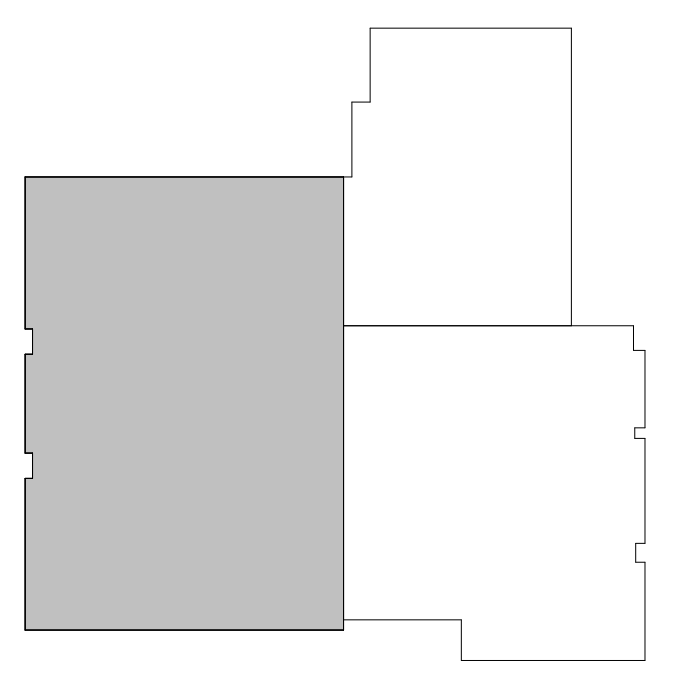
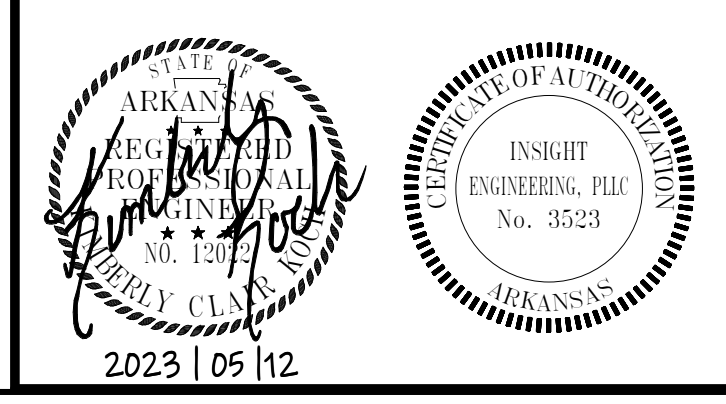


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AREA "A"

1 FIRST FLOOR PLAN AREA A - HVAC DUCTWORK DEMOLITION  
1/8" = 1'-0"



NO.	DATE	DESCRIPTION
22-046		
2023   05   12		
		ISSUE
		M101

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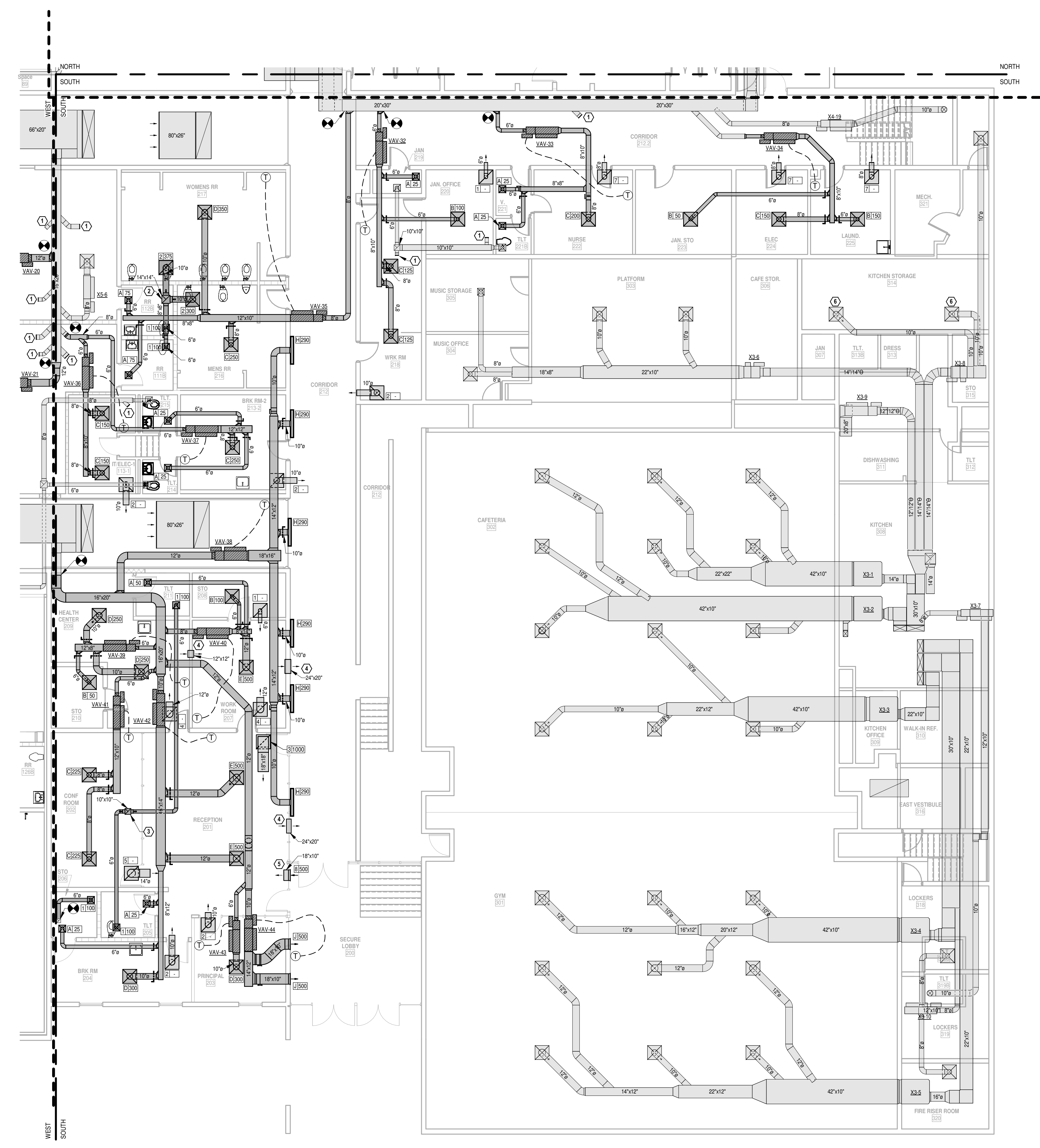
NO.	DATE	DESCRIPTION
22-046		
2023   05   12		
		ISSUE
		M105

**GENERAL NOTES**

- ALL CONDUIT SERVING THERMOSTATS LOCATED ON CMU BLOCK WALL SHALL BE ROUTED WITHIN BLOCK WALL. EXPOSED SURFACE MOUNTED CONDUIT AND DEVICES ON CMU BLOCK WALL IS NOT PERMITTED. COORDINATE WITH ARCHITECTURAL PLAN FOR ALL EXISTING TO REMAIN CMU BLOCK WALLS.

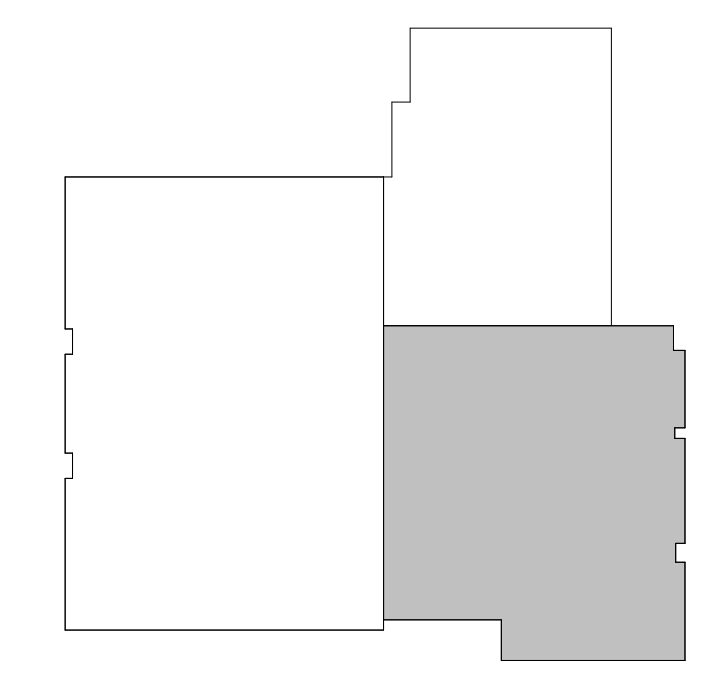
**KEYED NOTES**

- CAP. SEAL AND INSULATE EXISTING DUCTWORK.
- 14" X 14" EXHAUST DUCT UP TO EE2.
- 10" X 10" EXHAUST DUCT UP TO EE3.
- RETURN AIR TRANSFER OPENING.
- SIDEWALL GRILLE TO RETURN AIR ABOVE CEILING IN ADJACENT SPACE.
- REMOVE AND REINSTALL GRILLE INTO CEILING GRID.



**1** FIRST FLOOR PLAN AREA B - HVAC DUCTWORK  
1/8" = 1'-0"

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AREA "B"

21/2023 | 4:52:59 PM Autodesk DWG TrueView 2015 (10/15/2015) 7/26/2023 10:41:11 AM 2023 | 05 | 12

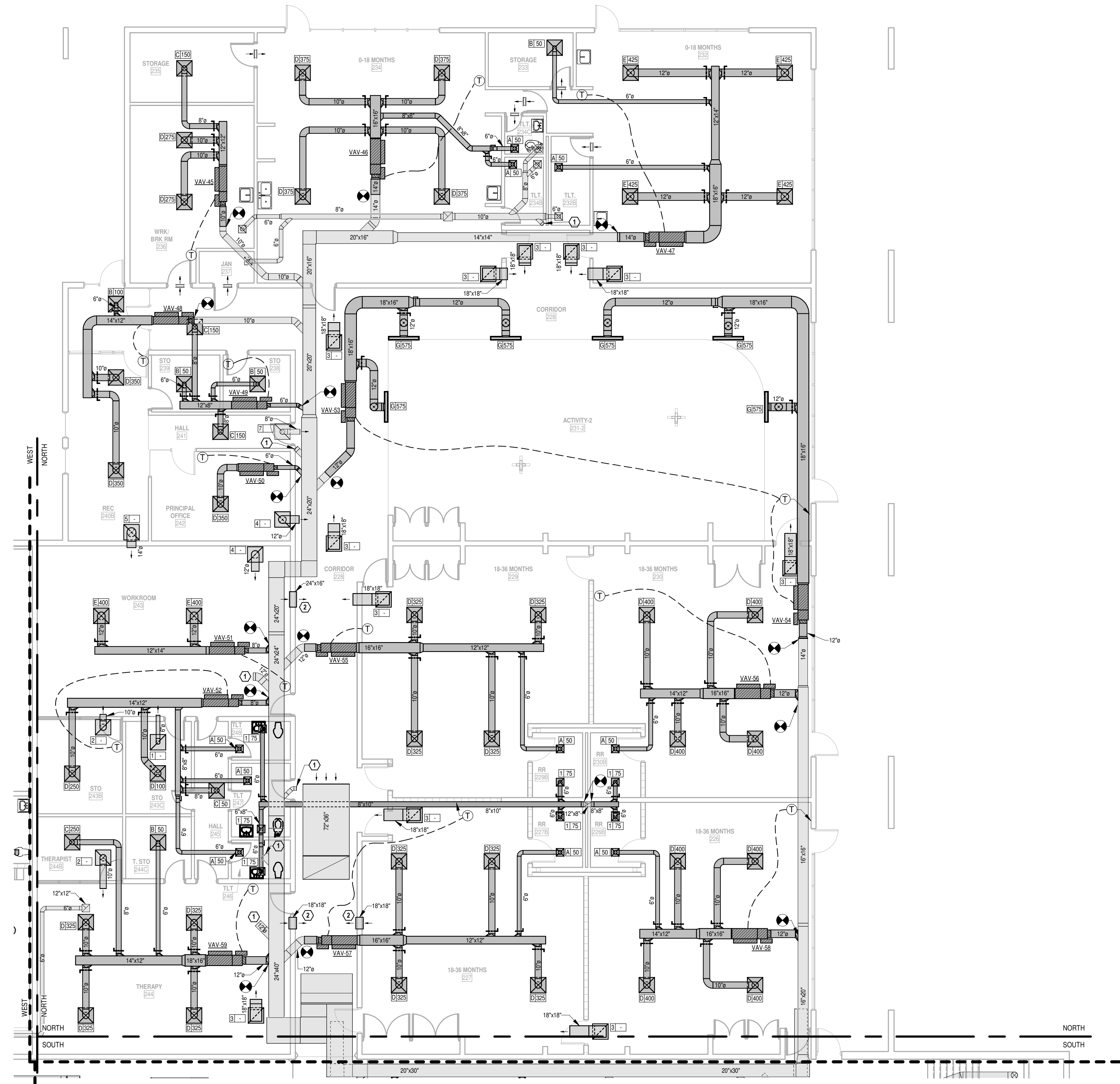


GENERAL NOTES

- ALL CONDUIT SERVING THERMOSTATS LOCATED ON CMU BLOCK WALL SHALL BE ROUTED WITHIN BLOCK WALL. EXPOSED SURFACE MOUNTED CONDUIT AND DEVICES ON CMU BLOCK WALL IS NOT PERMITTED. COORDINATE WITH ARCHITECTURAL PLAN FOR ALL EXISTING TO REMAIN CMU BLOCK WALLS.

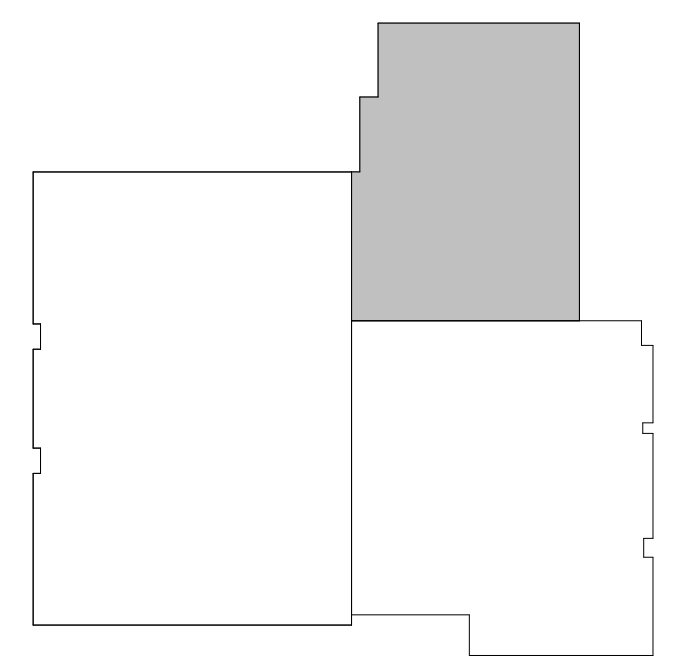
KEYED NOTES

- CAP, SEAL AND INSULATE EXISTING DUCTWORK.
- RETURN AIR TRANSFER OPENING.

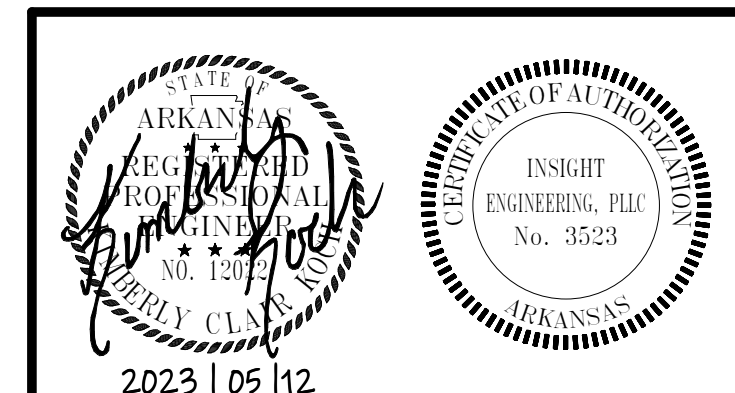


1 FIRST FLOOR PLAN AREA C - HVAC DUCTWORK  
1/8" = 1'-0"

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AREA "C"











**VARIABLE AIR VOLUME BOX - ELECTRIC HEAT**

DESIGNATION	REFERENCE PRODUCT	SERVES	PRIMARY INLET	AIRFLOW			ELECTRIC HEAT			
				DESIGN COOLING (CFM)	MINIMUM COOLING (CFM)	VALVE HEATING (CFM)	COIL HEATING CAPACITY (MBH)	VOLTS / PHASE	ELECTRIC HEAT (KW)	HEATER STAGE
VAV-1	TRANE: VCEF12	134 - P3 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-2	TRANE: VCEF12	135 - P3 CLASS	12"	1800.0	540.0	900	38	480 / 3	11	2.0
VAV-3	TRANE: VCEF12	136 - P3 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-4	TRANE: VCEF12	137 - P3 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-5	TRANE: VCEF12	138 - P3 CLASS	12"	1800.0	540.0	900	38	480 / 3	11	2.0
VAV-6	TRANE: VCEF12	139 - P3 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-7	TRANE: VCEF10	133 - P3 MAKER SPACE WEST	10"	1400.0	420.0	700	27	480 / 3	8	2.0
VAV-8	TRANE: VCEF12	133 - P3 MAKER SPACE CENTRAL - 1	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-9	TRANE: VCEF12	133 - P3 MAKER SPACE CENTRAL - 2	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-10	TRANE: VCEF10	133 - P3 MAKER SPACE EAST	10"	1400.0	420.0	700	27	480 / 3	8	2.0
VAV-11	TRANE: VCEF08	101 - VESTIBULE	8"	700.0	210.0	350	14	480 / 3	4	2.0
VAV-12	TRANE: VCEF08	104 - FAM RR, 105 - FAM RR, 106 - WOMEN, 107 - MEN, 108 - JANITOR	8"	575.0	173.0	288	12	480 / 3	4	2.0
VAV-13	TRANE: VCEF10	109 - COMMUNITY - 1	10"	1200.0	360.0	600	24	480 / 3	7	2.0
VAV-14	TRANE: VCEF10	109 - COMMUNITY - 2	10"	1200.0	360.0	600	24	480 / 3	7	2.0
VAV-15	TRANE: VCEF08	100 - VESTIBULE	8"	650.0	195.0	325	14	480 / 3	4	2.0
VAV-16	TRANE: VCEF10	110 - EXPLORATION SPACE - 1	10"	1150.0	345.0	575	22	480 / 3	7	2.0
VAV-17	TRANE: VCEF10	110 - EXPLORATION SPACE - 2	10"	1150.0	345.0	575	22	480 / 3	7	2.0
VAV-18	TRANE: VCEF10	110 - EXPLORATION SPACE - 3	10"	1150.0	345.0	575	22	480 / 3	7	2.0
VAV-19	TRANE: VCEF10	110 - EXPLORATION SPACE - 4	10"	1150.0	345.0	575	22	480 / 3	7	2.0
VAV-20	TRANE: VCEF12	112 - P3 CLASS	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-21	TRANE: VCEF12	111 - P4 CLASS	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-22	TRANE: VCEF10	133 - P3 MAKER SPACE WEST	10"	1400.0	420.0	700	27	480 / 3	8	2.0
VAV-23	TRANE: VCEF12	116 - P3 MAKER SPACE CENTRAL - 1	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-24	TRANE: VCEF12	116 - P3 MAKER SPACE CENTRAL - 2	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-25	TRANE: VCEF10	133 - P3 MAKER SPACE WEST	10"	1400.0	420.0	700	27	480 / 3	8	2.0
VAV-26	TRANE: VCEF12	121 - P4 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-27	TRANE: VCEF12	122 - P4 CLASS	12"	1800.0	540.0	900	38	480 / 3	11	2.0
VAV-28	TRANE: VCEF12	123 - P4 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-29	TRANE: VCEF12	124 - P4 CLASS	12"	1800.0	540.0	900	38	480 / 3	11	2.0
VAV-30	TRANE: VCEF12	125 - P4 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-31	TRANE: VCEF12	126 - P4 CLASS	12"	1700.0	510.0	850	34	480 / 3	10	2.0
VAV-32	TRANE: VCEF06	218 - WRK RM, 219 - JAN, 220 JAN, OFFICE	6"	375.0	113.0	118	9	480 / 3	3	2.0
VAV-33	TRANE: VCEF05	221 - V, 221B - TLT, 222 - NURSE	5"	250.0	75.0	125	5	480 / 3	2	2.0
VAV-34	TRANE: VCEF05	223 - JAN, STO., 224 - ELEC., 225 - LAUNDARY	5"	350.0	105.0	175	7	480 / 3	2	2.0
VAV-35	TRANE: VCEF08	111B - RR, 112B - RR, 214 - TLT, 215 - TLT, 216 - MENS RR, 217 - WOMENS RR	8"	750.0	225.0	375	15	480 / 3	5	2.0
VAV-36	TRANE: VCEF05	113-1 - IT/ELEC - 1	5"	300.0	90.0	175	7	480 / 3	2	2.0
VAV-37	TRANE: VCEF05	213-2 BREAKROOM - 2	5"	300.0	90.0	175	7	480 / 3	2	2.0
VAV-38	TRANE: VCEF12	191 - CORRIDOR	12"	1740.0	522.0	870	34	480 / 3	10	2.0
VAV-39	TRANE: VCEF06	209 - HEALTH CENTER	6"	500.0	150.0	250	10	480 / 3	3	2.0
VAV-40	TRANE: VCEF06	207 - WORKROOM, 208 - STORAGE, 210 - STORAGE, 211 - TLT	8"	700.0	210.0	350	14	480 / 3	4	2.0
VAV-41	TRANE: VCEF06	202 - CONFERENCE ROOM	6"	500.0	150.0	250	10	480 / 3	3	2.0
VAV-42	TRANE: VCEF10	201 - RECEPTION, 204 - BREAKROOM, 205 - TLT, 206 - STORAGE	10"	1350.0	405.0	675	27	480 / 3	8	2.0
VAV-43	TRANE: VCEF05	203 - PRINCIPAL	5"	300.0	90.0	175	7	480 / 3	2	2.0
VAV-44	TRANE: VCEF10	200 - SECURE LOBBY	10"	1000.0	300.0	500	20	480 / 3	6	2.0
VAV-45	TRANE: VCEF06	235 - STORAGE, 236 - WORK/BREAK ROOM	8"	700.0	210.0	350	14	480 / 3	4	2.0
VAV-46	TRANE: VCEF12	234C-TLT, 234B-TLT, 234-0.18	12"	1600.0	480.0	800	31	480 / 3	9	2.0
VAV-47	TRANE: VCEF12	232 - 0.18, 232B - TLT, 233 - STORAGE	12"	1800.0	540.0	900	38	480 / 3	11	2.0
VAV-48	TRANE: VCEF08	240 - REC	8"	800.0	240.0	400	31	480 / 3	5	2.0
VAV-49	TRANE: VCEF05	231 - ACTIVITY ENTRY CORRIDOR, 239 - STORAGE, 238 - STORAGE, 241 - HALL	5"	350.0	105.0	175	7	480 / 3	2	2.0
VAV-50	TRANE: VCEF05	242 - PRINCIPAL OFFICE	5"	350.0	105.0	175	7	480 / 3	2	2.0
VAV-51	TRANE: VCEF08	243 - OVERFLOW	8"	800.0	240.0	400	31	480 / 3	5	2.0
VAV-52	TRANE: VCEF08	243B - STORAGE, 243C - STORAGE, 246-TLT, 247-TLT, 248-TLT	8"	550.0	165.0	275	12	480 / 3	4	2.0
VAV-53	TRANE: VCEF12	231-ACTIVITY - 1	12"	1725.0	518.0	863	34	480 / 3	10	2.0
VAV-54	TRANE: VCEF12	231-ACTIVITY - 2	12"	1725.0	518.0	863	34	480 / 3	10	2.0
VAV-55	TRANE: VCEF10	229- 2 YEAR OLDS	10"	1350.0	405.0	675	27	480 / 3	8	2.0
VAV-56	TRANE: VCEF12	230- 2 YEAR OLDS	12"	1650.0	495.0	825	31	480 / 3	9	2.0
VAV-57	TRANE: VCEF10	227- 2 YEAR OLDS	10"	1400.0	420.0	700	27	480 / 3	8	2.0
VAV-58	TRANE: VCEF12	226- 2 YEAR OLDS	12"	1650.0	495.0	825	31	480 / 3	9	2.0
VAV-59	TRANE: VCEF12	244-THERAPY, 244B- THERAPIST, 224C- THERAPY STORAGE	12"	1600.0	480.0	800	31	480 / 3	9	2.0
Remarks	PROVIDE SCR CONTROLLER PROVIDE FACTORY-MOUNTED AND PRE-PROGRAMMED, PRESSURE-INDEPENDENT, BAGNET DDC CONTROLLER WITH AIRFLOW MEASUREMENT. PROVIDE WITH ZONE TEMPERATURE SENSOR. PROVIDE WITH FACTORY-WIRED DISCHARGE AIR TEMPERATURE SENSOR. PROVIDE UNIT-MOUNTED CONTROL POWER TRANSFORMER AND DISCONNECT. UNITS TO BE TRANE MODEL, SIZE AND CONFIGURATION AS INDICATED IN SCHEDULE AND ON DRAWINGS.									

