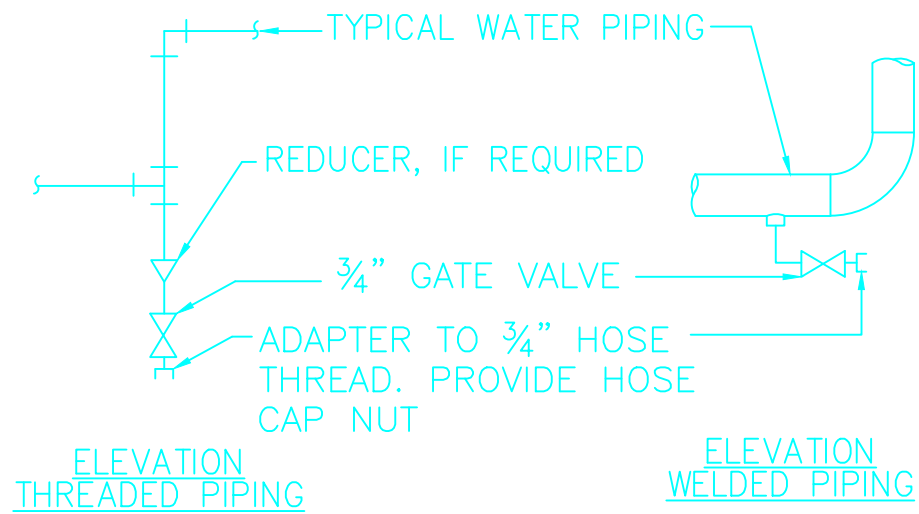


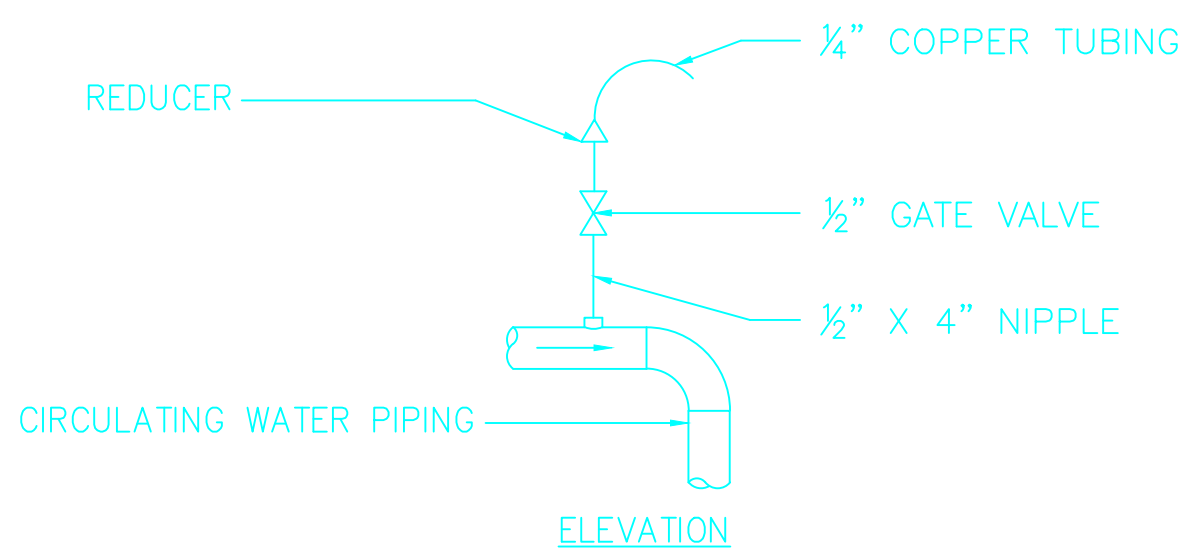
### CONCRETE EQUIPMENT BASES

- NOTES:
1. L AND W DIMENSIONS SHALL BE 6 IN. GREATER THAN THE EQUIPMENT BASE PLATE.



