

VALVE SYMBOLS	
SYMBOL	IDENTIFICATION
	GATE VALVE
	GATE VALVE; VERTICAL ORIENTATION
	SHUT-OFF VALVE
	SHUT-OFF VALVE ON RISER
	BALL VALVE
	GLOBE VALVE
	BUTTERFLY VALVE
	BALANCING VALVE
	CIRCUIT SETTER
	SOLENOID VALVE
	PRESSURE REDUCING VALVE
	TEMPERATURE MIXING VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	ANGLE VALVE
	ANGLE VALVE; VERTICAL ORIENTATION
	PRESSURE REGULATING VALVE
	CHECK VALVE
	WYE STRAINER
	REDUCED PRESSURE ZONE ASSEMBLY
	DOUBLE CHECK ASSEMBLY

OTHER PLUMBING SYMBOLS	
SYMBOL	IDENTIFICATION
	HOSE BIBB
	PUMP
	CIRCULATION PUMP
	FLOOR DRAIN
	FLOOR SINK
	TRAP PRIMER W/ ACCESS PANEL
	DOWNSPOUT NOZZLE
	POINT OF CONNECTION
	SHEET KEYNOTE TAG
	CONTRACTOR EQUIPMENT TAG

PLUMBING SYMBOLS	
SYMBOL	IDENTIFICATION
	PIPE CONTINUED
	PIPE UP
	PIPE DROP
	PIPE DROP AT TEE
	PIPE CAP
	PIPE UP OR DOWN THROUGH LEVEL
	PIPE TRANSITION
	90° SWEEP
	ELBOW
	TEE
	45° WYE FITTING
	COMBINATION WYE FITTING
	FLEXIBLE CONNECTION
	PRESSURE/TEMPERATURE PLUG
	UNION
	WATER HAMMER ARRESTOR WITH ACCESS PANEL
	WATER HAMMER ARRESTOR
	GRADE CLEANOUT OR FLOOR CLEANOUT
	WALL CLEANOUT
	THERMOMETER
	PRESSURE GAUGE
	TEMPERATURE GAUGE

PIPING SYSTEM LINE TYPES	
SYMBOL	IDENTIFICATION
	CONDENSATE DRAIN
	COLD WATER
	HOT WATER
	HOT WATER RETURN PIPE
	STORM DRAIN / OVERFLOW DRAIN PIPE
	WATER PIPE BELOW GRADE
	WASTE PIPE / GREASE WASTE PIPE BELOW GRADE
	VENT PIPE
	SPECIALTY SYSTEM PIPE

ABBREVIATIONS			
ABBRV.	IDENTIFICATION	ABBRV.	IDENTIFICATION
Ø	DIAMETER	LBS	POUNDS
&	AND	LRA	LOCKED ROTOR AMPS
°F	DEGREES FAHRENHEIT	LVG	LEAVING
AFF	ABOVE FINISH FLOOR	LWT	LEAVING WATER TEMPERATURE
AGGR	AGGREGATE	MAX	MAXIMUM
AP	ACCESS PANEL	MBH	1000 BTU PER HOUR
ARCH	ARCHITECT/ARCHITECTURAL	MCA	MINIMUM CURRENT AMPACITY
APPROX	APPROXIMATE	MECH	MECHANICAL
BHP	BRAKE HORSEPOWER	MFR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BTU	BRITISH THERMAL UNITS	MOCP	MAXIMUM OVERCURRENT PROTECTION
CA	COMPRESSED AIR	MV	MEDICAL VACUUM
CD	CONDENSATE DRAIN	(N)	NEW
CFH	CUBIC FEET PER HOUR	NC	NORMALLY CLOSED
CIRC	CIRCULATING	NIC	NOT IN CONTRACT
COND	CONDENSATE	NO	NORMALLY OPEN
CONN	CONNECTION	NTS	NOT TO SCALE
CONT	CONTINUED	OC	ON CENTER
COORD	COORDINATE	OCC	OCCUPANCY
CONST	CONSTRUCTION	OD	OVERFLOW DRAIN
CW	COLD WATER (DOMESTIC)	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
DN	DOWN	PD	PRESSURE DROP
DSP	DRY STAND PIPE	PH	PHASE
DSPKR	DRY SPRINKLER	P/N	PART NUMBER
DWGS	DRAWINGS	PRV	PRESSURE REDUCING VALVE
(E)	EXISTING TO REMAIN	POC	POINT OF CONNECTION
EFF	EFFICIENCY	PSI	POUNDS PER SQUARE INCH
ETC	ETCETERA	QTY	QUANTITY
ELEC	ELECTRICAL	(R)	RELOCATE EXISTING
ELEV	ELEVATION	REQD	REQUIRED
EMBT	EMBEDMENT	RM	ROOM
EQUIP	EQUIPMENT	RPM	REVOLUTIONS PER MINUTE
EWT	ENTERING WATER TEMPERATURE	RPZA	REDUCED PRESSURE ZONE ASSEMBLY
EXT	EXTERIOR	RV	RELIEF VALVE
F	FIRE WATER	SCFM	STANDARD CUBIC FEET PER MINUTE
FC	FLEXIBLE CONNECTION	SD	STORM DRAIN
FCO	FLOOR CLEANOUT	SM	SHEETMETAL
FFE	FINISHED FLOOR ELEVATION	SOV	SHUT-OFF VALVE
FLA	FULL-LOAD AMPERES	SPEC	SPECIFICATION
FLR	FLOOR	SPKR	SPRINKLER
FPM	FEET PER MINUTE	SPKR(D)	DELUGE SPRINKLER
FT	FEET	SQ	SQUARE
FT HD	FEET HEAD	STD	STANDARD
G	GAS	TDH	TOTAL DYNAMIC HEAD
GA	GAUGE	TEMP	TEMPERATURE
GALV	GALVINIZED	TP	TRAP PRIMER LINE
GCO	GRADE CLEANOUT	TW	TEMPERED WATER
GPM	GALLONS PER MINUTE	TWR	TEMPERED WATER RETURN
GPR	GAS PRESSURE REGULATOR	TYP	TYPICAL
GV	GLOBE VALVE	UL	UNDERWRITER'S LABORATORIES
GW	GREASE WASTE	UON	UNLESS OTHERWISE NOTED
HP	HORSEPOWER	UPC	UNIFORM PLUMBING CODE
HR	HOUR	V	VENT
HW	HOT WATER	VTR	VENT THROUGH ROOF
HWR	HOT WATER RETURN	W	WASTE
HZ	HERTZ	W/	WITH
ID	INSIDE DIAMETER	WC	WATER COLUMN
IE	INVERT ELEVATION	WCO	WALL CLEANOUT
IN	INCHES	WSP	WET STAND PIPE
IW	INDUSTRIAL WASTE	(X)	EXISTING TO BE REMOVED
KW	KILOWATTS		

A.

B.

C.

D.

ALL SYMBOLS MAY NOT BE USED IN THIS PROJECT.
SYMBOLS DO NOT ALWAYS REPRESENT REAL LIFE DIMENSIONS.
SEE BOOK SPECIFICATIONS FOR ADDITIONAL INFORMATION.
SEE PLANS FOR PIPE SIZES.

GENERAL PLUMBING NOTES

- ALL CONTROL WIRING SHALL BE IN CONDUIT. CONDUIT SHALL BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR. PROVIDE AND INSTALL RIGID CONDUIT IN AREAS EXPOSED TO THE ELEMENTS.
- SUPPORT PIPES TIGHT BELOW STRUCTURE WHEREVER POSSIBLE.
- COORDINATE WITH OTHERS ON SPACE REQUIRED AND TIME SCHEDULE FOR DELIVERY OF ALL ITEMS.
- FOR ROOF PENETRATIONS WITHOUT CURBS, PROVIDE WEATHERPROOF FLASHING PER SMACNA ARCHITECTURAL SHEET METAL MANUAL AND DRAWING NOTES.
- ALL PIPING IS CONCEALED UNLESS OTHERWISE NOTED.
- ALL PIPING, FIXTURES, EQUIPMENT, ETC SHOWN IS NEW UNLESS OTHERWISE NOTED.
- PROVIDE OPERATING AND MAINTENANCE MANUAL TO OWNER UPON SYSTEM COMMISSIONING.
- WHERE BRANCH CONNECTION SIZES ARE NOT SHOWN, REFER TO FIXTURE CONNECTION SCHEDULE P002.
- WATER HAMMER ARRESTORS SHALL BE PLACED AT ALL QUICK ACTING VALVES IN ACCORDANCE WITH 2019 OPSC.
- ALL FLOOR DRAINS, SINKS AND SIMILAR FIXTURES SHALL BE PROVIDED WITH TRAP PRIMER(S).

LIST OF GOVERNING CODES

THIS WORK SHALL CONFORM TO ALL CURRENT AND ADOPTED LOCAL CODES

- OREGON STRUCTURAL SPECIALTY CODE (OSSC)
- OREGON MECHANICAL SPECIALTY CODE (OMSC)
- OREGON PLUMBING SPECIALTY CODE (OPSC)
- OREGON ENERGY CODE (OEG)
- OREGON FIRE CODE (OFC)

PLUMBING SHEET KEY	
SHEET NUMBER	DESCRIPTION
P001	LEGEND
P002	SCHEDULES
P003	CALCULATIONS
P201	OVERALL SITE PLAN - PLUMBING
P211	FLOOR PLAN SECTOR A WASTE - PLUMBING
P212	FLOOR PLAN SECTOR B WASTE - PLUMBING
P213	FLOOR PLAN SECTOR A WATER - PLUMBING
P214	FLOOR PLAN SECTOR B WATER - PLUMBING
P231	ROOF - PLUMBING
P501	PLUMBING SCHEMATIC DIAGRAMS
P601	DETAILS

REGISTERED PROFESSIONAL
ENGINEER
91918PE

OREGON
MAR. 13, 2018
MICHAEL LEAVITT

EXPIRES 12/31/2026

COLEBREIT
ENGINEERING

OREGON / CALIFORNIA

BID AND PERMIT SET

KCC CHILDCARE LEARNING
CENTER

PROJECT # - 20230862
KLAMATH COMMUNITY COLLEGE
7380 S. 6TH ST.
KLAMATH FALLS, OR
97603

SHEET TITLE:
LEGEND

REVISIONS:
DESCRP. DATE

ISSUE DATE: 08/01/2025

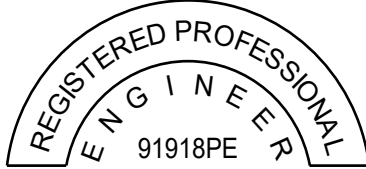
P001

GREASE INTERCEPTOR				
MARK	LOCATION	CAPACITY (GAL.)	DIMENSIONS [LxWxH] (IN)	MAKE & MODEL
GI-1	UTILITY COURT	800	90x60x87	OLD CASTLE PRECAST GI-4878

PUMP SCHEDULE												
MARK	LOCATION	FLOW [GPM]	HEAD [FT]	DESIGN TEMP. [°F]	V/PH	HP (W)	RPM @ DUTY POINT	MAKE	MODEL	CONNECTION [IN]	OPER. WEIGHT [LBS]	NOTES
CP-1	MECH ROOM	4	15	120	115/1	0.0469	4491	BELL & GOSSET	ECOCIRC 20-18	1	10	1,2
CP-2	MECH ROOM	4	15	120	115/1	0.0469	4491	BELL & GOSSET	ECOCIRC 20-18	1	10	1,2
NOTES:												
1. PUMP PROVIDED WITH INTEGRAL VARIABLE SPEED DRIVE CONTROLLED BY SELFSENSING ALGORITHM THAT DOES NOT REQUIRE REMOTE DIFFERENTIAL PRESSURE TRANSDUCER.												
2. PUMPS TO BE MOUNTED AGAINST WALL. PROVIDE NECESSARY SUPPORT AND BRACING.												

