

**RAMIREZ-SIMON ENGINEERING, LLC** 9805 WHITHORN DRIVE HOUSTON, TEXAS 77095 MAIN: 832.261.1420 TEXAS REGISTERED ENGINEERING FIRM F-14781

# **BLINN MECHANICAL PROJECTS -BRENHAM - MELCHER + BCPA2**

902 COLLEGE AVE, BRENHAM, TX 77833

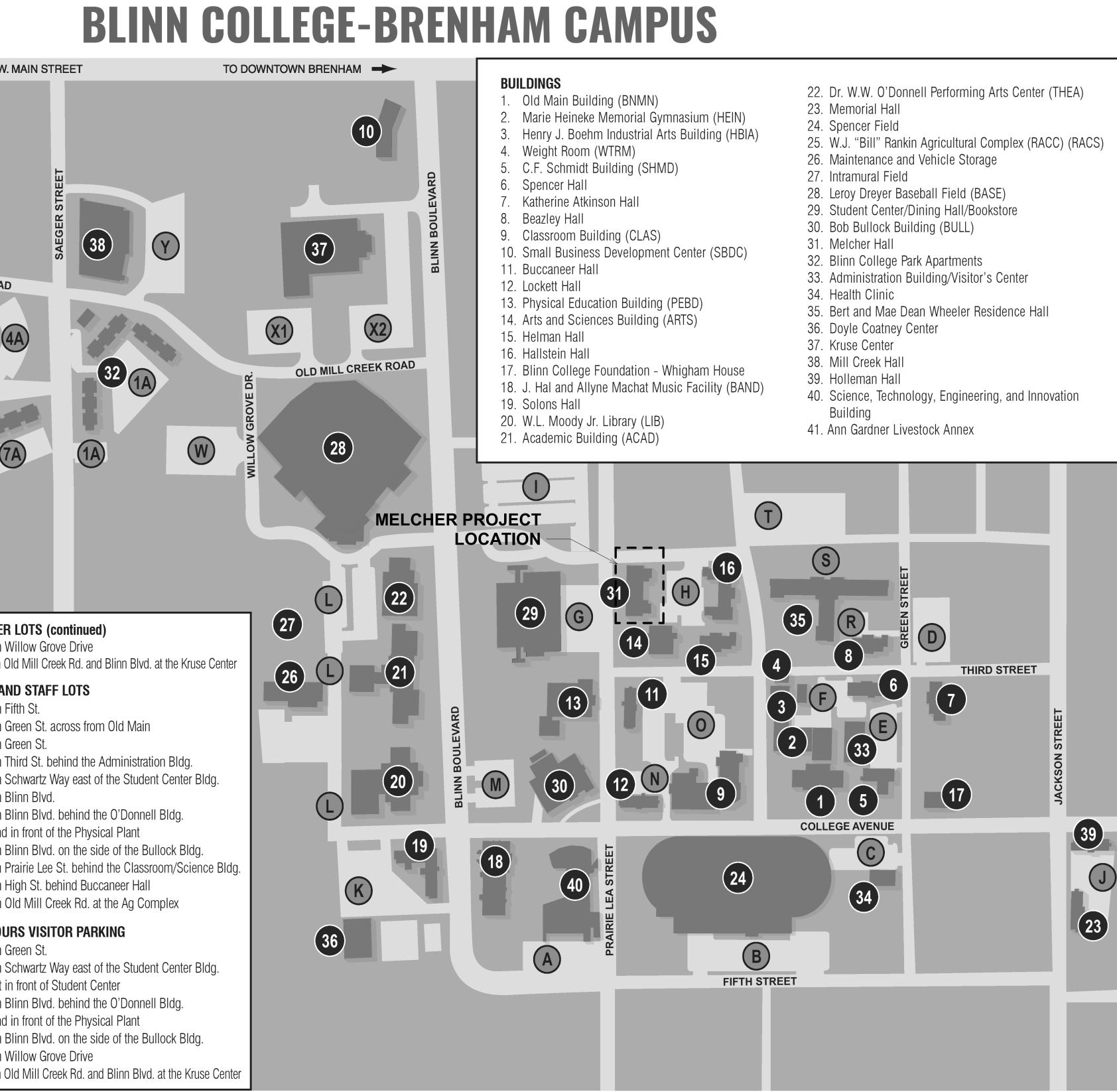
**ISSUE FOR CONSTRUCTION** DECEMBER 13, 2024

# BLINN COLLEGE BRENHAM, TEXAS



TO AUSTIN	W.
BCPA2 PROJECT LOCATION	
	L CREEK ROAD
25	(5A)
(V) GA	32
(7A)	(
<b>41 V</b>	
VISITOR PARKING LOTS	COMMUTER
Lot E lot in front of Administration Bldg.	Lot W on W
Lot I lot in front of Student Center Lot V on Old Mill Creek Rd. at the Ag Complex	Lot X2 on O FACULTY AN
Lot X1 on Old Mill Creek Rd. at the Kruse Center	Lot A on F
RESIDENCE PARKING LOTS	Lot C on G
Lot Hon Second St.	Lot D on G
Lot J on Jackson St.	Lot Fon TI Lot Gon S
Lot K on Blinn Blvd. Lot N on Prairie Lee St.	Lot K on B
Lot O on High St.	Lot L on B
Lot R on Green St.	and
Lot S on Second St.	Lot M on B
Lot T on Second St. and High St.	Lot N on P
Lot Y on Old Mill Creek Rd.	Lot 0 on H
Lot 1A on Saeger St.	Lot V on O
Lot 4A on Saeger St. Lot 5A on Saeger St.	AFTER-HOU
Lot 6A on Saeger St.	Lot D on G
Lot 7A on Saeger St.	Lot G on S
COMMUTER LOTS	Lot I lot ir Lot L on B
Lot B on Fifth St.	and
	<i>(</i> )))))
Lot I on Schwartz's Way St. in front of the	
	Lot M on B



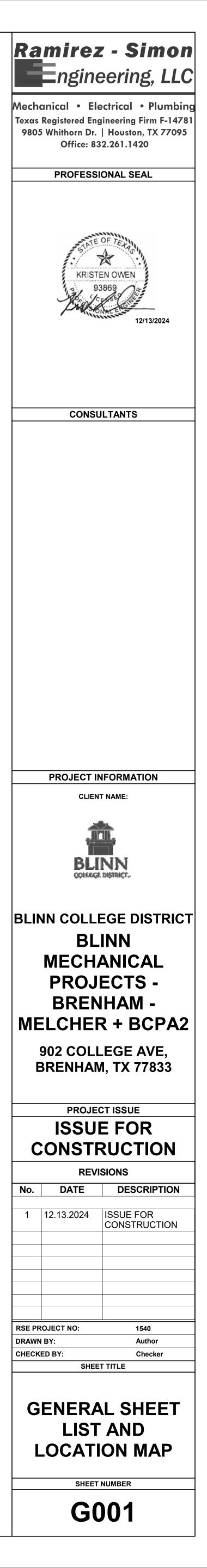


VICINITY MAP

### APPLICABLE BUILDING CODES THE FOLLOWING CODES ARE ADOPTED AS AMMENDED BY THE CITY OF BRENHAM.

INTERNATIONAL BUILDING CODE (IBC 2018) INTERNATIONAL EXISTING BUILDING CODE (IEBC 2018) INTERNATIONAL PLUMBING CODE (IPC 2018) INTERNATIONAL ENERGY CONSERVATION CODE (IECC 2018) NATONAL ELECTRICAL CODE (NEC 2023)

SHEET LIST									
SHEET NUMBER	SHEET NAME								
G001	GENERAL SHEET LIST AND LOCATION MAP								
E001	ELECTRICAL GENERAL INFORMATION								
E301	ELECTRICAL MELCHER FLOORPLAN								
E302	ELECTRICAL BCPA2 FLOOR PLAN								
E501	ELECTRICAL DETAILS								
E601	ONE LINE DIAGRAMS AND SCHEDULES								
P001	PLUMBING GENERAL INFORMATION								
P201	PLUMBING MELCHER FLOOR PLAN								
P202	PLUMBING BCPA2 FLOOR PLAN								
P501	PLUMBING DETAILS								
	•								