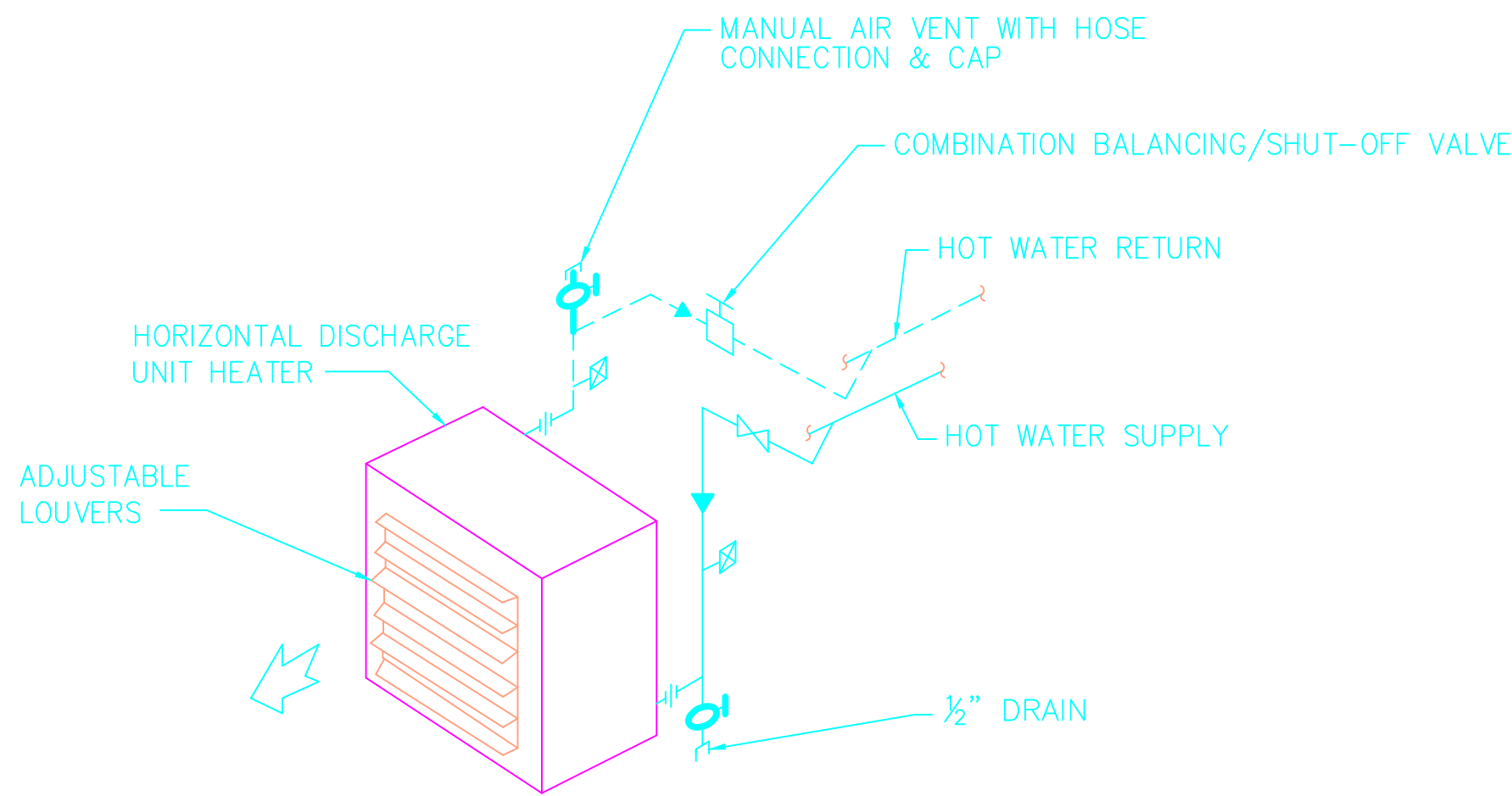
### TYPICAL CHILLED AND HOT WATER PIPING DRAIN VALVE CONNECTIONS

- NOTES:
1. DRAIN ALL LOW POINTS AS INDICATED ABOVE.
  2. WHERE SCALE POCKETS ARE SHOWN ON PIPE RISER DIAGRAMS AND/OR PLANS LOCATE DRAIN AT BOTTOM OF SCALE POCKET.