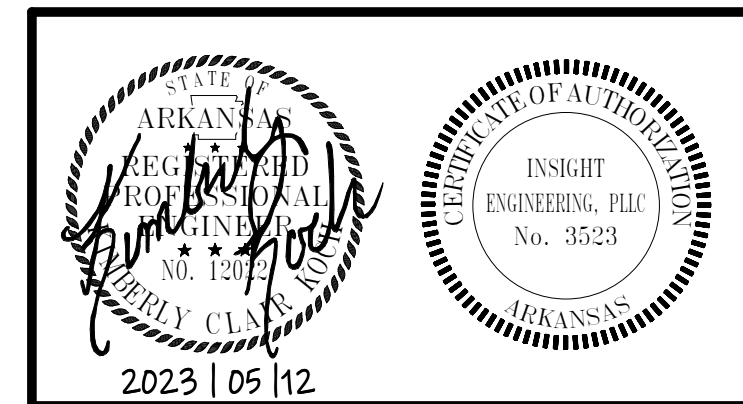
**EXHAUST FANS**

DESIGNATION	REFERENCE PRODUCT	TYPE	AIR FLOW RATE (CFM)	TOTAL STATIC PRESSURE (IN. WATER)	ROTATION (RPM)	DRIVE	SONES	MOTOR			ELECTRICAL	REMARKS
								HP	VOLTS	PHASE		
EF-1	GREENHECK: G-095-D	DOWNBLAST	600	0.5	1,550	DIRECT	9.3	1/8	115	1	PROVIDE MANUFACTURER'S ROOF CURB AND ELECTRICAL DISCONNECT.	
EF-2	GREENHECK: G-120-B	DOWNBLAST	875	0.5	1,140	DIRECT	7.9	1/6	115	1	PROVIDE MANUFACTURER'S ROOF CURB AND ELECTRICAL DISCONNECT.	
EF-3	GREENHECK: G-080-D	DOWNBLAST	200	0.5	1,150	DIRECT	7.7	1/20	115	1	PROVIDE MANUFACTURER'S ROOF CURB AND ELECTRICAL DISCONNECT.	

**AIR DEVICES**

DESIGNATION	REFERENCE PRODUCT	CONFIGURATION	MAXIMUM AIRFLOW (CFM)	TOTAL PRESSURE (IN. WATER)	NECK SIZE (IN.)	PANEL SIZE (IN.)	MAX. N.C.	FINISH	REMARKS
A	TITUS: OMNI AA	LAY-IN PLAQUE	100	0.109	6	12 x 12	30	WHITE	PROVIDE WITH INSULATION BLANKET.
B	TITUS: OMNI AA	LAY-IN PLAQUE	100	0.025	6	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
C	TITUS: OMNI AA	LAY-IN PLAQUE	300	0.091	8	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
D	TITUS: OMNI AA	LAY-IN PLAQUE	400	0.107	10	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
E	TITUS: OMNI AA	LAY-IN PLAQUE	600	0.151	12	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
F	TITUS: OMNI AA	LAY-IN PLAQUE	900	0.256	14	24 x 24	30	WHITE	PROVIDE WITH INSULATION BLANKET.
G	TITUS: FL-20	LINEAR SLOT	575	0.164	12	24 x 4	34	WHITE	PROVIDE CONTINUOUS PLENUM, TYPE 22 BORDER, HIGH THROW AIR PATTERN, 2" SLOT WIDTH.
H	TITUS: FL-20	LINEAR SLOT	290	0.112	10	24 x 4	30	WHITE	PROVIDE CONTINUOUS PLENUM, TYPE 22 BORDER, HIGH THROW AIR PATTERN, 2" SLOT WIDTH.
J	TITUS: 301	LINEAR SIDEWALL	500	0.016	18 x 10	20 x 12	30	WHITE	
K	TITUS: 301	LINEAR SIDEWALL	500	0.04	12 x 10	14 x 12	30	WHITE	
1	TITUS: 50F	LAY-IN EGGRATE	150	0.04	6 x 6 or 6"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. PROVIDE FILTER. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
2	TITUS: 50F	LAY-IN EGGRATE	375	0.04	10 x 10 or 10"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. PROVIDE FILTER. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
3	TITUS: 50F	LAY-IN EGGRATE	1800	0.062	18 x 18 or 18"	24 x 24	34	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. PROVIDE FILTER. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
4	TITUS: 50F	LAY-IN EGGRATE	500	0.022	12 x 12 or 12"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
5	TITUS: 50F	LAY-IN EGGRATE	750	0.022	14 x 14 or 14"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
6	TITUS: 50F	LAY-IN EGGRATE	2200	0.022	22 x 22	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
7	TITUS: 50F	LAY-IN EGGRATE	225	0.095	8 x 8 or 8"	24 x 24	30	WHITE	1/2" x 1/2" x 1/2" ALUMINUM CORE. USE SRG ADAPTER WHERE ROUND NECK SIZE IS INDICATED ON PLANS.
8	TITUS: 350RL	LINEAR SIDEWALL	1000	0.022	18 x 10	20 x 12	30	WHITE	

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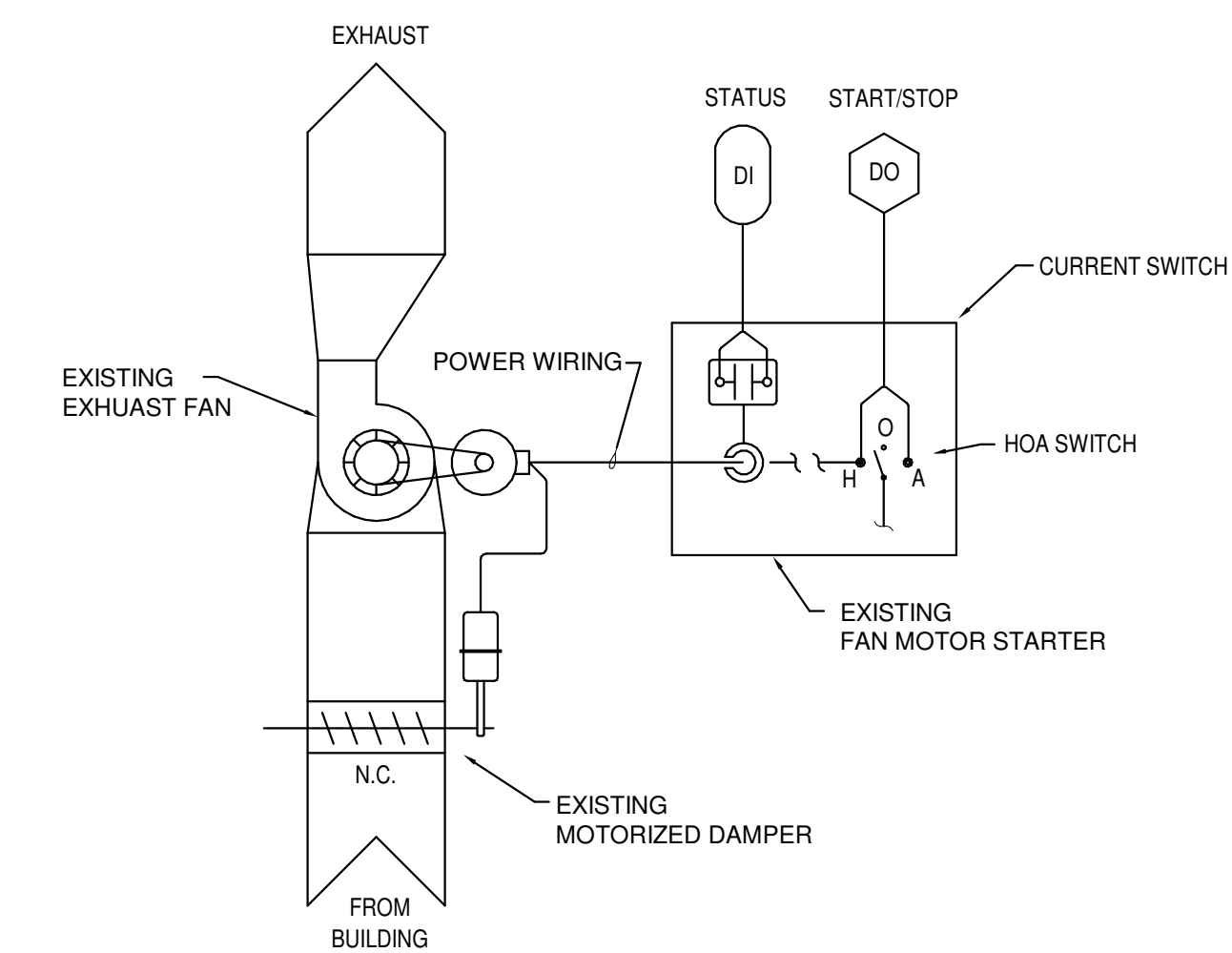




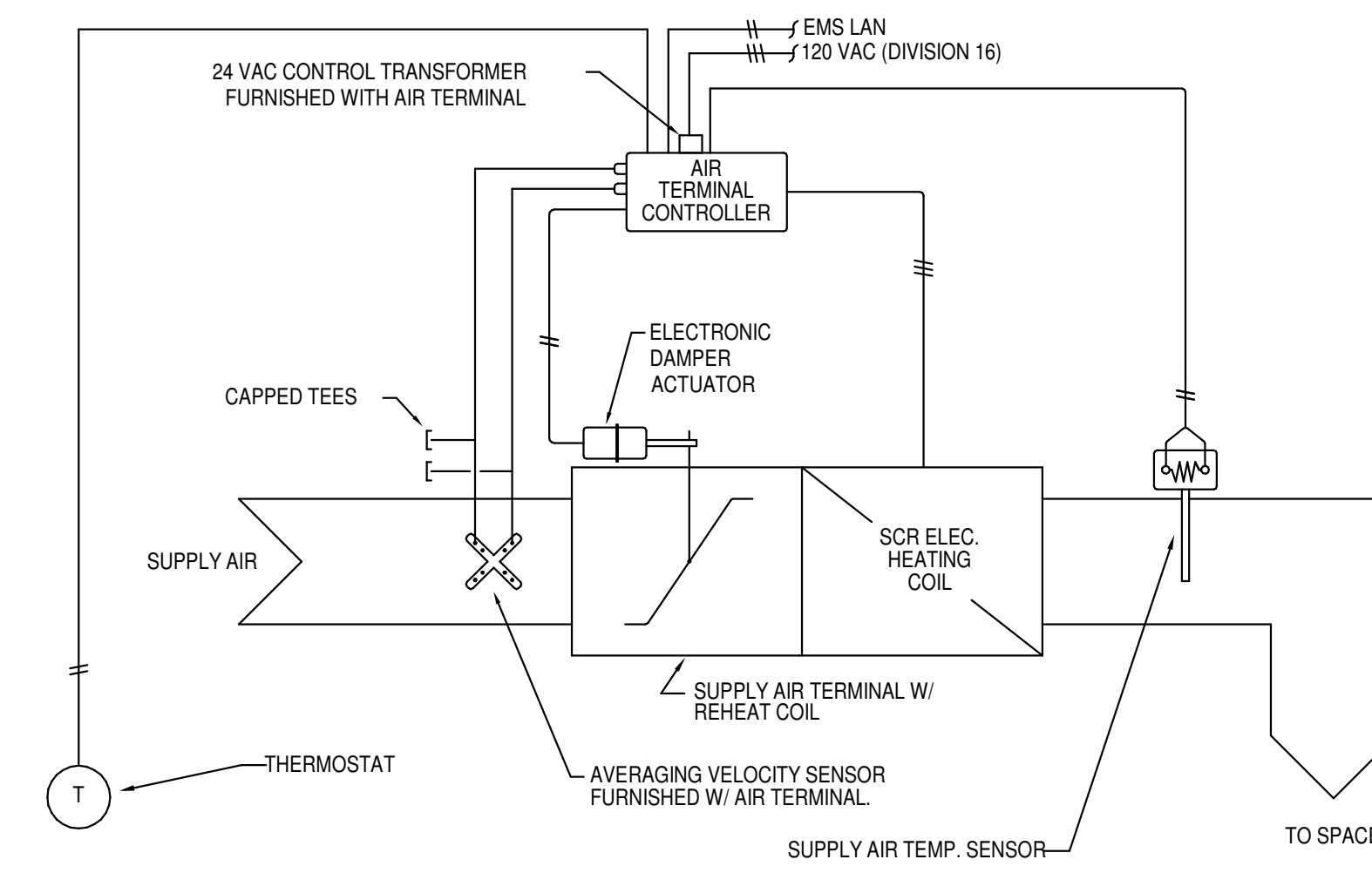
**SEQUENCE OF OPERATIONS**

**GENERAL EXHAUST FAN SEQUENCE OF OPERATION:**

EXHAUST FAN SHALL BE STARTED AND STOPPED BY HOA SWITCH AT FAN MOTOR STARTER. WHEN SWITCH IS IN THE AUTO POSITION FAN SHALL BE STARTED AND STOPPED BY BUILDING DDC PANEL THROUGH DIGITAL OUTPUT BASED UPON WEEKLY SCHEDULE OR OPERATOR COMMAND.



**1 GENERAL EXHAUST FAN CONTROL DIAGRAM**  
NOT TO SCALE:



**BUILDING AUTOMATION SYSTEM INTERFACE:**

THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED, AND UNOCCUPIED COMMANDS. THE BAS MAY ALSO SEND A HEAT/COOL MODE, PRIORITY SHUTDOWN COMMANDS, SPACE TEMPERATURE AND/OR SPACE TEMPERATURE SETPOINT. IF COMMUNICATION IS LOST WITH THE BAS, THE CONTROLLER SHALL OPERATE USING ITS LOCAL SETPOINTS.

**OCCUPIED:**

NORMAL OPERATING MODE FOR OCCUPIED SPACES OR DAYTIME OPERATION. WHEN THE UNIT IS IN THE OCCUPIED MODE THE VAV SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE OCCUPIED HEATING OR COOLING SETPOINT. APPLICABLE VENTILATION AND AIRFLOW SETPOINTS SHALL BE ENFORCED. THE OCCUPIED MODE SHALL BE THE DEFAULT MODE OF THE VAV.

**UNOCCUPIED:**

NORMAL OPERATING MODE FOR UNOCCUPIED SPACES OR NIGHTTIME OPERATION. WHEN THE UNIT IS IN UNOCCUPIED MODE THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE STORED UNOCCUPIED HEATING OR COOLING SETPOINT REGARDLESS OF THE PRESENCE OF A HARDWIRED OR COMMUNICATED SETPOINT. WHEN THE SPACE TEMPERATURE EXCEEDS THE ACTIVE UNOCCUPIED SETPOINT THE VAV SHALL MODULATE FULLY CLOSED.

**OCCUPIED BYPASS:**

MODE USED TO TEMPORARILY PLACE THE UNIT INTO THE OCCUPIED OPERATION. TENANTS SHALL BE ABLE TO OVERRIDE THE UNOCCUPIED MODE FROM THE SPACE SENSOR. THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 4 HOURS (ADJ.). THE TENANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME. DURING THE OVERRIDE THE UNIT SHALL OPERATE IN OCCUPIED MODE.

**COOLING MODE:**

WHEN THE UNIT IS IN COOLING MODE, THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE COOLING SETPOINT BY MODULATING THE AIRFLOW BETWEEN THE ACTIVE COOLING MINIMUM AIRFLOW SETPOINT TO THE MAXIMUM COOLING AIRFLOW SETPOINT. THE VAV SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE COOLING SETPOINT TO DETERMINE THE REQUESTED COOLING CAPACITY OF THE UNIT. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED COOLING CAPACITY. WHEN IN THE OCCUPIED MODE, THE CONTROLLER SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE COOLING SETPOINT TO DETERMINE THE REQUESTED COOLING CAPACITY OF THE UNIT. THE OUTPUTS SHALL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED COOLING CAPACITY.

**HEATING MODE:**

WHEN THE UNIT IS IN HEATING MODE, THE VAV CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT BY MODULATING THE AIRFLOW BETWEEN THE ACTIVE HEATING MINIMUM AIRFLOW SETPOINT TO THE MAXIMUM HEATING AIRFLOW SETPOINT. THE VAV CONTROLLER SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE HEATING SETPOINT TO DETERMINE THE REQUESTED HEATING CAPACITY OF THE UNIT. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED HEATING CAPACITY.

**ELECTRIC REHEAT (SCR):**

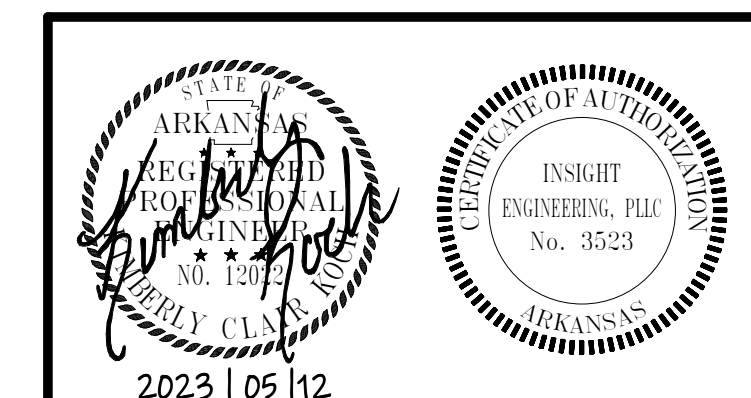
IF THE SPACE TEMPERATURE IS AT THE HEATING SETPOINT, THE ELECTRIC HEATER SHALL MODULATE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT WHILE THE VAV OPERATES AT ITS MINIMUM HEATING AIRFLOW SETPOINT. IF THE DISCHARGE AIR TEMPERATURE REACHES THE DESIGN HEATING DISCHARGE AIR TEMPERATURE SETPOINT (ADJ.), THE VAV SHALL MODULATE AIRFLOW BETWEEN THE MINIMUM HEATING AIRFLOW SETPOINT AND THE MAXIMUM HEATING AIRFLOW SETPOINT AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT. WHILE THE ELECTRIC HEATER MODULATES TO MAINTAIN DISCHARGE AIR TEMPERATURE AT THE DESIGN HEATING DISCHARGE AIR TEMPERATURE SETPOINT, IF THE AIRFLOW REACHES THE MAXIMUM HEATING AIRFLOW SETPOINT, THE VAV SHALL MODULATE THE ELECTRIC HEATER AS REQUIRED TO MAINTAIN SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT, WHILE THE VAV OPERATES AT ITS MAXIMUM HEATING AIRFLOW SETPOINT.

**SPACE SENSOR FAILURE:**

IF THERE IS A FAULT WITH THE OPERATION OF THE ZONE SENSOR AN ALARM SHALL BE ANNUNCIATED AT THE BAS. SPACE SENSOR FAILURE SHALL CAUSE THE VAV TO DRIVE THE DAMPER TO MINIMUM AIR FLOW IF THE VAV IS IN THE OCCUPIED MODE, OR DRIVE IT CLOSED IF THE VAV IS IN THE UNOCCUPIED MODE.

