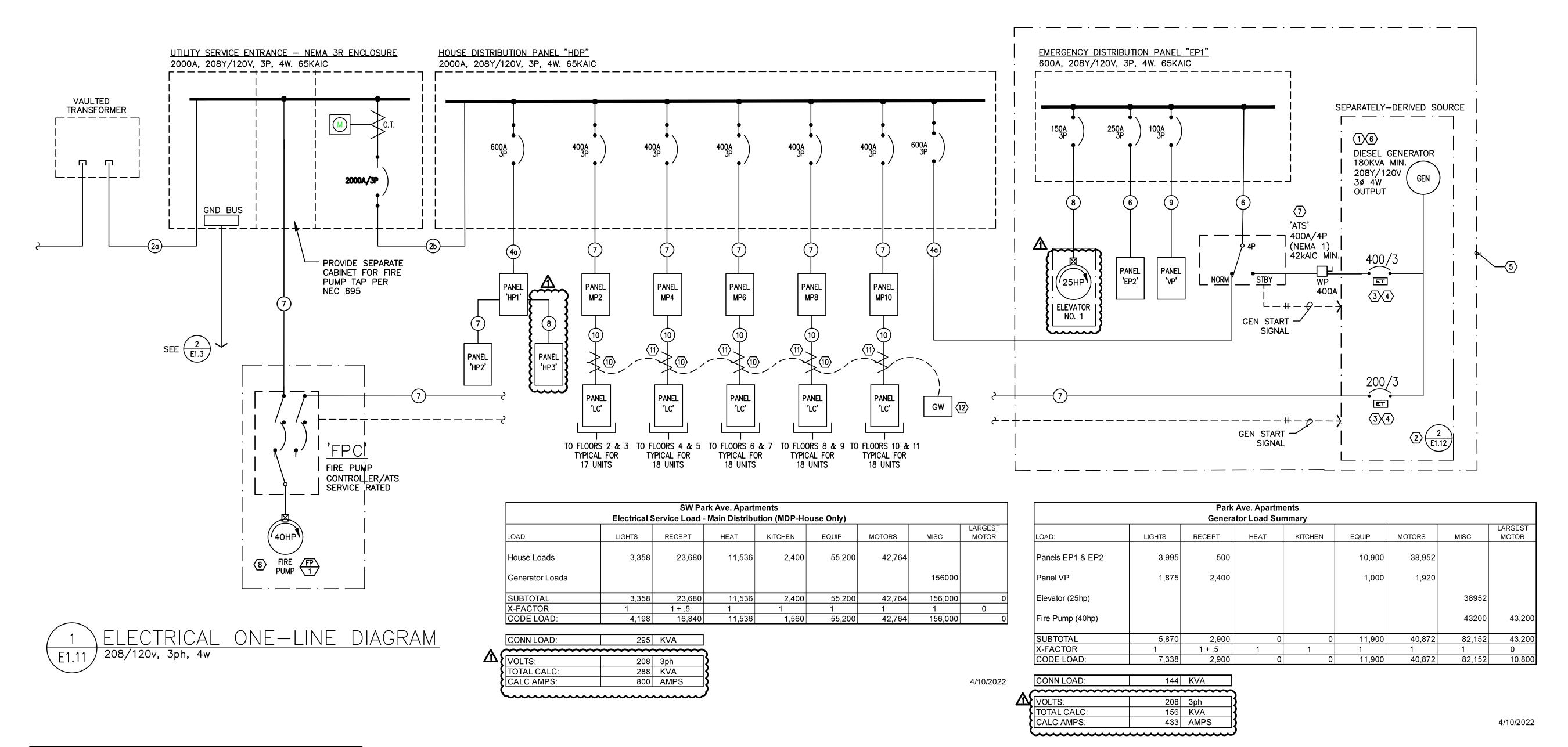
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SHEET

E1.01



	FE	EDER S	SCHEDULE (C		PPER	)
NO.	AMPS	CONDUIT	CONDUCTOR			
1		PRIMARY	BY UTILITY CO.	&		GND
2a)		*(12) 5"	BY UTILITY CO.	&		GND
<b>2</b> b	2500A	*(6) 4"	ea w/ (4) #600Kcm	&	(1) #350	(GMD
3	1200A	*(3) 4"	ea w/ (4) #600Kcm	&	(1) #3/0	GND
4	800A	*(2) 4"	ea w/ (4) #600Kcm	&	(1) #1/0	GND
40	600A	*(2) 3"	ea w/ (4) #350Kcm	&	(1) #1	GND
5	400A	3 1/2"	(4) #500Kcm	&	(1) #3	GND
6	250A	2 1/2"	(4) #250Kcm	&	(1) #4	GND
7	200A	2"	(4) #3/0	&	(1) #6	GND
8	150A	2"	(4) #1/0	&	(1) #6	GND
9	100A	1 1/2"	(4) #1	&	(1) #8	GND
10	100A	1 1/2"	(3) #1	&	(1) #8	GND

\* PARALLEL FEEDER

## ONE-LINE GENERAL NOTES:

A. COORDINATE ALL WORK ASSOCIATED WITH ELECTRIC SERVICE WITH LOCAL UTILITY PROVIDER. PROVIDE ALL CONDUIT, GROUNDING, TRANSFORMER VAULT/PAD, ETC., IN ACCORDANCE WITH SERVING UTILITY REQUIREMENTS.

#### B. COORDINATE METERING REQUIREMENTS WITH UTILITY.

C. FOR LOAD CENTER FEEDER LENGTHS GREATER THAN 145'-0" FROM METER CENTER, INCREASE WIRE SIZE ONE SIZE UP FOR VOLTAGE DROP.

D. PER NEC 240.87, THE ELECTRICAL CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR ARC ENERGY REDUCTION DEVICE(S) FOR CIRCUIT BREAKERS 1200A OR GREATER, CONTRACTOR SHALL PROVIDE AN ENERGY-REDUCING ACTIVE FLASH MITIGATION SYSTEM OR OTHER METHOD APPROVED BY THE NEC.

E. USE OF ALUMINUM CONDUCTORS, AS ALLOWED BY CODE, MAY BE SUBSTITUTED FOR COPPER. CONTRACTOR SHALL PROVIDE WRITTEN SUBSTITUTION REQUEST DEMONSTRATING THE THAT THE PROPOSED PRODUCT IS EQUIVALENT TO COPPER IN ALL ASPECTS.

F. ACCEPTABLE POWER MONITORING SYSTEM MANUFACTURERS ARE: SIEMENS SEM3 E-MON D-MON SQUARE D POWERLOGIC OR AS APPROVED BY SUBMITTAL PROCESS.

# O ONE-LINE NOTES:

- 1. ESTIMATED GENERATOR STARTING LOAD IS BASED ON THE ELEVATOR & FIRE PUMP MOTORS BEING PROVIDED WITH REDUCED STARTING.
- 2. PROVIDE GROUND FOR SEPARATELY DERIVED SYSTEM PER NEC.
- 3. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKER. EXACT BREAKER TYPE, SETTINGS, ETC. TO BE VERIFIED AND AS DETERMINED BY SELECTIVE COORDINATION STUDY AS PERFORMED BY THE ELECTRICAL DISTRIBUTION EQUIPMENT MANUFACTURER.
- 4. COORDINATE INSTALLATION OF OUTPUT BREAKERS WITH GENERATOR MANUFACTURER TO SELECTIVELY COORDINATE WITH POWER STUDY RECOMMENDATIONS.
- 5. 'LIFE SAFETY' BRANCH TO MEET ALL REQUIREMENTS OF NEC 700. CONTRACTOR SHALL BE AWARE THAT MFIA HAS ATTEMPTED TO INDICATE EQUIPMENT AND SIZES THAT WILL SELECTIVELY COORDINATE, BUT WILL NOT BE KNOWN UNTIL ELECTRICAL EQUIPMENT MANUFACTURER PERFORMS THE REQUIRED POWER STUDIES AS SPECIFIED IN 26 05 73. CHANGES MAY BE NECESSARY AFTER THE BID.
- 6. GENERATOR IS SIZED TO OPERATE ONLY ONE ELEVATOR AT A TIME. COORDINATE WITH ELEVATOR & GENERATOR PROVIDERS FOR AUTOMATIC SEQUENTIAL OPERATION AS REQUIRED UNDER ASME A17.1, SECTION 2.27.2.1 THROUGH 2.27.2.5.
- 7. THE AUTOMATIC TRANSFER SWITCH FOR THE EMERGENCY PANEL "EDP" SHALL OPERATE SUCH THAT THE EGRESS LOADS ARE SWITCHED TO GENERATOR POWER WITHIN 10 SECONDS AND THE ELEVATOR(S) SWITCHED WITHIN 60 SECONDS OF A POWER FAILURE.

- 8. CONSULT MECHANICAL, PLUMBING AND/OR FIRE ALARM PLANS AND VERIFY EXACT POWER REQUIREMENTS FOR THE FIRE PUMP.
- 9. CONSULT ELEVATOR PROVIDER FOR INSTALLATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- 10. PROVIDE CIRCUIT BREAKER WITH INTEGRAL LOAD MONITORING MODULE COMPATIBLE WITH POWER MONITORING SYSTEM. SEE MANUFACTURER
- SPECIFICATIONS FOR WEB BASED POWER MONITORING SYSTEM REQUIREMENTS. 11. SERIAL COMMUNICATIONS CABLE, 18 AWG MINIMUM. BELDEN 9463 OR APPROVED.
- 12. PROVIDE LOAD MONITORING NETWORK GATEWAY COMPATIBLE WITH POWER
- MONITORING SYSTEM.

13. GENERATOR SET AND ALL ASSOCIATED COMPONENTS AND ACCESSORIES TO BE PROVIDED BY OWNER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION, POWER CONNECTIONS, COORDINATION AND TESTING AS REQUIRED FOR A COMPLETE INSTALLATION. CONSULT MANUFACTURER'S DOCUMENTATION AND DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.



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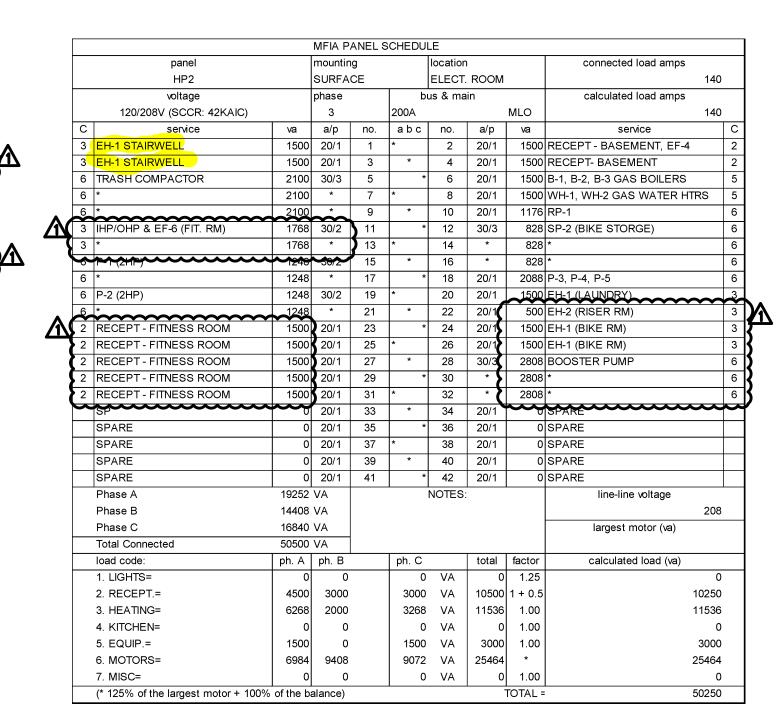
SHEET

	panel		mountir	ng		location	1		,	connected load amps		
	EP1		SURFA	CE		ELECT.	ROOM				222	
	voltage		phase		b	us & ma	iin		calculated load amps			
	120/208V (SCCR: 42KAIC)		3		400A			MLO			252	
С	service	va	a/p	no.	abc	no.	a/p	va		service		С
6	ELEVATOR	9384	150/3	1	*	2	250/3	16344	PANEL	EP2		7
6	*	9384	*	3	*	4	*	15692	*			7
6	*	9384	*	5	*	6	*	12920	*			7
	SPARE		20/1	7	*	8	100/3	2700	PANEL	VP		7
	SPARE		20/1	9	*	10	*	3620	*			7
	SPARE		20/1	11	*	12	*	500	*			7
	BLANK			13	*	14			BLANK			
	BLANK			15	*	16			BLANK			
	BLANK			17	*	18			BLANK			
	BLANK			19	*	20			BLANK			
	BLANK			21	*	22			BLANK			
	BLANK			23	*	24			BLANK			
	BLANK			25	*	26			BLANK			
	BLANK			27	*	28			BLANK			
	BLANK			29	*	30			BLANK			
	BLANK			31	*	32			BLANK			
	BLANK			33	*	34			BLANK			
	BLANK			35	*	36			BLANK			
	BLANK			37	*	38			BLANK			
	BLANK			39	*	40			BLANK			
	BLANK			41	*	42			BLANK			
	Phase A	28428	VA		1	NOTES:				line-line voltage		
	Phase B	28696	VA								208	
	Phase C	22804	VA							largest motor (va)		
	Total Connected	79928	VA								43200	
	load code:	ph. A	ph. B		ph. C		total	factor		calculated load (va)		
	1. LIGHTS=	0	0		0	VA	0	1.25			0	
	2. RECEPT.=	0	о		0	VA	0	1 + 0.5			0	
	3. HEATING=	0	о		0	VA	О	1.00			0	
	4. KITCHEN=	0	о		0	VA	О	1.00			0	
	5. EQUIP.=	0	0		0	VA	0	1.00			0	
	6. MOTORS=	9384	9384		9384	VA	28152	*			38952	
	7. MISC=	19044	19312		13420	VA	51776	1.00			51776	
_	(* 125% of the largest motor + 100%	of the b	alance)		1			TOTAL =			90728	

	panel		mountin	ıg		location			connected load amps		
	EP2		SURFA	CE		ELECT.	ROOM		125		
	voltage		phase		bu	ıs & ma	in		calculated load amps		
	120/208V (SCCR: 42KAIC)		3		250A			MLO	127		
С	service	va	a/p	no.	abc	no.	a/p	va	service	(	
1	LIGHTS - BLDG EXTERIOR	206	20/1	1	*	2	20/1	1200	ELEV. CONTROL PANEL	- 5	
1	LIGHTS - STAIR #2	744	20/1	3	*	4	20/1	1200	ELEV. CAB LIGHTS		
1	LIGHTS - STAIR #1	806	20/1	5	*	6	20/1	1500	GENERATOR BLOCK HEATER	1	
1	ELEV PITS & LTS (PIT & SHAFT)	500	20/1	7	*	8	20/1	1500	GENERATOR BATTERY CHARGER		
1	LIGHTS - BSMNT, FLR 1 & 2	220	20/1	9	*	10	20/1	500	FACP/VOICE EVAC	į	
1	LIGHTS - FLRS 3,4,5	210	20/1	11	*	12	20/1	1176	SP-1 (ELEV PIT)	6	
1	LIGHTS - FLRS 6,7,8	210	20/1	13	*	14	20/1	500	RECEPT - ELEV MACH RM	2	
1	LIGHTS - FLRS 9,10,11,12,ROOF	300	20/1	15	*	16	20/1	500	GENERATOR REMOTE ANNUNC.		
	SPARE	0	20/1	17	*	18	20/1	0	SPARE	_	
5	SMOKE CURTAINS	1500	20/1	19	*	20	20/1	0	SPARE	_	
5	SMOKE CURTAINS	1500	20/1	21	*	22	20/1	0	SPARE	_	
5	SMOKE CURTAINS	1500	20/1	23	*	24	20/1	0	SPARE	_	
5	SMOKE DAMPERS	1500	20/1	25	*	26	50/3	3864	SF-3 STAIR PRESSURIZATION FAN		
5	SPARE	1500	20/1	27	*	28	*	3864	*	-	
	SPARE	0	20/1	29	*	30	*	3864	*	1	
6	IAC/OAC-3	1500	30/2	31	*	32	50/3	3864	SF-4 STAIR PRESSURIZATION FAN	1	
<u></u>	*	1500	*	33	*	34	*	3864	*	1	
	BLANK			35	*	36	*	3864	*	-	
	BLANK			37	*	38			BLANK	_	
	BLANK			39	*	40			BLANK	_	
	BLANK			41	*	42			BLANK	Γ	
	Phase A	16344	VA		1	NOTES:			line-line voltage	_	
	Phase B	15692	VA						208		
	Phase C	12920	VA						largest motor (va)	_	
	Total Connected	44956	VA						0		
	load code:	ph. A	ph. B		ph. C		total	factor	calculated load (va)	_	
	1. LIGHTS=	916	1264		1016	VA	3196	1.25	3995	_	
	2. RECEPT.=	500	0		0	VA	500	1 + 0.5	500		
	3. HEATING=	0	0		0	VA	0	1.00	o		
	4. KITCHEN=	0	0		0	VA	0	1.00	o		
	5. EQUIP.=	5700	5200		3000	VA	13900	1.00	13900		
	6. MOTORS=	9228	9228		8904	VA	27360	*	27360		
	7. MISC=	0	О		0	VA	0	1.00	0		
_	(* 125% of the largest motor + 100%	of the b	alance)				_	TOTAL =	45755	_	