Δ	ABBREVIATIONS DEFINITION	EC TETET		ENTION	SYMBOL	DEVICES			<b>LIGHTING</b> RE SCHEDULE FOR ALL LUMINAIRE TYPES WHETHE	RWALL	SYMBOL	ONE-LINE DIAGRAM DESCRIPTION	
ч ЧС	AMPS, AMPERE ALTERNATING CURRENT		1, 2, 3, = SUBFED PANEL			DEVICE INDICATOR LETTER. "X" EQUALS DESIGI (TYPICAL FOR MOST RECEPTACLE TYPES):	NATION BELOW	MOUNTED OR CEILI SYMBOL	ING MOUNTED. DESCRIPTION	MOUNTING LOC. HT.	) <u>300</u> 3P	CIRCUIT BREAKER; TRIP SETTING/FRAME SIZE SETTINGS AND PROTECTION AS NOTED ON PL	
ADA AFF AFG	AMERICANS WITH DISABILITIES ACT ABOVE FINISHED FLOOR ABOVE FINISHED GRADE		A, B, C, = SEQUENCE OF PANEL	LS OF THIS TYPE		BLANK FOR NORMAL POWER			HATCHING INDICATES EMERGENCY LIGHTING. HATCH WILL BE MODIFIED FOR EACH			SETTINGS AND FROTEGRION AS NOTED ON FE	
AFG AIC AL	ABOVE FINISHED GRADE AVAILABLE INTERRUPTING CURRENT ALUMINUM		□ 1, 2, 3, = FLOOR LEVEL	OARD (480/277)		INTERUPTER RATED IG = ISOLATED GROUND T = TAMPERPROOF	MOUNTING		LUMINAIRE TYPE. EMERGENCY LUMINAIRE DESIGNATED WITH "E" IN TYPE DESIGNATION.	VARIES	480-3P T1A	PRIMARY VOLTAGE AND WIRING CONFIGURATI TRANSFORMER GROUNDING SIZE	ION, NAME
ANSI ATSC	AMERICAN NATIONAL STANDARDS INSTITUTE AUTOMATIC TRANSFER SWITCH CONTROL		L = LOW VOLTAGE PANELBC T = TRANSFORMER P = DISTRIBUTION PANELBO		×	WP = WEATHERPROOF IN-USE	MOUNTING LOC. HT.				<del>ست</del> ⊒َ≕ 30kVA	SECONDARY VOLTAGE, TRANSFORMER SIZE K RATING IF APPLICABLE	
ATS AWG	AUTOMATIC TRANSFER SWITCH AMERICAN WIRE GAUGE		MSB= MAIN SWITCH BOARD MCC= MOTOR CONTROL CENTI I = ISOLATED PANELBOARD	ER	↓ ×	CONFIGURATION AS INDICATED ON PLANS IN FLOOR DUPLEX RECEPTACLE.			LUMINAIRE. SMALL CASE "a" DENOTES SWITCHING. SYMBOL "A" DENOTES LUMINAIRE TYPE		3000/5	CURRENT TRANSFORMER, NUMBER	
CCTV CKT	CONDUIT CLOSED CIRCUIT TELEVISION CIRCUIT		I = ISOLATED PANELBOARD	,		CONFIGURATION AS INDICATED ON PLANS		A a		CEILING	3	"3000/5" DENOTES RATIO. NUMBER 3 DENOTES QUANITY	
CLF CO	CURRENT LIMITING FUSE CONDUIT ONLY		B = BUSWAY		×	CONFIGURATION AS INDICATED ON PLANS	FLOOR FLUSH			CEILING	208Y/120V	POTENTIAL TRANSFORMER. NUMBER "2" DENOTES QUANTITY	
	COPPER DIRECT CURRENT				×	COMMUNICATIONS OUTLET. (TWO GANG OUTLE CONFIGURATION AS	ET)		LINEAR DIRECT/INDIRECT LUMINAIRE. CABLE OR STEM MOUNTED		/ 300A	DISCONNECT SWITCH. "300A" DENOTES AMPERAGE	
DIA E	DIAMETER EMERGENCY		E = STANDBY EL = EMERGENCY-LIFE SAFET EC = EMERGENCY-CRITICAL-E EQ = EMERGENCY-EQUIPMEN	TY-BRANCH BRANCH	() c	INDICATED ON PLANS.		$\bigcirc$	DOWN LIGHT LUMINAIRE; CEILING MOUNTED	CHED		RATING FUSE. "300A" DENOTES	
EC EG	EMERGENCY, CRITICAL ENGINE GENERATOR EMERGENCY, LIFE SAFETY		C EQ = EMERGENCY-EQUIPMEN	II-BRANCH	⇒c	CEILING MOUNTED DOUBLE DUPLEX RECEPTACLE				ING S	<b>300A</b>	AMPERAGE RATING	
EQ EX	EMERGENCY, EQUIPMENT EXISTING	EXAM	PLES: 1H1A (SERVED FROM SES#1, 480/277 NORMAL,		C C	CEILING MOUNTED EMERGENCY DOUBLE DUPLEX RECEPTACLE	CEILING FLUSH		WALL MOUNTED LUMINAIRE	WALL H		GROUND FAULT PROTECTION	
= (FUT) =A	FUTURE FIRE ALARM	B.	1EQH1A (SERVED FROM MAIN EMER SWBD #1, LEVEL 1, FIRST BOARD)			COMBINATION POWER/COMMUNICATION IN						=	
FACP FDR	FIRE ALARM CONTROL PANEL FEEDER				c	CEILING OUTLET. CONFIGURATION AS INDICATED ON PLANS				REF		SHUNT TRIP OPERATOR	
FUT. GEN GEI	FUTURE GENERATOR GROUND FAULT INTERRUPTER		<b>RACEWAY &amp; CONDUCT</b>	ORS	×	SIMPLEX RECEPTACLE		WALL H	EXIT LUMINAIRE. SHADED SIDE INDICATES FACE SIDE. PROVIDE DIRECTIONAL ARROW(S)			GROUND CONNECTION	
GFCI GFP	GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT PROTECTION	SYMBOL	DESCRIPTION		x	DUPLEX RECEPTACLE	WALL, +18",		AS INDICATED ON PLANS			TRANSFER SWITCH. SEE PLANS FOR	
GND HOA	GROUND. HAND-OFF-AUTOMATIC.	LA-1	HOMERUN TO EQUIPMENT LOCATION. TH ADJACENT TO HOMERUN INDICATES EQU		×	QUAD RECEPTACLE	UON UON	WALL H	DOUBLE FACE EXIT LUMINAIRE. SHADED SIDE INDICATES FACE SIDE. PROVIDE DIRECTIONAL	VARIES		TYPE OF SWITCH	
HP EEE	HORSEPOWER INSTITUTE OF ELECTRICAL AND ELECTRONICS		POLES OF THE CIRCUIT BREAKE. MINIMU BE PROVIDED IN HOMERUN UON. ALL HO	M #12 CONDUCTORS SHALL		EMERGENCY DUPLEX RECEPTACLE EMERGENCY DOUBLE DUPLEX RECEPTACLE			ARROW(S) AS INDICATED ON PLANS				
G	ENGINEERS ISOLATED GROUND		GROUND WIRE. RACEWAY BETWEEN DEVICES AND OR EQU	JIPMENT IN		SPECIAL PURPOSE RECEPTACLE. NEMA			EMERGENCY BATTERY PACK LUMINAIRE		SPD	SURGE PROTECTIVE DEVICE	
KCMIL KV KVA	THOUSAND CIRCULAR MILS KILOVOLT KILOVOLT AMPS		WALLS OR IN CEILING SPACE UNDERGROUND RACEWAY BETWEEN DEVIC	CES AND OR EQUIPMENT	X	CONFIGURATION AND AMPERAGE AS NOTED OF PLANS		●—── ● ──	SINGLE HEAD, POLE MOUNTED LUMINAIRE		5	MOTOR. NUMBER INDICATES HORSEPOWER RATING 1HP AND LARGER	R
KVA KVAR KW	KILOVOLT AMPS KILOVOLT AMPS REACTIVE KILOWATT									EXTERIOR AS DETAILED			
KWH _SIG	KILOWATT HOUR. LONG TIME, SHORT TIME, INSTANTANEOUS,								BOLLARD LUMINAIRE UPPERCASE SUBSCRIPT INDICATES SWITCH		СТ	CT ENCLOSURE. EITHER ON BUILDING OR ON U	JTILITY EQUIPMENT
MAX	AND GROUND MAXIMUM	SYMBOL	DESCRIPTION			MULTI-OULET ASSEMBLY (SURFACE MOUNTED		\$ <sub>X,x</sub>	TYPE. LOWER CASE SUBSCRIPT INDICATES SWITCH SWITCH ZONE		$\land$	DELTA CONNECTED	
ЛСС ЛIN ЛН	MOTOR CONTROL CENTER MINIMUM MANHOLE	MSB	MAIN SWITCHBOARD. DASH LINES INDICATI	E CLEARANCES.		RACEWAY)	VARIES VARIES SEE SEE	\$	LINE VOLTAGE SINGLE POLE SWITCH		$\bigvee$	WYE CONNECTED	
/M /TS	MANHOLE MIXED MEDIA MANUAL TRANSFER SWITCH	P				COMBINATION POWER/COMMUNICATION POLE. CONFIGURATION AS NOTED ON PLANS	PLANS PLANS	¢	LINE VOLTAGE THREE-WAY SWITCH		VFD	VFD CONNECTION	
MVA N	MEGAVOLT AMPS NEW		DISTRIBUTION PANELBOARD. DASH LINES I	INDICATE CLEARANCES.	HJ	WALL MOUNTED CODE SIZE J-BOX POWER CONNECTION TO EQUIPMENT		⇒ 3		+48"			
N.A. NC	NOT APPLICABLE NORMALLY CLOSED	H1A	FLUSH MOUNTED PANELBOARD. DASH LINE	ES INDICATE		MOUNTED J-BOX.		\$ 4	LINE VOLTAGE FOUR-WAY SWITCH	WALL UON	<u>M</u>	MOTOR CONNECTION	
NEC NEMA	NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION		CLEARANCES.		J     P	CODE SIZE JUNCTION BOX	VARIES VARIES SEE SEE PLANS PLANS	\$ <sub>LV</sub>	LOW VOLTAGE SINGLE BUTTON SWITCH				
NEUT NFPA	NEUTRAL NATIONAL FIRE PROTECTION ASSOCIATION	L1A	SURFACE MOUNTED PANELBOARD. DASH L CLEARANCES.	LINES INDICATE	PB	PUSHBUTTON		\$ <sub>LVD</sub>	LOW VOLTAGE RAISE/ LOWER, ON/OFF SWITCH			250KW/312.5KVA NATURAL GAS ENGINE GENERATOR	
NIC NL	NOT IN CONTRACT NORMAL		MOTOR CONTROL CENTER. DASH LINES IN	DICATE CLEARANCES.	PC	PHOTOCELL MOUNTED ON ROOF		+ LVD	WALL MOUNTED DUAL TECHNOLOGY	_			
NM NO	NEW MEXICO NORMALLY OPEN				•	LIGHTNING PROTECTION AIR TERMINAL	ROOF VARIES	⇒ os	OCCUPANCY SENSOR			LOAD CENTER	
ЭН (О/Н) Э	OVERHEAD POLE PUBLIC ADDRESS	T T1A VFD	DRY TYPE TRANSFORMER.		S M	MOTOR RATED SWITCH WITH THERMAL OVERLOAD. AMPERAGE/NEMA ENCLOSURE		\$ <sub>osd</sub>	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR WITH DIMMING		400A-3		
PC PH	PHOTOCELL PHASE					RATING, 3 POLE. U.O.N NON-FUSED DISCONNECT SWITCH.		OS	DUAL TECHNOLOGY OCCUPANCY SENSOR; TYPE AS INDICATED ON PLANS	CEILING SURFACE	FIRE PL	JMP START/STOP	
PMCS RSC	POWER MONITORING AND CONTROL SYSTEM RIGID STEEL CONDUIT	UPS-A	UNINTERRUPTABLE POWER SUPPLY.			AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE U.O.N.		PS	DAYLIGHT SENSOR THAT PROVIDES AUTOMATIC DIMMING BASED ON AVAILABLE	CEILING SURFACE	ATS ST	ART/STOP	
SEC SPD	SECURITY SURGE PROTECTIVE DEVICE		AUTOMATIC TRANSFER SWITCH.		F	FUSED DISCONNECT SWITCH. AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE U.O.N.	VARIES VARIES		DAYLIGHT		. هر <sup>4</sup> 4		
SW FEMP FTB	SWITCH TEMPORARY TELEPHONE TERMINAL BOARD	ATS-1				MOTOR STARTER. STARTER SIZE INDICATED BY NUMBER/NEMA ENCLOSURE RATING,			FIRE ALARM				
TV TVSS	TELEVISION TRANSIENT VOLTAGE SURGE SUPPRESSER					SINGLE SPEED U.O.N. COMBINATION FUSIBLE DISCONNECT SWITCH		SYMBOL FACP	DESCRIPTION CONTROL PANEL	MOUNTING LOC. HT. WALL -			
IYP. JC	TYPICAL UNDER COUNTER UNDERGROUND		SECURITY			AND MOTOR STARTER. NEMA STARTER SIZE/AMPERAGE/NEMA ENCLOSURE RATING, 3 POLE U.O.N.	+48" UON	FAA	ANNUNCIATOR PANEL			SPECIAL SYSTEMS	MOUNTING
J/G JGE JL	UNDERGROUND ELECTRIC UNDERWRITERS' LABORATORIES	SYMBOL	DESCRIPTION	MOUNTING LOC. HT.				NAC	NOTIFICATION APPLIANCE CIRCUIT PANEL	WALL +44"	SYMBOL	DESCRIPTION DATA OUTLET	LOC. HT.
JON JPS	UNLESS OTHERWISE NOTED UNINTERRUPTABLE POWER SUPPLY	CR	CARD READER.	WALL, +48"				F	DOUBLE ACTION MANUAL PULL STATION			VOICE\DATA OUTLET	WALL +18
/ /FD	VOLTS, VOLTAGE VARIABLE FREQUENCY DRIVE		RET PAD	UON UON							WAP	WIRELESS ACCESS POINT	
/V WP KFER	WIRE WEATHERPROOF TRANSFER								MULTI CANDELA SPEAKER/STROBE	WALL OR +80" CEILING UON			
KFMR (TRANSF)	TRANSFORMER		FIRE ALARM						STROBE LIGHT		SYMPOL	DEMOLITION	NOTES
PDU	BUSWAY	SYMBOL	DESCRIPTION					H	ADDRESABLE PHOTOELECTRIC SMOKE DETECTOR	CEILING	SYMBOL           ( )         ( )           ( )         ( )	DASHED SYMBOL INDICATES EXISTING DEVICE	NOTES E REFER TO
											$\begin{array}{c} \underline{T} \\ \underline{T} \\ \underline{\Psi} \\ \underline{\nabla} \\ $	OR EQUIPMENT TO BE REMOVED SOLID SYMBOL, LIGHTER IN COLOR	DEMOLITION PLANS FOR ADDITIONAL
SYMBOL DE		S UT	FACILITY TRANSFORMER PAD MOUNTED SWITCH					· · · · · · · · · · · · · · · · · · ·	DUCT DETECTOR	AT SEE DUCT PLANS	ΓΥΨ\$	INDICATES EXISTING DEVICE OR EQUIPMENT TO REMAIN	INFORMATIO
КЕ	EYED NOTE REFERENCE	CC	CONNECTION CABINET (UTILITY METER MOUNT)										
	ECHANICAL EQUIPMENT REFERENCE ENOTES MOUNTING HEIGHT A.F.F.	PM	PRIMARY SITE METER ENCLOSURE					M	MAGNETIC DOOR HOLDER				
	TCHEN EQUIPMENT REFERENCE							R       MM	MONITOR MODULE	VARIES SEE PLANS			
								Η®	REMOTE ALARM INDICATING LIGHT				
	AL DRAWING SYMBOLS												
	AL DRAWING SYMBOLS         1       — SECTION LETTER OR DETAIL NUMBER							R	ADDRESSABLE/SUPERVISED RELAY				



PROVIDE AND INSTALL ELECTRICAL RACEWAY, CONDUCTORS, DEVICES, AND EQUIPMENT AT NO ADDITIONAL COST. B. THE CONTRACTOR SHALL REFER TO DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE SPECIFICATIONS ARE A PART OF THE CONSTRUCTION DOCUMENT SET AND MAY CONTAIN INFORMATION NOT SHOWN ON THE DRAWING SET. C. THE WORD "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL. EXCEPTIONS SHALL BE NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS. DO NOT SCALE THE ELECTRICAL DRAWING TO DETERMINE THE LOCATIONS OF LUMINAIRES, OUTLETS, OR EQUIPMENT. REFER TO THE ARCHITECTURAL DRAWINGS AND FIELD MEASUREMENTS FOR ALL PROJECT DIMENSIONS. THE CONTRACTORS SHALL COORDINATE ALL WORK WITH OTHER DISCIPLINES PRIOR TO START OF WORK AND INSTALLATION OF EQUIPMENT. F. ALL EXPOSED CONDUIT, FITTING, BOXES, HANGERS, CLIPS, SUPPORTERS, ETC. IN FINISHED AREAS SHALL BE PAINTED PER THE OWNER'S INSTRUCTIONS. PROVIDE PULLSTRING IN ALL EMPTY CONDUITS. H. IN THE CASE OF CONFLICTS NOT CLARIFIED PRIOR TO THE BIDDING DEADLINE, USE OF THE MOST COSTLY ALTERNATIVE (BETTER QUALITY, GREATER QUANTITY, AND LARGER SIZE) IN PREPARING THE BID. CONTRACTORS SHALL VERIFY AND COORDINATE WITH EXACT MOUNTING HEIGHTS AND LOCATIONS OF ALL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. ALL GROUNDING CABLE IN THE WHOLE ELECTRICAL DISTRIBUTION SYSTEM SHALL SHOW ZERO CURRENT (AFTER SYSTEM IS ENERGIZED) - IF ANY CURRENT IS FOUND IN THE SYSTEM, THEN THE CONTRACTOR IS RESPONSIBLE TO RESOLVE THE PROBLEM AND REMOVE OBJECTIONABLE CURRENT FROM THE GROUNDING SYSTEM. K. 120V POWER BRANCH CIRCUITS SHALL BE 2#12 & 1#12GND IN 3/4"C MINIMUM UNLESS OTHERWISE INDICATED. L. FOR 120V BRANCH CIRCUITS THAT EXCEED 60FT IN LENGTH, USE #10. FOR 277V BRANCH CIRCUITS THAT EXCEED 100FT IN LENGTH, USE #10.

**PROJECT GENERAL NOTES** 

5

D.

E.

G.

I.

J.