**2 AIR TERMINAL ELECTRIC REHEAT CONTROL DIAGRAM**  
NOT TO SCALE:

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**LEGEND**

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING FIXTURE / EQUIPMENT TO REMAIN.		BALL VALVE
	EXISTING FIXTURE / EQUIPMENT TO BE REMOVED.		GATE VALVE
	NEW FIXTURE / EQUIPMENT.		CHECK VALVE
	EXISTING PIPING TO REMAIN.		PLUMBING FIXTURE / EQUIPMENT DESIGNATION
	EXISTING PIPING TO BE REMOVED.		FD
	NEW PIPING		SD
	SANITARY SEWER (SS)		VTR
	VENT (V)		CP
	COLD WATER (CW)		FCO
	HOT WATER (HW)		WCO
	HOT WATER RETURN (HWR)		COTG
	STORM DRAIN		DCOTG
			1 P301 RISER DESIGNATION
			CONNECT TO EXISTING.
			POINT OF DEMOLITION.
			REVISION DELTA

**PLUMBING GENERAL NOTES**

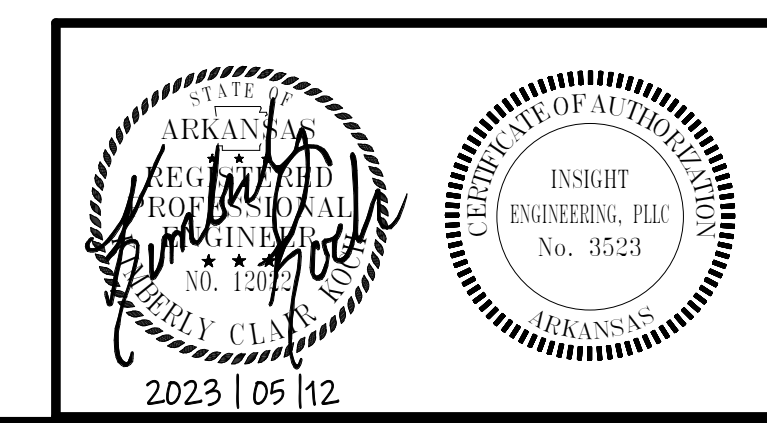
- ALL PIPING IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE A HARD SUSPENDED CEILING.
- ACCESS PANELS IN HARD SUSPENDED CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, CLEANOUTS, CONTROLS, ETC. COORDINATE LOCATION OF PANELS WITH MECHANICAL INSTALLATION AND DEMONSTRATE ACCESS TO EQUIPMENT SERVED.
- ALL PIPE ROUTING AND CONSTRUCTION SHOWN ON THE DRAWINGS IS DIAGNOSTIC IN NATURE AND MAY NOT BE SHOWN IN EXACT LOCATIONS OR WITH ALL ANCILLARY ITEMS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING PER TYPICAL CONSTRUCTION PRACTICE IN THE MOST EFFICIENT WAY POSSIBLE WHILE ADHERING AS CLOSELY TO THE DRAWINGS AS POSSIBLE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INSTALLATION WITH THE WORK OF OTHER TRADES. FIELD MODIFICATIONS SUCH AS OFFSETS IN PIPING NEEDED DUE TO OBSTRUCTIONS OR INTERFERENCES SHALL BE PROVIDED AT NO ADDITIONAL COST.
- ALL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER WITHIN STANDARD OF CARE FOR PROFESSIONAL ALL LABOR, MATERIAL, TOOLS, PERMITS, INSPECTIONS, TESTING, CERTIFICATION, ETC. REQUIRED FOR A COMPLETE AND SATISFACTORY INSTALLATION TO DESIGN INTENT SHALL BE FURNISHED BY CONTRACTOR. PROVIDE, AT NO ADDITIONAL COST, INCLUDING INCIDENTAL ITEMS NOT SHOWN WHEN REQUIRED FOR TYPICAL COMPLETION OF WORK.
- DRAWINGS NOT BEARING THE STAMP OR SEAL AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES UNLESS EXPRESSLY APPROVED IN WRITING BY THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DRAWINGS AND SPECIFICATIONS BEING USED FOR BIDDING AND CONSTRUCTION PURPOSES ARE OF THE LATEST REVISION AVAILABLE AND ALL ADDENDUM DOCUMENTS HAVE BEEN INCORPORATED EITHER BY REVISION RELEASE OF DRAWINGS/SPECIFICATIONS OR ATTACHMENT OF SKETCHES OR OTHER ADDENDUM INFORMATION.
- THE PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL NEW PRODUCTS OF ESTABLISHED AND REPUTABLE MANUFACTURERS. NO EQUIPMENT SUBSTITUTIONS SHALL BE MADE THAT WOULD LEAVE INADEQUATE OPERATING OR SERVICE SPACE. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND IN AN ARRANGEMENT THAT WILL GIVE THE GREATEST PRACTICAL EASE OF OPERATION AND SERVICE TO THE OWNER.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE, AND LOCAL ORDINANCES. ALL PLUMBING MATERIALS, INSTALLATION PROCEDURES, AND SYSTEM LAUNCHES SHALL BE APPROVED BY ALL APPLICABLE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THESE RULES, REGULATIONS, AND ORDINANCES. THESE CODES REPRESENT THE MINIMUM ACCEPTABLE REQUIREMENTS. THEREFORE, WHERE DRAWINGS AND/OR SPECIFICATIONS INDICATE MATERIALS OR CONSTRUCTION MORE STRINGENT THAN CODE REQUIREMENTS, THE DRAWINGS AND/OR SPECIFICATIONS SHALL GOVERN.
- IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION.
- ALL DOMESTIC WATER PIPING SHALL CONFORM TO THE REQUIREMENTS OF THE ANSI SAFETY CODE AND BE FREE FROM ALL DEFECTS AND BE PROPERLY IDENTIFIED.
- STERILIZE THE ENTIRE WATER DISTRIBUTION SYSTEM PER THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- DOMESTIC WATER SYSTEM, WASTE, SOIL AND VENT SYSTEM SHALL ALL BE TESTED PER LOCAL AUTHORITY HAVING JURISDICTION. TEST AND OBTAIN APPROVAL ON ALL UNDERGROUND PIPING FROM ADMINISTRATIVE AUTHORITY HAVING JURISDICTION PRIOR TO COVERING WORK.
- PLUMBING CONTRACTOR SHALL PROVIDE INITIAL START UP OF ALL SYSTEMS INCLUDED IN THE PLUMBING WORK.
- ALL EXPOSED PIPING BELOW LAVATORY'S DESIGNATED AS HANDICAPPED SHALL BE TOTALLY INSULATED.
- ALL NON-DRAINAGE PIPING SHALL BE RIM LEVEL AND GENERALLY FREE OF TRAPS AND UNNECESSARY BENDS, ARRANGED TO CONFORM TO THE BUILDING REQUIREMENTS AND TO SUIT THE NECESSITIES OF CLEARANCES FOR OTHER MECHANICAL WORK. PROVIDE VALVED DRAINAGE OUTLETS IN AREAS OF PIPING WHICH WOULD BE UNREMOVABLE DURING MAINTENANCE OR REPAIRS.
- ALL EQUIPMENT, PIPING, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION.
- PENETRATIONS OF WALLS OR FLOORS FOR THE PASSAGE OF PIPING OR OTHER EQUIPMENT SHALL BE PROPERLY SEALED AFTER INSTALLATION OF ITEMS AND EQUIPMENT.
- PROVIDE UNIONS OR FLANGES AT PIPING CONNECTIONS TO EQUIPMENT TO ALLOW DISASSEMBLY FOR MAINTENANCE. ARRANGE PIPING TO ALLOW PULL SPACE FOR EQUIPMENT REMOVAL.
- PROVIDE ESCUTCHEONS FOR EXPOSED PIPING PENETRATIONS INTO FINISHED ROOMS.
- PIPING, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO ELECTRICAL SWITCHBOARDS, PANELBOARDS, DISTRIBUTION BOARDS, OR MOTOR CONTROL CENTERS SHALL NOT BE INSTALLED WITHIN THE REQUIRED SPACE FOR WORKING CLEARANCES OR DEDICATED SPACES OF THE ELECTRICAL EQUIPMENT. EXTENDING IN FRONT OF AND FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC-110.26.

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PLUMBING FIXTURE SCHEDULE									
DESIGNATION	FIXTURE TYPE	BASIS OF DESIGN		PIPE CONNECTION SIZE				TRAP	DESCRIPTION
		MANUFACTURER AND MODEL	ACCESSORIES	COLD	HOT	WASTE	VENT		
WC-1	WATER CLOSET	AMERICAN STANDARD #3043.001, AMERICAN STANDARD 6047.121.002 FLUSH VALVE	AMERICAN STANDARD #5901.100 HEAVY DUTY OPEN FRONT LESS COVER SEAT, ZURN Z8802-XL-Q-PC QUARTER TURN STOP	1"	-	4"	2"	INTEGRAL	FLOOR MOUNTED ADA WATER CLOSET, VITREOUS CHINA, INTEGRAL STOPS AND TRAP, SIPHON JET, 1-1/2" EXPOSED TOP SPUD FLUSH VALVE, 1.6 GPM, RUBBER DIAPHRAGM WITH DUAL FILTERED FIXED BYPASS, CHLORAMINE RESISTANT HANDLE PACKING, MAIN SEAT, STOP SEAT, AND VACUUM BREAKER; MANUAL FLUSH VALVE, OPEN FRONT SEAT
WC-2	WATER CLOSET	AMERICAN STANDARD #2234.001, AMERICAN STANDARD 6047.121.002 FLUSH VALVE	AMERICAN STANDARD #5901.100 HEAVY DUTY OPEN FRONT LESS COVER SEAT, ZURN Z8802-XL-Q-PC QUARTER TURN STOP	1"	-	4"	2"	INTEGRAL	FLOOR MOUNTED WATER CLOSET, VITREOUS CHINA, INTEGRAL STOPS AND TRAP, SIPHON JET, 1-1/2" EXPOSED TOP SPUD FLUSH VALVE, 1.6 GPM, RUBBER DIAPHRAGM WITH DUAL FILTERED FIXED BYPASS, CHLORAMINE RESISTANT HANDLE PACKING, MAIN SEAT, STOP SEAT, AND VACUUM BREAKER; MANUAL FLUSH VALVE, OPEN FRONT SEAT
WC-3	WATER CLOSET	AMERICAN STANDARD #2282.001, AMERICAN STANDARD 6047.121.002 FLUSH VALVE	CHURCH 1580C OPEN OPEN FRONT LESS COVER SEAT, ZURN Z8802-XL-Q-PC QUARTER TURN STOP	1"	-	4"	2"	INTEGRAL	FLOOR MOUNTED ADA WATER CLOSET, VITREOUS CHINA, INTEGRAL STOPS AND TRAP, SIPHON JET, 1-1/2" EXPOSED TOP SPUD FLUSH VALVE, 1.6 GPM, RUBBER DIAPHRAGM WITH DUAL FILTERED FIXED BYPASS, CHLORAMINE RESISTANT HANDLE PACKING, MAIN SEAT, STOP SEAT, AND VACUUM BREAKER; MANUAL FLUSH VALVE, OPEN FRONT SEAT
LAV-1	LAVATORY ADA	AMERICAN STANDARD "DECORUM" #9024.001EC, KOHLER K-46029-4 FAUCET	ZURN Z78700-PC TRAP, ZURN Z8743-PC SOLID STRAINER, ZURN Z8804-XL-LR-PC STOPS, WADE CARRIER #530 SERIES	1/2"	1/2"	2"	2"	1-1/4"	LAVATORY - ADA COMPLIANT, 20" X18-1/2" X24" H, WALL HUNG, WHITE VITREOUS CHINA, BACK OVERFLOW, FAUCET - 0.5 GPM, SINGLE HANDLE, HIGH TEMPERATURE LIMIT SETTING, DUAL WATER SUPPLY, FLEXIBLE STAINLESS STEEL, BRAIDED SUPPLY HOSES INCLUDED, LEAD FREE, POLISHED CHROME FINISH
LAV-2	LAVATORY ADA	AMERICAN STANDARD "OVALYN" #0495.221, KOHLER K-46029-4 FAUCET	ZURN Z78700-PC TRAP, ZURN Z8743-PC SOLID STRAINER, ZURN Z8804-XL-LR-PC STOPS, WADE CARRIER #530 SERIES	1/2"	1/2"	2"	2"	1-1/4"	LAVATORY - ADA COMPLIANT, 15-1/16" X12-1/16" X5-1/2" H, UNDERMOUNT, WHITE VITREOUS CHINA, FRONT OVERFLOW, FAUCET - 0.5 GPM, SINGLE HANDLE, HIGH TEMPERATURE LIMIT SETTING, DUAL WATER SUPPLY, FLEXIBLE STAINLESS STEEL BRAIDED SUPPLY HOSES INCLUDED, LEAD FREE, POLISHED CHROME FINISH
UR-1	URINAL	AMERICAN STANDARD #6042.001EC "DECORIUM", AMERICAN STANDARD 6045.013.002 FLUSH VALVE	WADE CARRIER #402 SERIES	3/4"	-	2"	2"	INTEGRAL	URINAL, 14" X 13-5/16" X 21-1/2" HIGH, WALL MOUNTED, VITREOUS CHINA, 3/4" TOP SPUD, WASHOUT ACTION, INTEGRAL TRAP, MANUAL FLUSH VALVE - 0.125 GPM, SELF-CLEANING BRASS PISTON-TYPE, INTEGRAL WIPER SPRING, CHLORAMINE RESISTANT EPDM SEAL, AND VACUUM BREAKER
S-1	SINGLE COMPARTMENT SINK	ELKAY CROSTOWN ETR135579TC, KOHLER TRITON BOWE K-100770-44KA FAUCET (2)	DEARBORN BRASS P9704 TRAP, BRASSCRAFT G2CR19 SUPPLY STOP, BRASSCRAFT 649 5/8" ESCUTCHEON	1/2"	1/2"	2"	2"	1-1/2"	SINK - 36-1/2" X18-1/2" X9" D, UNDERMOUNT SINGLE BOWL, 18 GAUGE, TYPE 304 STAINLESS STEEL, POLISHED SATIN FINISH, BOTTOM GRID, BASKET STRAINER, FAUCET (2) - 1.0 GPM, CHROME PLATED LEAD FREE, 5-3/16" RIGID GOOSENECK SPOUT, DECK MTD, 1/4 TURN VANDAL RESISTANT LEVER HANDLES, DUAL HOT/COLD SUPPLY, SINGLE HOLE INSTALLATION
S-2	SINGLE COMPARTMENT SINK	ELKAY LUSTERTON LAD132255, KOHLER TRITON BOWE K-400770-44KA FAUCET	ZURN P-TRAP, ZURN Z8804-XL-LR-PC STOPS, ZURN BASKET STRAINER	1/2"	1/2"	2"	2"	1-1/2"	SINK - ADA COMPLIANT, 1 COMPARTMENT (31" X22" X5-1/2" D), COUNTER-TOP, SELF RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, CENTER DRAIN OUTLET, TWO FAUCET HOLES ON 4" CENTERS, FAUCET - 1.0 GPM, CHROME PLATED LEAD FREE, 5-3/16" GOOSENECK SPOUT, DECK MTD, 1/4 TURN VANDAL RESISTANT LEVER HANDLES, DUAL HOT/COLD SUPPLY, 4" CENTERS
S-3	SINGLE COMPARTMENT SINK	ELKAY LUSTERTON LAD1918, KOHLER TRITON BOWE K-400770-44KA FAUCET	MCGUIRE 151 BASKET STRAINER, DEARBORN BRASS P9704 TRAP, BRASSCRAFT G2CR19 SUPPLY STOP, BRASSCRAFT 649 5/8" ESCUTCHEON	1/2"	1/2"	3"	3"	1-1/2"	SINK - 19" X18" X6-1/2" D, DROP IN SINGLE BOWL, 18 GAUGE, TYPE 304 STAINLESS STEEL, SELF RIMMING, TWO HOLES, FAUCET - 1.0 GPM, CHROME PLATED LEAD FREE, 5-3/16" GOOSENECK SPOUT, DECK MTD, 1/4 TURN VANDAL RESISTANT LEVER HANDLES, DUAL HOT/COLD SUPPLY, 4" CENTERS
S-4	DOUBLE COMPARTMENT SINK	ELKAY ELUH4D311855, KOHLER FAUCET KOHLER TRITON BOWE K-400770-44KA FAUCET	MCGUIRE 151 BASKET STRAINER, DEARBORN BRASS P9704 TRAP, BRASSCRAFT G2CR19 SUPPLY STOP, BRASSCRAFT 649 5/8" ESCUTCHEON	1/2"	1/2"	3"	3"	1-1/2"	SINK - 30.75" X18.5" X6.375" D, UNDERMOUNT DOUBLE BOWL, 18 GAUGE, TYPE 304 STAINLESS STEEL, FAUCET - 1.0 GPM, CHROME PLATED LEAD FREE, 5-3/16" GOOSENECK SPOUT, DECK MTD, 1/4 TURN VANDAL RESISTANT LEVER HANDLES, DUAL HOT/COLD SUPPLY, 4" CENTERS
SS-1	LAUNDRY SINK	MAUSTE #19CF	-	1/2"	1/2"	2"	2"	1-1/2"	LAUNDRY SINK - FREE STANDING LAUNDRY TUB SINK, ONE PIECE MOLDED THERMOPLASTIC, INTEGRALLY MOLDED DRAIN ASSEMBLY, STOPPER, HEAVY GAUGE FINISHED STEEL LEGS, WHITE FINISH, FAUCET - 6" SWING SPOUT, TWO 20" FLEXIBLE SUPPLY LINES
WB-1	WASHING MACHINE BOX	GUY GRAY #MWB-16	-	1/2"	1/2"	2"	2"	2"	WASHER BOX - 10-7/8" X8-3/8" X2-1/2", FIRE RATED WHITE POWDER COATED 20 GAUGE STEEL WALL BOX, BOTTOM SUPPLY VALVES, LEAD FREE BRASS, QUARTER TURN, SWEAT INLET CONNECTIONS, INTEGRAL HAMMER ARRESTORS, 2" BOTTOM WASTE OUTLET
SB-1	ICE MAKER BOX	GUY GRAY BIM75	-	1/2"	-	-	-	-	11.62" X 9-1/2" X 3-1/2" 18 GAUGE STEEL ICE MAKER BOX WITH VALVE
HR-1	HOSE BIBB	ZURN Z-1350 NARROW WALL HYDRANT	-	1/2"	-	-	-	-	ENCASED WALL HYDRANT, BRONZE BODY AND INTERNAL PARTS, SCREWDRIVER OPERATED STOP VALVE, KEY OPERATED CONTROL VALVE

PLUMBING SPECIALTIES SCHEDULE						
DESIGNATION	FIXTURE	DESCRIPTION	SIZE	PIPE CONNECTION SIZE		
				COLD WATER	HOT WATER	TRAP
TMV-1	MIXING VALVE	LEONARD VALVE - TM-2020R-1F-DT, MIXING VALVE - 65 GPM @ 10 PSI DROP, THERMOSTATIC MIXING VALVE, HI-LO STYLE. INSTALL PER MANUFACTURER'S INSTRUCTIONS.	SAME AS PIPE SIZE	-	-	-
FSQ	FLOOR CLEANOUT	ZURN ZN-1400-BP-VP "LEVEL-TROL", CAST IRON, GASKETED HUB OUTLET, THREADED ADJUSTABLE HOUSING, BRONZE PLUG, NICKEL BRONZE SCORAIATED TOP, VANDAL-PROOF SCREWS.	AS NOTED	-	-	-
WCO	WALL CLEANOUT	ZURN Z-1442-BP-VP, CAST IRON NO-HUB CLEANOUT FERRULE, BRONZE PLUG, STAINLESS STEEL ROUND ACCESS COVER PLATE, VANDAL-PROOF SCREW.	AS NOTED	-	-	-
FD-1	FLOOR DRAIN	ZURN ZN-4155-P, 6" X6" SQUARE POLISHED NICKEL BRONZE STRAINER, 1/2" TRAP PRIMER CONNECTION.	AS NOTED	-	-	-
FS-1	FLOOR SINK	ZURN ZN-1901-2-32 WITH CAST IRON BODY AND NICKEL BRONZE FRAME AND 1/2" GRATE	AS NOTED	-	-	-
ET-1	EXPANSION TANK	AMTROL THERM-X-TROL MODEL NO. ST-30VC-DD, 16.5 GALLON IN-LINE DIAPHRAGM EXPANSION TANK. MAXIMUM WORKING PRESSURE 150 PSIG	AS NOTED	3/4"	-	-
	WATER HAMMER ARRESTORS	WADE 4800 WATER HAMMER ARRESTOR, SIZED IN ACCORDANCE WITH PDH-WH201 AND ASSE-1010. BELLOWS AND CASING SHALL BE CONSTRUCTED OF STAINLESS STEEL. MAXIMUM WORKING PRESSURE OF 350 PSIG.	AS NOTED	-	-	-

PLUMBING EQUIPMENT SCHEDULE						
DESIGNATION	EQUIPMENT	BASIS OF DESIGN	PIPING CONNECTIONS	ELECTRIC (VOLT / PH / HZ)	POWER	REMARKS
CP-1 & CP-2	CIRCULATION PUMP	TACO 009	3/4" HWR	HARDWIRED 120V / 1 / 60	1/8 HP, 1.4 A	HOT WATER CIRCULATOR PUMP - 4 GPM @ 37' HD, 7" X4-1/8" X3-3/8", CAST IRON CASING, ALUMINUM STATOR HOUSING, STAINLESS STEEL CARTRIDGE, NON-METALLIC IMPELLER, CERAMIC SHAFT, CARBON BEARINGS, EPDM O-RINGS/GASKETS, SELF LUBRICATING, DIRECT DRIVE, REPLACEABLE CARTRIDGE DESIGN, NO MECHANICAL SEAL