PLUMBING EQUIPMENT				
MARK	EQUIPMENT DESCRIPTION	EQUIPMENT MANUFACTURER	MODEL NUMBER	NOTES
WH-1	GAS WATER HEATER	BRADFORD WHITE	D-100T-199-3N	COMMERCIAL FLUE DAMPER ELECTRONIC IGNITION GAS WATER HEATER (98 GAL). 120-1, 5 AMPS. PROVIDE DISCONNECT, 194 GPH RECOVERY AND 100 DEG. RISE.
WH-2	GAS WATER HEATER	BRADFORD WHITE	D-100T-199-3N	COMMERCIAL FLUE DAMPER ELECTRONIC IGNITION GAS WATER HEATER (98 GAL). 120-1, 5 AMPS. PROVIDE DISCONNECT, 194 GPH RECOVERY AND 100 DEG. RISE.
WH-3	GAS WATER HEATER	BRADFORD WHITE	RG250H6N	ATMOSPHERIC VENT HIGH INPUT RESIDENTIAL GAS WATER HEATER (48 GAL). 120-1, 5 AMPS. PROVIDE DISCONNECT, 70 GPH RECOVERY AND 90 DEG. RISE.
ET-1	EXPANSION TANK	AMTROL	ST-12C-DD	DIAPHRAGM TANK TYPE, 150 PSI AND 120F DESIGN , NSF CERTIFIED. TANK VOLUME 4.4 GALLONS, TANK ACCEPTANCE FACTOR 0.73. WEIGHT LBS. (DRY) 9.
ET-2	EXPANSION TANK	AMTROL	ST-12C-DD	DIAPHRAGM TANK TYPE, 150 PSI AND 120F DESIGN , NSF CERTIFIED. TANK VOLUME 4.4 GALLONS, TANK ACCEPTANCE FACTOR 0.73. WEIGHT LBS. (DRY) 9.
ET-3	EXPANSION TANK	AMTROL	ST-449C	DIAPHRAGM TANK TYPE, 150 PSI AND 120F DESIGN , NSF CERTIFIED. TANK VOLUME 2.0 GALLONS, TANK ACCEPTANCE FACTOR 0.45. WEIGHT LBS. (DRY) 5.

PLUMBING FIXTURE CONNECTIONS											
MARK	FIXTURE DESCRIPTION	FIXURE MANUFACTURER	MODEL NUMBER	CONNECTION SIZE			MINIMUM BRANCH SIZE				NOTES
				W	CW	HW	W	V	CW	HW	
DF-1	DRINKING FOUNTAIN	ELKAY	EMABFTL8WSLK	2"	3/4"	-	2"	2"	3/4"	-	WALL MOUNTED REFRIGERATED BOTTLE FILLING STATION W/ MECHANICALLY ACTIVATED BI-LEVEL. PROVIDE WITH MIP200 BI-LEVEL IN WALL CARRIER, INSTALL PER MANUFACTURERS RECOMMENDATIONS. 120v-1 PHASE POWER. (370w/6FLA)
FD-1	FLOOR DRAIN	J.R. SMITH	2005	2"	-	-	2"	1-1/2"	-	-	CAST IRON BODY FLOOR DRAIN WITH FLASHING COLLAR AND ADJUSTABLE STRAINER HEAD. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
FS-1	FLOOR SINK	MIFAB	FS720-150	4"	-	-	2"	1-1/2"	-	-	12"x12"x6" DEEP CAST IRON FLOOR AREA AND INDIRECT SANITARY WASTE DRAIN W/ WHITE ACID RESISTANT PORCELAIN ENAMEL, LOOSE SET GRATE AND ANTI-SPLASH DOME STRAINER.
FS-2	FLOOR SINK	MIFAB	FS730-150	3"	-	-	2"	1-1/2"	-	-	12"x12"x8" DEEP CAST IRON FLOOR ARE AND INDIRECT SANITARY WASTE DRAIN W/ WHITE ACID RESISTANT PORCELAIN ENAMEL, LOOSE SET GRATE AND ANTI-SPLASH DOME STRAINER.
FS-3	FLOOR SINK	MIFAB	FS720-175	2"	-	-	2"	1-1/2"	-	-	12"x12"x6" DEEP CAST IRON FLOOR AREA AND INDIRECT SANITARY WASTE DRAIN W/ WHITE ACID RESISTANT PORCELAIN ENAMEL, LOOSE SET GRATE AND ANTI-SPLASH DOME STRAINER.
HB-1	NON-FREEZE WALL HYDRANT	WOODFORD	B67	-	3/4"	-	-	-	3/4"	-	AUTOMATIC DRAINING FREEZELESS WALL HYDRANT WITH MODEL 50 HIGH FLOW DOUBLE CHECK BACKFLOW PREVENTER. HOSE BIBS TO BE LOCATED IN FREEZE PROTECTED LOCATIONS.
LV-1	LAVATORY	SLOAN	S5-3017	2"	1/2"	1/2"	2"	1-1/2"	1/2"	1/2"	ADA WHITE ENAMELLED CAST IRON WALL MOUNTED BACKSPASH LAVATORY W/ BATTERY POWERED DECK MOUNTED SLOAN SF-2350 0.35 GPM FAUCET, 4" CENTERS, SUPPLIES AND STOPS, PROFLO TRAP COVER, AND JR SMITH WALL CARRIER.
MS-1	MOP SINK	ZURN	Z1996-36	2"	1/2"	1/2"	2"	1-1/2"	1/2"	1/2"	MOLDED HIGH DENSITY COMPOSITE BASIN MOP SINK WITH SELF DRAINING MOP SHELF, PROVIDE ALL SUPPLIES AND STOPS, AND ELKAY LK940BP0714H 4.0 GPM WALL MOUNTED FAUCET.
RD-1	DUAL OUTLET ROOF DRAIN/OVERFLOW	WATTS	RD700	3"	-	-	3"	-	-	-	EPOXY COATED CAST IRON DUAL OUTLET ROOF DRAIN/OVERFLOW COMBINATION W/ FLASHING CLAMP, INTEGRAL GRAVEL STOP, 4" INTERNAL OVERFLOW STANDPIPE, SECURED DUCTILE IRON DOME AND NO HUB OUTLETS.
S-1	SINK	ELKAY	LRAD202255	2"	1/2"	1/2"	2"	1-1/2"	1/2"	1/2"	ADA COMPLIANT STAINLESS STEEL DROP-IN SINGLE BOWL SINK. PROVIDE W/ ELKAY LK406LGN08T4 GOOSENECK 1.5 GPM FAUCET ON 4" CENTERS, SUPPLIES AND STOPS, AND PROFLO TRAP COVER.
S-2	SINK	ELKAY	LRAD312260	2"	1/2"	1/2"	2"	1-1/2"	1/2"	1/2"	ADA COMPLIANT STAINLESS STEEL DROP-IN SINGLE BOWL SINK. PROVIDE W/ ELKAY LK406LGN08T4 GOOSENECK 1.5 GPM FAUCET ON 4" CENTERS, SUPPLIES AND STOPS, AND PROFLO TRAP COVER.
S-3	SINK	-	-	2"	1/2"	1/2"	2"	1-1/2"	1/2"	1/2"	CUSTOM THREE FAUCET, SINGLE DRAIN TROUGH HAND SINK. 16 GAUGE STAINLESS STEEL CONSTRUCTION W/ CONTINUOUS CLEAT HANGING SYSTEM. PROVIDE CHICAGO 772 FAUCETS W/ 6" SPOUTS. REFER TO OWNER PROVIDED DETAIL SHEET.
TP-1	ELECTRONIC TRAP PRIMER	J.R. SMITH	270FM SERIES	-	1/2"	-	-	-	1/2"	-	ELECTRONIC TRAP PRIMER WITH SIX OUTLETS AND GALVANIZED STEEL FLUSH MOUNT ENCLOSURE. 120v-60hz POWER. (0.10A-120)
TP-2	PRESSURE DIFFERENTIAL TRAP PRIMER	J.R. SMITH	2694	-	1/2"	-	-	-	1/2"	-	LEAD FREE BRASS 3PSI MINIMUMUM PRESSURE DROP ACTIVATED TRAP PRIMER.
WB-1	WASHER BOX	SIOUX CHIEF	MODEL	2"	3/4"	3/4"	2"	1-1/2"	3/4"	3/4"	IAPMO LISTED WASHING MACHINE OUTLET BOX WITH A TAMPER RESISTANT CAP. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
WC-1	WATER CLOSET	AMERICAN STANDARD	BABY DEVORO	3"	1/2"	-	3"	2"	1/2"	-	FLOOR MOUNTED VITREOUS CHINA MANUAL FLUSH CHILDRENS 10" HIGH ELONGATED WATER CLOSET. INCLUDE "CARDIFF SLOW-CLOSE TOILET SEAT - 5257A.65MT" UPON INSTALLATION.
WC-2	ADA WATER CLOSET	AMERICAN STANDARD	BABY DEVORO ADA	3"	1/2"	-	3"	2"	1/2"	-	FLOOR MOUNTED VITREOUS CHINA MANUAL FLUSH CHILDRENS 10" HIGH ELONGATED ADA WATER CLOSET. INCLUDE "CARDIFF SLOW-CLOSE TOILET SEAT - 5257A.65MT" UPON INSTALLATION.
WC-3	WATER CLOSET	AMERICAN STANDARD	CADET 2467.016	3"	1/2"	-	3"	2"	1/2"	-	FLOOR MOUNTED VITREOUS CHINA MANUAL FLUSH CADET HEIGHT ELONGATED PRESSURE-ASSISTED ADA WATER CLOSET. (1.6GPF) INCLUDE "CARDIFF SLOW-CLOSE TOILET SEAT - 5257A.65MT" UPON INSTALLATION.