A. CONTRACTOR SHALL INFORM THEMSELF OF ANY

ELECTRICAL DIVISION. COORDINATE ALL WORK

ELECTRICAL INFORMATION THAT MIGHT BE SHOWN IN

OTHER DISCIPLINES OF THIS PROJECT AND NOT SHOWN IN

DISCREPANCIES WITH ARCHITECT PRIOR TO BID. SHOULD

COORDINATION NOT OCCUR, IT IS UNDERSTOOD THAT THE CONTRACTOR FOUND NO DISCREPANCIES AND SHALL

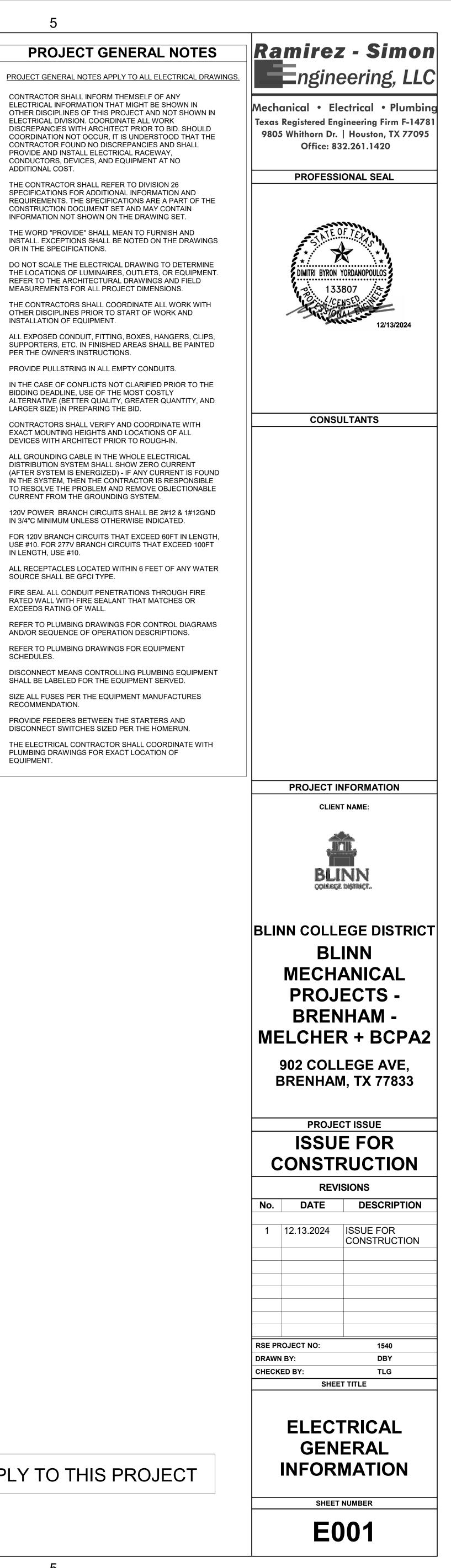
M. ALL RECEPTACLES LOCATED WITHIN 6 FEET OF ANY WATER SOURCE SHALL BE GFCI TYPE. N. FIRE SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALL WITH FIRE SEALANT THAT MATCHES OR

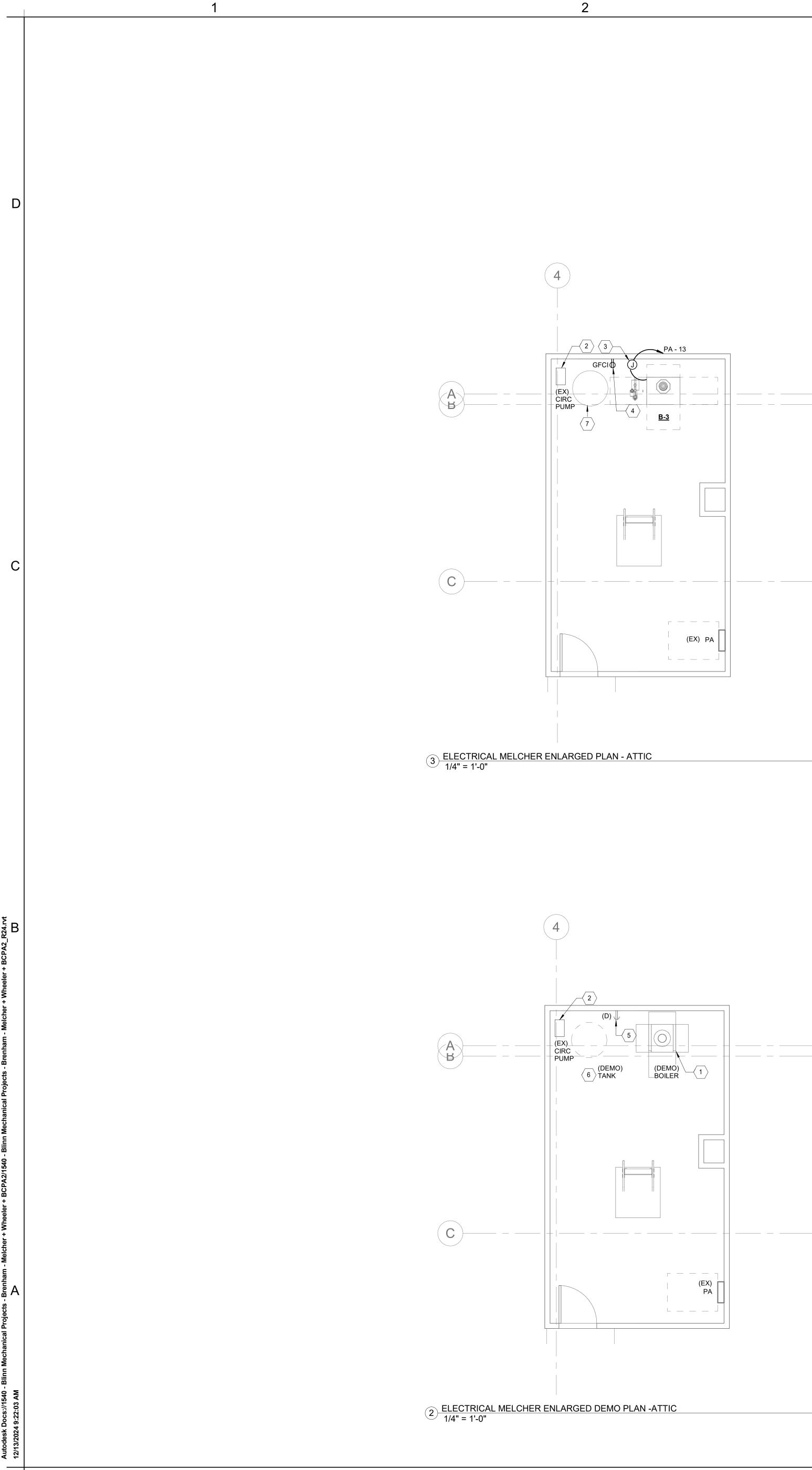
- EXCEEDS RATING OF WALL. REFER TO PLUMBING DRAWINGS FOR CONTROL DIAGRAMS Ο. AND/OR SEQUENCE OF OPERATION DESCRIPTIONS.
- REFER TO PLUMBING DRAWINGS FOR EQUIPMENT Ρ. SCHEDULES.
- DISCONNECT MEANS CONTROLLING PLUMBING EQUIPMENT Q. SHALL BE LABELED FOR THE EQUIPMENT SERVED.
- R. SIZE ALL FUSES PER THE EQUIPMENT MANUFACTURES RECOMMENDATION.
- PROVIDE FEEDERS BETWEEN THE STARTERS AND S. DISCONNECT SWITCHES SIZED PER THE HOMERUN.

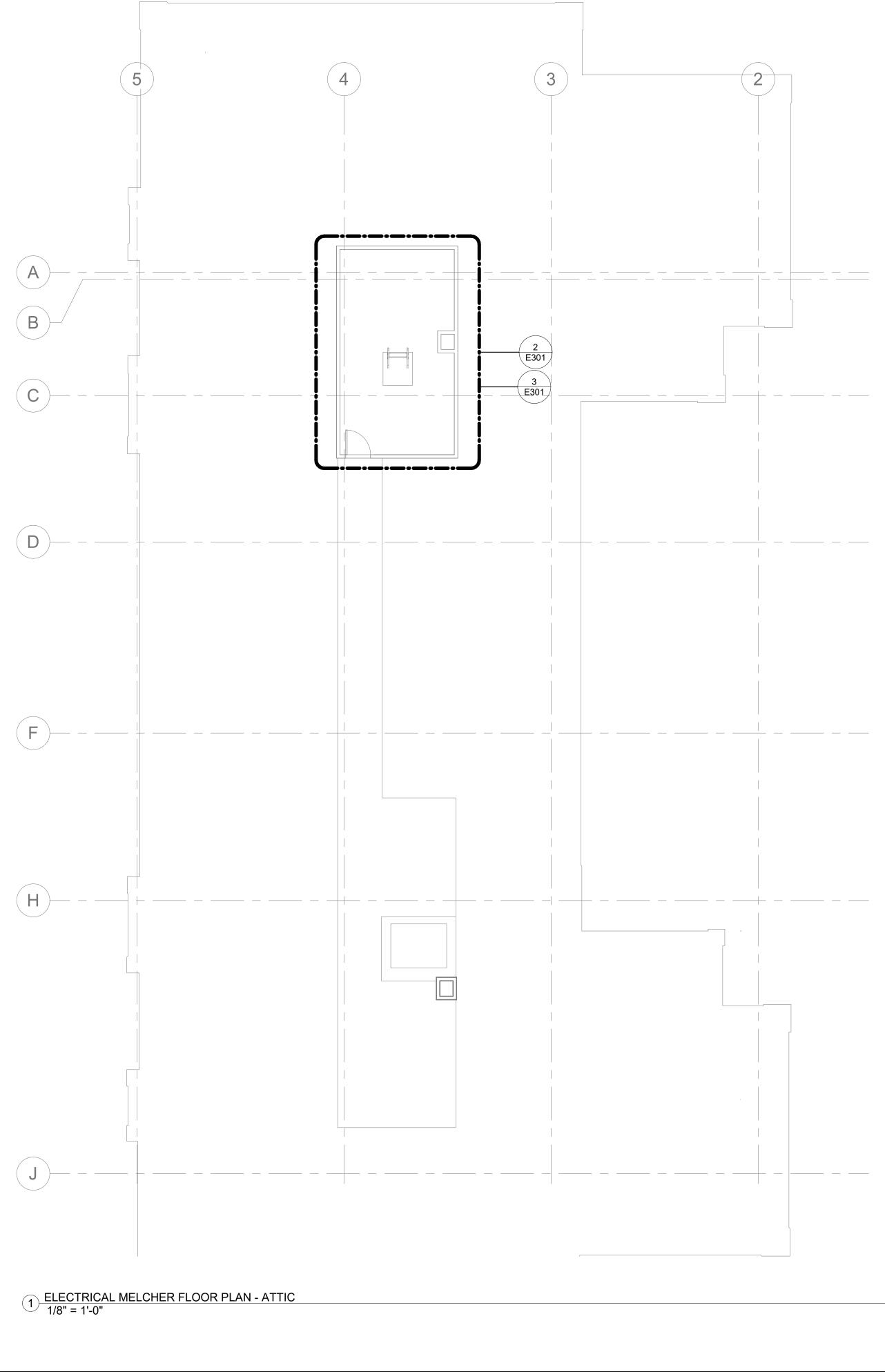
EQUIPMENT.

T. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH PLUMBING DRAWINGS FOR EXACT LOCATION OF

### NOTE: NOT ALL ABBREVIATIONS OR SYMBOLS APPLY TO THIS PROJECT







4

3

## GENERAL NOTES

A. REFER TO ELECTRICAL LEGEND AND PROJECT GENERAL NOTES ON SHEET E001. B. DRAWINGS ARE SCHEMATIC IN NATURE; VERIFY DIMENSIONS AND EQUIPMENT LOCATIONS IN THE FIELD. CONTRACTOR SHALL VERIFY EXACT LOCATION AND CONFIGURATION OF INSTALLATIONS TO REMAIN.

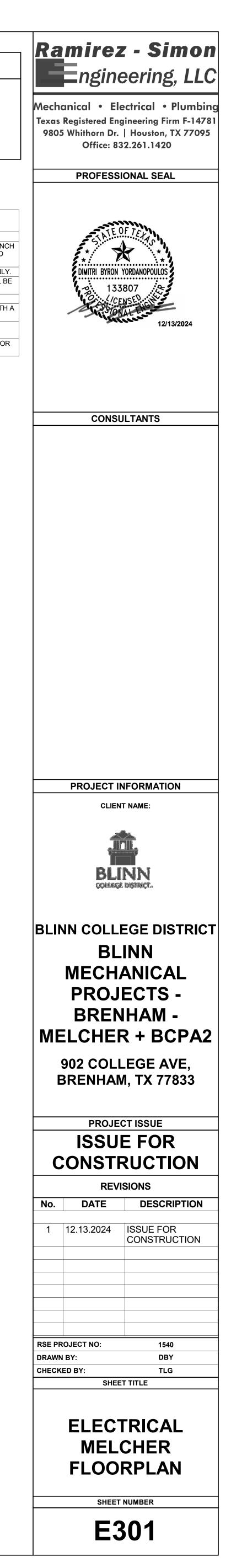
$\bigcirc$	SHEET KEYED NOTES
Key Value	Keynote Text
1	EXISTING BOILER AND ASSOCIATED PUMP TO BE DEMOLISHED. DEMO BRANC CIRCUIT WIRING AND CONDUIT BACK TO SOURCE. TURN OFF BREAKER AND LABEL AS SPARE.
2	EQUIPMENT/FIXTURE IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY
3	INSTALL POWER TO SERVE BOILER. LOCAL DISCONNECTING MEANS SHALL B PROVIDED VIA THE CIRCUIT BREAKER IN PANEL.
4	PROVIDE GFCI TYPE RECEPTACLE. CONNECT TO EXISTING CIRCUIT.
5	EXISTING STANDARD RECEPTACLE TO BE DEMOLISHED AND REPLACED WITH GFCI RECEPTACLE.
6	EXISTING TANK TO BE DEMOLISHED. NO SCOPE FOR ELECTRICAL. JUST SHOWN FOR REFERENCE.
7	NEW TANK TO BE INSTALLED. NO SCOPE FOR ELECTRICAL. JUST SHOWN FOR REFERENCE.