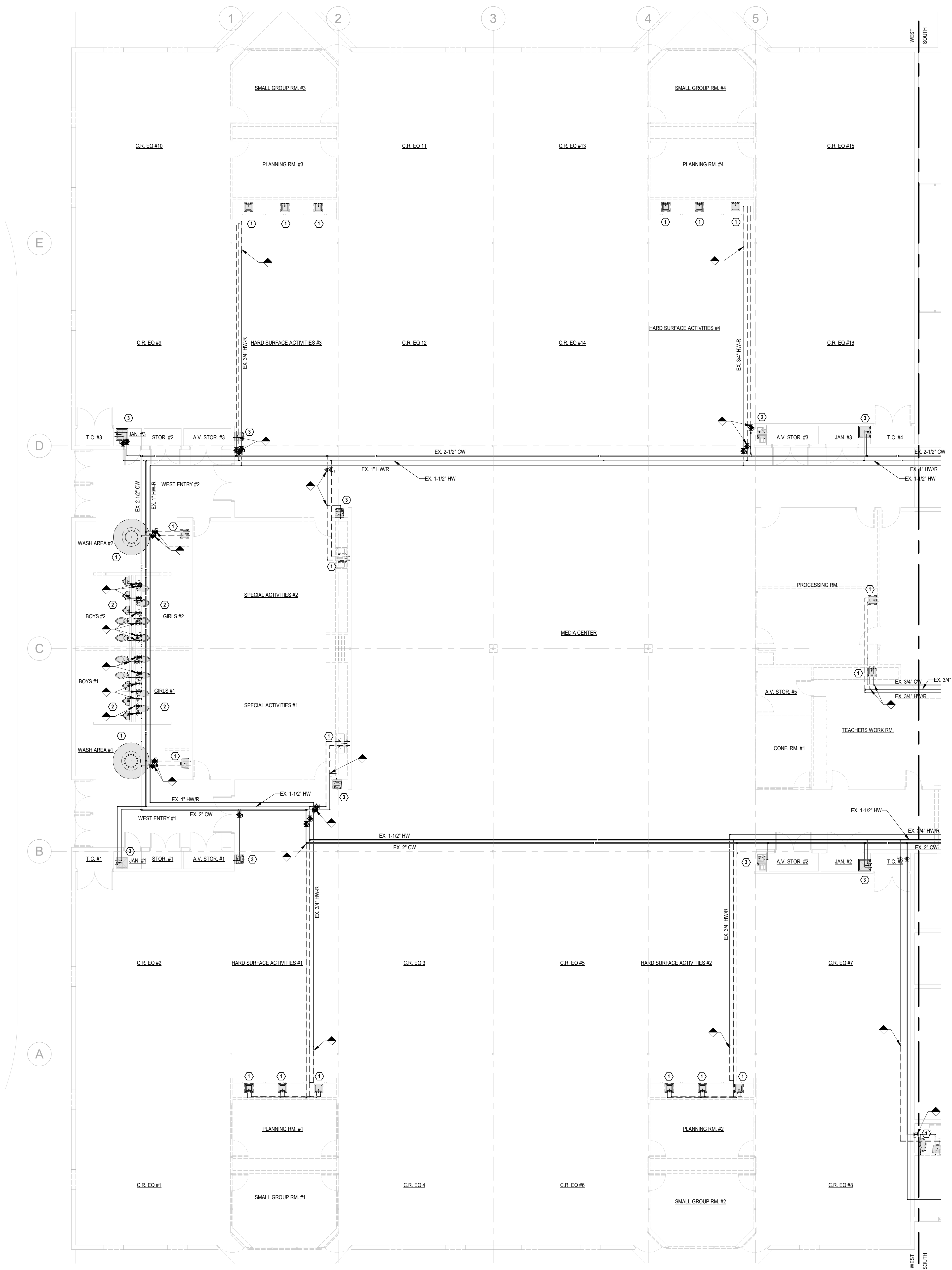


**DEMOLITION GENERAL NOTES**

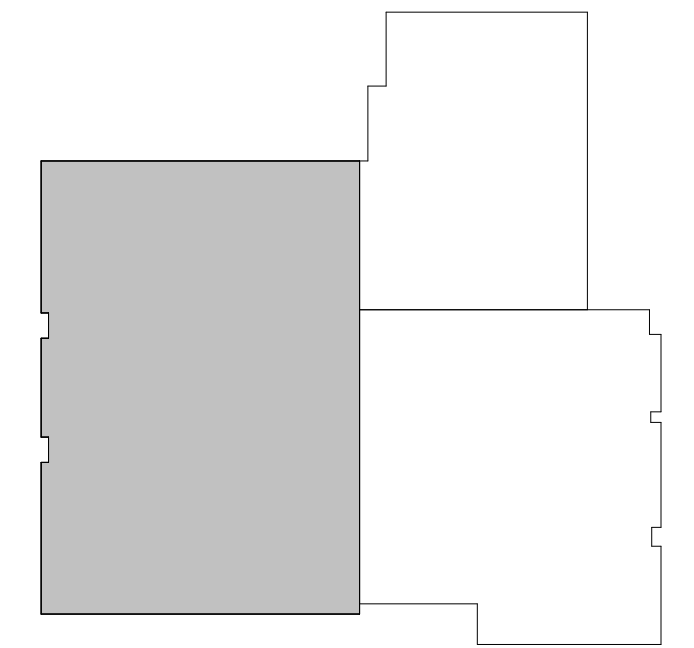
- 1. DEMOLISH ALL UNUSED OR ABANDONED PIPING BACK TO MAIN, CAP AND VALVE AS REQUIRED.

**DEMOLITION KEYED NOTES**

- ① DEMOLISH EXISTING FIXTURE AND ASSOCIATED PIPING.
- ② DEMOLISH EXISTING FIXTURE AND REWORK EXISTING ROUGH-IN FOR NEW FIXTURE.
- ③ EXISTING FIXTURE TO REMAIN.



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AREA "A"

**1** FIRST FLOOR PLAN AREA A - DOMESTIC WATER DEMOLITION  
1/8" = 1'-0"

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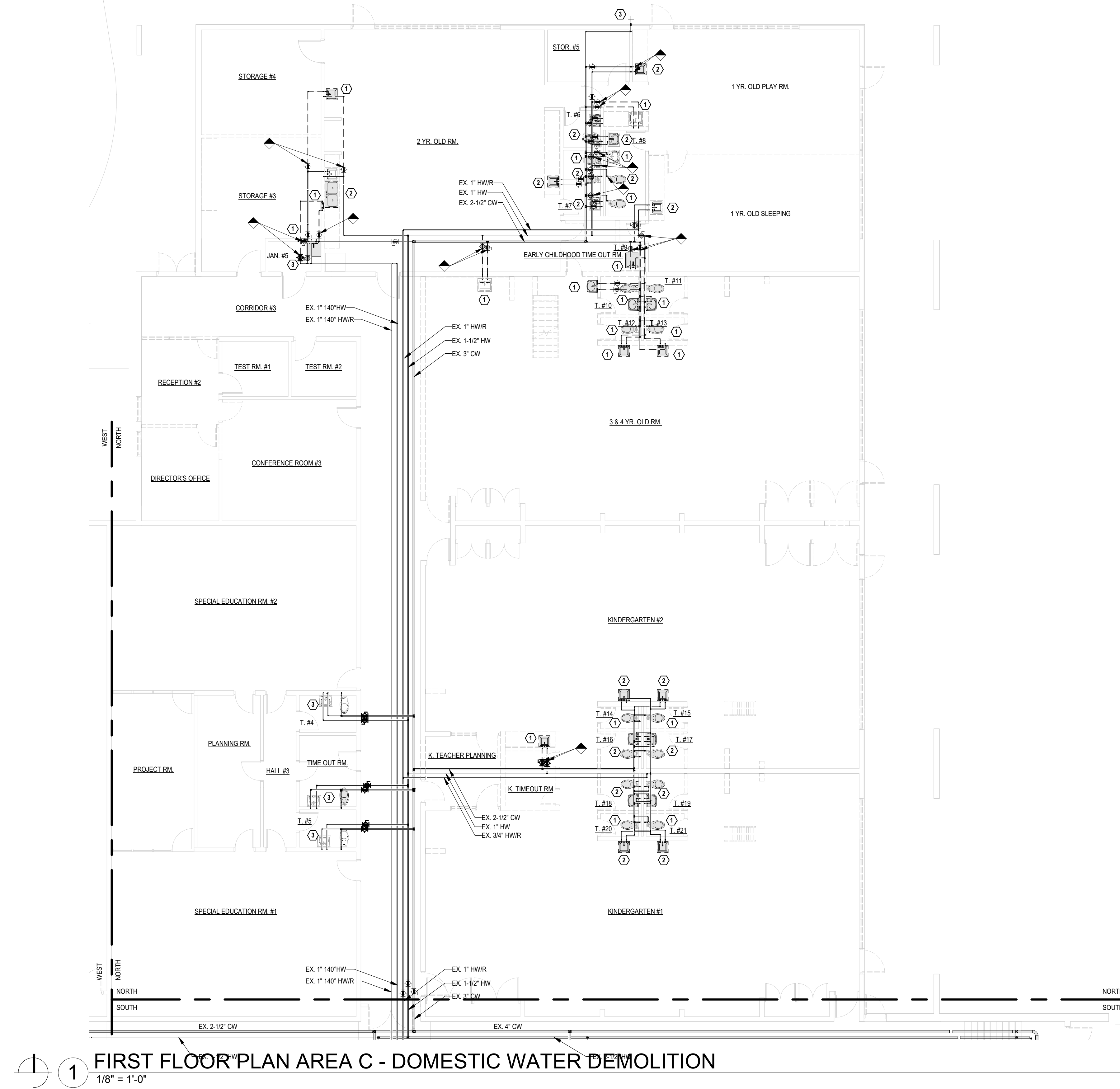


**DEMOLITION GENERAL NOTES**

- 1. DEMOLISH ALL UNUSED OR ABANDONED PIPING BACK TO MAIN, CAP AND VALVE AS REQUIRED.

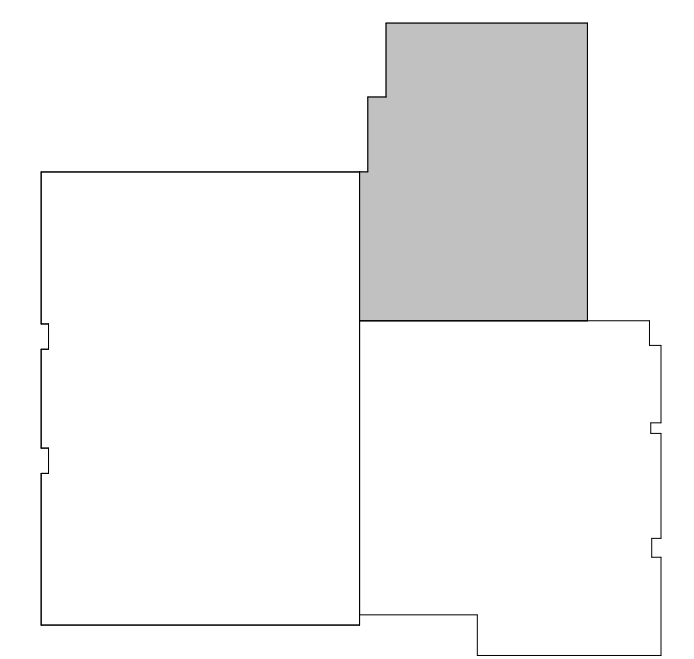
**DEMOLITION KEYED NOTES**

- ① DEMOLISH EXISTING FIXTURE AND ASSOCIATED PIPING.
- ② DEMOLISH EXISTING FIXTURE AND REWORK EXISTING ROUGH-IN FOR NEW FIXTURE.
- ③ EXISTING FIXTURE TO REMAIN.

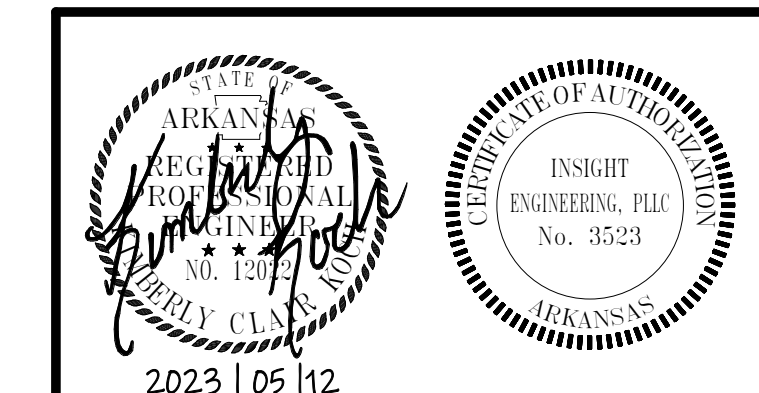


1 FIRST FLOOR PLAN AREA C - DOMESTIC WATER DEMOLITION  
1/8" = 1'-0"

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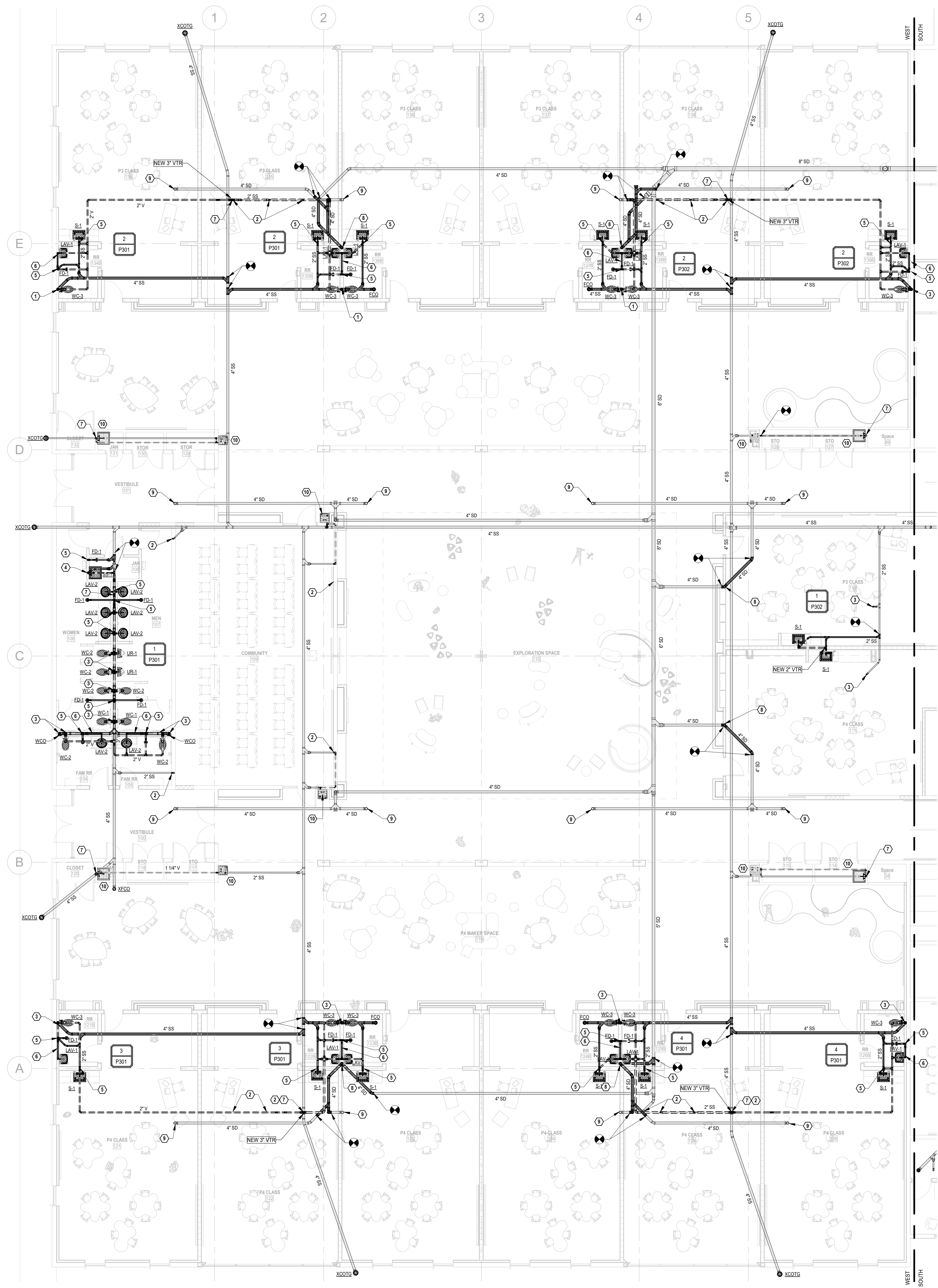


AREA "C"



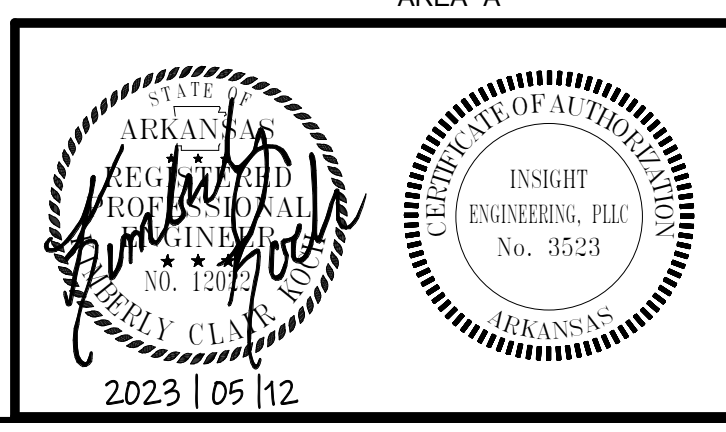
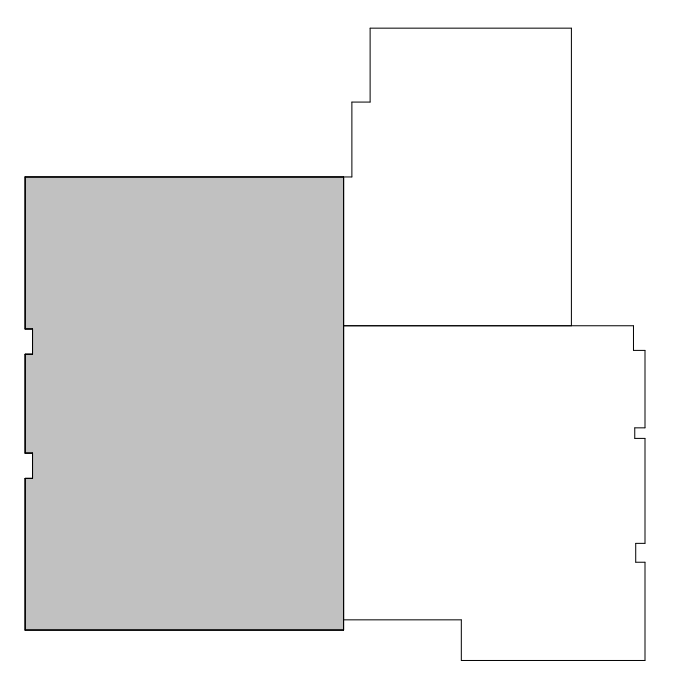
Architect: David J. O'Neil, Licensed Professional Engineer, State of Arkansas, License No. 12345. Project No. 22-046. Date: 5/22/24. Scale: 1/8" = 1'-0".





- KEYED NOTES**
- ① REWORK EXISTING ROUGH IN AND INSTALL NEW FIXTURE.
  - ② CAP EXISTING PIPING BELOW FLOOR, ABOVE CEILING OR IN WALL, AS REQUIRED.
  - ③ 4" SS DOWN TO BELOW FLOOR.
  - ④ 3" SS DOWN TO BELOW FLOOR.
  - ⑤ 2" SS DOWN TO BELOW FLOOR.
  - ⑥ SANITARY PIPING ABOVE FLOOR.
  - ⑦ EXISTING VTR PENETRATION.
  - ⑧ 4" SD DOWN TO BELOW FLOOR.
  - ⑨ EXISTING 4" SD UP TO ROOF DRAIN.
  - ⑩ EXISTING FIXTURE TO REMAIN.