_	panel		mountin		SCHEDU	location			connected load amps	
	VP		SURFA	-			' A VAUL	т	connected load amps	19
	voltage		phase		h	us & ma		- '	calculated load amps	- 10
	120/208V (SCCR: 42 KAIC)		3		100A	us & IIIc		MLO	calculated load amps	20
_	service	l va	a/p	no.	a b c	no.	a/p	va	service	
<u>-</u>	LIGHTS	1000	20/1	1	*	2	20/1		RECEPTACLES	
1	LIGHTS - EGRESS	500	20/1	3	*	4	20/1		RECEPT - SUMP PUMP SP-X	
<u>-</u> 5	SMOKE DAMPERS	500		5	*	6	30/2	1200	IAC/OAC-X	
<u>-</u> -	SMOKE DAMPERS	500	20/1	7	*	8	*		*	
<u>-</u>	EF-5	1920	30/1	9	*	10	20/1	0	SPARE	
_	SPARE	0	20/1	11	*		20/1		SPARE	
	BLANK	+	20/1	13	*	14	20/1		BLANK	
	BLANK			15	*	16			BLANK	
	BLANK			17	*	18			BLANK	
	BLANK			17	*	20			BLANK	
	BLANK			21	*	22			BLANK	
	BLANK			23	*	24			BLANK	
	BLAIN			25	*	26			BLAIN	
				27	*	28				
		1		29	*					
				31	*	32				
				33	*	34				
				35	*	36				
				37	*	38				
					*					
				39	*	40				
	Dhara	0700	) / A	41		'-			Par Par vallana	
	Phase A	2700				NOTES			line-line voltage	000
	Phase B	3620								208
	Phase C	500							largest motor (va)	,
	Total Connected	6820			1 0					(
	load code:	ph. A	ph. B		ph. C	1/4	total	factor	calculated load (va)	4075
	1. LIGHTS=	1000			0		1500	1		1875
	2. RECEPT.=	1200	1200		0	VA		1 + 0.5	2	2400
	3. HEATING=	0	0		0	VA	0	1		0
	4. KITCHEN=	0	0		0	VA	0			1000
	5. EQUIP.=	500	0		500	VA	1000	1		1000
	6. MOTORS=	0	1920		0		1920		ĺ	1920
	7. MISC=	0	0		0	VA	0	1.00		С

	panel		mounting	g		location	1		connected load amps	
	HP1		SURFAC	CE		ELECT	ROOM		360	1
	voltage		phase		bi	us & ma	iin		calculated load amps	
	120/208V (SCCR: 42KAIC)		3		600A			MLO	387	
2	service	va	a/p	no.	abc	no.	a/p	va	service	7
1	LIGHTS - BLDG EXTERIOR	116	20/1	1	*	2	20/1	_1500	RECEPT-1STELR	<u> </u>
1	LIGHTS - BSMNT, FLR 1 & 2	640	20/1	3	*	4	20/1	1500	RECEPT - 1ST FLR & SF-2	
1	LIGHTS - FLR 1	485	20/1	5	*	6	20/1		DEDERTIAST FLR	_
1	LIGHTS - FLRS 3,4,5	240	20/1	7	*	8	20/1		REFRIGERATOR	
1	LIGHTS - FLRS 6,7,8	240	20/1	9	*	10	20/1	500	RECEPT - KITCHEN	
ı	LIGHTS - FLRS 9,10,11,12,ROOF	320	20/1	11	*	12	20/1	900	DISPOSAL	
1	LIGHTS - LANDSCAPING	0	20/1	13	*	14	20/1	~500	RECEDT-KITCHEN	
1	LIGHTS - ROOF (EXTERIOR)	145	20/1	15	*	16	20/1	_	SPARE	
5	TELECOM PANEL	500	20/1	17	*	18	20/1		RECEPTIONPLR	<b>~</b>
5	TELECOM PANEL	500	20/1	19	*	20	20/1	500	SF-1 (x10)	
5	TLELCOM PANEL	500	20/1	21	*	22	20/1	500	RECEPT - ELEV MACHINE RM	
5	LANDSCAPE	500	20/1	23	*	24	20/1	1440	RECEPT - FLRS 2,3	
5	IRRIGATION	500	20/1	25	*	26	20/1	1440	RECEPT - FLRS 4,5	
1	LIGHTS - FLOOR 12	500	20/1	27	*	28	20/1	1440	RECEPT - FLRS 6,7	
6	IA/OAC-1	1500	30/2	29	*	30	20/1	1440	RECEPT - FLRS 8,9	
6	*	1500	*	31	*	32	20/1	1440	RECEPT - FLRS 10,11	T
6	IAC/OAC-2	1500	30/2	33	*	34	20/1	0	SPARE	Г
6	*	1500	*	35	*	36	20/1	0	SPARE	Г
7	PANEL HP2	19252	200/3	37	*	38	200/3	8000	PANEL HP3	
7	*	14408	*	39	*	40	*	21600	*	
7	*	16840	*	41	*	42	*	21600	*	
	Phase A	36988	VA		İ	NOTES			line-line voltage	_
	Phase B	43473	VA						208	
	Phase C	49185	VA						largest motor (va)	
	Total Connected	129646	VA						43200	
	load code:	ph. A	ph. B		ph. C		total	factor	calculated load (va)	
	1. LIGHTS=	356	1525		805	VA	2686	1.25	3358	
	2. RECEPT.=	4880	3940		5040	VA	13860	1 + 0.5	11930	
	3. HEATING=	0	0		0	VA	o	1.00	0	
	4. KITCHEN=	1500	0		900	VA	2400	1.00	2400	
	5. EQUIP.=	1000	500		1000	VA	2500	1.00	2500	
	6. MOTORS=	2000	1500		3000	VA	6500	*	17300	
	7. MISC=	27252	36008		38440	VA	101700	1.00	101700	į



			MFIA PA	ANELS	CHEDUI	E					
	panel		mountin	g		location	)		connected load amps		
	HP3		SURFA	CE		ELECT	ROOM			142	
	voltage		phase		bı	us & ma	in		calculated load amps		
	120/208V (SCCR: 42KAIC)		3		200A			MLO		142	
С	service	va	a/p	no.	abc	no.	a/p	va	service		
2	WASHER	1500	20/1	1	*	2	20/1	1500	WASHER		
5	DRYER	4320	30/2	3	*	4	30/2		DRYER		
5	*	4320	*	5	*	6	*	4320			
5	WASHER	1500	20/1	7	*	8	20/1	1500	WASHER		
5	DRYER	4320	30/2	9	*	10	30/2	4320	DRYER		
5	*	4320	*	11	*	12	*	4320	*		
5	WASHER	1500	20/1	13	*	14	20/1	500	DRYER BOOSTER FANS		
5	DRYER	4320	30/2	15	*	16	20/1	0	SPARE		
5	*	4320	*	17	*	18	20/1	0	SPARE		
				19	*	20			BLANK		
	BLANK			21	*	22			BLANK		
	BLANK			23	*	24			BLANK		
	BLANK			25	*	26			BLANK		
	BLANK			27	*	28			BLANK		
	BLANK			29	*	30			BLANK		
	BLANK			31	*	32			BLANK		
	BLANK			33	*	34			BLANK		
	BLANK			35	*	36			BLANK		
	BLANK			37	*	38			BLANK		
	BLANK			39	*	40			BLANK		
	BLANK			41	*	42			BLANK		
	Phase A	8000	VA			NOTES			line-line voltage		
	Phase B	21600	VA							208	
	Phase C	21600							largest motor (va)		
	Total Connected	51200			,						
	load code:	ph. A	ph. B		ph. C		total	factor	calculated load (va)		
	1. LIGHTS=	0	_		0		0	l		0	
	2. RECEPT.=	1500	0		0	VA		1 + 0.5		1500	
	3. HEATING=	0			0		0			0	
	4. KITCHEN=	0	0		0		0			0	
	5. EQUIP.=	6500	21600		21600		49700			49700	
	6. MOTORS=	0	0		0		0			0	
	7. MISC=	0	0		0	VA	0	1.00		0	



ARTMENTS

SCHEDUL

ARK RYS

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Consulting Engineers 2007 S.E. Ash St. Portland, OR 97214 PHN: (503) 234-0548 FAX: (503) 234-0677 WWW.MFIA-ENG.COM

SHEET

		MECHAI	VICAL	EQU	IPMENT :	SCHEDU	ILE		
NO.	EQUIPMENT NAME	HP/KW	VOLTS	PH	AMPS	CONDUIT	WIRE	GND	CIRCUIT
EF-1	EXHAUST FAN NO.1	11.0W	120	1		1/2"	#12	#12	SEE TYP. UNIT PLANS
EF-2	EXHAUST FAN NO.2	11.0W	120	1		1/2"	#12	#12	
EF-3	EXHAUST FAN NO.3	11.0W	120	1		1/2"	#12	#12	HP2-27
EF-4	EXHAUST FAN NO.4	11.0W	120	1		1/2"	#12	#12	HP2-33
EF-5	EXHAUST FAN NO.5	1HP	120	1	~~~~	1/2"	#12	#12	VP-9
EF-6	EXHAUST FAN NO.6	16W	120	1		1/2"	#12	#12	SEE NOTE "E" BELOW
EH-1	WALL HEATER NO.1	1.5KW~~	208	~~~	<b></b>	472~~~	#12	<del></del>	SEE POWER PLANS
EH-2	WALL HEATER NO.2	500W	120	1		1/2"	#12	<b>#</b> 12	SEE POWER PLANS
EH-3	WALL HEATER NO.3	4.0KW	208	1		1/2"	#12	#12	SEE POWER PLANS
IAC-1	SPLIT SYST NO.1 (BOILER RM)								INTERCONNECT W/ O
OAC-1	SPLIT SYST NO.1 (OUTDOOR)		208	1	18.0 MCA	1/2"	#10	#10	HP1-29,31
IAC-2	SPLIT SYST NO.2 (IT RM)								INTERCONNECT W/ O/
OAC-2	SPLIT SYST NO.2 (OUTDOOR)	~~~~~	208	1	18.0 MCA	1/2'	#10	#10	HP1-33,35
IAC-3	SPLIT SYST NO.3 (RISER RM)								INTERCONNECT W/ O
OAC-3	SPLIT SYST NO.3 (OUTDOOR)		208	1	18.0 MCA	1/2'	#10	#10	EP2-31,33
IAC-X	SPLIT SYST NO.3 (CLASS A VAU	LT)	<del>~~~~</del>	~~~	<del></del>	<del></del>	<del>~~~</del>	<del>~~~</del>	INTERCONNECT W/ O
OAC-X	SPLIT SYST NO.X (OUTDOOR)		208	1	12.0 MCA	1/2'	#12	#12	VP-6,8
IHP-1	SPLIT SYST NO.1 (FITNESS RM)								INTERCONNECT W/ OF
OHP-1	SPLIT SYST NO.1 (OUTDOOR)		208	1	17.0 MCA	1/2'	#10	#10	HP2-11,13
B-1	BOILER NO.1 (GAS)	<del>~~~~</del>	120	~~~	·····	1/2"	#12	#12	HP2-6 (PC)
B-2	BOILER NO.2 (GAS)		120	1		1/2"	#12	#12	HP2-6 (PC)
B-3	BOILER NO.3 (GAS)		120	11		1/2"	#12	#12	HP2-6 (PC)
BP-1	BOOSTER PUMP NO.1	(3) 2HP	208	3		1/2"	<b>#</b> 10	#10	HP2-28,30,32
P-1	PUMP NO. 1	2HP	208	1		1/2"	#10	#10	HP2-35,37
P-2	PUMP NO. 2	2HP	208	1		1/2"	#1O	#10	HP2-36,38
P-3	PUMP NO. 3	1/4HP	120	1		1/2"	#12	#12	HP2-18 (PC)
P-4	PUMP NO. 4	1/4HP	120	1		1/2"	#12	#12	HP2-18 (PC)
P-5	PUMP NO. 5	1/4HP	120	1.1.		1/2"	#12	#12	HP2-18 (PC)
RP-1	RECIRC PUMP NO.1	1/2HP	120	1	~~~~~	1/2"	#12	#12	HP2-10
SF-2	SUPPLY FAN NO.2	13W	120	1		1/2"	#12	#12	SEE E3.01
SF-3	SUPPLY FAN NO.3	10HP	208	3		1"	#6	#10	EP2-26,28,30
SF-4	SUPPLY FAN NO.4	10HP	208	3		1"	#6	#10	EP2-32,34,36
35-1	SUMP PUMP NO.1	172HP	<del>~120~</del>	<b>~~~</b>	·····	4/2	#12···	<b>~</b> #12~	
SP-2	SUMP PUMP NO.2	2x 3/4HP	208	3		1/2"	#10	#10	HP2-12,14,16
WH-1	WATER HEATER NO.1 (GAS)		120	1		1/2"	#12	#12	HP2-20 (PC)
WH-2	WATER HEATER NO.2 (GAS)		120	1		1/2"	#12	#12	HP2-20 (PC)

# GENERAL EQUIPMENT NOTES:

CALC AMPS:

- A. CONTRACTOR/DESIGNER SHALL VERIFY ALL MECHANICAL EQUIPMENT CONNECTION LOAD REQUIREMENTS WITH THE MECHANICAL EQUIPMENT PROVIDER PRIOR TO ROUGH IN.
- B. MECHANICAL EQUIPMENT SIZES SHOWN IN THE MECHANICAL SCHEDULE ABOVE ARE FOR REFERENCE ONLY AND MAY NOT REFLECT THE ACTUAL EQUIPMENT TO BE INSTALLED.
- C. INDOOR & OUTDOOR COMPONENTS OF THE MINI-SPLIT SYSTEMS ARE INTERCONNECTED. CONSULT WITH AND COORDINATE THE ELECTRICAL REQUIREMENTS AND EXACT LOCATIONS WITH THE HVAC EQUIPMENT INSTALLER PRIOR TO ROUGH IN.
- D. REFER TO TYPICAL UNIT PLAN LOAD CENTER SCHEDULES ON THIS SHEET FOR CIRCUITING INFORMATION.