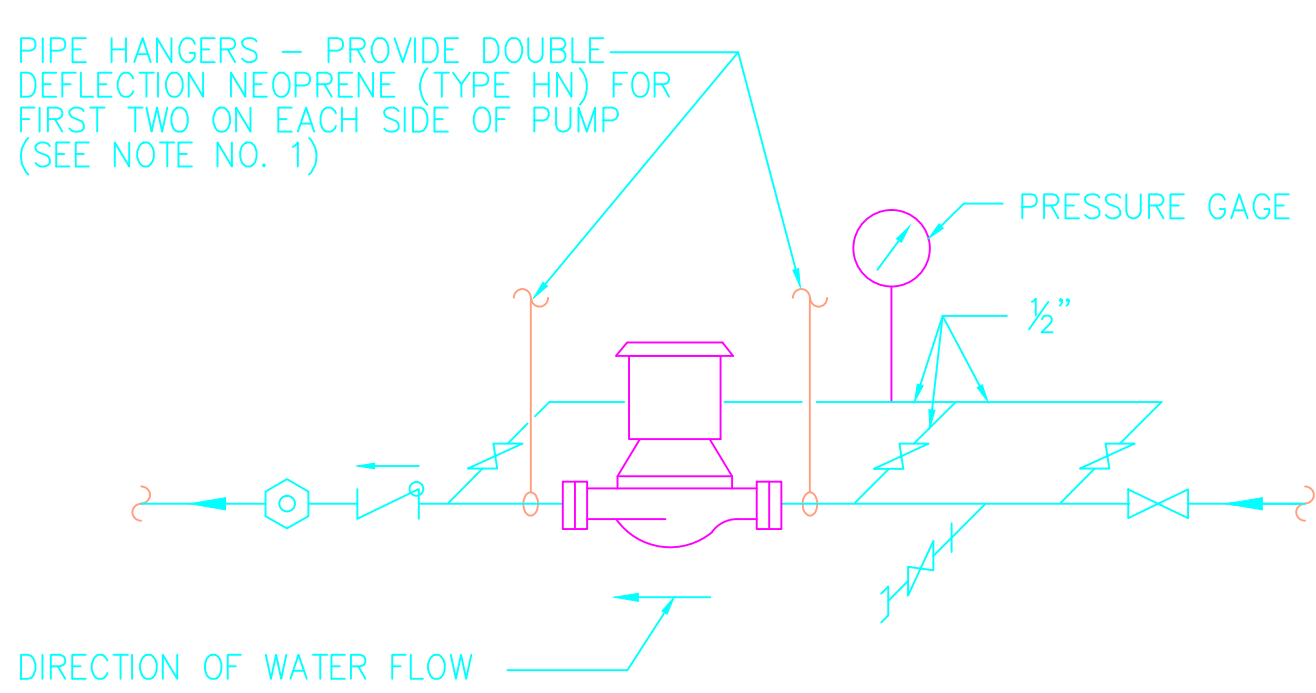


### TYPICAL AIR VENT

- NOTES:
1. VENT ALL HIGH POINTS INDICATED ABOVE.
  2. IF AUTOMATIC AIR VENTS ARE USED, PIPE DISCHARGE TO DRAIN

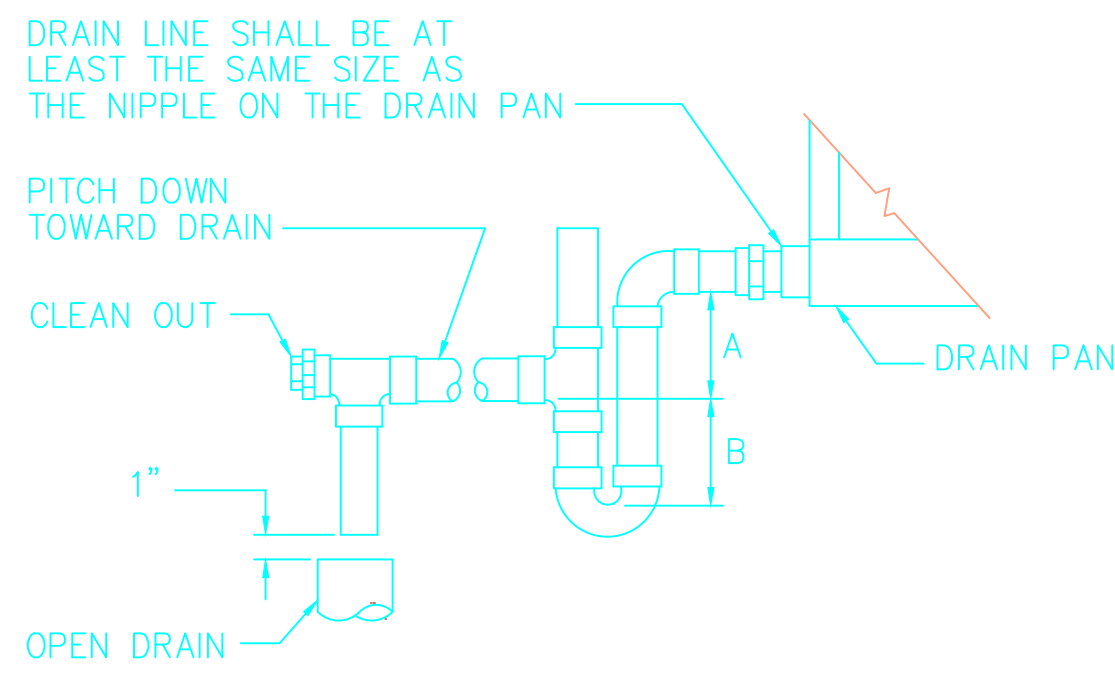


