

ELECTRICAL SYMBOL LIST

	LIGHT FIXTURE, RECESSED
	LIGHT FIXTURE, RECESSED – EMERGENCY
	LIGHT FIXTURE, SURFACE MOUNT
	LIGHT FIXTURE, SURFACE MOUNT – EMERGENCY
	LIGHT FIXTURE, STRIP
	LIGHT FIXTURE, STRIP – EMERGENCY
	DOWNLIGHT FIXTURE, RECESSED
	DOWNLIGHT FIXTURE, RECESSED – EMERGENCY
	LIGHT FIXTURE, WALL MOUNT
	LIGHT FIXTURE, CEILING MOUNT
	RECESSED LIGHT FIXTURE, WALL MOUNT
	LIGHT FIXTURE, WALL MOUNT
	LIGHT FIXTURE, WALL SCONCE
	LIGHT FIXTURE, TRACK W/ HEADS AS SHOWN ON PLAN
	EXIT SIGN, UNIVERSAL MOUNT, W/ DIRECTIONAL ARROW
	EXIT SIGN, WALL MOUNT, +8'-0" A.F.F.
	EMERGENCY LIGHT W/ BATTERY PACK, +8'-0" A.F.F.
	FLOOD LIGHT
	AREA LUMINAIRE
	AREA LUMINAIRE W/STANDBY LAMP
	AREA LUMINAIRE, WALL MOUNT
	AREA LUMINAIRE, POLE MOUNT

	SWITCH, SPST +48" A.F.F.
	SWITCH, DPST +48" A.F.F.
	SWITCH, 3-WAY +48" A.F.F.
	SWITCH, 4-WAY +48" A.F.F.
	SWITCH, DIMMER +48" A.F.F.
	SWITCH, SPST, W/PILOT LIGHT +48" A.F.F.
	SWITCH, KEY-OPERATED +48" A.F.F.
	SWITCH, TIMED +48" A.F.F.
	PHOTOCELL CONTROL
	OCCUPANCY SENSOR CONTROL

	TELEPHONE OUTLET +18" A.F.F.
	DATA OUTLET +18" A.F.F.
	DATA/TELEPHONE OUTLET +18" A.F.F.
	CLOCK
	SIGNAL BELL
	VISUAL ALARM SIGNAL (COLOR AS INDICATED ON PLAN)
	P.A. SPEAKER
	CATV OUTLET (LOCATE AS SHOWN ON PLANS)

	FIRE ALARM MANUAL PULL STATION, +48" A.F.F.
	MAGNETIC DOOR HOLDER
	SMOKE DETECTOR, W/AUX. CONTACTS
	SMOKE/FIRE DAMPER
	SMOKE DETECTOR, DUCT, IONIZATION TYPE W/SAMPLING TUBE
	SMOKE DETECTOR, IONIZATION TYPE
	SMOKE DETECTOR, PHOTO TYPE
	HEAT DETECTOR, RATE-OF-RISE OR FIXED TEMP.
	FIRE MAIN FLOW DETECTION SWITCH
	FIRE MAIN TAMPER DETECTION SWITCH
	FIRE ALARM BELL, +80" A.F.F.
	FIRE ALARM HORN, +80" A.F.F.
	FIRE ALARM HORN/STROBE, +80" A.F.F.
	FIRE ALARM STROBE, +80" A.F.F.

	RECEPTACLE, DUPLEX +18" A.F.F.
	RECEPTACLE, QUAD +18" A.F.F.
	RECEPTACLE, DUPLEX +6" ABV COUNTER
	RECEPTACLE, DUPLEX +18" A.F.F. (ONE OUTLET SWITCHED)
	RECEPTACLE, DUPLEX +18" A.F.F. (BOTH OUTLETS SWITCHED)
	RECEPTACLE, DUPLEX, PEDESTAL MOUNT
	RECEPTACLE, DUPLEX, FLUSH FLOOR MOUNT
	RECEPTACLE, SPECIAL (COORDINATE WITH EQUIPMENT SERVED)
	RELAY
	TIME CLOCK CONTROL
	PUSHBUTTON STATION
	JUNCTION BOX
	THERMOSTAT
	TRANSFORMER
	DISCONNECT, NON-FUSED
	DISCONNECT, FUSED
	ELECTRICAL CONNECTION
	ELECTRICAL CONNECTION, SINGLE MOTOR
	ELECTRICAL CONNECTION, MULTI-MOTOR
	ELECTRICAL DISTRIBUTION PANEL, RECESSED
	ELECTRICAL DISTRIBUTION PANEL, SURFACE
	MISCELLANEOUS PANEL, RECESSED
	MISCELLANEOUS PANEL, SURFACE
	FLUSH FLOOR BOX (W/ DEVICES AS SHOWN ON PLAN)

	PANEL & CIRCUIT NUMBER
	HOMERUN TO PANEL
	CONDUCTOR SIZE (IF OTHER THAN #12)
	PHASE CONDUCTOR
	NEUTRAL CONDUCTOR
	GROUND CONDUCTOR
	CONCEALED CONDUIT

	CONDUIT SIZE
	CONDUIT (UNDER SLAB OR FLOOR)
	FLEXIBLE CONNECTION
	CONDUIT, STUBBED & CAPPED

	NOTATIONS
	DRAWING NOTE
	DETAIL REFERENCE: TOP=DETAIL NO., BOTTOM=SHEET NO.
	MECHANICAL EQUIPMENT MARK NO. (SEE EQUIPMENT SCHEDULE)
	EQUIPMENT NO. (SEE EQUIPMENT SCHEDULE)

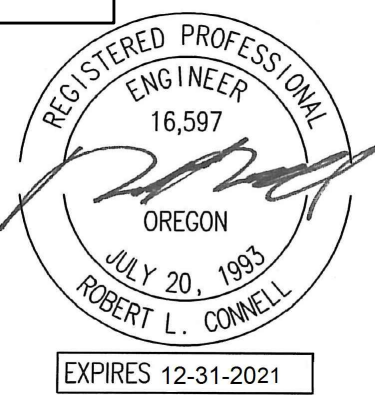
	NORMAL POWER CIRCUIT LINETYPE
	EMERGENCY POWER CIRCUIT LINETYPE
	EXISTING POWER CIRCUIT LINETYPE

	ELECTRICAL DISTRIBUTION PANELBOARD (MLO)
	ELECTRICAL DISTRIBUTION PANELBOARD (MCB)
	SUB-FEED CIRCUIT BREAKER
	CIRCUIT BREAKER (TRIP RATING & POLES AS INDICATED ON PLAN)
	MAIN SWITCH (RATING & POLES AS INDICATED ON PLAN)
	FUSE (RATING & CLASS AS INDICATED ON PLAN)
	TRANSFER SWITCH (MANUAL OR AUTOMATIC)
	GENERATOR (RATING AS INDICATED ON PLAN)
	TRANSFORMER (RATING AS INDICATED ON PLAN)
	FUSE (RATING & CLASS AS INDICATED ON PLAN)
	GROUND SYSTEM (SIZE AS INDICATED ON PLAN)
	WATER PIPE GROUND ELECTRODE
	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	UTILITY METER & METER BASE
	UTILITY METER CURRENT TRANSFORMER
	FEEDER NO. (SEE FEEDER SCHEDULE)

ABBREVIATIONS			
'A'	LIGHT FIXTURE TYPE (SEE FIXTURE LIST)	I.G.	ISOLATED GROUND
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
C	CONDUIT	N.L.	NIGHT LIGHT
C.O.	CONDUIT ONLY	P	POLE
CATV	CABLE TELEVISION	PC	PARTIAL CIRCUIT
CB	CIRCUIT BREAKER	PH	PHASE
CCTV	CLOSED CIRCUIT TELEVISION	R.T.U.	REMOTE TELEMETRY UNIT
C.T.	CURRENT TRANSFORMER	T.V.S.S.	TRANSIENT VOLTAGE SURGE SUPPRESSOR
(E)	EXISTING	U.G.	UNDERGROUND
FACP	FIRE ALARM CONTROL PANEL	U.O.N.	UNLESS OTHERWISE NOTED
G.F.I.	GROUND FAULT INTERRUPTER	VFD	VARIABLE FREQUENCY DRIVE
GND	GROUND	W	WIRE
HP	HORSEPOWER	W.G.	WIRE GUARD
		W.P.	WEATHERPROOF

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

MFI
Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0677
INC. WWW.MFI-ENG.COM
CONTACT: DENISE TAYLOR

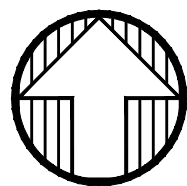
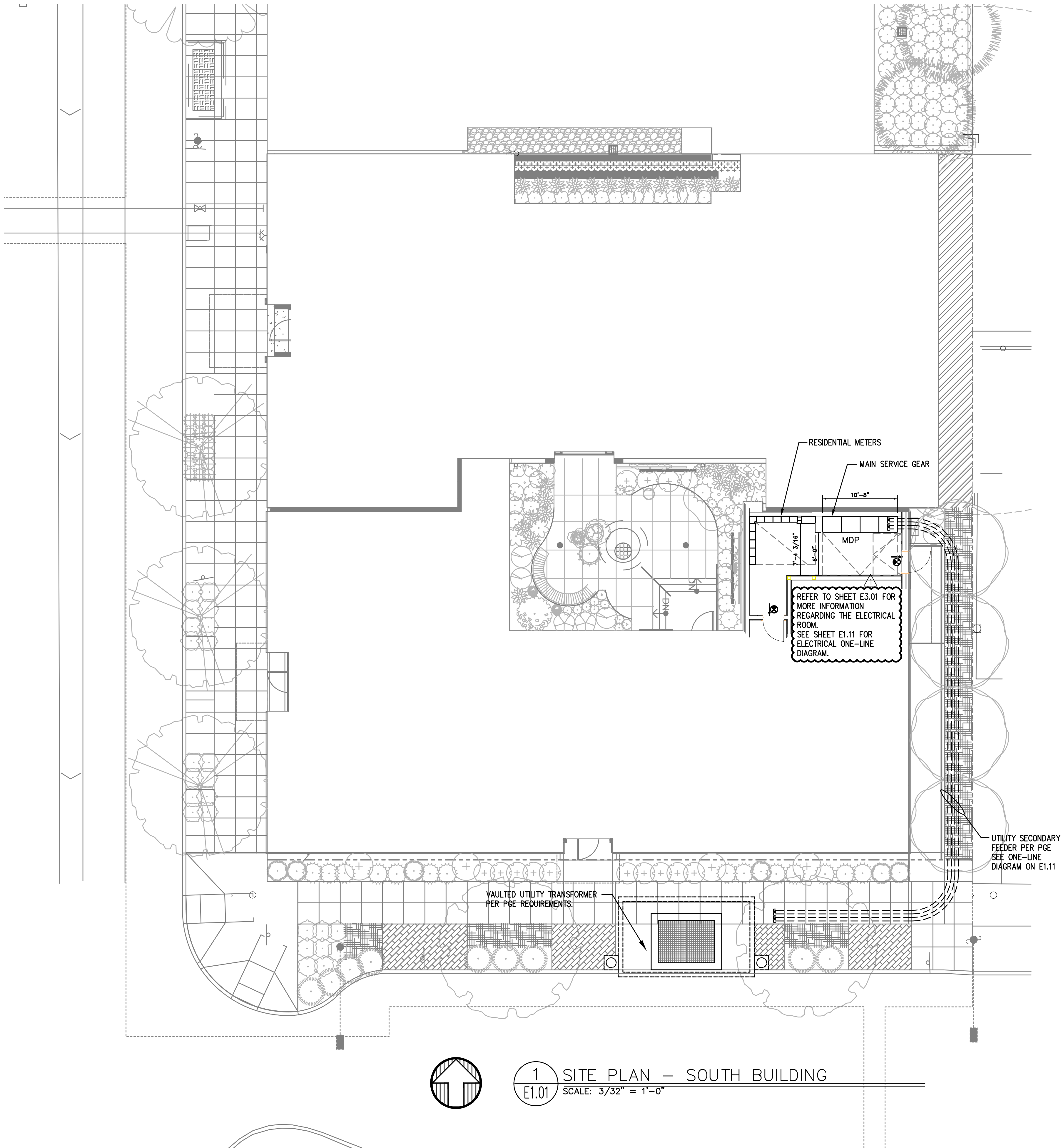


CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

ELECTRICAL LEGEND
PROJECT NO. 17004
03/12/2021
REVISIONS:
ADDENDUM #1 04/30/2021

COPYRIGHT - CARLETON HART ARCHITECTURE DO NOT REPRODUCE WITHOUT PERMISSION



1
E1.01

SITE PLAN — SOUTH BUILDING

SCALE: 3/32" = 1'-0"

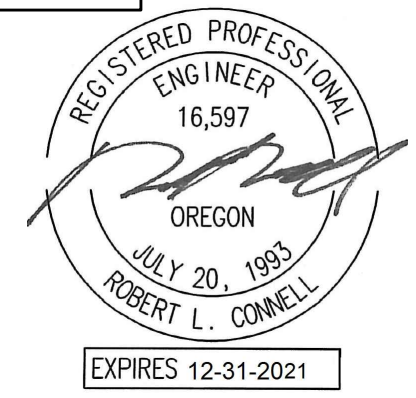
GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL SERVICE ENTRANCE EQUIPMENT DESIGN IS BASED ON SIEMENS PRODUCTS. ACTUAL PRODUCTS USED MAY DIFFER IN SIZE AND CONFIGURATION AND SHALL BE NOTED IN FINAL PROJECT DOCUMENTS.
- COORDINATE WITH LOCAL UTILITY PROVIDER FOR EXACT SERVICE CONDUIT AND CONDUCTORS REQUIREMENTS.
- ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH PGE ELECTRICAL SERVICE REQUIREMENTS.
- U.G. PRIMARY FEEDER SHALL HAVE A MINIMUM 48 INCH BURY.
- U.G. SECONDARY FEEDER SHALL HAVE A MINIMUM 36 INCH BURY.
- REFER TO SHEET E1.11 FOR TYPICAL FEEDER SCHEDULE.
- SECONDARY CONDUIT SWEEPS SHALL BE MINIMUM 60 INCH RADIUS WITH A MINIMUM OR 7'-0" STRAIGHT CONDUIT RUN BETWEEN SWEEPS.
- LOCATION AND INSTALLATION OF THE PRIMARY AND SECONDARY CONDUITS, TRANSFORMER, ETC. SHALL BE PROVIDED PER PGE ELECTRICAL SERVICE REQUIREMENTS.
- REFER TO SHEET E3.01 FOR ELECTRICAL ROOM EQUIPMENT LAYOUT.

PGE REQUIREMENTS

- CUSTOMER TO PROVIDE ALL TRENCHING AND BACKFILLING. TRENCH TO BE 36 INCHES DEEP AND 30 INCHES WIDE, MEASURED FROM FINAL GRADE.
- ALL PGE CONDUCTORS TO BE INSTALLED IN GREY SCHEDULE 40, ELECTRICAL GRADE, PVC CONDUIT WITH NYLON PULL STRINGS (MIN 500 LBS. TEST). PGE 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.
- CONSULT WITH PGE REPRESENTATIVE 2 WEEKS BEFORE STARTING MAIN POWER TRENCHING FOR A PRECONSTRUCTION CONFERENCE. INCLUDED IN THIS CONFERENCE WILL BE EXCAVATOR, PGE, TELCO, CATV, AND GAS.
- CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING. COORDINATE WITH CIVIL.

MET Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0877
INC. WWW.MET-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503.243.2252 | www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

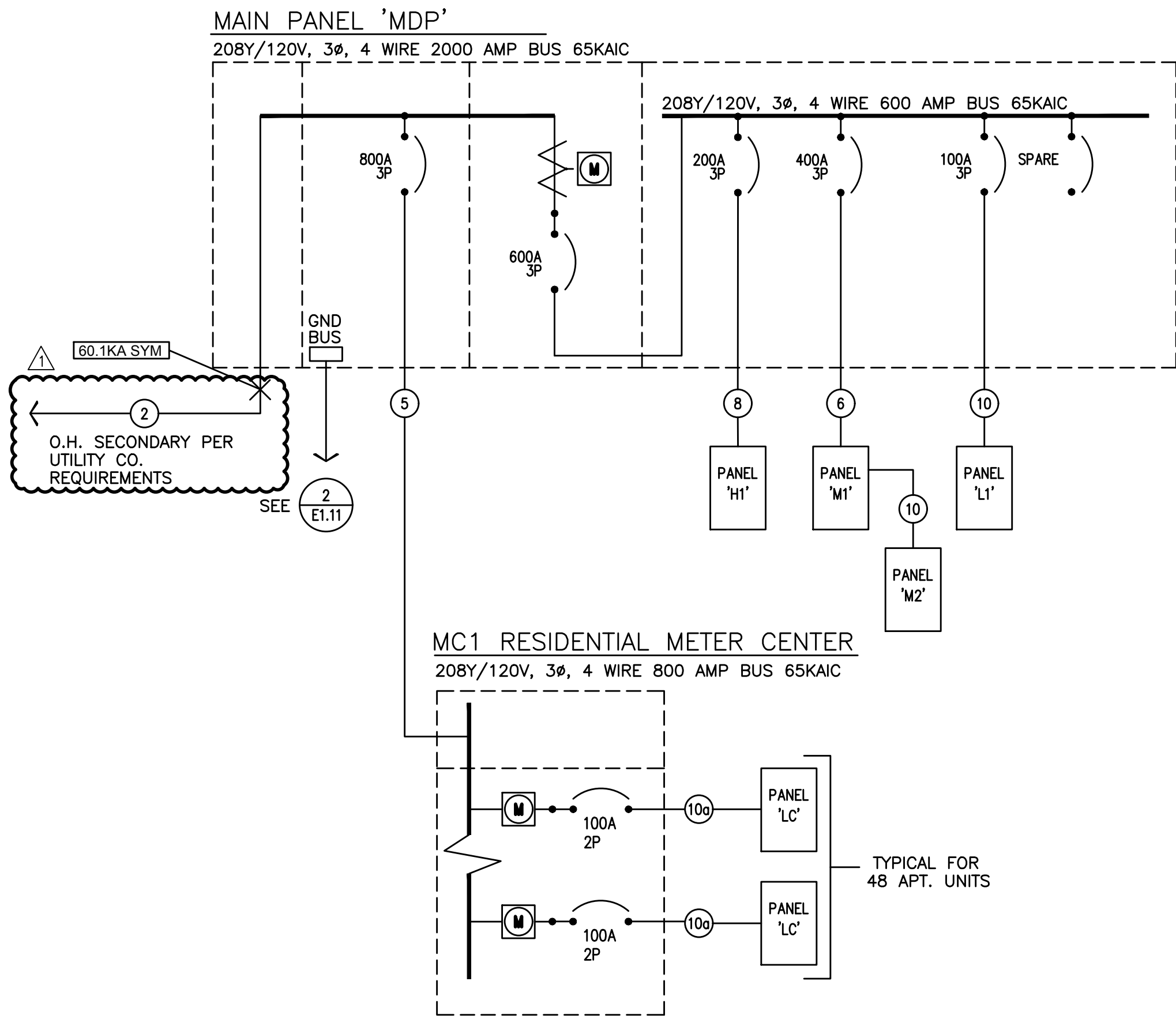
ELECTRICAL
SITE PLAN

PROJECT NO.
17004

03/12/2021

REVISIONS:
 ADDENDUM #1 04/30/2021

E1.01



1 ELECTRICAL ONE-LINE DIAGRAM

E1.11 208Y/120V, 3PH, 4W

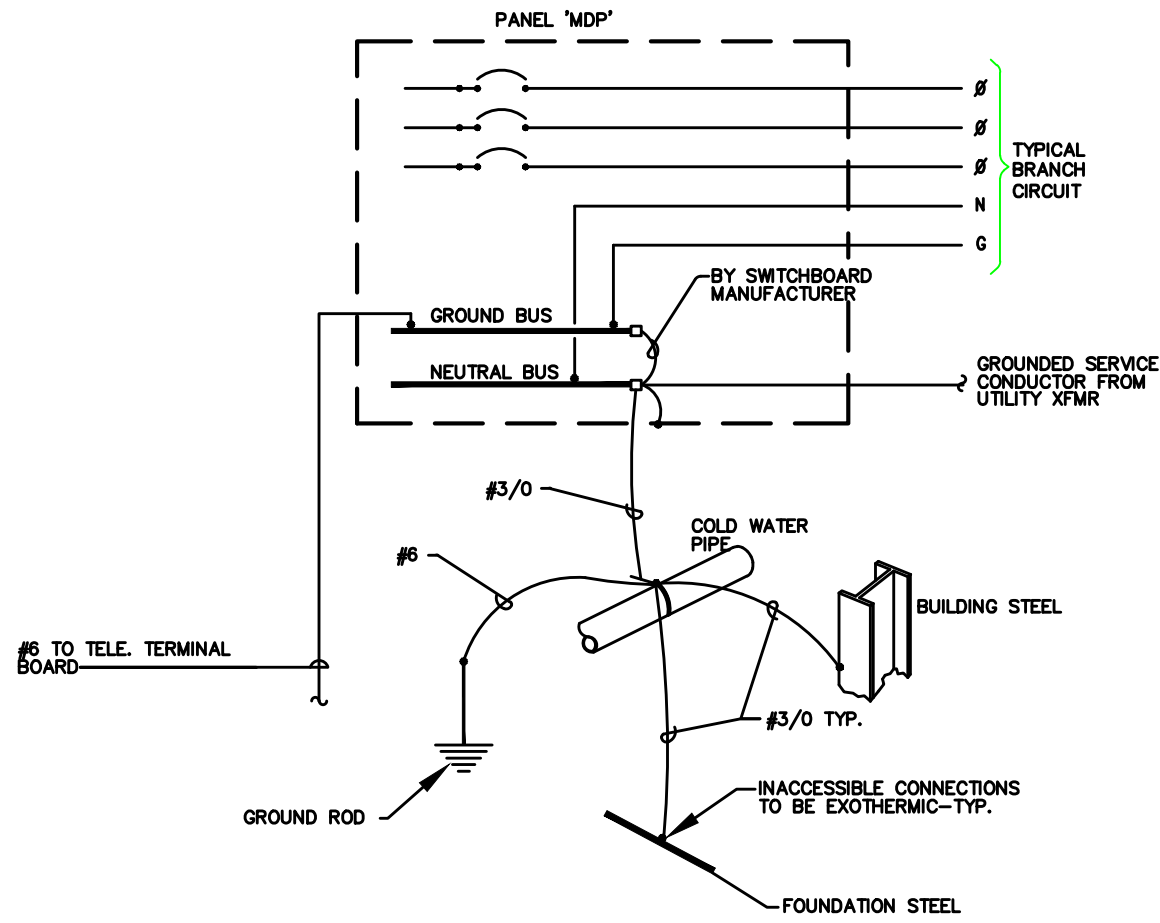
FEEDER SCHEDULE (COPPER)					
NO.	AMPS	CONDUIT	CONDUCTOR		
1		*(5) 4"	BY UTILITY CO.	& (1)	GND
2		*(8) 6"	BY UTILITY CO.	& (1)	GND
3	1600A	*(4) 4"	ea w/ (4) #600Kcmil	& (1) #4/0	GND
4	1200A	*(3) 4"	ea w/ (4) #600Kcmil	& (1) #3/0	GND
5	800A	*(2) 4"	ea w/ (4) #600Kcmil	& (1) #1/0	GND
6	400A	3 1/2"	(4) #500Kcmil	& (1) #3	GND
7	250A	2 1/2"	(4) #250Kcmil	& (1) #4	GND
8	200A	2"	(4) #3/0	& (1) #6	GND
9	150A	2"	(4) #1/0	& (1) #6	GND
10	100A	1 1/2"	(4) #1	& (1) #8	GND
10a	100A	1 1/2"	(3) #1	& (1) #8	GND
11	125A	1 1/2"	(3) #1	& (1) #6	GND
12	60A	1 1/4"	(4) #4	& (1) #10	GND

* PARALLEL FEEDER

Susan Emmons - South Building							
LOAD SUMMARY - MAIN PANEL 'MDP'							
4/27/2021							
LOAD:	LIGHTS	RECEPT	HEAT	KITCHEN	EQUIP	MOTORS	MISC
Panel H1	5,971	16,400	0	13,500	6,000	1,000	0
Panel M1	0	500	6,000	0	12,000	71,395	32,580
Panel L1	0	4,500	0	0	500	17,125	0
Elevator	0	0	0	0	0	42,500	0
Elevator	0	0	0	0	0	42,500	0
Residential Loads	0	0	0	0	0	0	267,000
SUBTOTAL	5,971	21,400	6,000	13,500	18,500	174,520	299,580
X-FACTOR	1.25	1 + .5	1	0.65	1	1	0.25
CODE LOAD:	7,464	15,700	6,000	8,775	18,500	174,520	299,580
10.625							
CONN LOAD:		539 KVA					
VOLTS:		208 3ph					
TOTAL CALC:		541 KVA					
CALC AMPS:		1502 AMPS					

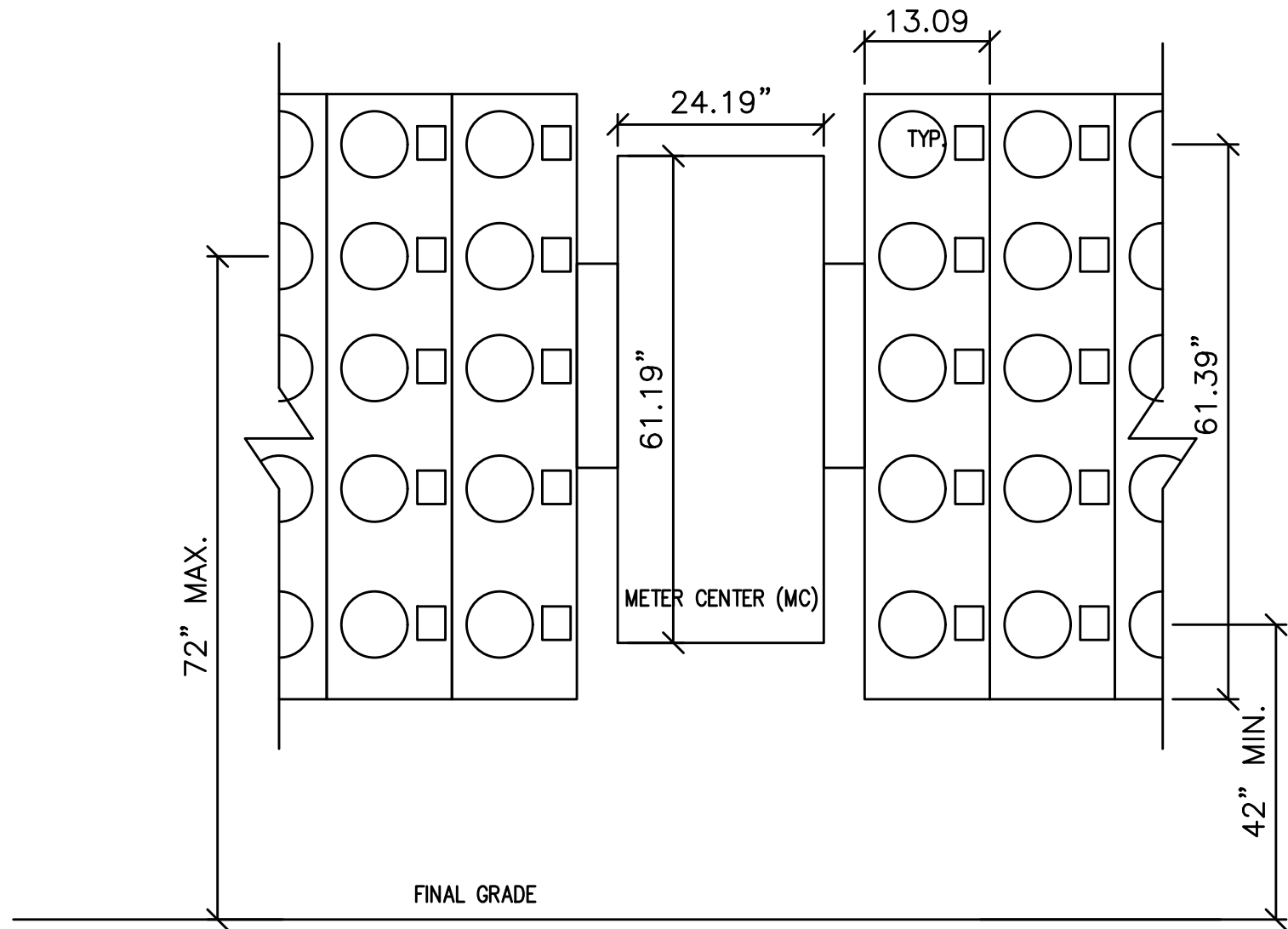
ONE-LINE GENERAL NOTES:

- A. COORDINATE ALL WORK ASSOCIATED WITH ELECTRIC SERVICE WITH LOCAL UTILITY. 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.



2 GROUNDING/BONDING DIAGRAM

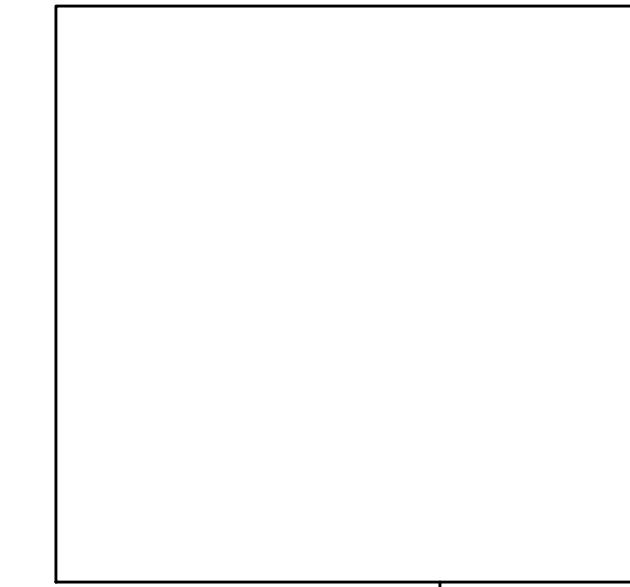
E1.11 208Y/120V, 3Ø, 4 WIRE



3 TYPICAL METER ELEVATION

E1.11 NOT TO SCALE

TYPICAL METER ARRANGEMENT PER PGE REQUIREMENTS. COMPONENTS SHOWN ARE APPROXIMATE BASED ON VENDOR INFORMATION. ACTUAL EQUIPMENT TO BE INSTALLED MAY VARY. ELECTRICAL CONTRACTOR TO PROVIDE CUTSHEETS OF THE PRODUCTS INSTALLED UPON SUBMITTAL REVIEW & APPROVAL.



Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

BID SET

ELECTRICAL
ONE-LINE DIAGRAM

PROJECT NO.
17004

03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021

E1.11

MFIA PANEL SCHEDULE														
panel		mounting		location		connected load amps								
H1 (House Loads)		SURFACE		ELECT RM										
voltage		phase		bus & main		calculated load amps								
120/208V (SCCR: 42KAIC)		3		200A		MLO								
C	service	va	q/p	no.	a b c	no.	a/p	va	service	C				
1	LIGHTS - EXTERIOR	200	20/1	1	*	2	20/1	1080	RECEPT - 1ST FLOOR	2				
1	LIGHTS - STAIR #1	152	20/1	3	*	4	20/1	900	RECEPT - 1ST FLOOR	2				
1	LIGHTS - STAIR #2	152	20/1	5	*	6	20/1	1280	RECEPT - 1ST FLOOR	2				
1	ELEVATOR PIT LITS & RECEPT	1500	20/1	7	*	8	20/1	1280	RECEPT - 1ST FLOOR	2				
1	LIGHTS - 1ST FLOOR (EGRESS)	260	20/1	9	*	10	20/1	500	RECEPT - 1ST FLOOR	2				
1	LIGHTS - 1ST FLOOR (CORRID)	308	20/1	11	*	12	20/1	1500	RECEPT - 1ST FLOOR	2				
1	LIGHTS - 1ST FLOOR (EGRESS)	437	20/1	13	*	14	50/2	6000	RANGE	4				
1	LIGHTS - 2ND FLOOR (EGRESS)	256	20/1	15	*	16	*	6000	*	4				
1	LIGHTS - 2ND FLOOR (CORRID)	224	20/1	17	*	18	20/1	1500	HOOD/MICROWAVE	4				
1	LIGHTS - 3RD FLOOR (EGRESS)	256	20/1	19	*	20	20/1	1080	RECEPT - 1ST FLOOR	2				
1	LIGHTS - 3RD FLOOR (CORRID)	224	20/1	21	*	22	20/1	1280	RECEPT - 2ND FLOOR	2				
1	LIGHTS - 4TH FLOOR (EGRESS)	160	20/1	23	*	24	20/1	1280	RECEPT - 2ND FLOOR	2				
1	LIGHTS - 4TH FLOOR (CORRID)	160	20/1	25	*	26	20/1	1080	RECEPT - 3RD FLOOR	2				
1	LTS - FLR 2,3,4 (EQUIP RMS)	182	20/1	27	*	28	20/1	900	RECEPT - 3RD FLOOR	2				
5	PALLET JACK CHARGER	1500	20/1	29	*	30	20/1	900	RECEPT - 4TH FLOOR	2				
5	SMOKE DAMPERS	1000	20/1	31	*	32	20/1	1080	RECEPT - ROOF	2				
5	SMOKE DAMPERS	1000	20/1	33	*	34	20/1	1000	EF-4	6				
5	SMOKE DAMPERS	1000	20/1	35	*	36	20/1	1500	COURTYARD LIGHTS	1				
5	SMOKE DAMPERS	1000	20/1	37	*	38	20/1	500	MAGNETIC DOOR HOLDERS	5				
2	RECEPT - AMENITY	900	20/1	39	*	40	20/1	1440	RECEPT - OFFICE 329	2				
	SPARE	0	20/1	41	*	42	20/1	0	SPARE	2				
Phase A		16633	VA	NOTES:				line-line voltage						
Phase B		14974	VA											
Phase C		11264	VA											
Total Connected		42871	VA							largest motor (va)		0		
load code:		ph. A	ph. B	ph. C	total		factor		calculated load (va)					
1. LIGHTS=		2553	1074	2344	VA	5971	1.25		7464					
2. RECEPT=		5580	5900	4920	VA	16400	1 + 0.5		13200					
3. HEATING=		0	0	0	VA	0	1.00		0					
4. KITCHEN=		6000	6000	1500	VA	13500	1.00		13500					
5. EQUIP.=		2500	1000	2500	VA	6000	1.00		6000					
6. MOTORS=		0	1000	0	VA	1000	*		1000					
7. MISC=		0	0	0	VA	0	1.00		0					
(* 125% of the largest motor + 100% of the balance)								TOTAL =		41164				

MFIA PANEL SCHEDULE														
panel		mounting		location		connected load amps								
M1 (Mechanical Loads)		SURFACE		ELECT RM										
voltage		phase		bus & main		calculated load amps								
120/208V (SCCR: 42KAIC)		3		400A		MLO								
C	service	va	a/p	no.	a b c	no.	a/p	va	service	C				
3	EH-3	1500	20/2	1	*	2	20/1	500	PHONE BOARD	5				
3	*	1500	*	3	*	4	20/1	500	COMMUNICATIONS BOARD	5				
3	EH-2	500	20/1	5	*	6	20/1	500	RECEPT - ELEV MACH RM	2				
5	AUTO DOORS	1500	20/1	7	*	8	20/1	1176	SP-1	6				
5	BUILDING SIGN	1500	20/1	9	*	10	20/1	1176	SP-2	6				
5	FIRE ALARM REMOTE ANNUNC	500	20/1	11	*	12	20/1	500	WH-1 & WH-2 (GAS)	3				
5	FACP	500	20/1	13	*	14	20/1	1176	RP-1	6				
5	ENTRY SYSTEM	1000	20/1	15	*	16	50/3	3865	BP-1	6				
5	SECURITY SYSTEM	1000	20/1	17	*	18	*	3865	*	6				
5	IRRIGATION	500	20/1	19	*	20	*	3685	*	6				
6	IHP/OHP-2	4368	50/2	21	*	22	50/2	2900	TRASH COMPACTOR	6				
6	*	4368	*	23	*	24	*	2900	*	6				
6	IHP/OHP-3	4368	50/2	25	*	26	20/1	1500	EH-4	3				
6	*	4368	*	27	*	28	20/1	0	SPARE	3				
	SPARE	20/1	29	*	30	20/1	500	EH-2	3					
7	PANEL M2	10860	100/3	31	*	32	20/1	1500	ELEVATOR SMOKE CURTAIN	5				
7	*	10860	*	33	*	34	20/1	1500	ELEVATOR SMOKE CURTAIN	5				
7	*	10860	*	35	*	36	20/1	1500	SNOW MELT SYSTEM	5				
	BLANK	20/1	37	*	38			BLANK						
	BLANK	20/1	39	*	40			BLANK						
	BLANK	20/1	41	*	42			BLANK						
Phase A		61945 VA		NOTES:				line-line voltage						
Phase B		33537 VA								208				
Phase C		26993 VA								largest motor (va)				
Total Connected		122475 VA								0				
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	0	500	VA	500	1 + 0.5			500				
3. HEATING=		3000	1500	1500	VA	6000	1.00			6000				
4. KITCHEN=		0	0	0	VA	0	1.00			0				
5. EQUIP.=		4500	4500	3000	VA	12000	1.00			12000				
6. MOTORS=		43585	16677	11133	VA	71395	*			71395				
7. MISC=		10860	10860	10860	VA	32580	1.00			32580				
(* 125% of the largest motor + 100% of the balance)								TOTAL =		122475				

MFIA PANEL SCHEDULE													
panel		mounting		location		connected load amps						63	
L1 (Laundry)		FLUSH		ELECT RM									
voltage		phase		bus & main		MLO		calculated load amps					
120/208V (SCCR: 42KAIC)		3		100A									
C	service	va	a/p	no.	a	b	c	no.	a/p	va	service	C	
2	WASHER	1500	20/1	1	*			2	40/2	2800	DRYER	6	
2	WASHER	1500	20/1	3	*			4	*	2800	*	6	
2	ELECT BIKE CHARGER	1500	20/1	5	*			6	40/2	2800	DRYER	6	
6	RF-1 (4TH FLR RADON FAN)	215	20/1	7	*			8	*	2800	*	6	
6	RF-1 (5TH FLR RADON FAN)	110	20/1	9	*			10	40/2	2800	DRYER	6	
5	LAUNDRY CARD MACHINE	500	20/1	11	*			12	*	2800	*	6	
6	IHP/OHP-4 - OFFICE 329	0	40/2	13	*			14	20/1	500	DRYER BOOSTERS (x3)	6	
6	*	0	*	15	*			16	20/1	0	SPARE	6	
	BLANK			17	*			18	20/1	0	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			
	BLANK			31	*			32		BLANK			
	BLANK			33	*			34		BLANK			
	BLANK			35	*			36		BLANK			
	BLANK			37	*			38		BLANK			
	BLANK			39	*			40		BLANK			
				41	*			42		BLANK			
NOTES:													
Phase A		7815 VA								line-line voltage			
Phase B		7210 VA										208	
Phase C		7600 VA											
Total Connected		22625 VA								largest motor (va)		0	
load code:		ph. A		ph. B		ph. C		total		factor		calculated load (va)	
1. LIGHTS=		0		0		0		VA		0.125		0	
2. RECEPT.=		1500		1500		1500		VA		4500/1 + 0.5		4500	
3. HEATING=		0		0		0		VA		0 + 1.00		0	
4. KITCHEN=		0		0		0		VA		0 + 1.00		0	
5. EQUIP.=		0		0		500		VA		500 1.00		500	
6. MOTORS=		6315		5710		5600		VA		17625 *		17625	
7. MISC=		0		0		0		VA		0 1.00		0	
(* 125% of the largest motor + 100% of the balance)										TOTAL =		22625	

LIGHTING FIXTURE LIST					
TYPE	LAMP	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	OPTIONS
A1 A1E	LED 3000K 2000LM/80CRI 25W	LITHONIA (OR APPROVED OTHER)	ZLIN SERIES	TYPE :4" GEN. PURPOSE STRIP MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :DIFFUSED ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	TYPE 'AE' SIMILAR TO TYPE 'A' EXCEPT WITH EMERGENCY BATTERY BACK-UP EQUIP. RMS, TRASH RM
A2	LED 3500K 3000LM/80CRI 23W	LITHONIA (OR APPROVED OTHER)	FEML48 SERIES	TYPE :4" ENCLOSED INDUSTRIAL MOUNTING :SURFACE HOUSING :POLYCARBONATE LENS/REFL :CLEAR POLYCARBONATE VOLTAGE :MVOLT BALLAST :LED DRIVER	ELEVATOR PIT & TOP OF SHAFT
B1 B1E	LED 3000K 3600LM/80CRI 34W	FAIL SAFE (OR APPROVED OTHER)	HVSL8 SERIES	TYPE :4" WRAP AROUND MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	B1E TO BE PROVIDED WITH EMERGENCY BATTERY BALLAST. PROVIDE WITH INTEGRAL OCCUPANCY. SENSOR, DIMED STANDBY MODE STAIRWELLS
B3 B3E	LED 3000K 573LM/FT 80CRI 20W	NEO RAY LIGHTING (OR APPROVED OTHER)	SI24DS-C SERIES	TYPE :4FT LINEAR FIXTURE MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :STRAIGHT BLADE DIFFUSER VOLTAGE :MVOLT BALLAST :LED DRIVER (0-10 DIMMING)	B3E PROVIDED WITH EMERGENCY BATTERY BACKUP MATTIE WHITE FINISH VERIFY MOUNTING TYPE W/ ARCHITECT OFFICE/LAUNDRY/BIKE RMS, TRASH RMS
C1 C1E	LED 1300LM/80CRI 3000K 16W	USAI LIGHTING (OR APPROVED OTHER)	B4RD 16G1 SERIES	TYPE :4.5" DIA. DOWNLIGHT MOUNTING :RECESSED HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER (0-10 DIMMING)	C1E PROVIDED WITH EMERGENCY BATTERY BACK UP. 90 DEGREE BEAM TRIMLESS/BLACK FINISH IC RATED CORRIDORS, LOBBY
C2 C2E	LED 3000K 973LM 14W	USAI LIGHTING (OR APPROVED OTHER)	BEVELED 1020 SERIES	TYPE :4.5" DIA. DOWNLIGHT MOUNTING :RECESSED HOUSING :ALUMINUM LENS/REFL :SOLITE VOLTAGE :MVOLT BALLAST :LED DRIVER	C2E TO BE PROVIDED WITH EMERGENCY BATTERY BACK-UP FLANGE TRIM/BRONZE FINISH UL LISTED WET LOCATION MAIN BUILDING ENTRANCES
C3 C3E	LED 3000K 2000LM 10W	LITHONIA LIGHTING (OR APPROVED OTHER)	WDG1 P2 SERIES	TYPE :EXTERIOR WALL PACK MOUNTING :SURFACE (+8'-0") HOUSING :ALUMINUM LENS/REFL :ACRYLIC VOLTAGE :MVOLT BALLAST :LED DRIVER	C3E TO BE PROVIDED WITH EMERGENCY BATTERY BACK UP FLANGE TRIM/BRONZE FINISH TYPE VW DISTRIBUTION WET LOCATION LISTED BUILDING MAINTENANCE COURTYARD
C4S	(2) LED A19 3000K 10W	SEA GULL LIGHTING (NO SUBSTITUTE)	8313802-12	TYPE :EXTERIOR WALL SCONCE MOUNTING :SURFACE (+8'-0") HOUSING :ALUMINUM LENS/REFL :NA VOLTAGE :120V BALLAST :INTEGRAL LED DRIVER	C4E TO BE PROVIDED WITH REMOTE EMERGENCY BATTERY BACK UP. BLACK FINISH WET LOCATION LISTED BUILDING SERVICE ENTRANCES
F2	LED 3000K 550LM 20W	KICHLER (NO SUBSTITUTE)	49298BKLED	TYPE :EXTERIOR WALL SCONCE MOUNTING :SURFACE (+8'-0") HOUSING :ALUMINUM LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :LED DRIVER	ADA COMPLIANT. VERIFY MOUNTING HEIGHT BLACK FINISH WET LOCATION LISTED MAIN BUILDING ENTRANCE
D1	LED 1020LM/FT 3000K (6.7W/FT)	KELVIX LIGHTING (OR APPROVED EQUAL)	VT35K-WR-24V SERIES CH-011 CHANNEL	TYPE :LINEAR LED TAPE (16'-6") MOUNTING :SURFACE (IN CHANNEL) HOUSING :ALUMINUM LENS/REFL :ACRYLIC/FROSTED VOLTAGE :24 VOLT DC BALLAST :LED DRIVER	VERIFY EXACT LENGTHS W/ARCHITECT CHANNEL TYPE PER ARCHITECT PROVIDE APPROPRIATE TRANSFORMER(S) AND ACCESSORIES FOR EACH LOCATION. UL LISTED WET LOCATION
L1 ①	LED 3000K 1620LM 18W	LIGHTOLOGY (OR APPROVED OTHER)	RLM801450	TYPE :18" DECORATIVE PENDANT MOUNTING :SUSPENDED HOUSING : LENS/REFL :GLASS GLOBE VOLTAGE :120V BALLAST :INTEGRAL LED DRIVER	MATTIE BLACK FINISH PROVIDE WITH ADJUSTABLE SUSPENSION CORD. COMMUNITY ROOM
L2 ⚠	LED 3000K 35710LM 42W	LIGHTOLOGY (OR APPROVED OTHER)	HAMPTON SERIES	TYPE :20.9" DIA CEILING LIGHT MOUNTING :SURFACE HOUSING :METAL LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :INTEGRAL LED DRIVER	MATTIE BLACK FINISH AMMENITY, AMENITY KITCHEN
L3 L3E	LED 3000K 2000LM 22W	ALCON LIGHTING (OR APPROVED OTHER)	11170-12 SERIES	TYPE :12" DIA CEILING LIGHT MOUNTING :SURFACE HOUSING :METAL LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :INTEGRAL LED DRIVER	FINISH PER ARCHITECT L3E PROVIDE WITH REMOTE EMERGENCY BATTERY BACK UP CORRIDORS, RESTRM
L4	LED 3000K 2621LM 28W	LANDSCAPE FORMS (OR APPROVED OTHER)	TUMBLER SERIES	TYPE :CANTERNARY (STRING) LIGHTS MOUNTING :SUSPENDED (12FT) HOUSING :METAL LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :INTEGRAL LED DRIVER	MATTIE BLACK FINISH QUANTITY OF FIXTURES AS SHOWN ON LIGHTING PLANS COURTYARD

LIGHTING FIXTURE LIST					
TYPE	LAMP	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	OPTIONS
U1	LED 700LM/90CRI 3000K (10W)	LIGHTOLIER (OR APPROVED EQUAL)	SDSR SERIES	TYPE :5" DIA. DOWNLIGHT MOUNTING :SURFACE (J-BOX) HOUSING :ALUMINUM LENS/REFL :MOLDED POLYMER VOLTAGE :MVOLT BALLAST :LED DRIVER (0-10 DIMMING)	WHITE FINISH UNIT KITCHEN, HALL, BATHROOM
U3	LED 1300LM/90CRI 3000K 16W	DESIGN CLASSICS (OR APPROVED EQUAL)	PRODUCT #646438 MODEL 1330-30-90	TYPE :24" VANITY LIGHT MOUNTING :SURFACE (+6" ABOVE MIRROR) HOUSING :STEEL LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :INTEGRAL DRIVER	CHROME FINISH UNIT BATHROOM
U4	LED 2500lm 3000K (36W)	MAXIM LIGHTING (OR APPROVED OTHER)	WAFFER SERIES 57746WTMT	TYPE :4FT FLAT PANEL MOUNTING :SURFACE HOUSING :ALUMINUM LENS/REFL :ACRYLIC VOLTAGE :120V BALLAST :LED DRIVER (0-10 DIMMING)	WHITE FINISH UNIT KITCHEN
U5	LED 1200LM 3000K (17W)	PROGRESS LIGHTING (OR APPROVED EQUAL)	P3911 SERIES	TYPE :14" DIA. CEILING LIGHT MOUNTING :SURFACE HOUSING :STEEL LENS/REFL :WHITE ACRYLIC VOLTAGE :120V BALLAST :LED DRIVER (0-10 DIMMING)	WHITE FINISH UNIT BEDROOM, LIVING ROOM
X1 X2	LED (GREEN LETTERS) (1.5W)	LITHONIA DMF LIGHTING (OR APPROVED OTHER)	LE EL N SERIES DLED500EM-G	TYPE :EXIT SIGN MOUNTING :SURFACE HOUSING :DIE-CAST ALUMINUM LENS/REFL :SINGLE FACE/DUAL FACE VOLTAGE :MVOLT BALLAST :NICKLE CADMIUM BATTERY	X1-SINGLE SIDE X2-DOUBLE SIDE
X3	LED (GREEN LETTERS) (1.5W)	LITHONIA (OR APPROVED OTHER)	WLTE EL SERIES	TYPE :EXIT SIGN MOUNTING :UNIVERSAL HOUSING :DIE-CAST ALUMINUM LENS/REFL :SINGLE FACE VOLTAGE :MVOLT BALLAST :NICKLE CADMIUM BATTERY	FINISH PER ARCHITECT LISTED WET LOCATION

MECHANICAL EQUIPMENT SCHEDULE									
NO.	EQUIPMENT NAME	HP/KW	VOLTS	PH	AMPS	CONDUIT	WIRE	GND	CIRCUIT
EF-1	EXHAUST FAN NO.1	38W	120	1		1/2"	#12	#12	SEE UNIT PLANS
EF-2	EXHAUST FAN NO.2	8.2A	120	1		1/2"	#12	#12	SEE E3.01
EF-3	EXHAUST FAN NO.3	7.7A	120	1		1/2"	#12	#12	SEE E3.02
EF-4	EXHAUST FAN NO.4	1/4HP	120	1		1/2"	#12	#12	H1-34
EF-5	EXHAUST FAN NO.5	1/10 HP	120	1		1/2"	#12	#12	SEE E3.01/NOTE 16
EF-6	EXHAUST FAN NO.6	8.2A	120	1		1/2"	#12	#12	
EH-1	ELECT HEATER NO.1	1.5KW	120V	1		1/2"	#12	#12	SEE UNIT PLANS
EH-2	ELECT HEATER NO.2	500W	120	1		1/2"	#12	#12	M1-5
EH-3	ELECT HEATER NO.3	3.0KW	208	1		1/2"	#12	#12	M1-1,3
EH-4	ELECT HEATER NO.4	1.5KW	120V	1		1/2"	#12	#12	M1-26
IHP-1	MINI SPLIT SYST NO.1 (INDOOR)	(A & B)							
OHP-1	MINI SPLIT SYST NO.1 (OUTDOOR)		208	1	42.0 MCA	3/4"	#6	#10	SEE UNIT PLANS
IHP-2	MINI SPLIT SYST NO.2 (INDOOR)								
OHP-2	MINI SPLIT SYST NO.2 (OUTDOOR)		208	1	42.0 MCA	3/4"	#6	#10	M1-21,23
IHP-3	MINI SPLIT SYST NO.3 (INDOOR)	(A & B)							
OHP-3	MINI SPLIT SYST NO.3 (OUTDOOR)		208	1	42.0 MCA	3/4"	#6	#10	M1-25,27
IHP-4	MINI SPLIT SYST NO.4 (INDOOR)								
OHP-4	MINI SPLIT SYST NO.4 (OUTDOOR)		208	1	42.0 MCA	3/4"	#6	#10	L1-13,15
RTU-1	AIR HANDLING UNIT NO.1		208	3	30.0 MCA	3/4"	#6	#10	M2-1,3,5
RTU-2	AIR HANDLING UNIT NO.2		208	3	24.0 MCA	1/2"	#10	#10	M2-7,9,11
RTU-3	AIR HANDLING UNIT NO.3		208	3	24.0 MCA	1/2"	#10	#10	M2-13,15,17
SP-1	SUMP PUMP NO.1	1/2HP	120	1		1/2"	#12	#12	M1-8
SP-2	SUMP PUMP NO.2	1/2HP	120	1		1/2"	#12	#12	M1-10
RF-1	RADON FAN NO.1	53W	120	1		1/2"	#12	#12	L1- 7 & 8
RP-1	RECIRC PUMP NO.1	1/2HP	120	1		1/2"	#12	#12	M1-14
BP-1	BOOSTER PUMP NO.1	(2) 5HP	208	3	28.8 EA.	1"	#4	#10	M1-16,18,20
WH-1	WATER HEATER NO.1 (GAS)		120	1		1/2"	#12	#12	M1-12 (PC)
WH-2	WATER HEATER NO.2 (GAS)		120	1		1/2"	#12	#12	M1-12 (PC)

GENERAL LIGHTING NOTES:

- A. ALL LIGHT FIXTURES SHALL HAVE ENERGY EFFICIENT LAMPING AND BALLASTS.
- B. LIGHT FIXTURES FOR LIVING UNITS SHALL BE "ENERGY STAR" RATED.
- C. VERIFY ALL FIXTURE FINISHES WITH ARCHITECT PRIOR TO BID.
- D. VERIFY ALL FIXTURE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO BID.
- E. VERIFY ALL FIXTURE LOCATIONS WITH ARCHITECT PRIOR TO ROUGH IN.
- F. ALL INTERIOR LIGHTING SHALL BE 3000 KELVIN UNLESS OTHERWISE NOTED.
- G. ALL PRODUCT SUBSTITUTIONS AND VALUE ENGINEERING SHALL BE SUBMITTED DURING BID PHASE, SHALL MEET DESIGN INTENT AND IS SUBJECT TO OWNER APPROVAL.
- H. EGRESS LIGHTING SHALL BE PROVIDED WITH EMERGENCY BATTERY BACKUP, EITHER INTEGRAL OR REMOTE, AS REQUIRED. EGRESS LIGHTING SHALL BE PROVIDED TO MEET MINIMUM LIGHT LEVELS AS DESCRIBED PER OREGON STRUCTURAL SPECIALTY CODE 1006.3.
- I. BUILDING MOUNTED LIGHT FIXTURES SHALL BE CONTROLLED VIA PHOTOCCELL AND SHALL ACT AS EGRESS LIGHTING IN THE EVENT OF POWER FAILURE.

KEYED LIGHTING NOTES:

1. PROVIDE REMOTE EMERGENCY BATTERY PACK FOR THE FIXTURES IN THE MAIN LOBBY.

GENERAL EQUIPMENT NOTES:

- 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.

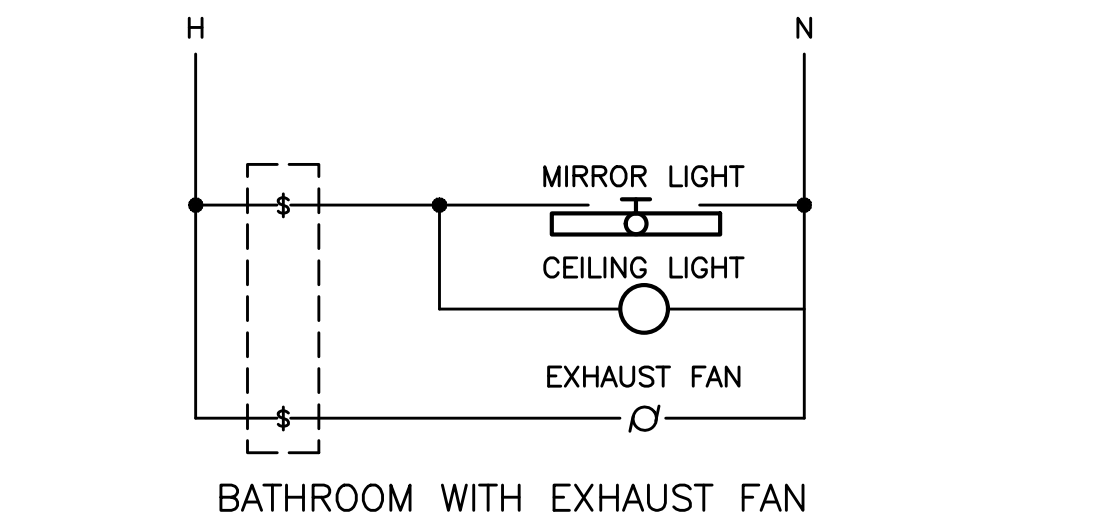
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

BID SET

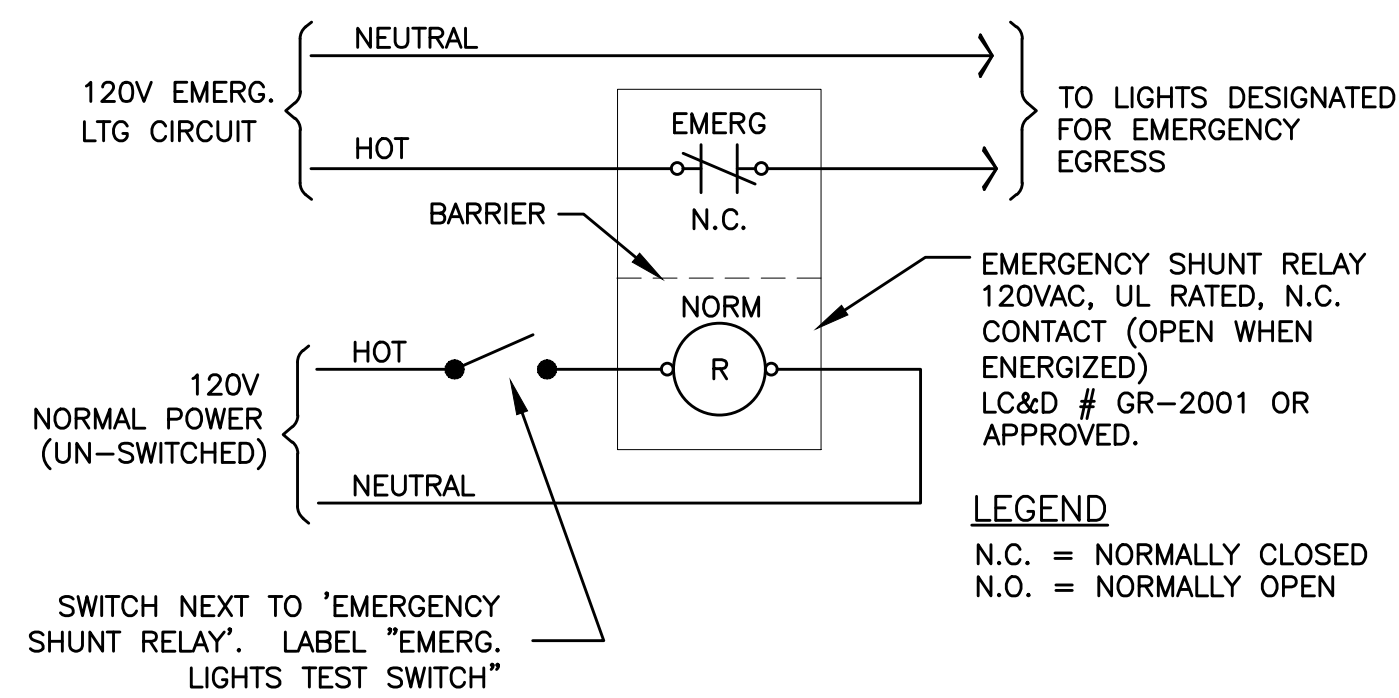
ELECTRICAL
SCHEDULES & DETAILS

PROJECT NO.
17004
03/12/2021

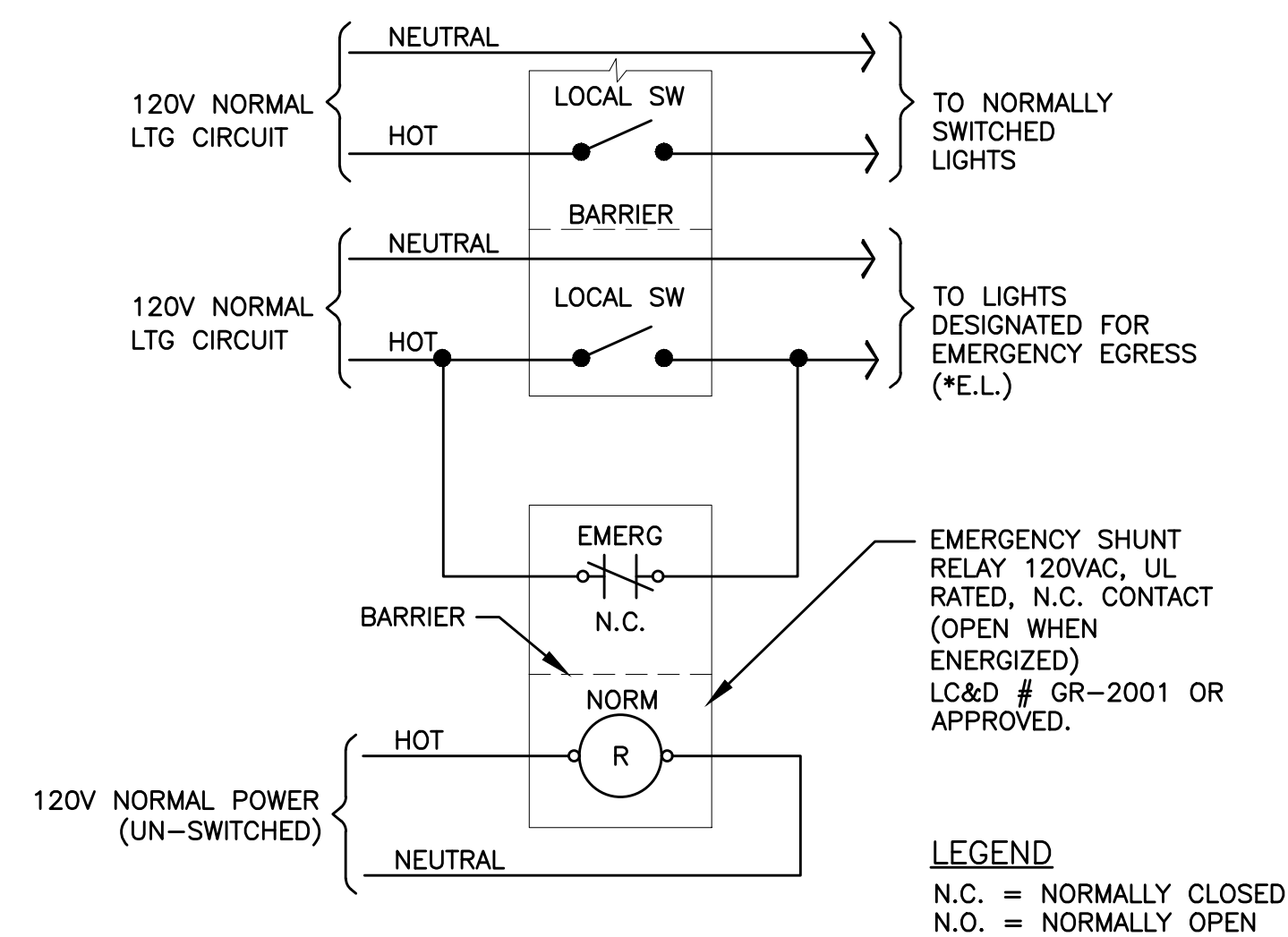
REVISIONS:
ADDENDUM #1 04/30/2021



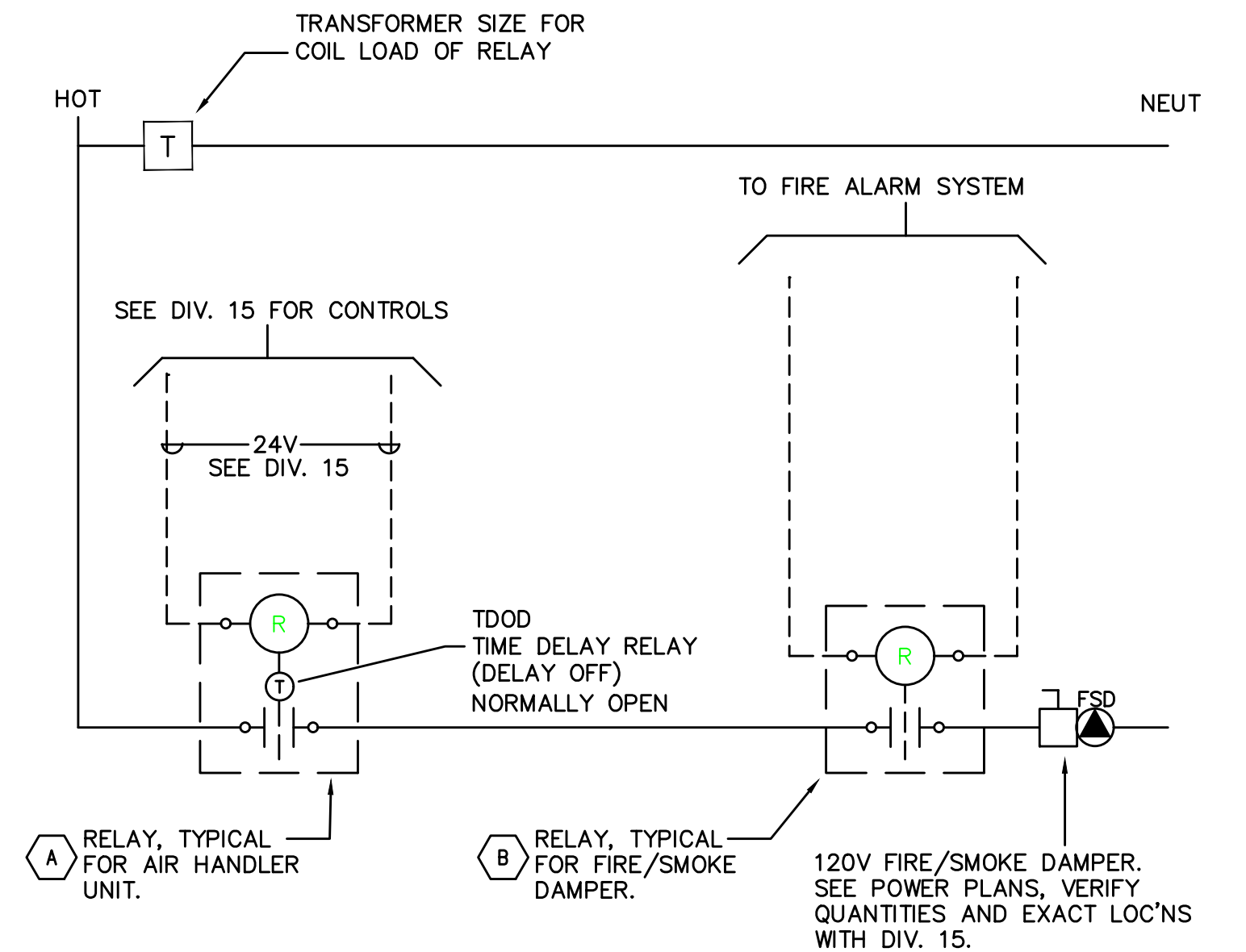
1 BATHROOM SWITCHING DIAGRAM — TYPICAL
E1.14 NO SCALE