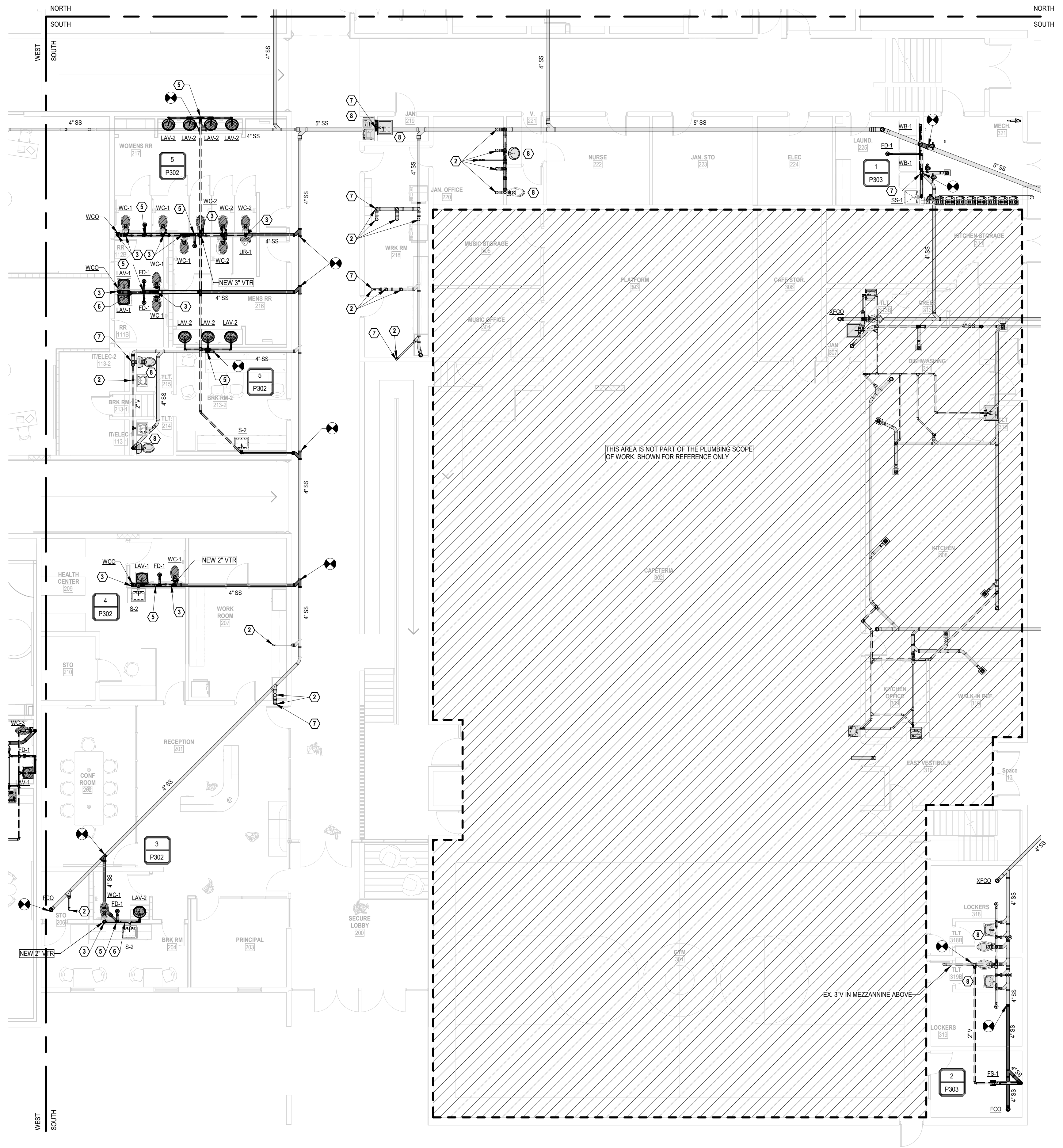
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1 FIRST FLOOR PLAN AREA A - SANITARY SEWER AND VENT  
1/8" = 1'-0"

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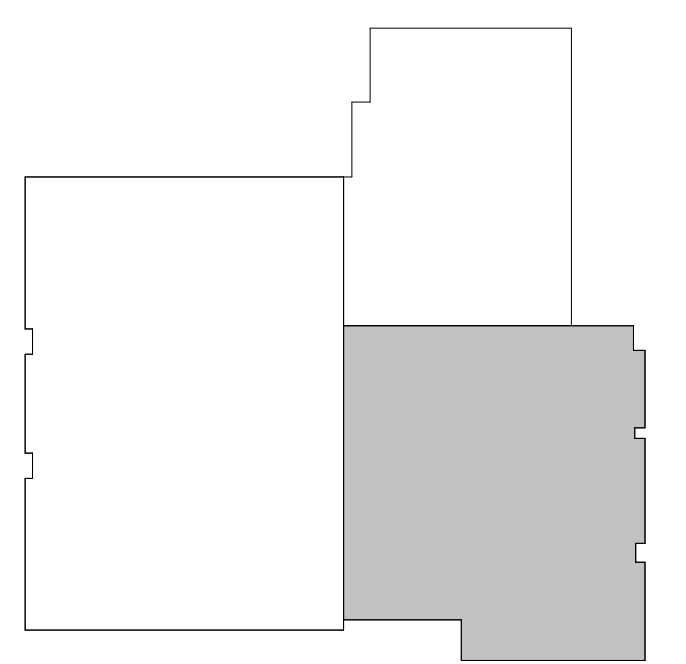




KEYED NOTES	
①	REWORK EXISTING ROUGH IN AND INSTALL NEW FIXTURE.
②	CAP EXISTING PIPING BELOW FLOOR, ABOVE CEILING OR IN WALL, AS REQUIRED.
③	4" SS DOWN TO BELOW FLOOR.
④	3" SS DOWN TO BELOW FLOOR.
⑤	2" SS DOWN TO BELOW FLOOR.
⑥	SANITARY PIPING ABOVE FLOOR.
⑦	EXISTING VTR.
⑧	EXISTING FIXTURE TO REMAIN.

THIS AREA IS NOT PART OF THE PLUMBING SCOPE OF WORK SHOWN FOR REFERENCE ONLY

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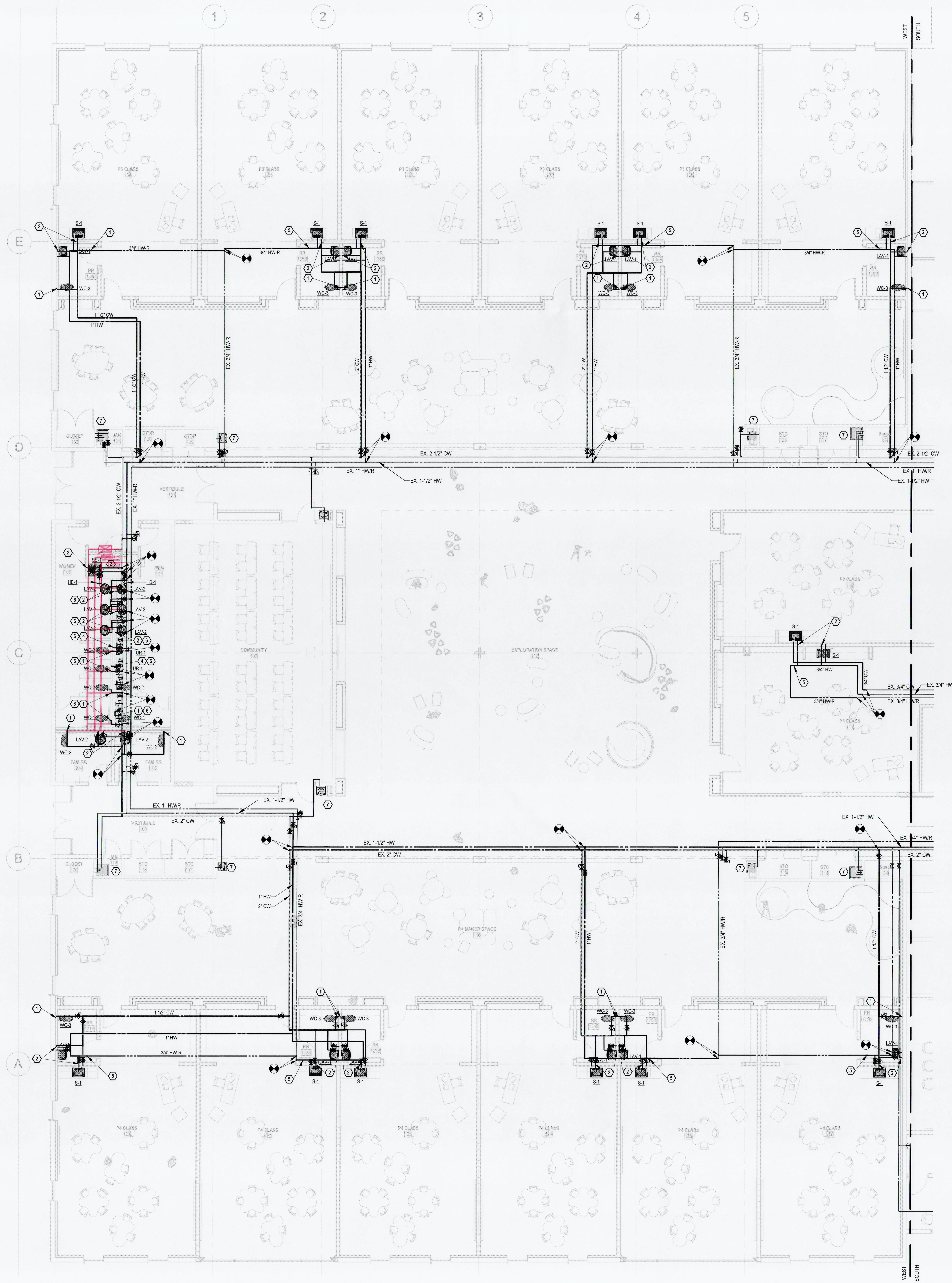
AREA "B"

**1** FIRST FLOOR PLAN AREA B - SANITARY SEWER AND VENT  
1/8" = 1'-0"

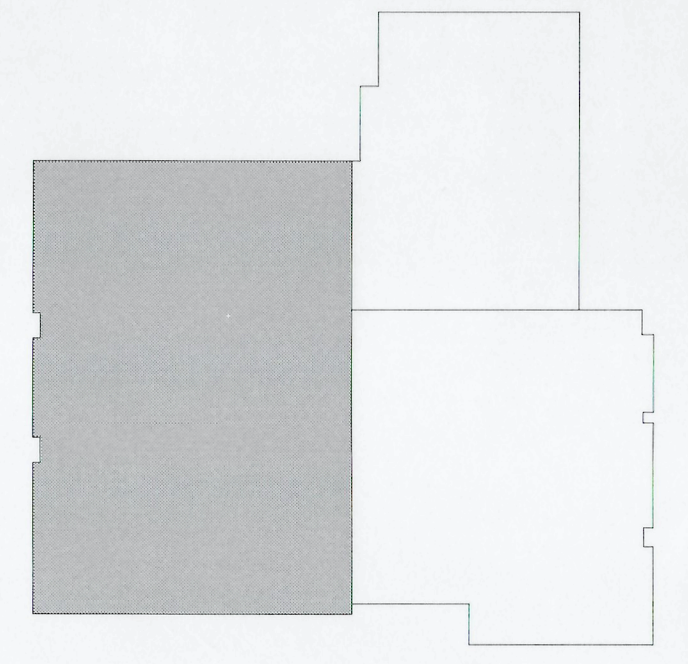
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KEYED NOTES	
①	1" CW DOWN TO FIXTURE.
②	1/2" HW & CW DOWN TO FIXTURE.
③	1/2" CW DOWN TO FIXTURE.
④	3/4" CW DOWN TO FIXTURE.
⑤	THERMOSTATIC BALANCING VALVE EQUAL TO CIRCUITSOLVER MODEL CS-34-120.
⑥	REWORK EXISTING PLUMBING ROUGH-IN AND CONNECT NEW FIXTURE.
⑦	EXISTING FIXTURE TO REMAIN.



AREA "A"

① FIRST FLOOR PLAN AREA A - DOMESTIC WATER  
1/8" = 1'-0"

NO.	DATE	DESCRIPTION
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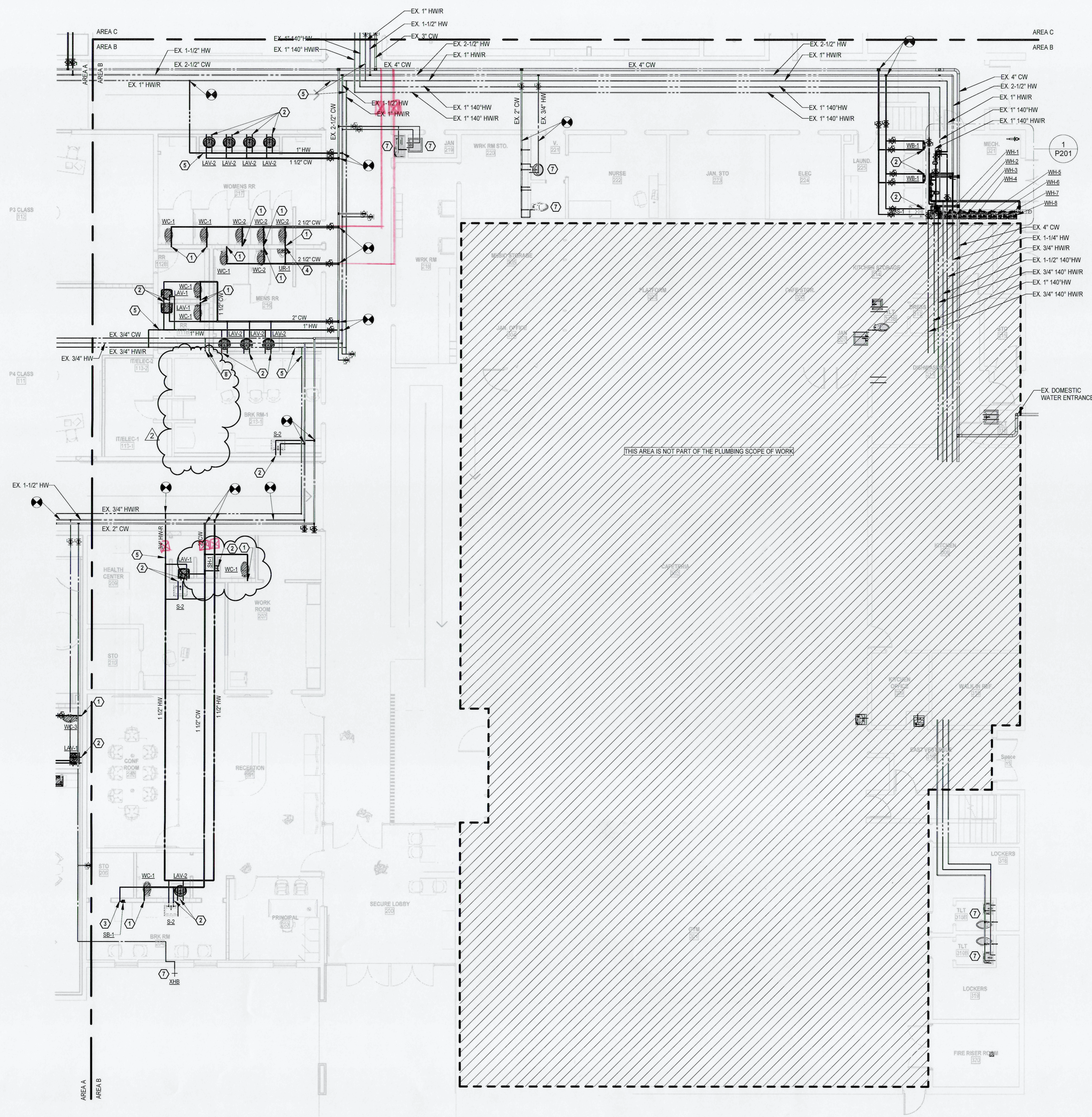
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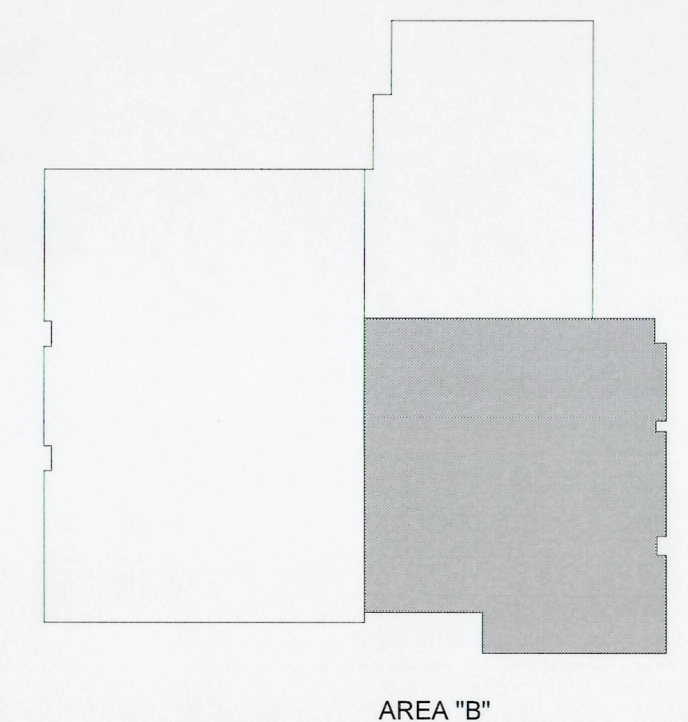
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 Arkansas State Board of Professional Engineers, Inc. - Registration No. 35223  
 2023 | 05 | 12





KEYED NOTES	
①	1" CW DOWN TO FIXTURE.
②	1/2" HW & CW DOWN TO FIXTURE.
③	1/2" CW DOWN TO FIXTURE.
④	3/4" CW DOWN TO FIXTURE.
⑤	THERMOSTATIC BALANCING VALVE EQUAL TO CIRCUITSOLVER MODEL: CS-PIPE SIZE-120.
⑥	REWORK EXISTING PLUMBING ROUGH-IN AND CONNECT NEW FIXTURE.
⑦	EXISTING FIXTURE TO REMAIN.
⑧	CAP DOMESTIC WATER ABOVE CEILING.

1 FIRST FLOOR PLAN AREA B - DOMESTIC WATER  
1/8" = 1'-0"



2023 | 05 | 12

NO.	DATE	DESCRIPTION
1	2023-05-24	ADDENDUM #2
2	2023-09-06	PR #6

*ASB:HS*  
*5/14/24*  
*CH*

22-046

2023 | 05 | 12

ISSUE

P111

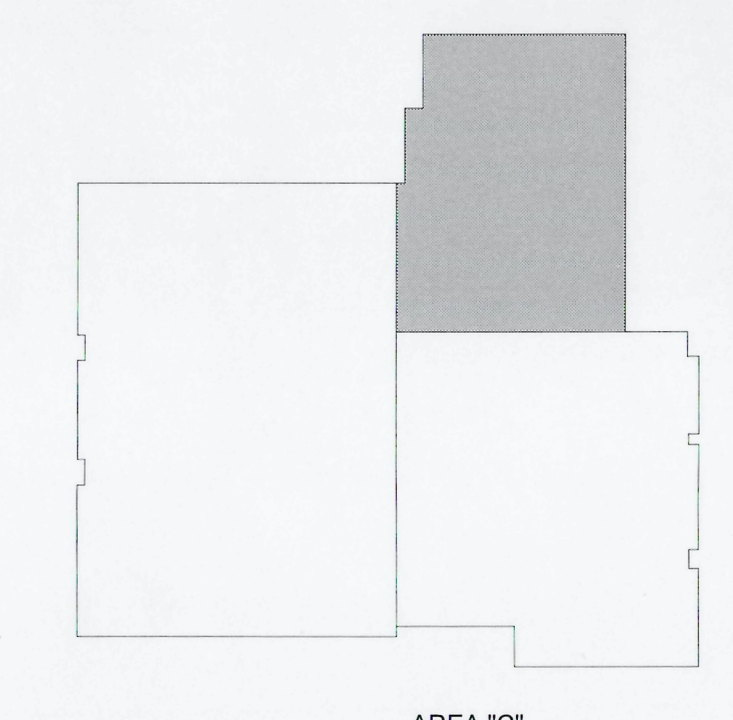
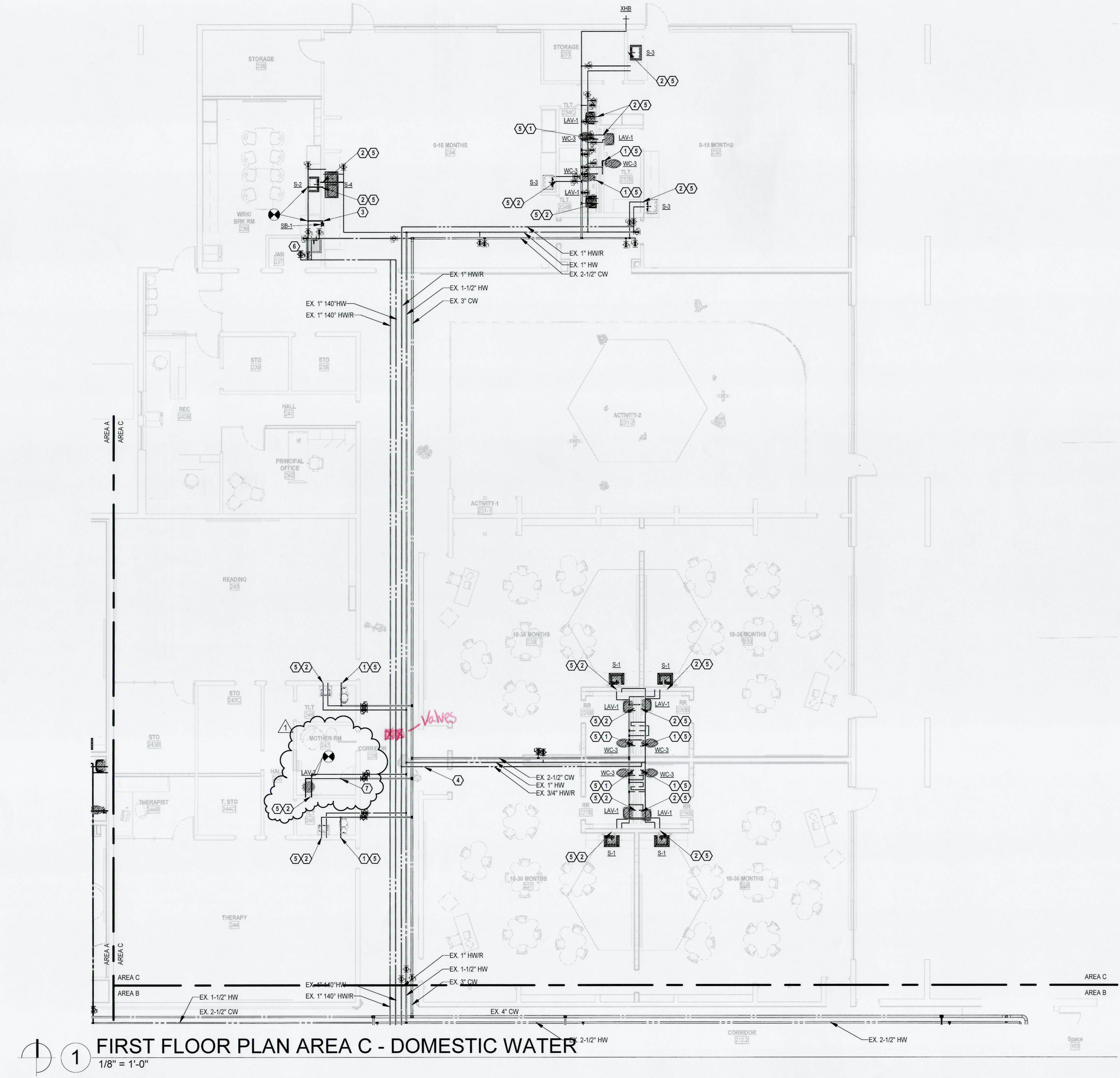


GENERAL NOTES

1. SAMPLE TEXT...
2. SAMPLE TEXT...
3. SAMPLE TEXT...
4. SAMPLE TEXT...

KEYED NOTES

- ① 1" CW DOWN TO FIXTURE.
- ② 1/2" HW & CW DOWN TO FIXTURE.
- ③ 1/2" CW DOWN TO FIXTURE.
- ④ THERMOSTATIC BALANCING VALVE EQUAL TO CIRCUITSOLVER MODEL CS-34-120.
- ⑤ REWORK EXISTING PLUMBING ROUGH-IN AND CONNECT NEW FIXTURE.
- ⑥ EXISTING FIXTURE TO REMAIN.
- ⑦ CAP WATER PIPING ABOVE CEILING.



