

**AES**

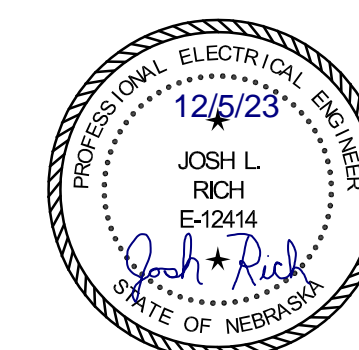
ADVANCED  
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CERTIFICATE OF AUTHORIZATION #CA1800  
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PROJECT #: 23-095

**NEBRASKA CORRECTIONAL CENTER  
FOR WOMEN - BUILDING A WATER HEATER  
& NORTH HALL BOILER REPLACEMENT  
1107 RECHARGE ROAD  
YORK, NE. 68467-8003**

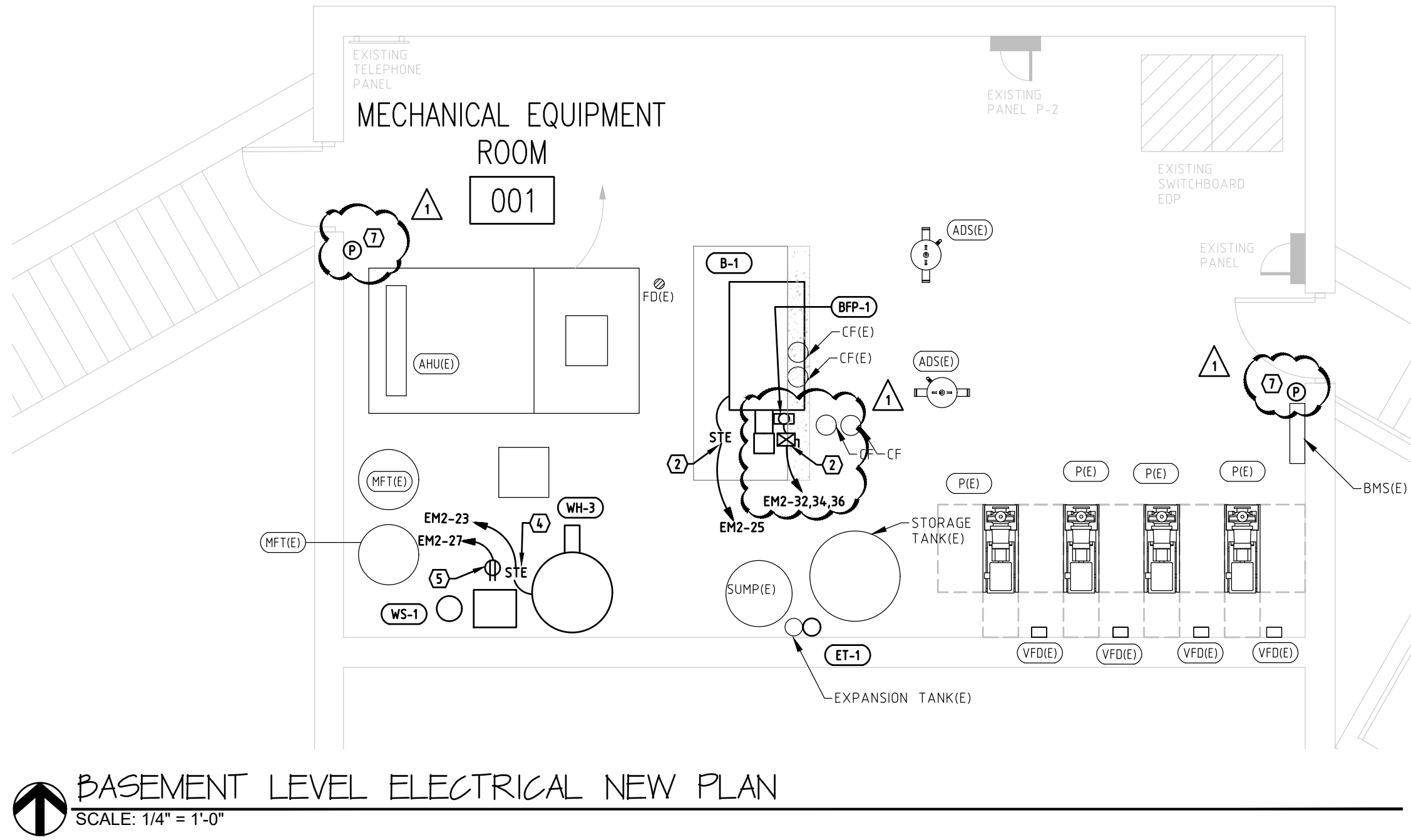
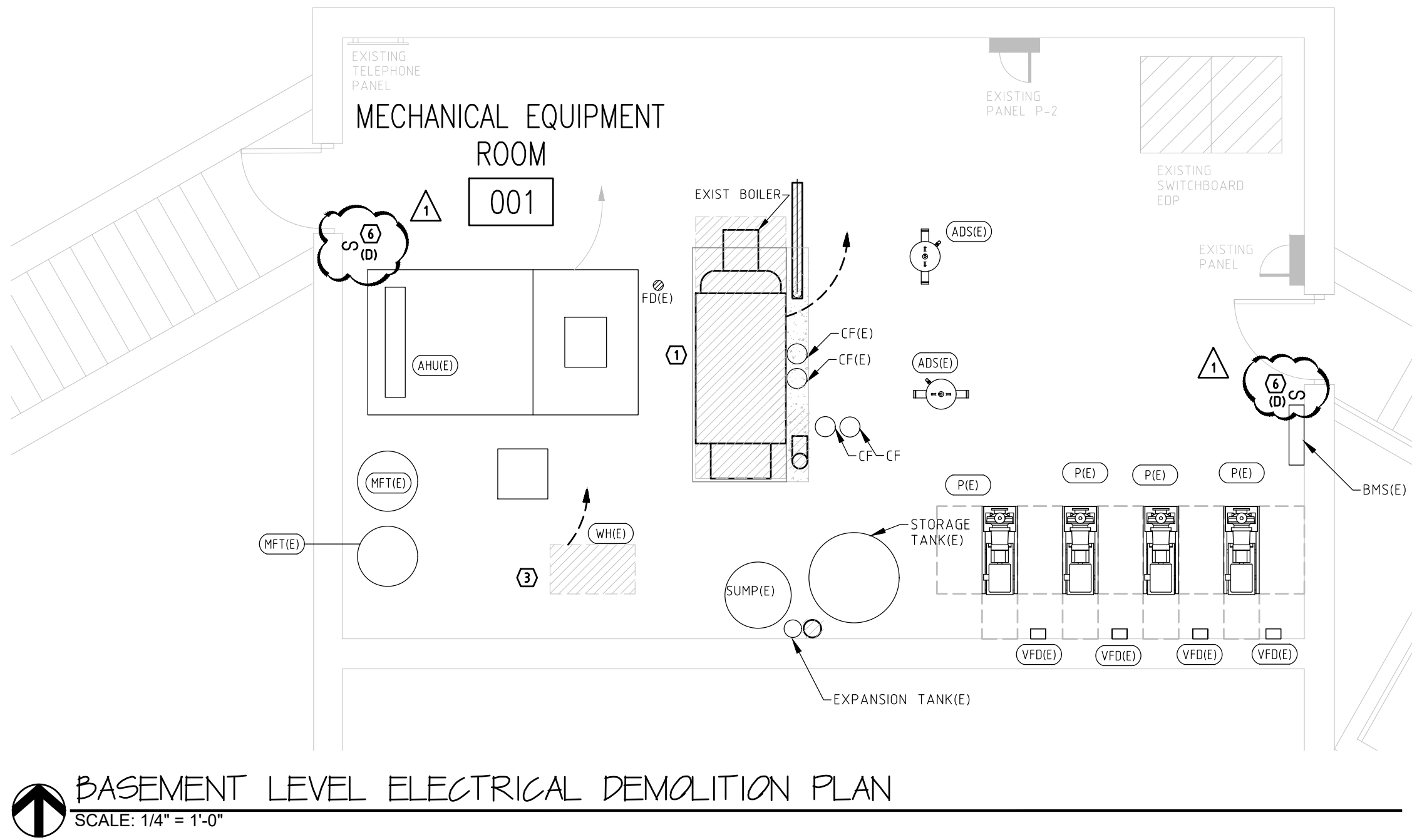
No.	Issued For	Date
1	ADDENDUM #1	12-5-23