### TYPICAL CONNECTIONS TO HORIZONTAL HOT WATER UNIT HEATER



### TYPICAL PIPING CONNECTIONS TO IN-LINE WATER PUMPS

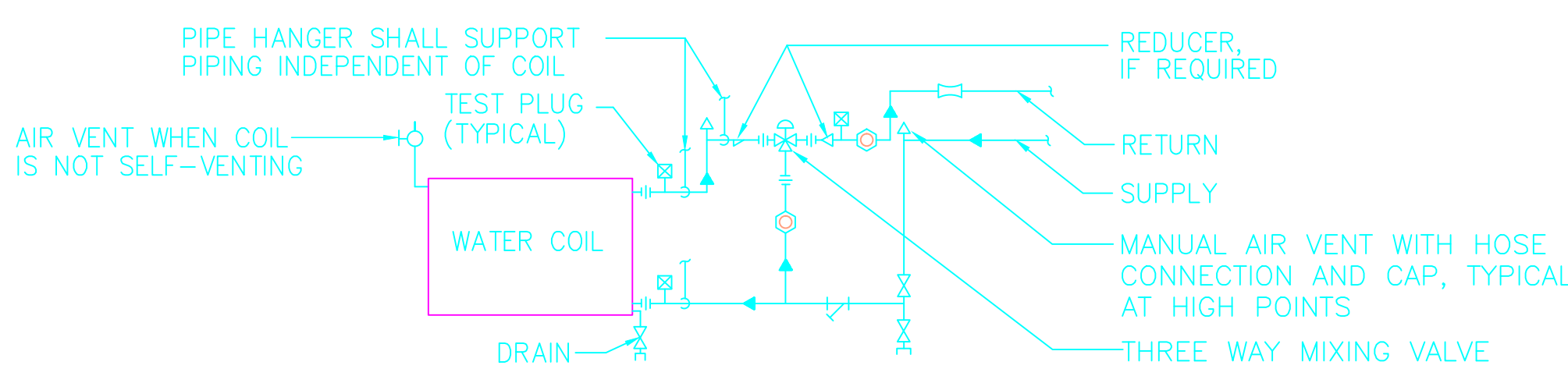
- NOTES:
1. SUPPORT PUMP FROM PIPING ONLY. DO NOT SUPPORT PUMP FROM MOTOR.