EXPIRES 12/31/2026

COLEBREIT
ENGINEERING
OREGON CALIFORNIA

BID AND PERMIT SET
KCC CHILDCARE LEARNING
CENTER

PROJECT # : 20230862
KLAMATH COMMUNITY COLLEGE
7380 S. 6TH ST.
KLAMATH FALLS, OR
97603

SHEET TITLE:
SCHEDULES

REVISIONS:
DESCRP. DATE

ISSUE DATE: 08/01/2025

DFU CALCULATIONS						
MARK	FIXTURE GROUP	OCC. TYPE	QTY.	MIN TRAP SIZE	DFU EACH	TOT. DFU
SECTION 'A'						
<u>S-1</u>	SINK KITCHEN, DOMESTIC	PUBLIC	16	1-1/2"	2	32
<u>S-2</u>	SINK KITCHEN, DOMESTIC	PUBLIC	16	1-1/2"	2	32
<u>S-3</u>	SINK WASH, EACH SET OF FAUCETS	PUBLIC	48	-	2	96
<u>LV-1</u>	LAVATORY, SINGLE	PUBLIC	9	1-1/4"	1	9
<u>WC-1</u>	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	8	3"	4	32
<u>WC-2</u>	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	8	3"	4	32
<u>WC-3</u>	WATER CLOSET, 1.6 GPF FLUSHOMETER VALVE	PUBLIC	1	3"	4	4
<u>MS-1</u>	SINK SERVICE OR MOP BASIN	PUBLIC	1	2"	3	3
<u>WB-1</u>	CLOTHES WASHER, DOMESTIC, STANDPIPE	PUBLIC	3	2"	3	9
<u>FS-1</u>	FLOOR DRAIN	PUBLIC	1	2"	2	2
<u>FD-1</u>	FLOOR DRAIN, EMERGENCY	PUBLIC	11	2"	0	0
SECTION 'B'					SUBTOTAL	251
<u>DF-1</u>	DRINKING FOUNTAIN OR WATER COOLER	PUBLIC	1	1-1/4"	0.5	0.5
<u>S-1</u>	SINK KITCHEN, DOMESTIC	PUBLIC	8	1-1/2"	2	16
<u>S-2</u>	SINK KITCHEN, DOMESTIC	PUBLIC	8	1-1/2"	2	16
<u>S-3</u>	SINK WASH, EACH SET OF FAUCETS	PUBLIC	21	-	2	42
<u>LV-1</u>	LAVATORY, SINGLE	PUBLIC	7	1-1/4"	1	7
<u>WC-1</u>	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	4	3"	4	16
<u>WC-2</u>	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	4	3"	4	16
<u>WC-3</u>	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	3	3"	4	12
<u>FD-1</u>	FLOOR DRAIN, EMERGENCY	PUBLIC	8	2"	0	0
					SUBTOTAL	125.5
GREASE INTERCEPTOR CALCULATIONS						
MARK	FIXTURE GROUP	OCC. TYPE	QTY	MIN TRAP SIZE	DFU EACH	TOT. DFU
<u>FS-1</u>	INDIRECT WASTE RECEPTOR	-	-	4"	8	8
-	SINK KITCHEN, DOMESTIC	PUBLIC	4	-	2	-
<u>FS-2</u>	INDIRECT WASTE RECEPTOR	-	-	1-1/2"	2	2
-	DISHWASHER, DOMESTIC, WITH INDEPENDENT DRAIN	PUBLIC	1	-	2	-
<u>FS-3</u>	INDIRECT WASTE RECEPTOR	-	-	3"	6	6
-	SINK KITCHEN, DOMESTIC	PUBLIC	2	-	2	-
-	SINK WASH, EACH SET OF FAUCETS	PUBLIC	1	-	2	-
<u>FD-1</u>	FLOOR DRAIN, EMERGENCY	PUBLIC	2	2"	0	0
					GREASE WASTE SUBTOTAL	16
					SITE WASTE TOTAL	414.5
NOTES:						
1.						

WATER SERVICE CALCULATIONS							
MARK	FIXTURE GROUP	OCC. TYPE	QTY	CW WSFU EACH	HW WSFU EACH	TOT. HW WSFU	TOT. CW WSFU
SECTION 'A'							
S-1	SINK, KITCHEN, DOMESTIC	PUBLIC	16	1.5	1.125	18	24
S-2	SINK, KITCHEN, DOMESTIC	PUBLIC	16	1.5	1.125	18	24
S-3	SINK, WASHUP, EACH SET OF FAUCETS	PUBLIC	48	2	1.5	72	96
LV-1	LAVATORY	PUBLIC	9	1	0.75	6.75	9
WC-1	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	8	2.5	0	0	20
WC-2	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	8	2.5	0	0	20
WC-3	WATER CLOSET, 1.6 GPF FLUSHOMETER VALVE	PUBLIC	1	5	0	0	5
MS-1	SINK, SERVICE OR MOP BASIN	PUBLIC	1	3	2.25	2.25	3
WB-1	CLOTHES WASHER	PUBLIC	3	4	3	9	12
HB-1	HOSE BIBB	PUBLIC	1	2.5	0	0	2.5
HB-1	HOSE BIBB, EACH ADDITIONAL	PUBLIC	5	1	0	0	5
SECTION 'B'			SUB TOTAL			126	220.5
DF-1	DRINKING FOUNTAIN OR WATER COOLER	PUBLIC	1	0.5	0	0	0.5
S-1	SINK, KITCHEN, DOMESTIC	PUBLIC	8	1.5	1.125	9	12
S-2	SINK, KITCHEN, DOMESTIC	PUBLIC	8	1.5	1.125	9	12
S-3	SINK, WASHUP, EACH SET OF FAUCETS	PUBLIC	21	2	1.5	31.5	42
LV-1	LAVATORY	PUBLIC	7	1	0.75	5.25	7
WC-1	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	4	2.5	0	0	10
WC-2	WATER CLOSET, 1.6 GPF FLUSHOMETER TANK	PUBLIC	4	2.5	0	0	10
WC-3	WATER CLOSET, 1.6 GPF FLUSHOMETER VALVE	PUBLIC	3	5	0	0	15
HB-1	HOSE BIBB, EACH ADDITIONAL	PUBLIC	4	1	0	0	4
KITCHEN			SUB TOTAL			#N/A	54.75
-	DISHWASHER, COMMERCIAL	PUBLIC	1	1.5	1.125	1.125	1.5
-	SINK, KITCHEN, DOMESTIC	PUBLIC	6	1.5	1.125	6.75	9
-	SINK, BAR	PUBLIC	1	2	1.5	1.5	2
			SUB TOTAL			#N/A	9.375
BUILDING TOTAL WSFU:						190.125	345.5
SYSTEM TYPE:						Flush Valves	
TOTAL WSFU FLOW:						63.0 GPM	117.3 GPM
FLOW AND PRESSURE CALCULATIONS							
DESIGN FLOW RATE							117.3 GPM
SITE WATER SUPPLY DESIGN INFORMATION							
DAILY SITE SERVICE PRESSURE							55.0 PSIG
TOTAL EQUIVALENT PIPE LENGTH FROM METER TO POC 5 FEET FROM BUILDING							275.0 FT
MAIN SIZE FROM WATER METER TO POC 5 FEET FROM BUILDING							3" IN
A) PRESSURE LOSS FROM PIPING AT DESIGN FLOW RATE FROM WATER METER TO POC 5 FEET FROM BUILDING							3.5 PSIG
B) WATER METER PRESSURE LOSS							2" METER 3.5 PSIG
C) BACKFLOW PREVENTER PRESSURE LOSS							3" BACKFLOW 3.5 PSIG
D) STATIC (GRAVITY) HEAD REQUIRED FROM WATER METER TO POC 5 FEET FROM BUILDING							5.0 FT 2.2 PSIG
TOTAL SITE LEVEL PRESSURE LOSS (A+B+C+D)							12.7 PSIG
BUILDING WATER SUPPLY DESIGN INFORMATION							
TOTAL PIPE LENGTH FROM POC 5 FEET FROM BUILDING TO MOST HYDRAULICALLY REMOTE FIXTURE							330.0 FT
TOTAL EQUIVALENT PIPE LENGTH FROM POC 5 FEET FROM BUILDING TO MOST HYDRAULICALLY REMOTE FIXTURE							400.0 FT
DAILY SERVICE PRESSURE AT POC 5 FEET FROM BUILDING (DAILY SITE SERVICE PRESSURE - TOTAL SITE LEVEL PRESSURE LOSS)							42.4 PSIG
PRV MAXIMUM PRESSURE SET POINT							NA
PRV ALLOWABLE FALLOFF PRESSURE LOSS							NA
DESIGN SERVICE PRESSURE AT BUILDING							42.4 PSIG
E) STATIC (GRAVITY) HEAD REQUIRED FROM POC 5 FEET FROM BUILDING TO MOST HYDRAULICALLY REMOTE FIXTURE							10.0 FT 4.3 PSIG
F) HOT WATER MIXING VALVE PRESSURE DROP (IF MOST HYDRAULICALLY REMOTE FIXTURE HAS HOT WATER CONNECTION)							0.0 PSIG
TOTAL PRESSURE LOSS (E+F)							4.3 PSIG
REQUIRED RESIDUAL PRESSURE AT FURTHEST UNIT/FIXTURE							25.0 PSIG
AVAILABLE PRESSURE FOR PIPING							13.1 PSIG
SERVICE MAIN NOMINAL PIPE SIZE							3" IN
MAIN WATER SUPPLY LINE ALLOWABLE FRICTION LOSS							
AVAILABLE PIPING FRICTION LOSS							3 PSIG/100FT
AVAILABLE PIPING FRICTION LOSS							7.6 FT.W.C./100FT
NOTES:							
1. SIZED IN ACCORDANCE WITH OPSC 2021, APPENDIX A.							
2. CONTRACTOR SHALL VERIFY SUPPLY PRESSURE, METER/BACKFLOW SIZE & TYPE AND REPORT ANY DISCREPANCIES TO ENGINEER.							
3. METER PRESSURE LOSS BASED ON X" 'METER TYPE' AT DESIGN FLOW RATE.							
4. BACKFLOW PREVENTER PRESSURE LOSS BASED ON X" 'BACKFLOW TYPE' AT DESIGN FLOW RATE.							



BID AND PERMIT SET

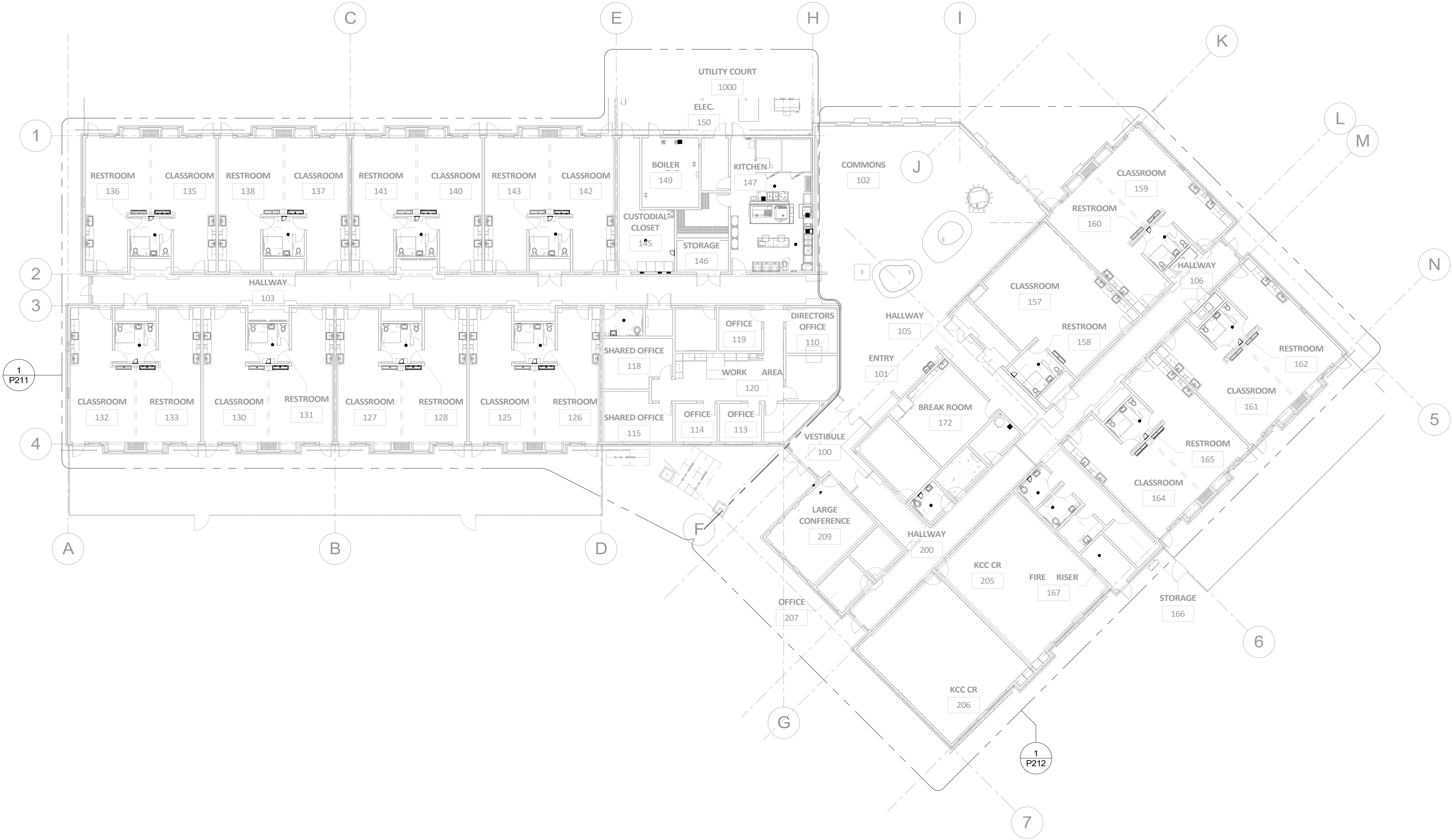
KCC CHILDCARE LEARNING CENTER

PROJECT # : 20230862
KLAMATH COMMUNITY COLLEGE
7380 S. 6TH ST.
KLAMATH FALLS, OR 97603

SHEET TITLE:
CALCULATIONS

REVISIONS:		
#	DESCRP.	DATE

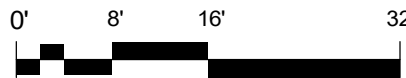
ISSUE DATE: 08/01/2025



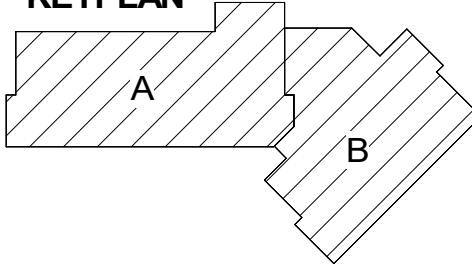
1
P201

OVERALL SITE PLAN - PLUMBING

1/16" = 1'-0"