DATE: 10/30/2023

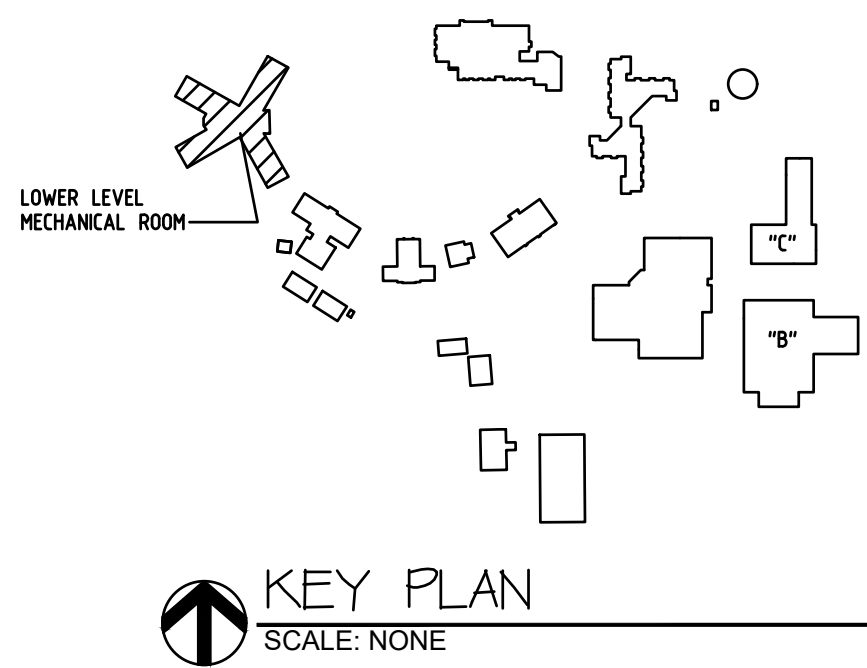


**BLDG "A" NEW AND  
DEMOLITION FLOOR  
PLANS ELECTRICAL -  
MECHANICAL ROOM**

### ***E1.1***



- KEY NOTES** KEY NOTE SYMBOL =
1. REMOVE EXISTING BOILER AND PUMP DISCONNECTS AND CABLE BACK TO THE SOURCE. CONTRACTOR TO INSPECT AND DETERMINE IF EACH CONDUIT TO THE ROOM CAN BE REUSED FOR NEW EQUIPMENT. IF IT CAN, DEMO BACK AS FAR AS NECESSARY TO ROUTE ADDITIONAL NEW CONDUIT TO NEW DISCONNECT. THE FINISH PRODUCT SHALL BE NEAT AND ROUTED AS IF NEW. IF CONDUIT CANNOT BE REUSED, REMOVE CONDUIT BACK TO SOURCE.
  2. (TYPICAL) INSTALL NEW LOCKABLE DISCONNECT AND THERMAL ELEMENT SWITCH ON EXISTING UNISTRUT IF POSSIBLE. IF NOT POSSIBLE PROVIDE NEW UNISTRUT AS TO NOT INTERFERE WITH THE EXISTING AND NEW EQUIPMENT. VERIFY LOCATION WITH MECHANICAL CONTRACTOR.
  3. UNDER ALTERNATE #1 REMOVE EXISTING WATER HEATER DISCONNECTS AND CABLE BACK TO THE SOURCE. CONTRACTOR TO INSPECT AND DETERMINE IF EACH CONDUIT TO THE ROOM CAN BE REUSED FOR NEW EQUIPMENT. IF IT CAN, DEMO BACK AS FAR AS NECESSARY TO ROUTE ADDITIONAL NEW CONDUIT TO NEW THERMAL ELEMENT SWITCH. THE FINISH PRODUCT SHALL BE NEAT AND ROUTED AS IF NEW. IF CONDUIT CANNOT BE REUSED, REMOVE CONDUIT BACK TO SOURCE.
  4. UNDER ALTERNATE #1 INSTALL NEW THERMAL ELEMENT SWITCH FOR WH-3 ON NEW UNISTRUT AS TO NOT INTERFERE WITH THE NEW OR EXISTING EQUIPMENT. VERIFY LOCATION WITH MECHANICAL CONTRACTOR.
  5. UNDER ALTERNATE #2 INSTALL NEW RECEPTACLE FOR WATER SOFTENER ON NEW UNISTRUT METAL FRAMING SYSTEM COMPLETE WITH 1 5/8" CHANNEL, FITTINGS, HARDWARE & ALL ACCESSORIES AS REQUIRED. ANCHOR MATERIAL FIRMLY IN PLACE AS TO NOT INTERFERE WITH THE NEW OR EXISTING EQUIPMENT. VERIFY LOCATION WITH MECHANICAL CONTRACTOR.
  6. REMOVE EXISTING BOILER SHUTDOWN TOGGLES.
  7. INSTALL NEW INTERLOCKED BOILER SHUTDOWN BUTTONS. BUTTONS SHALL SHUT DOWN ALL WATER HEATERS AND BOILER.