  E. EXHAUST FAN EF-6 TO BE INTERCONNECTED WITH IHP/OHP-1 SPLIT SYSTEM. CONSULT MECHANICAL EQUIPMENT INSTALLER FOR ADDITIONAL INFORMATION. INSTALLER FOR ADDITIONAL INFORMATION.

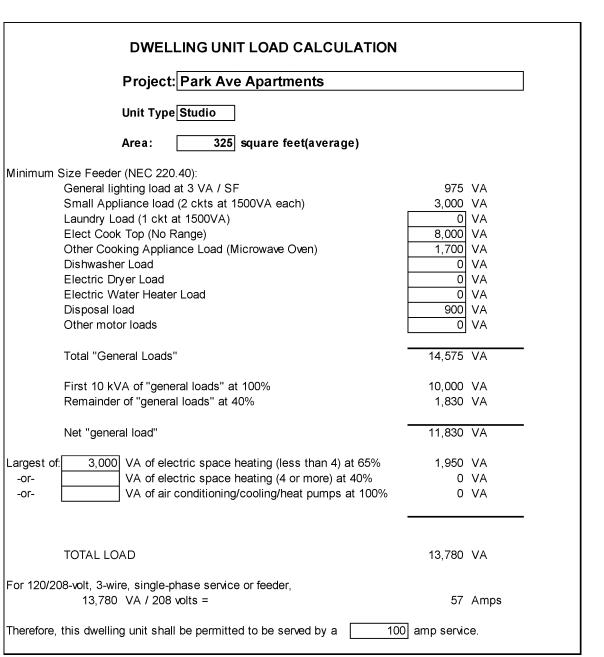
1,929 AMPS

		SW Par	k Ave. Apartn	nents				
Total Building Loads	Elect	rical Service L	oad - Main D	istribution (MC	P)			
LOAD:	LIGHTS	RECEPT	HEAT	KITCHEN	EQUIP	MOTORS	MISC	LARGEST MOTOR
House Loads	3,358	23,680	11,536	2,400	55,200	42,746		
Residential Loads							407,000	
Generator Loads							156000	
SUBTOTAL	3,358	23,680	11,536	2,400	55,200	42,746	563,000	
X-FACTOR	1	1 + .5	1	1	1	1	1	0
CODE LOAD:	4,198	16,840	11,536	1,560	55,200	42,746	563,000	
CONN LOAD:	702	KVA						
VOLTS:	208	3ph						
TOTAL CALC:	695	KVA						

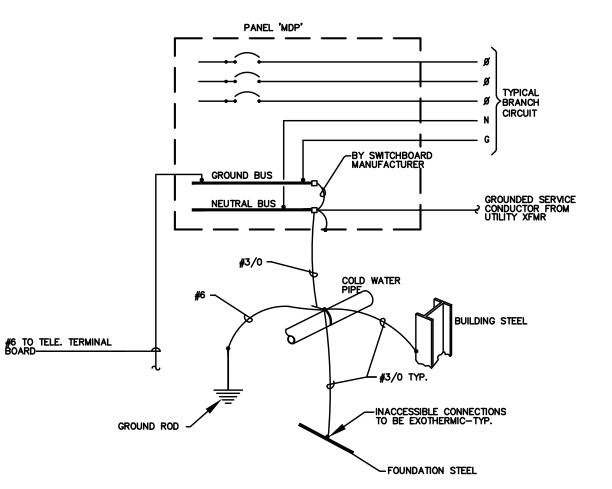
4/8/2022

					Ave. Apartm				
	QTY		AREA	LTG	SM		MICRO/HOOD	MOTORS	LARGEST OI
UNIT TYPE:	PER FLOOR	TOTAL	(SF)	RECEPT	APPL	(NO OVEN)			AC/HEATING
	Studio			(3VA / SF)	(1500VA X 2)	(CONNECTED)	(CONNECTED)	(CONNECTED)	(CONNECTED
Level 1	2	2	325	975	3000	8000	1700	0	300
Level 2	8	8	325	975	3000	8000	1700	0	300
Level 3	9	9	325	975	3000	8000	1700	0	300
Level 4	9	9	325	975	3000	8000	1700	0	300
Level 5	9	9	325	975	3000	8000	1700	0	300
Level 6	9	9	325	975	3000	8000	1700	0	300
Level 7	9	9	325	975	3000	8000	1700	0	300
Level 8	9	9	325	975	3000	8000	1700	0	300
Level 9	9	9	325	975	3000	8000	1700	0	300
Level 10	9	9	325	975	3000	8000	1700	0	300
Level 11	9	9	325	975	3000	8000	1700	0	300
Level 12	9	9	325	975	3000	8000	1700	0	300
TOTALS:	100	100	32500	97500	300000	800000	170000	0	30000
	VOLTS: TOTAL CONNECTED: DEMAND FACTOR: TOTAL CALCULATED: CALCULATED AMPS:	208 1770 0.23 407 1131	3ph KVA Based on T KVA AMPS	otal Number of F	Residential Units	= 63 & Over (See	e N.E.C. Article:	220.84 )	

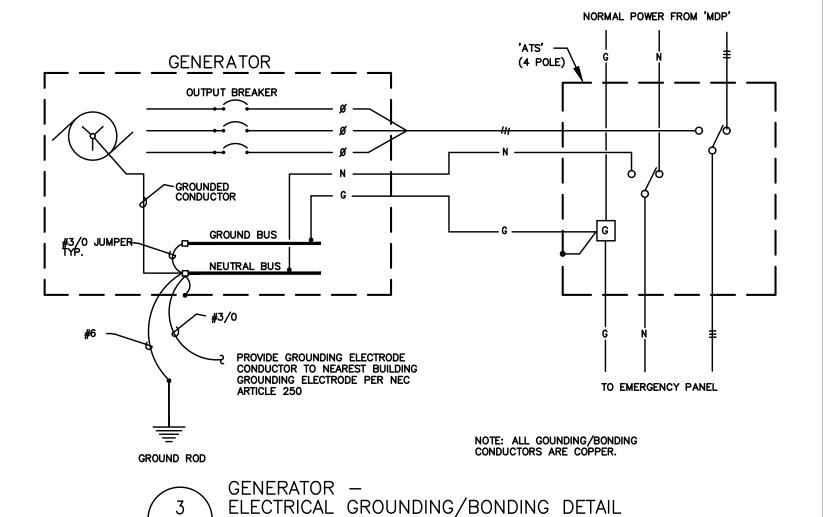
Connected amount of 8000w is the minimum connected load per NEC 220.55 for full diversity.



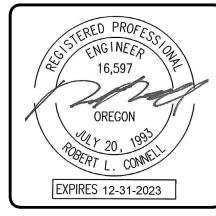
	MFIA C	IRCUIT	DIRE	ECTO	ORY			10-Apr-22
Loadcenter Name	mountin	g			location	า		
LC-STUDIO (TYPICAL)		RECES	SSE	)				
voltage	phase			bı	us & ma	ain		
120/208	1		100	A M	LO	(SCCR:	22K)	
service	a/p	no.	L1	L2	no.	a/p	service	
LIGHTS-KITCHEN/LIVING	20/1(A)	1	*		2	20/1(A)	APPLIANCE CIRCUIT	
LTS & RECEPT - BATH	20/1	3		*	4	20/1(A)	APPLIANCE CIRCUIT	
LTS & RECEPT - BEDROOM	20/1(A)	5	*		6	20/1	REFRIGERATOR	
RECEPT - LIVING (OPTIONAL)	20/1(A)	7		*	8	20/1	MICRO/HOOD	
SMART PANEL	20/1	9	*		10	30/2	2-BURNER COOKTOP	
AC PORT (OPTIONAL)	20/1	11		*	12	*	*	
HEAT	20/2	13	*		14	20/1	DISPOSAL (OPTIONAL)	
k	*	15		*	16	20/1	SPARE	
SPARE	20/1	17	*		18	20/1	SPARE	
BLANK		19		*	20		BLANK	
BLANK		21	*		22		BLANK	
BLANK		23		*	24		BLANK	
BLANK		25	*		26		BLANK	
BLANK		27		*	28		BLANK	
BLANK		29	*		30		BLANK	
NOTES: 1. (A) DENOTES: ARC-FAULT INTI 2. LOADS FOR THIS PANEL ARE 3. BREAKER & WIRE SHALL BE S	INDICATE	D ON T	ΠΗΕ '	'DW	ELLING	S UNIT LO		

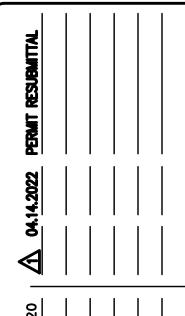


1 GROUNDING/BONDING DIAGRAM E1.12 208Y/120V, 3ø, 4 WIRE



E1.12 NO SCALE





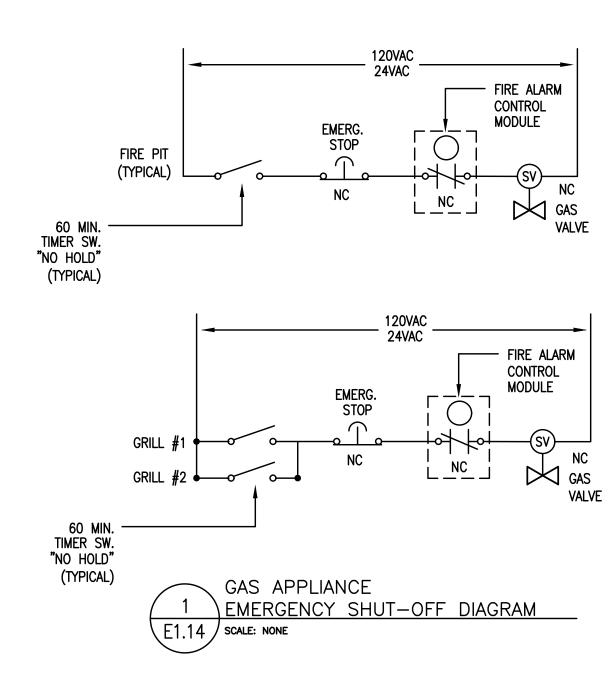
ARK AVE. ARK RYS 2057

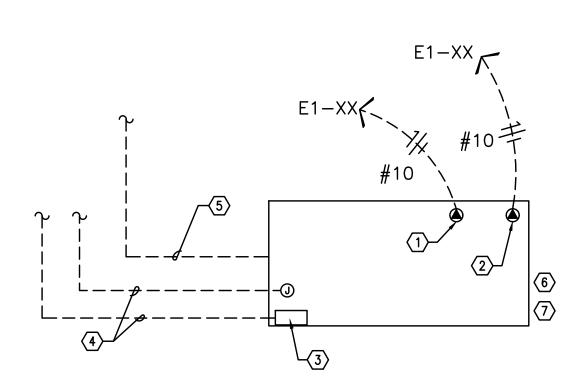
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SHEET



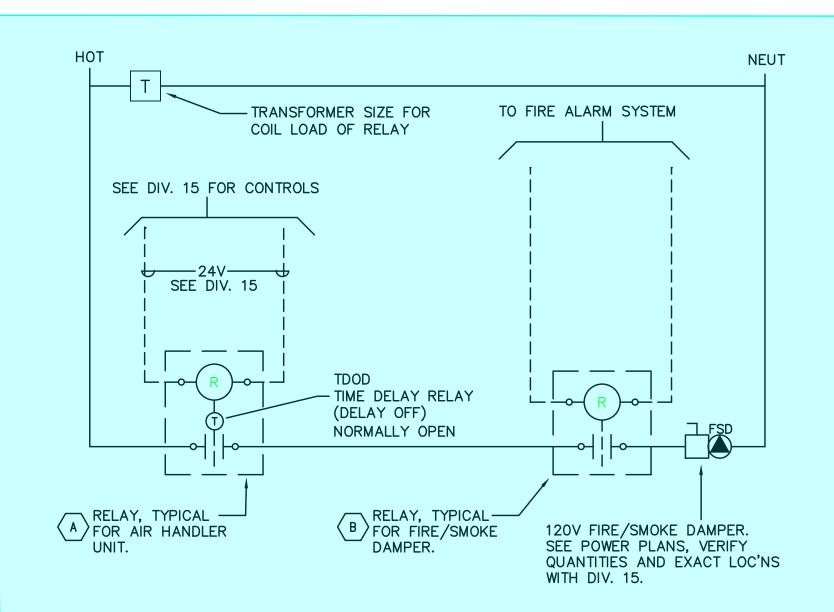




#### NOTES:

- 1. 120V GENERATOR BLOCK HEATER. SEE PANEL E1.
- 2. 120V GENERATOR BATTERY CHARGER. SEE PANEL E1.
- 3. GENERATOR OUTPUT BREAKER AND CONTROL SECTION. SEE PANEL E1.
- 4. POWER AND CONTROL TO TRANSFER SWITCH AND REMOTE ANNUNCIATOR. SEE ONE-LINE DIAGRAM ON SHEET E1.10.
- 5. TO AUTOMATIC TRANSFER SWITCH. SEE E1.10.
- 6. DIESEL GENERATOR TO BE PROVIDED WITH DOUBLE-WALL FUEL TANK
- 7. DIESEL GENERATOR TANK SHALL DOUBLE WALLED AND BE EQUIPPED WITH OVERFILL PROTECTION (AUTO SHUTOFF), 5 GALLON INFILL SPILL BUCKET WITH DRAIN BACK, 12FT ABOVE GRADE TANK FUME VENTING AND ONSITE PRESSURE TESTING PER CITY REQUIREMENTS.

AND SPILL CONTAINMENT PER CITY OF PORTLAND REQUIREMENTS.



# SMOKE/FIRE DAMPER CONTROL DIAGRAM

# ADDRESSABLE DETECTOR CONTROL

- RELAY TO BE 'NORMALLY OPEN'. TDOD (TIME DELAY ON DE-ENERGY) SET FOR 15 SECONDS. RELAY TO CLOSE UPON SIGNAL FROM HVAC CONTROL SYSTEM (ALLOWS DAMPER TO OPEN); DAMPERS TO CLOSE ON DE-ENERGIZE AFTER 15 SEC. TIME-OUT. PROVIDE WITH 20A CONTACTS AND COIL VOLTAGE AS REQ'D BY HVAC CONTROL SYSTEM. MOUNT RELAY IN NEMA 1 ENCLOSURE ADJACENT TO HVAC CONTROL PANEL.
- B RELAY TO BE 'NORMALLY ENERGIZED'. RELAY TO BE DE-ENERGIZED UPON SIGNAL FROM FIRE ALARM SYSTEM (ALLOWS DAMPERS TO CLOSE). PROGRAM FIRE ALARM SYSTEM FOR 15 SECOND DELAY BETWEEN SMOKE DETECTOR ACTIVATION AND FIRE/SMOKE DAMPER SHUTDOWN. PROVIDE WITH 20A CONTACTS AND COIL VOLTAGE AS REQ'D BY FIRE ALARM SYSTEM. MOUNT RELAY IN NEMA 1 ENCLOSURE ADJACENT TO FIRE/SMOKE DAMPER.