KEYPLAN



BID AND PERMIT SET

KCC CHILDCARE LEARNING
CENTER

PROJECT #: 20230862
KLAMATH COMMUNITY COLLEGE
7390 S. 6TH ST.
KLAMATH FALLS, OR
97603

SHEET TITLE:

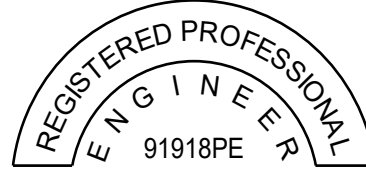
OVERALL SITE
PLAN -
PLUMBING

REVISIONS:

#	DESCRP.	DATE
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ISSUE DATE: 08/01/2025

P201



COLEBREIT
ENGINEERING

OREGON / CALIFORNIA

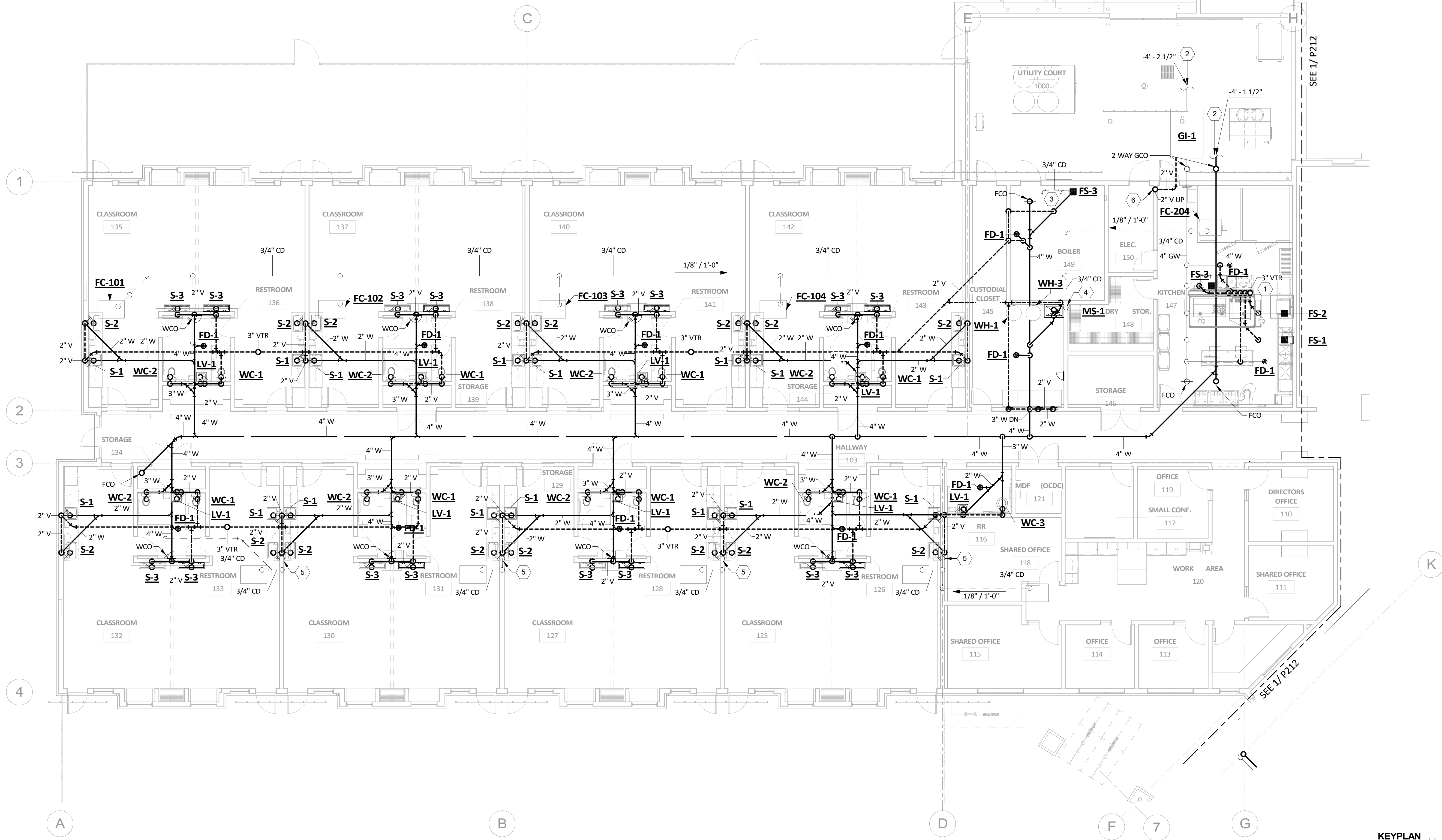
PIVOT
ARCHITECTURE

KEY NOTES

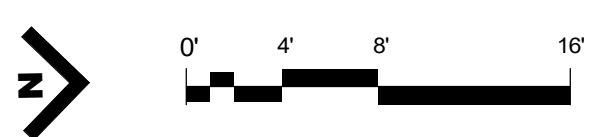
- GREASE WASTE VENT, DO NOT COMBINE WITH ANY OTHER VENTING SYSTEM.
- SEE CIVIL FOR CONTINUATION
- CONDENSATE FROM BOILERS. SEE MECHANICAL PLANS BEFORE INSTALLATION.
- ROUTE CONDENSATE DOWN WALL TO MS-2.
- ROUTE CONDENSATE TO S-2 TAILPIECE.
- GREASE INTERCEPTOR VENT, DO NOT COMBINE WITH ANY OTHER VENTING SYSTEM.

GENERAL PLUMBING NOTES:

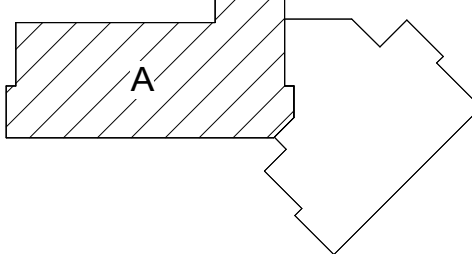
- A. COORDINATE ALL BELOW GRADE PLUMBING ROUTING WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION.



FLOOR PLAN SECTOR 'A' WASTE - PLUMBING
1/8" = 1'-0"



KEYPLAN



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CENTER

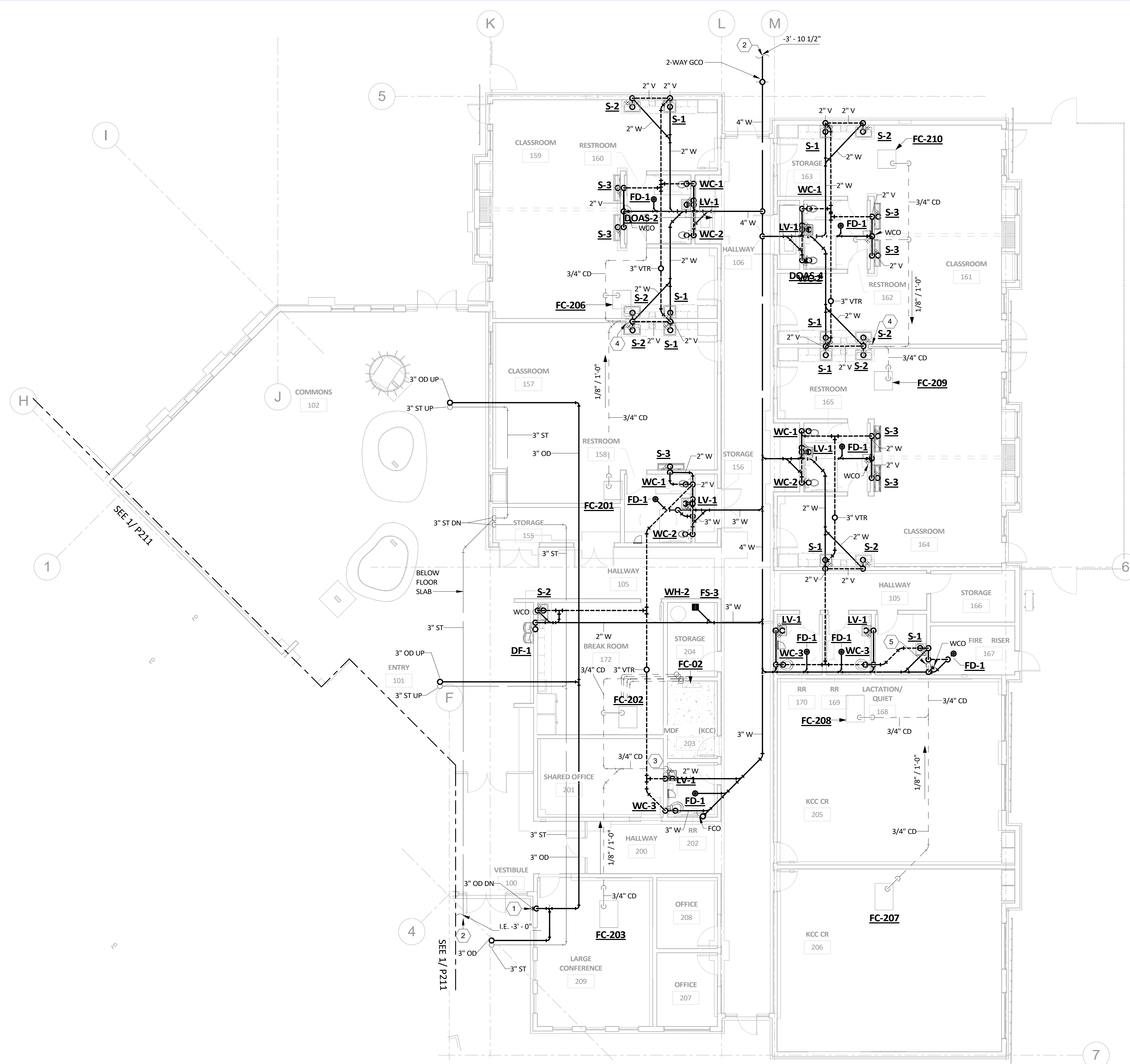
PROJECT #: 20230862
KLAMATH COMMUNITY COLLEGE
7380 S. 6TH ST.
KLAMATH FALLS, OR
97603

SHEET TITLE:
**FLOOR PLAN
SECTOR A
WASTE -
PLUMBING**

REVISIONS:
DESCRP. DATE

ISSUE DATE: 08/01/2025

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FLOOR PLAN SECTOR 'B' WASTE - PLUMBING

$$1/8'' = 1'-0''$$

GENERAL PLUMBING NOTES:

- A. COORDINATE ALL BELOW GRADE PLUMBING ROUTING WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

KEY NOTES

1. 3" DOWNSPOUT, MOUNT 18" ABOVE GRADE.
2. SEE CIVIL FOR CONTINUATION
3. ROUTE CONDENSATE TO LV-1 TAILPIECE.
4. ROUTE CONDENSATE TO S-2 TAILPIECE.
5. ROUTE CONDENSATE TO S-1 TAILPIECE.