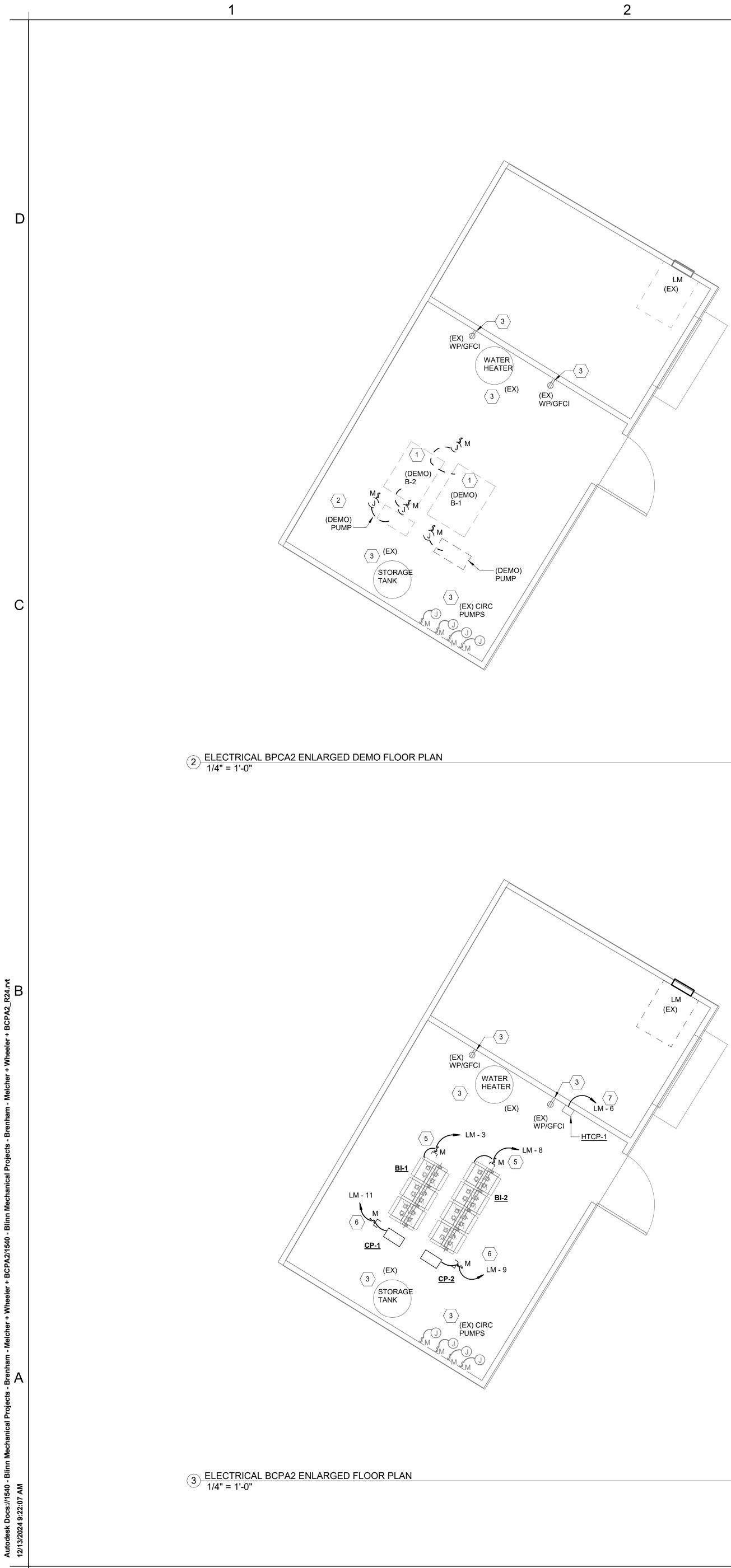
TRUE PROJECT NORTH NORTH

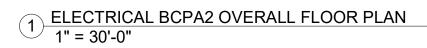
SCALE: 1/4" = 1'-0"

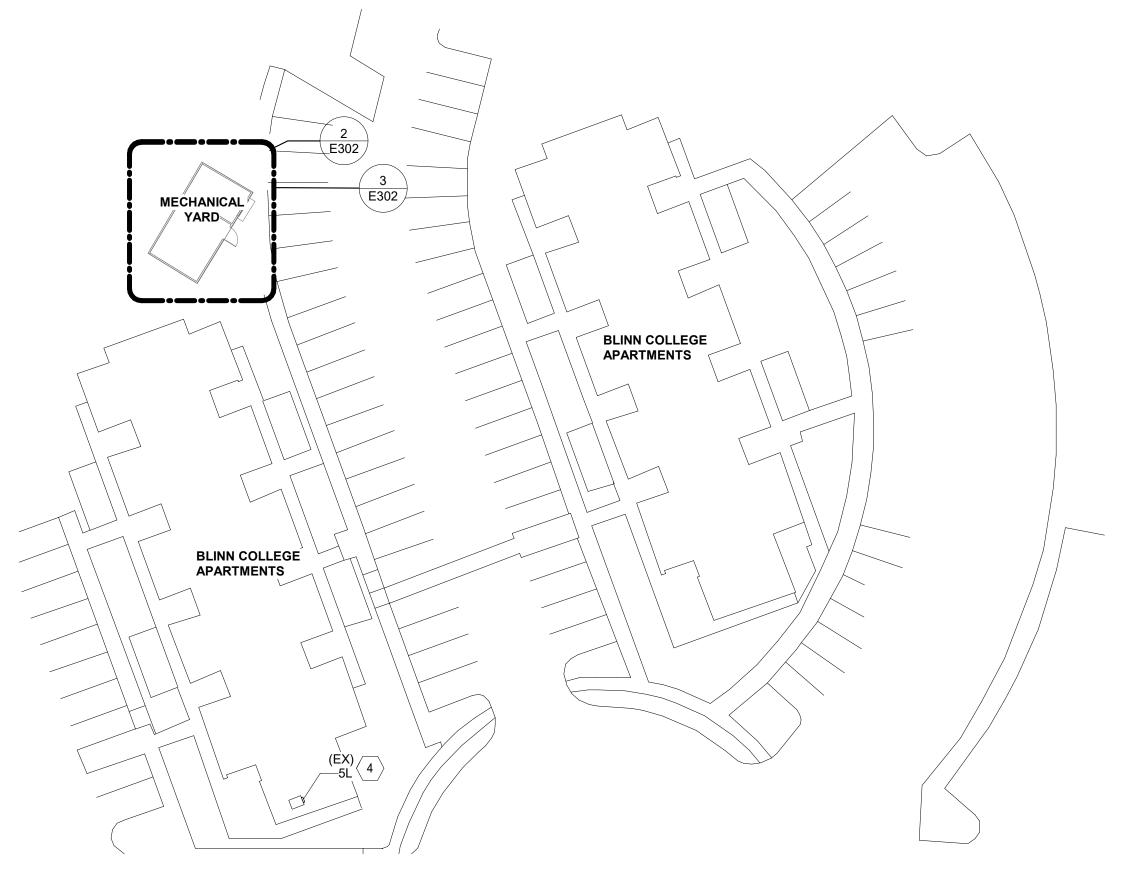
0' 2' 4'

5





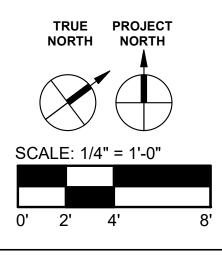


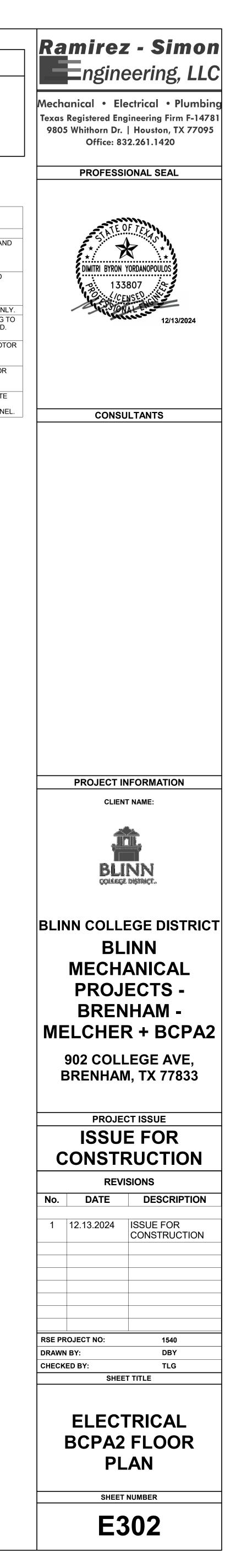


### GENERAL NOTES

 A. REFER TO ELECTRICAL LEGEND AND PROJECT GENERAL NOTES ON SHEET E001.
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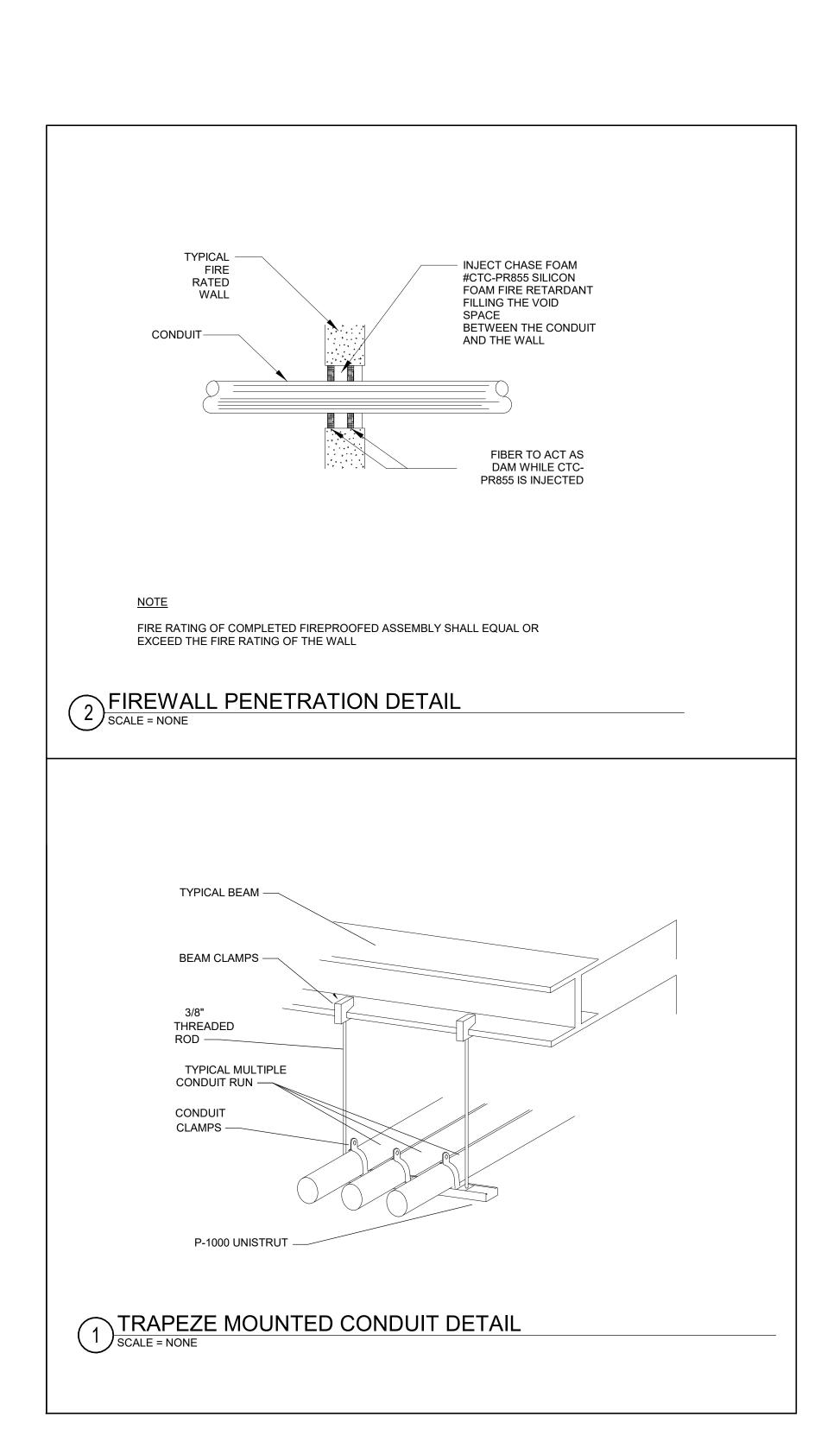
$\bigcirc$	SHEET KEYED NOTES
Key Value	Keynote Text
1	EXISTING BOILERS TO BE DEMOLISHED. DEMO BRANCH CIRCUIT WIRING AND CONDUIT BACK TO SOURCE. TURN OFF BREAKER AND LABEL AS SPARE. APPROXIMATE LOCATION OF CEILING MOUNTED MOTOR RATED SWITCH SHOWN. FIELD VERIFY EXACT LOCATION.
2	EXISTING PUMP TO BE DEMOLISHED. DEMO BRANCH CIRCUIT WIRING AND CONDUIT BACK TO SOURCE. TURN OFF BREAKER AND LABEL AS SPARE. APPROXIMATE LOCATION OF CEILING MOUNTED MOTOR RATED SWITCH SHOWN. FIELD VERIFY EXACT LOCATION.
3	EQUIPMENT/FIXTURE IS EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.
4	APPROXIMATE LOCATION OF PANEL 5L IN ELECTRICAL ROOM. ACCORDING TO EXISTING DRAWINGS PANEL 5L SUBFEEDS PANEL LM IN MECHANICAL YARD. CONTRACTOR TO FIELD VERIFY.
5	INSTALL POWER TO SERVE BOILER RACK SYSTEM. PROVIDE NEMA 3R MOTOR RATED SWITCH LOCATED ON UNISTRUT NEXT TO SKID FOR LOCAL DISCONNECTING MEANS.
6	INSTALL POWER TO SERVE CIRCULATION PUMP. PROVIDE NEMA 3R MOTOR RATED SWITCH LOCATED ON UNISTRUT NEXT TO SKID FOR LOCAL DISCONNECTING MEANS.
7	PROVIDE POWER TO SERVE HEAT TRACING CONTROL PANEL. COORDINATE WITH PLUMBING CONTRACTOR FOR EXACT LOCATION. GROUND FAULT EQUIPMENT PROTECTION FOR CIRCUIT IS INTEGRAL TO THE CONTROL PANEL.