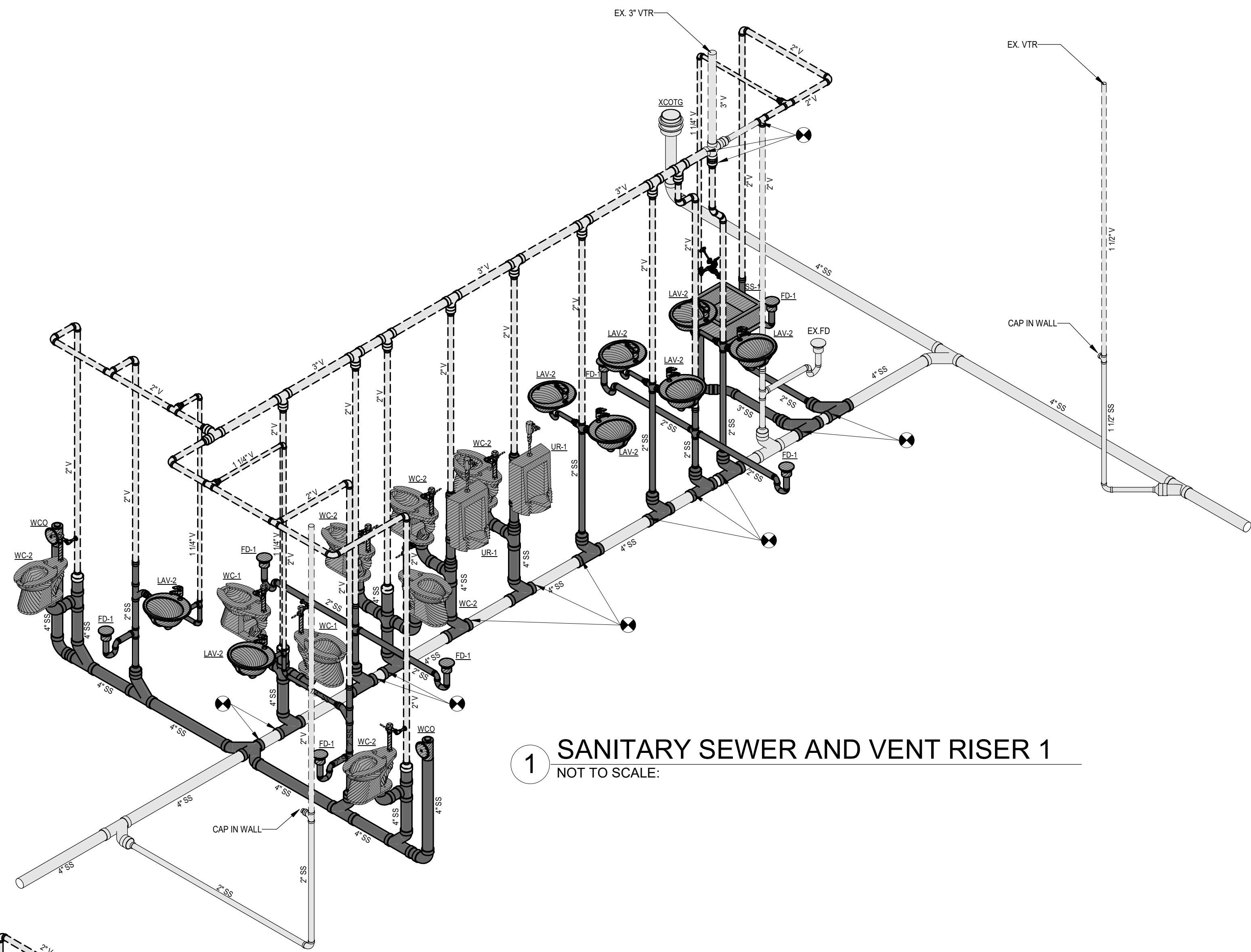
AREA "C"

AR 2023.3 3.18.23 PM Arkansas Council of Professional Engineers & Surveyors, Inc. Registration No. 1001 Licensed Professional Engineer - PLS

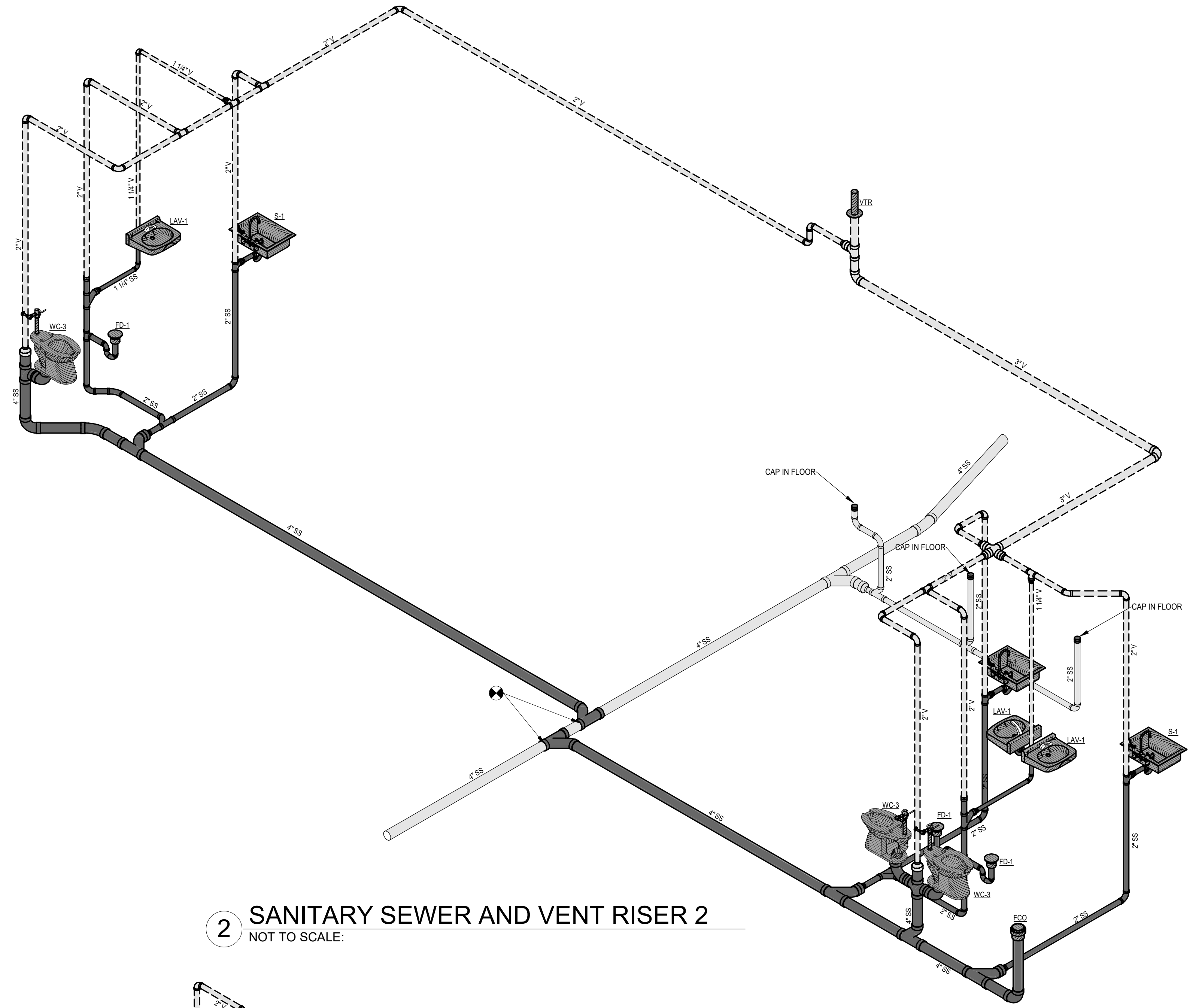




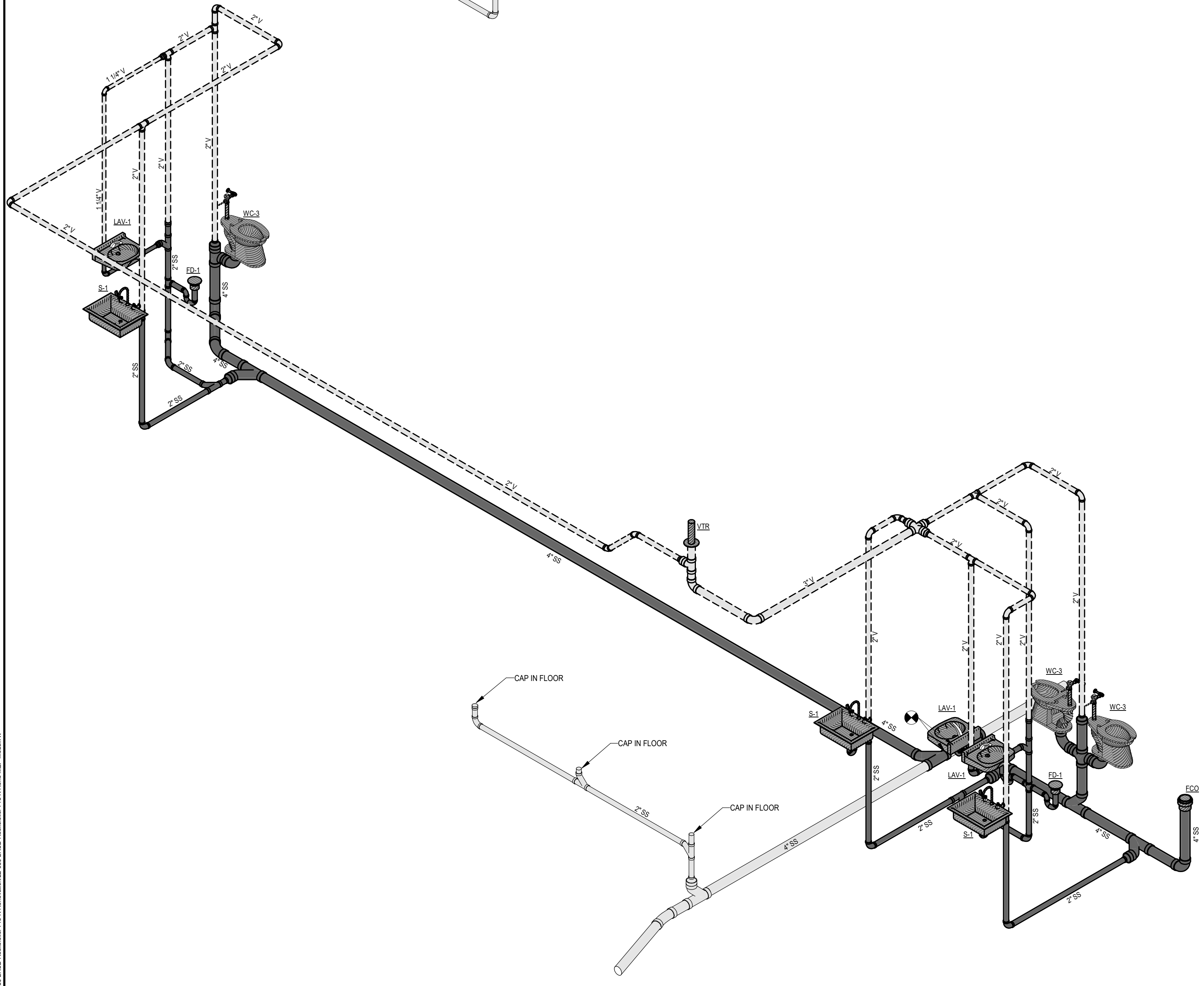




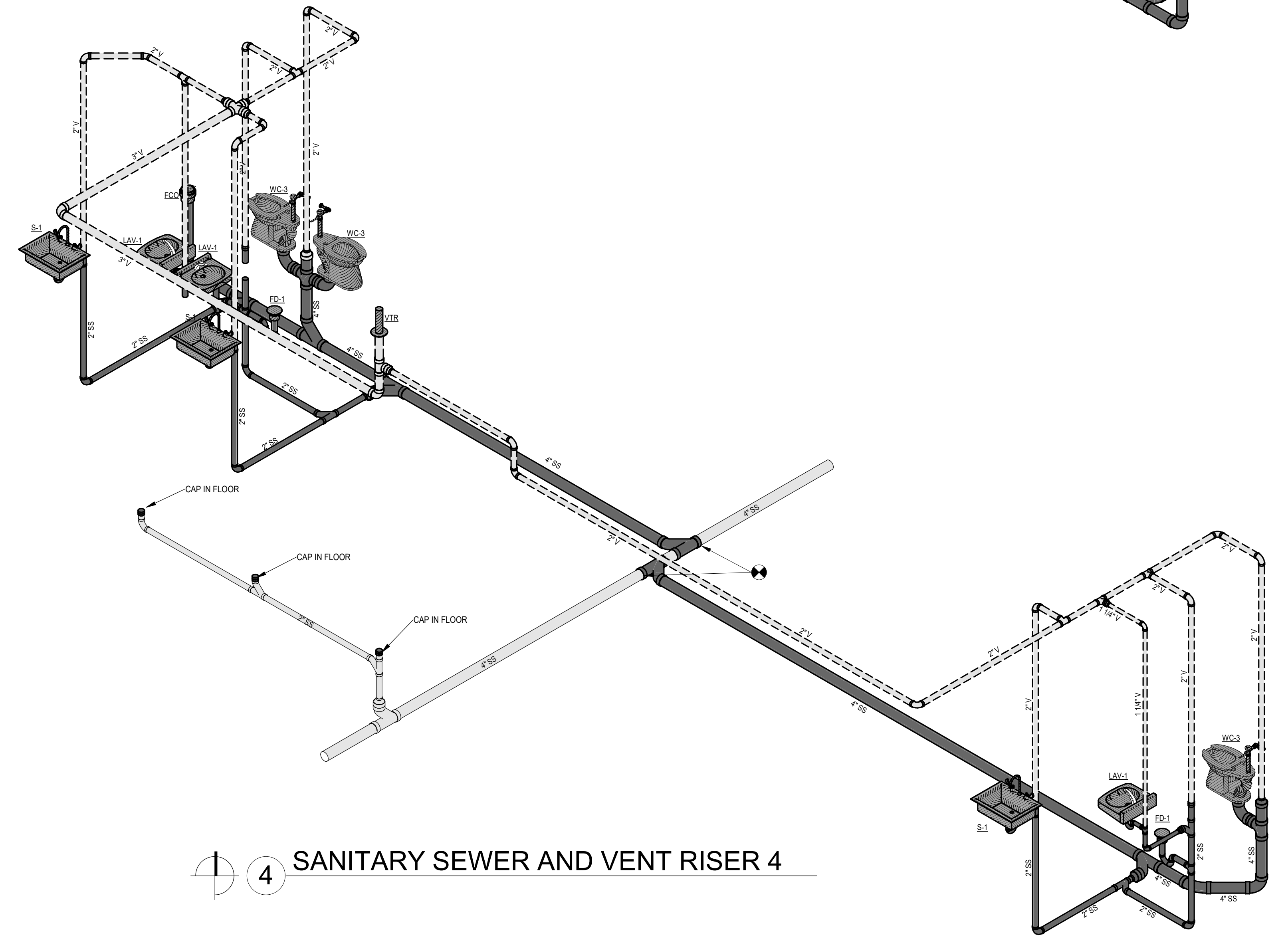
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NOT TO SCALE:



**2** SANITARY SEWER AND VENT RISER 2  
NOT TO SCALE:

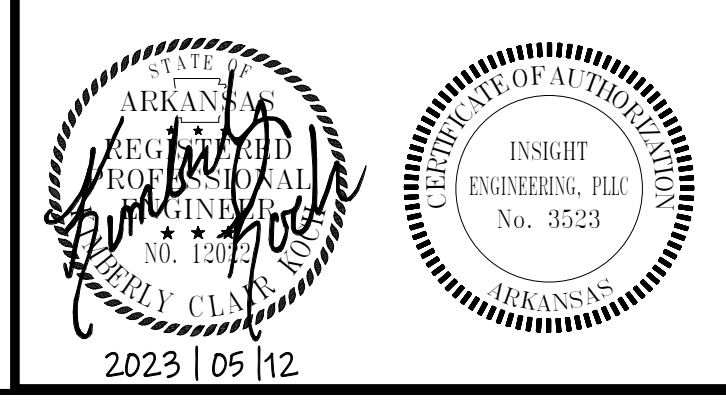


**3** SANITARY SEWER AND VENT RISER 3  
NOT TO SCALE:



**4** SANITARY SEWER AND VENT RISER 4

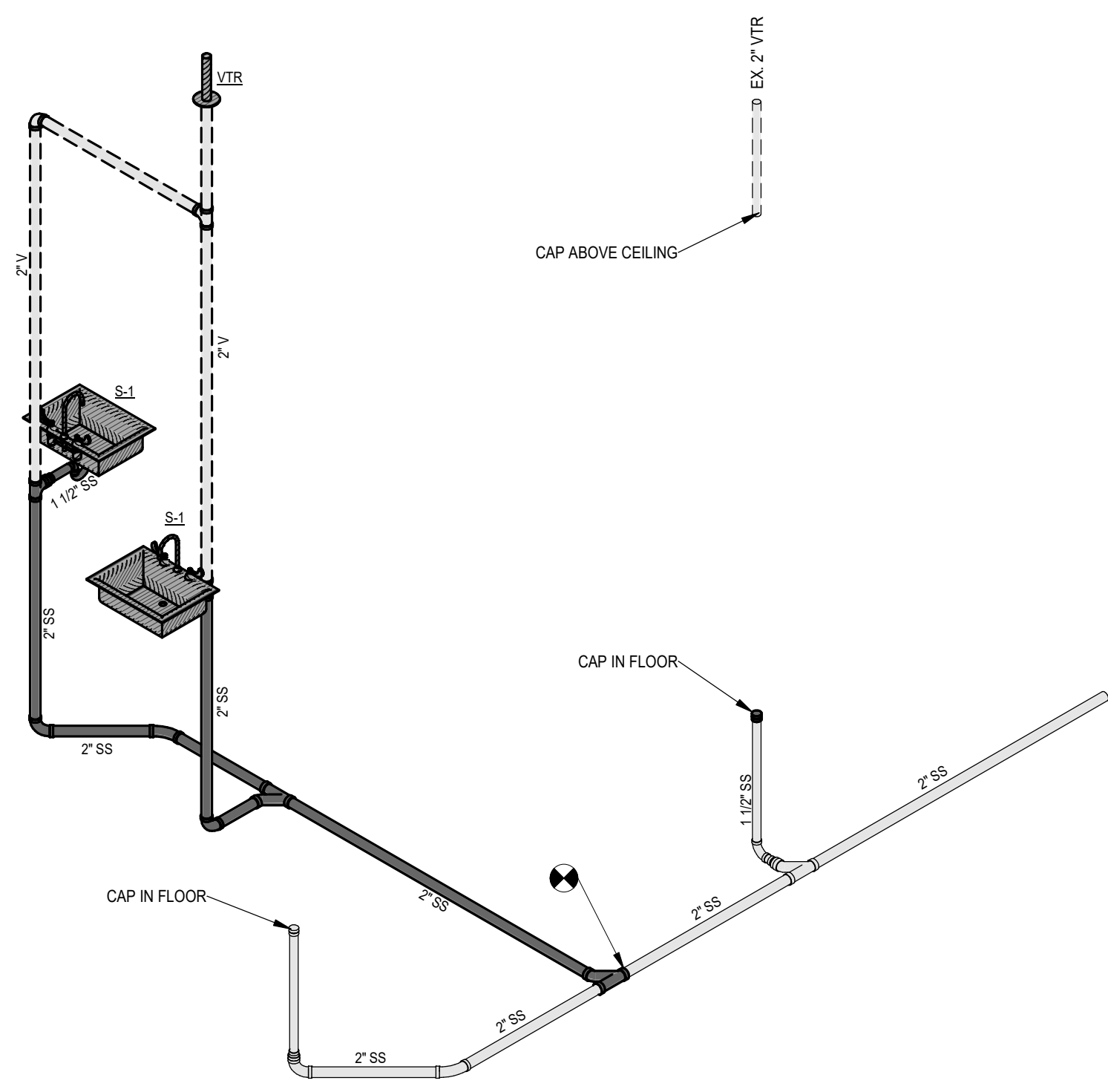
As-Builts  
CSUSA  
5/22/24  
MA



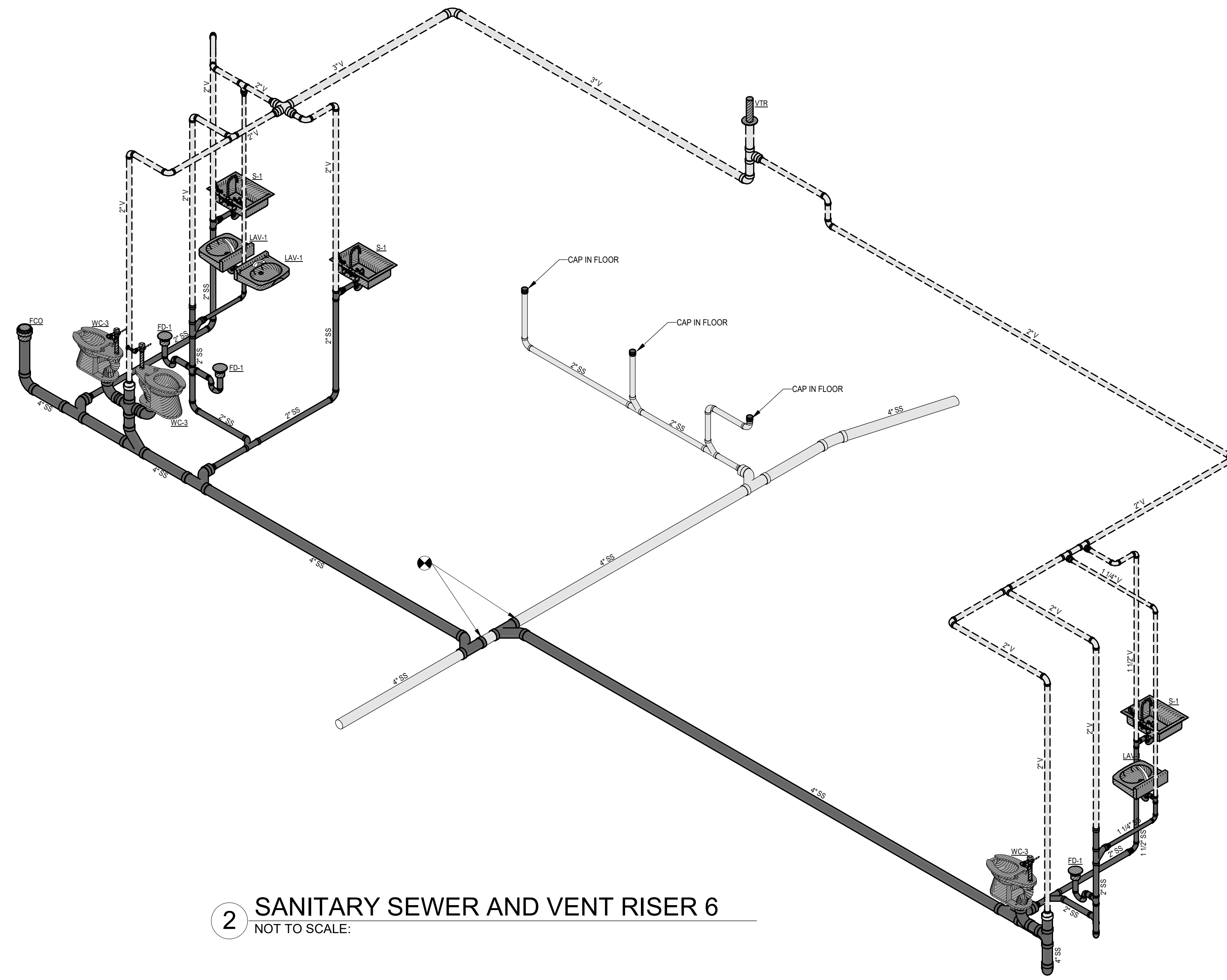
Architect: David J. O'Neil, Licensed Professional Engineer, No. 10527, State of Arkansas  
 Engineer: David J. O'Neil, Licensed Professional Engineer, No. 10527, State of Arkansas  
 Designer: David J. O'Neil, Licensed Professional Engineer, No. 10527, State of Arkansas  
 Checker: David J. O'Neil, Licensed Professional Engineer, No. 10527, State of Arkansas  
 Date: 5/22/24