#

PVOT
ARCHITECTURE ■



EXPIRES 12/31/2026

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BID AND PERMIT SET
KCC CHILDCARE LEARNING
CENTER
PROJECT #: 20220662

PROJECT # 20200042
KLAMATH COMMUNITY COLLEGE
7390 S. 6TH ST.
KLAMATH FALLS, OR
97603

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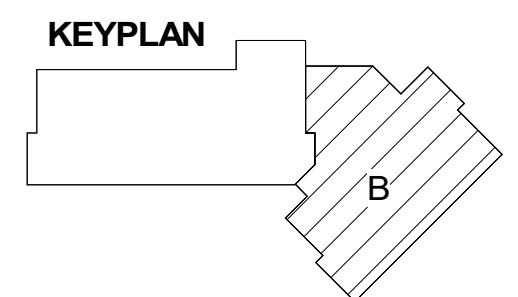
**FLOOR PLAN
SECTOR B
WASTE -
PLUMBING**

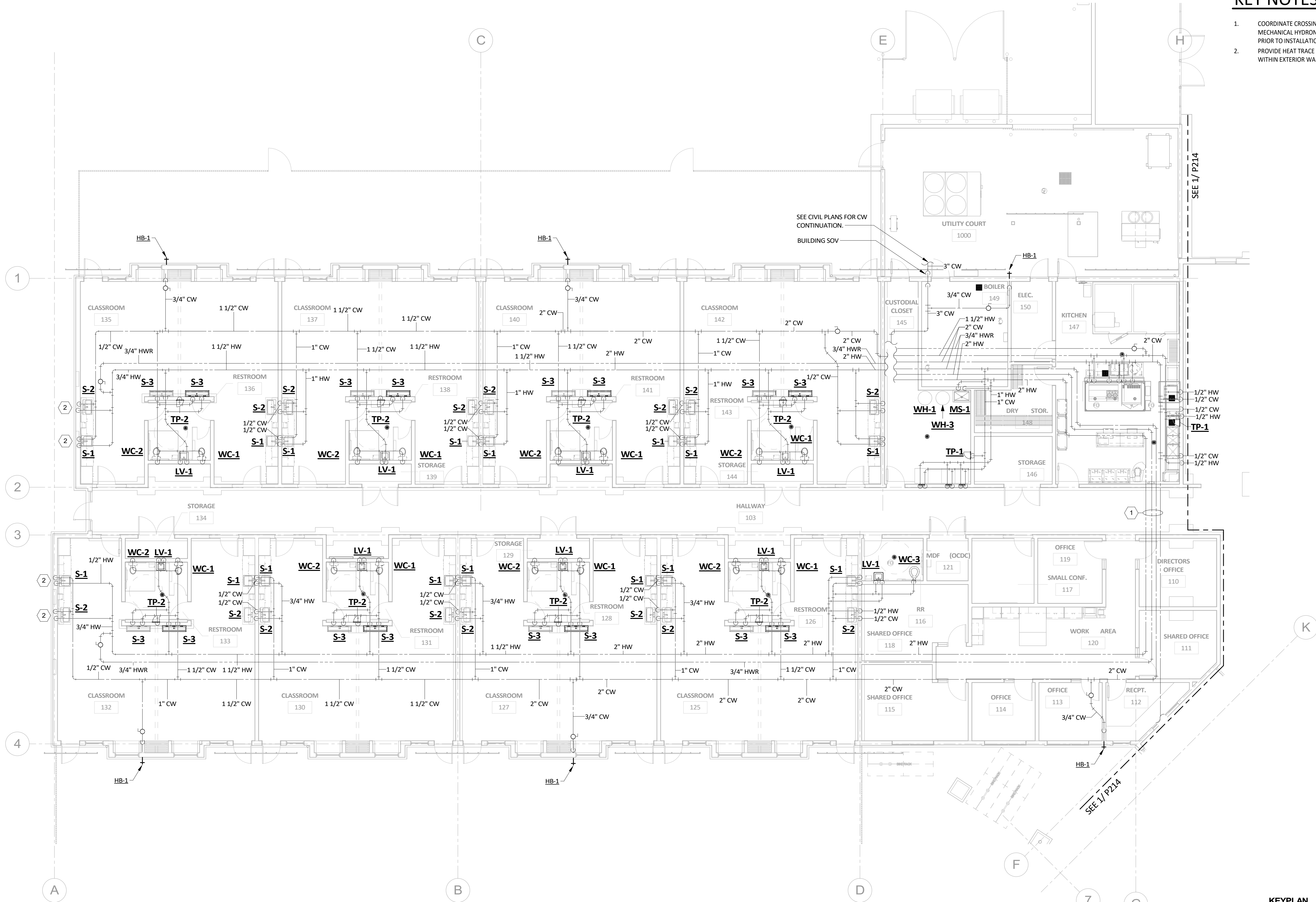
REVISIONS:

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P212

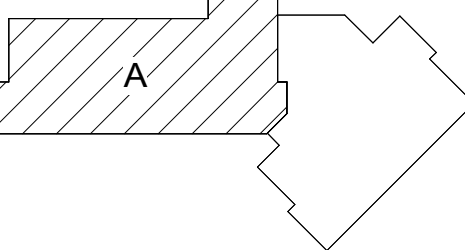




KEY NOTES

- COORDINATE CROSSING LOCATION WITH MECHANICAL HYDRONIC PIPING AND ARCHITECT PRIOR TO INSTALLATION.
- PROVIDE HEAT TRACE ON ALL HW AND CW LINES WITHIN EXTERIOR WALLS.

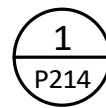
KEYPLAN



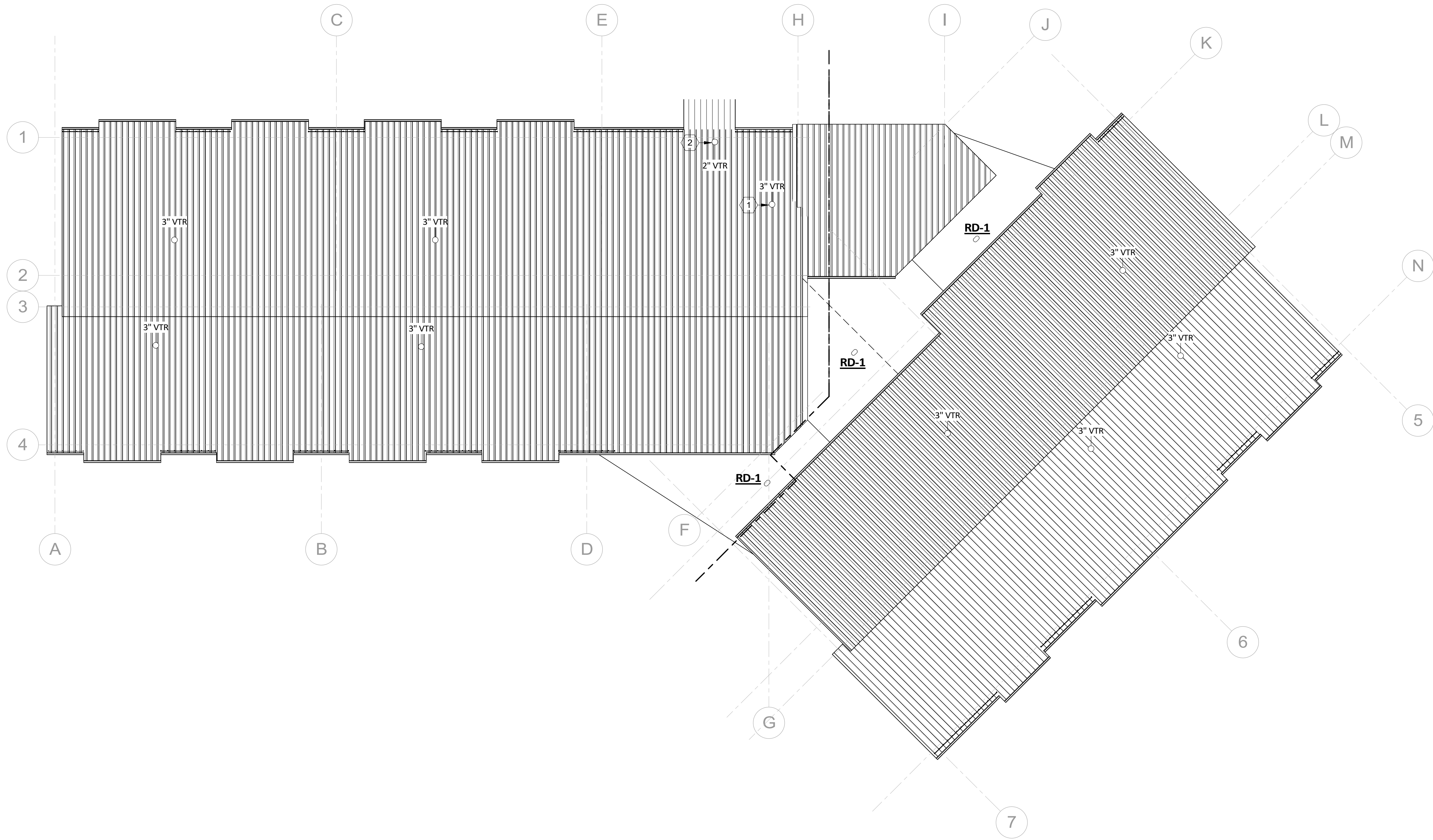
FLOOR PLAN SECTOR 'A' WATER - PLUMBING

1/8" = 1'-0"

1
P213


$$1/8'' = 1' - 0''$$

-
- The diagram shows a composite figure consisting of a rectangle on the left and a parallelogram on the right. The parallelogram is shaded with diagonal lines and labeled 'B'.



1
P231

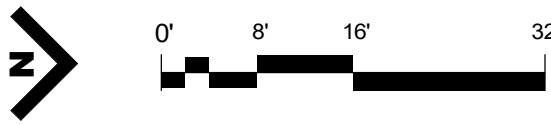
ROOF - PLUMBING

1/16" = 1'-0"

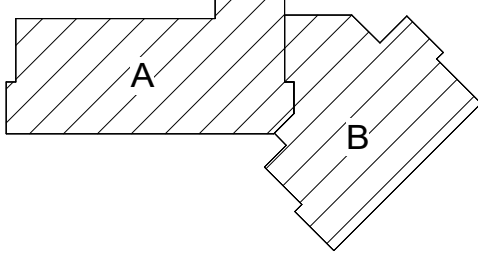
KEY NOTES

- GREASE WASTE VENT, DO NOT COMBINE WITH ANY OTHER VENTING SYSTEM.
- GREASE INTERCEPTOR VENT, DO NOT COMBINE WITH ANY OTHER VENTING SYSTEM.