Figure 308.2.1 Unobstructed Forward Reach

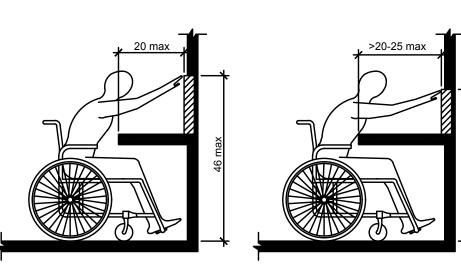
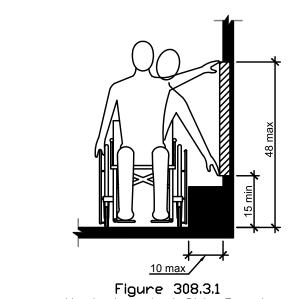
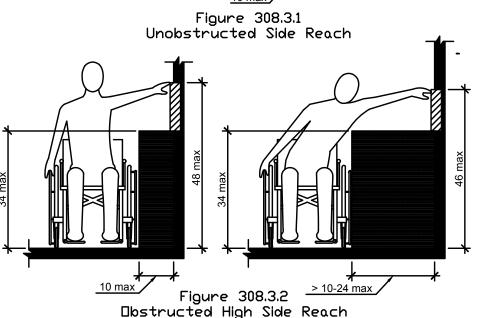


Figure 308.2.2 Obstructed High Forward Reach





Obstructed High Side Reach ADA REACH REQUIREMENTS E1.14

#### 308.2 Forward Reach.

PROVIDED REVISED FIRE/SMOKE

DAMPER DETAIL.

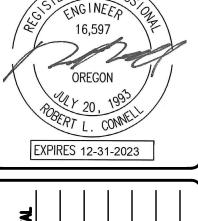
308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward read be 48" maximum and the low forward reach shall be 15" minimum above the ground.

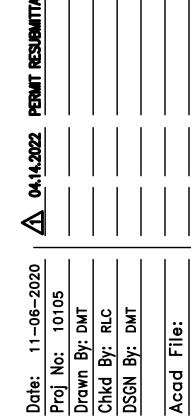
308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, clear floor or ground space shall extend beneath the element for a distance no thank the required reach depth over the obstruction. The high forward reach s 48" maximum where the reach depth is 20" maximum. Where the reach depth 20", the high forward reach shall be 44" maximum and the reach depth shall t maximum.

#### 308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approa an element and the side reach is unobstructed, the high side reach shall be 48 maximum and the low side reach shall be 15" minimum above the floor or grou **Exception**: Existing elements shall be permitted at 54" maximum above the floor or ground.

308.3.2 Obstructed High Reach. Where a clear floor or ground space allows a paralle approach to an object and the high side reach is over an obstruction, the heigh the obstruction shall be 34" maximum and the depth of the obstruction shall 2 maximum. The high side reach shall be 48" maximum for a reach depth of 10" maximum. Where the reach depth exceeds 10", the high side reach shall be maximum for a reach depth of 24" maximum.





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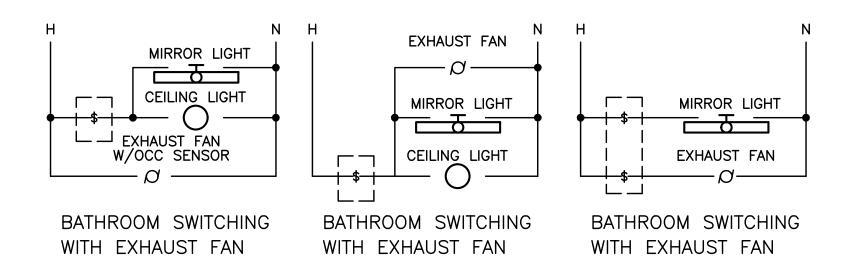
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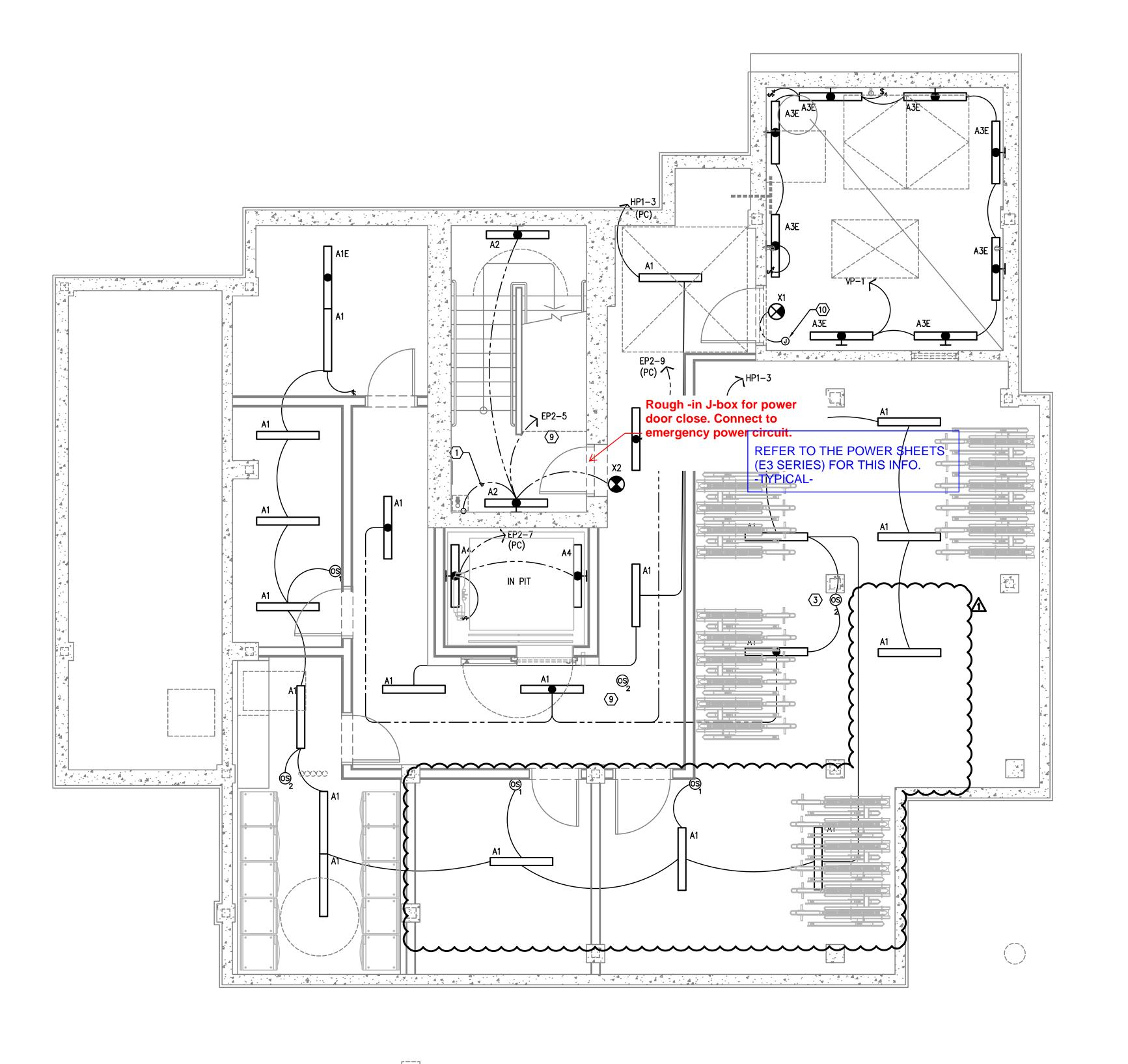
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Fire/Smoke dampers must be actuated in accordance with OSSC, Section 717.3.3.2 Revise detail









1 LIGHTING PLAN — BASEMENT LEVEL

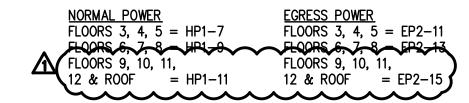
F2 00 SCALE: 1/4" = 1'-0"

# GENERAL LIGHTING NOTES:

- A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.
- B. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL & INTERIOR DESIGN DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.
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- D. REFER TO SHEET E1.21 FOR LIGHT FIXTURE SCHEDULE.
- E. REFER TO AVAILABLE ARCHITECTURAL AND/OR INTERIOR DESIGN DOCUMENTS & DRAWINGS FOR ADDITIONAL INFORMATION.
- F. OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE PROPER COVERAGE AND CONTROL.
- G. PROVIDE DIGITAL LIGHTING CONTROLS FOR EACH ROOM/SPACE, CONSISTING OF MULTI-BUTTON SWITCH(ES), OCC SENSORS, POWER PACKS, DAYLIGHT SENSORS, DIMMERS, INTERCONNECTING WIRING, ETC.
- H. CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. REFER TO SHEET E1.22 FOR SWITCH WIRING DIAGRAMS.
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- K. THERE SHALL BE NO SURFACE MOUNTED FIXTURES OR PATHWAYS (CONDUIT, ETC.) IN ANY PUBLICLY ACCESSIBLE SPACES, INCLUDING STAIRWELLS AND EXIT PASSAGEWAYS WITHOUT PRIOR APPROVAL BY OWNER AND ARCHITECT. ROUTE ALL PATHWAYS WITHIN STUD CAVITIES OR ABOVE FINISHED CEILINGS.

# KEYED NOTES:

- 1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
- 2. EXTERIOR BUILDING LIGHTS TO BE CONTROLLED VIA INTEGRAL AND/OR REMOTE PHOTOCELL FOR DUSK-TILL-DAWN OPERATION. REFER TO LIGHT FIXTURE SCHEDULE ON SHEET E1.21 FOR ADDITIONAL INFORMATION.
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- 6. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
- 7. REFER TO THE E3 SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER DEVICE LAYOUT.
- 8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:



- 9. CORRIDOR AND STAIRWELL LIGHT FIXTURES TO BE CONTROLLED SUCH THAT THE FIXTURES DIM BY 50% DURING PERIODS OF LOW ACTIVITY. UPON DETECTION, LIGHTS SHALL RETURN TO 100% AND REMAIN AT FULL OUTPUT FOR A MINIMUM OF 30 MINUTES BEFORE RETURNING TO THE DIMMED STATE. FIXTURES ON EMERGENCY POWER CIRCUITS SHALL REMAIN 'ON' 24/7.
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22 PLAN REVIEW

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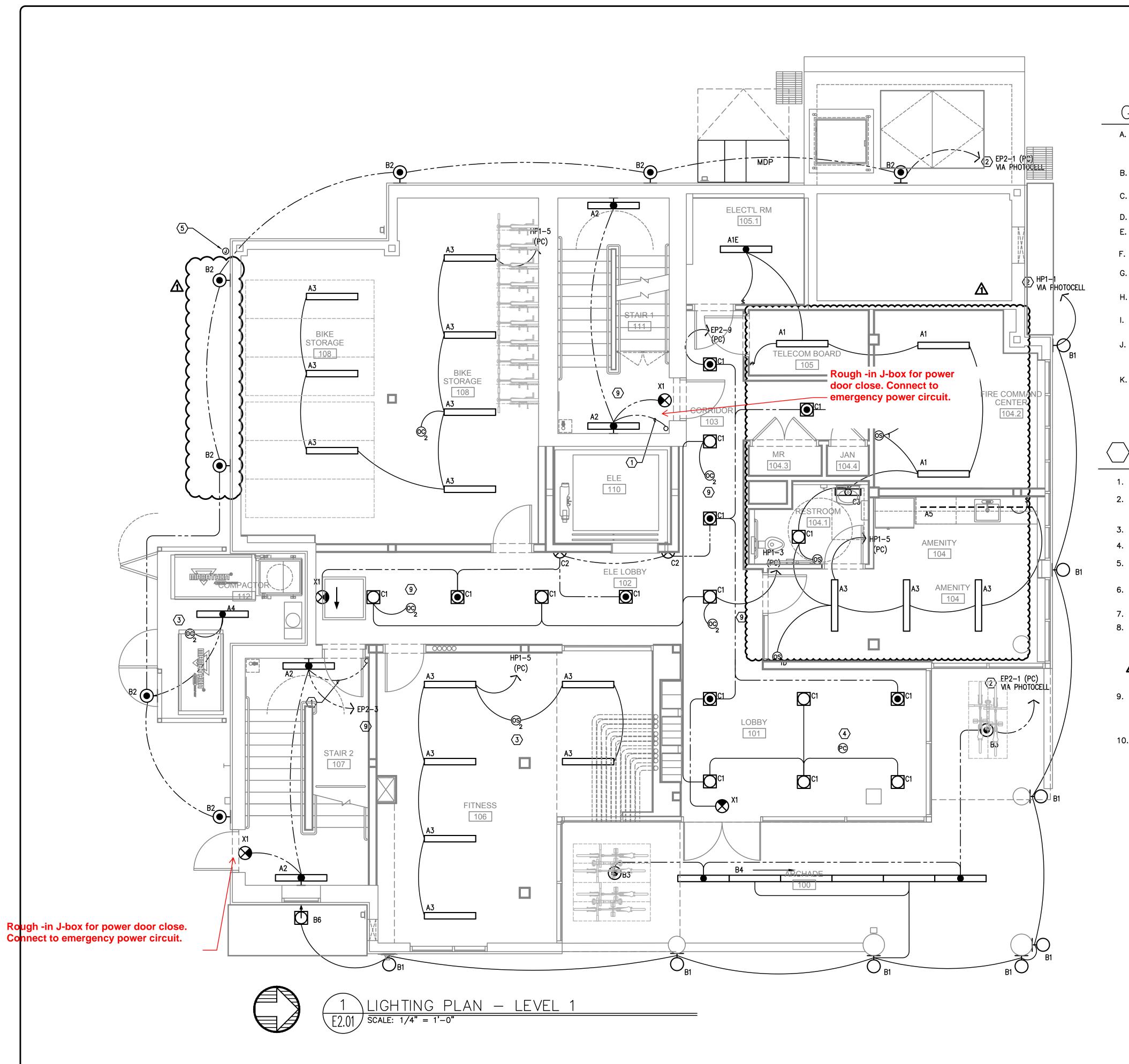
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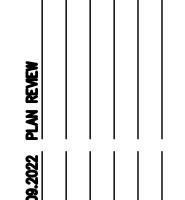
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- 8. CORRIDOR LIGHTING CIRCUITS FOR THE UPPER FLOORS ARE AS FOLLOWS:

NORMAL POWER
FLOORS 3, 4, 5 = HP1-7
FLOORS 6, 7, 8 HP1-9
FLOORS 6, 7, 8 FP2-13
FLOORS 9, 10, 11,
12 & ROOF = HP1-11

FLOORS 9, 10, 11,
12 & ROOF = EP2-15

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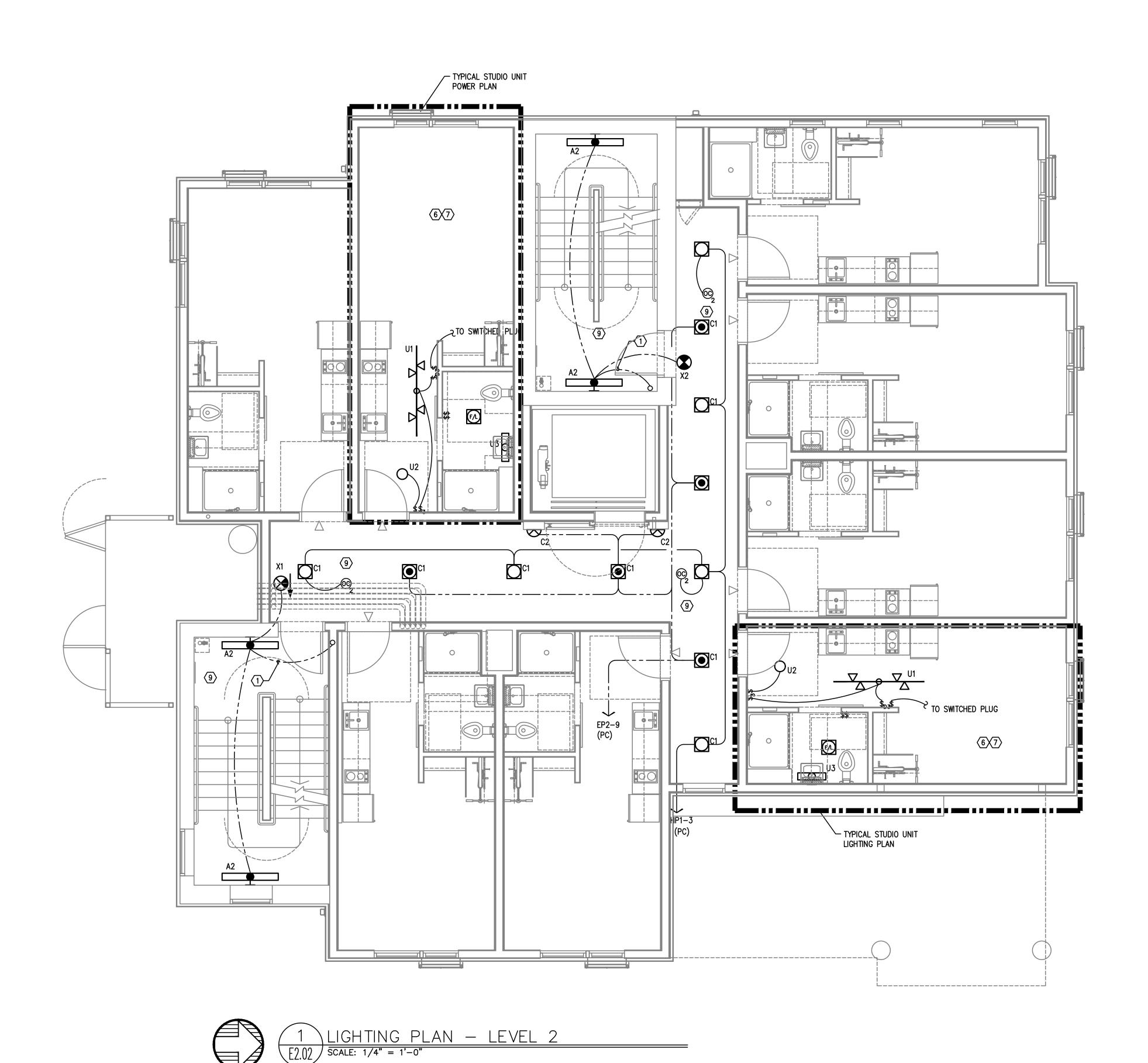
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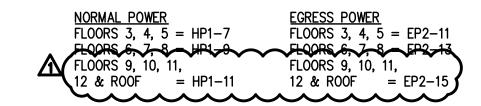
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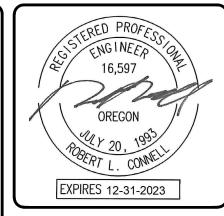
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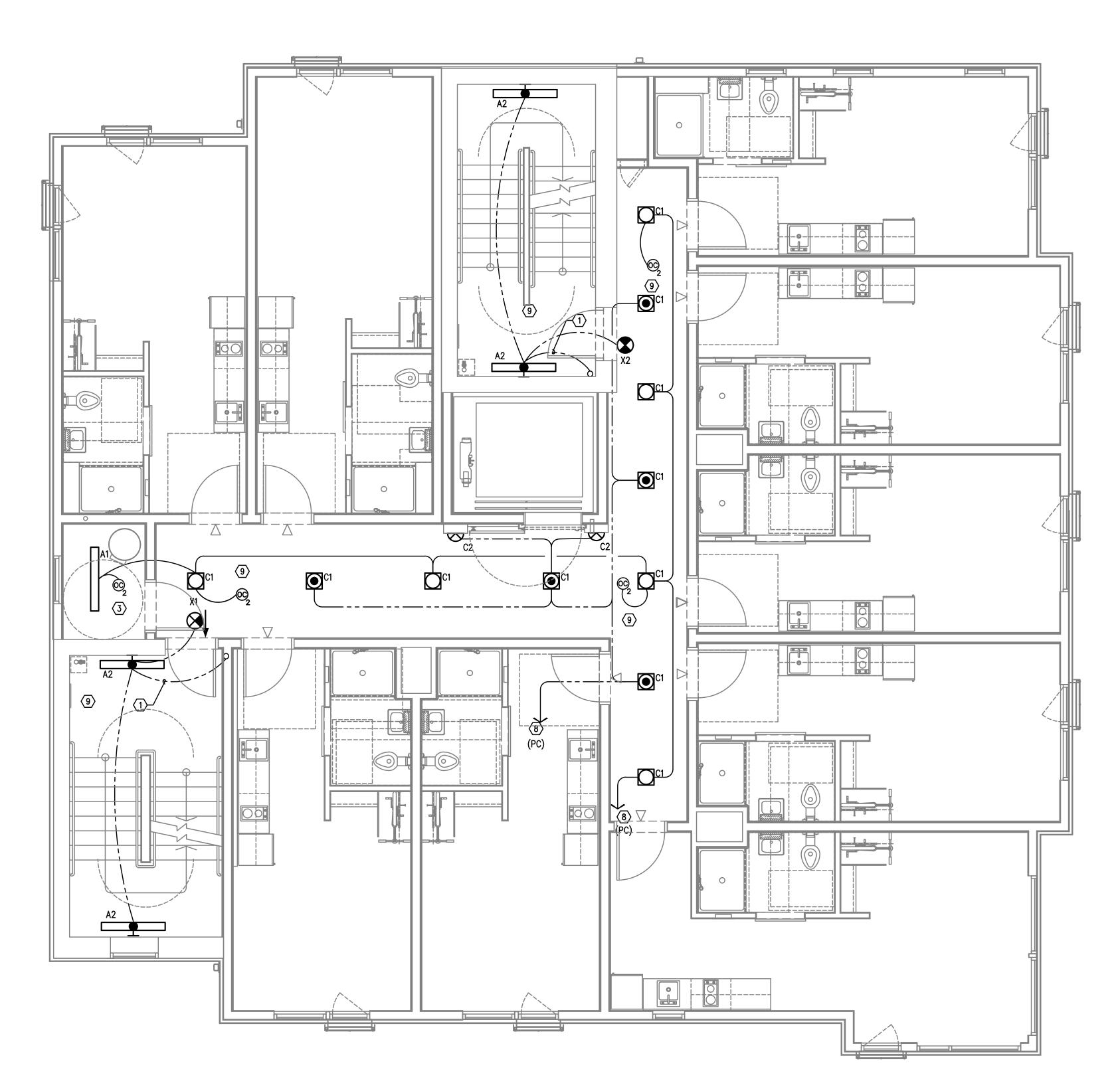
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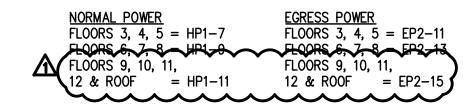
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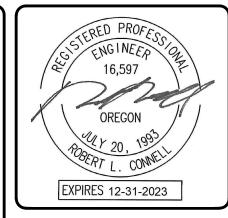
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.09.2022 PLAN REVIEW

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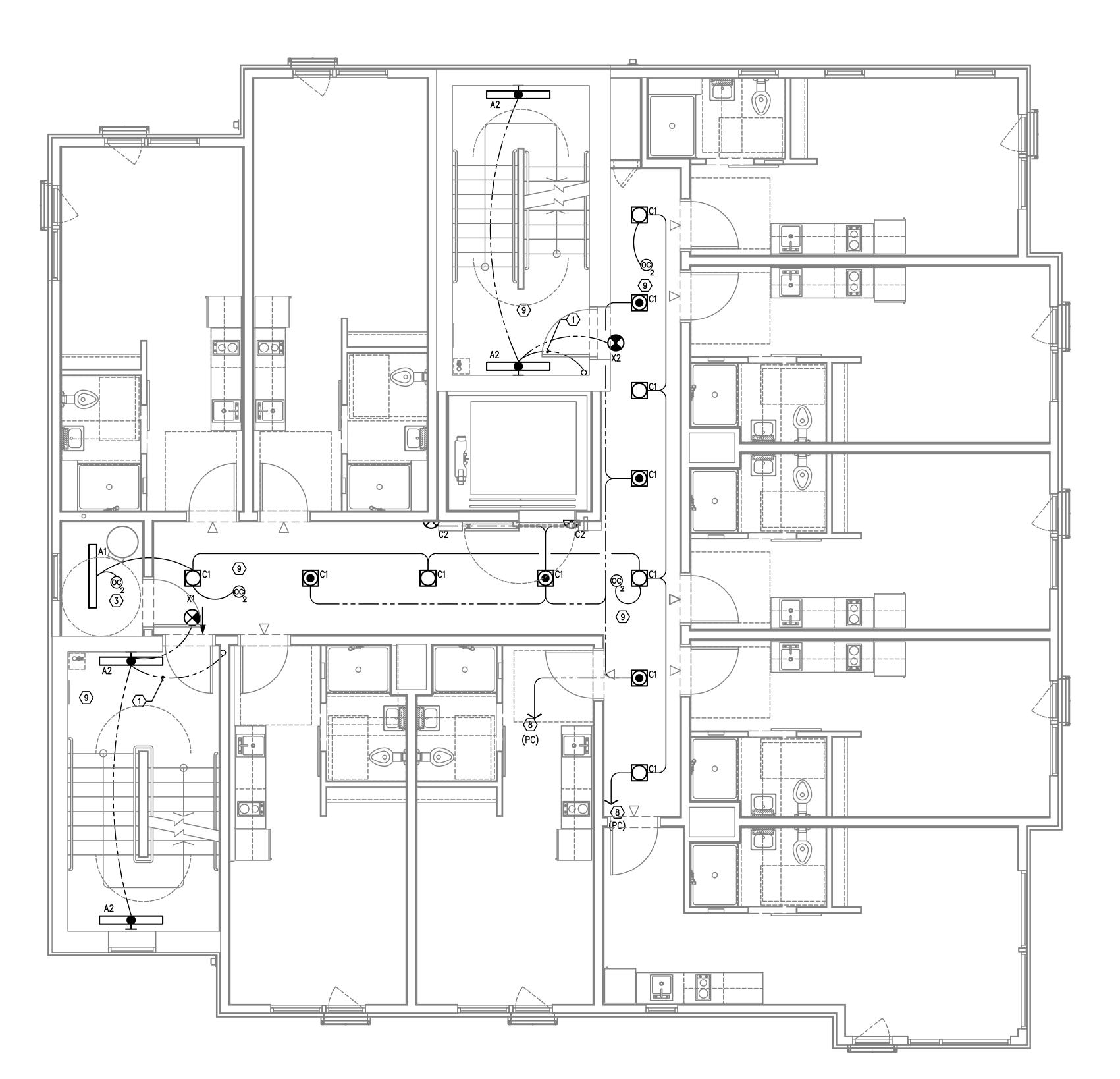


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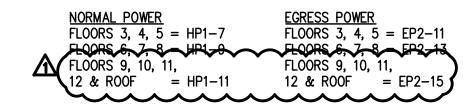




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- 1. CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
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.09.2022 PLAN REVIEW

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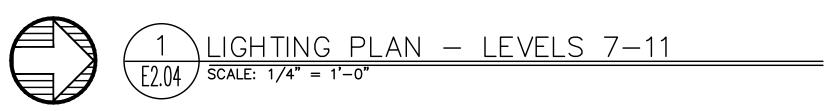
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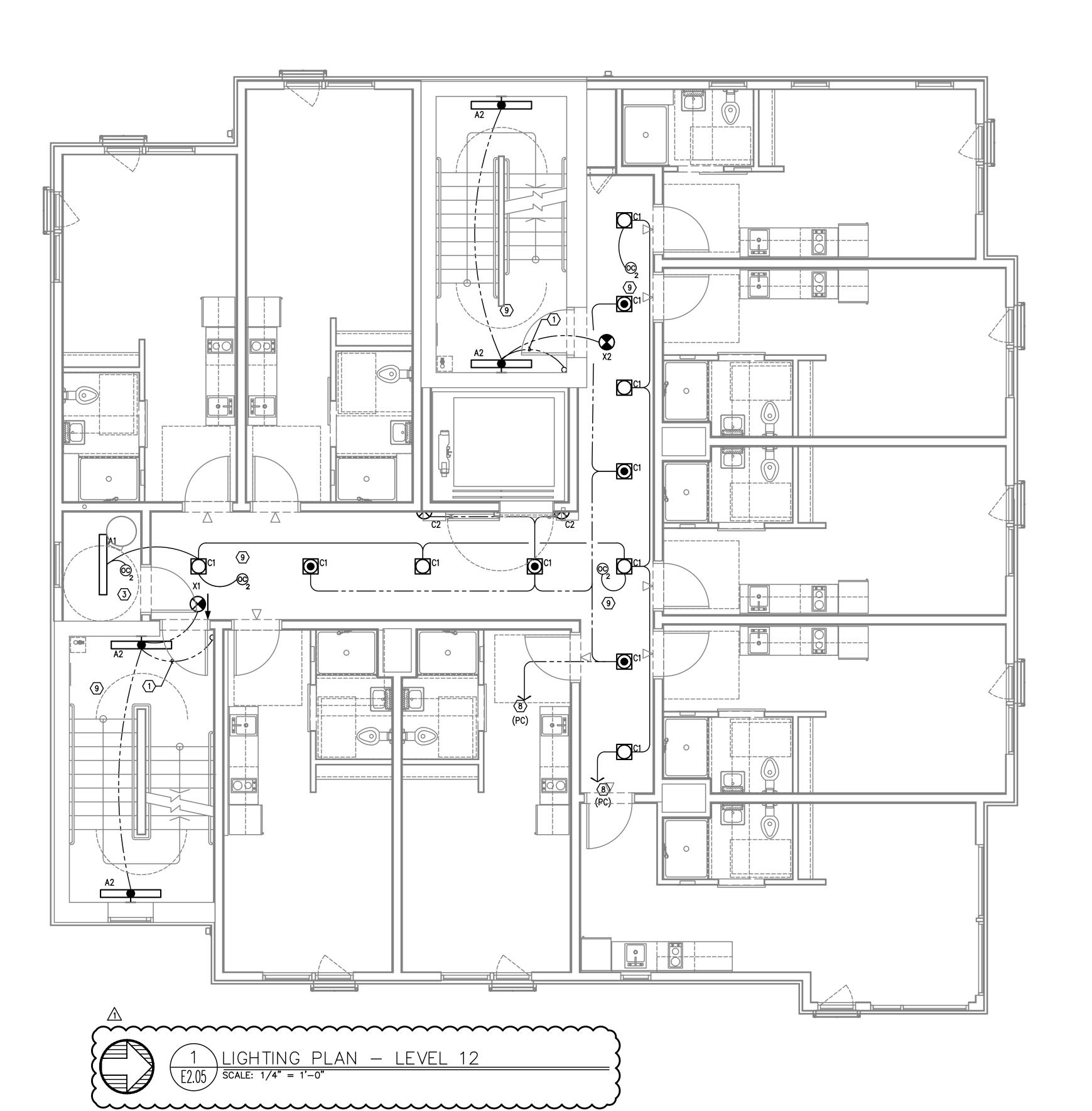