2 EMERGENCY EGRESS LIGHTING — UNSWITCHED
E1.14 NO SCALE

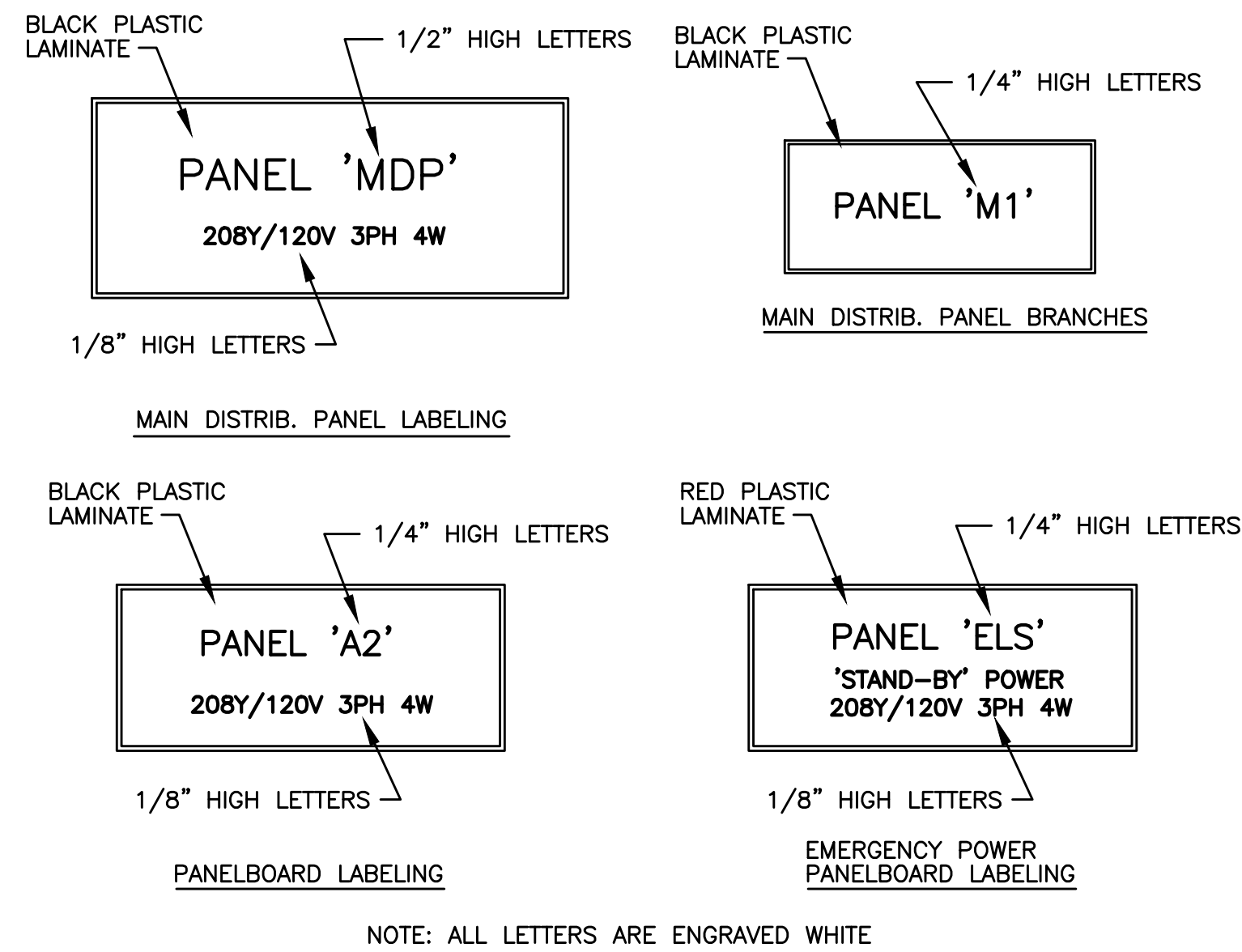


3 EMERGENCY EGRESS LIGHTING — SWITCHED
E1.14 NO SCALE

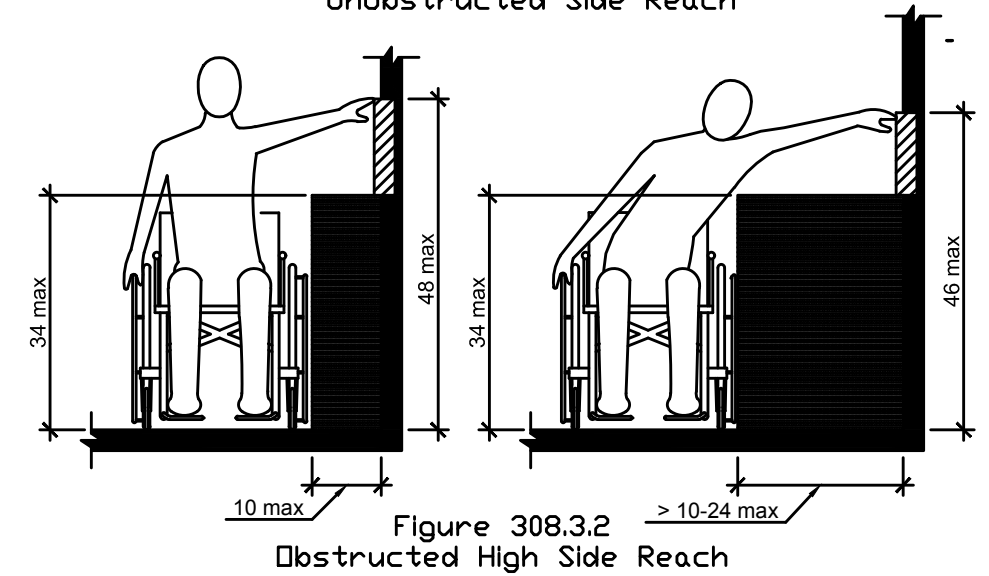
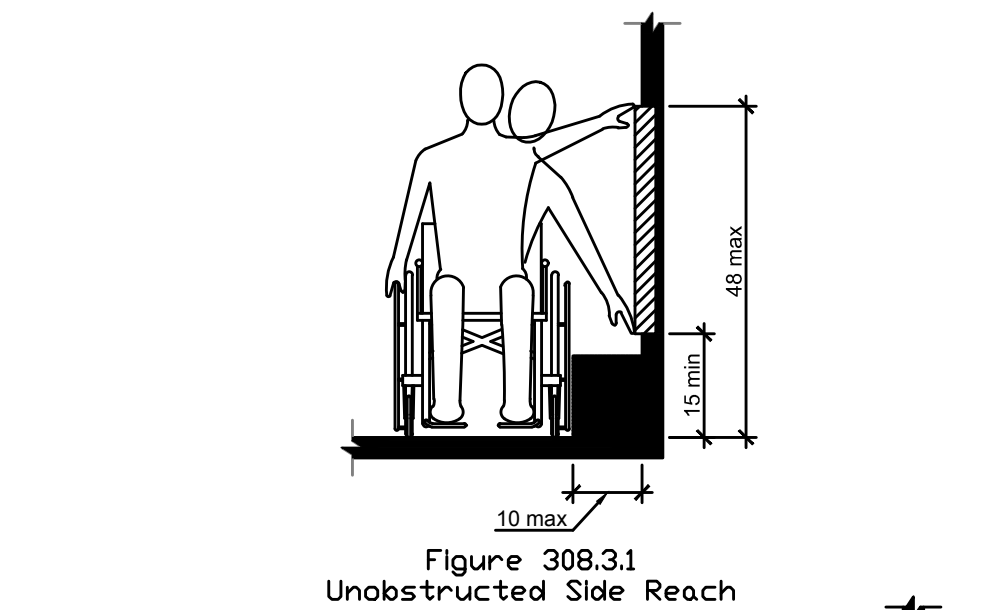
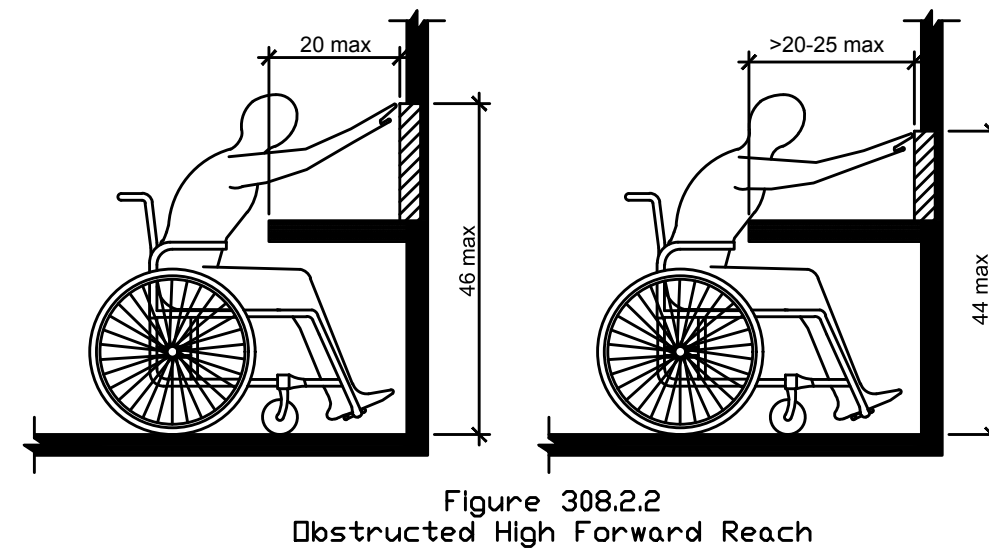
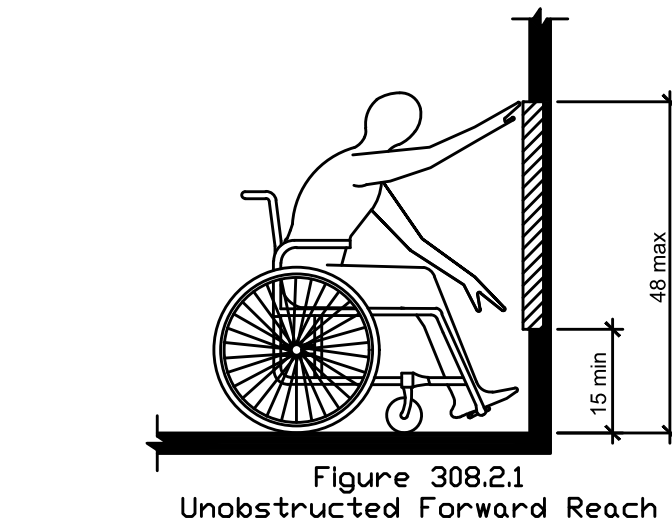


5 SMOKE/FIRE DAMPER CONTROL DIAGRAM
E1.14 NO SCALE

- ADDRESSABLE DETECTOR CONTROL
- A RELAY TO BE "NORMALLY OPEN". TODD (TIME DELAY ON DE-ENERGIZE) SET FOR 15 SECONDS. RELAY TO CLOSE UPON SIGNAL FROM HVAC CONTROL SYSTEM (ALLOWS DAMPER TO OPEN); 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.



6 SWITCHBOARD/PANEL LABELING DETAIL
E1.14 NO SCALE



7 ADA REACH REQUIREMENTS
E1.14 N.T.S.

308.2 Forward Reach.

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

308.2.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor or ground space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48" maximum where the reach depth is 20" maximum. Where the reach depth exceeds 20", the high forward reach shall be 44" maximum and the reach depth shall be 25" maximum.

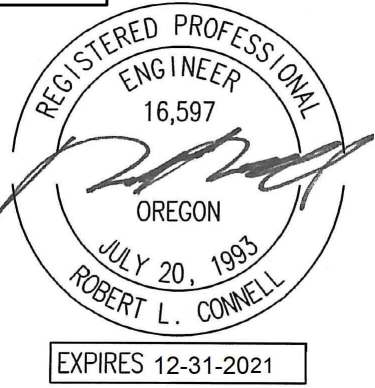
308.3 Side Reach.

308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to 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 ground.

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 parallel approach to an object and the high side reach is over an obstruction, the height of the obstruction shall be 34" maximum and the depth of the obstruction shall 24" 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 46" maximum for a reach depth of 24" maximum.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, OR 97205
503 243 2252
www.carletonhart.com

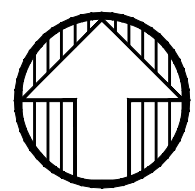
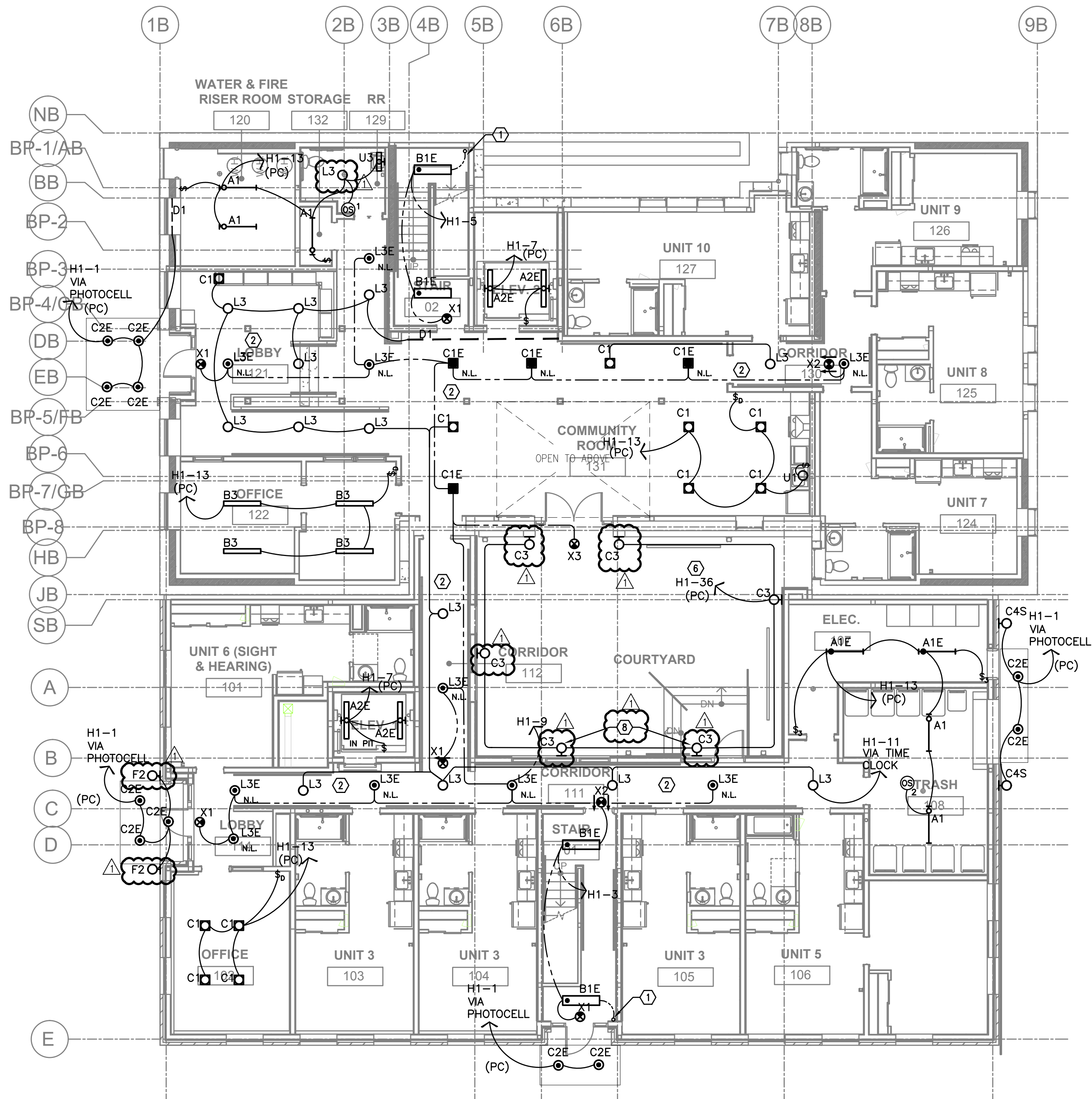
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

BID SET

ELECTRICAL DETAILS

PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021



1 FIRST FLOOR LIGHTING PLAN
E2.01 SCALE: 1/8" = 1'-0"

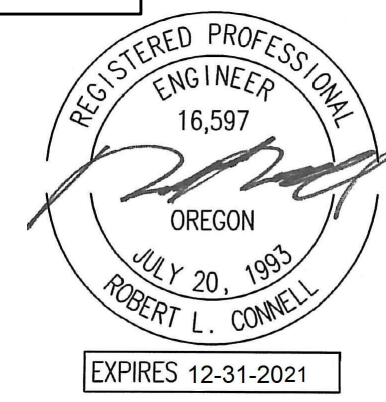
GENERAL LIGHTING NOTES:

- 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.
- THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE RESIDENTIAL UNITS.
- REFER TO SHEET E1.14 FOR LIGHT FIXTURE SCHEDULE.
- THE CONTRACTOR SHALL CONSULT THE ARCHITECT AND/OR INTERIOR DESIGNER FOR THE EXACT LOCATION OF ALL LIGHT FIXTURES PRIOR TO THE START OF ANY ROUGH IN WORK.
- OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE COVERAGE AND PROPER CONTROL.
- CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. ROUTE CORRIDOR LIGHTING VIA TIME CLOCK TO REDUCE LIGHT LEVELS BY 50% DURING PERIODS OF LOW ACTIVITY (EG. MIDNIGHT TO 4AM). REFER TO SHEET E1.15 FOR SWITCH WIRING DIAGRAMS.
- ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER REGARDLESS OF SWITCH POSITION. REFER TO SWITCHING DETAILS ON SHEET E1.15.

KEYED NOTES:

- CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
- CORRIDOR EGRESS LIGHTS SHALL BE ON 24/7. ALL OTHER CORRIDOR FIXTURES TO BE CIRCUITED VIA MECHANICAL TIME CLOCK AND SET TO REDUCE THE LIGHT LEVELS DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
- LOBBY PENDANT LIGHTS SHALL BE ON 24/7 AND CIRCUITED VIA MECHANICAL TIME CLOCK, SET TO DIM THE LIGHT LEVELS BY 50% DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
- EXTEND CIRCUIT TO POWER CONNECTION POINT FOR LOW VOLTAGE LIGHTING, IF REQUIRED. CONSULT LANDSCAPE AND/OR ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- PROVIDE ONE WEATHER PROOF 20A POWER CONNECTION MOUNTED AT 12FT AFF. FOR CANTERINARY LIGHTS. CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE AND EXACT MOUNTING HEIGHT.
- CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE.
- PROVIDE FIXTURE WITH A REMOTE BATTERY BACKUP FOR EMERGENCY EGRESS ILLUMINATION. LOCATE REMOTE DEVICE ABOVE CEILING, SO AS NOT TO BE IN CONFLICT WITH OTHER DEVICES AND/OR TRADES.
- LIGHT FIXTURE TO BE CENTERED ABOVE WINDOW.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



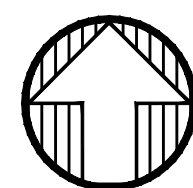
CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

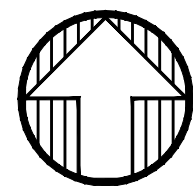
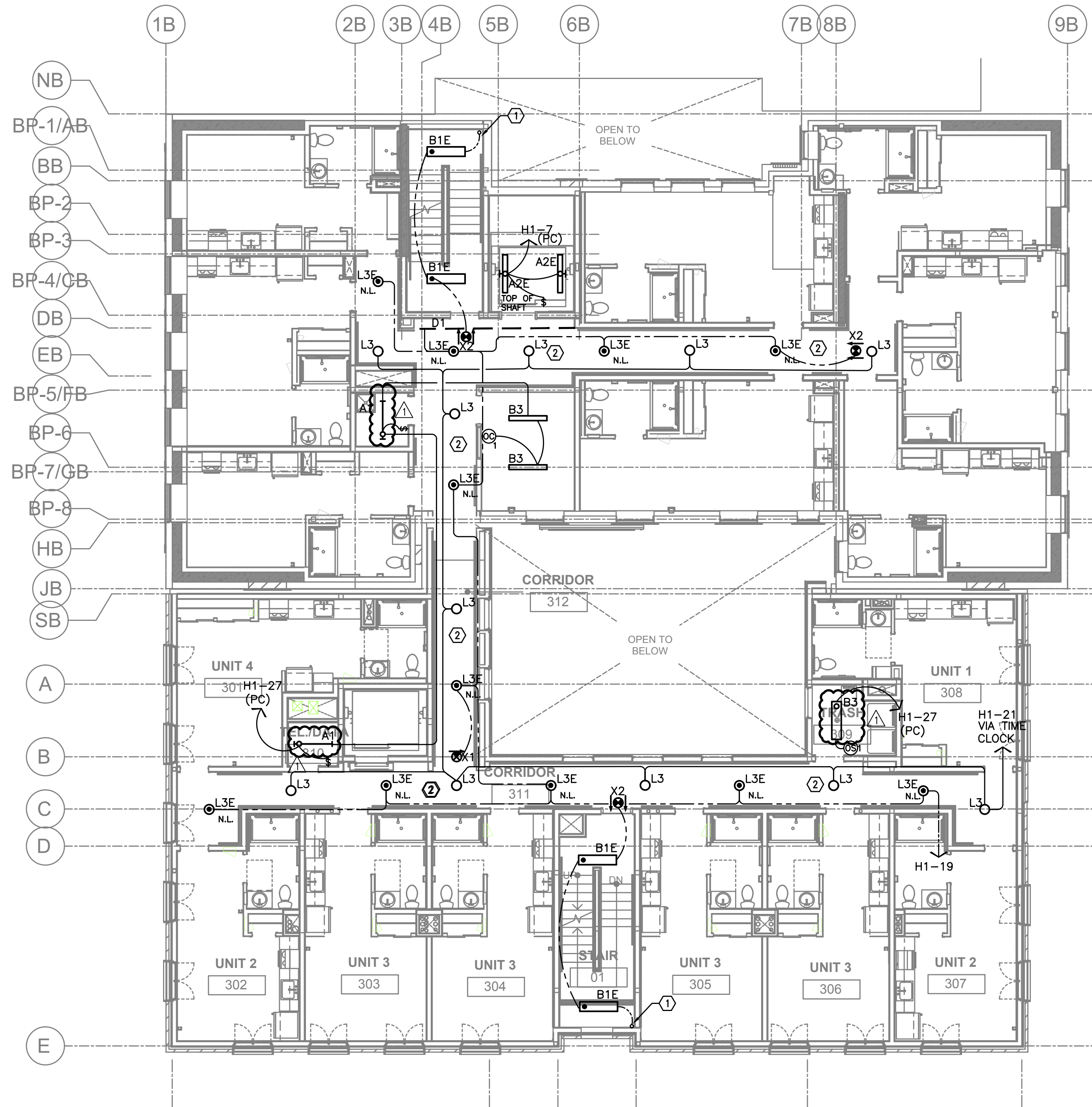
FIRST FLOOR
LIGHTING PLAN

PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021



- ## E2.02



1 THIRD FLOOR LIGHTING PLAN
E2.03 SCALE: 1/8" = 1'-0"

GENERAL LIGHTING NOTES:

- 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.
- THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL MOUNTING HEIGHTS AND FINISHES OF DEVICES AND FIXTURES.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE RESIDENTIAL UNITS.
- REFER TO SHEET E1.14 FOR LIGHT FIXTURE SCHEDULE.
- THE CONTRACTOR SHALL CONSULT THE ARCHITECT AND/OR INTERIOR DESIGNER FOR THE EXACT LOCATION OF ALL LIGHT FIXTURES PRIOR TO THE START OF ANY ROUGH IN WORK.
- OCCUPANCY SENSORS SHALL BE FIELD ADJUSTED TO ENSURE COVERAGE AND PROPER CONTROL.
- CORRIDOR LIGHTING TO BE CONSTANT "ON" AND PROVIDED WITH LOCAL MANUAL OVERRIDE SWITCHES FOR MAINTENANCE. ROUTE CORRIDOR LIGHTING VIA TIME CLOCK TO REDUCE LIGHT LEVELS BY 50% DURING PERIODS OF LOW ACTIVITY (EG. MIDNIGHT TO 4AM). REFER TO SHEET E1.15 FOR SWITCH WIRING DIAGRAMS.
- ALL EGRESS FIXTURES SHALL BE WIRED SUCH THAT IN THE EVENT OF A POWER FAILURE, ALL LIGHTS WILL AUTOMATICALLY RETURN TO FULL POWER REGARDLESS OF SWITCH POSITION. REFER TO SWITCHING DETAILS ON SHEET E1.15.

KEYED NOTES:

- CONTINUE CIRCUIT UP THROUGH THE STAIRWELL.
- CORRIDOR EGRESS LIGHTS SHALL BE ON 24/7. ALL OTHER CORRIDOR FIXTURES TO BE CIRCUITED VIA MECHANICAL TIME CLOCK AND SET TO REDUCE THE LIGHT LEVELS DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
- LOBBY PENDANT LIGHTS SHALL BE ON 24/7 AND CIRCUITED VIA MECHANICAL TIME CLOCK, SET TO DIM THE LIGHT LEVELS BY 50% DURING PERIODS OF LOW ACTIVITY (EG. 12AM TO 4AM). CONSULT OWNER FOR PREFERRED TIME CLOCK SETTINGS. LOCATE TIME CLOCK IN ELECTRICAL ROOM.
- EXTEND CIRCUIT TO POWER CONNECTION POINT FOR LOW VOLTAGE LIGHTING, IF REQUIRED. CONSULT LANDSCAPE AND/OR ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
- PROVIDE ONE WEATHER PROOF 20A POWER CONNECTION MOUNTED AT 12FT AFF, FOR CANTERINARY LIGHTS. CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE AND EXACT MOUNTING HEIGHT.
- CIRCUIT AS INDICATED VIA PHOTOCELL OR MECHANICAL TIME CLOCK. CONSULT ARCHITECT FOR PREFERRED CONTROL TYPE.
- PROVIDE FIXTURE WITH A REMOTE BATTERY BACKUP FOR EMERGENCY EGRESS ILLUMINATION. LOCATE REMOTE DEVICE ABOVE CEILING, SO AS NOT TO BE IN CONFLICT WITH OTHER DEVICES AND/OR TRADES.
- LIGHT FIXTURE TO BE CENTERED ABOVE WINDOW.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon 97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

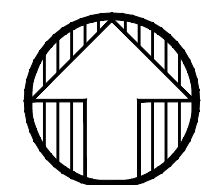
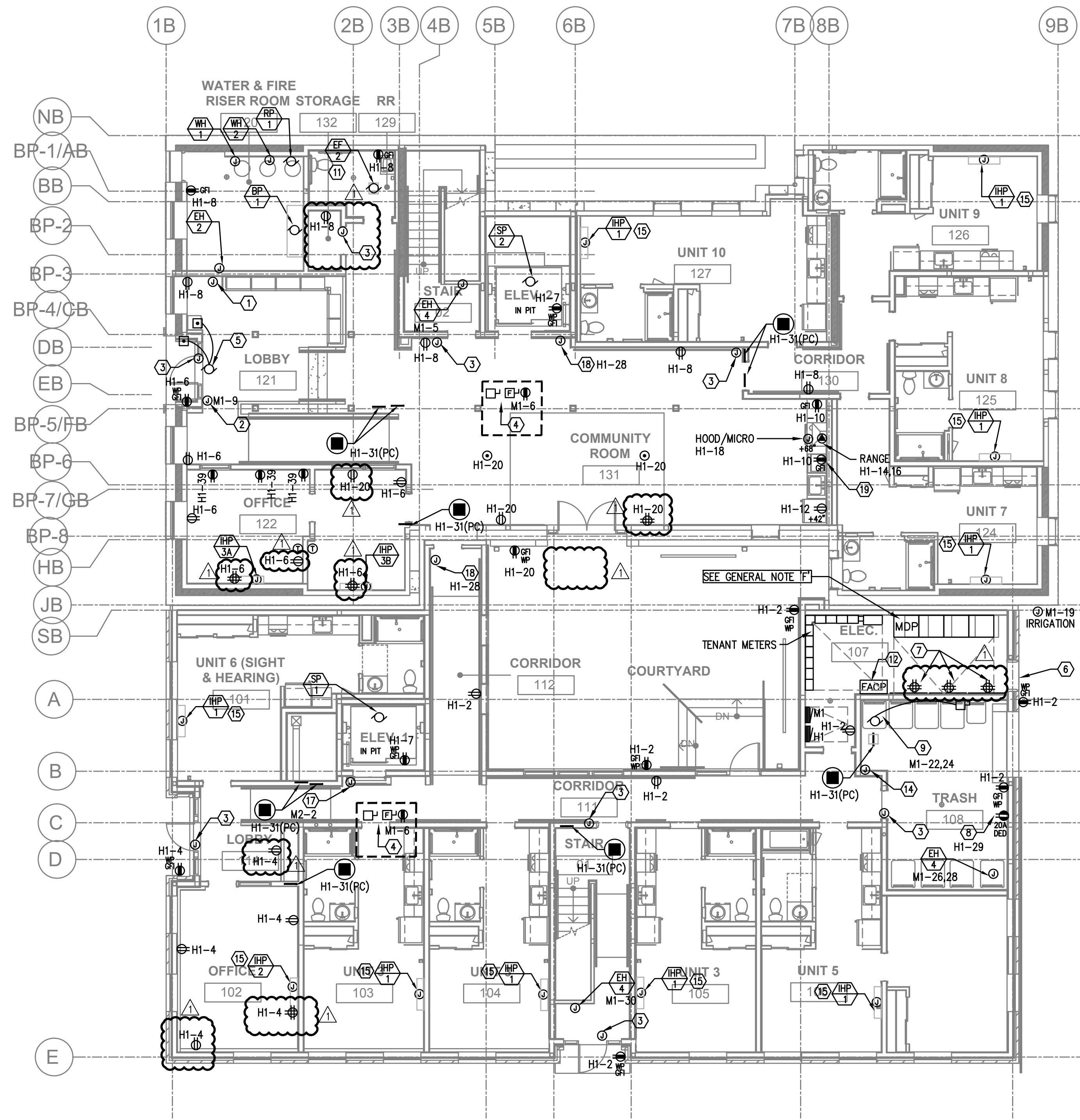
BID SET

THIRD FLOOR
LIGHTING PLAN

PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021

E2.03



1 FIRST FLOOR POWER PLAN
E3.01 SCALE: 1/8" = 1'-0"

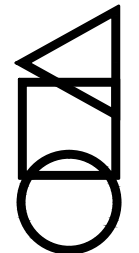
GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- REFER TO INTERIOR DECORATOR AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATION(S) AND ELEVATIONS OF FIXTURES & DEVICES. OTHER DEVICES SHOWN ON THE ELECTRICAL PLANS AND NOT INDICATED ON THE DECORATOR'S OR ARCHITECT'S DRAWINGS, SHALL BE INSTALLED AT STANDARD MOUNTING HEIGHT AS INDICATED THE SYMBOL LIST.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE APARTMENT UNITS.
- ELECTRICAL EQUIPMENT SHOWN IN THE ELECTRICAL ROOMS IS BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL VERIFY ANY SUBMITTED EQUIPMENT WILL FIT WITHIN THE SPACE PROVIDED AND MAINTAIN REQUIRED CLEARANCES. PRIOR TO PRODUCT SUBMITTAL REVIEW.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE LOW VOLTAGE ("T" SERIES) PLANS, INCLUDING FIRE ALARM AND SYSTEMS INSTALLER, AND PROVIDE ROUGH IN AS NEEDED.
- GENERAL PURPOSE CONVENIENCE RECEPTACLES LOCATED ON THE BUILDING EXTERIOR, OTHER THAN INTERIOR COURT YARD, SHALL BE EQUIPPED WITH A LOCKING, WEATHER PROOF COVER.
- CONSULT SWITCHGEAR SUPPLIER FOR HOUSEKEEPING PAD REQUIREMENTS PRIOR TO PURCHASE. HOUSEKEEPING PAD SHOULD 4" THICK, MINIMUM.

KEYED NOTES:

- FIRE ALARM REMOTE ANNUNCIATOR. FED FROM PANEL M1. REFER TO THE "T" SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P POWER CONNECTION FOR BUILDING SIGNS. CIRCUIT AS INDICATED VIA TIME CLOCK. MOUNT JUNCTION BOX TIGHT TO CEILING (AT BUILDING INTERIOR), COORDINATING EXACT LOCATION WITH SIGN INSTALLER'S SLEEVE AND PER ARCHITECT'S DIRECTION.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR BUILDING ENTRY ACCESS CONTROL SYSTEM AND PROVIDE ROUGH IN AND WIRING TO ACCESS POINTS LOCATED ON PLANS. CONSULT WITH LOW VOLTAGE SYSTEMS INSTALLER AND THE "T" SERIES SHEETS FOR ADDITIONAL INFORMATION.
- VERIFY ELEVATOR EQUIPMENT LOCATION AND ELECTRICAL REQUIREMENTS WITH ARCHITECT AND/OR ELEVATOR PROVIDER.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR AUTOMATIC DOOR OPENERS.
- ELECTRICAL SERVICE METER ROOMS SHALL HAVE OUTWARD SWING DOORS EQUIPPED WITH PANIC HARDWARE. PROVIDE A KEY BOX AT THE EXTERIOR FOR ELECTRICAL UTILITIES' 24/7 ACCESS.
- 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, AND PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL "M1" SCHEDULE ON E1.12 FOR CIRCUITS.
- DEDICATED 20A, 120V RECEPTACLE FOR PALLET JACK CHARGING.
- PROVIDE ONE 30A, 208V, 1PH ELECTRICAL CIRCUIT FOR TRASH COMPACTOR. FEED FROM PANEL M1.
- DEDICATED 20A, 120V RECEPTACLE FOR ELECTRIC BIKE CHARGING.
- TIE RESTROOM EXHAUST FAN INTO LIGHTING CIRCUIT FOR THIS SPACE. SWITCHING CONTROLLED VIA INTEGRAL OCCUPANCY SENSOR.
- FIRE ALARM CONTROL PANEL. FED FROM PANEL M1. REFER TO THE "T" SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL "L1" FOR DRYER BOOSTER FANS. REFER TO MECHANICAL SHEET M6.01, DETAIL 6 FOR ADDITIONAL INFORMATION AND COORDINATE WITH THE EQUIPMENT INSTALLER TO PROVIDE THE APPROPRIATE POWER CONNECTION(S).
- COORDINATE WITH LANDSCAPE DESIGNER/INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS OF ANY IRRIGATION CONTROLLER. PROVIDE POWER CONNECTION FROM PANEL "M1" AND SLEEVE PER LANDSCAPE'S DIRECTION.
- REFER TO TYPICAL UNIT PLANS ON THE E4 SERIES SHEETS FOR ADDITIONAL INFORMATION REGARDING THE HVAC EQUIPMENT LOCATIONS AND CIRCUITING. COORDINATE WITH MECHANICAL INSTALLER.
- CONTINUOUS OPERATION EXHAUST FAN TO BE TIED INTO NEAREST "NORMAL" POWER LIGHTING CIRCUIT, AHEAD OF ANY SWITCHING.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT AS INDICATED FOR ELEVATOR SMOKE CURTAIN.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL "H1" FOR MAGNETIC DOOR HOLDER.
- PER ARCHITECTS DIRECTION, ABOVE COUNTER RECEPTACLES SHALL BE 1-INCH OFFSET FROM THE WALL FOR EASE OF ACCESSIBILITY.
- PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- CONSULT "R" SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FOR "GREENWALD" ATM SYSTEM PER OWNER'S DIRECTION. CONSULT ARCHITECT FOR EXACT LOCATION.

M Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0577
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR

NORTHWEST HOUSING ALTERNATIVES

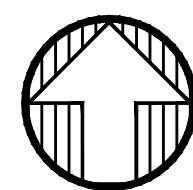
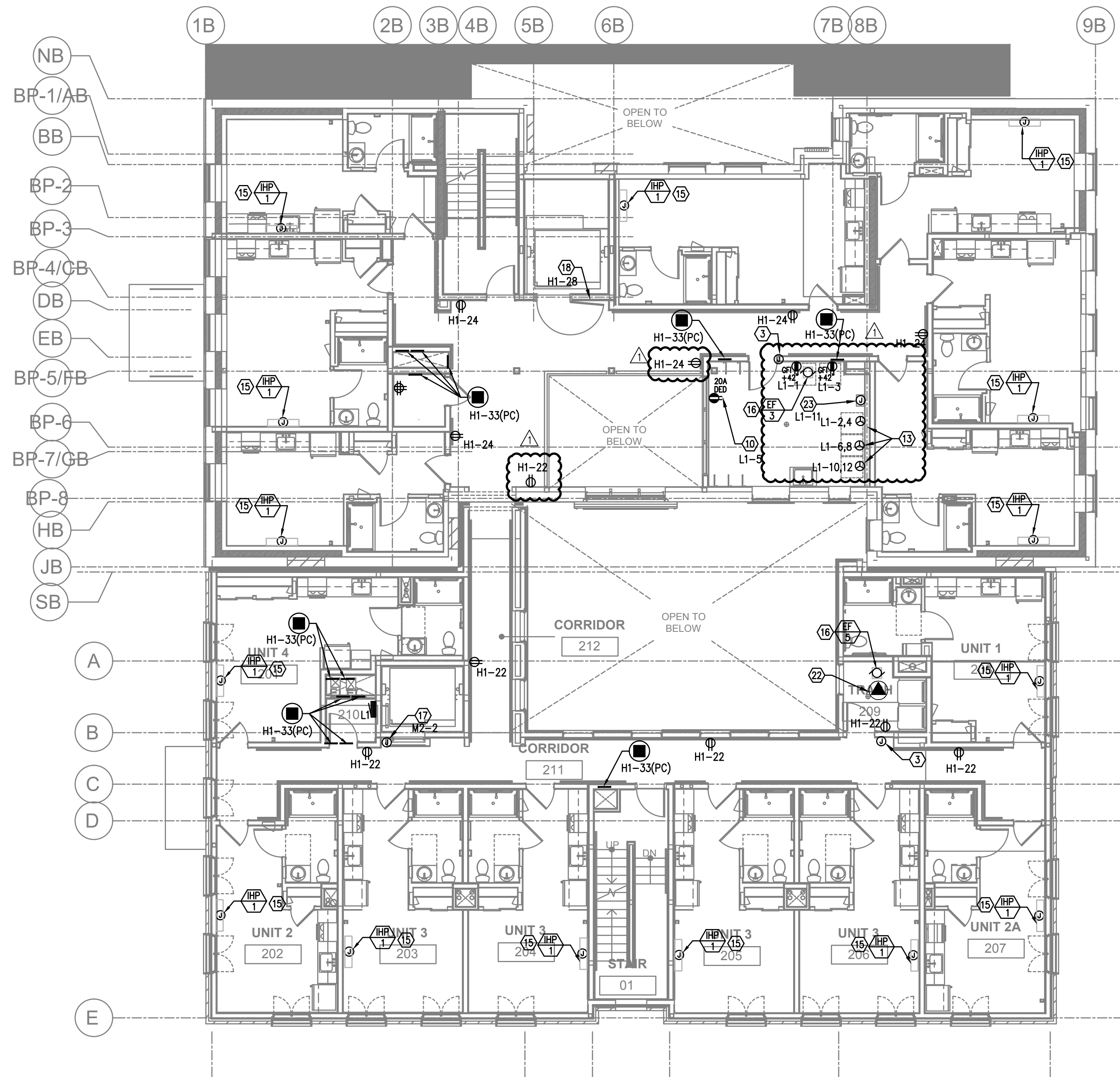
BID SET

FIRST FLOOR
POWER PLAN

PROJECT NO.
17004
03/12/2021

REVISIONS: A
ADDENDUM #1 04/30/2021

E3.01



1 SECOND FLOOR POWER PLAN
E3.02 SCALE: 1/8" = 1'-0"

GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- REFER TO INTERIOR DECORATOR AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATION(S) AND ELEVATIONS OF FIXTURES & DEVICES. OTHER DEVICES SHOWN ON THE ELECTRICAL PLANS AND NOT INDICATED ON THE DECORATOR'S OR ARCHITECT'S DRAWINGS, SHALL BE INSTALLED AT STANDARD MOUNTING HEIGHT AS INDICATED THE SYMBOL LIST.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE APARTMENT UNITS.
- ELECTRICAL EQUIPMENT SHOWN IN THE ELECTRICAL ROOMS IS BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL VERIFY ANY SUBMITTED EQUIPMENT WILL FIT WITHIN THE SPACE PROVIDED AND MAINTAIN REQUIRED CLEARANCES. PRIOR TO PRODUCT SUBMITTAL REVIEW.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE LOW VOLTAGE ('T' SERIES) PLANS, INCLUDING FIRE ALARM AND SYSTEMS INSTALLER, AND PROVIDE ROUGH IN AS NEEDED.
- GENERAL PURPOSE CONVENIENCE RECEPTACLES LOCATED ON THE BUILDING EXTERIOR, OTHER THAN INTERIOR COURT YARD, SHALL BE EQUIPPED WITH A LOCKING, WEATHER PROOF COVER.
- CONSULT SWITCHGEAR SUPPLIER FOR HOUSEKEEPING PAD REQUIREMENTS PRIOR TO PURCHASE. HOUSEKEEPING PAD SHOULD 4" THICK, MINIMUM.