#



KEYPLAN



EXPIRES 12/31/2026

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CENTER

PROJECT #: 20230862
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KLAMATH FALLS, OR
97603

SHEET TITLE:

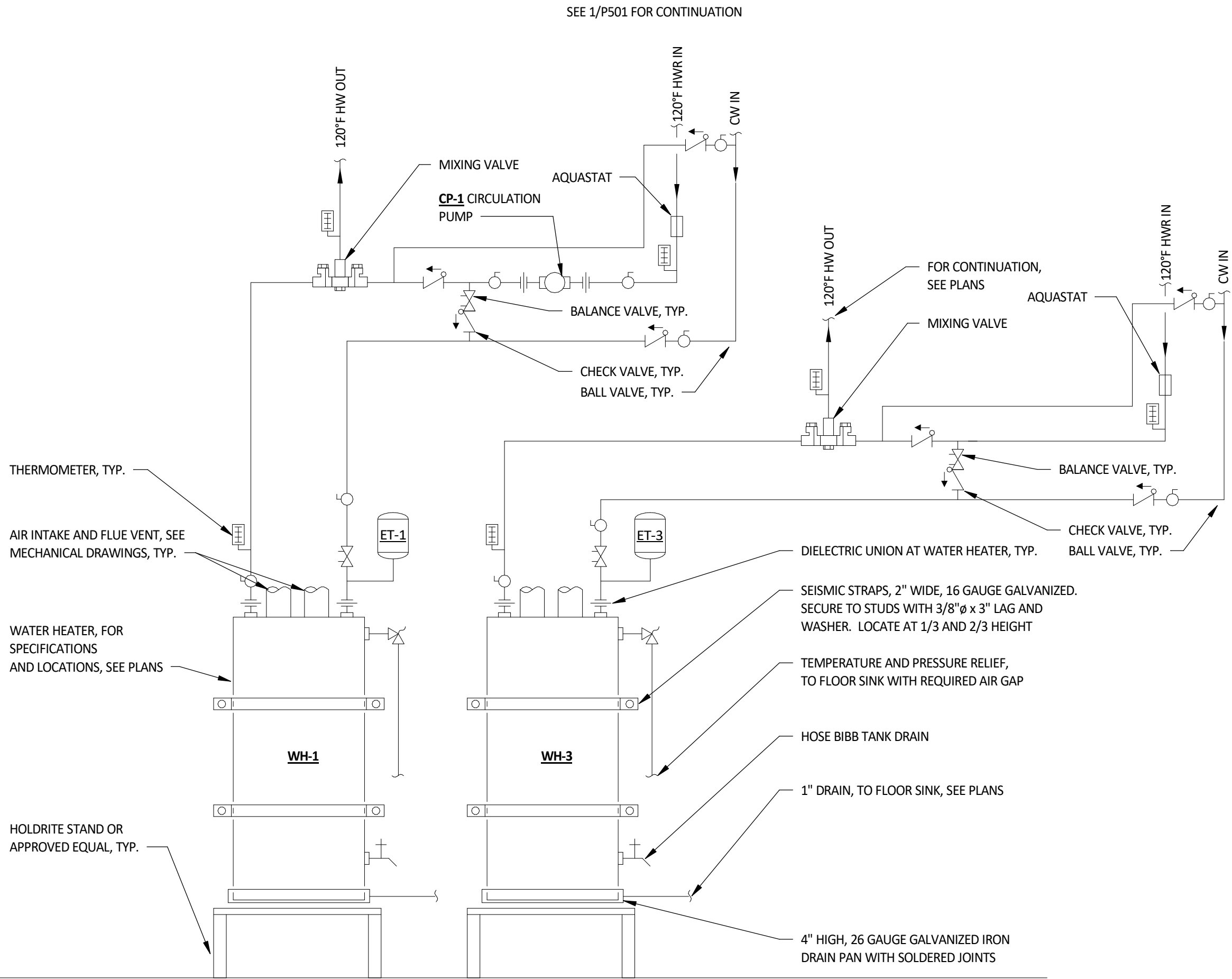
ROOF -
PLUMBING

REVISIONS:

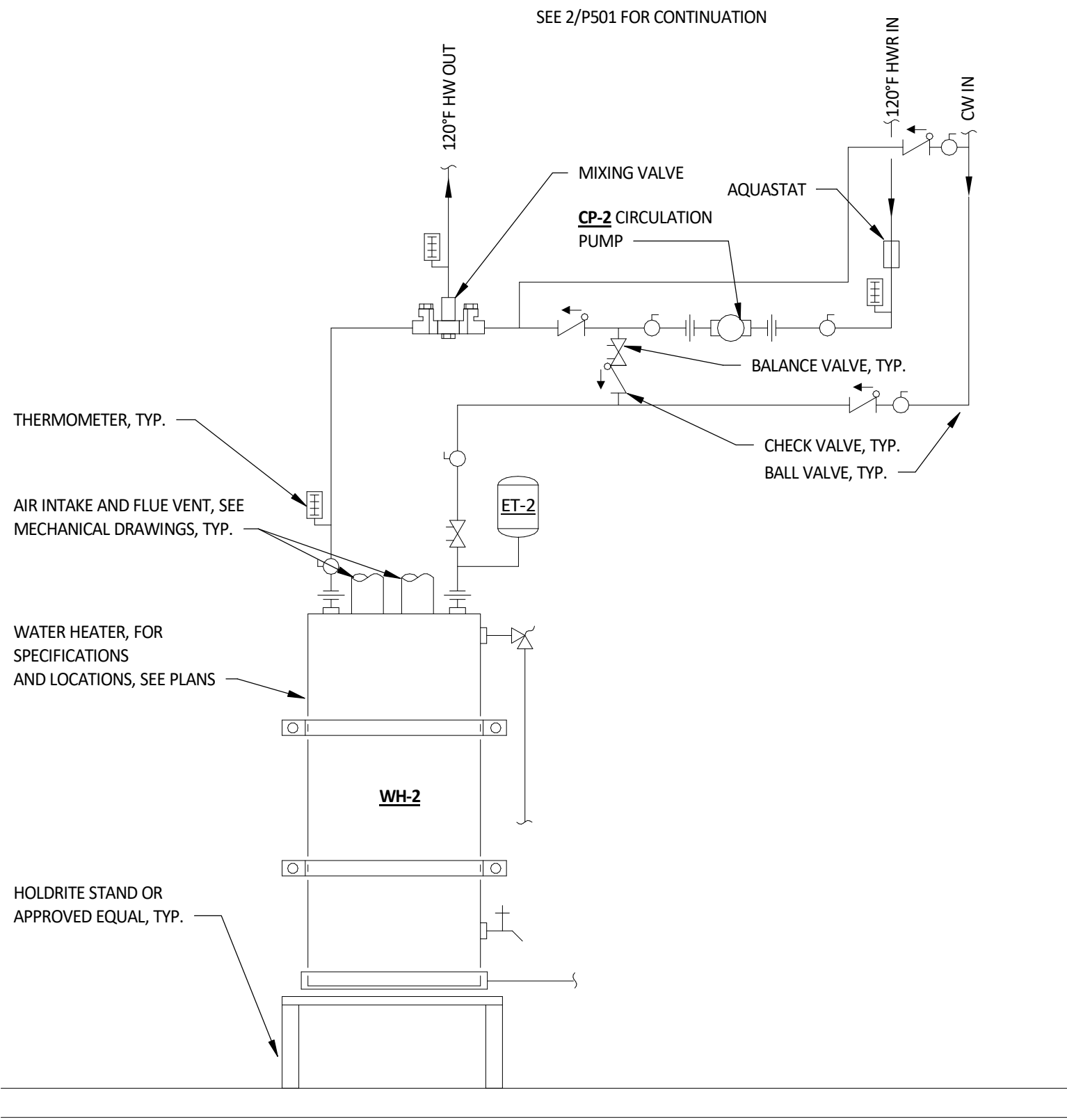
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ISSUE DATE: 08/01/2025