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SHEET

E2.04

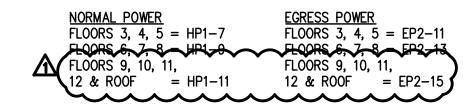




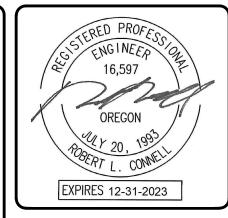
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12.09.2022 PLAN REVIEW

Proj No: 10105
Drawn By: DMT
Chkd By: RLC
DSGN By: DMT
Acad File:

OREGON FLOOR

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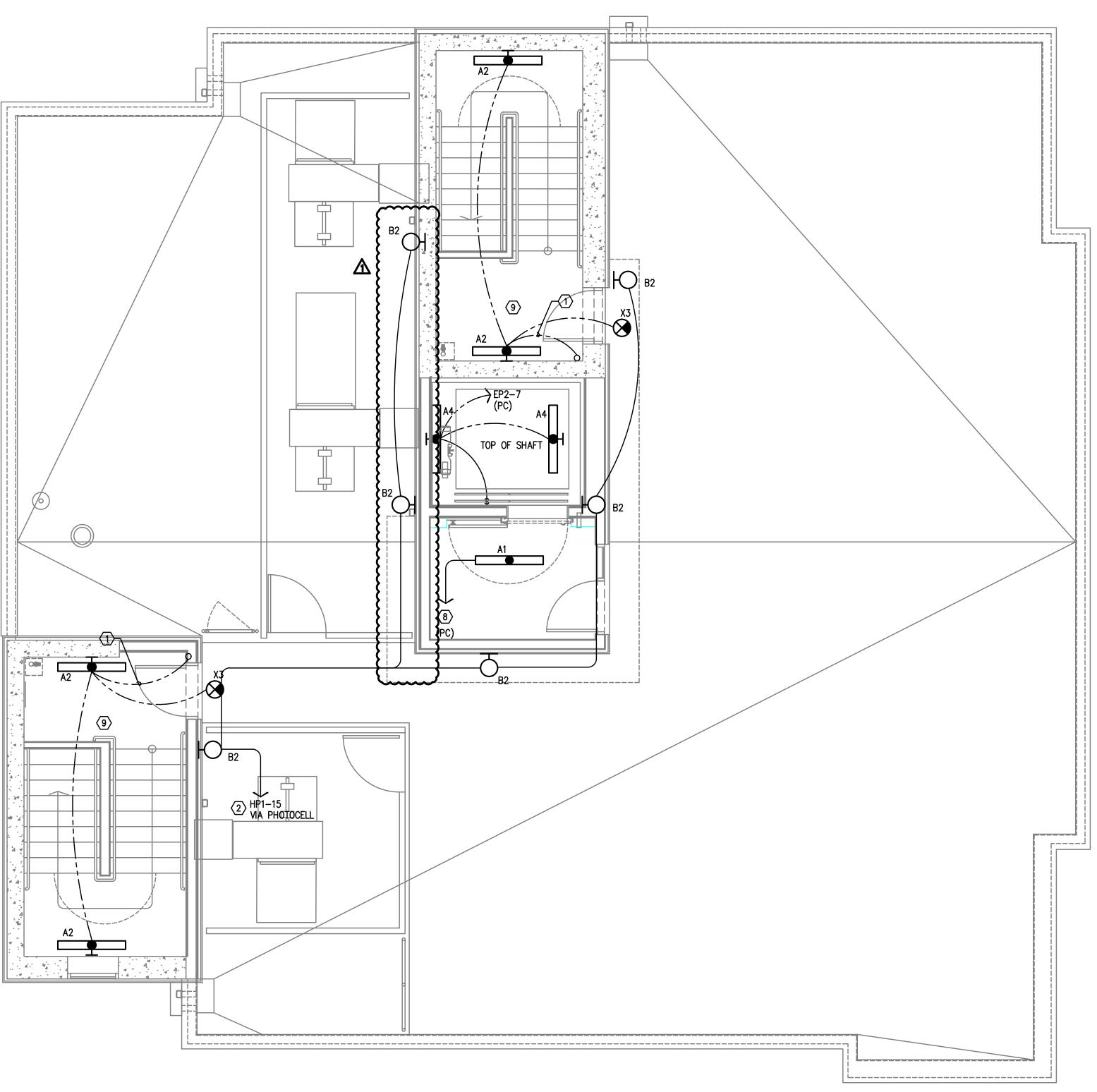
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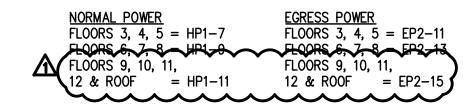
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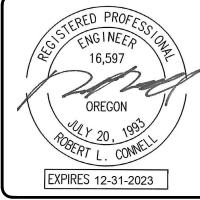
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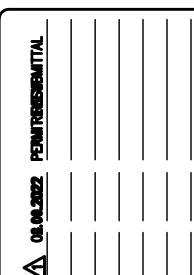
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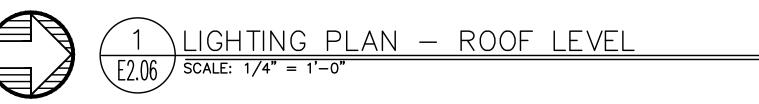
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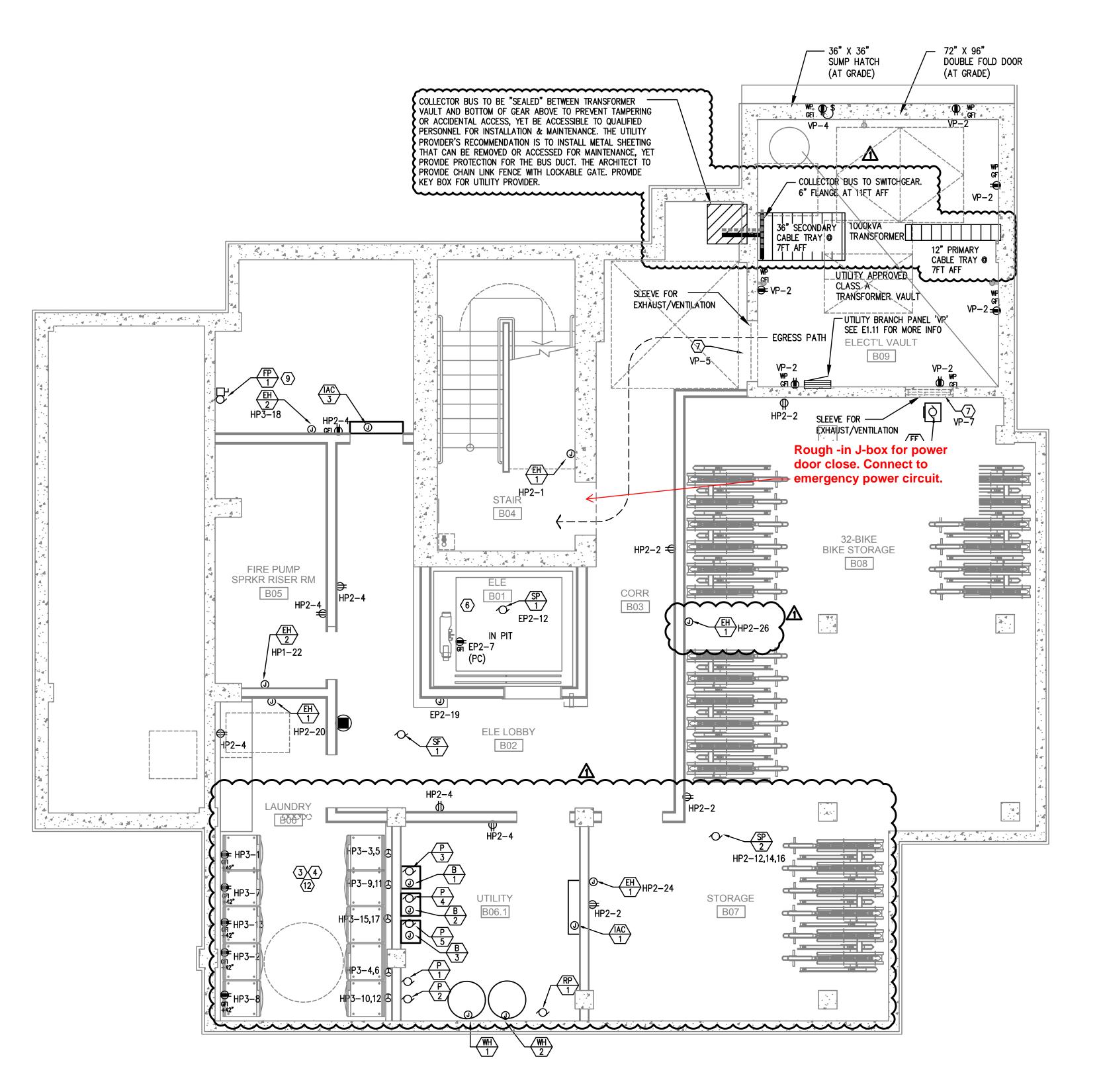


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SHEET

E2.06







1 POWER PLAN — BASEMENT LEVEL E3.00 SCALE: 1/8" = 1'-0"

#### GENERAL POWER NOTES:

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- B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.
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- E. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.
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- H. SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING CLEARANCES ARE PROVIDED.
- I. THE CLASS 'A' TRANSFORMER VAULT SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS AS WELL AS THOSE OF THE UTILITY PROVIDER. MAN-DOOR SHALL BE EQUIPPED WITH PANIC HARDWARE AND AN OUTWARD SWING.
- J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.
- K. TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS.
  SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.
- L. REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.
- M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
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- O. REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
- P. EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

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- 1. PROVIDE KEY BOX FOR PGE AT METER ROOM FOR 24/7 ACCESS.
- . GENERATOR EMERGENCY DISCONNECT.
- 3. LAUNDRY ROOM GFCI RECEPTACLES FOR WASHING MACHINES TO BE MOUNTED AT 42" A.F.F., OR UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
- 4. 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
- 5. EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
- 6. CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
- 7. SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
- 8. PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
- 9. CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE BUILDING FIRE PUMP.
- 10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
- 11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
- 12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

#### CLASS A TRANSFORMER VAULT GENERAL NOTES

VAULT ROOM DOORS SHALL BE BLAST-RATED METAL DOORS. DOORS AND VENT SHUTTERS MUST HAVE A THREE HOUR BLAST & FIRE RATING PER NFPA 450.43.

VAULT VENTS MUST HAVE SHUTTERS THAT ARE AUTOMATICALLY CLOSED BY THE HEAT DETECTOR IN THE FIRE SUPPRESSION SYSTEM HEAT DETECTORS SHALL MEET NFPA 72 REQUIREMENTS.

PROVIDE TWO "RATE TO RISE" HEAT DETECTORS PER THE UTILITY PROVIDER'S REQUIREMENTS. LOCATE ONE ABOVE THE TRANSFORMER AND ONE OTHER WITHIN THE ROOM.

ALL OPENING, GAPS & CRACKS MUST BE SEALED WITH THREE—HOUR RATED FIRE CAULKING. CONSULT UTILITY PROVIDER FOR APPROVED PRODUCTS.

A5. NON-METALIC SEISMIC-APPROVED CABLE TRAY WITH GALVANIZED HARDWARE SHALL BE INSTALLED IN VAULT ROOMS WITH CEILING GREATER THAN 10 FEET HIGH.

A6. ALL MATERIALS AND PRODUCTS USED WITHIN THE CLASS A VAULT IS SUBJECT TO THE UTILITY PROVIDER'S APPROVAL.

PRIMARY SERVICE CONDUCTORS FROM THE PROPERTY LINE TO THE VAULT SHALL BE IN SCHEDULE 40 PVC PER THE UTILITY PROVIDER'S DIRECTION. ALL CONDUIT PENETRATIONS MUST BE SEALED WITH A FLEXIBLE NON—SHRINK HYDROPHOBIC GROUT TO PREVENT WATER INTRUSION.

THE CLASS A VAULT SHALL BE PROVIDED WITH BOTH EQUIPMENT AND UFER GROUNDING PER THE UTILITY PROVIDER'S REQUIREMENTS.

PROVIDE TWO DIRECT UFER GROUND CONNECTIONS TO THE BUILDING FOOTER OR SOLDIER PILING. CONNECTIONS TO BE LOCATED AT OPPOSITE CORNERS OF THE VAULT FLOOR IN ACCORDANCE WITH NEC 250.

PROVIDE A CONTINUOUS LOOP OF 250MCM BARE COPPER AROUND THE ROOM AT 24 INCHES ABOVE THE FLOOR, WITH HUBS AT 5—FOOT INTERVALS.

A11. REFER TO E2 SERIES SHEETS FOR LIGHTING WITHIN THE VAULT ROOM.

THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE UTILITY PROVIDER AND THE PROVIDER'S REQUIREMENTS FOR CLASS A TRANSFORMER VAULTS PRIOR TO THE START OF ANY WORK. THE UTILITY PROVIDER IS THE AUTHORITY REGARDING ALL ASPECS OF THE VAULT ROOM



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- BASEMENT

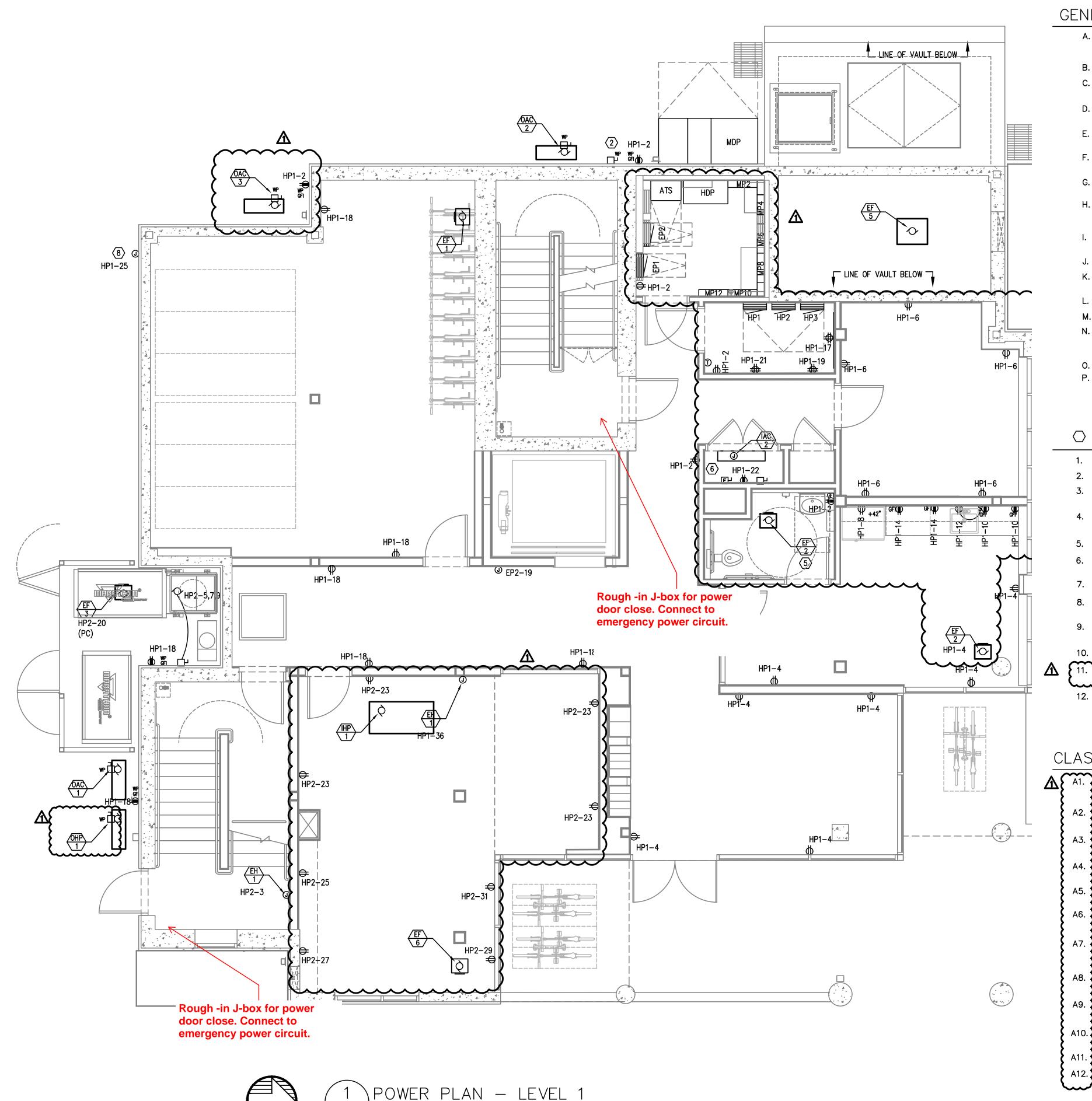
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E3.00