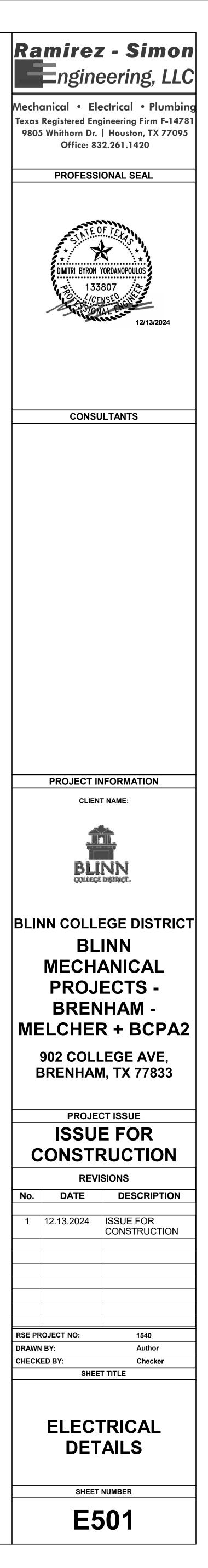




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			2







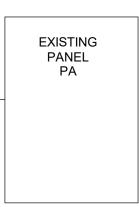
	EXISTING
	PANEL 5L
	50A/2P
D	400A MLO
	LOCATED IN BLINN COLLEGE APT ELEC ROOM
	1 BCPA2 ELECTRICAL
	U NTS
	EXISTING
	200A/3P
	1200A MLO
	LOCATED IN ELECTRICAL ROOM 1ST FLOOR
	2 MELCHER ELECTRIC NTS
С	
Ŧ	
e_R24.rv	
+ BCPA2	
/heeler -	
cher + V	
ım - Mel	
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1

Branch Panel: LM

EXISTING PANEL LM

L ONE-LINE DIAGRAM



ICAL ONE-LINE DIAGRAM

2

Location: Mechanical Yard Supply From: 5L Mounting: Recessed Enclosure: Type 1					Volts: 120/240 Single Phases: 1 Wires: 3					A.I.C. Rating: Existing Mains Type: MLO Mains Rating: 100 A			
Notes:													
скт	Circuit Description	Load Amps	Trip	Poles		<b>A</b>	E	3	Poles	Trip	Load Amps	Circuit Description	СКТ
1	Existing Circulation Pumps	4 A	20 A	1	500 VA	500 VA			1	20 A	4 A	Existing Lights	2
3	BI-1	5 A	20 A	1			600 VA	1000 VA	1	20 A	8 A	Existing Load	4
5	Existing Irrigation	4 A	20 A	1	500 VA	1200			1	20 A	10 A	HTCP-1	6
7	Existing Receptacles	9 A	20 A	1			1080 VA	800 VA	1	20 A	7 A	BI-2	8
9	CP-2	4 A	15 A	1	445 VA				1		0 A	Space	10
11	CP-1	4 A	15 A	1			445 VA		1		0 A	Space	12
13	Space	0 A		1					1		0 A	Space	14
15	Space	0 A		1					1		0 A	Space	16
17	Space	0 A		1					1		0 A	Space	18
19	Space	0 A		1					1		0 A	Space	20
21	Space	0 A		1					1		0 A	Space	22
23	Space	0 A		1					1		0 A	Space	24
25	Space	0 A		1					1		0 A	Space	26
27	Space	0 A		1					1		0 A	Space	28
				otal Load:		5 VA		5 VA					
			То	otal Amps:	26	6 A	33	3 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
Receptacle	0 VA	0.00%	0 VA		
_ighting	0 VA	0.00%	0 VA	Total Conn. Load:	7070 VA
Motor	890 VA	100.00%	890 VA	Total Est. Demand:	7965 VA
Miscellaneous	2600 VA	100.00%	2600 VA	Total Conn. Current:	29 A
Continuous	0 VA	0.00%	0 VA	Total Est. Demand Current:	33 A
Kitchen	0 VA	0.00%	0 VA		
Existing Load	3580 VA	125.00%	4475 VA		

### Branch Panel: PA

Location: Attic Supply From: M Mounting: Surface Enclosure: Type 1

Volts: 120/208 Wye Phases: 3 Wires: 4

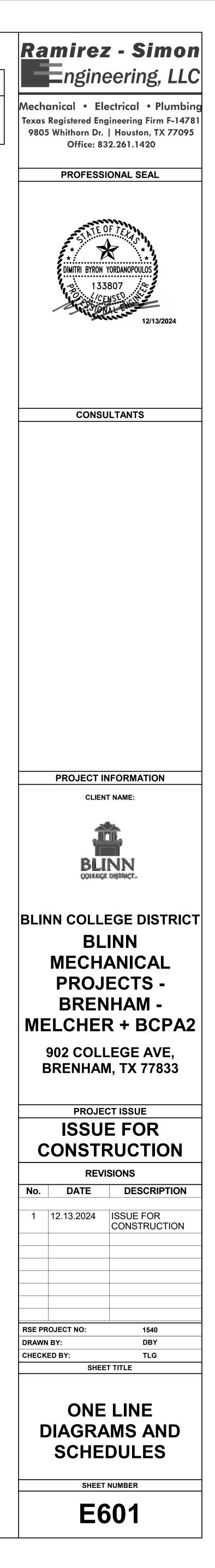
скт	Circuit Description	Load Amps	Trip	Poles		4		3	(	C	Poles	Trip	Load Amps	Circuit Description	СКТ
1	Existing Load	8 A	20 A	1	1000	1801									2
3	Existing Load	4 A	20 A	1			500 VA	1801			3	30 A	15 A	Existing H/W Pump	4
5	Existing Load	4 A	20 A	1					500	1801					6
7	Existing Load	4 A	20 A	1	500	500					1	20 A	4 A	Existing Load	8
9	Existing Load	4 A	20 A	1			500 VA	500 VA			1	20 A	4 A	Existing Load	10
11	Existing Load	13 A	20 A	1					1500	1500	1	25 A	13 A	Existing Load	12
13	В-3	8 A	20 A	1	1000						1		0 A	Space	14
15	Space	0 A		1				500 VA			1	20 A	4 A	Existing Load	16
17	Space	0 A		1							1		0 A	Space	18
19					9006						1		0 A	No Space	20
21	Existing Elevator	75 A	150 A	3			9006				1		0 A	No Space	22
23									9006		1		0 A	No Space	24
	Total Load: Total Amps:							8 VA 7 A		8 VA 1 A		1			<u>.</u>

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
Receptacle	0 VA	0.00%	0 VA		
Lighting	0 VA	0.00%	0 VA	Total Conn. Load:	40923 VA
Motor	32423 VA	100.00%	32423 VA	Total Est. Demand:	42798 VA
Miscellaneous	1000 VA	100.00%	1000 VA	Total Conn. Current:	114 A
Continuous	0 VA	0.00%	0 VA	Total Est. Demand Current:	119 A
Kitchen	0 VA	0.00%	0 VA		
Existing Load	7500 VA	125.00%	9375 VA		
Notes:		1	· · · · · ·		1

### GENERAL NOTES

A. REFER TO ELECTRICAL LEGEND AND GENERAL INFORMATION ON SHEET E001.

## A.I.C. Rating: Existing Mains Type: MLO Mains Rating: 225 A



2
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	GENERAL			
		GENERAL SYMBOLS		
	SECTION LOCATION	A1	ABBREVIATIO	
	DRAWING NUMBER WHERE DETAILED	P301	AFG	
	DETAIL SYMBOL	$\frown$	ARV	
	DETAIL LOCATION	(A1 (P501)	BOP	
			BTU	
	EQUIPMENT SYMBOLS		BTUH	
	SYMBOL INDICATES EQUIPMENT IDENTIFIE		CI	
	XX - ## NUMBERS REFER TO SPECIFIC EQUIPMEN		СР	
		E	DCO	
D	SECTION AND DETAIL TITLES		DCOTG DCW	
	SECTION LETTER LOCATION	A1 SECTION P301 SCALE	DCSW	
			DHW	
	DETAIL NUMBER LOCATION	[ ··· ]=:/	CWM	
	DRAWING NUMBER WHERE DETAILED	P501 SCALE	DF	
			DN DS	
	PLUMBING FIXTURE MARK		DWBP	
	FIXTURE TYPE REFER TO LV-1 SCHEDULE	P-1 VENT NUMBER	ECO	
	FOR ADDITIONAL INFORMATION	$\smile$	EL EWH	
			EWH EWC	
			EEW	
			EM EPP	
			ES	
			ESEW	
			EX (E)	
			°F	
			FCO	
			FD FFE	
			FP	
			FS FT	
			FT	
			GC	
			GI GPH	
			GPM	
С			GWH	
			GPR HB	
			NOTE:	
			NOT ALL ABB	

### 

ABBREVIATIONS				
DESCRIPTION	ABBREVIATION	DESCI		
ABOVE FINISHED FLOOR	HD	HEAD		
ABOVE FINISHED GRADE	HE	HEAT EXCHA		
AIR RELIEF VALVE	HP	HORSEPOWE		
BOTTOM OF PIPE	IM	ICE MAKER		
BIRD SCREEN	IN	INCHES		
BRITISH THERMAL UNIT	INV	INVERT		
BTU PER HOUR	JP	JOCKEY PUM		
CAST IRON	KW	KITCHEN WAS		
CLEAN OUT	LV	LAVATORY		
CIRCULATION PUMP	MB	MOP BASIN		
DOUBLE CLEANOUT	NA	NOT APPLICA		
DOUBLE CLEANOUT TO GRADE	NC	NORMALLY C		
DOMESTIC COLD WATER	NIC	NOT IN CONT		
DOMESTIC COLD SOFTEN WATER	NO	NORMALLY C		
DOMESTIC HOT WATER	No. #	NUMBER		
DOMESTIC HOT WATER RETURN	OW	OIL WASTE		
CLOTHES WASHING MACHINE	OWV	OIL WASTE V		
DRINKING FOUNTAIN	PC	PLUMBING CO		
DOWN	PRV	PRESSURE R		
DOWNSPOUT	PH	PHASE		
DOMESTIC WATER BOOSTER PUMP	PSAN	PUMPED SAN		
EXTERIOR CLEANOUT	PSB	PLUMBING SE		
ELEVATION	PSIG	POUNDS PER		
ELECTRIC WATER HEATER	PV	PRIMING VAL		
ELECTRIC WATER COOLER	SE	SEWAGE EJE		
EMERGENCY EYEWASH	SH	SHOWER		
EMERGENCY	SK	SINK		
ELEVATOR PIT PUMP	SP	SUMP PUMP		
EMERGENCY SHOWER	SV	SOLENOID VA		
EMERGENCY SHOWER EYE WASH	SS	SERVICE SINI		
EXISTINGCP	TD	TRENCH DRA		
EXISTING	TMV	THERMOSTA		
DEGREES FAHRENHEIT	TP	TRAP PRIME		
FLOOR CLEANOUT	ТҮР	TYPICAL		
	UR	URINAL		
	V	VENT		
FINISHED FLOOR ELEVATION	VTR	VENT THROU		
	VB	VACUUM BRE		
FLOOR SINK	YB	YARD BOX		
FEET	YH	YARD HYDRA		
	W	WASTE		
GENERAL CONTRACTOR	WCO	WAUL CLEAN		
GREASE INTERCEPTOR	WC	WALL OLLAN		
GALLONS PER HOUR	WH	WATER CLOS		
	WHA	WALL HIDRA		
GAS WATER HEATER				
GAS PRESSURE REDUCER				
HOSE BIBB				

DESCRIPTION
HEAD
HEAT EXCHANGER
HORSEPOWER
INCHES
INVERT
JOCKEY PUMP
KITCHEN WASTE, or, KILOWATT
LAVATORY
MOP BASIN
NOT APPLICABLE
NORMALLY CLOSED
NOT IN CONTRACT
NORMALLY OPEN
NUMBER
OIL WASTE
OIL WASTE VENT
PLUMBING CONTRACTOR
PRESSURE REDUCING VALVE
PHASE
PUMPED SANITARY
PLUMBING SERVICE BOX
POUNDS PER SQ. INCH GAUGE
PRIMING VALVE
SEWAGE EJECTOR
SHOWER
SINK
SUMP PUMP
SOLENOID VALVE
SERVICE SINK, or, STAINLESS STEEL
TRENCH DRAIN
THERMOSTATIC MIXING VALVE
TRAP PRIMER
TYPICAL
URINAL
VENT
VENT THROUGH ROOF
VACUUM BREAKER
YARD BOX
YARD HYDRANT
WASTE
WALL CLEANOUT
WATER CLOSET
WATER CLOSET
WATER HAMMER ARRESTOR

SYMBOL AND ABBREVIATION	DESCRIPTION
F	CONDENSATE DRAIN
·	DOMESTIC COLD WATER
⊢	DOMESTIC HOT WATER
F	DOMESTIC HOT WATER RETURN
⊢	VENT
	SANITARY SEWER
<u>⊢</u>	UNDERGROUND SANITARY SEWER
⊢ SD	STORM/ROOF DRAIN
	OVERFLOW STORM DRAIN
⊢NG	NATURAL GAS-LOW PRESSURE
	DIRECTION OF FLOW
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
0+	RISE IN PIPE
	UNION
	WYE TYPE STRAINER
	THERMOMETER
	PRESSURE GAUGE AND GAUGE COCK
AHW	WATER HAMMER ARRESTOR
+5+	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
гібіі	CAPPED OUTLET
++C+	DROP IN PIPE
	FLEXIBLE CONNECTION
A ⊥	AUTOMATIC AIR VENT (AAV)
FD @ci	FLOOR DRAIN
FS @c+	FLOOR SINK
	AREA DRAIN
FCO Ø	FLOOR CLEANOUT
ECO Ø	EXTERIOR CLEAN OUT
	TWO WAY OR DOUBLE CLEANOUT TO GRADE
$\frown$	
	ROOF DRAIN
	OVERFLOW DRAIN
	DECK DRAIN
$\oplus$	EXTEND NEW FROM THIS POINT
$\square$	DEMO TO THIS POINT

BREVIATIONS MAY BE USED ON THIS PROJECT.