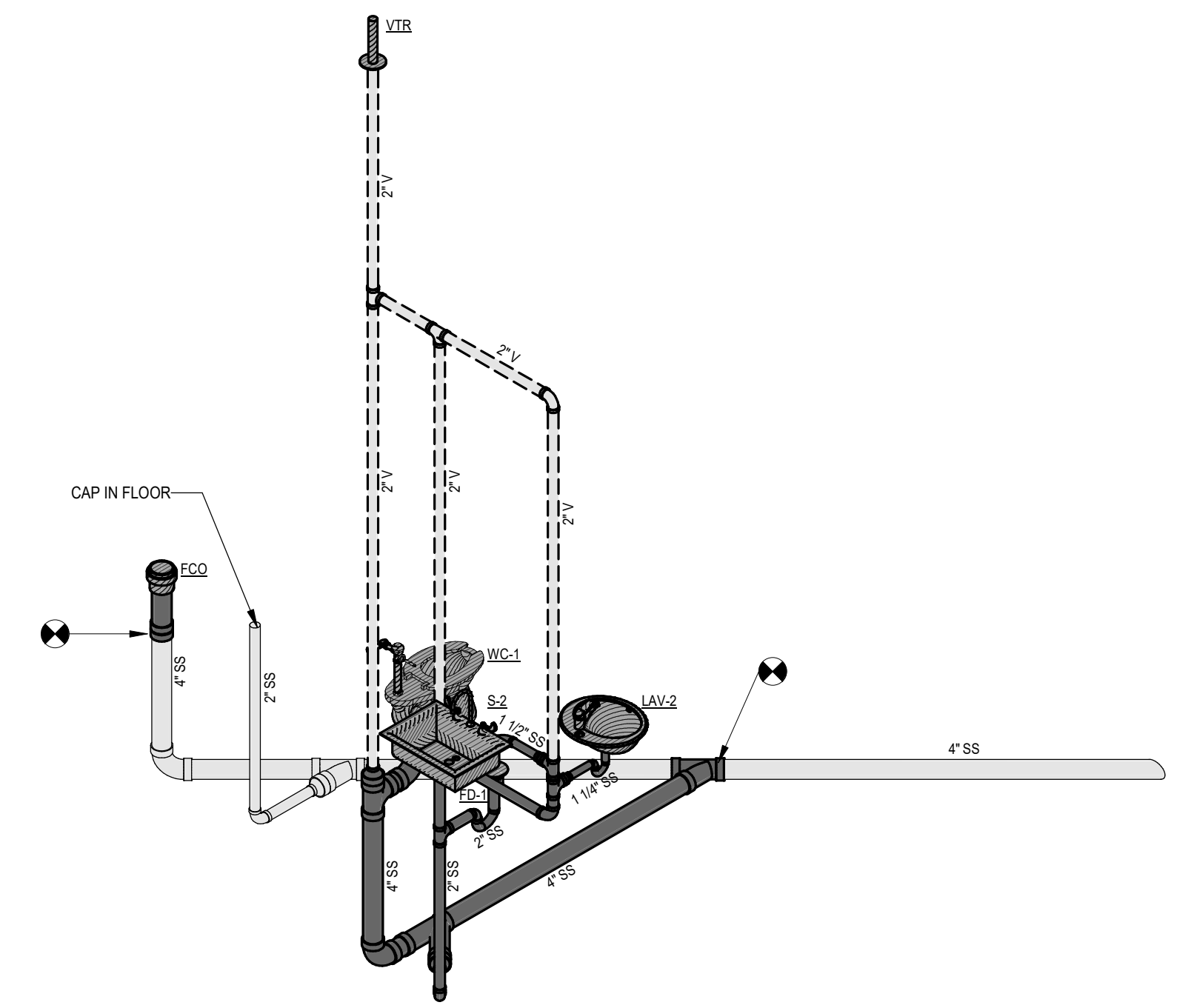
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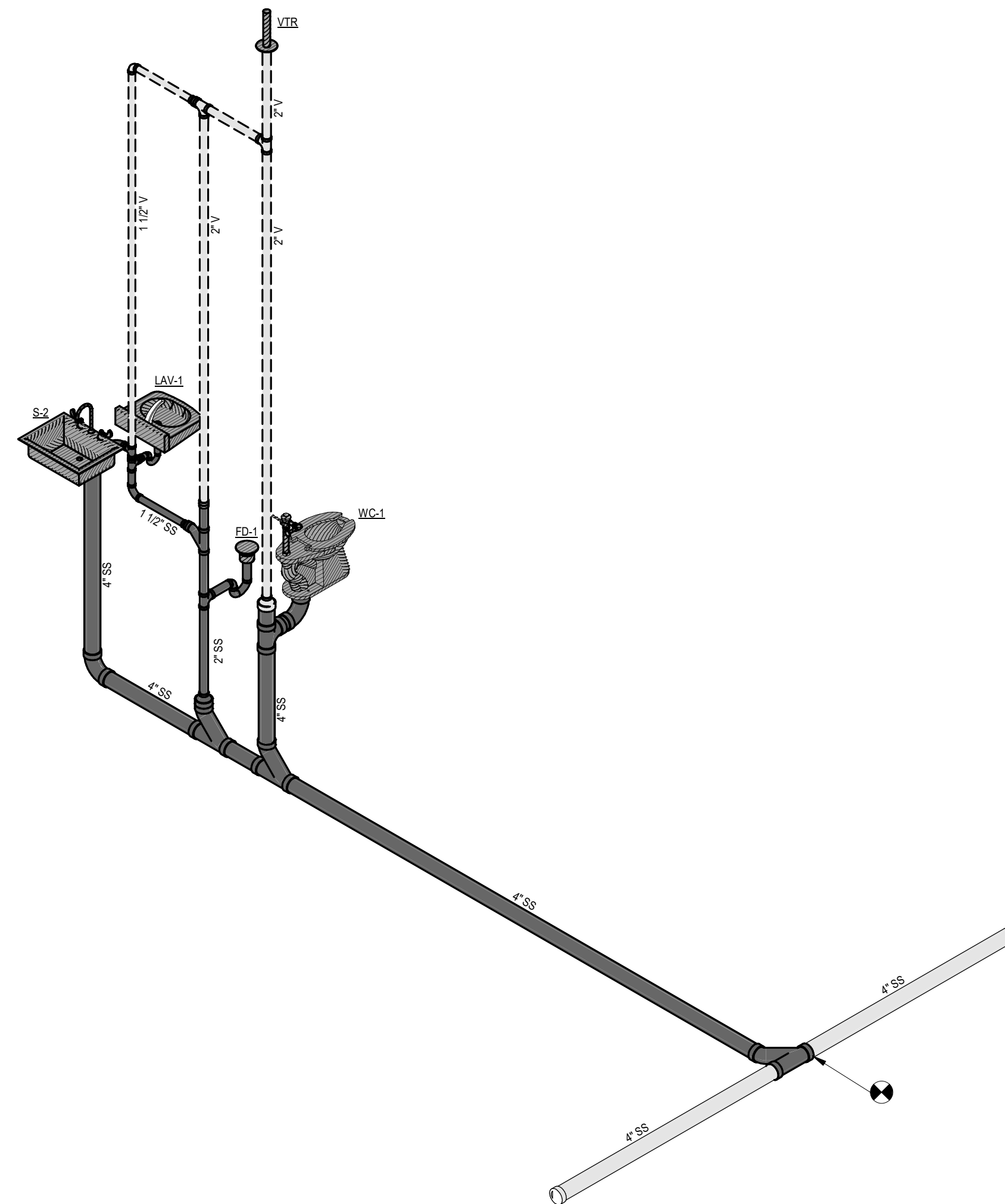
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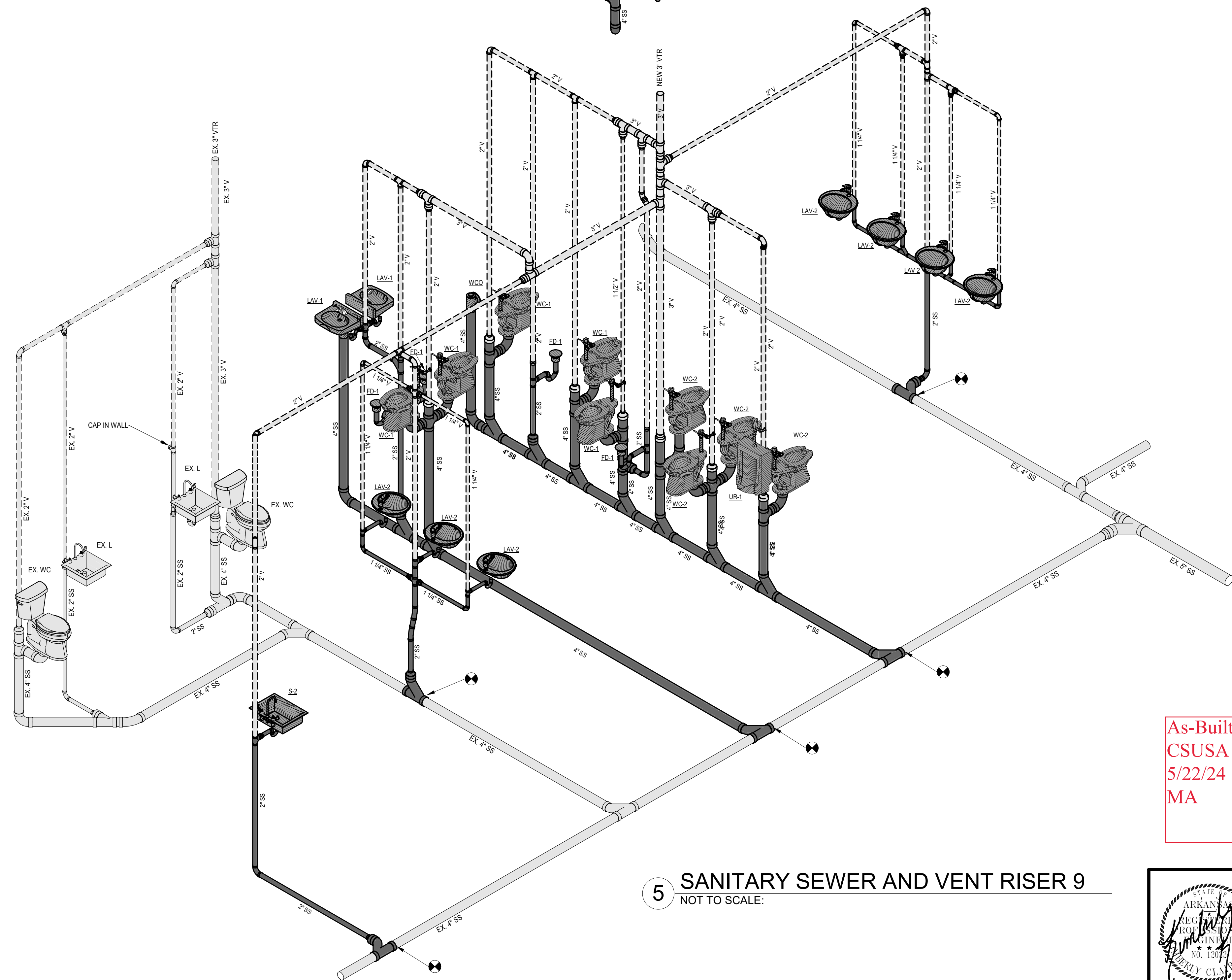
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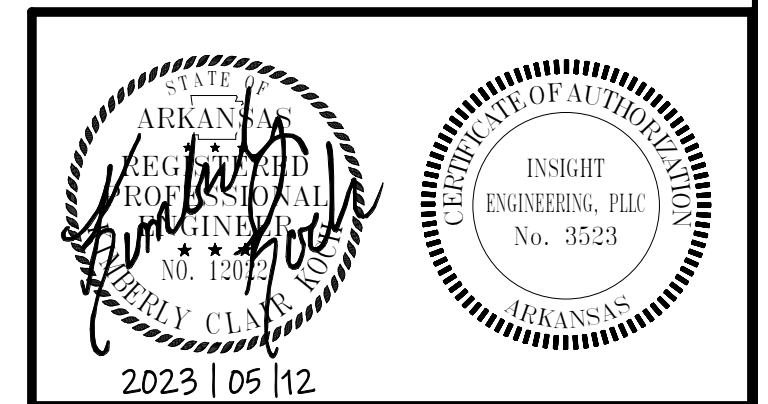
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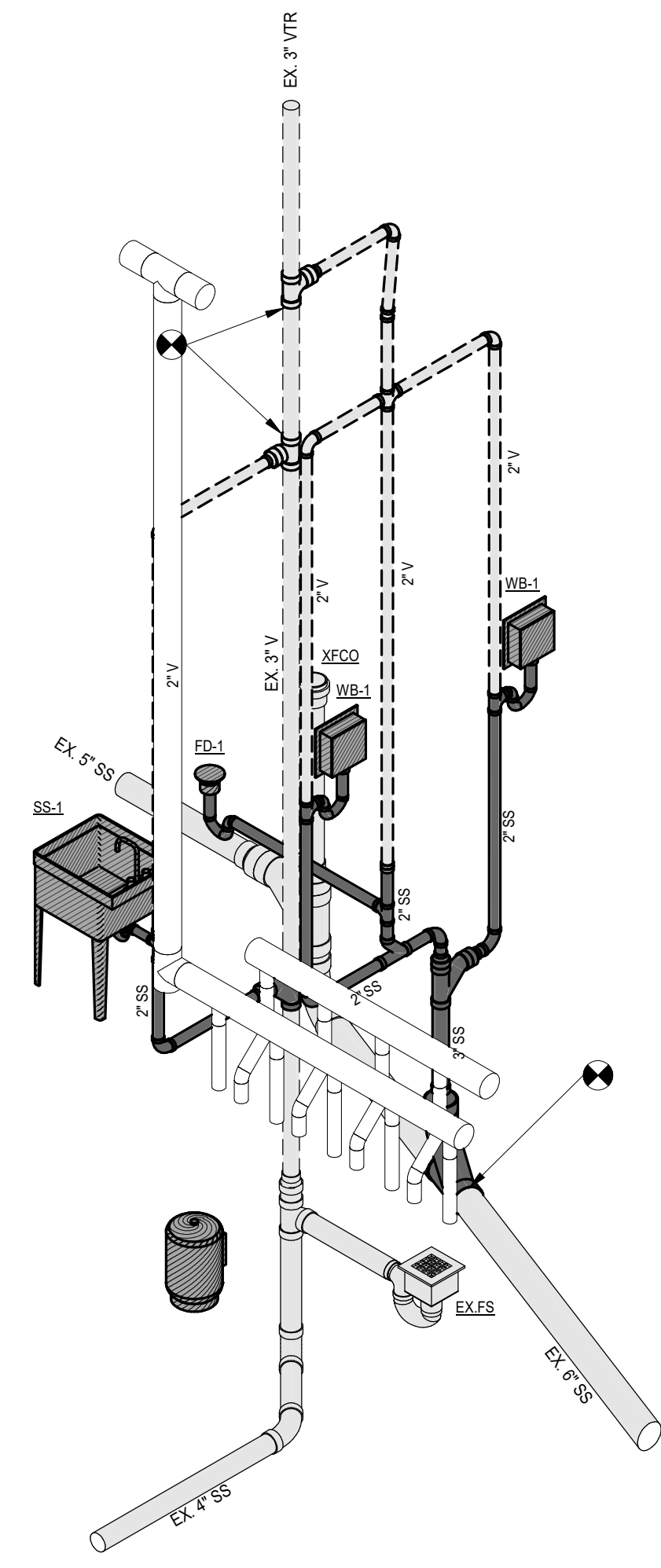
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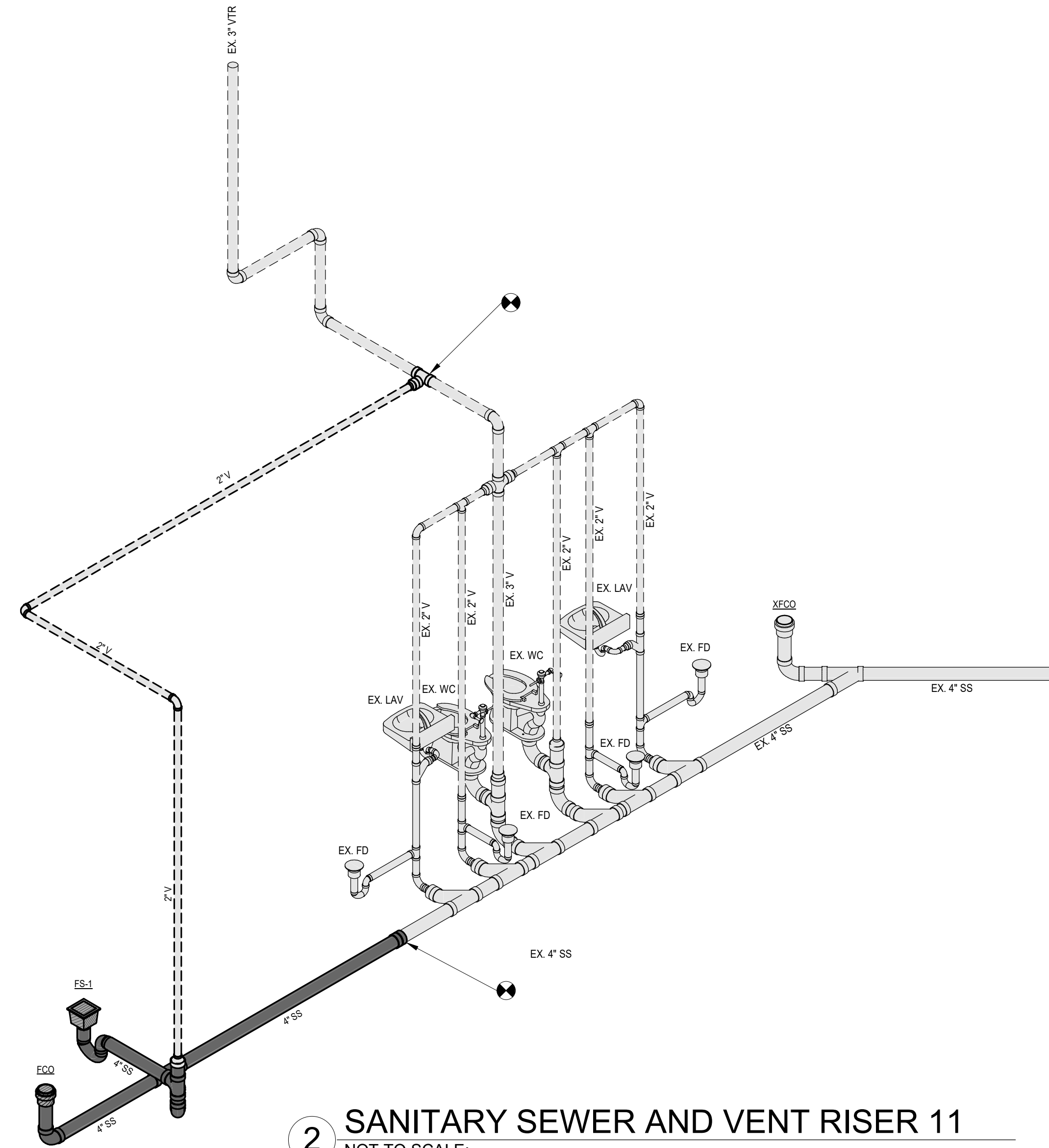
As-Builts  
CSUSA  
5/22/24  
MA