UNIT TYPE	A	B
DRAW THRU	2" PLUS X	X
BLOW THRU	1" MINIMUM	2X

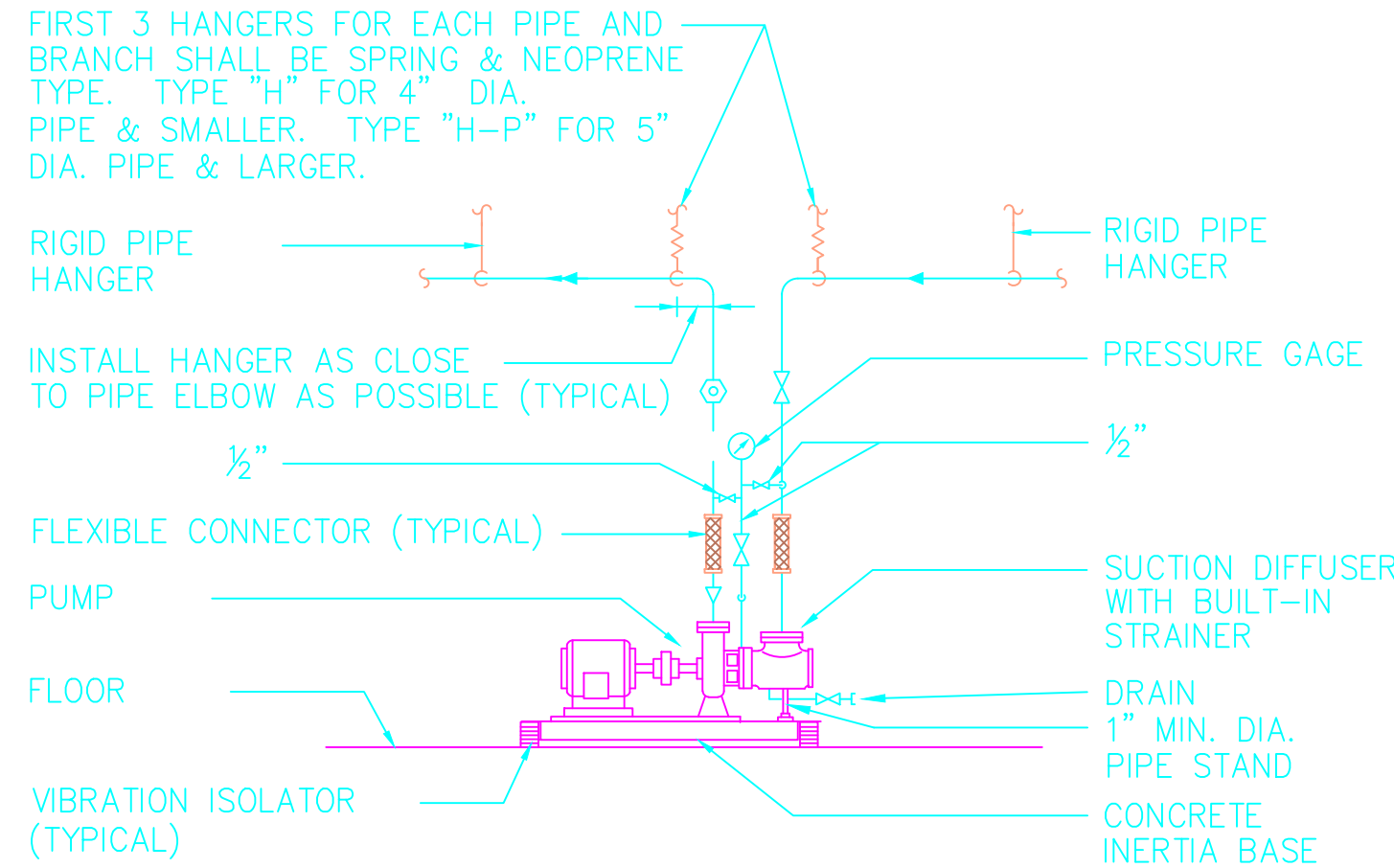
WHERE X = STATIC PRESSURE IN PAN

### AIR HANDLING UNIT DRAIN TRAP DETAIL



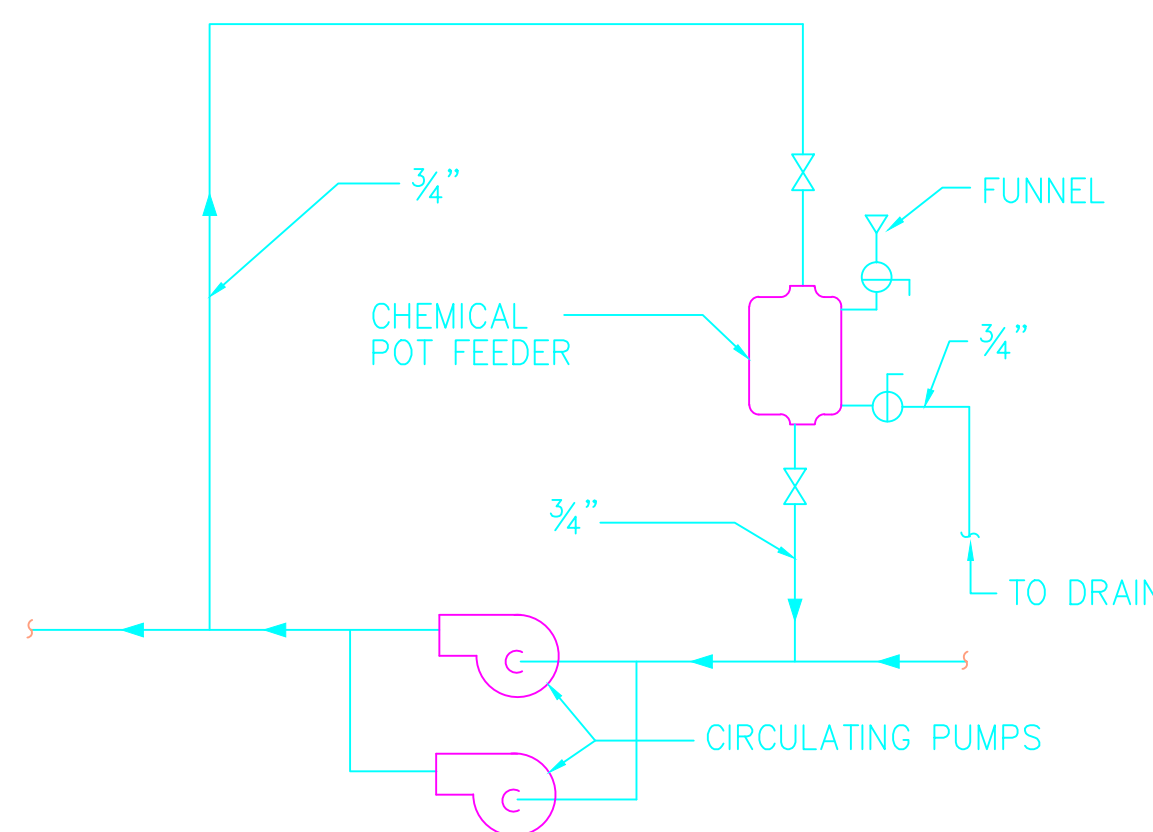
### TYPICAL CONNECTIONS TO WATER COILS

- NOTES:
1. WHEN COIL IS INCLUDED IN CASING MOUNTED ON VIBRATION ISOLATORS THE FIRST 2 HANGERS FOR EACH PIPE SHALL BE SPRING & NEOPRENE TYPE. TYPE "H" FOR 4" (100 MM) DIA. PIPE & SMALLER. TYPE "H-P" FOR 5" (125 MM) DIA. PIPE & LARGER.
  2. PIPING SHALL BE INSTALLED IN SUCH MANNER THAT IT WILL NOT BLOCK THE SWING OR USE OF ACCESS DOORS OR PANELS. NEITHER SHALL IT BLOCK THE SERVICING OF FILTERS, VALVES, OR EQUIPMENT.