KEYED NOTES:

- FIRE ALARM REMOTE ANNUNCIATOR. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P POWER CONNECTION FOR BUILDING SIGNS. CIRCUIT AS INDICATED VIA TIME CLOCK. MOUNT JUNCTION BOX TIGHT TO CEILING (AT BUILDING INTERIOR), COORDINATING EXACT LOCATION WITH SIGN INSTALLER'S SLEEVE AND PER ARCHITECT'S DIRECTION.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR BUILDING ENTRY ACCESS CONTROL SYSTEM AND PROVIDE ROUGH IN AND WIRING TO ACCESS POINTS LOCATED ON PLANS. CONSULT WITH LOW VOLTAGE SYSTEMS INSTALLER AND THE 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
- VERIFY ELEVATOR EQUIPMENT LOCATION AND ELECTRICAL REQUIREMENTS WITH ARCHITECT AND/OR ELEVATOR PROVIDER.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR AUTOMATIC DOOR OPENERS.
- ELECTRICAL SERVICE METER ROOMS SHALL HAVE OUTWARD SWING DOORS EQUIPPED WITH PANIC HARDWARE. PROVIDE A KEY BOX AT THE EXTERIOR FOR ELECTRICAL UTILITIES' 24/7 ACCESS.
- 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, AND PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'M1' SCHEDULE ON E1.12 FOR CIRCUITS.
- DEDICATED 20A, 120V RECEPTACLE FOR PALLET JACK CHARGING.
- PROVIDE ONE 30A, 208V, 1PH ELECTRICAL CIRCUIT FOR TRASH COMPACTOR. FEED FROM PANEL M1.
- DEDICATED 20A, 120V RECEPTACLE FOR ELECTRIC BIKE CHARGING.
- TIE RESTROOM EXHAUST FAN INTO LIGHTING CIRCUIT FOR THIS SPACE. SWITCHING CONTROLLED VIA INTEGRAL OCCUPANCY SENSOR.
- FIRE ALARM CONTROL PANEL. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'L1' FOR DRYER BOOSTER FANS. REFER TO MECHANICAL SHEET M6.01, DETAIL 6 FOR ADDITIONAL INFORMATION AND COORDINATE WITH THE EQUIPMENT INSTALLER TO PROVIDE THE APPROPRIATE POWER CONNECTION(S).
- COORDINATE WITH LANDSCAPE DESIGNER/INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS OF ANY IRRIGATION CONTROLLER. PROVIDE POWER CONNECTION FROM PANEL 'M1' AND SLEEVE PER LANDSCAPE'S DIRECTION.
- REFER TO TYPICAL UNIT PLANS ON THE E4 SERIES SHEETS FOR ADDITIONAL INFORMATION REGARDING THE HVAC EQUIPMENT LOCATIONS AND CIRCUITING. COORDINATE WITH MECHANICAL INSTALLER.
- CONTINUOUS OPERATION EXHAUST FAN TO BE TIED INTO NEAREST "NORMAL" POWER LIGHTING CIRCUIT, AHEAD OF ANY SWITCHING.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT AS INDICATED FOR ELEVATOR SMOKE CURTAIN.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'H1' FOR MAGNETIC DOOR HOLDER.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES SHALL BE 1-INCH OFFSET FROM THE WALL FOR EASE OF ACCESSIBILITY.
- PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- CONSULT 'R' SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FOR "GREENWALD" ATM SYSTEM PER OWNER'S DIRECTION. CONSULT ARCHITECT FOR EXACT LOCATION.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0577
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

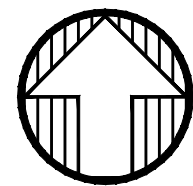
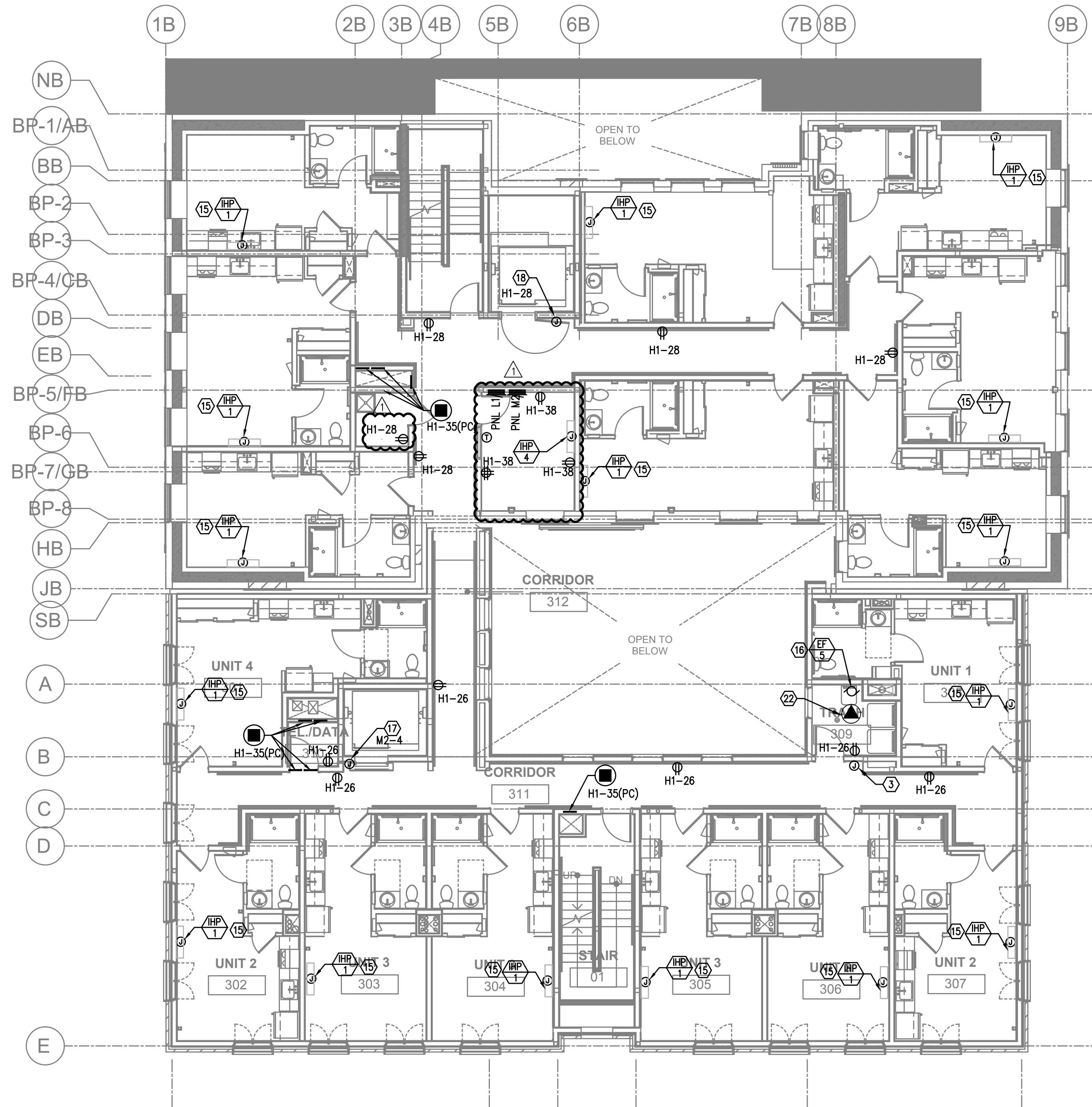
BID SET

SECOND FLOOR
POWER PLAN

PROJECT NO.
17004
03/12/2021

REVISIONS: A
ADDENDUM #1 04/30/2021

E3.02



1 THIRD FLOOR POWER PLAN
E3.03 SCALE: 1/8" = 1'-0"

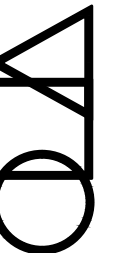
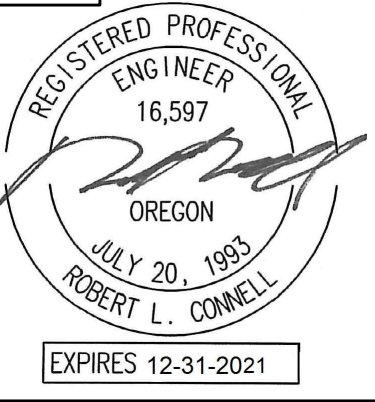
GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- REFER TO INTERIOR DECORATOR AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATION(S) AND ELEVATIONS OF FIXTURES & DEVICES. OTHER DEVICES SHOWN ON THE ELECTRICAL PLANS AND NOT INDICATED ON THE DECORATOR'S OR ARCHITECT'S DRAWINGS, SHALL BE INSTALLED AT STANDARD MOUNTING HEIGHT AS INDICATED THE SYMBOL LIST.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE APARTMENT UNITS.
- ELECTRICAL EQUIPMENT SHOWN IN THE ELECTRICAL ROOMS IS BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL VERIFY ANY SUBMITTED EQUIPMENT WILL FIT WITHIN THE SPACE PROVIDED AND MAINTAIN REQUIRED CLEARANCES. PRIOR TO PRODUCT SUBMITTAL REVIEW.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE LOW VOLTAGE ('T' SERIES) PLANS, INCLUDING FIRE ALARM AND SYSTEMS INSTALLER, AND PROVIDE ROUGH IN AS NEEDED.
- GENERAL PURPOSE CONVENIENCE RECEPTACLES LOCATED ON THE BUILDING EXTERIOR, OTHER THAN INTERIOR COURT YARD, SHALL BE EQUIPPED WITH A LOCKING, WEATHER PROOF COVER.
- CONSULT SWITCHGEAR SUPPLIER FOR HOUSEKEEPING PAD REQUIREMENTS PRIOR TO PURCHASE. HOUSEKEEPING PAD SHOULD 4" THICK, MINIMUM.

KEYED NOTES:

- FIRE ALARM REMOTE ANNUNCIATOR. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P POWER CONNECTION FOR BUILDING SIGNS. CIRCUIT AS INDICATED VIA TIME CLOCK. MOUNT JUNCTION BOX TIGHT TO CEILING (AT BUILDING INTERIOR), COORDINATING EXACT LOCATION WITH SIGN INSTALLER'S SLEEVE AND PER ARCHITECT'S DIRECTION.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR BUILDING ENTRY ACCESS CONTROL SYSTEM AND PROVIDE ROUGH IN AND WIRING TO ACCESS POINTS LOCATED ON PLANS. CONSULT WITH LOW VOLTAGE SYSTEMS INSTALLER AND THE 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
- VERIFY ELEVATOR EQUIPMENT LOCATION AND ELECTRICAL REQUIREMENTS WITH ARCHITECT AND/OR ELEVATOR PROVIDER.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR AUTOMATIC DOOR OPENERS.
- ELECTRICAL SERVICE METER ROOMS SHALL HAVE OUTWARD SWING DOORS EQUIPPED WITH PANIC HARDWARE. PROVIDE A KEY BOX AT THE EXTERIOR FOR ELECTRICAL UTILITIES' 24/7 ACCESS.
- 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, AND PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'M1' SCHEDULE ON E1.12 FOR CIRCUITS.
- DEDICATED 20A, 120V RECEPTACLE FOR PALLET JACK CHARGING.
- PROVIDE ONE 30A, 208V, 1PH ELECTRICAL CIRCUIT FOR TRASH COMPACTOR. FEED FROM PANEL M1.
- DEDICATED 20A, 120V RECEPTACLE FOR ELECTRIC BIKE CHARGING.
- TIE RESTROOM EXHAUST FAN INTO LIGHTING CIRCUIT FOR THIS SPACE. SWITCHING CONTROLLED VIA INTEGRAL OCCUPANCY SENSOR.
- FIRE ALARM CONTROL PANEL. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'L1' FOR DRYER BOOSTER FANS. REFER TO MECHANICAL SHEET M6.01, DETAIL 6 FOR ADDITIONAL INFORMATION AND COORDINATE WITH THE EQUIPMENT INSTALLER TO PROVIDE THE APPROPRIATE POWER CONNECTION(S).
- COORDINATE WITH LANDSCAPE DESIGNER/INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS OF ANY IRRIGATION CONTROLLER. PROVIDE POWER CONNECTION FROM PANEL 'M1' AND SLEEVE PER LANDSCAPE'S DIRECTION.
- REFER TO TYPICAL UNIT PLANS ON THE E4 SERIES SHEETS FOR ADDITIONAL INFORMATION REGARDING THE HVAC EQUIPMENT LOCATIONS AND CIRCUITING. COORDINATE WITH MECHANICAL INSTALLER.
- CONTINUOUS OPERATION EXHAUST FAN TO BE TIED INTO NEAREST "NORMAL" POWER LIGHTING CIRCUIT, AHEAD OF ANY SWITCHING.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT AS INDICATED FOR ELEVATOR SMOKE CURTAIN.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'H1' FOR MAGNETIC DOOR HOLDER.
- PER ARCHITECTS DIRECTION, ABOVE COUNTER RECEPTACLES SHALL BE 1-INCH OFFSET FROM THE WALL FOR EASE OF ACCESSIBILITY.
- PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- CONSULT 'R' SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FOR "GREENWALD" ATM SYSTEM PER OWNER'S DIRECTION. CONSULT ARCHITECT FOR EXACT LOCATION.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MEFA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

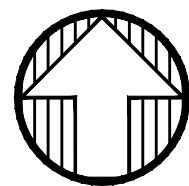
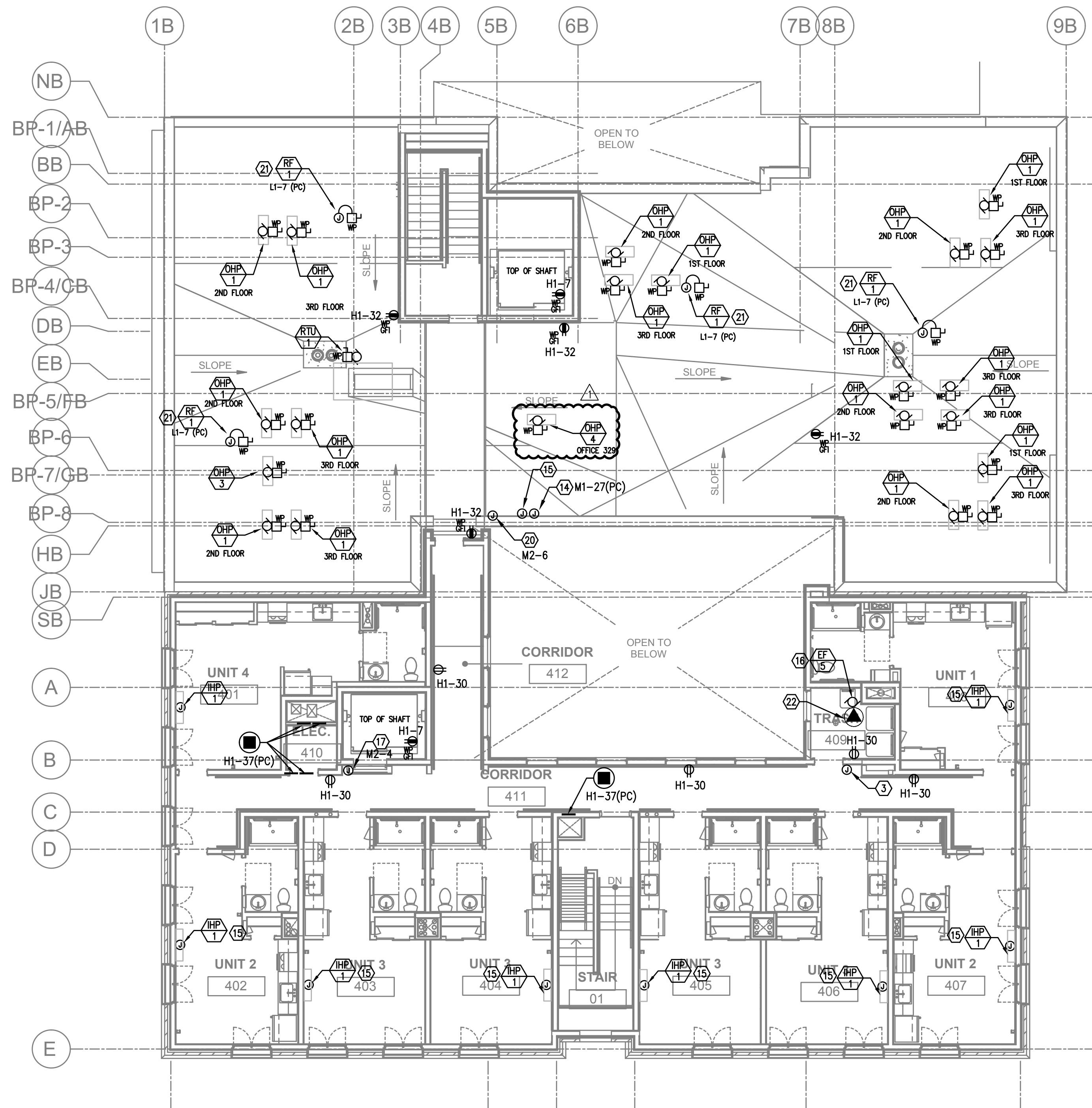
BID SET

THIRD FLOOR
POWER PLAN

PROJECT NO.
17004
03/12/2021

REVISIONS:
 ADDENDUM #1 04/30/2021

E3.03



1 FOURTH FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

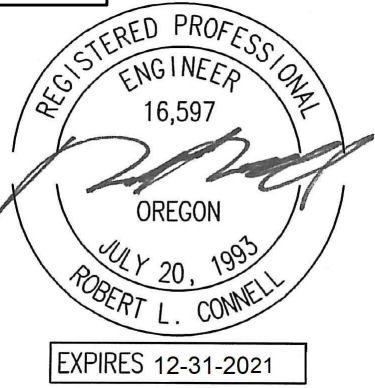
GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- REFER TO INTERIOR DECORATOR AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATION(S) AND ELEVATIONS OF FIXTURES & DEVICES. OTHER DEVICES SHOWN ON THE ELECTRICAL PLANS AND NOT INDICATED ON THE DECORATOR'S OR ARCHITECT'S DRAWINGS, SHALL BE INSTALLED AT STANDARD MOUNTING HEIGHT AS INDICATED THE SYMBOL LIST.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE APARTMENT UNITS.
- ELECTRICAL EQUIPMENT SHOWN IN THE ELECTRICAL ROOMS IS BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL VERIFY ANY SUBMITTED EQUIPMENT WILL FIT WITHIN THE SPACE PROVIDED AND MAINTAIN REQUIRED CLEARANCES. PRIOR TO PRODUCT SUBMITTAL REVIEW.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE LOW VOLTAGE ('T' SERIES) PLANS, INCLUDING FIRE ALARM AND SYSTEMS INSTALLER, AND PROVIDE ROUGH IN AS NEEDED.
- GENERAL PURPOSE CONVENIENCE RECEPTACLES LOCATED ON THE BUILDING EXTERIOR, OTHER THAN INTERIOR COURT YARD, SHALL BE EQUIPPED WITH A LOCKING, WEATHER PROOF COVER.
- CONSULT SWITCHGEAR SUPPLIER FOR HOUSEKEEPING PAD REQUIREMENTS PRIOR TO PURCHASE. HOUSEKEEPING PAD SHOULD 4" THICK, MINIMUM.

KEYED NOTES:

- FIRE ALARM REMOTE ANNUNCIATOR. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A,120V, 1P POWER CONNECTION FOR BUILDING SIGNS. CIRCUIT AS INDICATED VIA TIME CLOCK. MOUNT JUNCTION BOX TIGHT TO CEILING (AT BUILDING INTERIOR), COORDINATING EXACT LOCATION WITH SIGN INSTALLER'S SLEEVE AND PER ARCHITECT'S DIRECTION.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR BUILDING ENTRY ACCESS CONTROL SYSTEM AND PROVIDE ROUGH IN AND WIRING TO ACCESS POINTS LOCATED ON PLANS. CONSULT WITH LOW VOLTAGE SYSTEMS INSTALLER AND THE 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
- VERIFY ELEVATOR EQUIPMENT LOCATION AND ELECTRICAL REQUIREMENTS WITH ARCHITECT AND/OR ELEVATOR PROVIDER.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR AUTOMATIC DOOR OPENERS.
- ELECTRICAL SERVICE METER ROOMS SHALL HAVE OUTWARD SWING DOORS EQUIPPED WITH PANIC HARDWARE. PROVIDE A KEY BOX AT THE EXTERIOR FOR ELECTRICAL UTILITIES' 24/7 ACCESS.
- 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, AND PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'M1' SCHEDULE ON E1.12 FOR CIRCUITS.
- DEDICATED 20A, 120V RECEPTACLE FOR PALLET JACK CHARGING.
- PROVIDE ONE 30A, 208V, 1PH ELECTRICAL CIRCUIT FOR TRASH COMPACTOR. FEED FROM PANEL M1.
- DEDICATED 20A, 120V RECEPTACLE FOR ELECTRIC BIKE CHARGING.
- TIE RESTROOM EXHAUST FAN INTO LIGHTING CIRCUIT FOR THIS SPACE. SWITCHING CONTROLLED VIA INTEGRAL OCCUPANCY SENSOR.
- FIRE ALARM CONTROL PANEL. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'L1' FOR DRYER BOOSTER FANS. REFER TO MECHANICAL SHEET M6.01, DETAIL 6 FOR ADDITIONAL INFORMATION AND COORDINATE WITH THE EQUIPMENT INSTALLER TO PROVIDE THE APPROPRIATE POWER CONNECTION(S).
- COORDINATE WITH LANDSCAPE DESIGNER/INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS OF ANY IRRIGATION CONTROLLER. PROVIDE POWER CONNECTION FROM PANEL 'M1' AND SLEEVE PER LANDSCAPE'S DIRECTION.
- REFER TO TYPICAL UNIT PLANS ON THE E4 SERIES SHEETS FOR ADDITIONAL INFORMATION REGARDING THE HVAC EQUIPMENT LOCATIONS AND CIRCUITING. COORDINATE WITH MECHANICAL INSTALLER.
- CONTINUOUS OPERATION EXHAUST FAN TO BE TIED INTO NEAREST "NORMAL" POWER LIGHTING CIRCUIT, AHEAD OF ANY SWITCHING.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT AS INDICATED FOR ELEVATOR SMOKE CURTAIN.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'H1' FOR MAGNETIC DOOR HOLDER.
- PER ARCHITECTS DIRECTION, ABOVE COUNTER RECEPTACLES SHALL BE 1-INCH OFFSET FROM THE WALL FOR EASE OF ACCESSIBILITY.
- PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- CONSULT 'R' SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FOR "GREENWALD" ATM SYSTEM PER OWNER'S DIRECTION. CONSULT ARCHITECT FOR EXACT LOCATION.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MEFA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

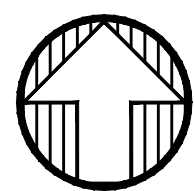
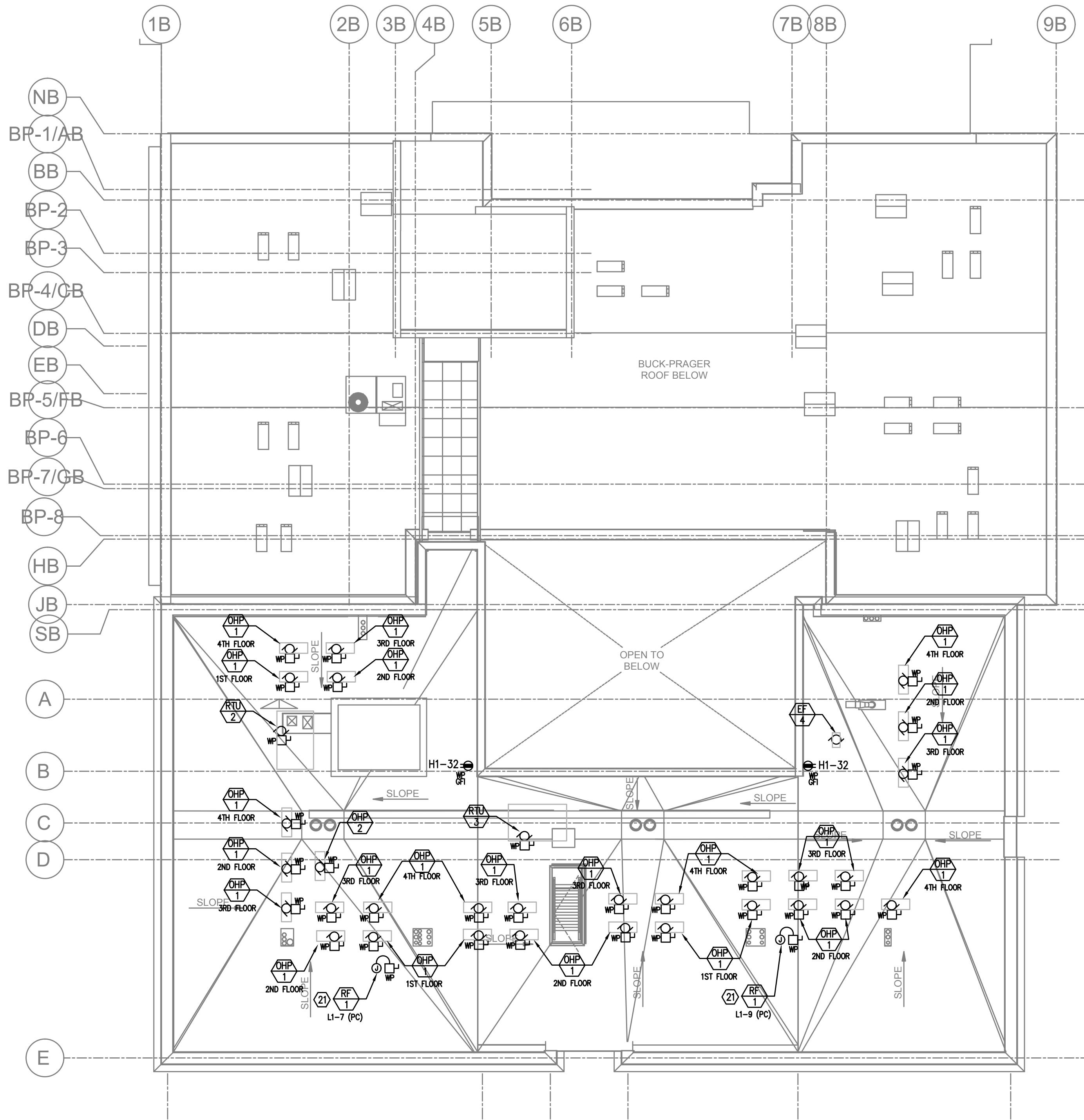
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

FOURTH FLOOR POWER PLAN

PROJECT NO.
17004
03/12/2021

REVISIONS:
 ADDENDUM #1 04/30/2021

E3.04



1 ROOF LEVEL POWER PLAN
E3.05 SCALE: 1/8" = 1'-0"

GENERAL POWER NOTES:

- ALL PLANS ARE CONSIDERED DIAGRAMMATICAL. THEREFORE ALL EQUIPMENT SIZES AND DEVICE LOCATIONS ARE APPROXIMATE AND SUBJECT TO FIELD CONDITIONS AND PRODUCT APPROVAL.
- ELECTRICAL CONTRACTOR TO PROVIDE THERMOSTATS NOT SUPPLIED BY MECHANICAL CONTRACTOR. CONSULT MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE INSTALLATION AND FINAL CONNECTION OF THERMOSTATS. CONSULT MECHANICAL CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO ROUGH IN.
- REFER TO INTERIOR DECORATOR AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATION(S) AND ELEVATIONS OF FIXTURES & DEVICES. OTHER DEVICES SHOWN ON THE ELECTRICAL PLANS AND NOT INDICATED ON THE DECORATOR'S OR ARCHITECT'S DRAWINGS, SHALL BE INSTALLED AT STANDARD MOUNTING HEIGHT AS INDICATED THE SYMBOL LIST.
- REFER TO ENLARGED TYPICAL UNIT PLANS (E4 SERIES SHEETS) FOR TYPICAL POWER & LIGHTING LAYOUTS FOR THE APARTMENT UNITS.
- ELECTRICAL EQUIPMENT SHOWN IN THE ELECTRICAL ROOMS IS BASED ON SIEMENS PRODUCTS. CONTRACTOR SHALL VERIFY ANY SUBMITTED EQUIPMENT WILL FIT WITHIN THE SPACE PROVIDED AND MAINTAIN REQUIRED CLEARANCES, PRIOR TO PRODUCT SUBMITTAL REVIEW.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE LOW VOLTAGE ('T' SERIES) PLANS, INCLUDING FIRE ALARM AND SYSTEMS INSTALLER, AND PROVIDE ROUGH IN AS NEEDED.
- GENERAL PURPOSE CONVENIENCE RECEPTACLES LOCATED ON THE BUILDING EXTERIOR, OTHER THAN INTERIOR COURT YARD, SHALL BE EQUIPPED WITH A LOCKING, WEATHER PROOF COVER.
- CONSULT SWITCHGEAR SUPPLIER FOR HOUSEKEEPING PAD REQUIREMENTS PRIOR TO PURCHASE. HOUSEKEEPING PAD SHOULD 4" THICK, MINIMUM.

KEYED NOTES:

- FIRE ALARM REMOTE ANNUNCIATOR. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P POWER CONNECTION FOR BUILDING SIGNS. CIRCUIT AS INDICATED VIA TIME CLOCK. MOUNT JUNCTION BOX TIGHT TO CEILING (AT BUILDING INTERIOR), COORDINATING EXACT LOCATION WITH SIGN INSTALLER'S SLEEVE AND PER ARCHITECT'S DIRECTION.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR BUILDING ENTRY ACCESS CONTROL SYSTEM AND PROVIDE ROUGH IN AND WIRING TO ACCESS POINTS LOCATED ON PLANS. CONSULT WITH LOW VOLTAGE SYSTEMS INSTALLER AND THE 'T' SERIES SHEETS FOR ADDITIONAL INFORMATION.
- VERIFY ELEVATOR EQUIPMENT LOCATION AND ELECTRICAL REQUIREMENTS WITH ARCHITECT AND/OR ELEVATOR PROVIDER.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL M1 FOR AUTOMATIC DOOR OPENERS.
- ELECTRICAL SERVICE METER ROOMS SHALL HAVE OUTWARD SWING DOORS EQUIPPED WITH PANIC HARDWARE. PROVIDE A KEY BOX AT THE EXTERIOR FOR ELECTRICAL UTILITIES' 24/7 ACCESS.
- 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, AND PROVIDE ROUGH IN AND/OR FINAL ELECTRICAL POWER CONNECTIONS & DEVICES. REFER PANEL 'M1' SCHEDULE ON E1.12 FOR CIRCUITS.
- DEDICATED 20A, 120V RECEPTACLE FOR PALLET JACK CHARGING.
- PROVIDE ONE 30A, 208V, 1PH ELECTRICAL CIRCUIT FOR TRASH COMPACTOR. FEED FROM PANEL M1.
- DEDICATED 20A, 120V RECEPTACLE FOR ELECTRIC BIKE CHARGING.
- TIE RESTROOM EXHAUST FAN INTO LIGHTING CIRCUIT FOR THIS SPACE. SWITCHING CONTROLLED VIA INTEGRAL OCCUPANCY SENSOR.
- FIRE ALARM CONTROL PANEL. FED FROM PANEL M1. REFER TO THE 'T' SERIES SHEETS FOR EXACT LOCATION. PROVIDE ROUGH IN AS REQUIRED.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'L1' FOR DRYER BOOSTER FANS. REFER TO MECHANICAL SHEET M6.01, DETAIL 6 FOR ADDITIONAL INFORMATION AND COORDINATE WITH THE EQUIPMENT INSTALLER TO PROVIDE THE APPROPRIATE POWER CONNECTION(S).
- COORDINATE WITH LANDSCAPE DESIGNER/INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS OF ANY IRRIGATION CONTROLLER. PROVIDE POWER CONNECTION FROM PANEL 'M1' AND SLEEVE PER LANDSCAPE'S DIRECTION.
- REFER TO TYPICAL UNIT PLANS ON THE E4 SERIES SHEETS FOR ADDITIONAL INFORMATION REGARDING THE HVAC EQUIPMENT LOCATIONS AND CIRCUITING. COORDINATE WITH MECHANICAL INSTALLER.
- CONTINUOUS OPERATION EXHAUST FAN TO BE TIED INTO NEAREST "NORMAL" POWER LIGHTING CIRCUIT, AHEAD OF ANY SWITCHING.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT AS INDICATED FOR ELEVATOR SMOKE CURTAIN.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FROM PANEL 'H1' FOR MAGNETIC DOOR HOLDER.
- PER ARCHITECTS DIRECTION, ABOVE COUNTER RECEPTACLES SHALL BE 1-INCH OFFSET FROM THE WALL FOR EASE OF ACCESSIBILITY.
- PROVIDE CIRCUIT AS INDICATED FOR SNOW MELT SYSTEM. VERIFY EXACT POWER REQUIREMENTS WITH SYSTEM INSTALLER PRIOR TO ROUGH IN AND COORDINATE CONNECTION LOCATION.
- CONSULT 'R' SERIES PLAN SHEETS FOR ADDITIONAL INFORMATION REGARDING THE POWER REQUIREMENTS FOR THE RADON MITIGATION SYSTEM. COORDINATE WITH SYSTEM INSTALLER FOR EXACT LOCATION(S) PRIOR TO ROUGH IN.
- ELECTRICAL CONTRACTOR TO CONSULT THE MECHANICAL PLANS AND COORDINATE WITH THE MECHANICAL INSTALLER FOR ANY POWER CONNECTIONS NEEDED FOR DAMPERS. PROVIDE ANY ROUGH IN AND/OR FINAL ELECTRICAL CONNECTIONS.
- PROVIDE ONE 20A, 120V, 1P CIRCUIT FOR "GREENWALD" ATM SYSTEM PER OWNER'S DIRECTION. CONSULT ARCHITECT FOR EXACT LOCATION.