SYMBOL	LVE SYMBOLS
	GATE VALVE
	CHECK VALVE
	GLOBE VALVE
	PLUG VALVE
	WATER PRESSURE REDUCING VALVE
	BALANCING VALVE/CIRCUIT SETTER MEASURING DEVICE
S 	SOLENOID VALVE
ь——Ю́н——	BALL VALVE
	DRAIN VALVE
	OS&Y VALVE
·	BUTTERFLY VALVE
	FUEL GAS PRESSURE REGULATOR
Ϋ́Υ	PRESSURE RELIEF VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	2-WAY CONTROL VALVE
	3-WAY MODULATING CONTROL VALVE
<u></u>	FLOW SWITCH
	DIAPHRAGM VALVE (PROCESS SYSTEMS)
	AUTO BALL DRIP VALVE
ıi	VALVE IN VERTICAL
	REDUCED PRESSURE BACKFLOW PREVENTER(F
	DOUBLE CHECK BACKFLOW PREVENTER (DCBP)
	DOUBLE DETECTOR CHECK ASSEMBLY (DDCA)
	ATMOSPHERIC VACCUM BREAKER
	PRESSURE STYLE VACUUM BREAKER

GENERAL NOTES
OBTAIN ALL NECESSARY PERMITS, PAY LEGAL FEES AND COMPLY WITH ALL NATIONAL, STATE AND MUNICIPAL LAWS, CODES, AND ORDINANCES

RELATING TO BUILDING AND PUBLIC SAFETY.
IT IS THE INTENTION OF THESE DRAWINGS TO CALL FOR FINISHED WORK, I.E., FULLY ADJUSTED, TESTED, AND READY FOR OPERATION. WHEREVER THE WORK "PROVIDE" IS USED. IT SHALL MEAN, "FURNISH AND INSTALL COMPLETE AND READY FOR USE".

PROTECT EQUIPMENT AND WORK FROM DAMAGE DURING HANDLING AND INSTALLATION UNTIL COMPLETION OF CONSTRUCTION.

REMOVE ALL EXCESS MATERIAL AND DEBRIS AND CLEAN ALL EQUIPMENT UPON COMPLETION OF WORK. TOUCH UP WITH PAINT WHERE REQUIRED. ALL SYSTEMS SHALL BE COMPLETE AND WORKING AT COMPLETION OF

CONSTRUCTION. CONTRACTOR SHALL COORDINATE EQUIPMENT CONNECTIONS WITH

EQUIPMENT DRAWINGS AND SUPPLIER. INSTALL EQUIPMENT AND MAKE FINAL CONNECTIONS, FURNISHING CUTOFF VALVES, P-TRAPS, P.R.V'S, AND PIPING AS REQUIRED.

ALL CONNECTIONS BETWEEN PIPES OF DISSIMILAR MATERIALS SHALL BE MADE WITH DIELECTRIC UNIONS. PROVIDE ACCESS PANELS WHERE REQUIRED.

COORDINATE WATER, WASTE AND VENT PIPING WITH OTHER TRADES TO AVOID SPACING OR ROUTING PROBLEMS.

CONTRACTOR SHALL COORDINATE ALL WORK CLOSELY WITH NEW MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL. SUBMIT SHOP DRAWINGS OF PROPOSED NEW DEVICES PRIOR TO 10.

INSTALLATION. FURNISH OWNER WITH COMPLETE OPERATING MANUALS AND INSTRUCTIONS FOR ALL EQUIPMENT FURNISHED.

12. FIXTURES, EQUIPMENT AND CONNECTIONS, AND PIPING SHALL BE FURNISHED AND INSTALLED TO MEET OR EXCEED STATE AND LOCAL CODES AND REQUIREMENTS.

THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED 13. TO SHOW ALL OFFSETS. INSTALL PIPING AS CLOSE AS POSSIBLE TO LOCATIONS SHOWN. WHERE INTERFERENCES WITH COMPONENTS OF OTHER TRADE'S WORK (STRUCTURAL FOUNDATIONS OR OTHER BUILDING ELEMENTS) REQUIRE ROUTINGS AND LOCATIONS THAT VARY FROM THOSE SHOWN, THE CONTRACTOR SHALL OBTAIN PROJECT ENGINEER'S APPROVAL PRIOR TO INSTALLATION. NO ADDITIONAL COST SHALL BE GRANTED FOR THESE CHANGES.

THE PLUMBING DRAWINGS DO NOT NECESSARILY SHOW EVERY 14. COMPONENT AND/OR ACCESSORY REQUIRED FOR A COMPLETE INSTALLATION. THE CONTRACTOR SHALL INCLUDE SUCH ITEMS AS ARE REQUIRED TO ENSURE THAT THE ENTIRE SYSTEM IS FUNCTIONING IN COMPLIANCE WITH APPLICABLE CODES, ACCEPTED INDUSTRY STANDARDS, AND MANUFACTURER'S INSTALLATION REQUIREMENTS UPON COMPLETION OF THE WORK.

FURNISH AND INSTALL WATER HAMMER ARRESTORS IN COLD WATER 15. LINES AT CONNECTIONS TO FLUSH VALVES AND QUICK CLOSING VALVES AND AT ALL HOT AND COLD WATER CONNECTIONS TO FIXTURES.

ROUGH-IN PLUMBING PIPING USING DIMENSIONS SHOWN ON 16 ARCHITECTURAL DRAWINGS. LOCATION OF ALL PIPING SHALL ALLOW INSTALLATION OF FIXTURES WITHOUT THE NEED TO FURR-OUT WALLS. PROVIDE CLEANOUTS IN EXCESS OF THOSE SHOWN WHICH ARE

REQUIRED BY THE PLUMBING CODE. 18. INDIVIDUAL FIXTURE SUPPLY AND DRAIN SERVICES ARE NOT SHOWN IN PLAN VIEW DUE TO DRAWING SPACE LIMITATIONS. THE CONTRACTOR SHALL PROVIDE ALL SERVICES FOR A COMPLETE FUNCTIONAL INSTALLATION.

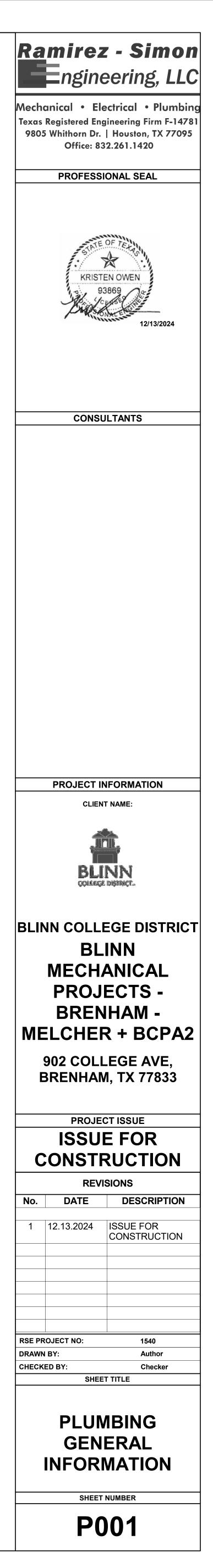
19. DO NOT INSTALL PIPING AT LOCATIONS THAT INTERFERE WITH SERVICE ACCESSIBILITY TO EQUIPMENT.

A.D.A. ACCESSIBLE LAVATORIES AND SINKS: INSULATE ALL EXPOSED DRAIN PIPING AND WATER SUPPLY PIPING BENEATH A.D.A. COMPLIANT LAVATORIES & SINKS WITH FULLY MOLDED CLOSED CELL VINYL INSULATION KIT AS MANUFACTURED BY TRUEBRO, BROCAR OR MCGUIRE.

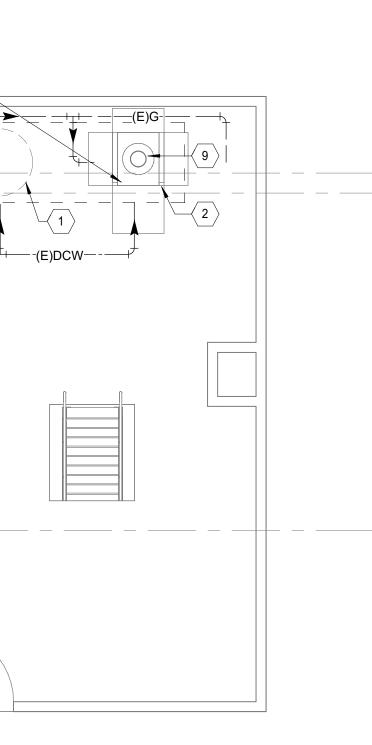
ALL CONFLICTS, WHICH MAY PREVENT THE COMPLETION OF WORK AS INTENDED, SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION. THE CONTRACTOR SHALL PROCEED AT THEIR OWN RISK UNTIL ALL CONFLICTS ARE RESOLVED AND THE CLARIFYING INFORMATION IS ISSUED TO THE CONTRACTOR BY THE ARCHITECT.

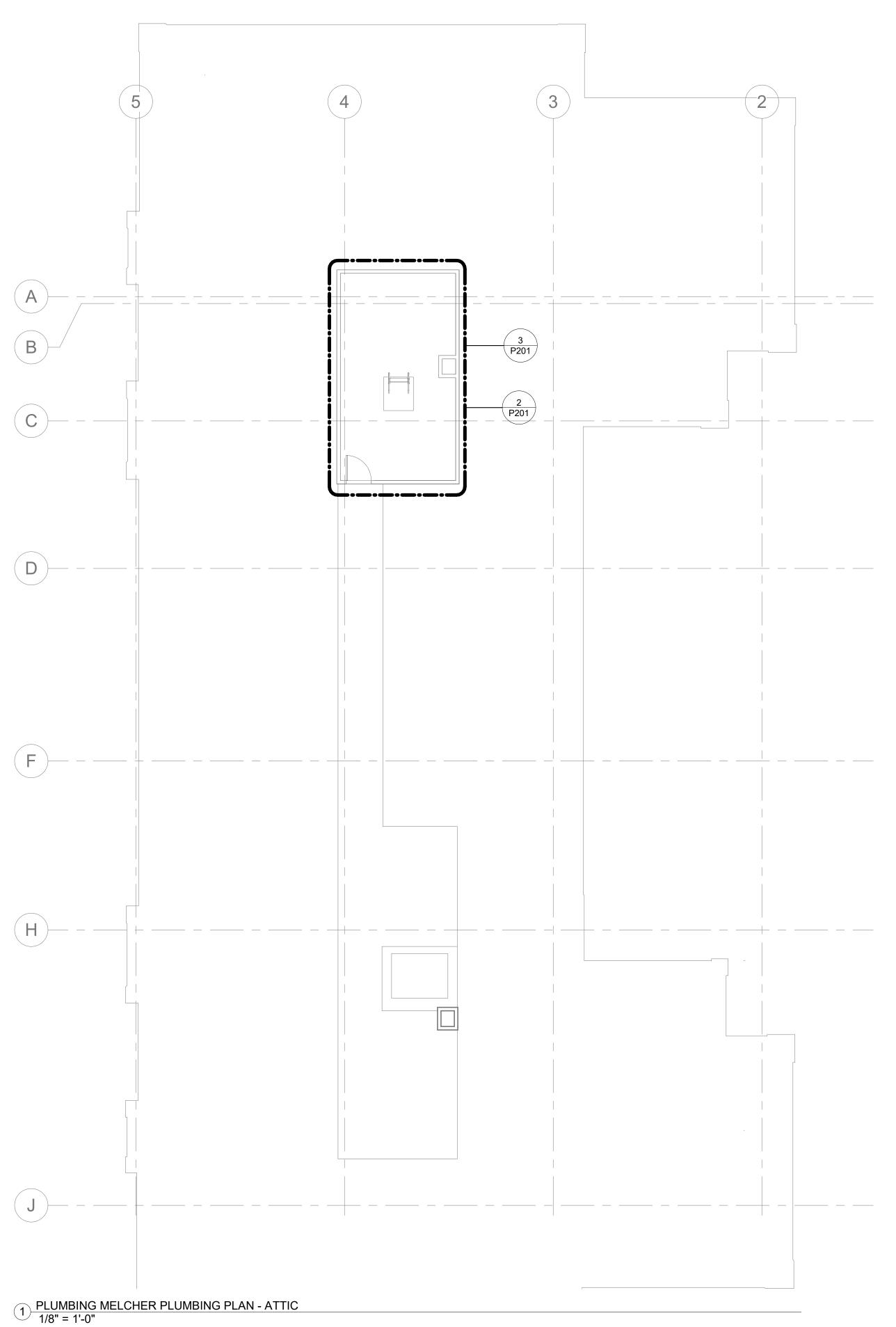
THE SUPPLY OF BOTH HOT AND COLD WATER TO EACH FIXTURE SHALL 22. BE EQUIPPED WITH STOP VALVE. ALL EXPOSED VALVES AND COCKS SHALL BE CHROMIUM PLATED TO CORRESPOND TO PIPE FINISH.

CONTRACTOR WILL BE RESPONSIBLE FOR RELOCATING DOMESTIC 23. WATER LINES IN CONFLICT WITH OTHER TRADES SCOPE OF WORK INCLUDING MECHANICAL EQUIPMENT, PIPING, DUCTS, ELECTRICAL CONDUITS, ETC.