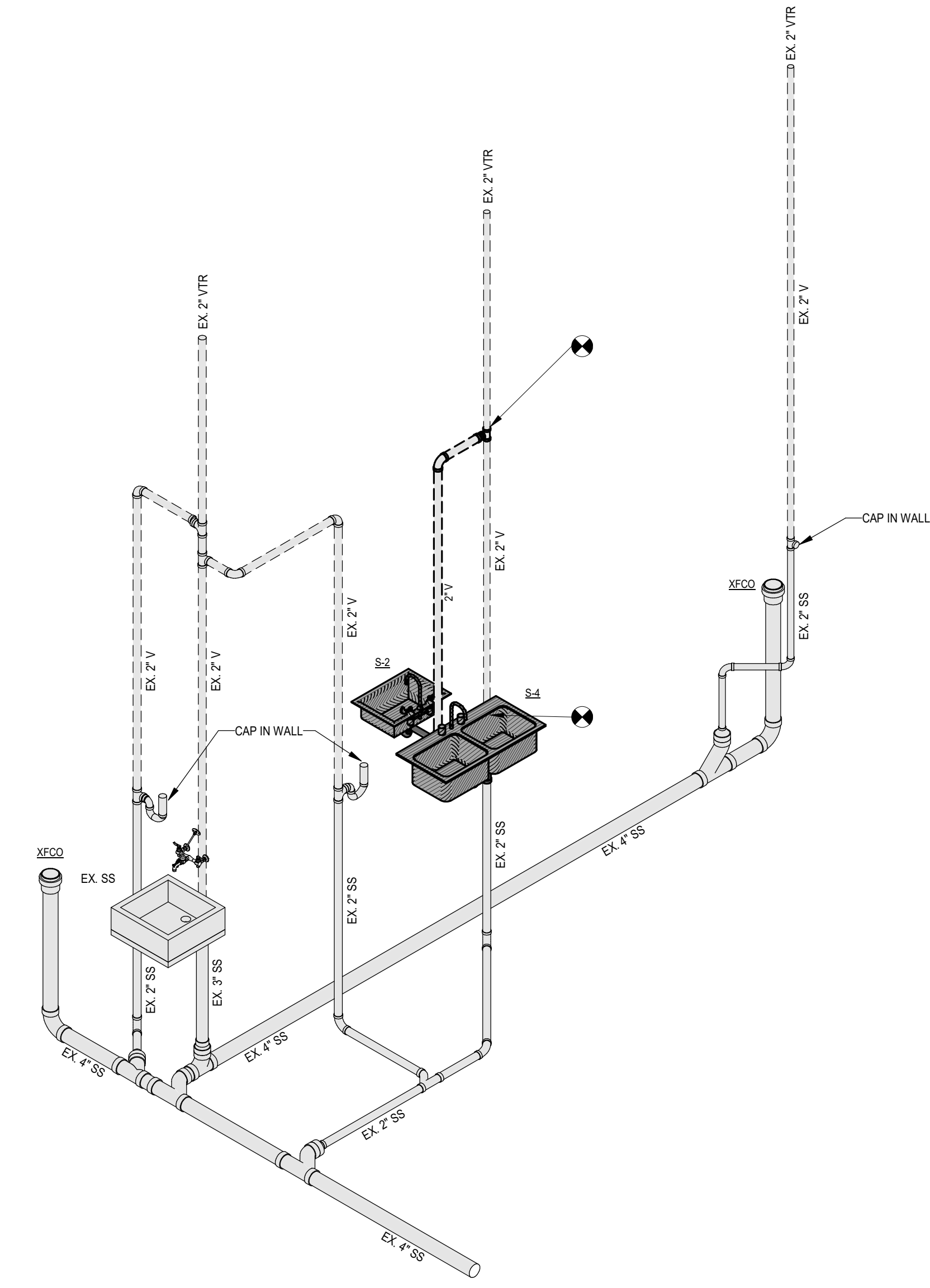




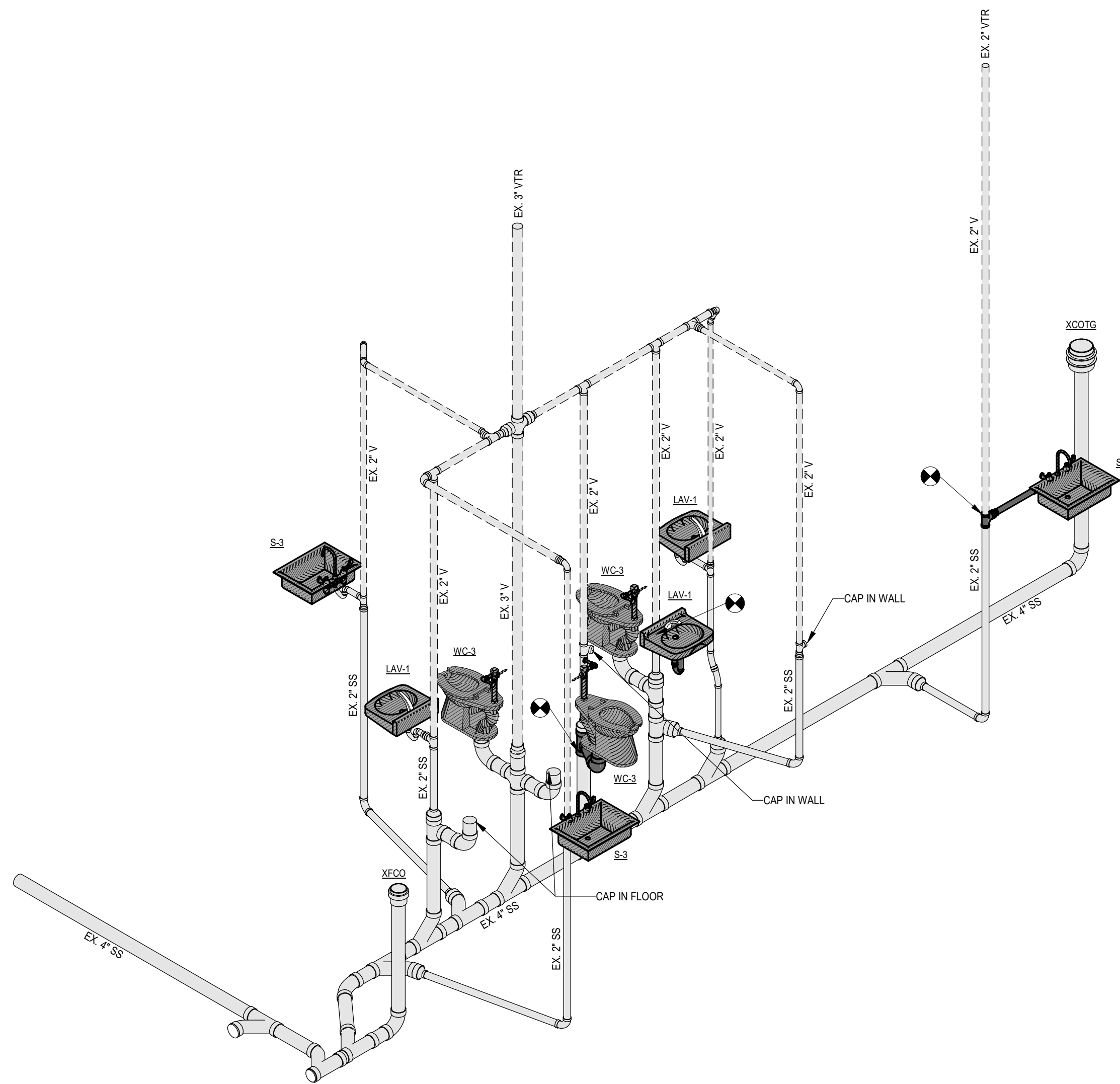
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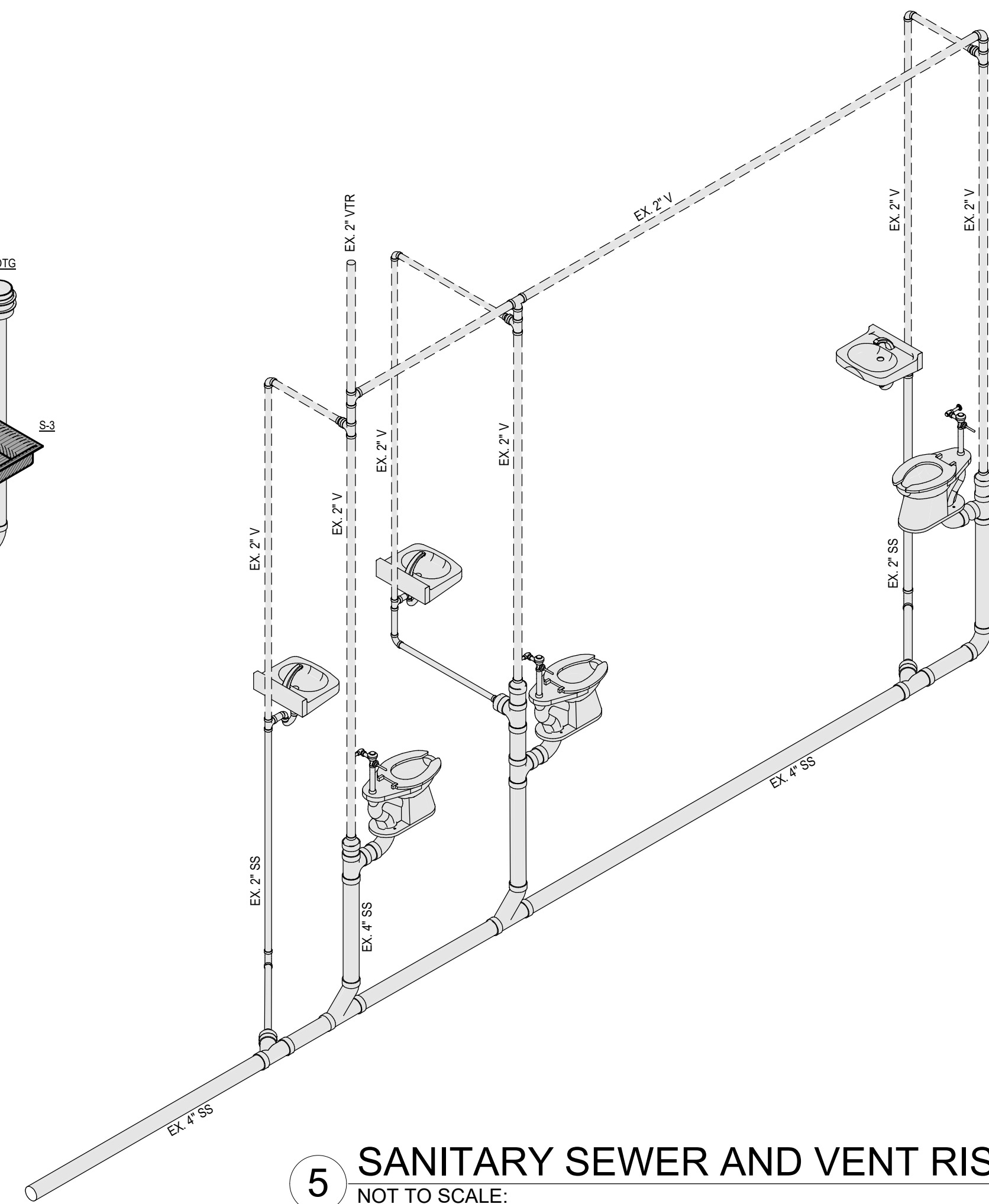
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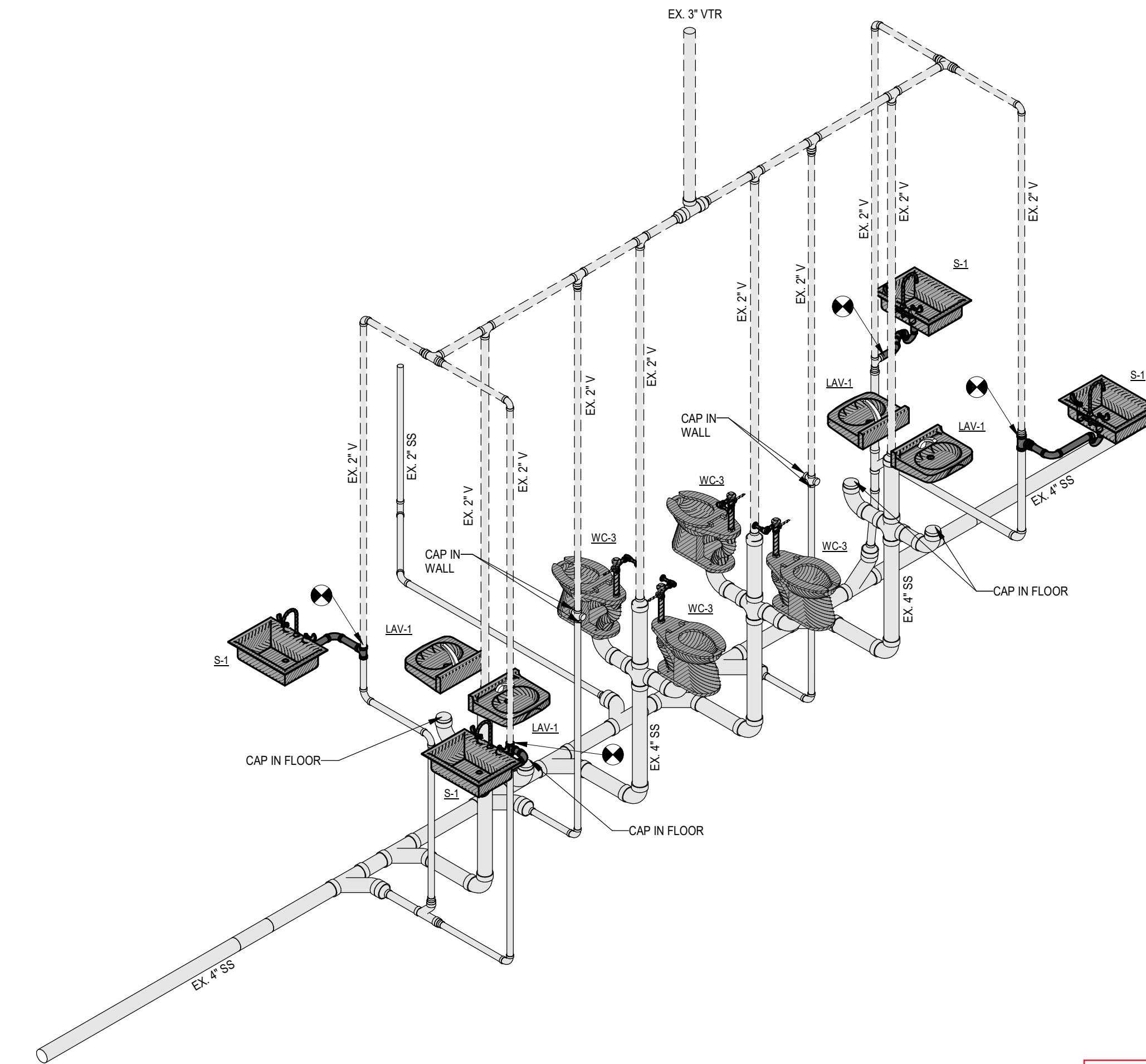
3 SANITARY SEWER AND VENT RISER 12  
NOT TO SCALE:



4 SANITARY SEWER AND VENT RISER 13  
NOT TO SCALE:



5 SANITARY SEWER AND VENT RISER 14  
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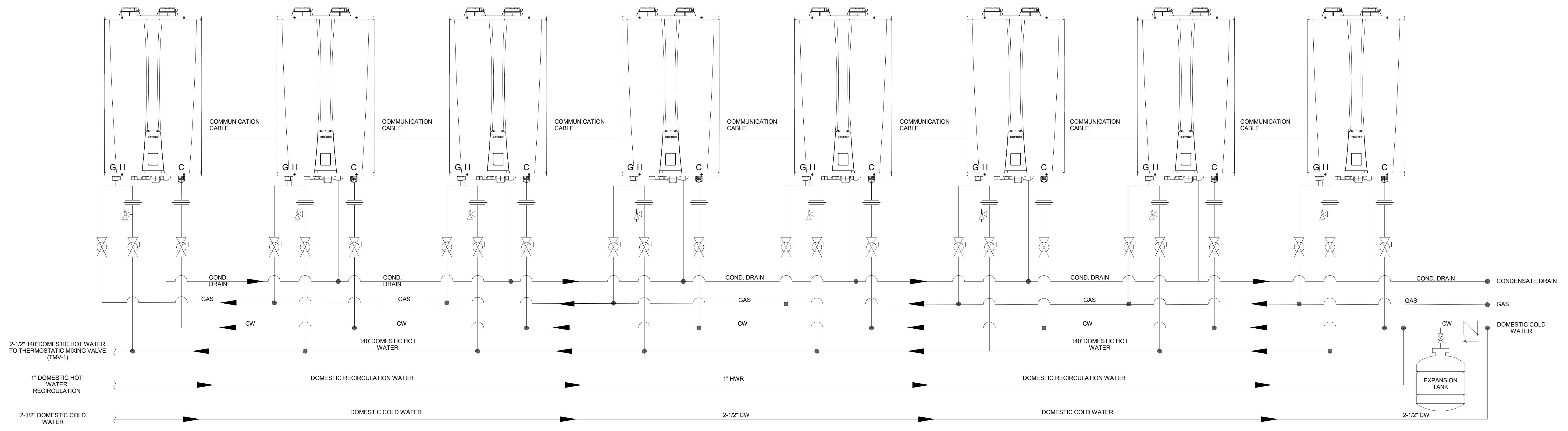
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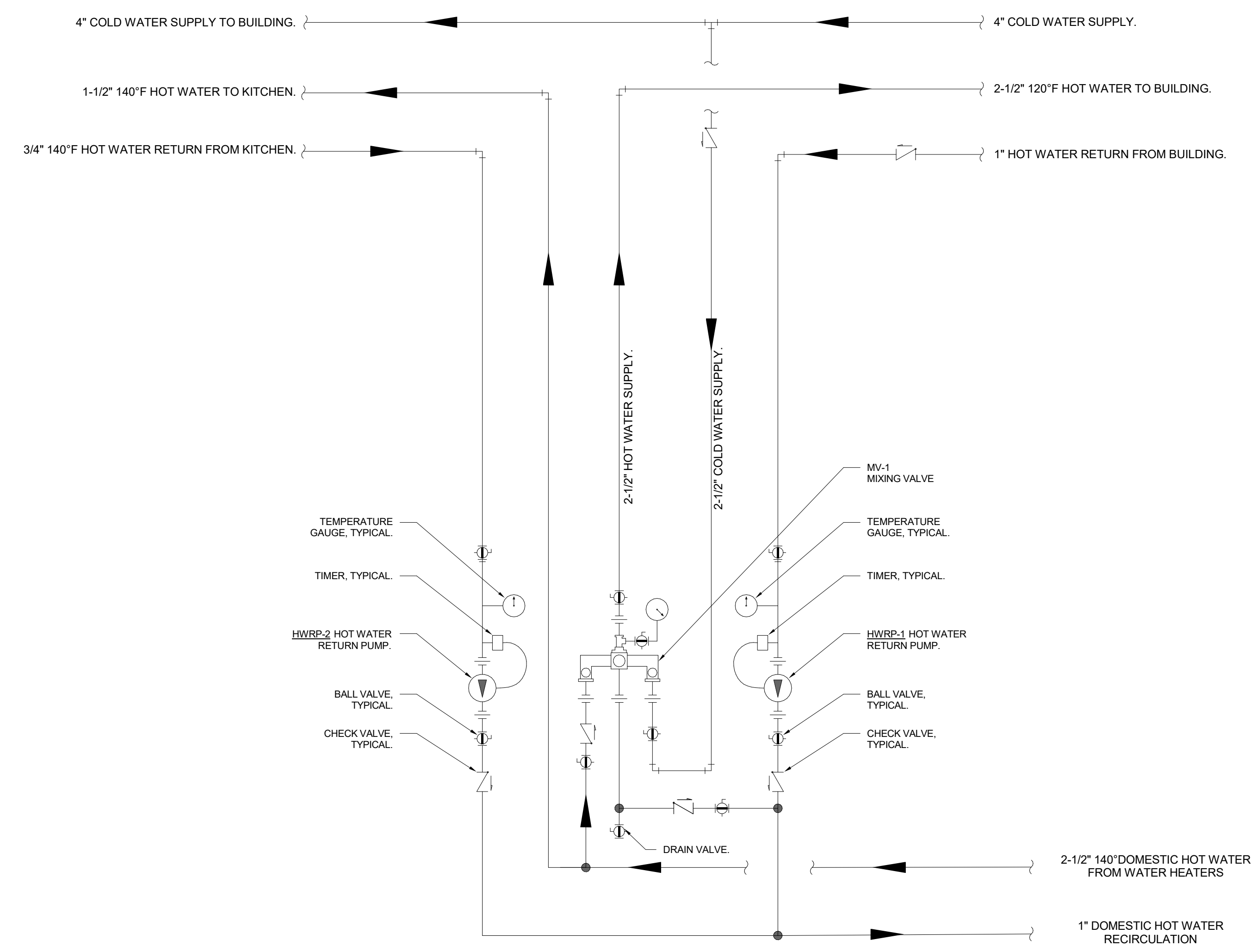






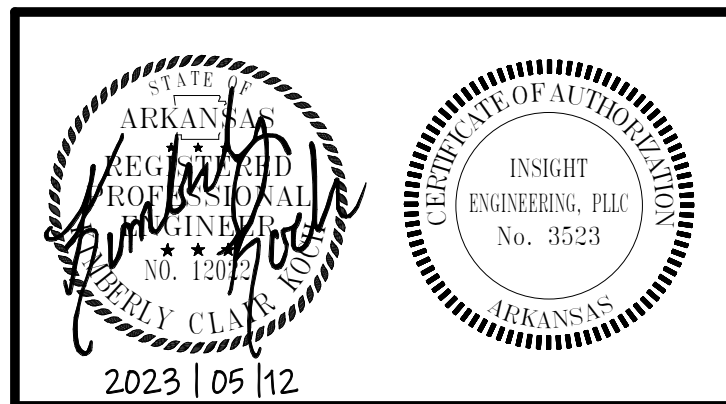


**1 TANKLESS DOMESTIC WATER HEATER PIPING DETAIL**  
NOT TO SCALE.



**2 DOMESTIC WATER BUILDING MIXING VALVE PIPING DETAIL**  
NOT TO SCALE.

As-Builts  
CSUSA  
5/22/24  
MA



Architect: David J. O'Neil, 18557 Rockledge, The Woodlands, TX 77380; Engineer: Paul R. Smith, 18557 Rockledge, The Woodlands, TX 77380