ME Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0877
INC. WWW.ME-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR

NORTHWEST HOUSING ALTERNATIVES

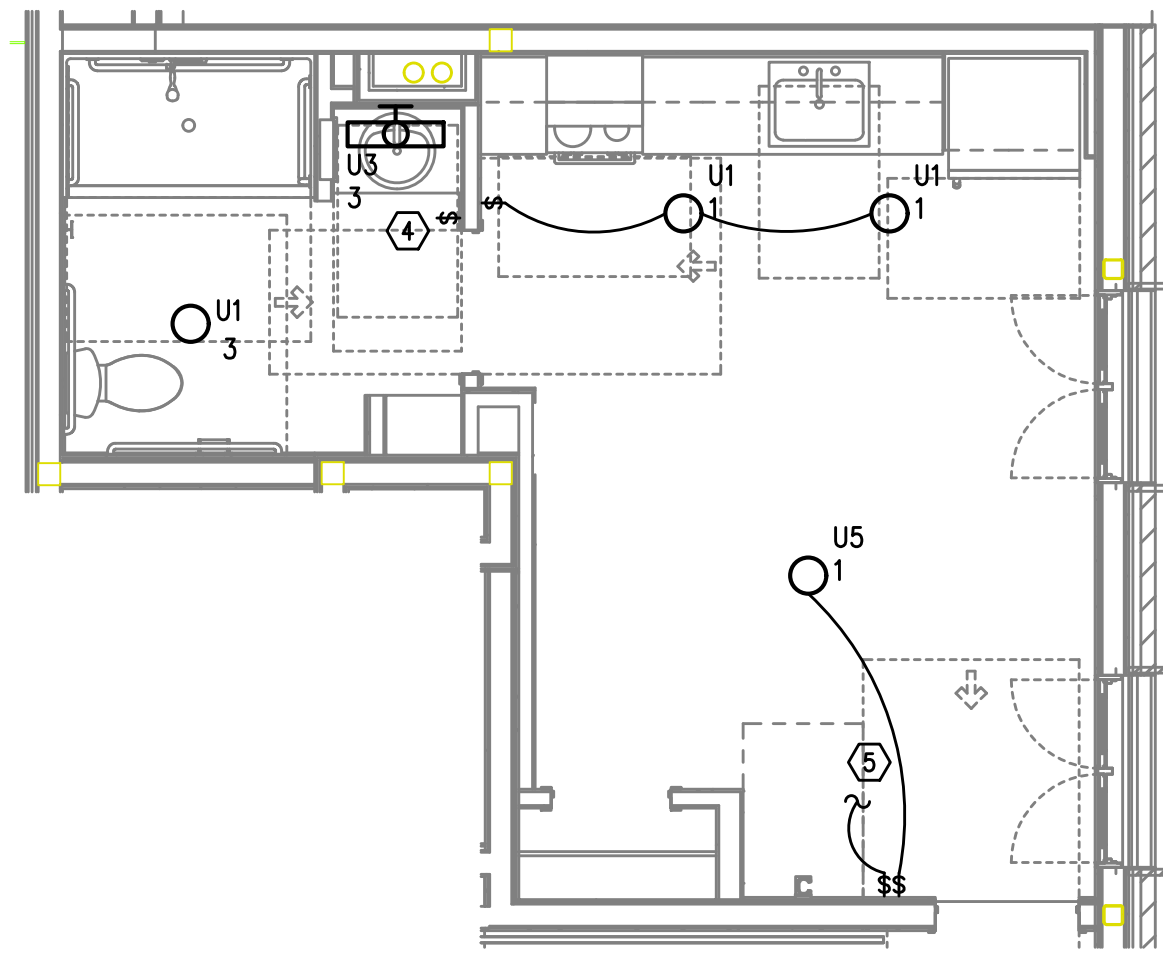
BID SET

**ROOF LEVEL
POWER PLAN**

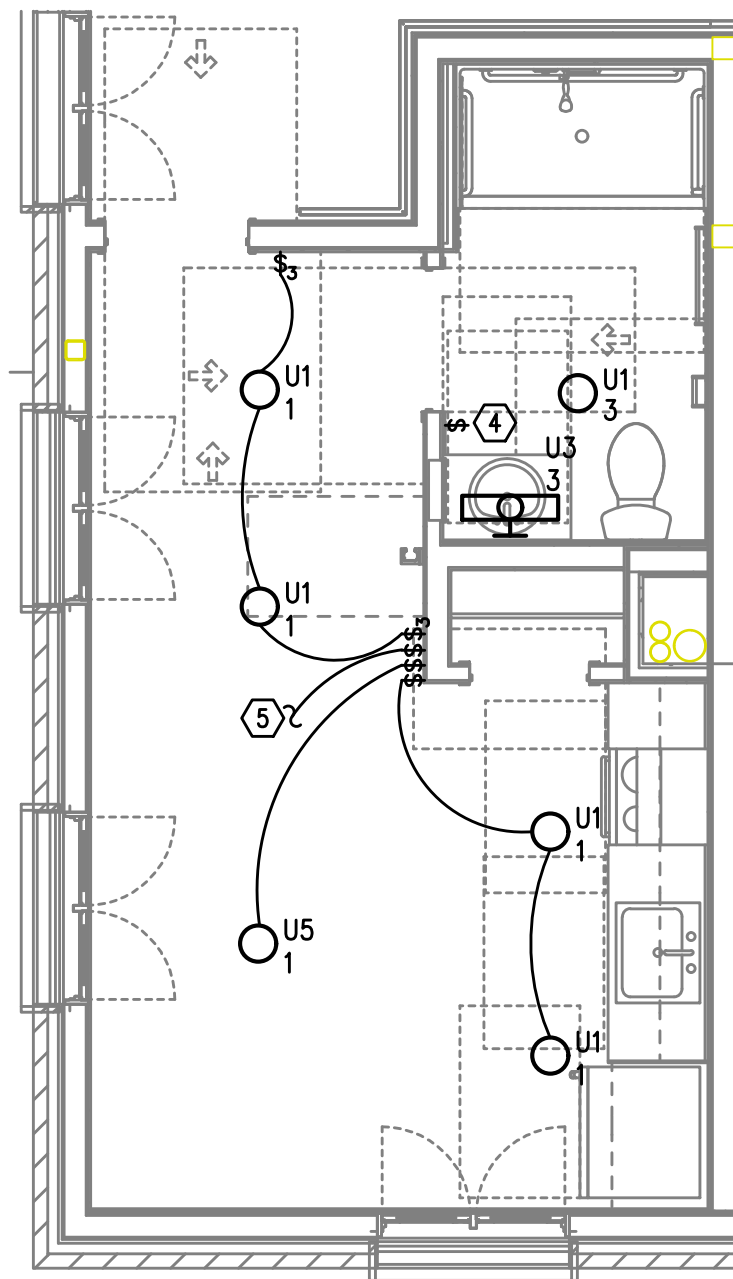
PROJECT NO.
17004
03/12/2021

REVISIONS: ADDENDUM #1 04/30/2021

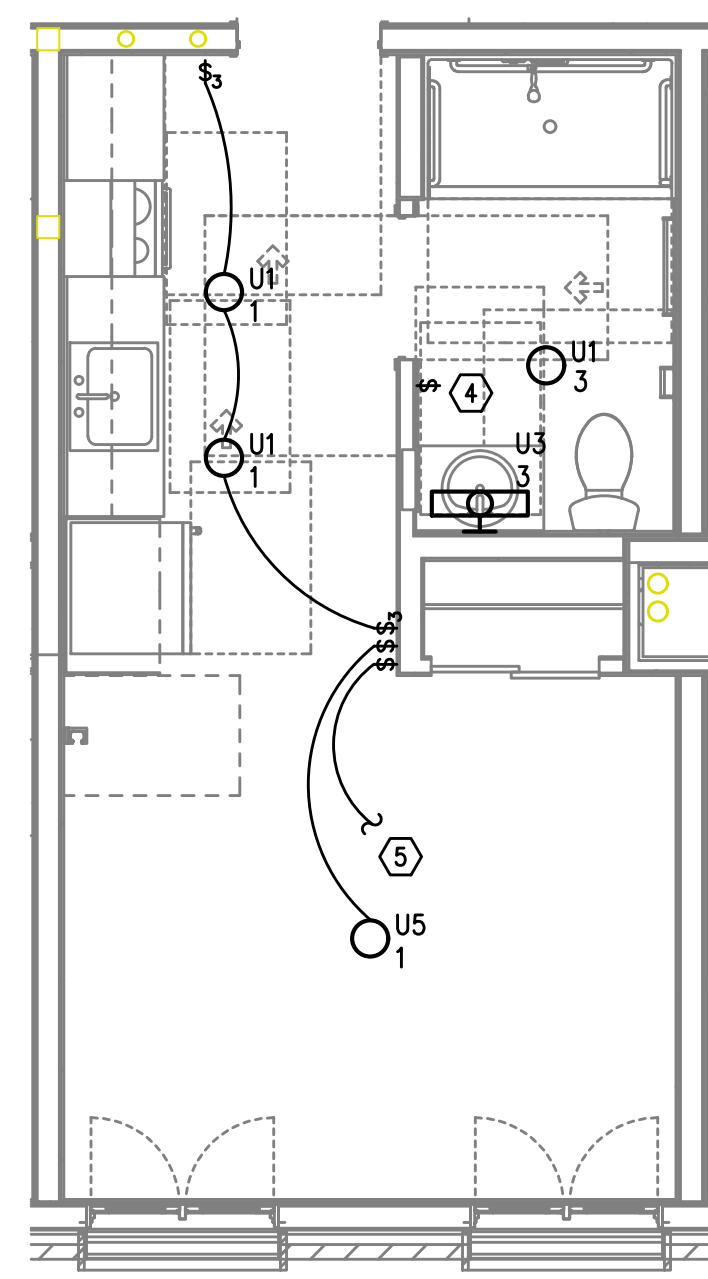
E3.05



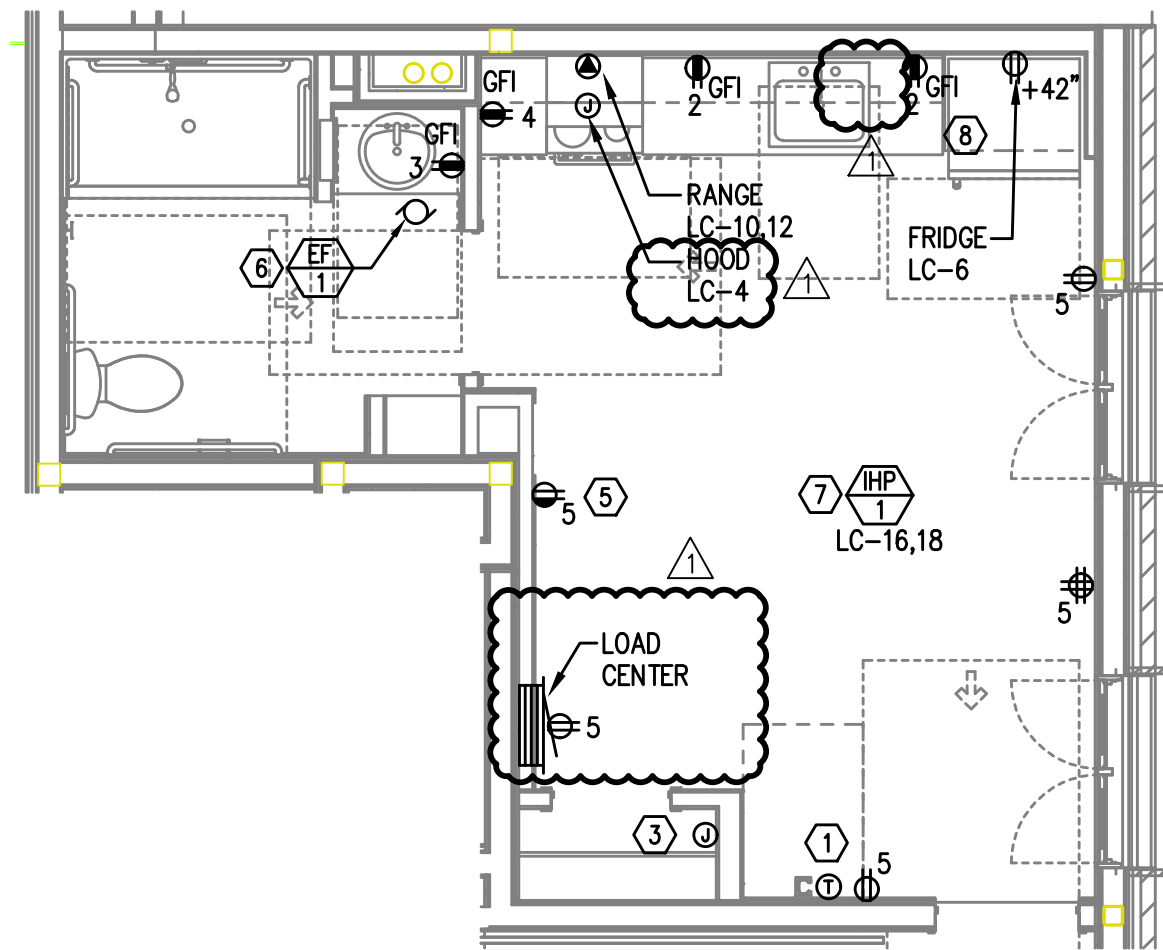
1
UNIT TYPE 1 ADA
TYPICAL LIGHTING PLAN
E4.01 SCALE: 1/4" = 1'-0"



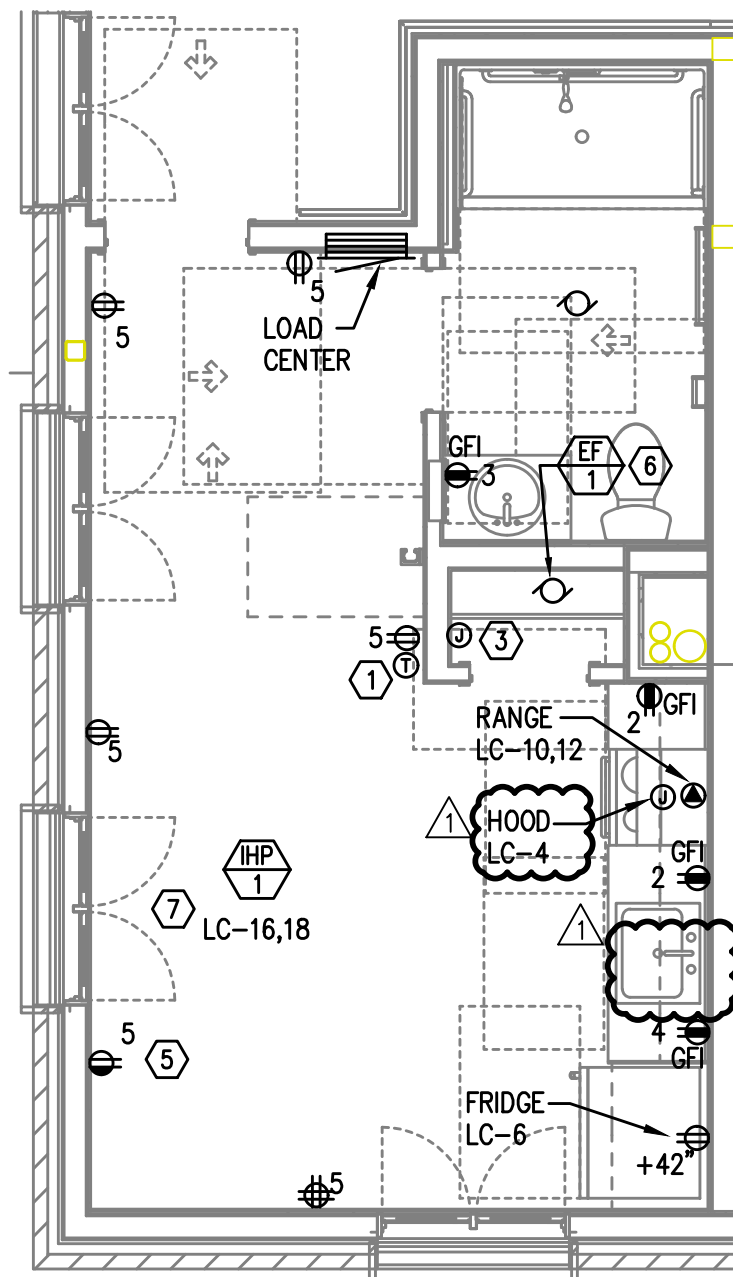
3
UNIT TYPE 2
TYPICAL LIGHTING PLAN
E4.01 SCALE: 1/4" = 1'-0"



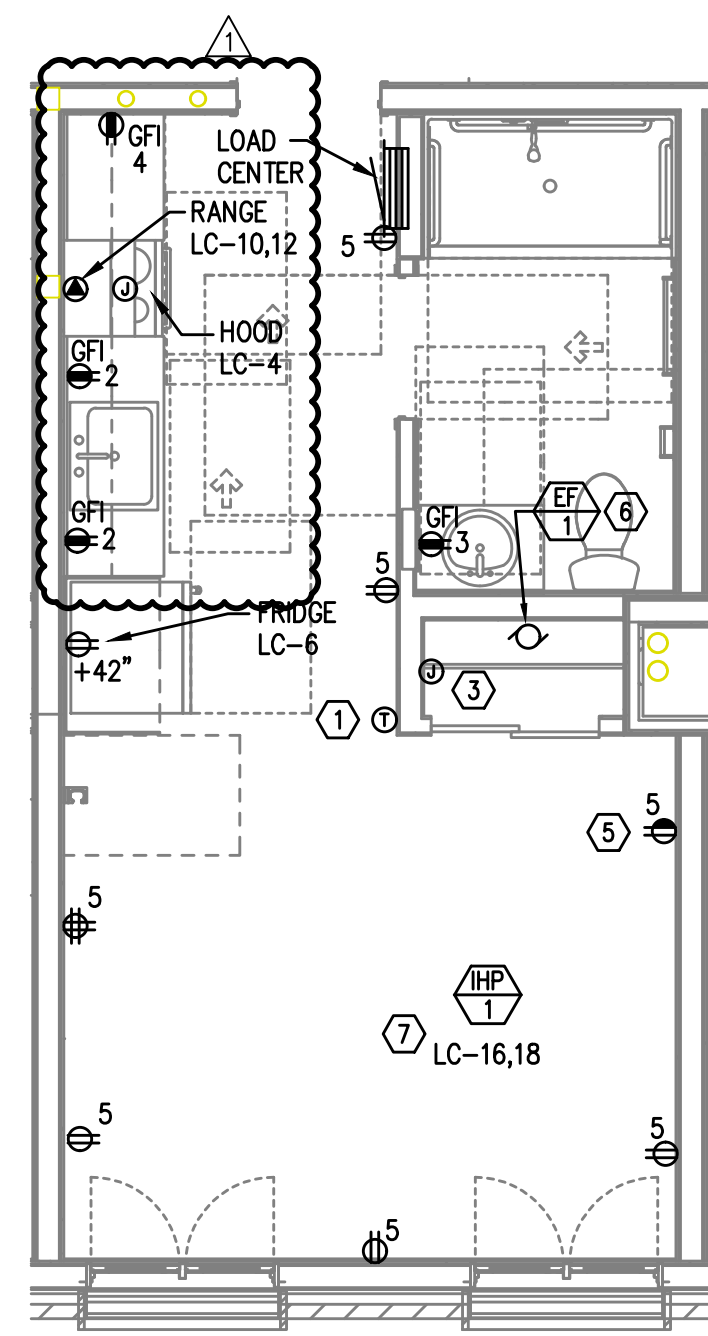
5
UNIT TYPE 3
TYPICAL LIGHTING PLAN
E4.01 SCALE: 1/4" = 1'-0"



2
UNIT TYPE 1 ADA
TYPICAL POWER PLAN
E4.01 SCALE: 1/4" = 1'-0"



4
UNIT TYPE 2
TYPICAL POWER PLAN
E4.01 SCALE: 1/4" = 1'-0"



6
UNIT TYPE 3
TYPICAL POWER PLAN
E4.01 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THAN 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503 243 2252
www.carletonhart.com

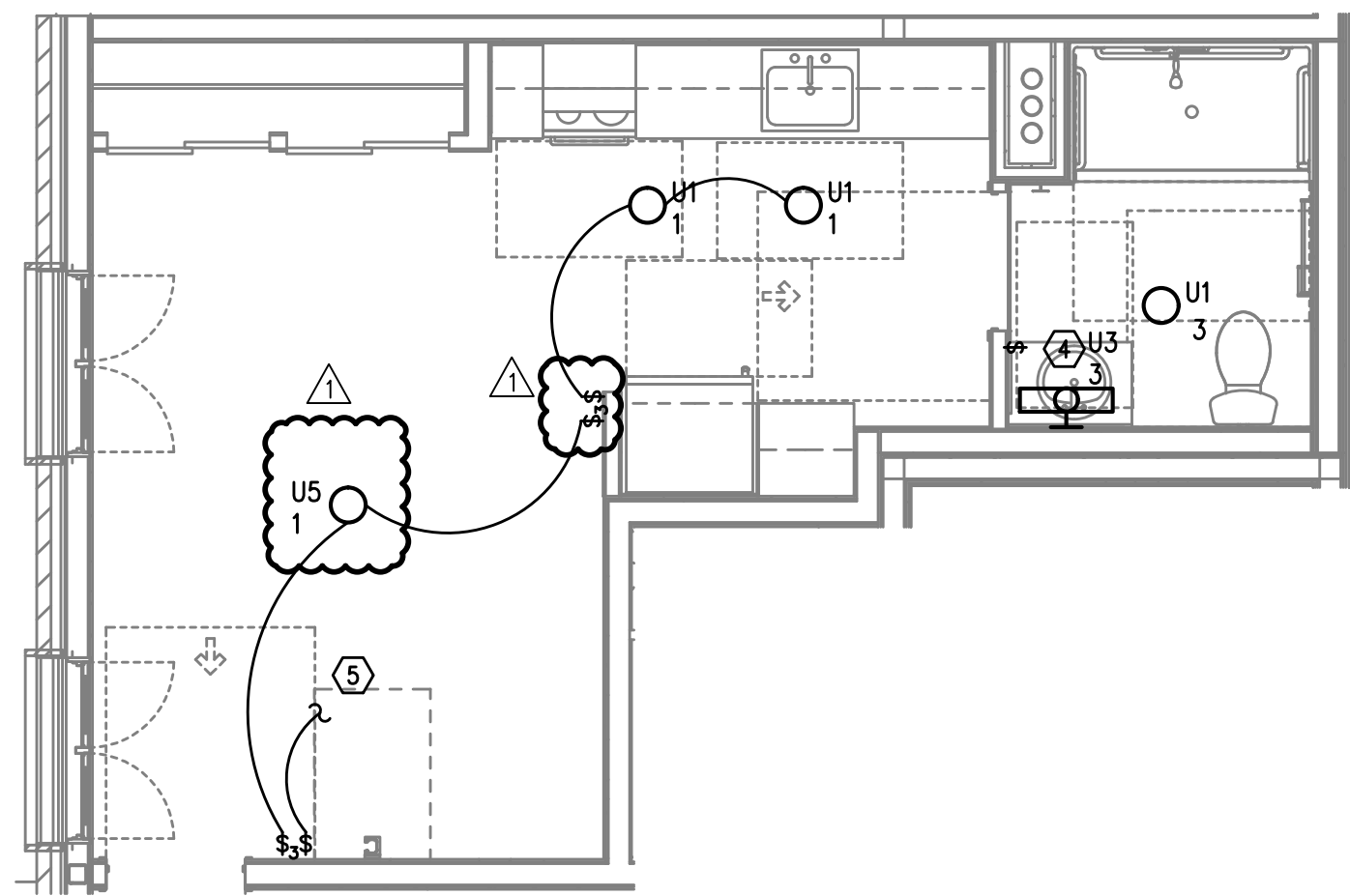
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

TYPICAL ENLARGED
UNIT PLANS

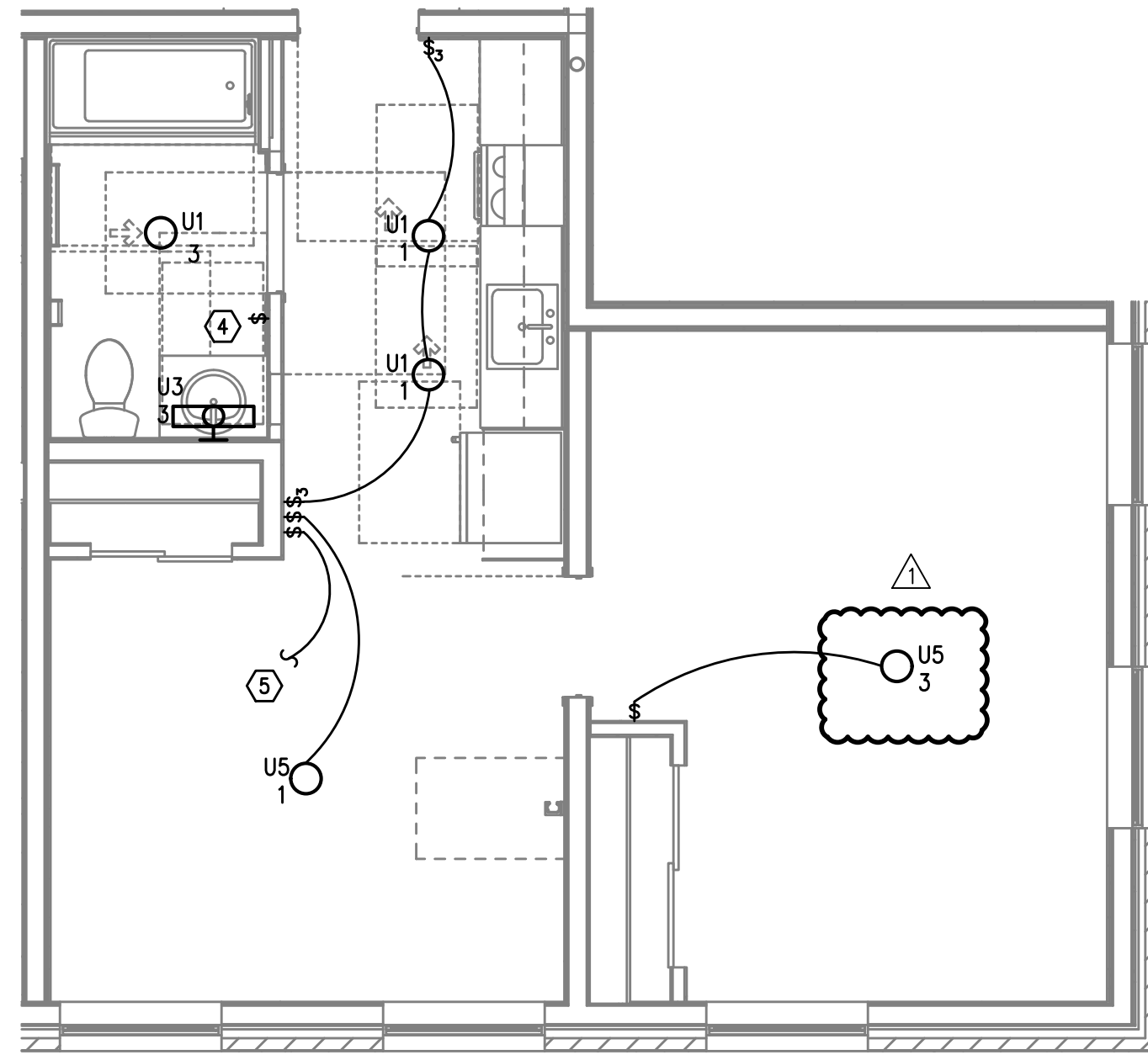
PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021

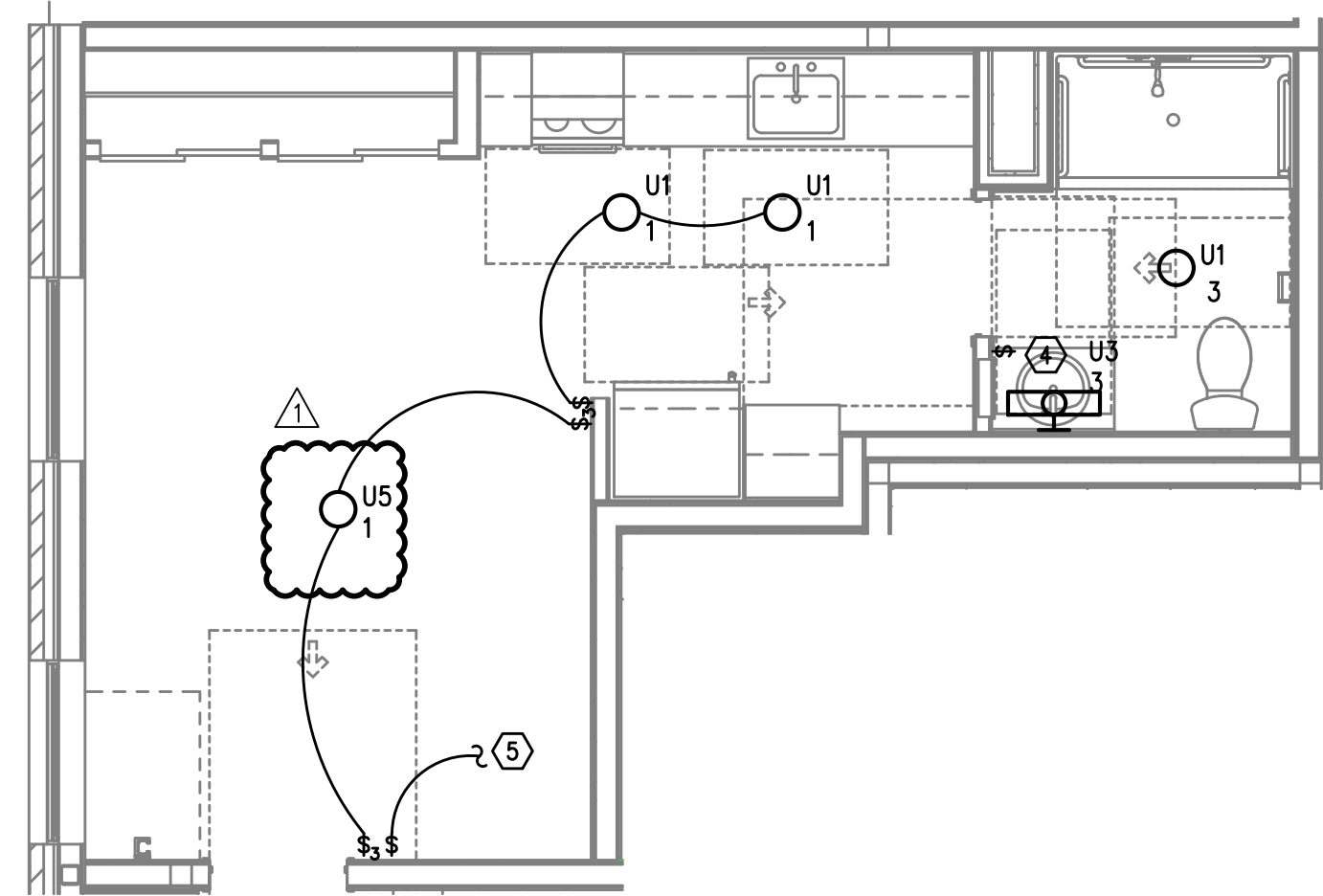
E4.01



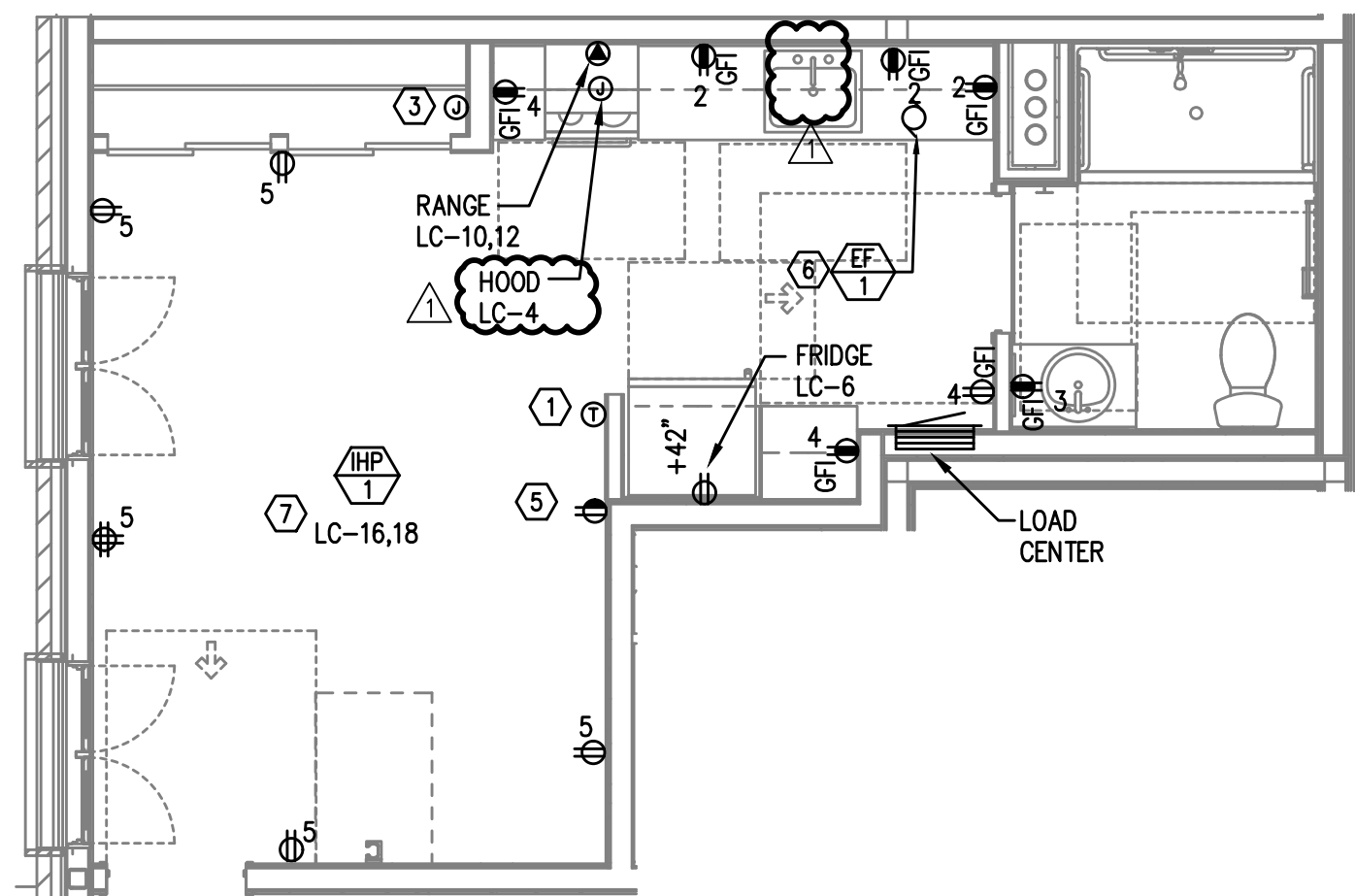
1
E4.02 UNIT TYPE 4
TYPICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