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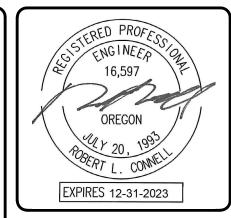
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  - 12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

#### CLASS A TRANSFORMER VAULT GENERAL NOTES

- VAULT ROOM DOORS SHALL BE BLAST-RATED METAL DOORS. DOORS AND VENT SHUTTERS MUST HAVE A THREE HOUR BLAST & FIRE RATING PER NFPA 450.43.
- A2. VAULT VENTS MUST HAVE SHUTTERS THAT ARE AUTOMATICALLY CLOSED BY THE HEAT DETECTOR IN THE FIRE SUPPRESSION SYSTEM HEAT DETECTORS SHALL MEET NFPA 72 REQUIREMENTS.
- PROVIDE TWO "RATE TO RISE" HEAT DETECTORS PER THE UTILITY PROVIDER'S REQUIREMENTS. LOCATE ONE ABOVE THE TRANSFORMER AND ONE OTHER WITHIN THE ROOM.
- A4. ALL OPENING, GAPS & CRACKS MUST BE SEALED WITH THREE—HOUR RATED FIRE CAULKING. CONSULT UTILITY PROVIDER FOR APPROVED PRODUCTS.

  NON—METALIC SEISMIC—APPROVED CABLE TRAY WITH GALVANIZED HARDWARE SHALL BE INSTALLED IN VAULT ROOMS WITH CEILING
- GREATER THAN 10 FEET HIGH.

  A6. ALL MATERIALS AND PRODUCTS USED WITHIN THE CLASS A VAULT IS SUBJECT TO THE UTILITY PROVIDER'S APPROVAL.
- PRIMARY SERVICE CONDUCTORS FROM THE PROPERTY LINE TO THE VAULT SHALL BE IN SCHEDULE 40 PVC PER THE UTILITY PROVIDER'S DIRECTION. ALL CONDUIT PENETRATIONS MUST BE SEALED WITH A FLEXIBLE NON—SHRINK HYDROPHOBIC GROUT TO PREVENT WATER INTRUSION.
- THE CLASS A VAULT SHALL BE PROVIDED WITH BOTH EQUIPMENT AND UFER GROUNDING PER THE UTILITY PROVIDER'S REQUIREMENTS.
- PROVIDE TWO DIRECT UFER GROUND CONNECTIONS TO THE BUILDING FOOTER OR SOLDIER PILING. CONNECTIONS TO BE LOCATED AT OPPOSITE CORNERS OF THE VAULT FLOOR IN ACCORDANCE WITH NEC 250.
- PROVIDE A CONTINUOUS LOOP OF 250MCM BARE COPPER AROUND THE ROOM AT 24 INCHES ABOVE THE FLOOR, WITH HUBS AT 5-FOOT INTERVALS.
- REFER TO E2 SERIES SHEETS FOR LIGHTING WITHIN THE VAULT ROOM.
- THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE UTILITY PROVIDER AND THE PROVIDER'S REQUIREMENTS FOR CLASS A TRANSFORMER VAULTS PRIOR TO THE START OF ANY WORK. THE UTILITY PROVIDER IS THE AUTHORITY REGARDING ALL ASPECS OF THE VAULT ROOM



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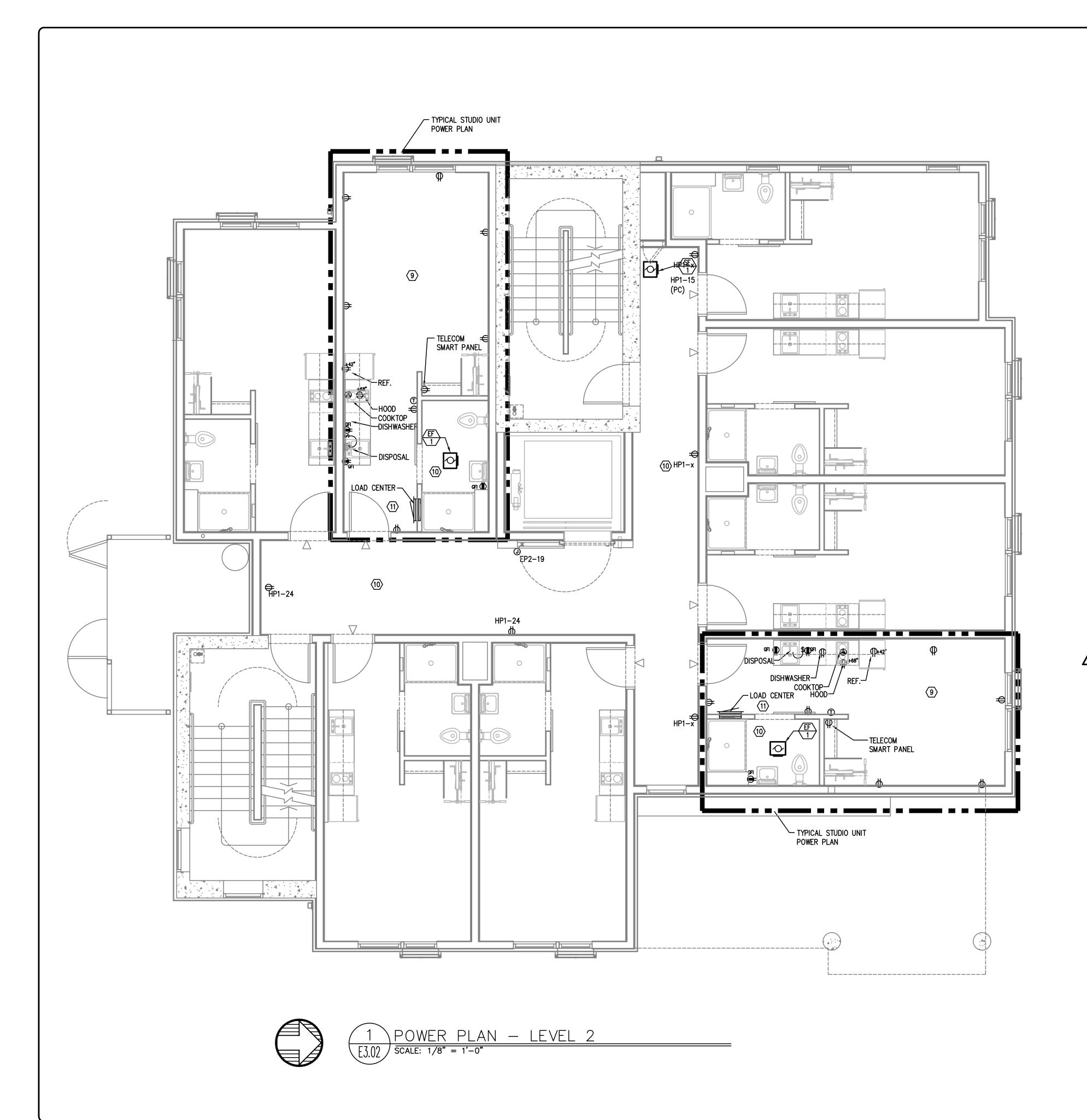
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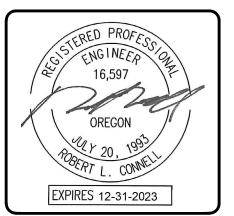
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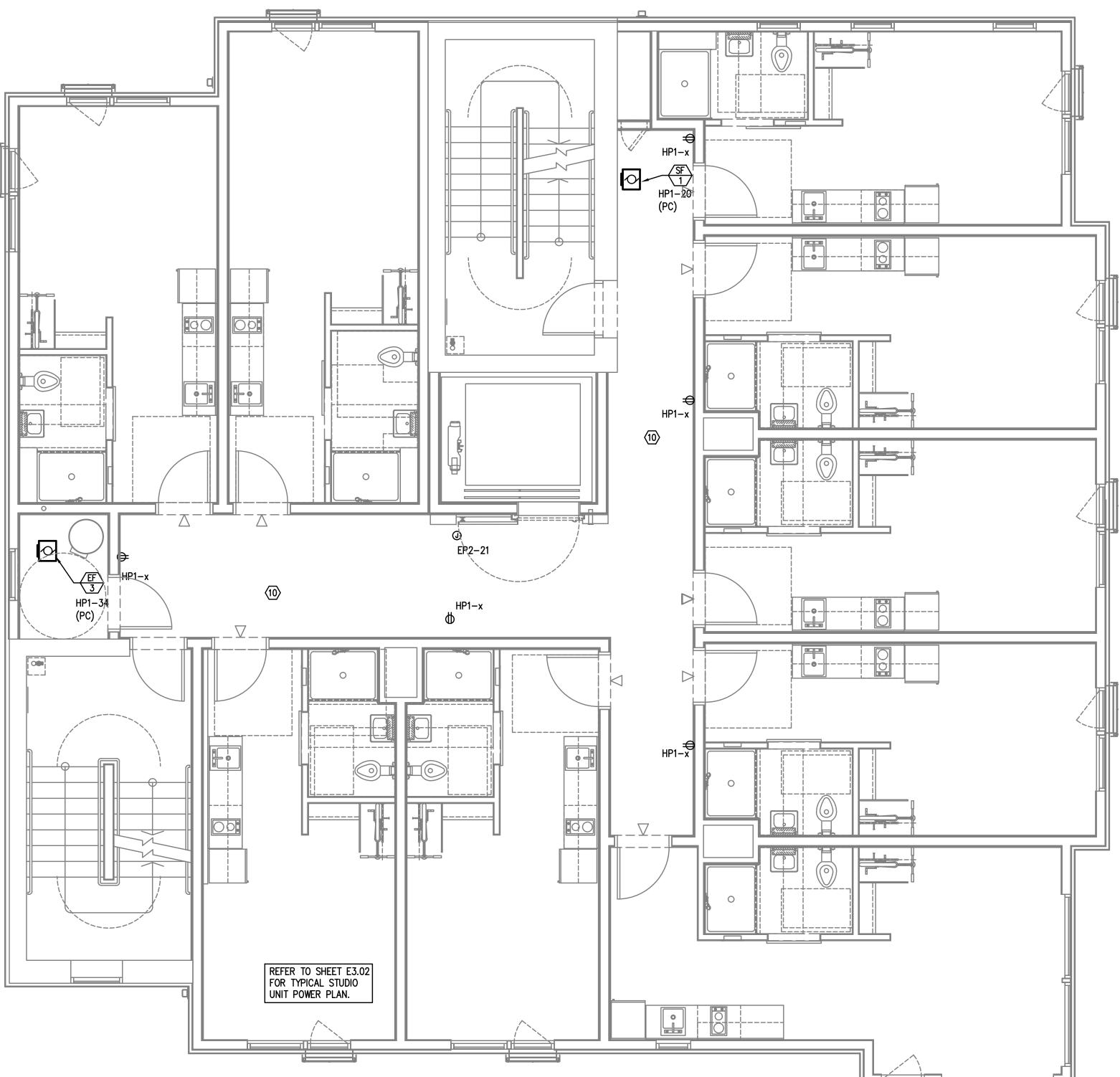
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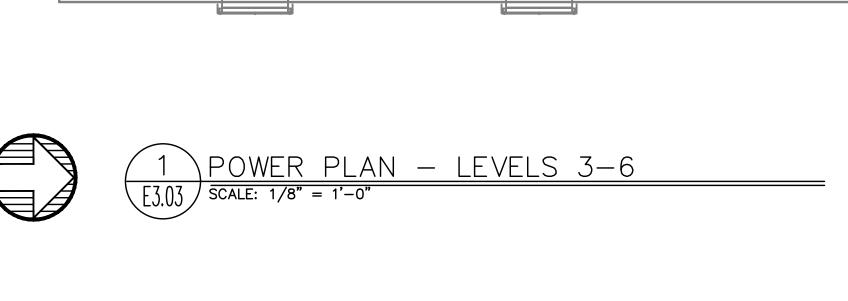
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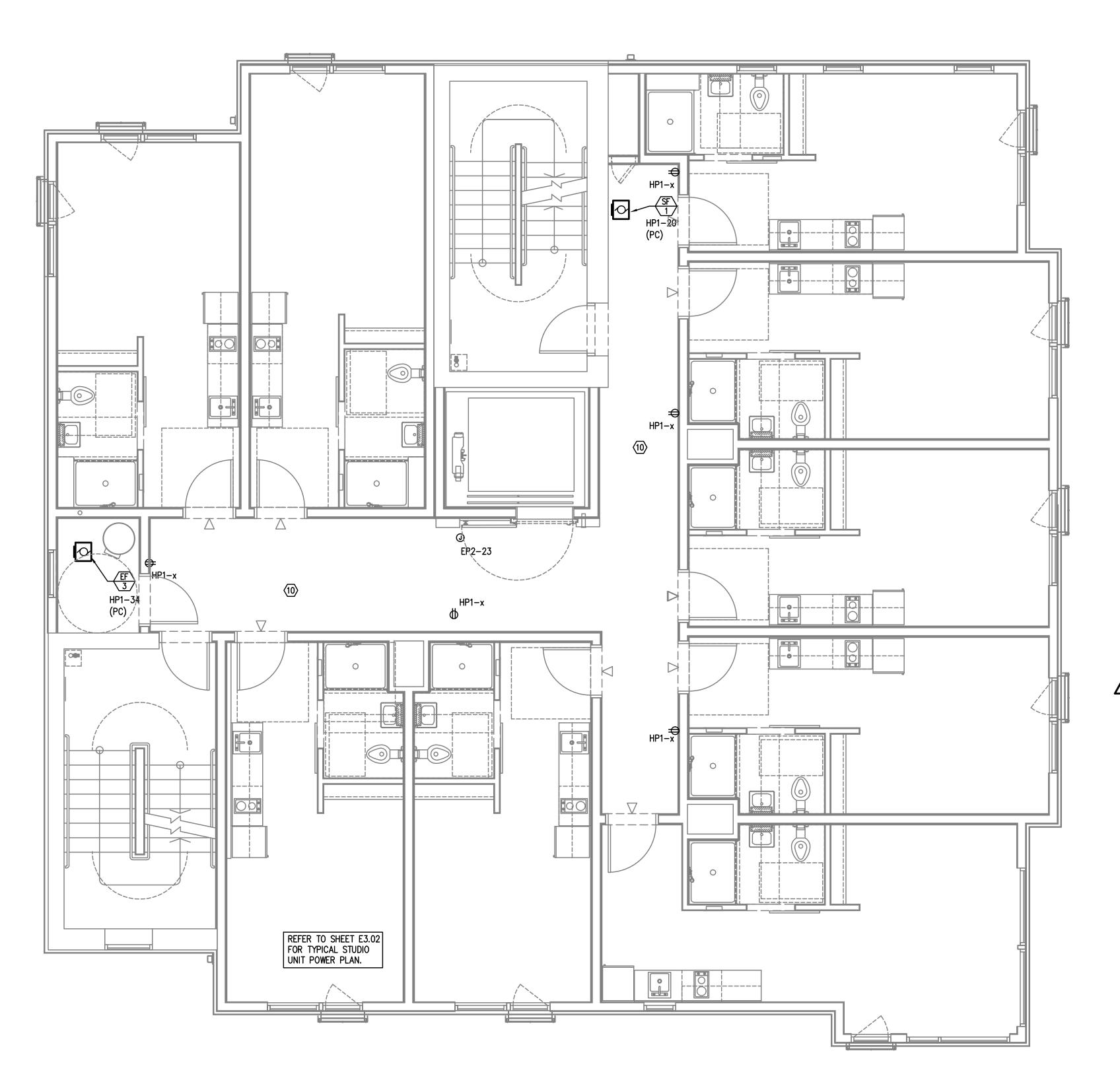