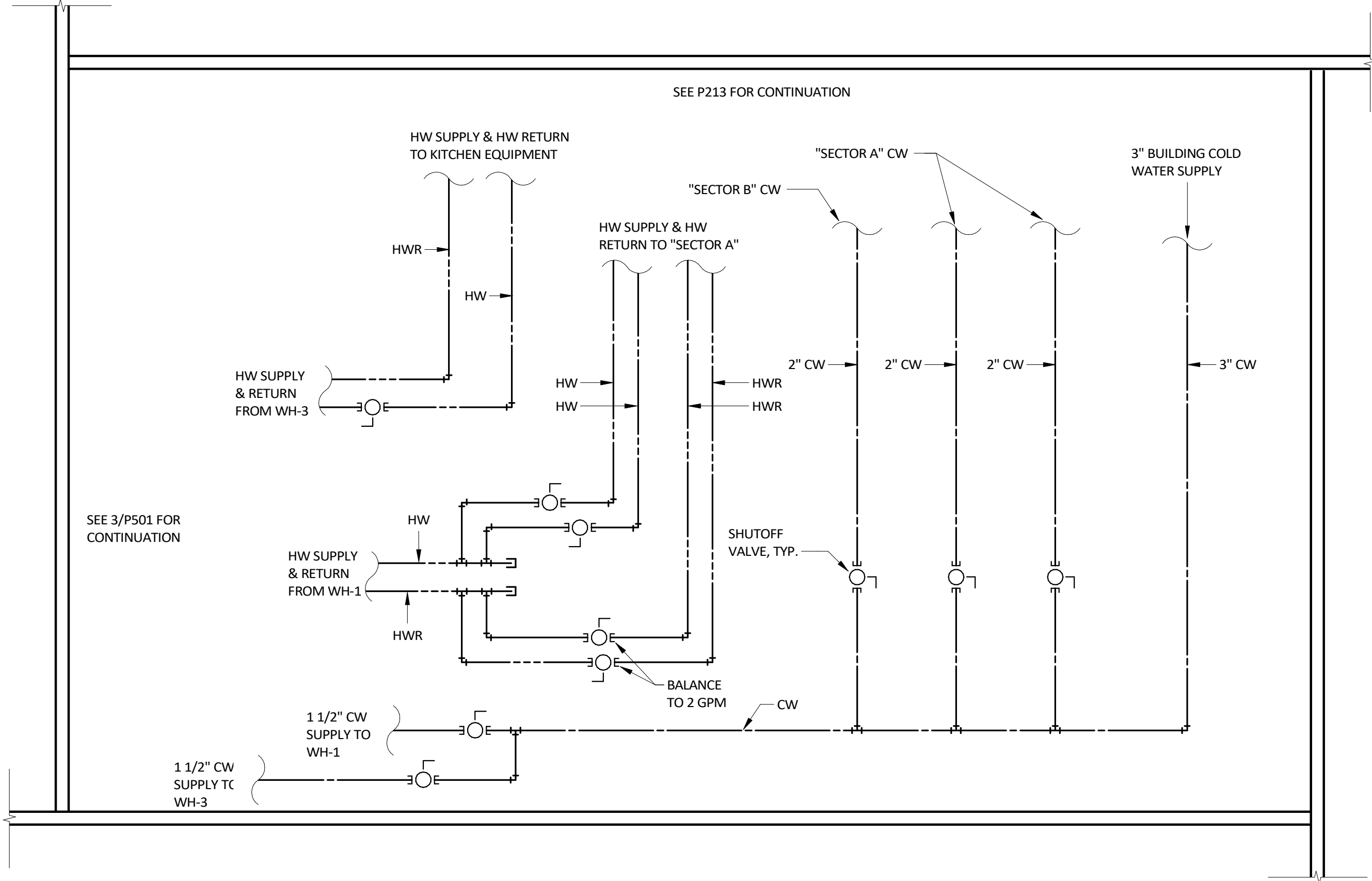
P231



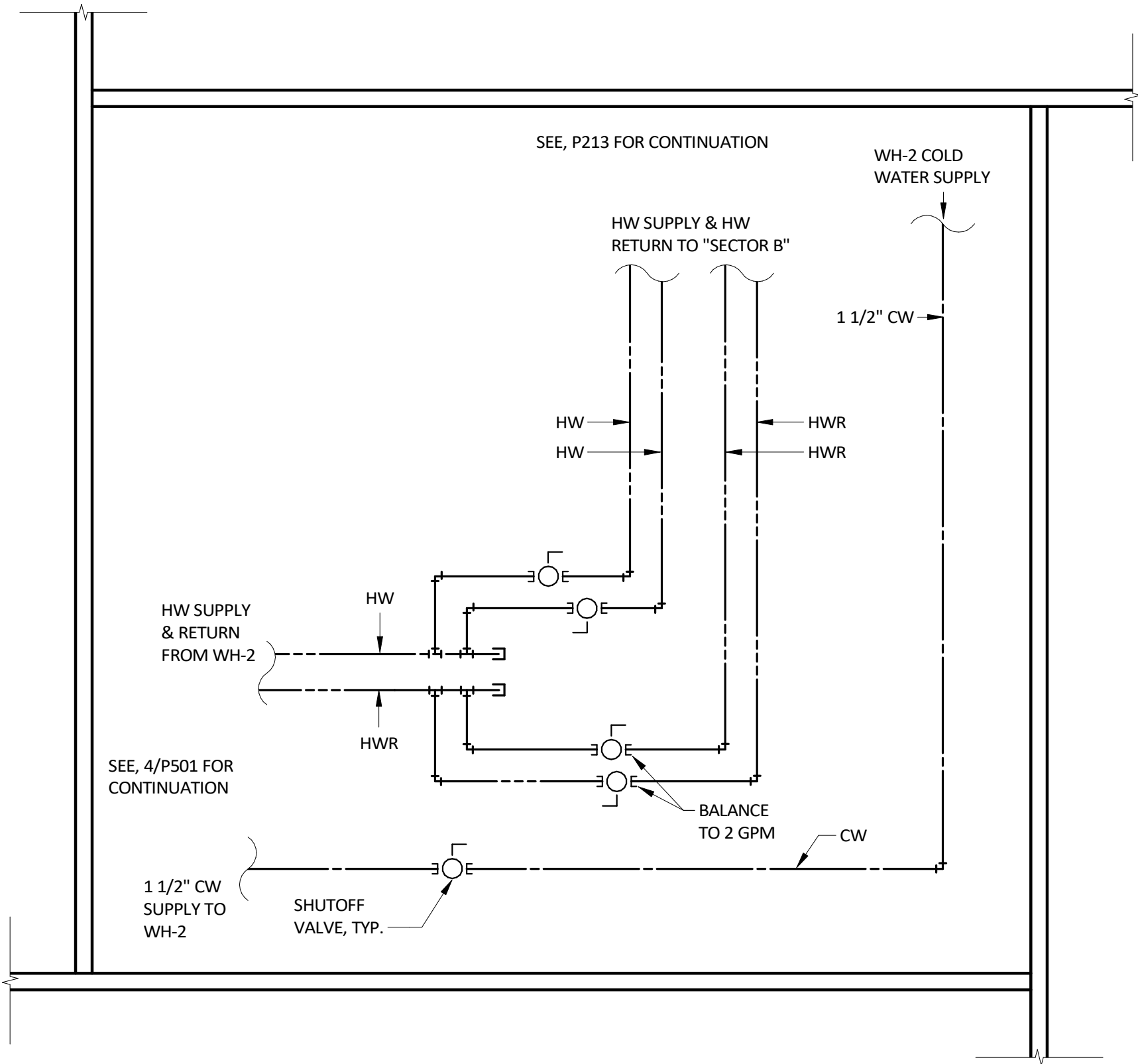
3 WATER HEATER 1 & 3 SCHEMATIC
P501 NTS



4 WATER HEATER 2 SCHEMATIC
P501 NTS

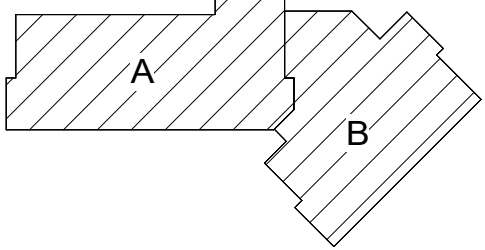


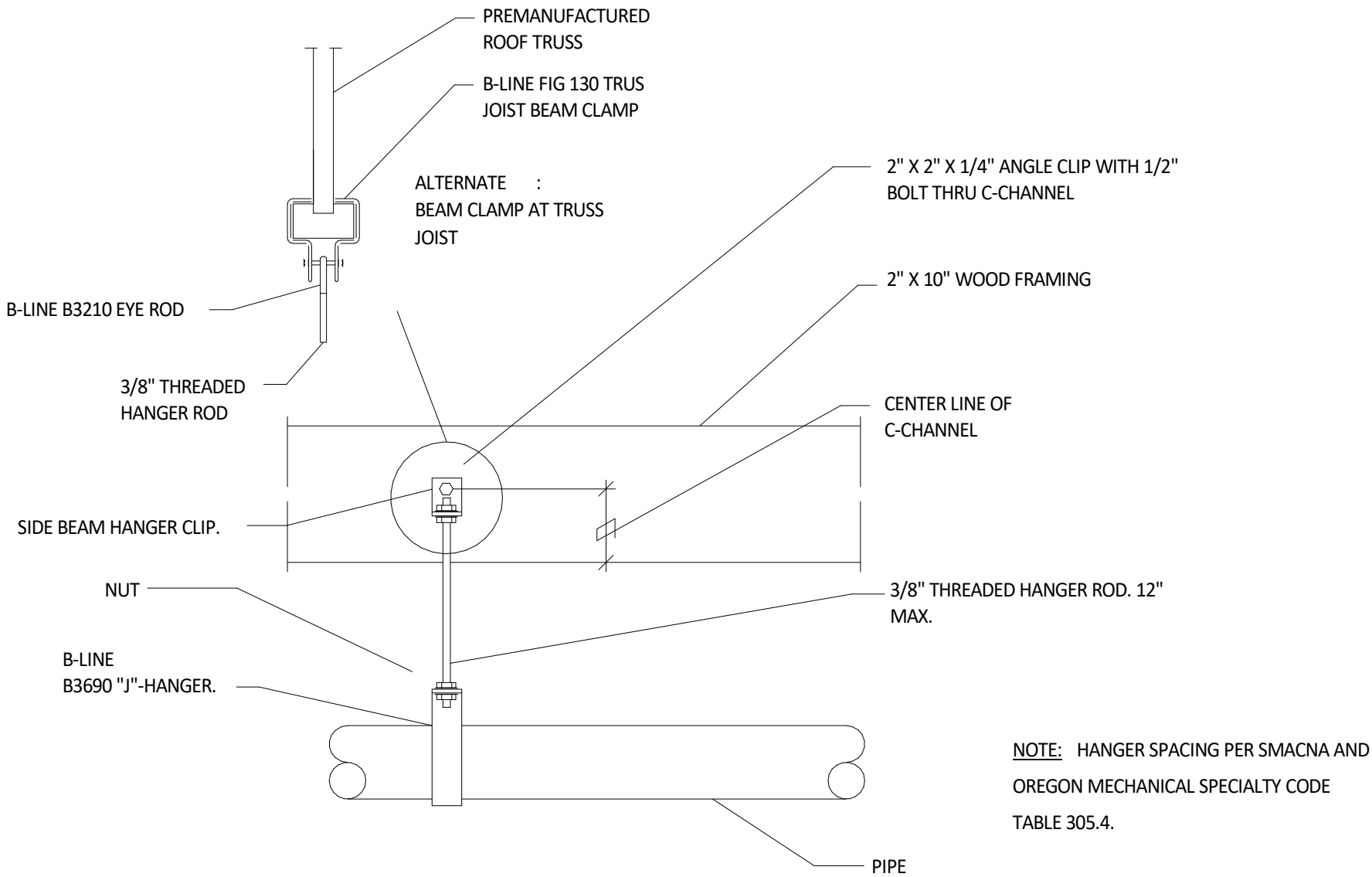
1 CUSTODIAL CLOSET 145 PIPING DETAIL
P501 NTS