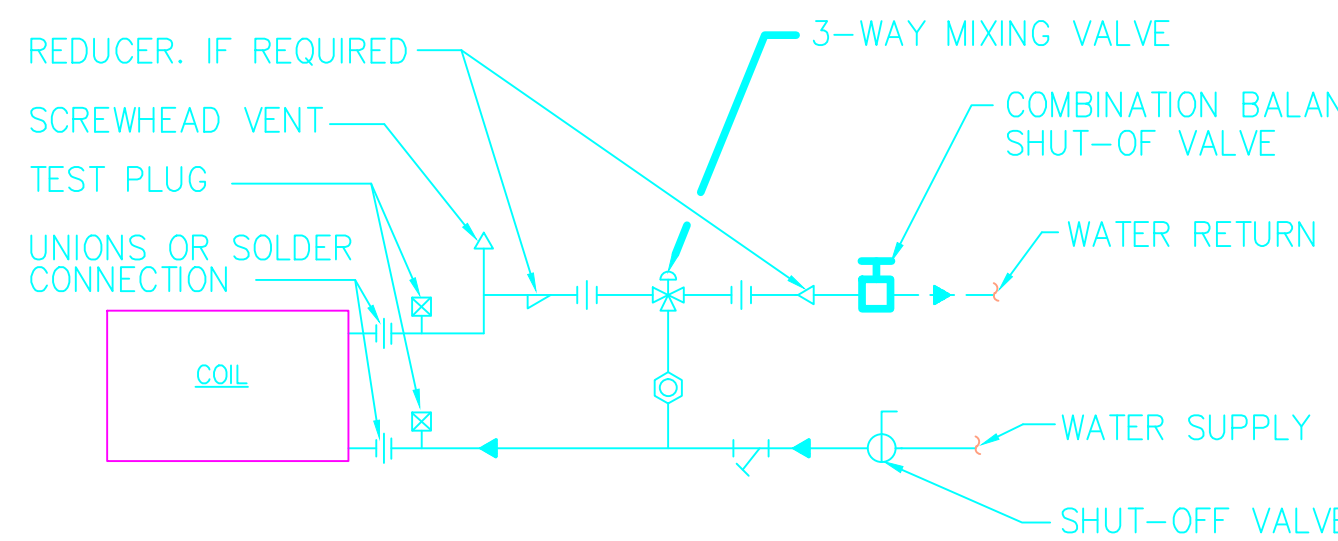
### TYPICAL PIPING CONNECTIONS TO FLOOR MOUNTED SINGLE SUCTION WATER PUMPS

- NOTES:
- SEE SPECIFICATION SECTION "PUMPS" FOR Y STRAINER OPTION

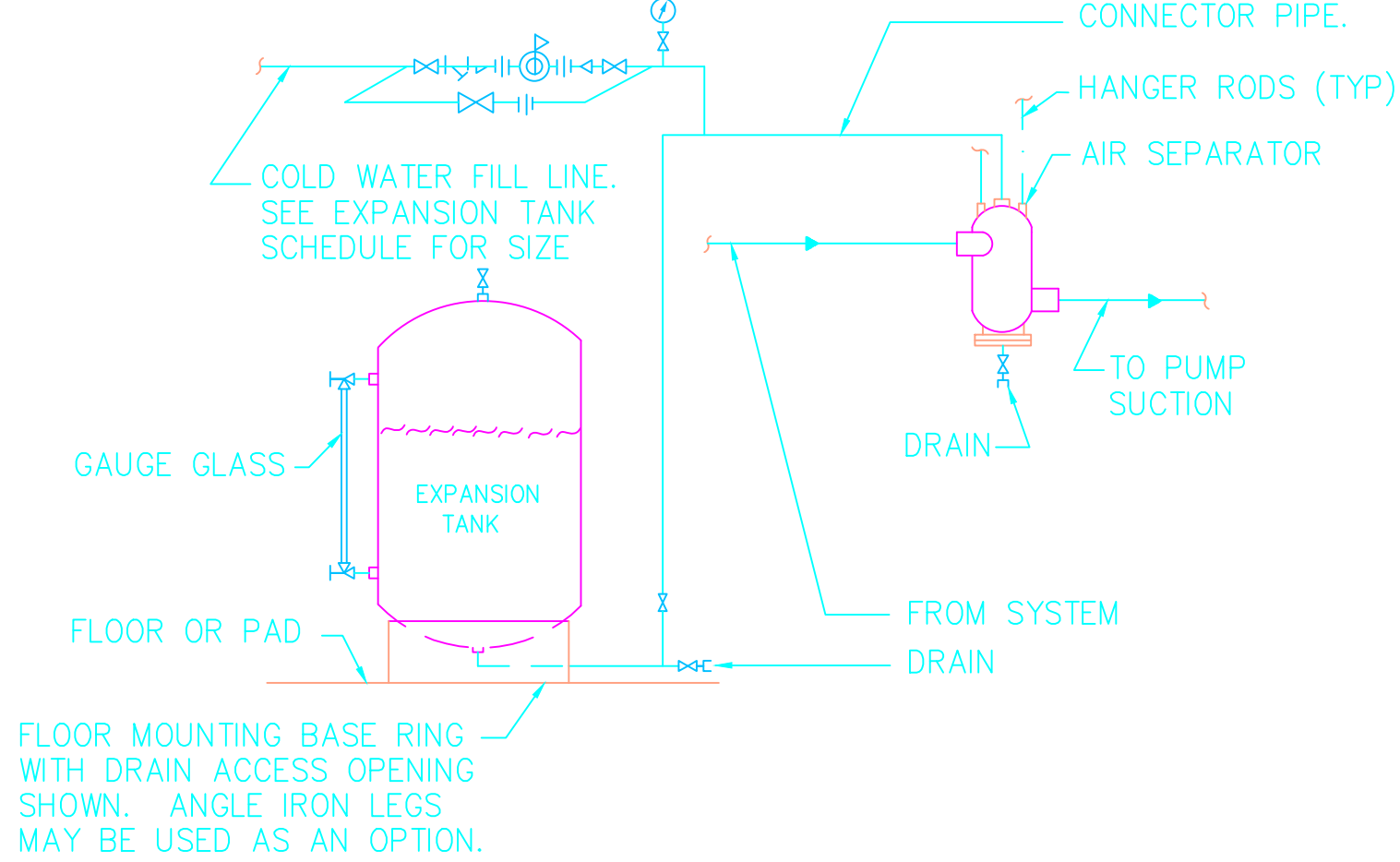


### TYPICAL CHILLED AND HEATING HOT WATER TREATMENT FOR CLOSED SYSTEMS

- NOTES:
1. TOP OF CHEMICAL POT FEEDER TANK SHALL NOT BE MORE THAN 3'-0" (1.0 M) ABOVE FINISHED FLOOR.