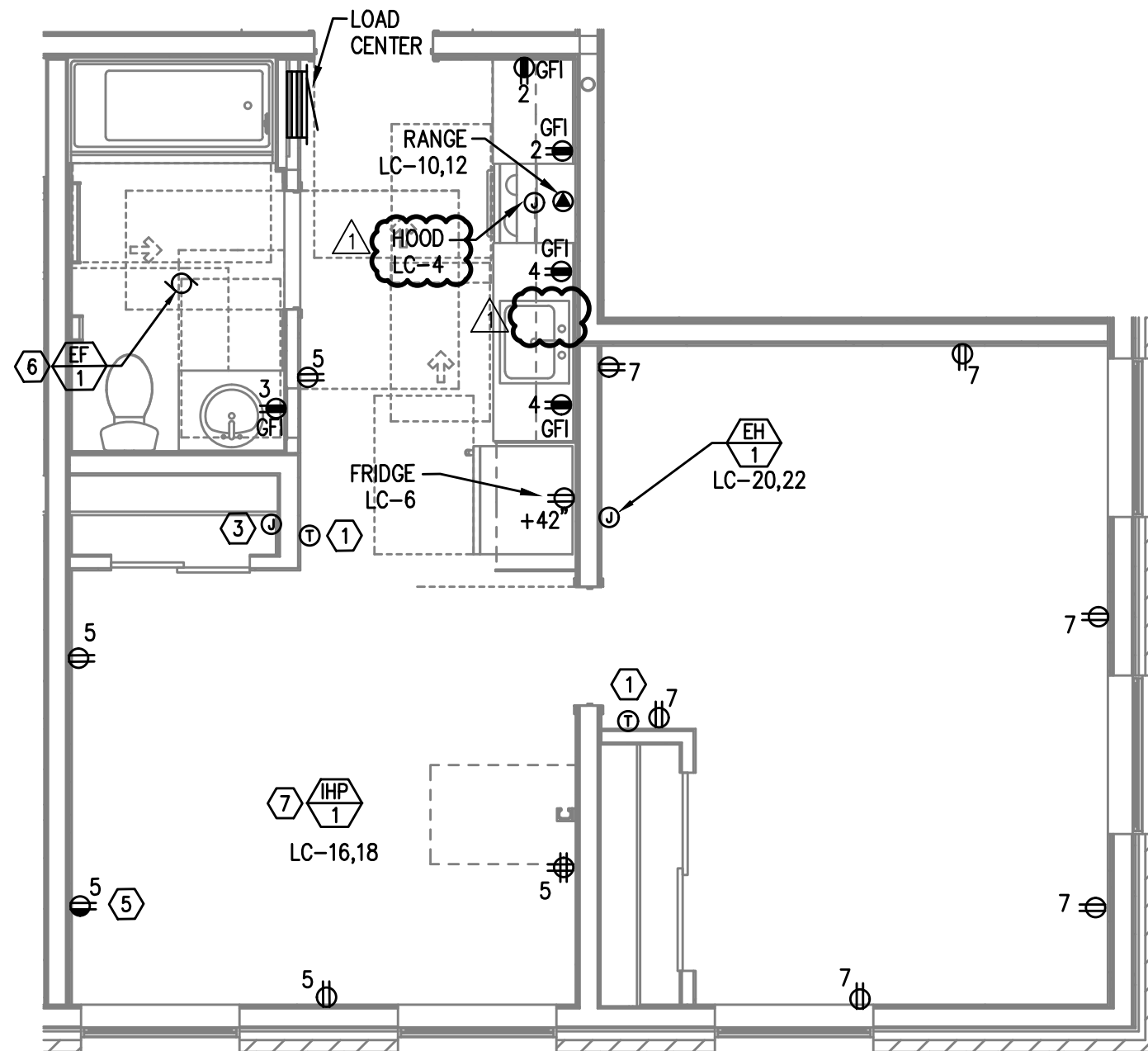
3
E4.02 UNIT TYPE 5
TYPICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



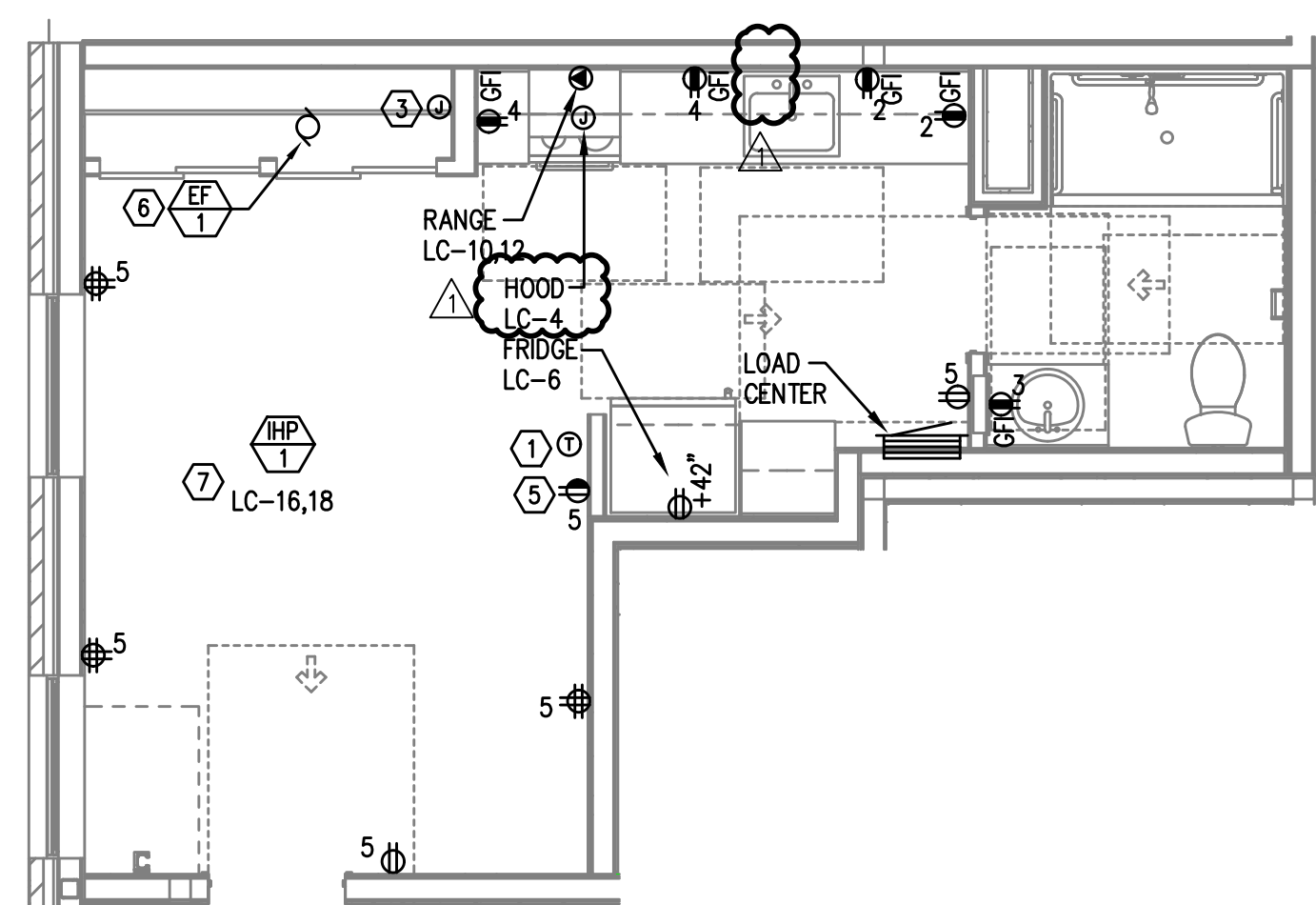
5
E4.02 UNIT TYPE 6
TYPICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



2
E4.02 UNIT TYPE 4
TYPICAL POWER PLAN
SCALE: 1/4" = 1'-0"



4
E4.02 UNIT TYPE 5
TYPICAL POWER PLAN
SCALE: 1/4" = 1'-0"



6
E4.02 UNIT TYPE 6
TYPICAL POWER PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THE 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'I' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

ME Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0548
FAX: (503) 234-0877
INC. WWW.MEIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES

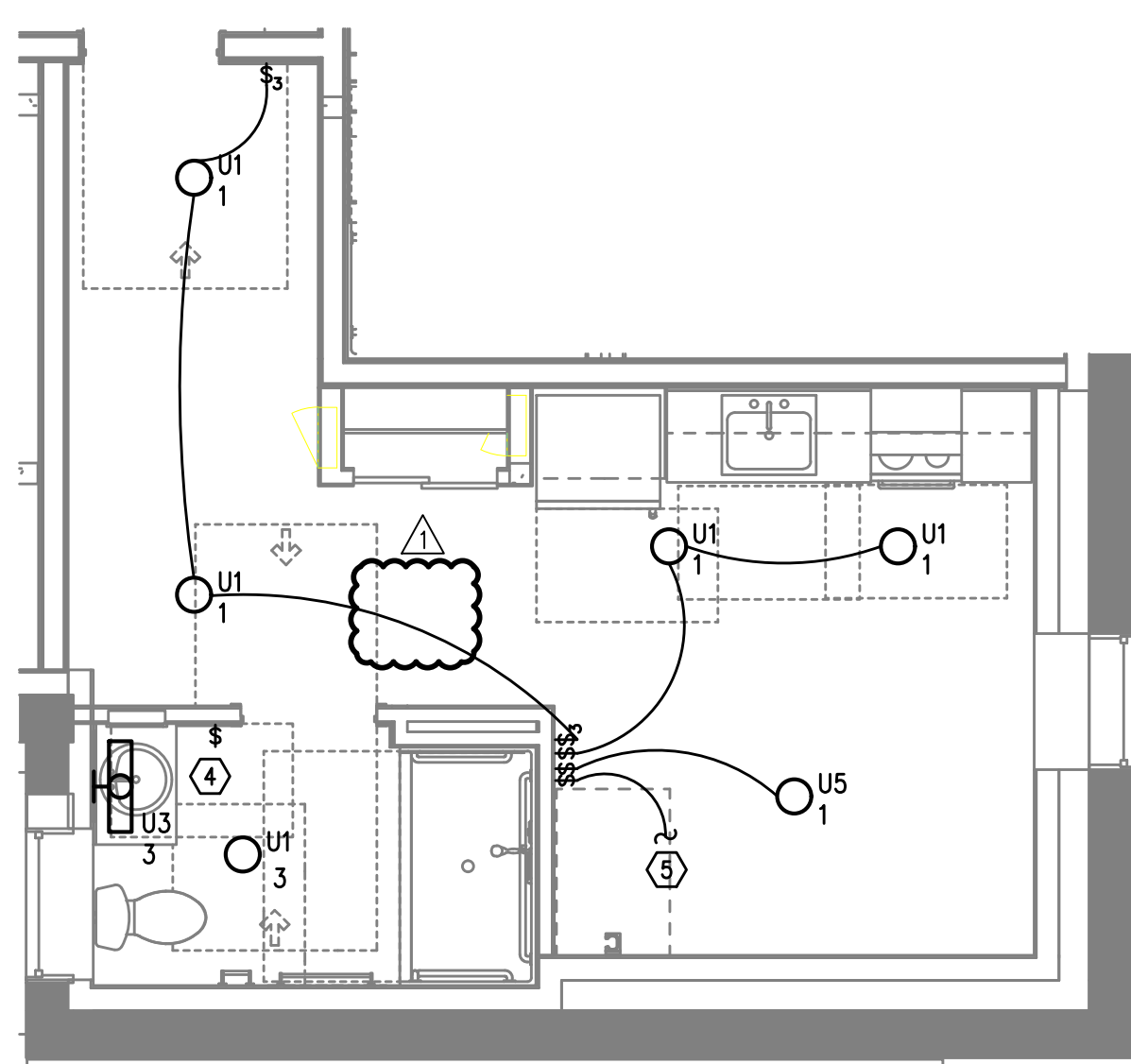
BID SET

TYPICAL ENLARGED
UNIT PLANS

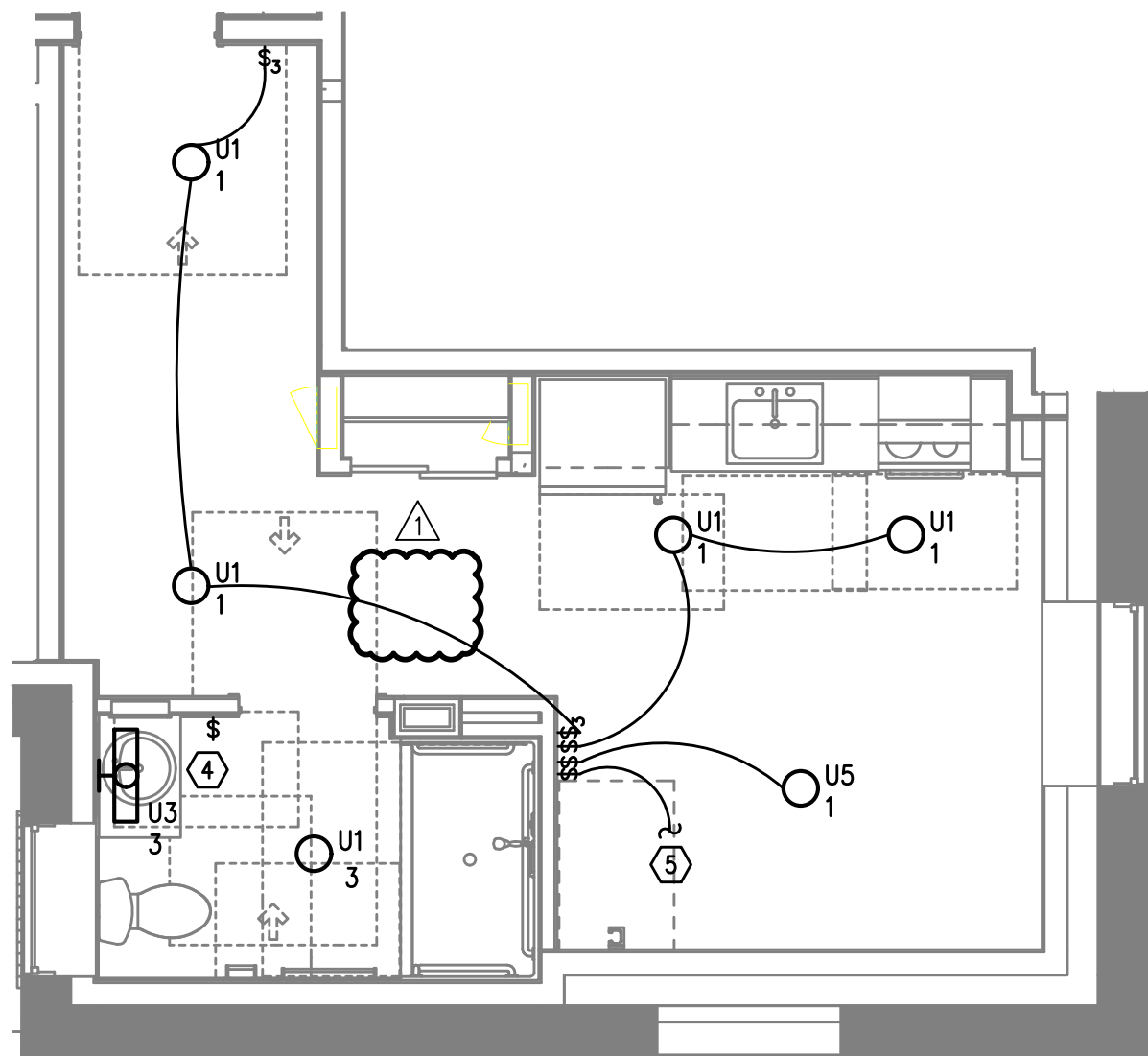
PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021

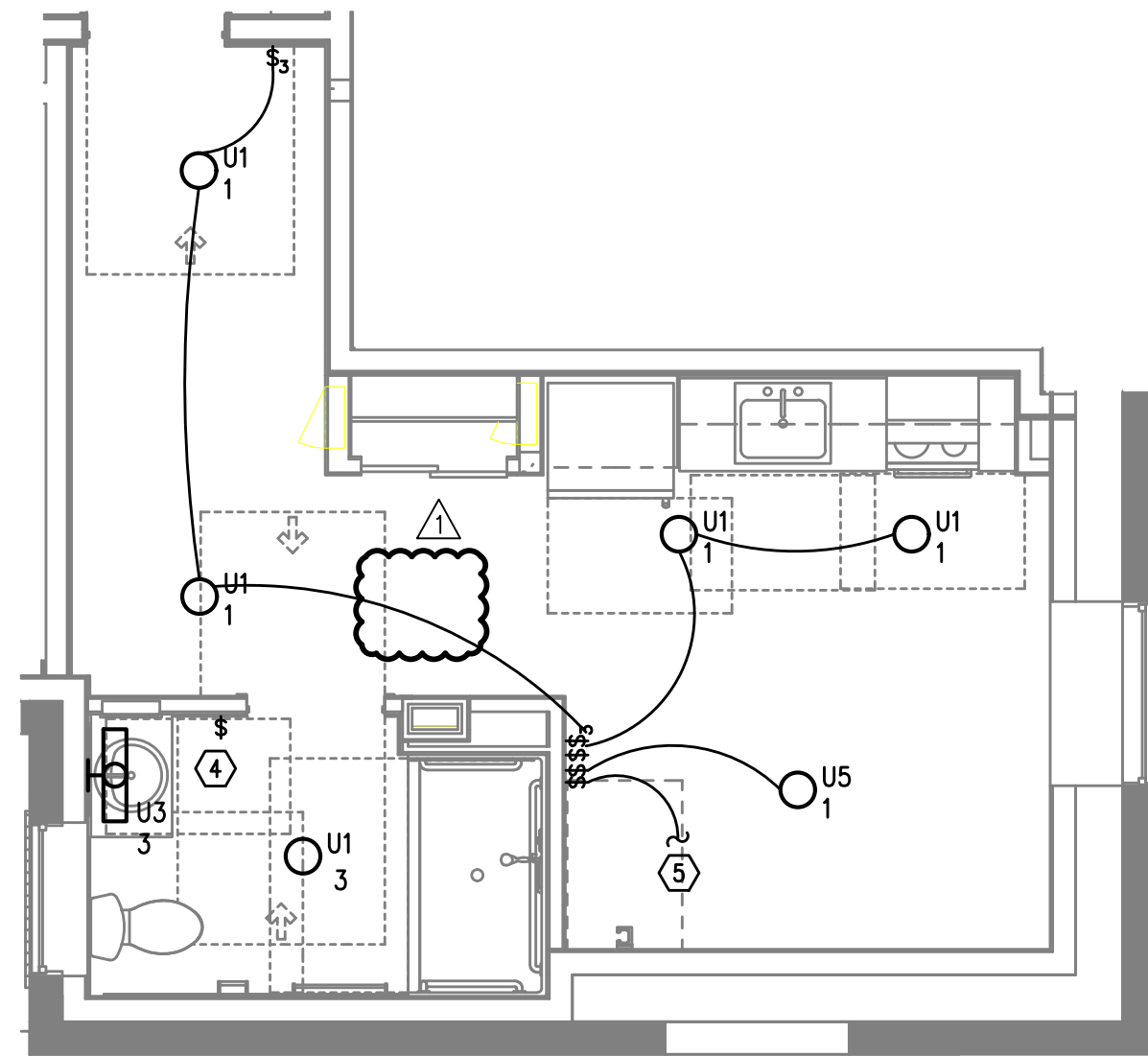
E4.02



UNIT TYPE 7 ADA
TYPICAL LIGHTING PLAN
1
E4.03 SCALE: 1/4" = 1'-0"



UNIT TYPE 7A ADA
TYPICAL LIGHTING PLAN
3
E4.03 SCALE: 1/4" = 1'-0"



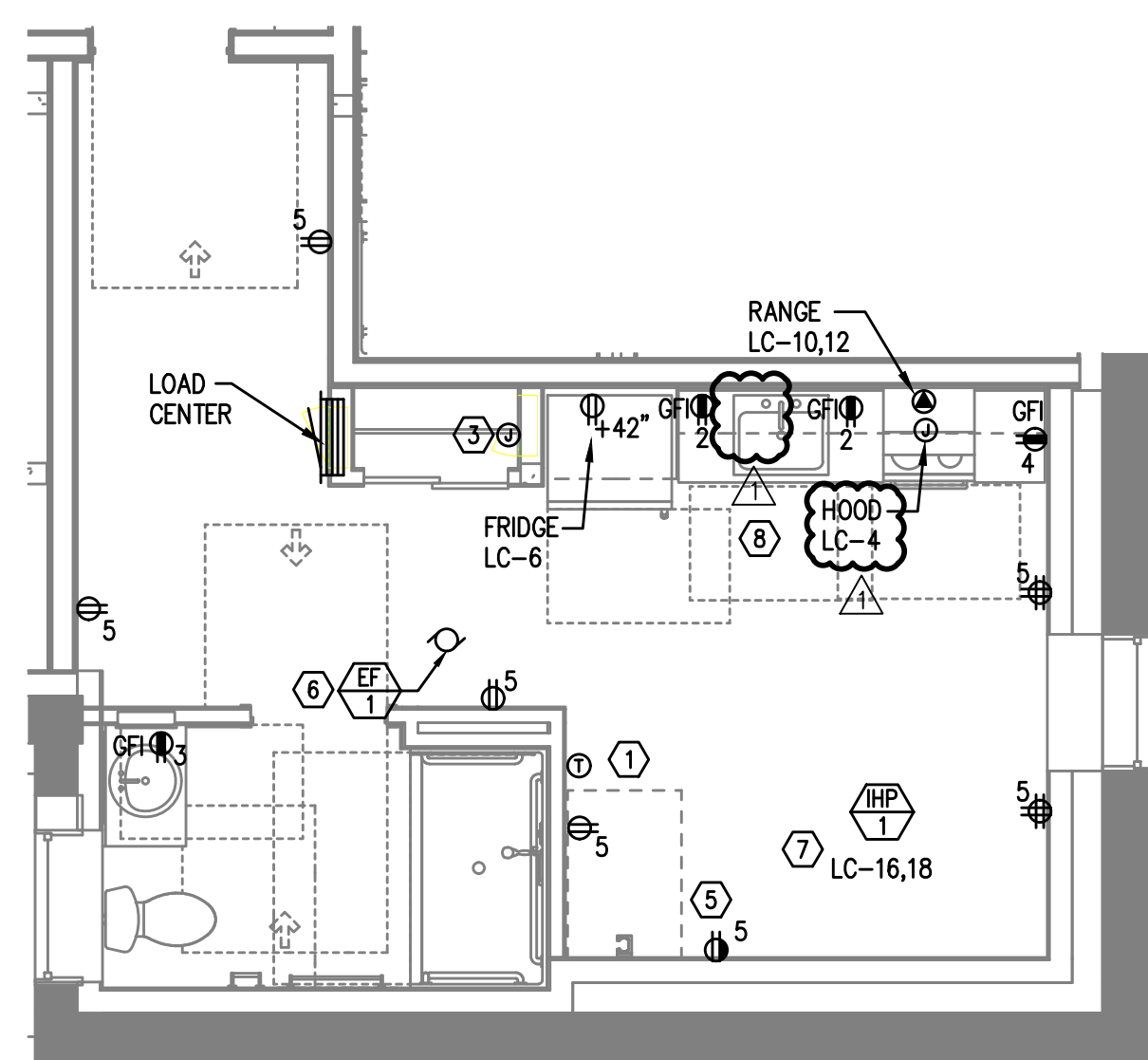
UNIT TYPE 7B ADA
TYPICAL LIGHTING PLAN
5
E4.03 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

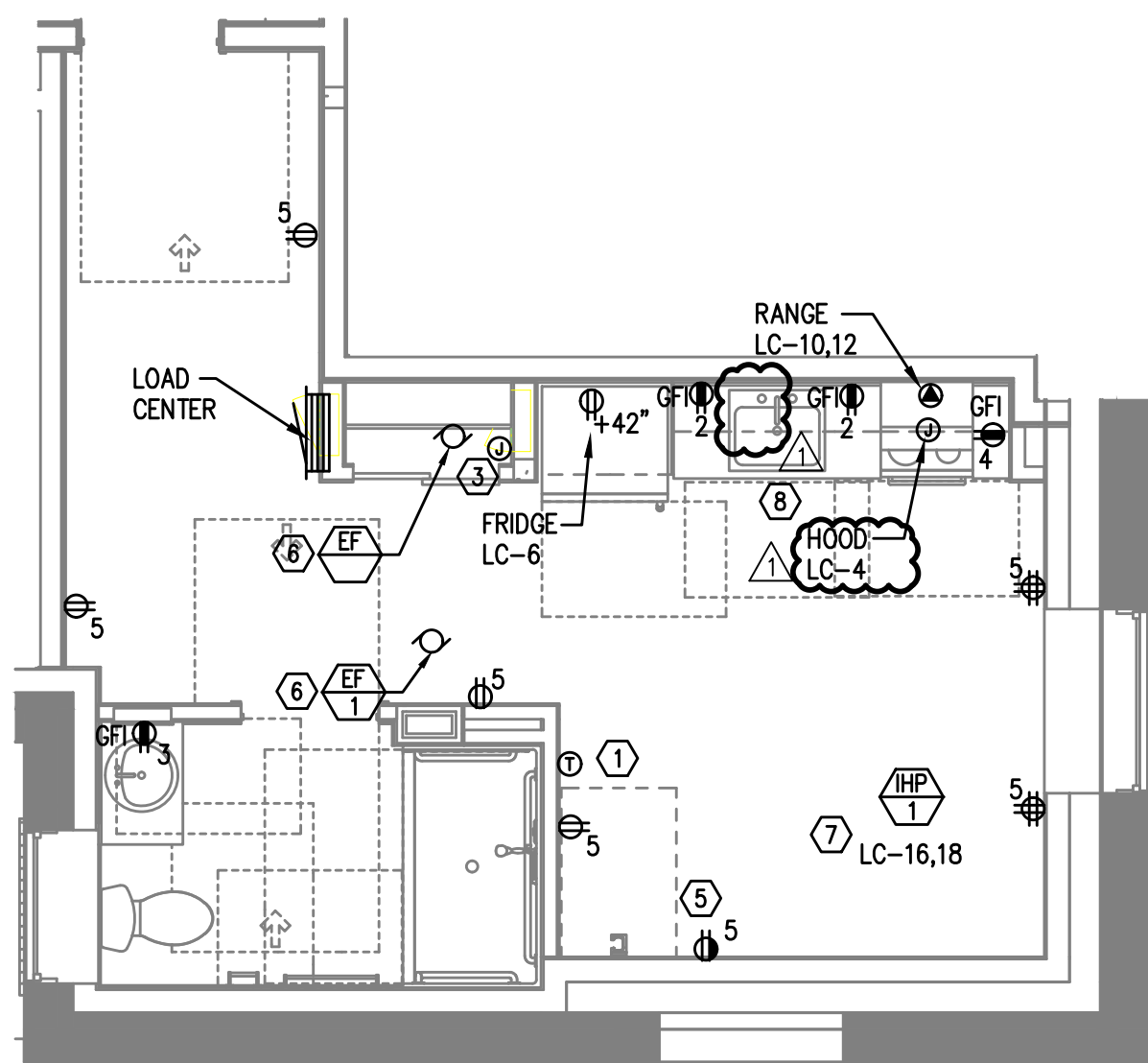
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THAN 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

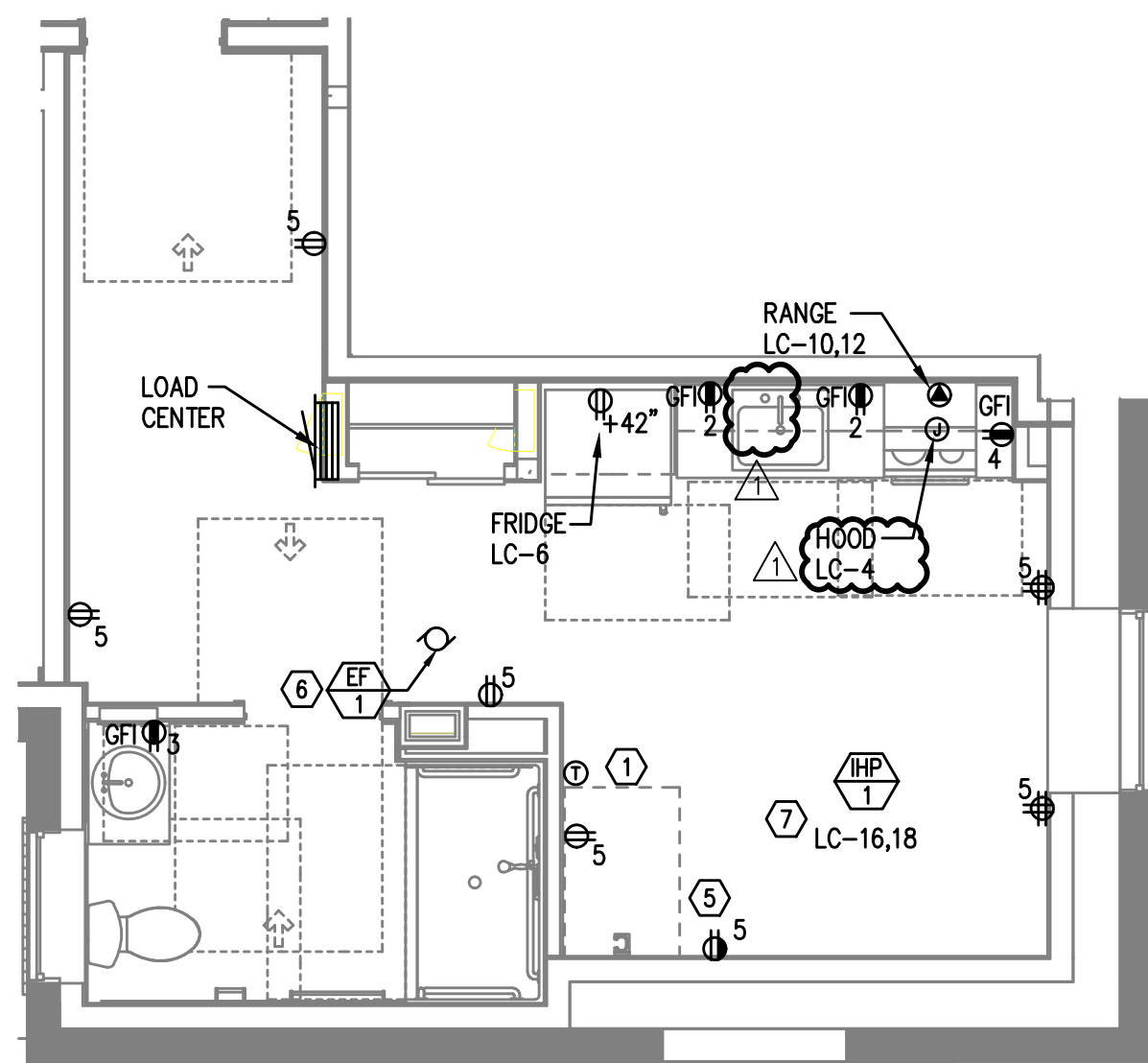
- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.