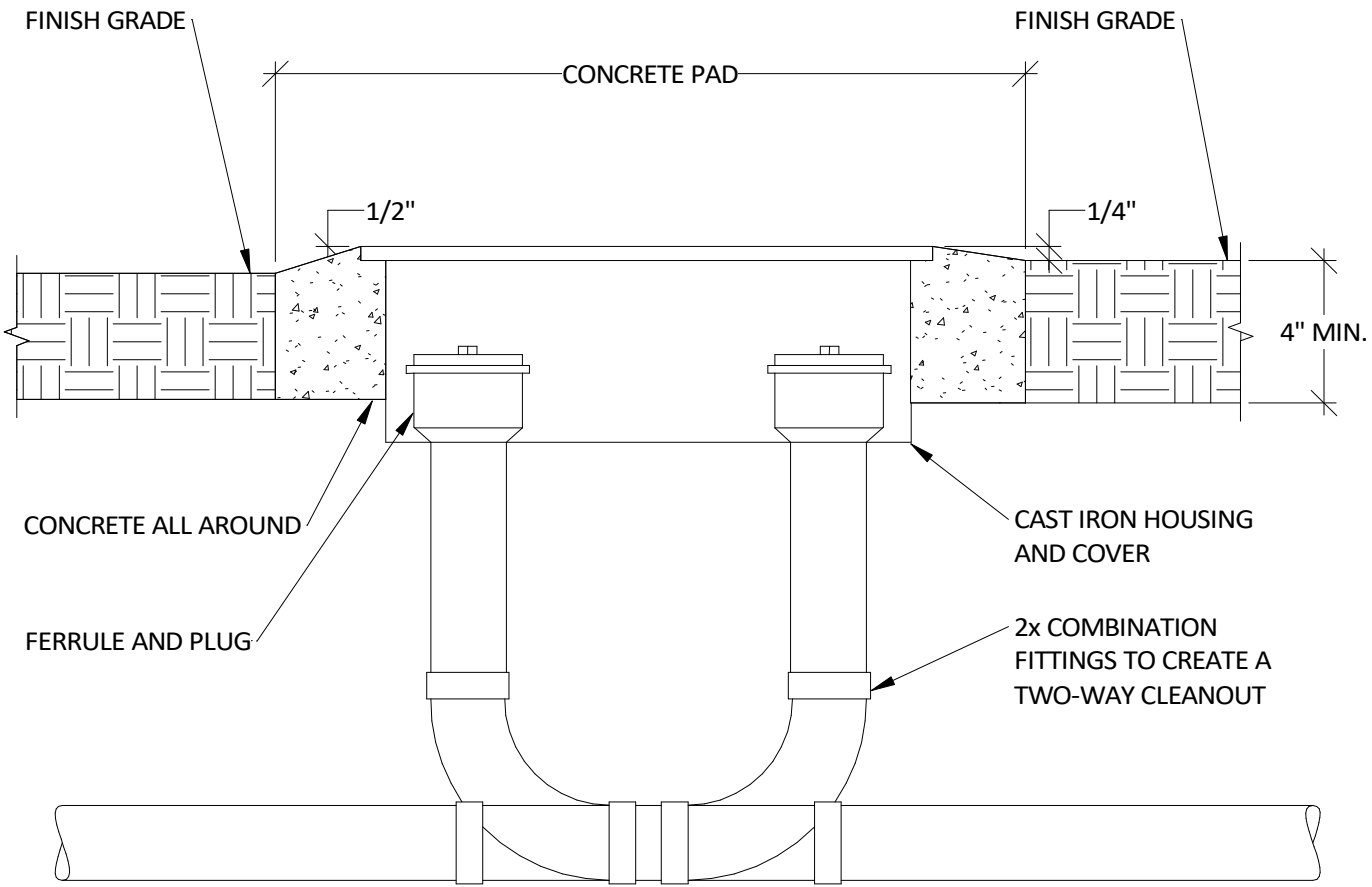
2 STORAGE 204 PIPING DETAIL
P501 NTS

KEYPLAN

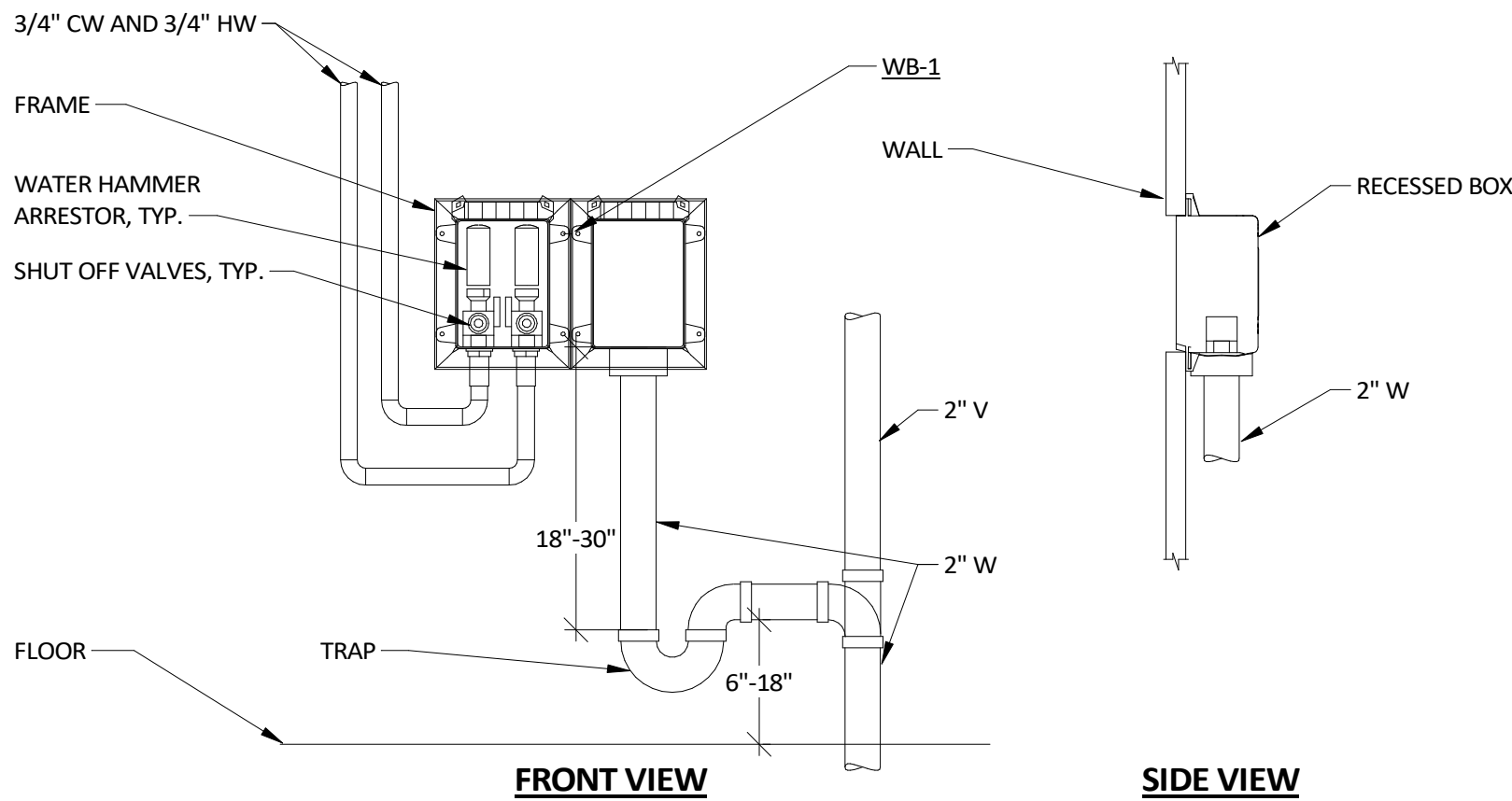




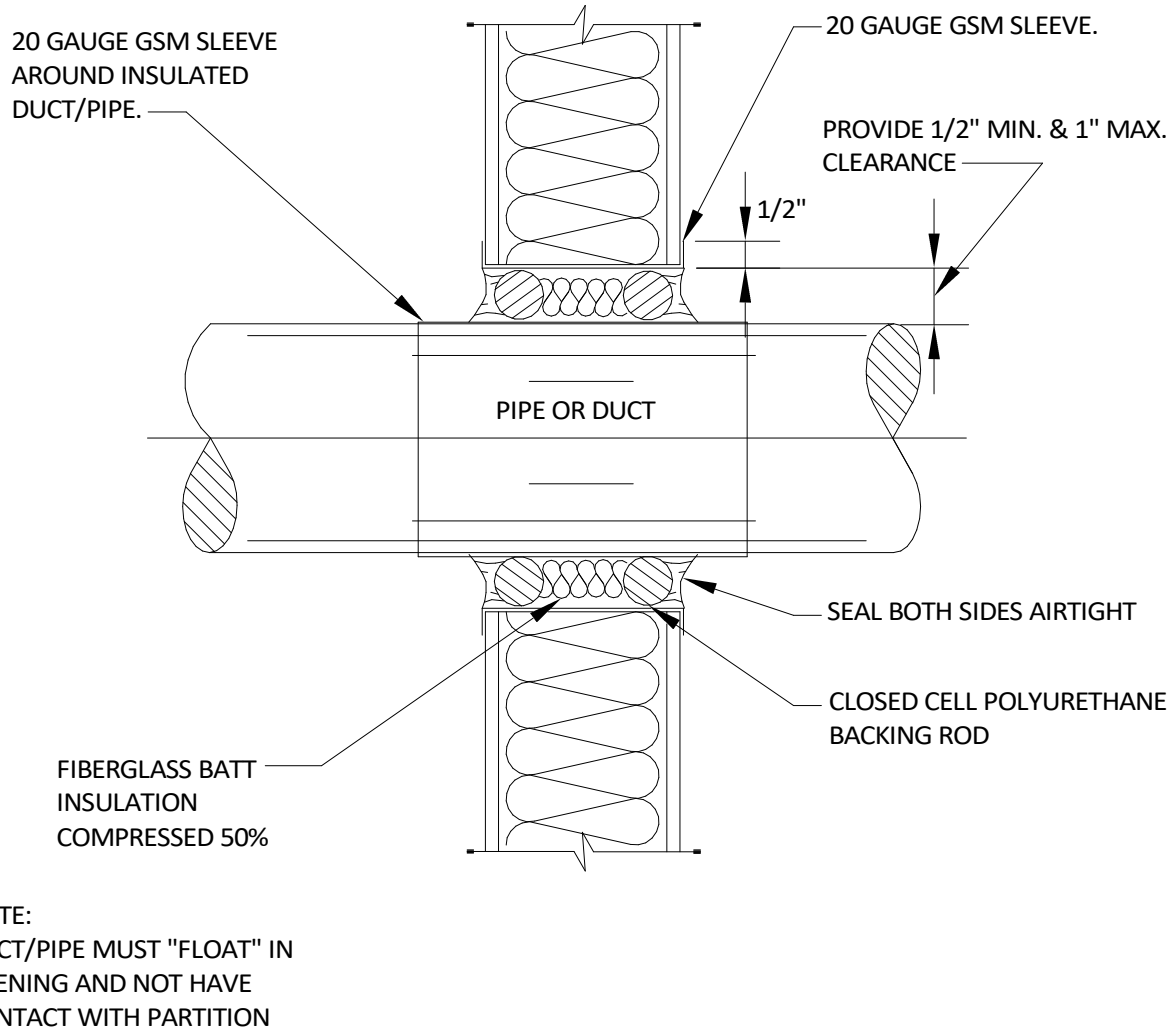
3 PIPE HANGER DETAIL
P601 NTS



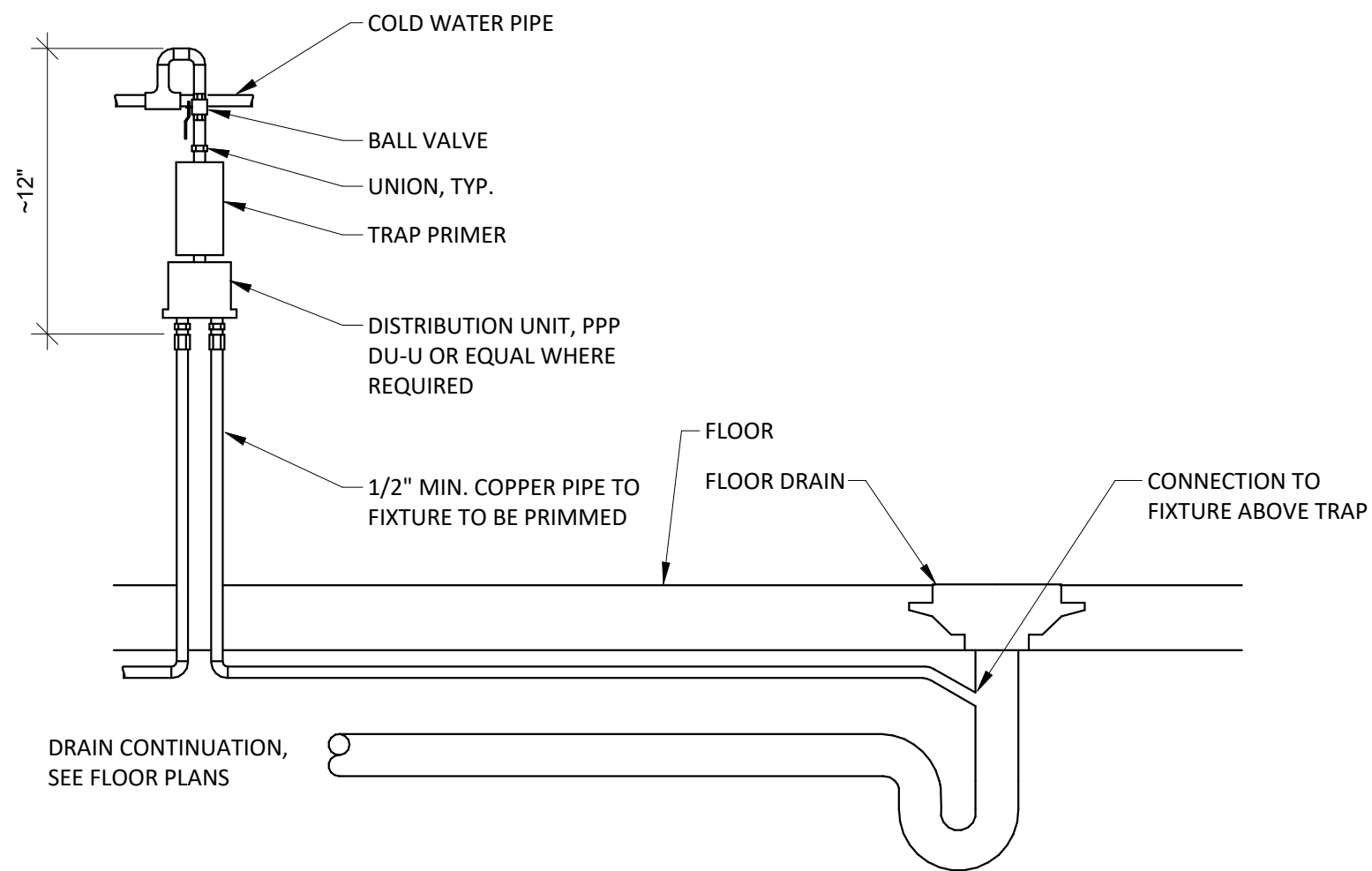
1 TWO-WAY CLEAN OUT
P601 NTS



4 WASHING MACHINE CONNECTION
P601 NTS



2 PIPE THROUGH NON RATED PARTITION
P601 NTS



5 TRAP PRIMER
P601 NTS

KEYPLAN