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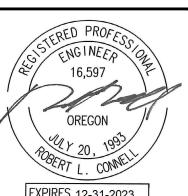


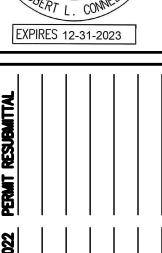


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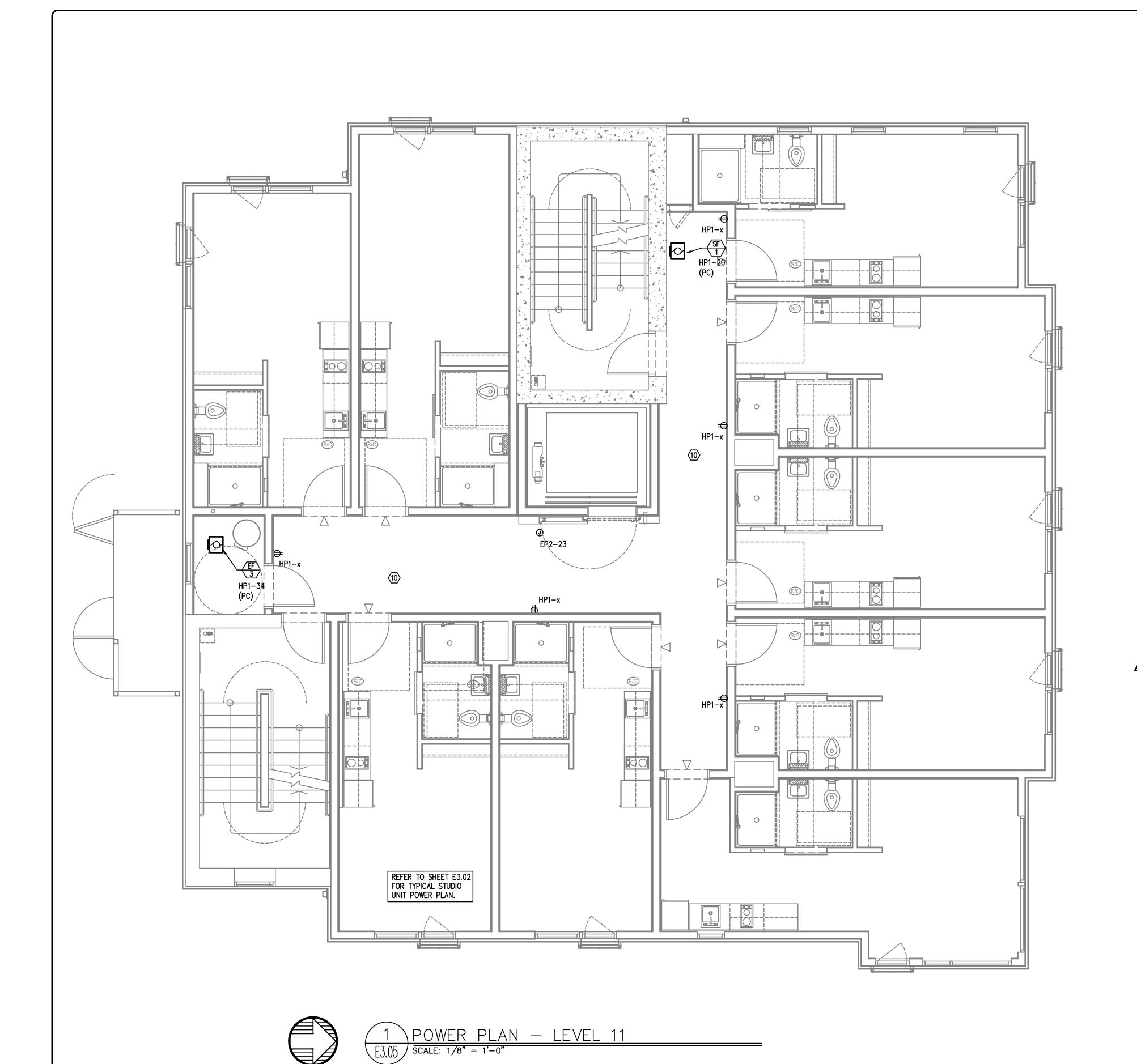
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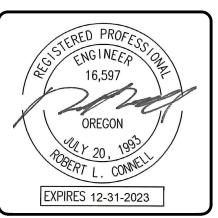
1 POWER PLAN — LEVELS 7—11 E3.04 SCALE: 1/8" = 1'-0"



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- 10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
- 11. REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2, SEE PANEL SCHEDULES.
  - 12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.





Drawn By: DMT
Chkd By: RLC
DSGN By: DMT
Acad File:

OREGON FLOOR

ER PLAN – 11TH F

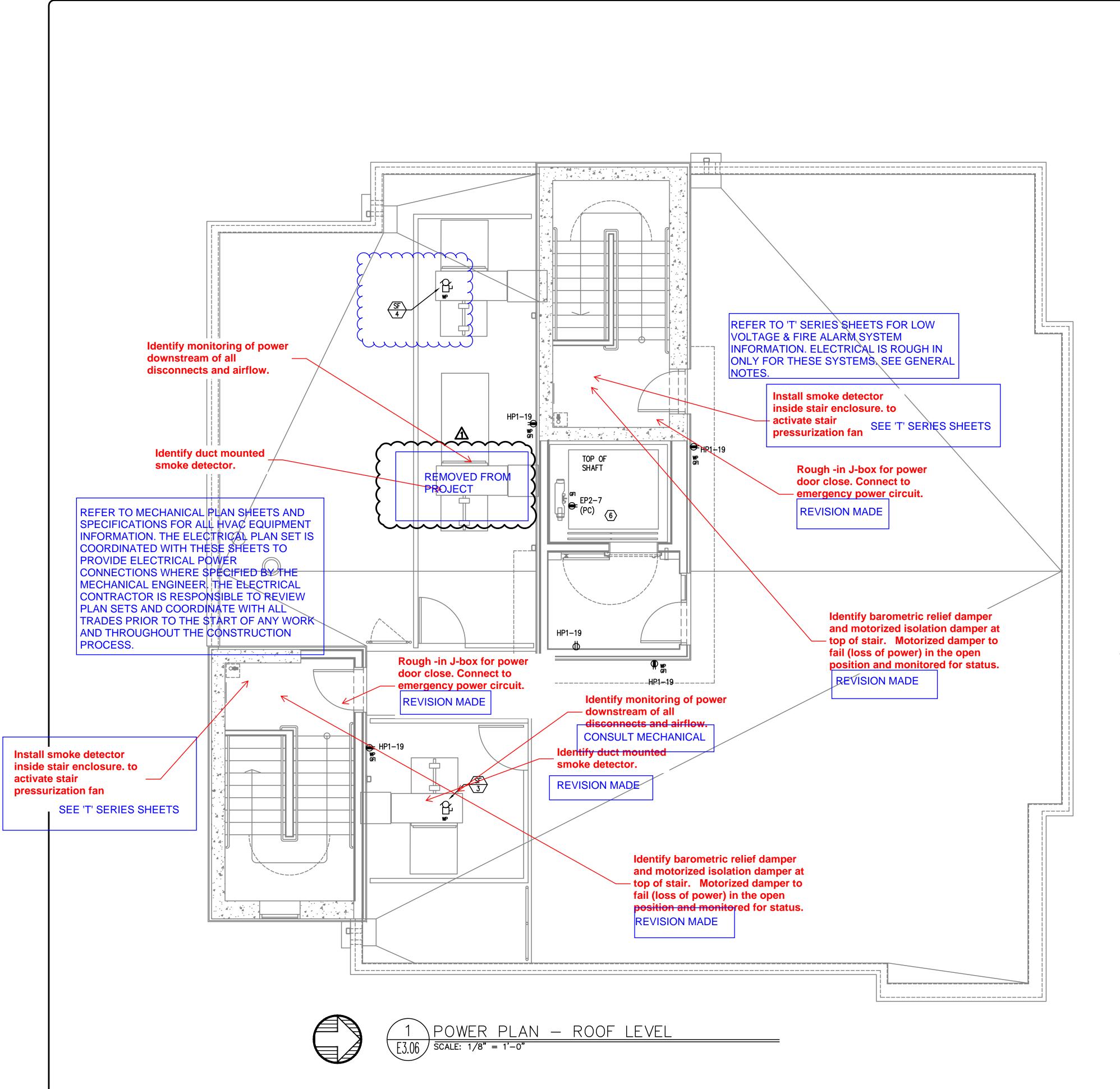
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- A. ELECTRICAL DRAWINGS ARE DIAGRAMMATICAL AND MAY NOT ACCURATELY REFLECT ACTUAL CONSTRUCTION CONDITIONS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT, WITH ALL TRADES PRIOR TO AND DURING CONSTRUCTION.
- B. WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR, AS REQUIRED. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- D. ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS AS REQUIRED. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- COORDINATE WITH DIVISION 23 FOR EXACT LOCATION AND POWER REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH IN. REFER TO SHEET E1.13 FOR MECHANICAL EQUIPMENT SCHEDULE.
- F. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF
- ELECTRICAL CONTRACTOR SHALL REFER TO THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR THE LOW VOLTAGE SYSTEMS/FIRE
- SERVICE ENTRANCE AND METERING EQUIPMENT SHOWN TO APPROXIMATE SCALE, BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLED EQUIPMENT FITS THE SPACE PROVIDED AND THAT ALL REQUIRED WORKING
- CLEARANCES ARE PROVIDED. THE CLASS 'A' TRANSFORMER VAULT SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS AS WELL AS THOSE OF THE UTILITY PROVIDER. MAN-DOOR SHALL BE EQUIPPED WITH PANIC HARDWARE AND AN OUTWARD SWING.
- J. PROVIDE A KEY BOX AT THE TRANSFORMER ROOM DOOR PER THE UTILITY PROVIDER'S REQUIREMENTS, FOR 24/7 ACCESS.
- TENANT ELECTRICAL METERING SHALL BE SUB-METERED BY THE OWNER PER THE UTILITY PROVIDER'S REQUIREMENTS. SUB-METERING EQUIPMENT IS BASED ON SIEMENS SEM3 PRODUCTS. REFER TO SHEET E1.11 FOR ADDITIONAL INFORMATION.
- REFER TO 'E4' SERIES SHEETS FOR TYPICAL DWELLING UNIT POWER PLANS.
- M. PROVIDE ROUGH IN AND WIRING FOR ACCESS CONTROL. REFER TO 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
- LOW VOLTAGE/COMMUNICATIONS SYSTEM DEMARCATION BOARD(S). COORDINATE LOCATIONS AND ELECTRICAL POWER REQUIREMENTS WITH THE TELECOM PLANS ('T' SERIES SHEETS) AND LOW VOLTAGE SYSTEMS INSTALLERS. PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'HP2' SCHEDULE ON E1.12 FOR CIRCUITS.
- REFER TO SHEET E1.12 FOR TYPICAL DWELLING UNIT LOAD CENTER SCHEDULE FOR CIRCUITING INFORMATION.
- EACH UNIT LOAD CENTER TO BE FED VIA SUB-METERING SYSTEM. REFER TO ONE-LINE DIAGRAM ON SHEET E1.11 FOR CONDUCTOR SIZE AND CABLING.

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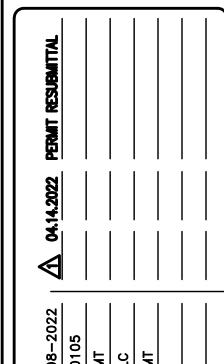
- PROVIDE KEY BOX FOR PGE AT METER ROOM FOR 24/7 ACCESS.
- GENERATOR EMERGENCY DISCONNECT.
- LAUNDRY ROOM GFCI RECEPTACLES FOR WASHING MACHINES TO BE MOUNTED AT 42" A.F.F., OR UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
- 40A, DEDICATED 14-40R DRYER RECEPTACLE (TYPICAL). VERIFY EXACT POWER RATING REQUIRED FOR THE COMMERCIAL DRYERS PRIOR TO ORDERING. LAUNDRY ROOM APPLIANCES CIRCUITED TO PANEL 'HP3'. REFER TO PANEL SCHEDULE ON SHEET E1.12.
- EXHAUST FAN IN THIS AREA TO BE TIED INTO THE LIGHTING CIRCUIT.
- CONSULT ELEVATOR PROVIDER FOR EXACT POWER REQUIREMENTS AND PROVIDE ALL ELECTRICAL WORK AS DIRECTED. VERIFY EXACT LOCATION FOR ELEVATOR EQUIPMENT WITH ARCHITECT AND COORDINATE WITH ELEVATOR INSTALLER.
- SMOKE DAMPER FOR VENTILATION LOUVER. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER AND CIRCUIT AS INDICATED
- PROVIDE POWER CONNECTION FOR IRRIGATION CONTROLS. COORDINATE WITH THE LANDSCAPER FOR EXACT REQUIREMENTS AND LOCATION PRIOR TO ROUGH IN.
- CONSULT FIRE SPRINKLER SYSTEM PLAN SET AND COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR THE
- 10. REFER TO THE HOUSE PANEL 'HP1' PANEL SCHEDULE FOR CORRIDOR RECEPTACLE CIRCUITS ON FLOOR 2 THROUGH 11.
- REFER TO PLUMBING PLAN SHEETS FOR ADDITIONAL INFORMATION ON THE PUMP SYSTEMS IN THIS SPACE. COORDINATE WITH INSTALLER AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED. PROVIDE CIRCUITS FROM PANEL HP2. SEE PANEL SCHEDULES.
- 12. PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL HP3 FOR DRYER BOOSTER FANS. COORDINATE WITH MECHANICAL EQUIPMENT INSTALLER FOR WIRING REQUIREMENTS PRIOR TO ROUGH IN.

#### Add the following notes:

- 13. Power shall be monitored downstream of all disconnects
- 14. Provide current transducer to monitor fan airflow (Hawkeye 608) or equal.
- 15. Provide duct mounted smoke detector at each pressurization fan. Activation of duct detector shall de-energize associated fan. Detector shall be located to ensure maximum velocities do not exceed the listing of the detector. Air balance contractor shall measure velocities of detector to confirm.

REFER TO POWER PLANS FOR REVISED NOTES.





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