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Autodesk Docs://1540 - Blinn Mechanical Projects - Brenham - Melcher + Wheeler + BCPA2/1540 - Blinn Mechanical Projects - Brenham - Melcher + Wheeler + BCPA2_R24.rvt 12/13/2024 9:22:14 AM		C PLUMBING MELCHER ENLARGED DEMO PLAN - ATTIC 1/4" = 1'-0"





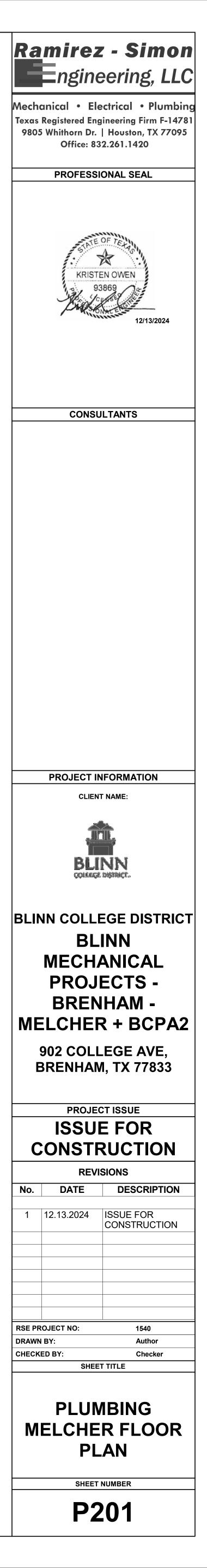
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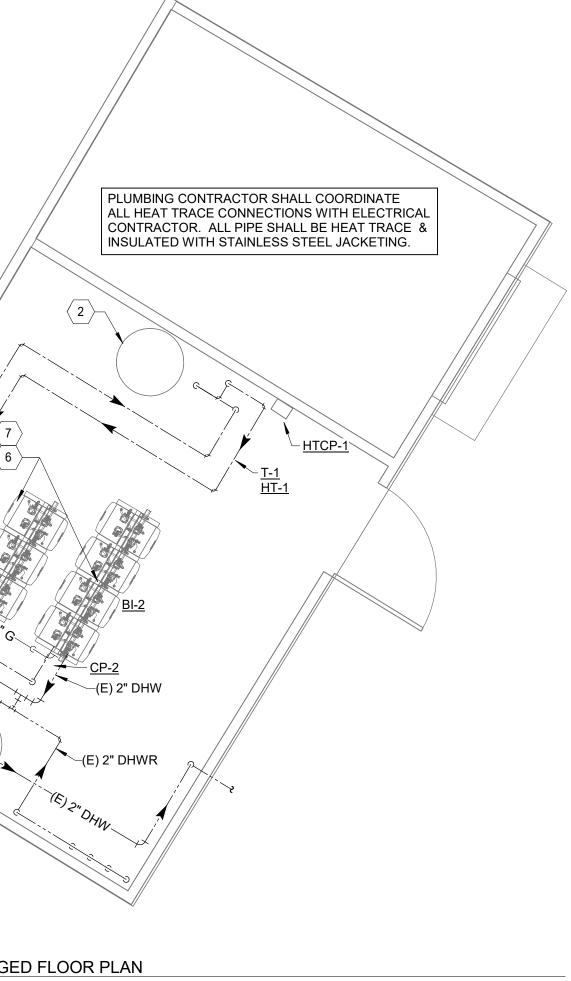
### GENERAL NOTES

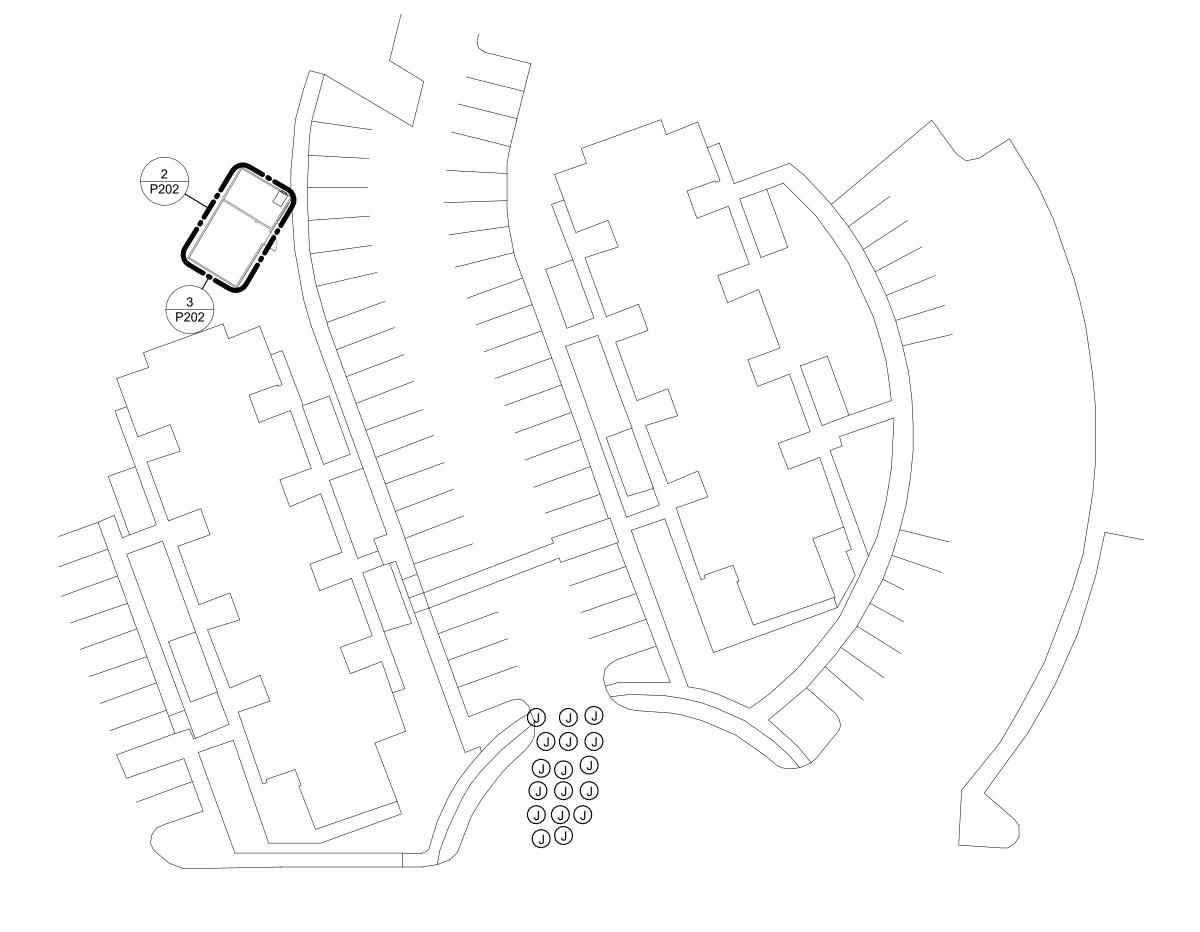
- A. REFER TO SHEET P001 FOR SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.
- B. CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT WHICH BECOME DAMAGED OR CONTAMINATED BY CONSTRUCTION ACTIVITY.

○ SHEET KEYED NOTES					
Key Value	Keynote Text				
1	TANK TO BE REMOVED.				
2	BOILER TO BE REMOVED.				
3	OWNER FURNISHED 200 GALLON STORAGE TANK.				
4	INSTALL CARBON MONOXIDE SENSOR AT 48" ABOVE FINISHED FLOOR. REFER TO WATER HEATER SCHEDULE FOR MAKE AND MODEL ON SHEET P501.				
5	DEMO ALL EXISTING ISOLATION VALVES DCW, GAS, DHW, AND DHWR.				
6	INSTALL ALL NEW ISOLATION VALVES DCW, GAS, DHW, AND DHWR.				
7	PLUMBING CONTRACTOR SHALL INSTALL PAN UNDER NEW STORAGE TANK AND BOILER AND DRAIN LINE TO BE RAN TO NEAREST FLOOR SINK OR DRAIN.				
8	RECONNECT NEW BOILER FLUE TO EXISTING FLUE PIPE THROUGH ROOF.				
9	EXISTING FLUE THROUGH ROOF TO REMAIN.				
10	DEMO EXISTING PAN.				
11	FOR PAN REPLACEMENT PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF (E) CP AND SHALL RE-INSTALL (E) CP REPLACE ALL GASKETS AND BOLTS TO ENSURE NO LEAKS.				



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		D
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③ PLUMBING BCPA2 ENLARG 1/4" = 1'-0"		_R24.rvt B
) PLUMBING BCPA2 ENLARGED		Autodesk Docs://1540 - Blinn Mechanical Projects - Brenham - Melcher + Wheeler + BCPA2/1540 - Blinn Mechanical Projects - Brenham - Melcher + Wheeler + BCPA2_R24.rvt 12/13/2024 9:22:18 AM

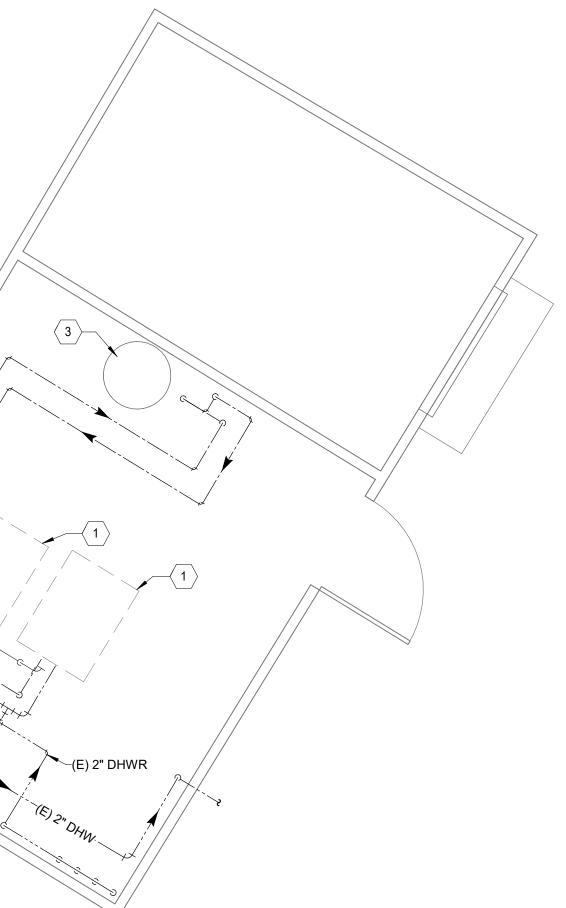




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1 PLUMBING BCPA2 FLOOR PLAN 1" = 30'-0"

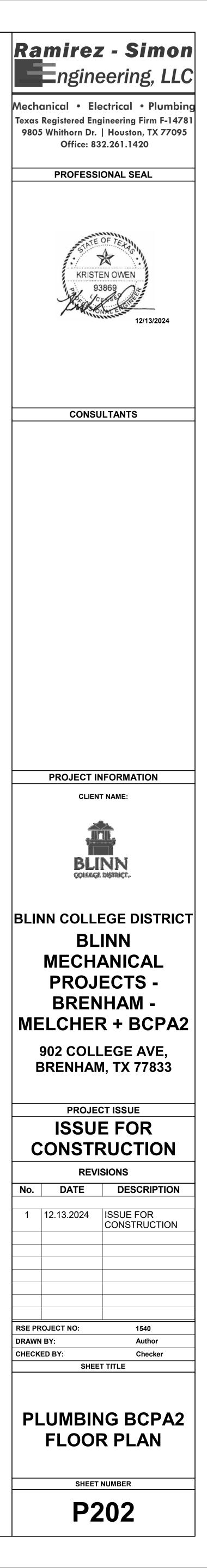
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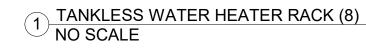