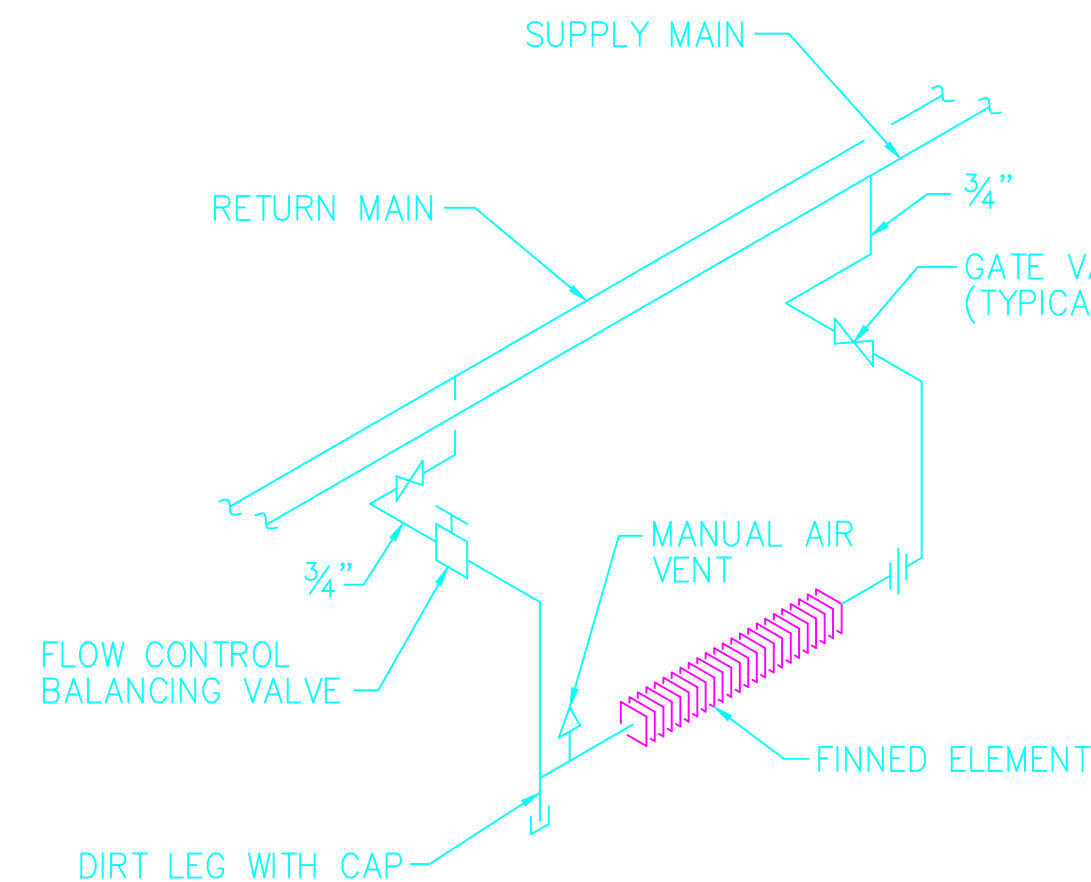


### TYPICAL PIPING CONNECTIONS TO TWO PIPE FAN COIL UNITS, VAV BOXES AND DUCT MOUNTED REHEAT COILS



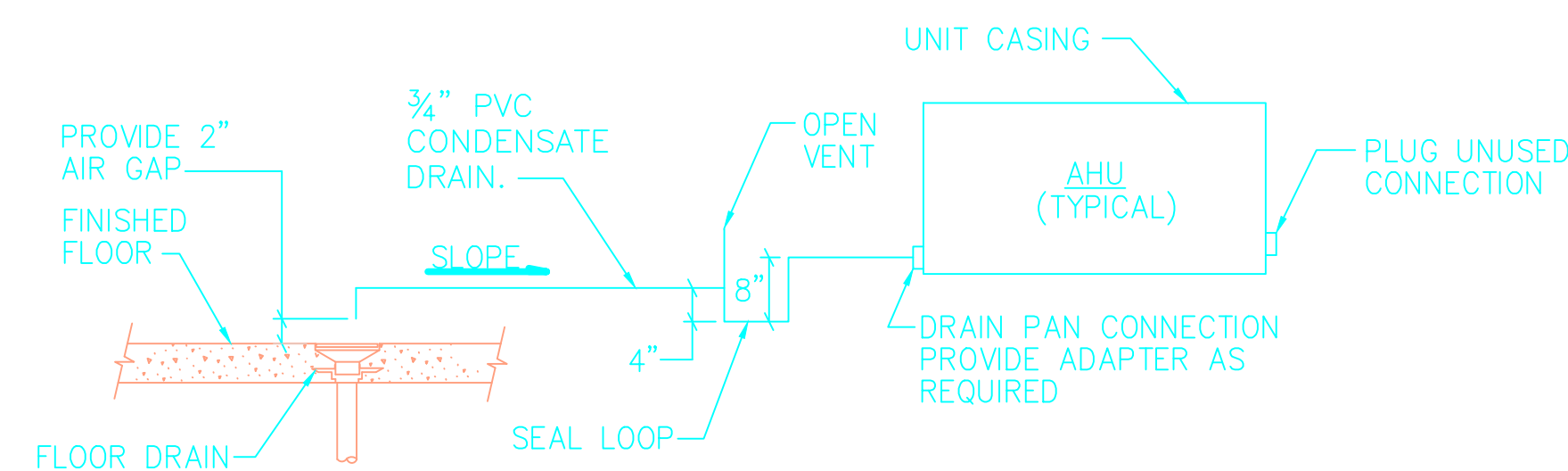
### AIR CONTROL & PIPING CONNECTIONS FOR CHILLED AND HEATING HOT WATER SYSTEMS WITH FLOOR MOUNTED EXPANSION TANK

- NOTE:
1. SEE EXPANSION TANK SYSTEM SCHEDULE FOR COMPONENTS SIZES.
  2. SET PRESSURE REDUCING VALVE SO PRESSURE AT HIGHEST POINT IN SYSTEM HAS A MINIMUM OF 4 PSIG. (28 kPa)



- NOTES:
1. LOCATE AIR VENT VALVES ABOVE CEILING EXCEPT WHERE INACCESSIBLE OR EXPOSED PIPING OCCURS, THEN LOCATE VALVES IN UNIT CABINET.
  2. THE COMBINATION BALANCING/SHUT-OFF VALVES SHALL BE INSTALLED BY THE CONTRACTOR IN CONFORMANCE WITH VALVE MFR'S RECOMMENDED SPACING UP/DOWNSTREAM FROM PIPE CHANGES IN DIRECTION AND/OR OTHER VALVES/COMPONENTS IN THE PIPING.

### FINTUBE PIPING DETAIL



### AHU CONDENSATE DRAIN

FULLY SPRINKLERED

85% SUBMITTAL	03.24.05
100% SUBMITTAL	05.03.05
FINAL SUBMITTAL	06.10.05
Revisions:	Date

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Drawing Title <b>HVAC DETAILS</b>	Project Title <b>Expand Community Based Outpatient Clinic</b>	Date <b>05.03.05</b>	Loch Raven Outpatient Clinic
Approved: Project Director	Location <b>V.A.M.C. LOCH RAVEN</b>	Project Number <b>512.514</b>	
Building Number 6	Checked <b>LJS</b>	Drawn <b>KDW</b>	
		Drawing Number <b>M-7</b> Dwg. 50 of 74	Department of Veterans Affairs