UNIT TYPE 7 ADA
TYPICAL POWER PLAN
2
E4.03 SCALE: 1/4" = 1'-0"



UNIT TYPE 7A ADA
TYPICAL POWER PLAN
4
E4.03 SCALE: 1/4" = 1'-0"



UNIT TYPE 7B ADA
TYPICAL POWER PLAN
6
E4.03 SCALE: 1/4" = 1'-0"

MEI Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0877
INC. WWW.MEIA-ENG.COM
CONTACT: DENISE TAYLOR

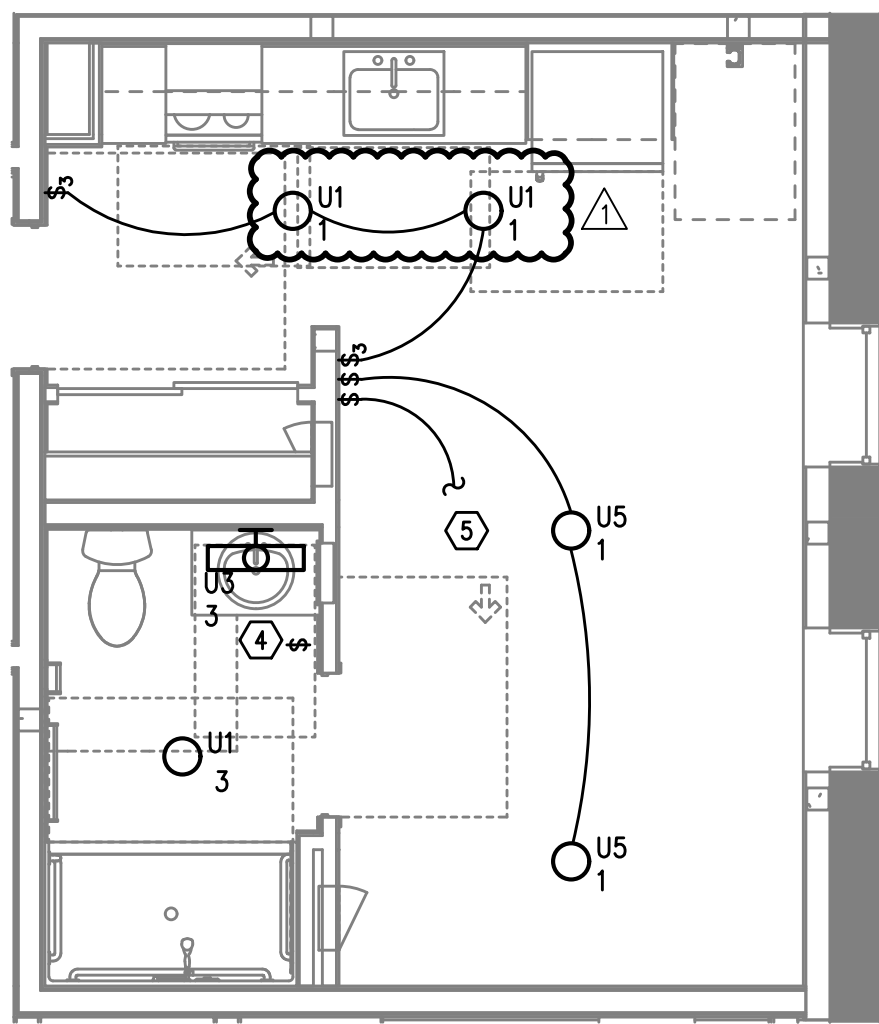


CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, Oregon 97205
503 243 2252
WWW.CARLETONHART.COM

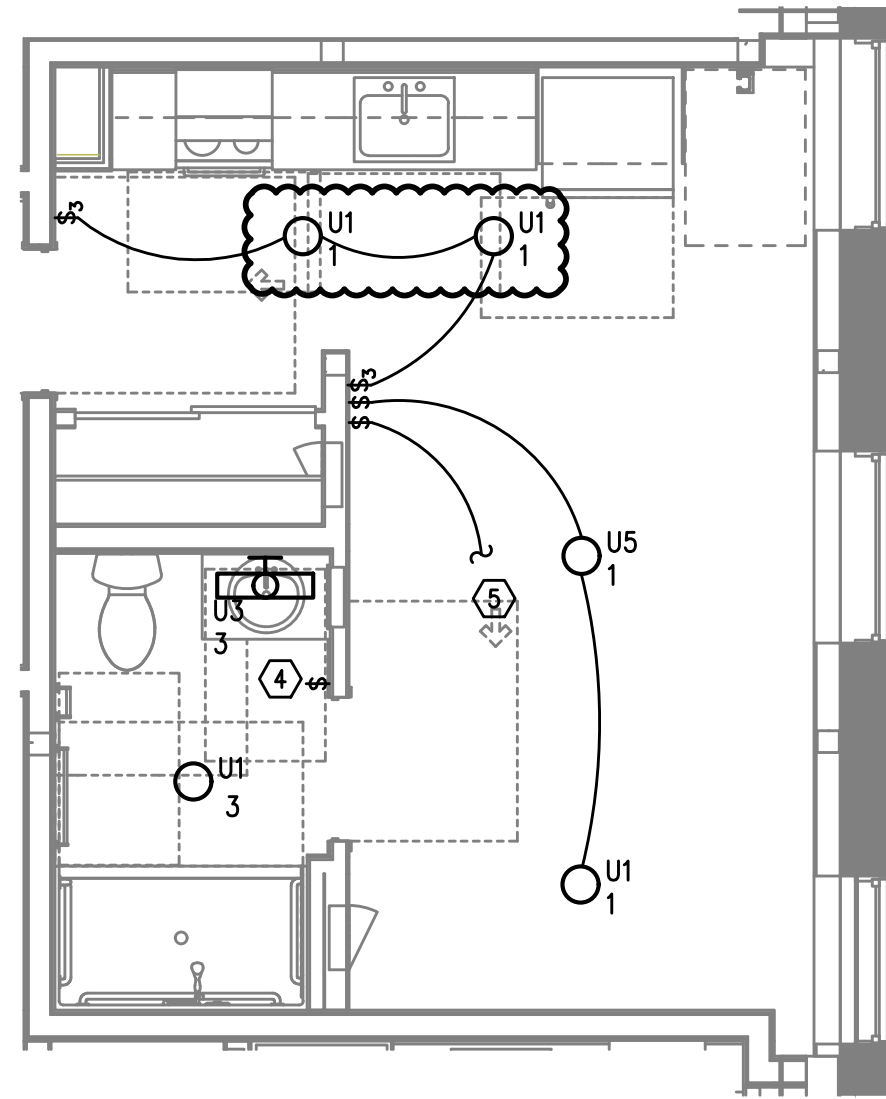
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

TYPICAL ENLARGED
UNIT PLANS
PROJECT NO.
17004
03/12/2021

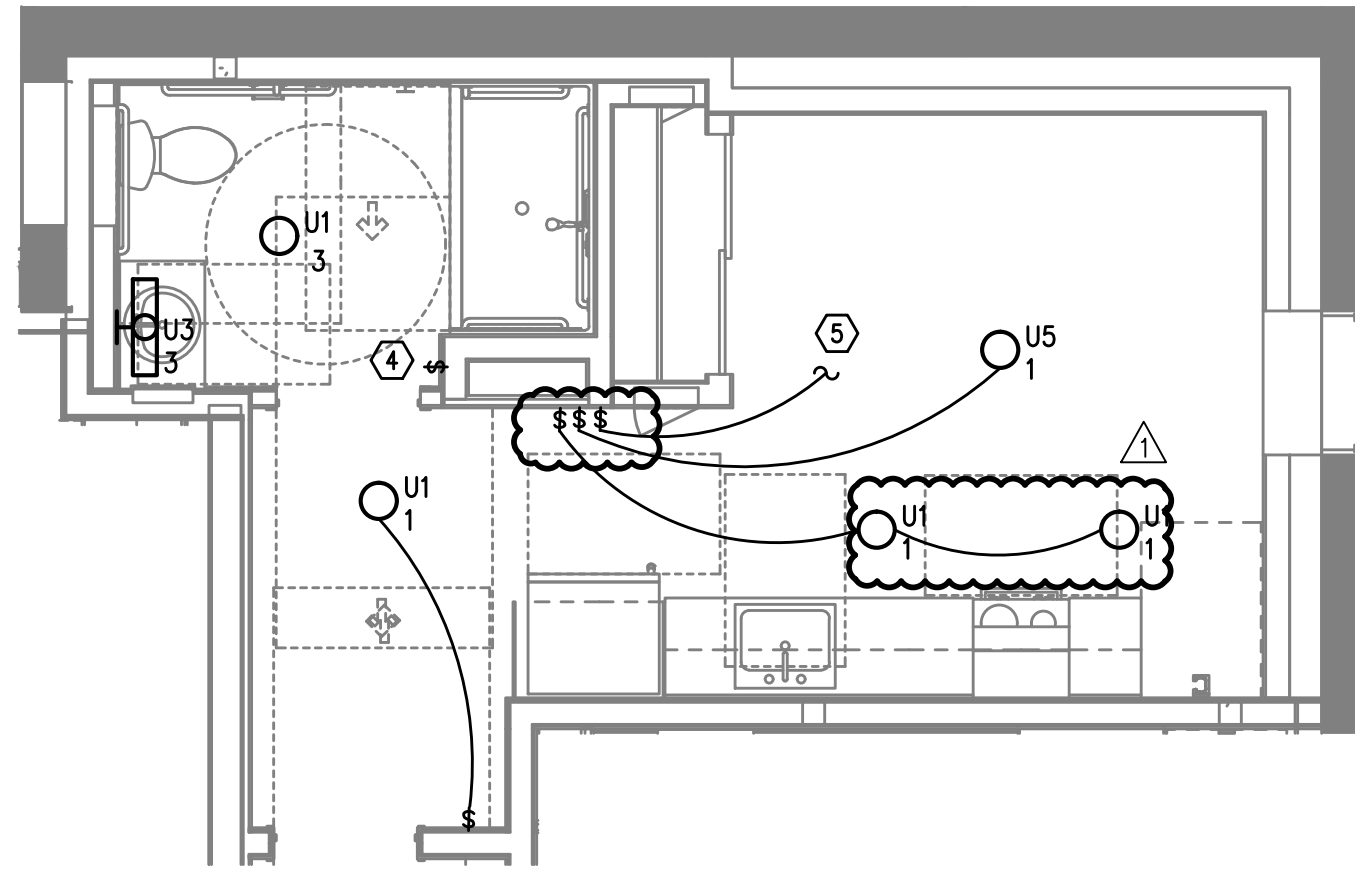
REVISIONS:
ADDENDUM #1 04/30/2021



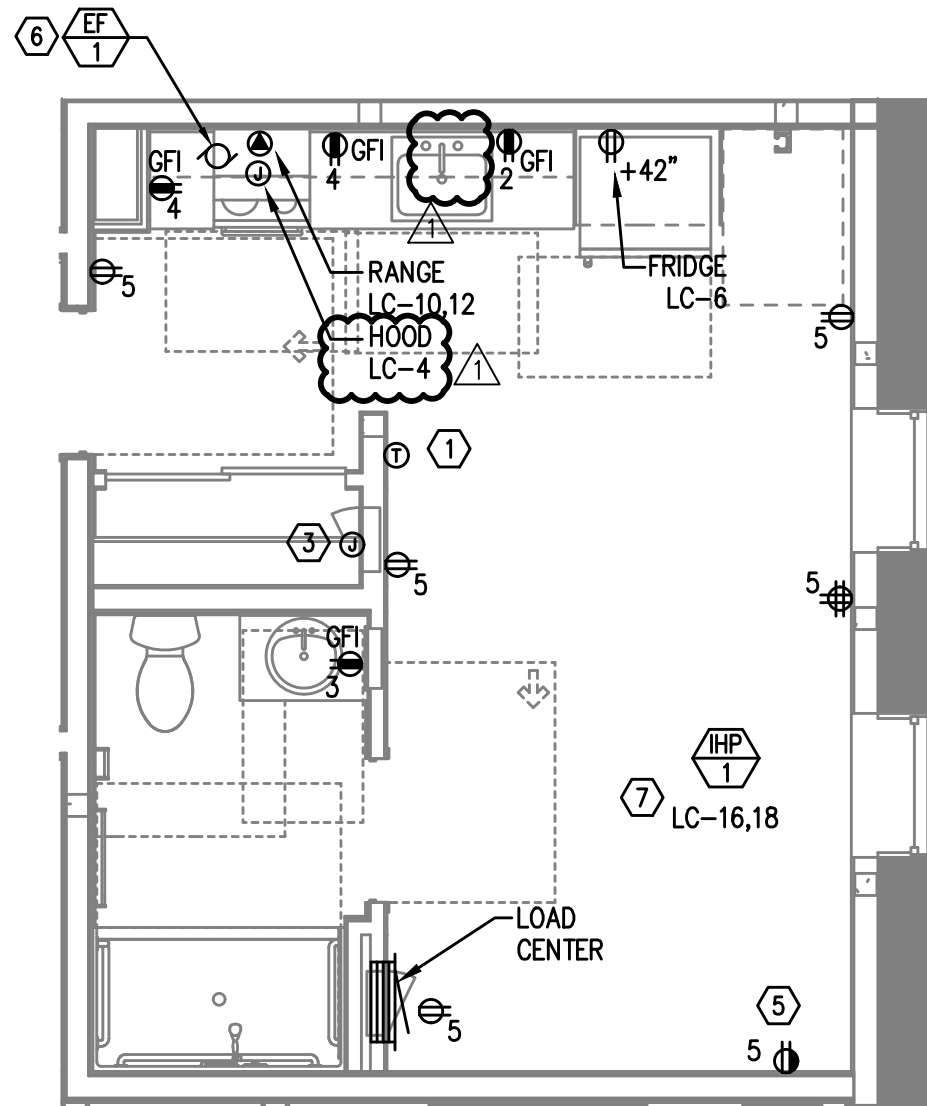
UNIT TYPE 8
TYPICAL LIGHTING PLAN
1
E4.04 SCALE: 1/4" = 1'-0"



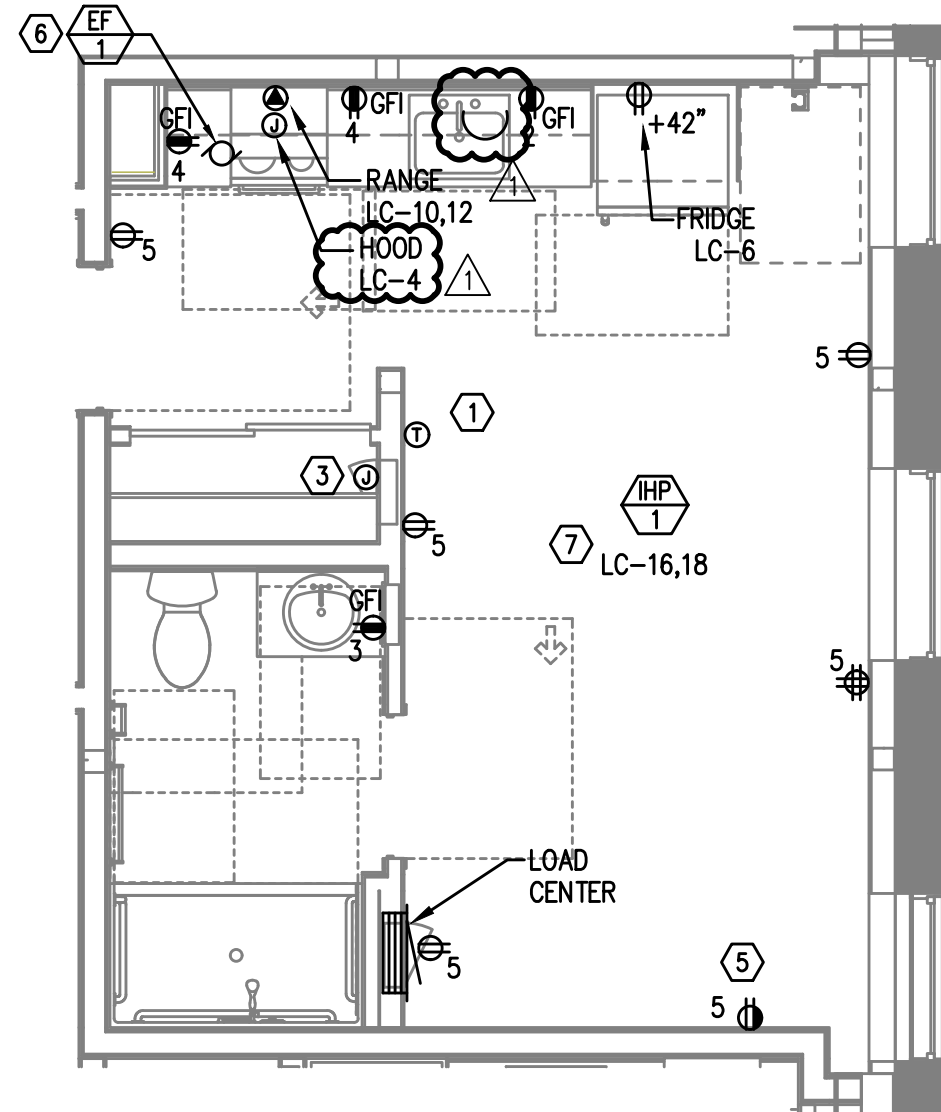
UNIT TYPE 8A
TYPICAL LIGHTING PLAN
3
E4.04 SCALE: 1/4" = 1'-0"



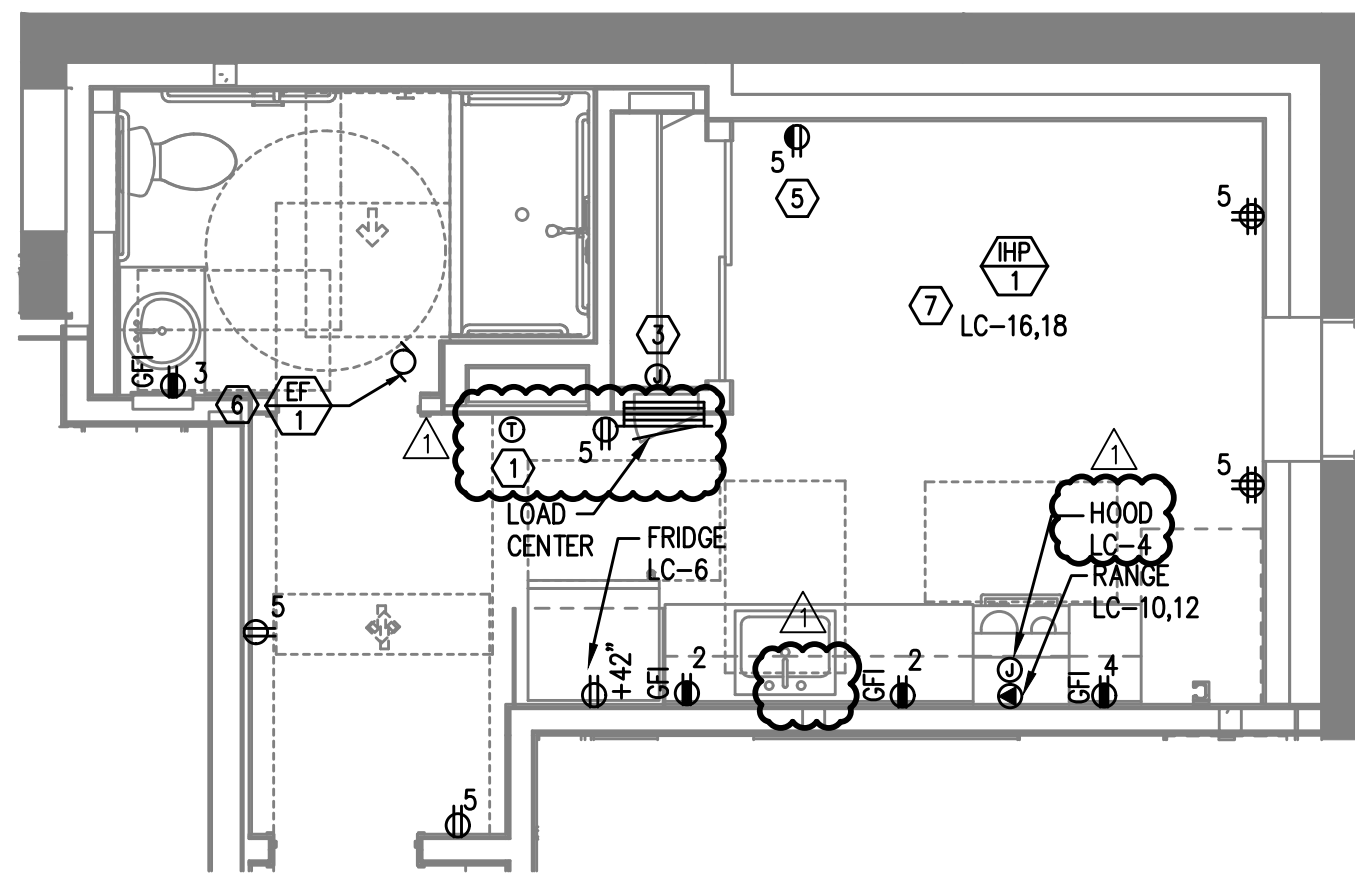
UNIT TYPE 9
TYPICAL LIGHTING PLAN
5
E4.04 SCALE: 1/4" = 1'-0"



UNIT TYPE 8
TYPICAL POWER PLAN
2
E4.04 SCALE: 1/4" = 1'-0"



UNIT TYPE 8A
TYPICAL POWER PLAN
4
E4.04 SCALE: 1/4" = 1'-0"



UNIT TYPE 9
TYPICAL POWER PLAN
6
E4.04 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THAN 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE "T" SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

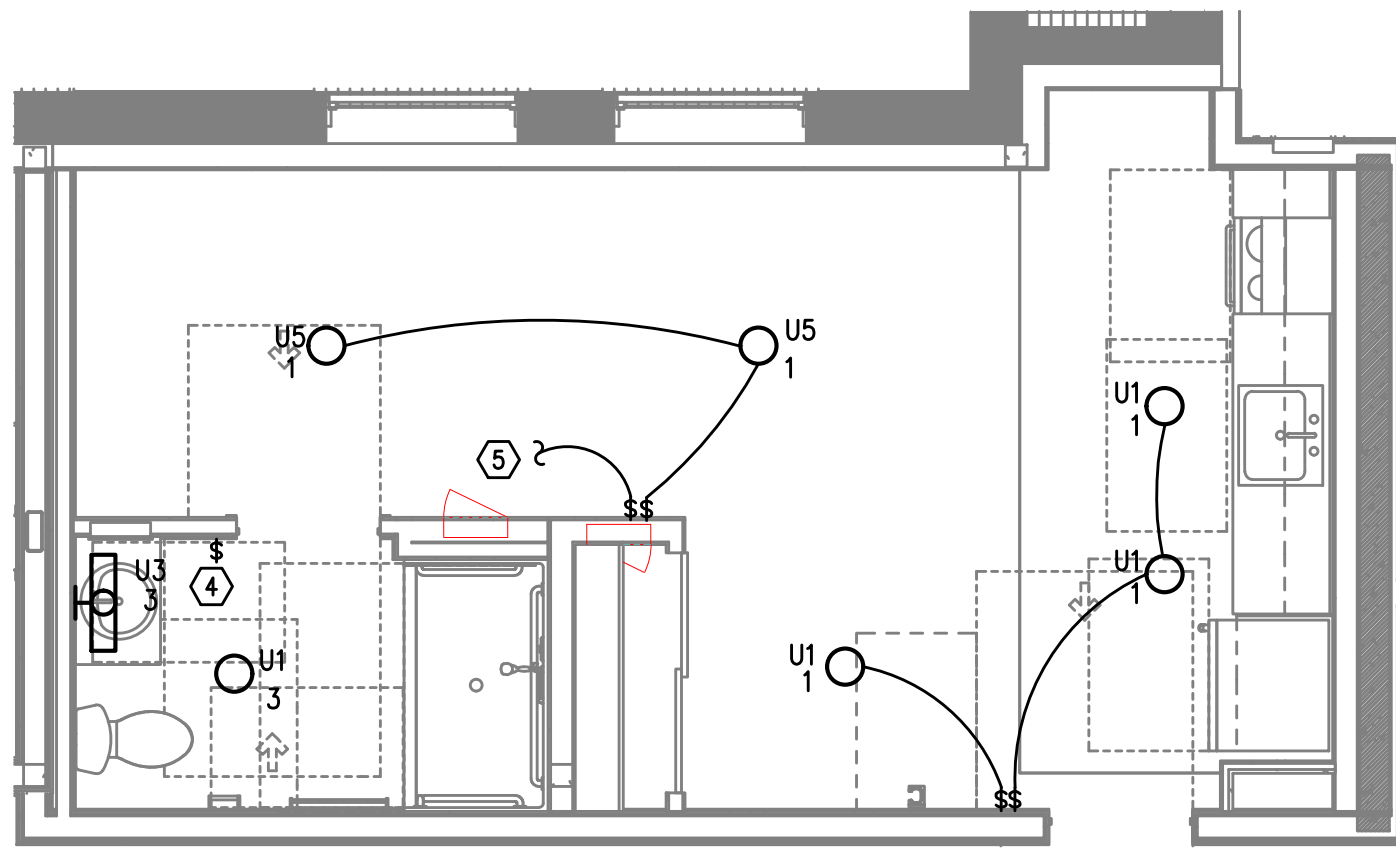
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

TYPICAL ENLARGED
UNIT PLANS

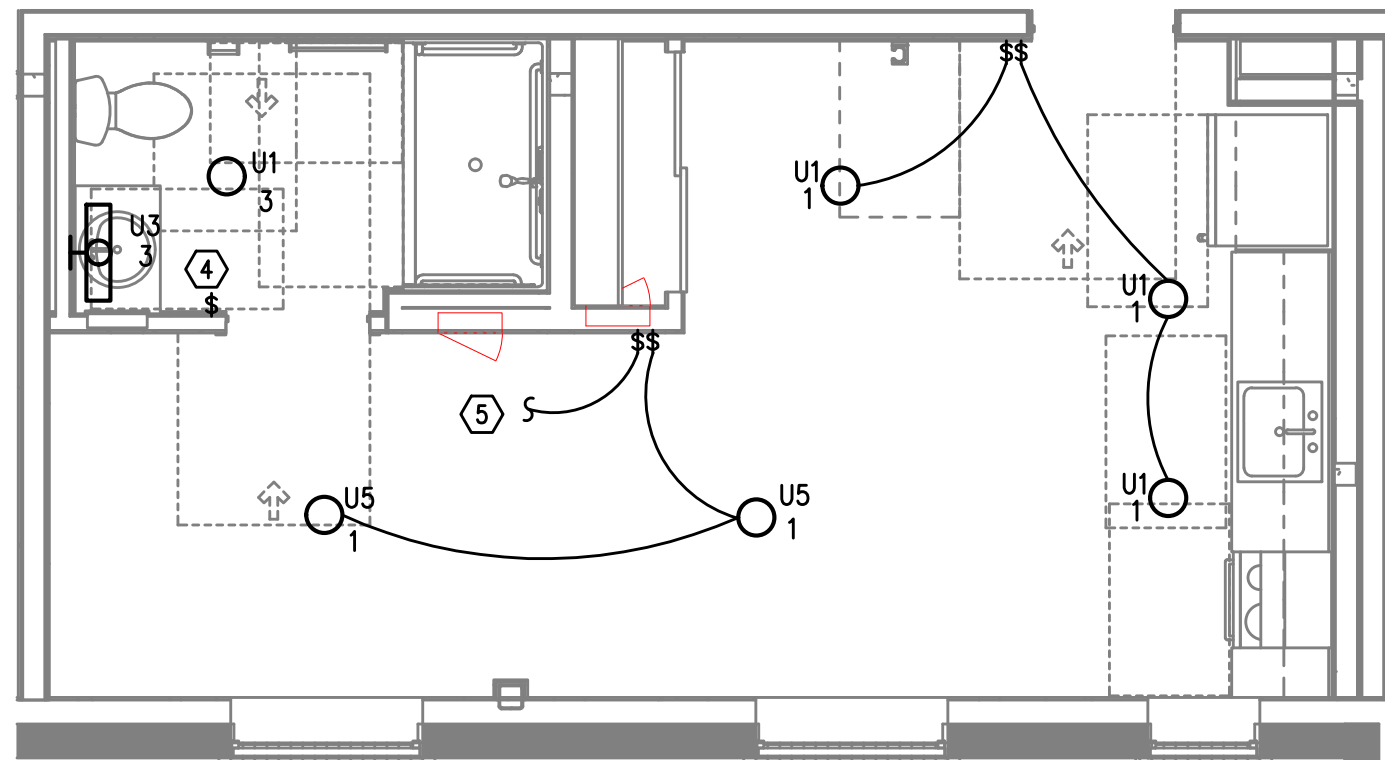
PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021

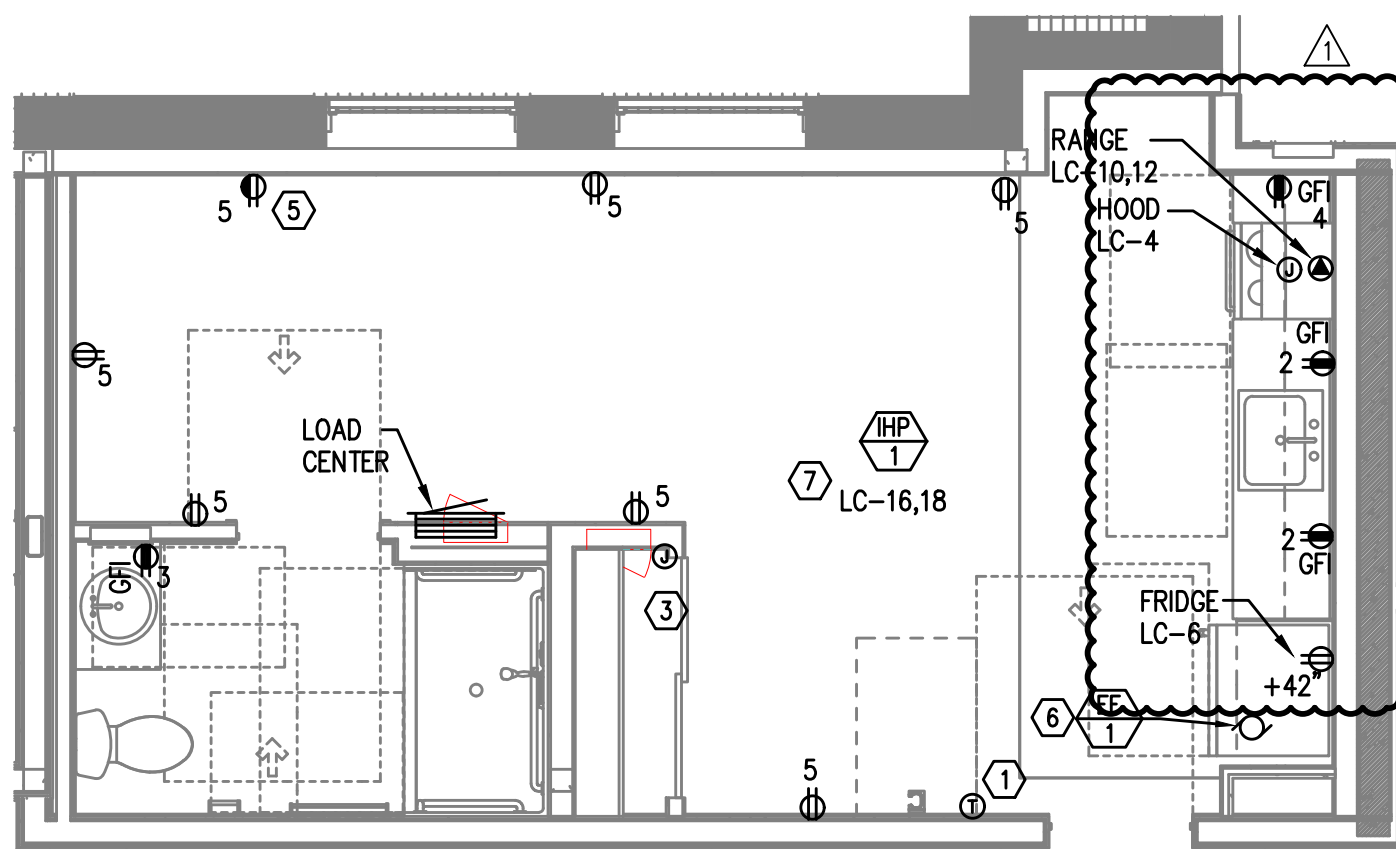
E4.04



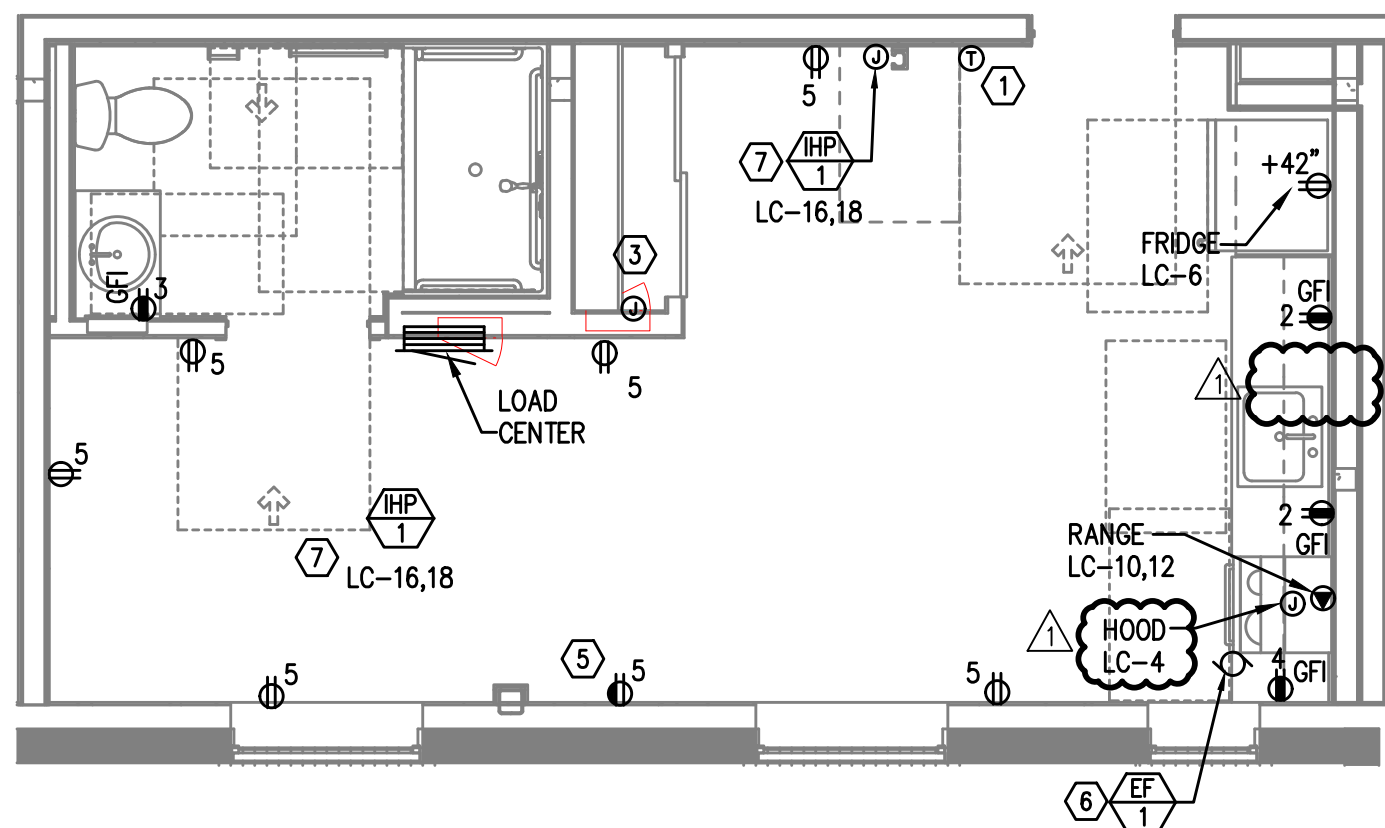
UNIT TYPE 10
1
E4.05
TYPICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



UNIT TYPE 10A
3
E4.05
TYPICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



UNIT TYPE 10
2
E4.05
TYPICAL POWER PLAN
SCALE: 1/4" = 1'-0"



UNIT TYPE 10A
4
E4.05
TYPICAL POWER PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THE 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR



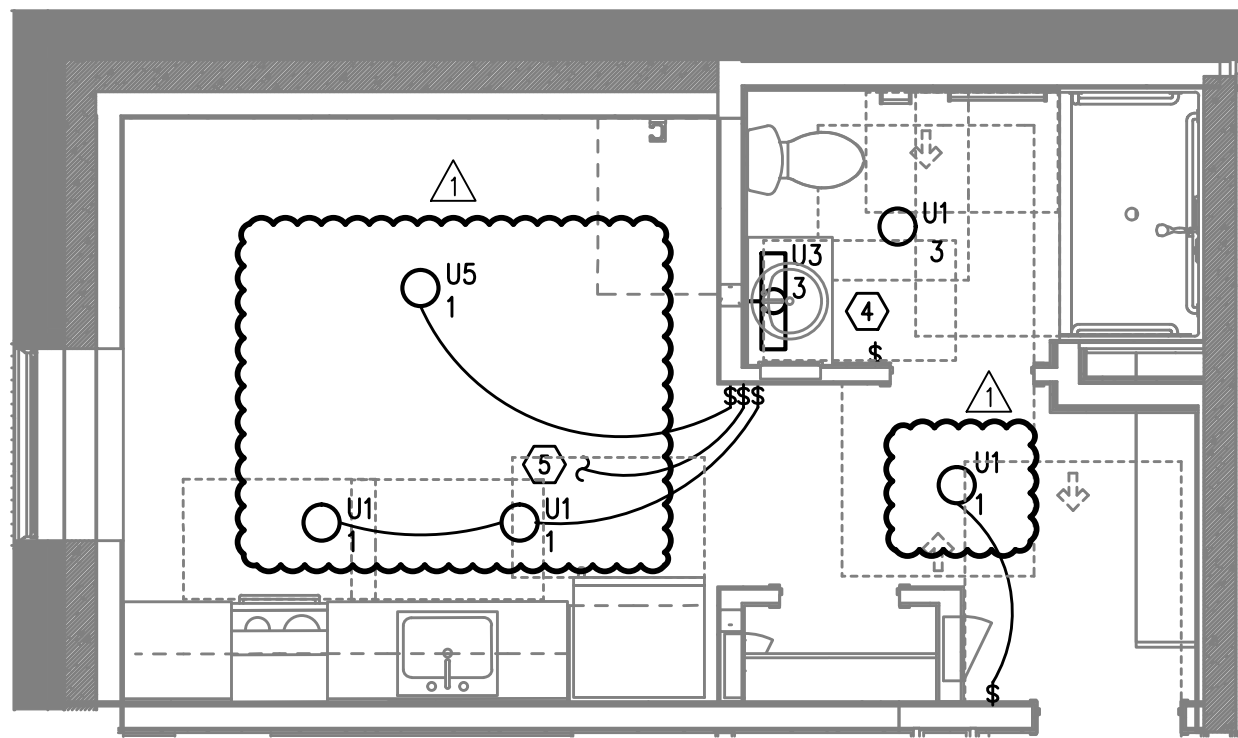
CARLETON HART ARCHITECTURE P.C.
830 sw 10th avenue #200 portlandoregon97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