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NORTH HALL NEW AND  
DEMOLITION FLOOR  
PLANS ELECTRICAL -  
MECHANICAL ROOM

**E1.2**





© ADVANCED ENGINEERING SYSTEMS

PROJECT #: 23-095

**NEBRASKA CORRECTIONAL CENTER  
FOR WOMEN - BUILDING A WATER HEATER  
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DATE: 10/30/2023



## E2.1

EXISTING PANEL EM2																
Main Rating			Interior		Voltage		Phase				Wire		KAIC		Mounting	
225			MLO		120/208		3				4		22		SURFACE	
General Notes:																
* COPPER BUS/100% RATED COPPER NEUTRAL																
Notes	LTS	RCPT	M/L/M/E/A/S	Circuit Description	AMP	Pole	CKT	Phase	CKT	Pole	AMP	Circuit Description	M/L/M/E/A/S	RCPT	LTS	Notes
				EXIST. FCU RMS. 16-18	20	1	1	A	2	3	35	EXIST. PUMP #1				
				EXIST. FCU RMS. 13-15	20	1	3	B	4							
				EXIST. MECH. RM. EM LTS	20	1	5	C	6							
				EXIST. FCU RMS. 18-22	20	1	7	A	8	3	35	EXIST. PUMP #2				
				EXIST. FCU RMS. 23-25	20	1	9	B	10							
				EXIST. FCU RMS 7-9	20	1	11	C	12							
					20	1	13	A	14	3	35	EXIST. PUMP#3				
				EXIST. FCU RMS 10-12	20	1	15	B	16							
				EXIST. FCU RMS. 4-6	20	1	17	C	18							
					20	1	19	A	20	3	35	EXIST. PUMP#4				
				EXIST. FCU OFFICE/RMS. 1-3	20	21	B	22								
					20	23	C	24								
					20	25	A	26	30	1	EXIST. BOILER PUMP					
					20	27	B	28	20	1	EXIST. GLYCOL TANKS					
					20	29	C	30	20	1	EXIST. RECEPT CONTROL ST					
					20	31	A	32	20	1						
					20	33	B	34	20	1						
					20	35	C	36	20	1						
					20	37	A	38	20	1						
					20	39	B	40	20	1						
					20	41	C	42	20	1						
Notes:																
1																
2																