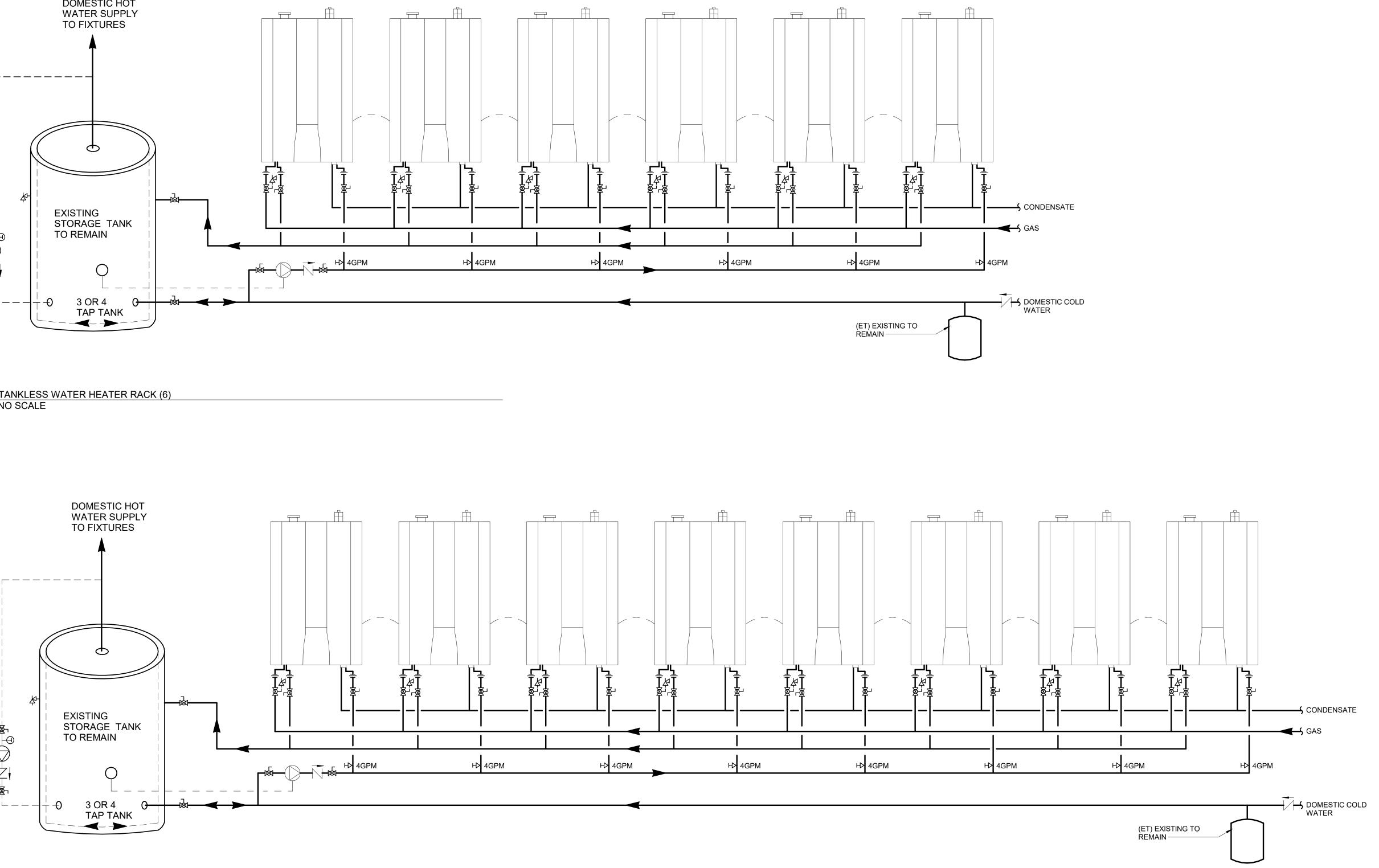
### GENERAL NOTES

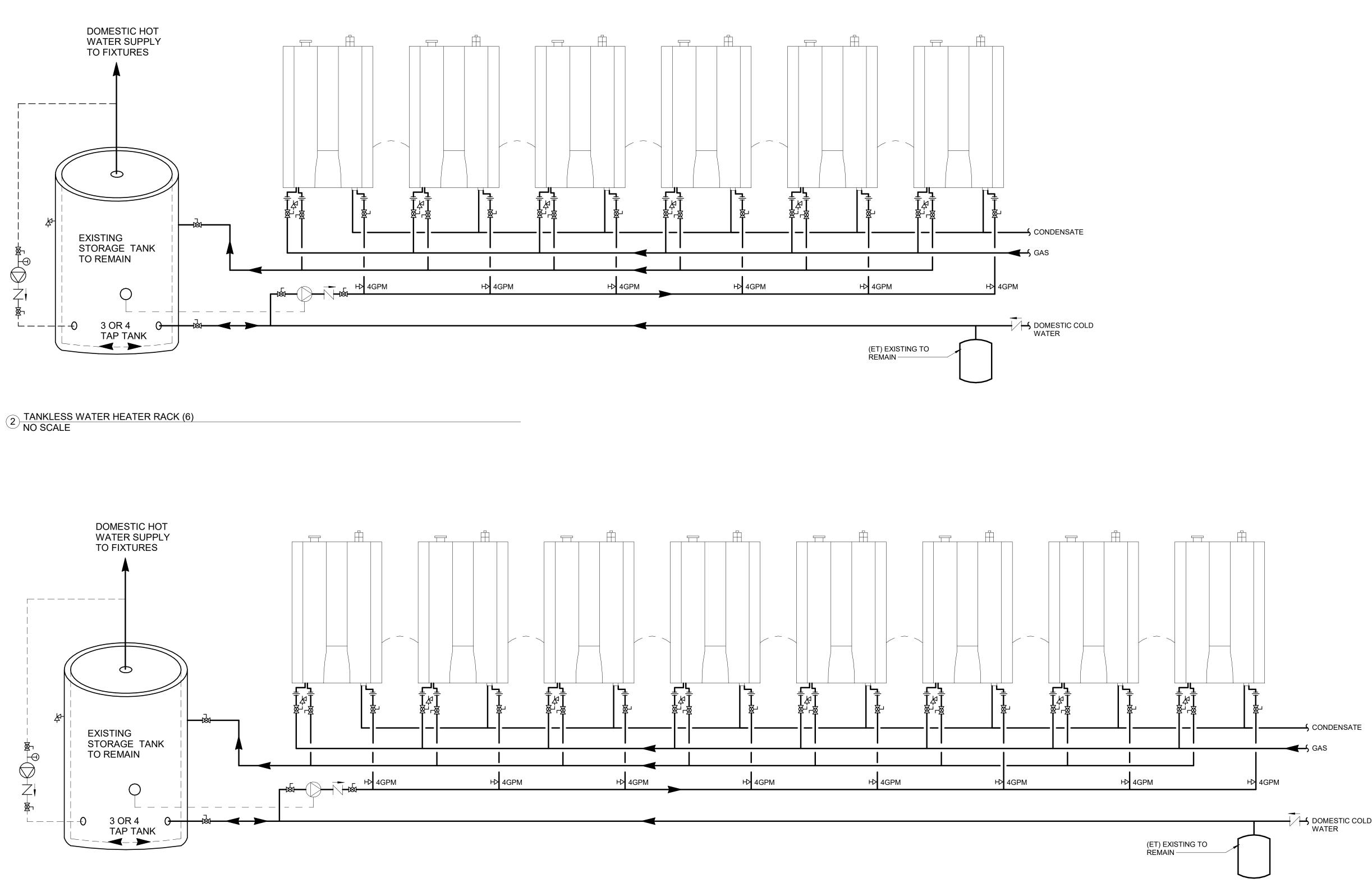
A. REFER TO SHEET P001 FOR SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.
B. CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT WHICH BECOME DAMAGED OR CONTAMINATED BY CONSTRUCTION ACTIVITY.

$\bigcirc$	SHEET KEYED NOTES				
Key Value	Keynote Text				
1	BOILER TO BE REMOVED.				
2	WATER SOFTENER TO BE INSULATED PROPERLY.				
3	EXISTING WATER SOFTENER TO REMAIN.				
4	EXISTING 200 GALLON HOT WATER STORAGE TANK TO REMAIN.				
5	NEW GAS PIPE FROM METER TO TANKLESS HEATER. TOTAL DEVELOPMENTAL LENGTH OF 50' @ LESS THEN 2PSI WITH A PRESSURE DROP OF .5 W.C. WITH A TOTAL LOAD OF 2,786 CFH.				
6	PROVIDE 2" GAS HEADER TO FEED ALL TANKLESS WATER HEATERS.				
7	PROVIDE ACID NEUTRALIZATION FOR CONDENSATE LINES FROM TANKLESS HEATER. ROUTE PIPE TO NEAREST DRAIN LINE OR DISCHARGE TO GRADE ON OUTSIDE.				

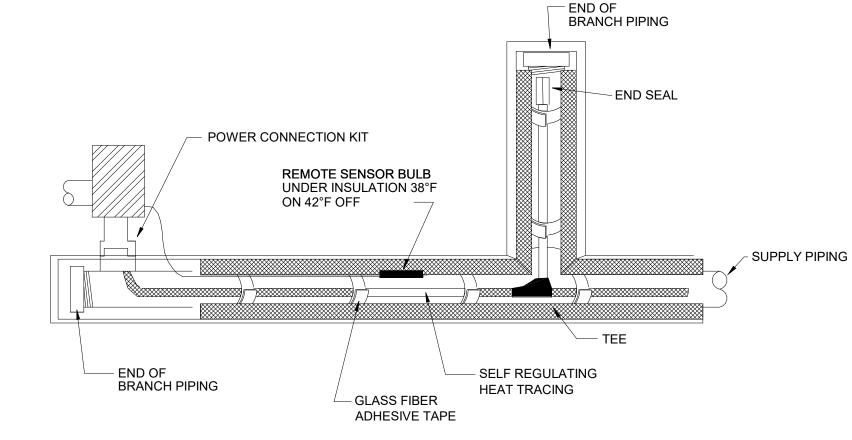












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				PLUMBING FIXTUF
ID	ID TYPE	MANUFACTURER	MODEL NUMBER	
HT-1	PIPE HEAT TAPE	RAYCHEM	# 5XL1-CR	"5 WATTS PER FOOT WITH POLYOLEFIN OUTER JACKET, REFERELECTRICAL REQUIREMENTS: 782 WATT TOTAL CONNECTED L
T-1	THERMOSTAT	RAYCHEM	# AMC-F5	LINE TEMPERATURE SENSING THERMOSTAT AND NEMA 4X END SENSING BULB. MOUNT THERMOSTAT SENSING BULB UNDER
HTCP-1	HEAT TAPE CONTROL PANEL	RAYCHEM	# 910*E1FWL*EMR2	"DIGITRACE" CONTROL PANEL FOR ON-OFF CONTROL OF HEAT PROTECTION, CAPABLE OF CHECKING HEATING CABLE CIRCUI WITH MODBUS PROTOCALL FOR STATUS AND ALARM CONDITION REMOTE TEMPERATURE DEVICE #RTD4AL AND STAINLESS STE INSULATION. POWER WIRING IS SPECIFIED BY ELECTRICAL.
FCV-1	FLOW CONTROL VALVE	BELL & GOSSETT	# LF-CB	"CIRCUIT SETTER PLUS", LEAD FREE CAST BRONZE BODY, BRA NAMEPLATE AND 1/2" VALVE BODY SIZE UNLESS SHOWN OTHE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

<b>QUANTITY</b> 8 6 1	CFH 199 199 299	RECO 32 GPM @ 2 21 GPM @ 2 426 0	1' OF HEAD 1' OF HEAD	VOLTS 120 120	PH 1 1	HZ 60 60	CON (ST1) OUT (ST1) (ST1) CON (ST1) (ST1) (ST1)	249), 3 E DOOR V 237) ITRACTC 249), 2 E DOOR V 237)	XTENSION ENT KITS ( OR SHALL F XTENSION ENT KITS (
	199	21 GPM @ 2	1' OF HEAD	120	1	60	(ST1 OUT (ST1) CON (ST1 OUT (ST1) CON	249), 3 E DOOR V 237) ITRACTC 249), 2 E DOOR V 237)	XTENSION ENT KITS ( R SHALL P XTENSION ENT KITS (
	199	21 GPM @ 2	1' OF HEAD	120	1		(ST1 OUT (ST1) CON (ST1 OUT (ST1) CON	249), 3 E DOOR V 237) ITRACTC 249), 2 E DOOR V 237)	OR SHALL P EXTENSION ENT KITS (S OR SHALL P EXTENSION ENT KITS (S
6					1	60	(ST1) OUT (ST1) CON	249), 2 E DOOR V 237)	XTENSION ENT KITS (§
1	299	426 0	GPM	100				TRACTO	
				120	1	60		IOXIDE S RLOKED	OR SHALL P SENSOR WI O WITH BOIL
RETURN	PUMP S	SCHEDULE							]
			HEAD	MOTOR D		FOR DATA			NOTES
TY	PE	(GPM)	(TOTAL FT)	HP		V	PHASE	HZ	NOTES
		32	21	1/6		120	1	60	ALL
		21	21	1/6		120	1	60	ALL
	TY CANNED TY CANNED	TYPE CANNED ROTOR TYPE CANNED ROTOR TYPE	CANNED ROTOR TYPE32CANNED ROTOR TYPE21	TYPEFLOW RATE (GPM)HEAD (TOTAL FT)CANNED ROTOR TYPE3221CANNED ROTOR TYPE2121	TYPEFLOW RATE (GPM)HEAD (TOTAL FT)HPCANNED ROTOR TYPE32211/6CANNED ROTOR TYPE21211/6	FLOW RATE (GPM)HEAD (TOTAL FT)MOTTYPE(GPM)(TOTAL FT)HPCANNED ROTOR TYPE32211/6CANNED ROTOR TYPE21211/6	FLOW RATE (GPM)HEAD (TOTAL FT)MOTOR DATATYPE(GPM)(TOTAL FT)HPVCANNED ROTOR TYPE32211/6120CANNED ROTOR TYPE21211/6120	FLOW RATE (GPM)HEAD (TOTAL FT)MOTOR DATATYPE(GPM)(TOTAL FT)HPVPHASECANNED ROTOR TYPE32211/61201CANNED ROTOR TYPE21211/61201	FLOW RATE (GPM)HEAD (TOTAL FT)MOTOR DATATYPE(GPM)(TOTAL FT)HPVPHASEHZCANNED ROTOR TYPE32211/6120160CANNED ROTOR TYPE21211/6120160

### PLUMBING FIXTURE SCHEDULE

DESCRIPTION ER FOOT WITH POLYOLEFIN OUTER JACKET, REFER TO SPECIFICATIONS FOR MORE INFORMATION. L REQUIREMENTS: 782 WATT TOTAL CONNECTED LOAD AT 120V SINGLE PHASE.

RATURE SENSING THERMOSTAT AND NEMA 4X ENCLOSURE FOR ON-OFF CONTROL OF HEAT TAPE CIRCUIT. FACTORY SET TO TURN ON AT 40%% DF. CAPILLARY AND JLB. MOUNT THERMOSTAT SENSING BULB UNDER THE PIPE INSULATION. POWER WIRING IS SPECIFIED BY ELECTRICAL. E" CONTROL PANEL FOR ON-OFF CONTROL OF HEAT TAPE CIRCUIT WITH NEMA 4X FRP ENCLOSURE, LED DISPLAY AND KEYPAD INTERFACE, GROUND FAULT CIRCUIT DN, CAPABLE OF CHECKING HEATING CABLE CIRCUIT FAULTS, ALARM LIGHTS FOR HIGH AND LOW TEMPERATURE, HIGH AN LOW CURRENT AND VOLTAGE. RS-485 INTERFACE SUS PROTOCALL FOR STATUS AND ALARM CONDITIONS INTERFACE WITH THE BUILDING AUTOMATION SYSTEM. SET TO TURN ON AT 40%% DF AND TURN OFF AT 45%% DF. MPERATURE DEVICE #RTD4AL AND STAINLESS STEEL CABLE #RTD-200, LENGTH AS REQUIRED, MOUNT REMOTE TEMPERATURE SENSING DEVICE ON PIPE UNDER THE

ETTER PLUS", LEAD FREE CAST BRONZE BODY, BRASS BALL, CALIBRATED BALANCE VALVE, DIFFERENTIAL PRESSURE READOUT PORTS, DRAIN PORT, MEMORY STOP, E AND 1/2" VALVE BODY SIZE UNLESS SHOWN OTHERWISE ON PLANS. SET AND BALANCE TO 4 GPM FLOW RATE UNLESS SHOWN OTHERWISE ON PLANS AND PER URER'S INSTALLATION INSTRUCTIONS.

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र	MODEL #	QUANTITY	CFH	RECOVERY	ELECTRICAL REQUIREMENTS			NOTES
					VOLTS	PH	HZ	
E	RTGS199N1	8	199	32 GPM @ 21' OF HEAD	120	1	60	CONTRACTOR SHALL PROVIDE: 1 BASE RACK (ST1249), 3 EXTENSION RACKS (ST1250); 8 OUTDOOR VENT KITS (ST1238); 8 PIPE COVER (ST1237)
E	RTGS199N1	6	199	21 GPM @ 21' OF HEAD	120	1	60	CONTRACTOR SHALL PROVIDE: 1 BASE RACK (ST1249), 2 EXTENSION RACKS (ST1250); 6 OUTDOOR VENT KITS (ST1238); 6 PIPE COVER (ST1237)
	HD-301	1	299	426 GPM	120	1	60	CONTRACTOR SHALL PROVIDE: CARBON MONOXIDE SENSOR WITH SWITCH, INTERLOKED WITH BOILER. OPERA MODEL # 6002