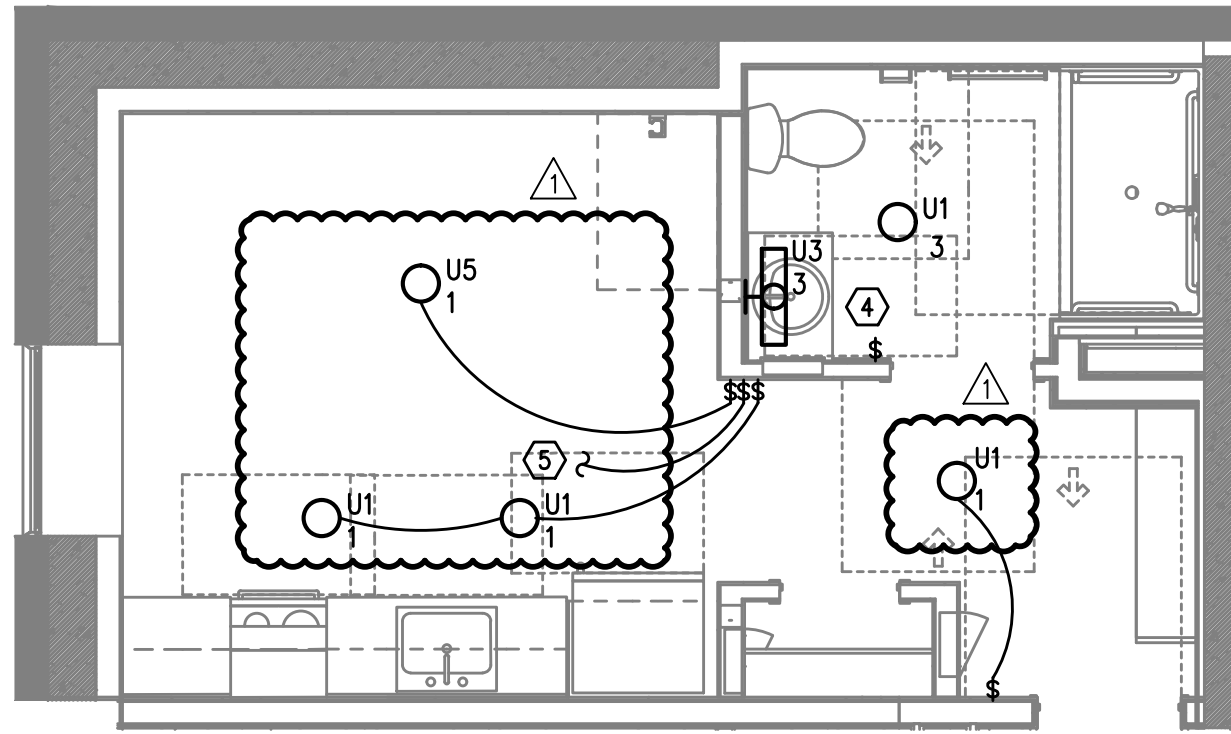
TYPICAL ENLARGED
UNIT PLANS

PROJECT NO.
17004
03/12/2021

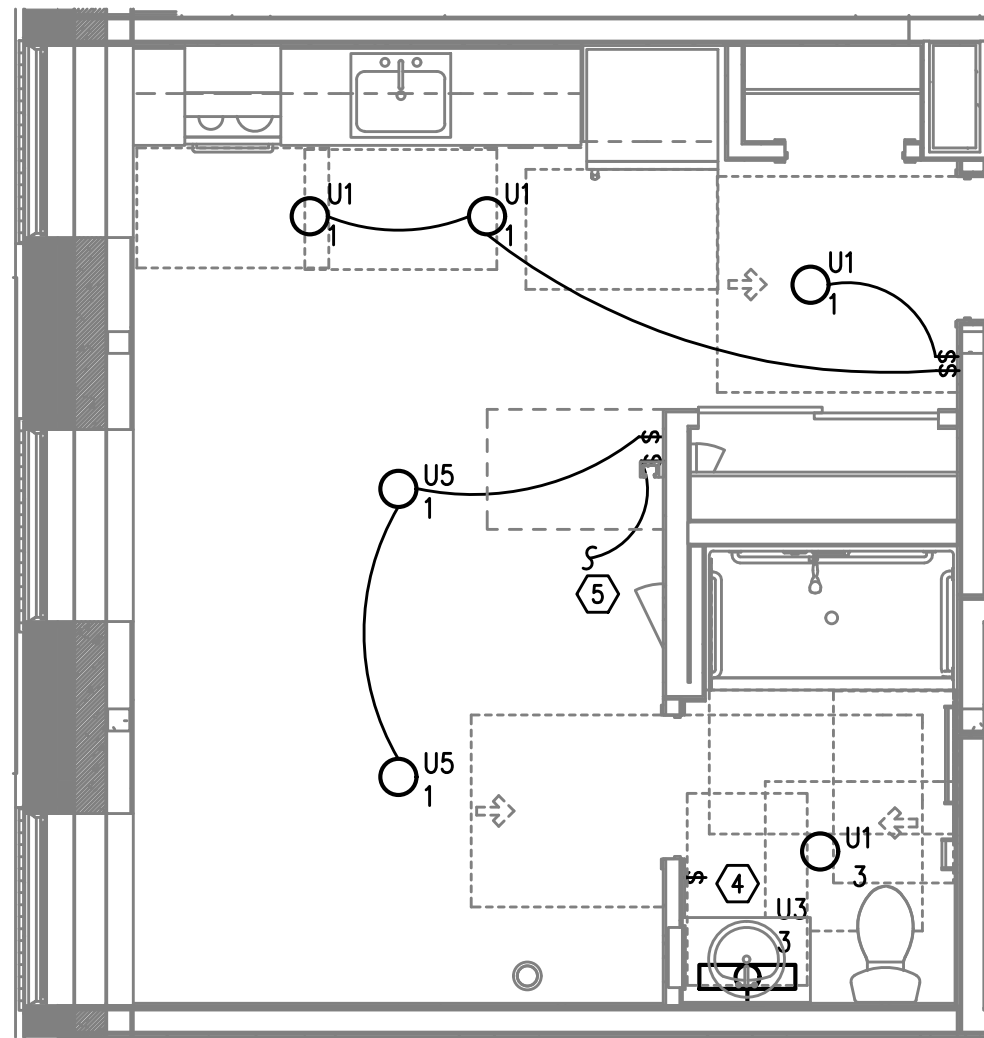
REVISIONS:
ADDENDUM #1 04/30/2021



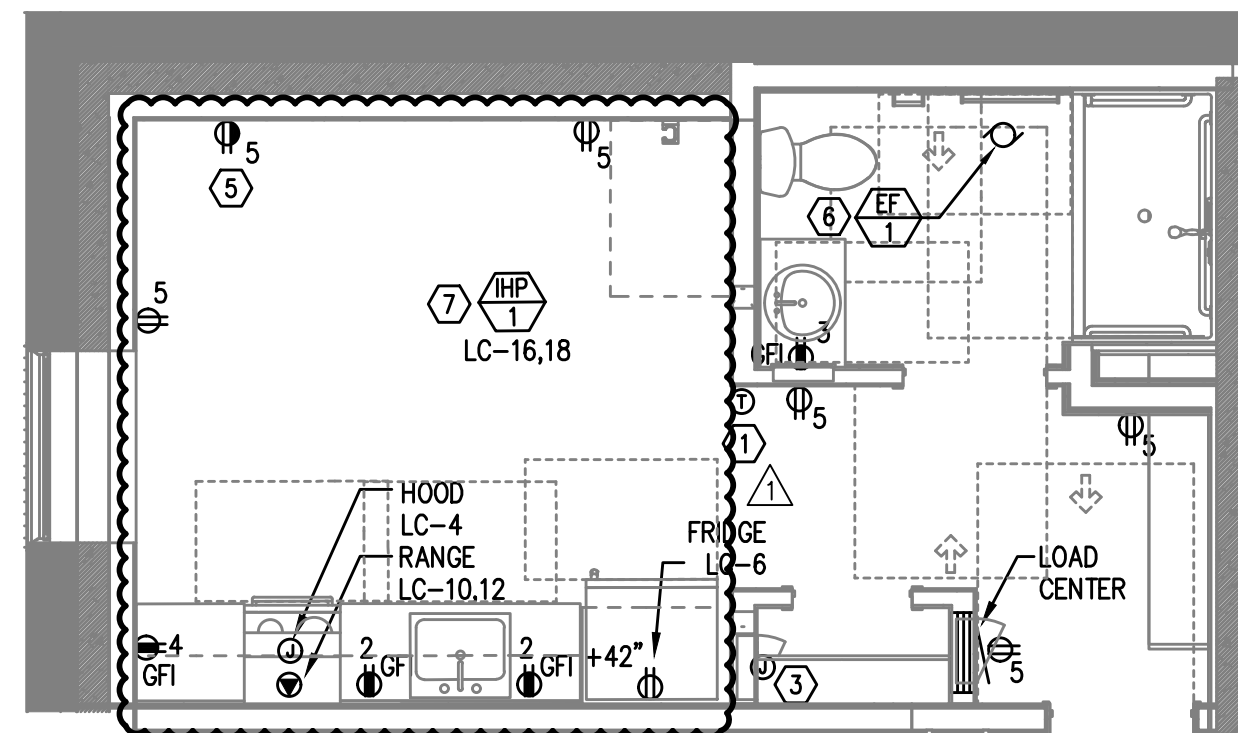
UNIT TYPE 11
1
TYPICAL LIGHTING PLAN
E4.06 SCALE: 1/4" = 1'-0"



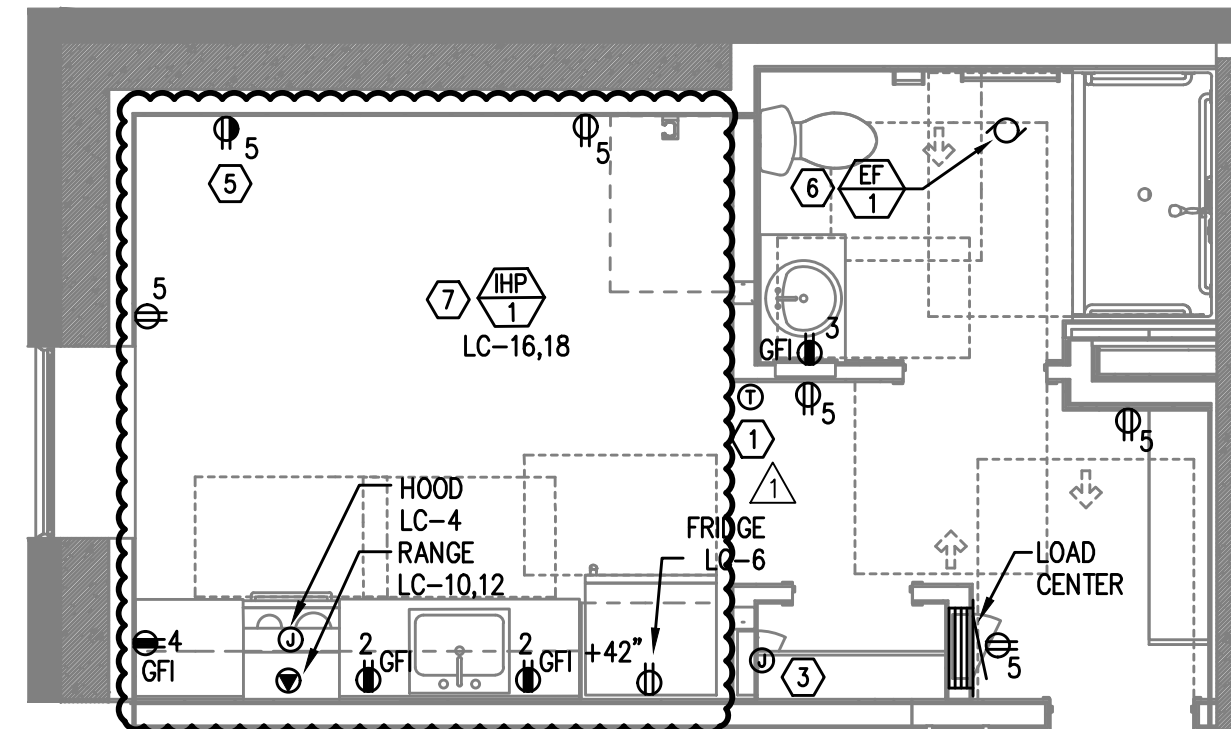
UNIT TYPE 11A
3
TYPICAL LIGHTING PLAN
E4.06 SCALE: 1/4" = 1'-0"



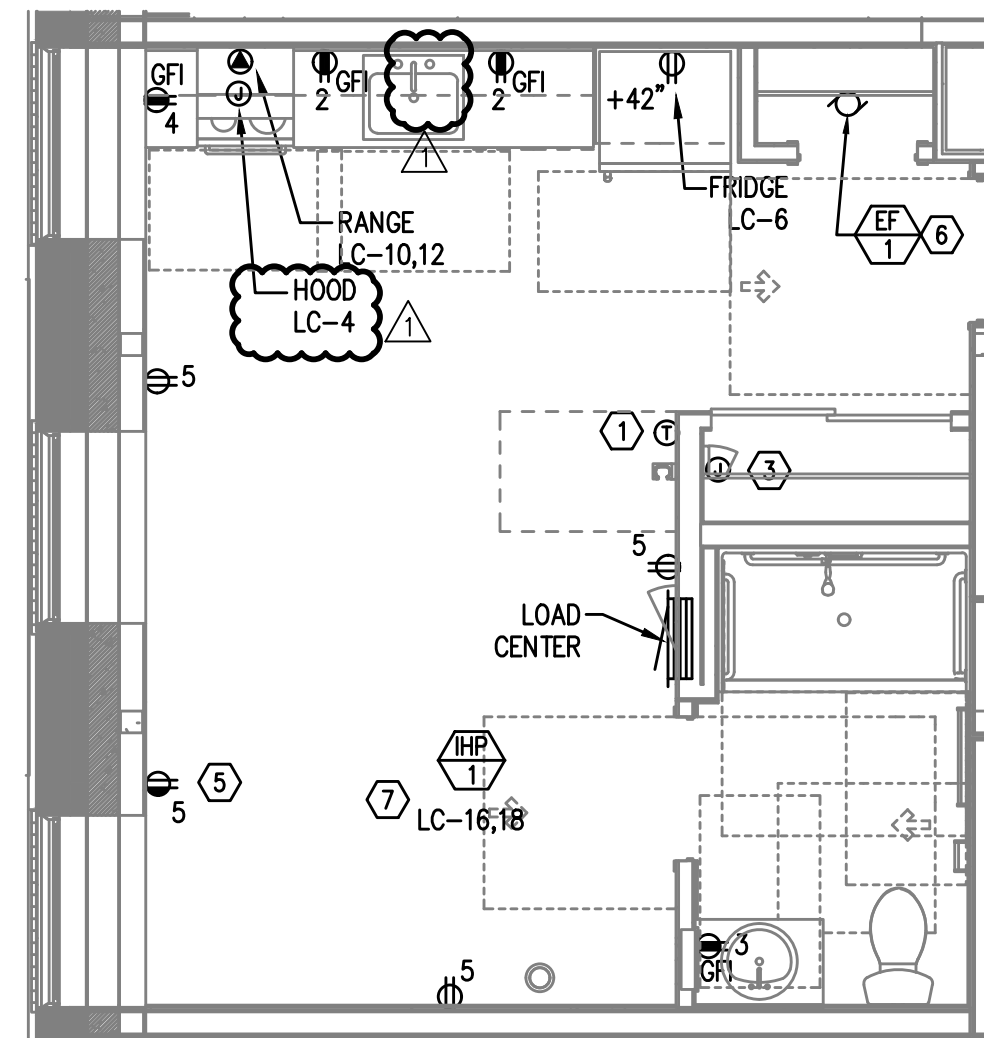
UNIT TYPE 12
5
TYPICAL LIGHTING PLAN
E4.06 SCALE: 1/4" = 1'-0"



UNIT TYPE 11
2
TYPICAL POWER PLAN
E4.06 SCALE: 1/4" = 1'-0"



UNIT TYPE 11A
4
TYPICAL POWER PLAN
E4.06 SCALE: 1/4" = 1'-0"



UNIT TYPE 12
6
TYPICAL POWER PLAN
E4.06 SCALE: 1/4" = 1'-0"

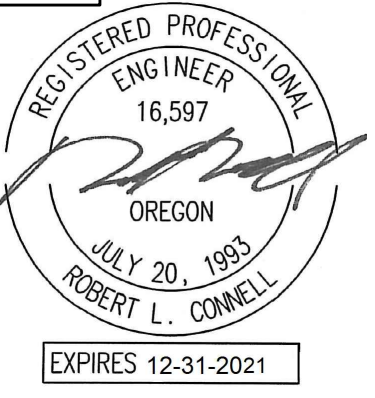
GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THE 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

MEFA Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PH: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MFIA-ENG.COM
CONTACT: DENISE TAYLOR

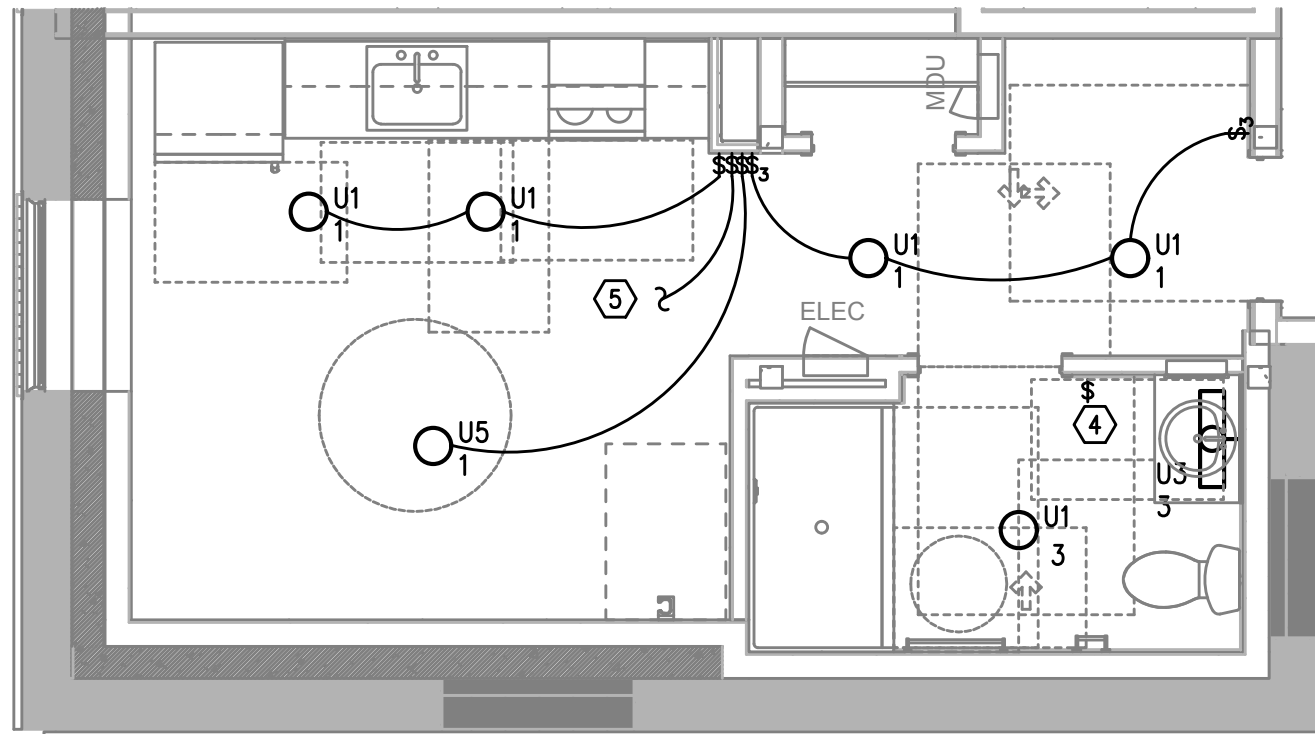


CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, OR 97205
503 243 2252
www.carletonhart.com

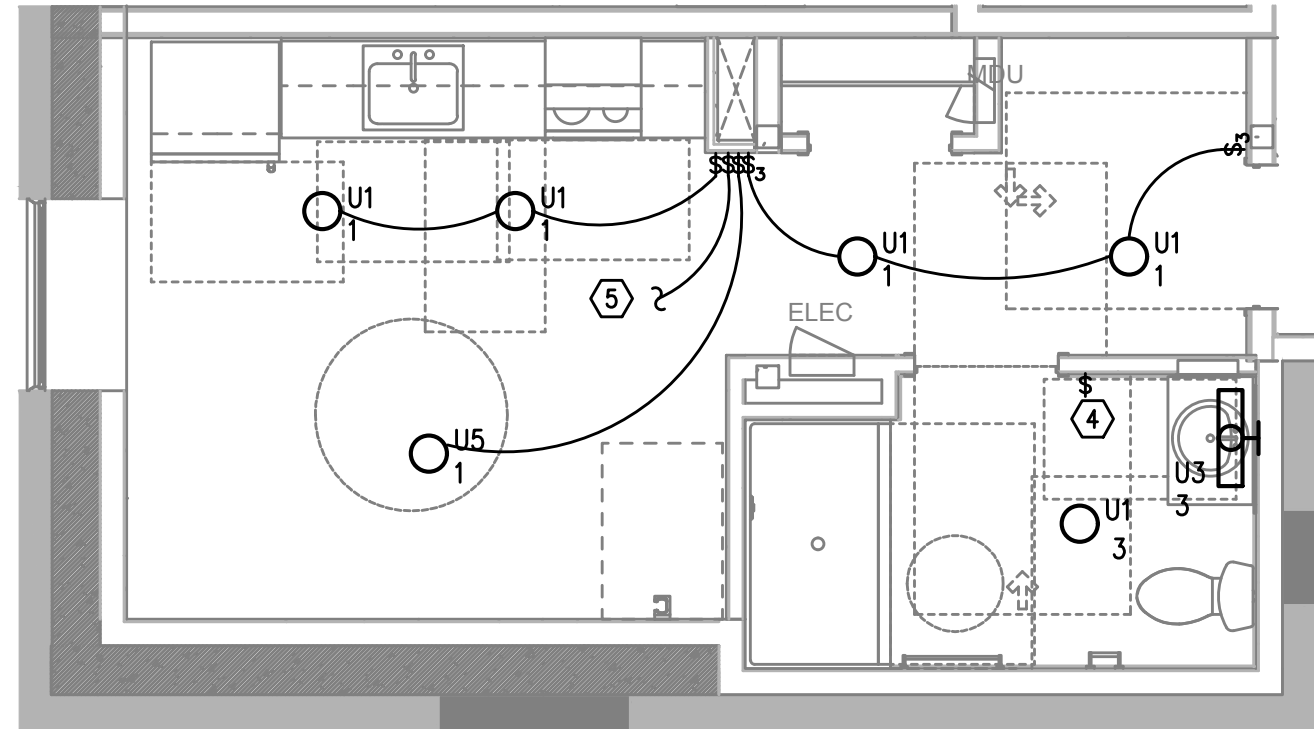
SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

TYPICAL ENLARGED
UNIT PLANS
PROJECT NO.
17004
03/12/2021

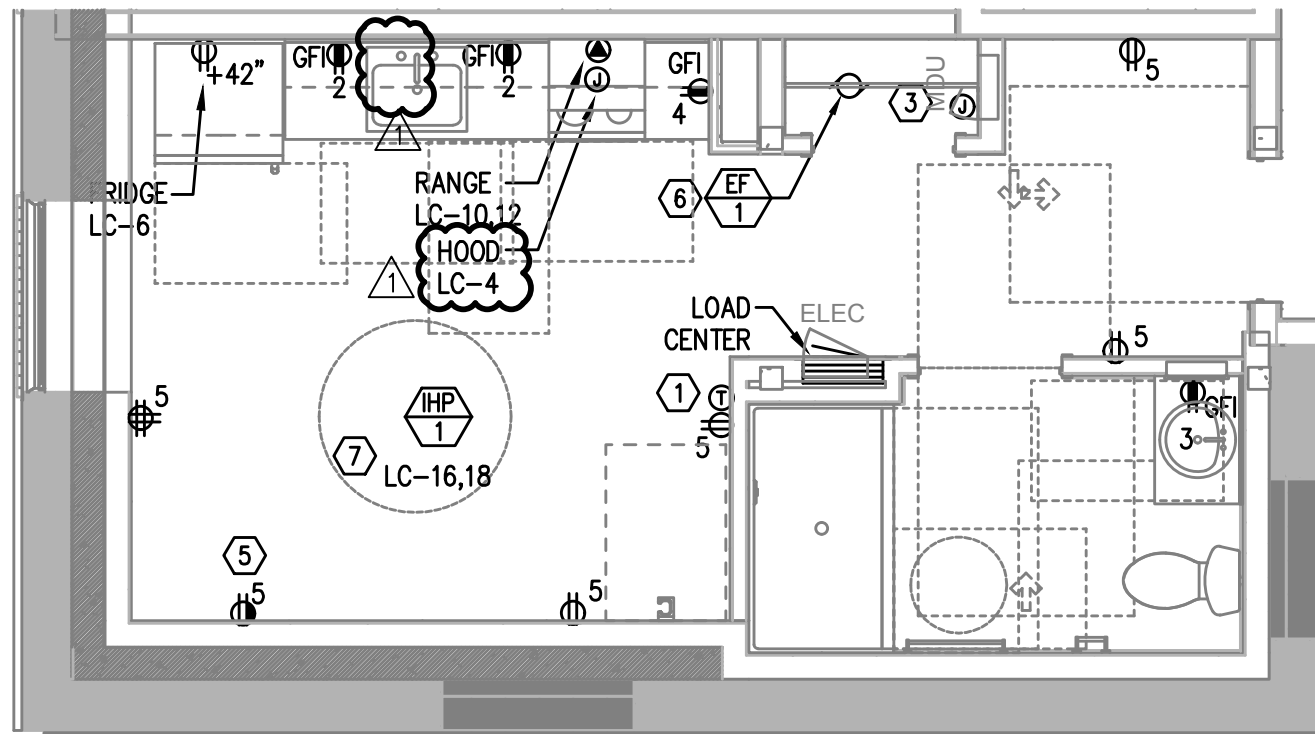
REVISIONS:
ADDENDUM #1 04/30/2021



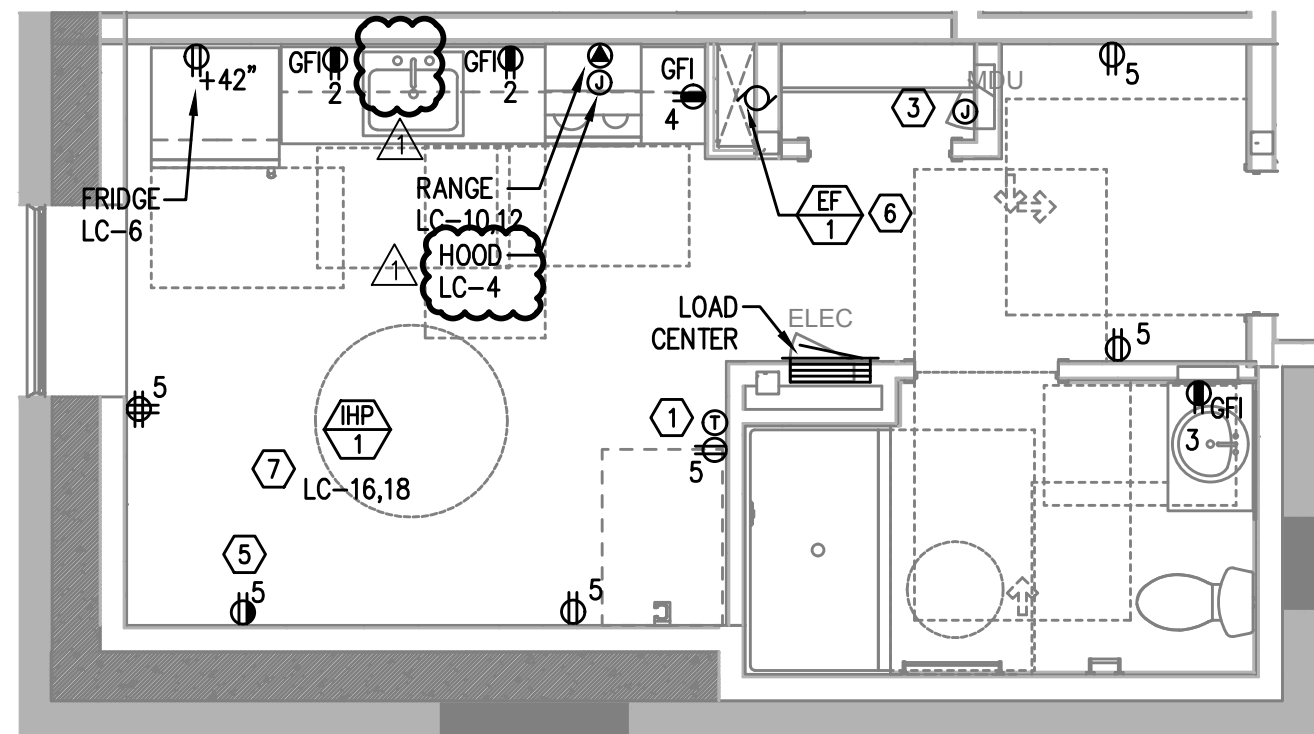
UNIT TYPE 13
TYPICAL LIGHTING PLAN
1
E4.07 SCALE: 1/4" = 1'-0"



UNIT TYPE 13A
TYPICAL LIGHTING PLAN
3
E4.07 SCALE: 1/4" = 1'-0"



UNIT TYPE 13
TYPICAL POWER PLAN
2
E4.07 SCALE: 1/4" = 1'-0"



UNIT TYPE 13A
TYPICAL POWER PLAN
4
E4.07 SCALE: 1/4" = 1'-0"

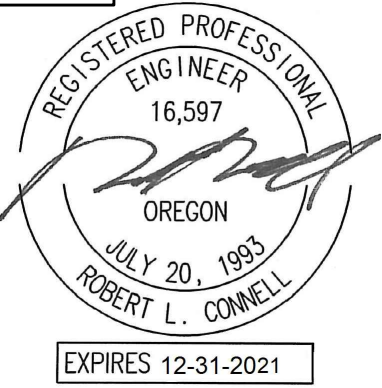
GENERAL NOTES:

- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL DEVICES AND FIXTURES.
- REFER TO SHEET E1.12 FOR TYPICAL UNIT LOAD CENTER DIRECTORIES.
- ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, SUCH AS LEVITON DECORA, OR APPROVED EQUAL.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT FIXTURE LOCATIONS. CONSULT INTERIOR DESIGNER FOR MOUNTING HEIGHTS NOT SPECIFIED.
- KITCHEN RECEPTACLES LOCATED IN ISLANDS OR PENINSULAS WHERE THE BACK SPLASH WILL NOT ACCOMMODATE VERTICAL PLACEMENT OR THE DUPLEX RECEPTACLE, THE CONTRACTOR SHALL ROTATE THE DEVICE 90 DEGREES SO THAT THE RECEPTACLE IS INSTALLED HORIZONTALLY.
- REFER TO DETAILS ON SHEET E1.15 FOR ADDITIONAL INFORMATION REGARDING ADA REACH REQUIREMENTS FOR RECEPTACLE AND SWITCH MOUNTING HEIGHT.
- STANDARD RECEPTACLE MOUNTING HEIGHT IS 18" A.F.F. UNLESS OTHERWISE SPECIFIED. RECEPTACLES LOCATED BELOW WINDOW SILLS SHALL NOT BE LESS THAN 15" A.F.F.
- ALL PLANS ARE DIAGRAMMATICAL. CONSULT ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL DEVICES AND FIXTURES.
- RECEPTACLE FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. COORDINATE INSTALLATION WITH THE MECHANICAL INSTALLER.
- COORDINATE WITH THE 'T' SERIES SHEETS AND PROVIDE ROUGH IN FOR LOW VOLTAGE SYSTEMS.

KEYED NOTES:

- PROVIDE WIRE CONNECTION FOR THERMOSTAT(S). COORDINATE WITH MECHANICAL INSTALLER FOR EXACT LOCATION AND POWER REQUIREMENTS PRIOR TO ROUGH IN.
- NOT USED.
- PROVIDE ONE 15A, RECEPTACLE CIRCUIT FROM TENANT LOAD CENTER FOR TELECOM SMART PANEL. COORDINATE WORK WITH SERVICE PROVIDER FOR EXACT LOCATION AND FINAL CONNECTION.
- REFER TO TYPICAL BATHROOM SWITCHING DETAILS ON SHEET E1.15.
- SWITCHED RECEPTACLE. SEE TYPICAL LIGHTING PLAN FOR SWITCH LOCATION.
- CONTINUOUS OPERATION EXHAUST FAN SHALL BE TIED INTO THE BATHROOM LIGHTING CIRCUIT. VERIFY EXACT LOCATION W/MECHANICAL INSTALLER PRIOR TO ROUGH IN.
- REFER TO E3 SHEETS FOR HVAC EQUIPMENT LOCATION(S) & TYPE IN EACH UNIT. REVIEW & COORDINATE WITH THE MECHANICAL PLANS AND THE MECHANICAL INSTALLER FOR EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO ROUGH IN. PROVIDE CIRCUITING AS INDICATED. INDOOR HEAT PUMP UNITS ARE INTERCONNECTED WITH OUTDOOR UNIT LOCATED ON THE ROOF. POWER CONNECTION FOR PTHP UNIT SHALL BE LOCATED BELOW THE UNIT, NEAR THE BASE OF THE WALL SUCH THAT THE CORD SET IS CONCEALED AS MUCH AS POSSIBLE. CONSULT MECHANICAL PLANS TO DETERMINE WHETHER PTHP UNITS ARE CORD & PLUG OR HARDWIRED AND PROVIDE THE APPROPRIATE CONNECTION TYPE.
- PER ARCHITECT'S DIRECTION, ABOVE COUNTER RECEPTACLES IN ACCESSIBLE UNIT KITCHENS TO BE PROVIDED WITH A 1-INCH OFFSET, EXCEPT FOR THOSE LOCATED ON AN END WALL.

ME Consulting Engineers
2007 S.E. Ash St.
Portland, OR 97214
PHN: (503) 234-0648
FAX: (503) 234-0677
INC. WWW.MEIA-ENG.COM
CONTACT: DENISE TAYLOR



CARLETON HART ARCHITECTURE P.C.
830 SW 10th Avenue #200 Portland, OR 97205
503 243 2252
www.carletonhart.com

SUSAN EMMONS - SOUTH BUILDING
610 NW 18TH AVENUE,
PORTLAND, OR
NORTHWEST HOUSING ALTERNATIVES
BID SET

TYPICAL ENLARGED
UNIT PLANS

PROJECT NO.
17004
03/12/2021

REVISIONS:
ADDENDUM #1 04/30/2021

E4.07