EXISTING PANEL EM2 REMODEL																
Main Rating		Interior		Voltage		Phase				Wire		KAIC		Mounting		
225		MLO		120/208		3				4		22		SURFACE		
General Notes:																
* COPPER BUS/100% RATED COPPER NEUTRAL																
Notes	LTS	RCPT	M/LM/E/A/S	Circuit Description	AMP	Pole	CKT	Phase	CKT	Pole	AMP	Circuit Description	M/LM/E/A/S	RCPT	LTS	Notes
				EXIST. FCU RMS, 16-18	20	1	1	A	2	3	35	EXIST. PUMP #1				
				EXIST. FCU RMS, 13-15	20	1	3	B	4							
				EXIST. MECH. RM. FM LTS	20	1	5	C	6							
				EXIST. FCU RMS, 18-22	20	1	7	A	9	3	35	EXIST. PUMP #2				
				EXIST. FCU RMS, 23-26	20	1	9	B	10							
				EXIST. FCU RMS 7-9	20	1	11	C	12							
					20	1	13	A	14	3	35	EXIST. PUMP#3				
				EXIST. FCU RMS 10-12	20	1	15	B	16							
				EXIST. FCU RMS, 4-6	20	1	17	C	18							
					20	1	19	A	20	3	35	EXIST. PUMP#4				
				EXIST. FCU OFFICE/RMS, 1-3	20	1	21	B	22							
					20	1	23	C	24							
1				NEW WH-3	20	1	25	A	26	30	1	SPARE				
				NEW B-1	20	1	27	B	28	20	1	EXIST. GLYCOL TANKS				
1				NEW RECEPT. WS-1	20	1	29	C	30	20	1	EXIST. RECEPT CONTROL ST				
					20	31	A	32	35	3		NEW BFP-1				1
					20	33	B	34								
					20	35	C	36								
					20	37	A	38	20	1						
					20	39	B	40	20	1						
					20	41	C	42	20	1						
Notes:																
1. PROVIDE NEW BREAKER, VERIFY EXACT REQUIREMENTS WITH MECHANICAL SUPPLIER.																

EQUIPMENT CONNECTION SCHEDULE																	
General Notes:																	
* SEE APPROVED SUBMITTALS FOR EXACT REQUIREMENTS/ACTUAL LOCATIONS.																	
* ANY ELECTRICAL COSTS, DUE TO SUBSTITUTION FOR SPECIFIED EQUIPMENT, SHALL BE THE RESPONSIBILITY OF THE MC AT NO ADDITIONAL EXPENSE TO THE OWNER.																	
* ELECTRICAL CONNECTIONS AND INTERCONNECTIONS TO ALL MECHANICAL/ELECTRICAL EQUIPMENT SHALL BE DONE BY THE EC, UNLESS NOTED OTHERWISE.																	
* LOW VOLTAGE CONTROL WIRE BY OTHERS.																	
* ALL NECESSARY DISCONNECT SWITCHES INSTALLED AHEAD OF EQUIPMENT CONTROL BY EC.																	
X-#		DATA						WIRING			CONNECTION						
DESIGNATION	DESCRIPTION	KILOWATTS	HORSEPOWER	MCA	MOPP	VOLTAGE	PHASE	CONDUCTORS	GROUNDING	RACEWAY	PLUG	NEMA CONFIG.	DIRECT	DISCONNECT SWITCH	MOTOR STARTER	NOTES	
B-1	HOT WATER BOILER				20	120	1	2-#12	#12	3/4"			X		STE		1
BFP-1	PUMP	3			35	208	3	3-#8	#10	3/4"			X			VFD	1.2
P-WH1	PUMP	3			35	208	3	3-#8	#12	3/4"			X			VFD	1.2
P-WH2	PUMP	3			35	208	3	3-#8	#12	3/4"			X			VFD	1.2
WH-1	DOMESTIC WATER HEATER				20	120	1	2-#12	#12	3/4"			X		STE		1
WH-2	DOMESTIC WATER HEATER				20	120	1	2-#12	#12	3/4"			X		STE		1
WH-3	DOMESTIC WATER HEATER				20	120	1	2-#12	#12	3/4"			X		STE		1
WS-1	WATER SOFTNER				15	120	1	2-#12	#12	3/4"	X	5-15R					1
NOTES:																	
1. VERIFY ALL REQUIREMENTS WITH MECHANICAL SUPPLIER.																	
2. VFD TO BE PROVIDED BY MECHANICAL CONTRACTOR.																	

