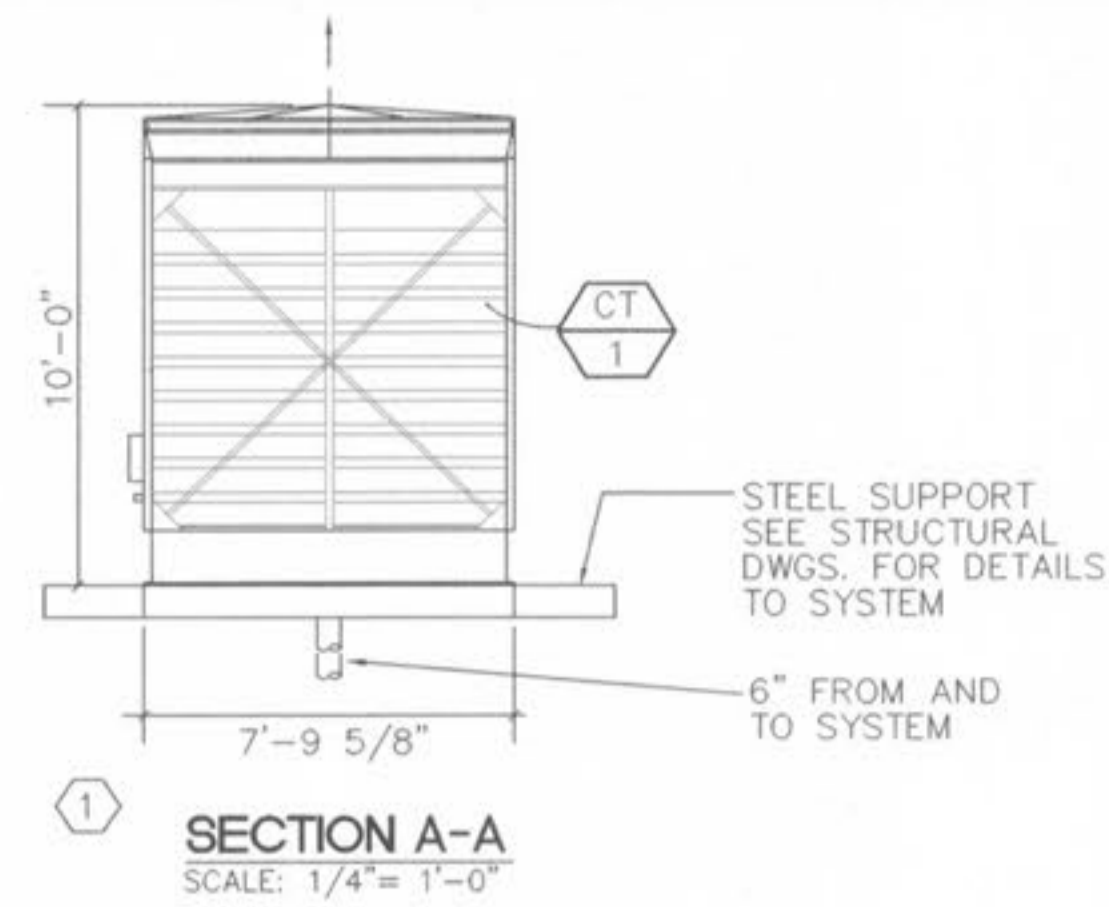
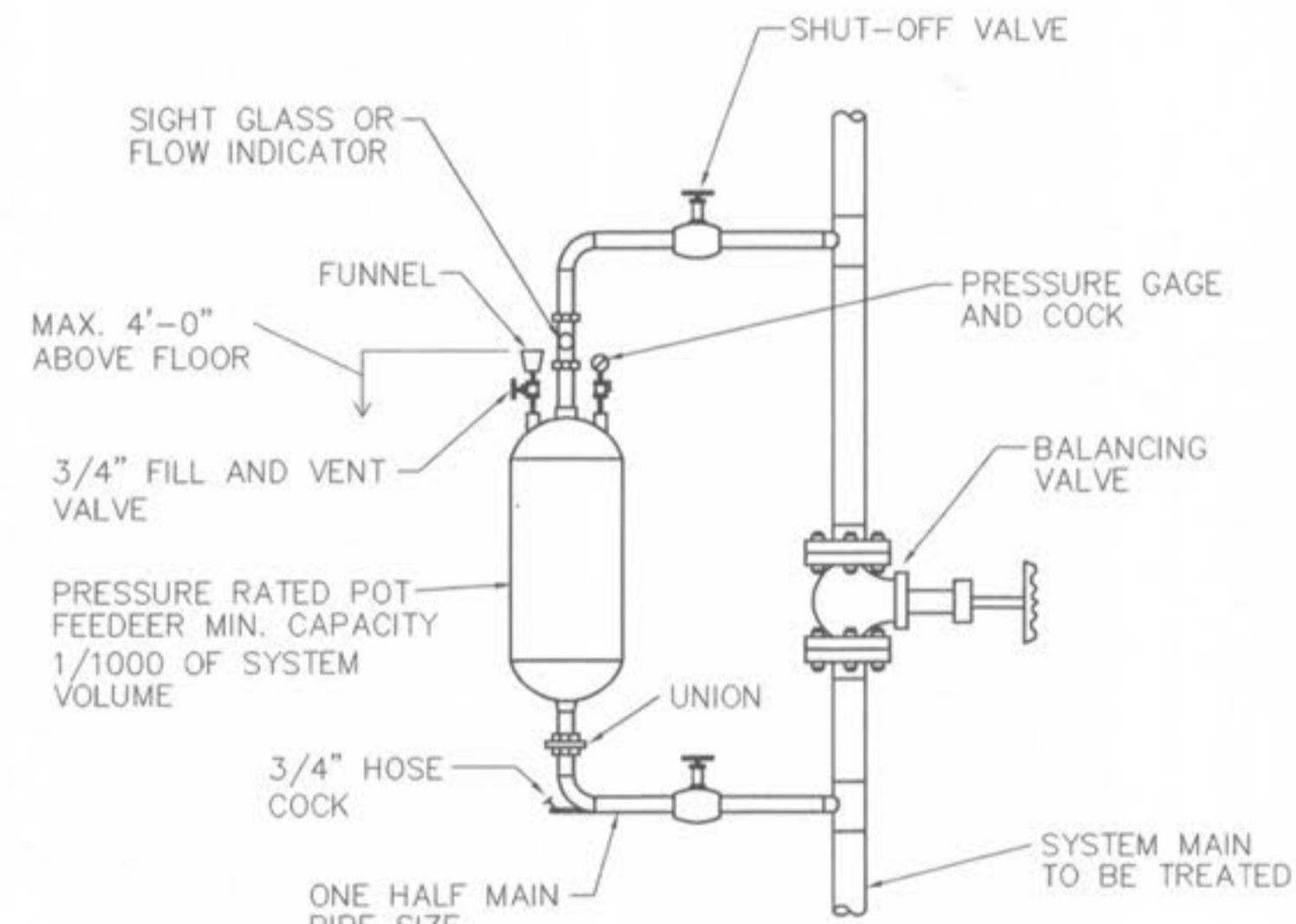


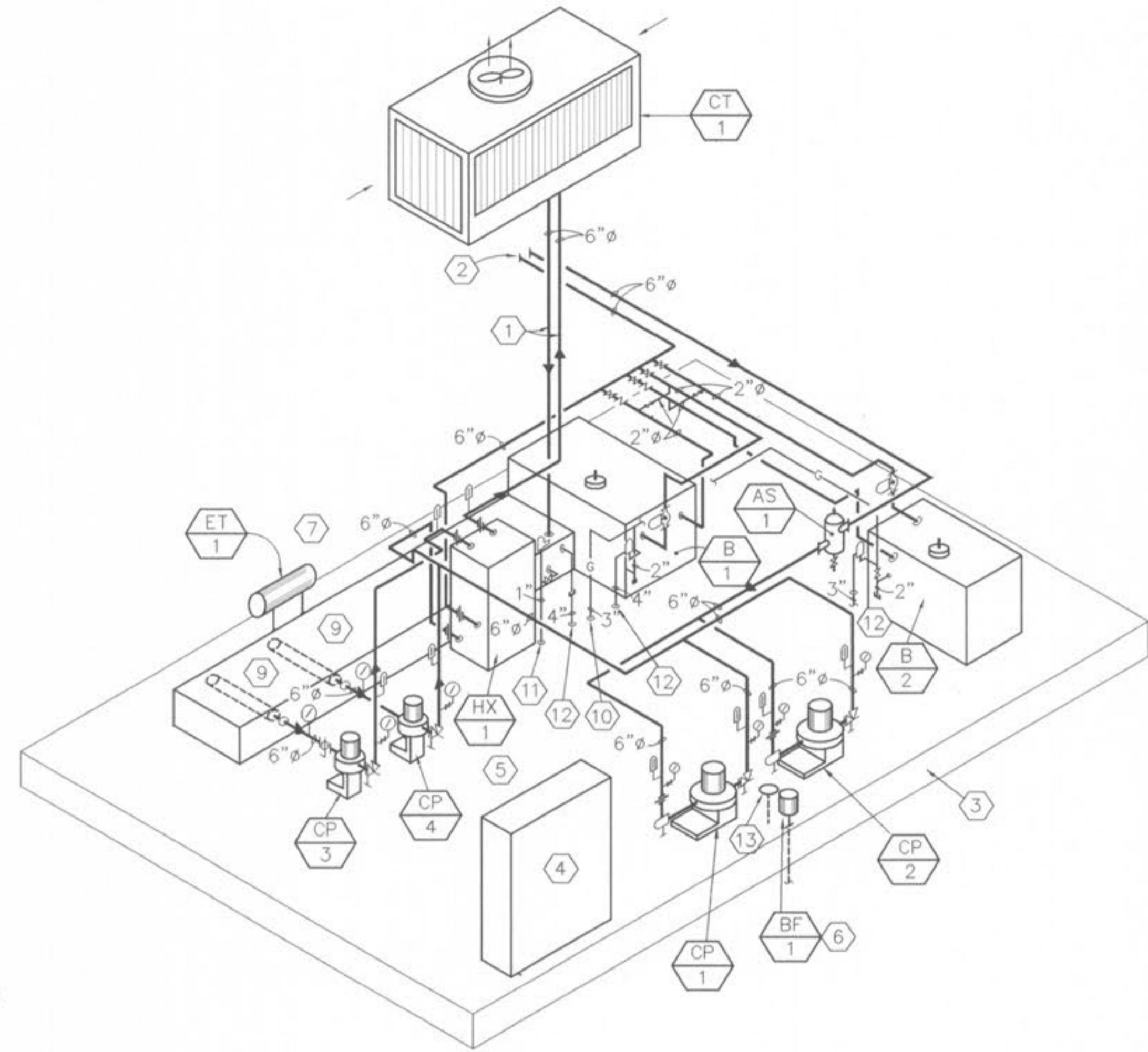
**PREFABRICATED WATER-SOURCE
HEAT PUMP UTILITY MODULE PLAN**
SCALE: 1/2"=1'-0"



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



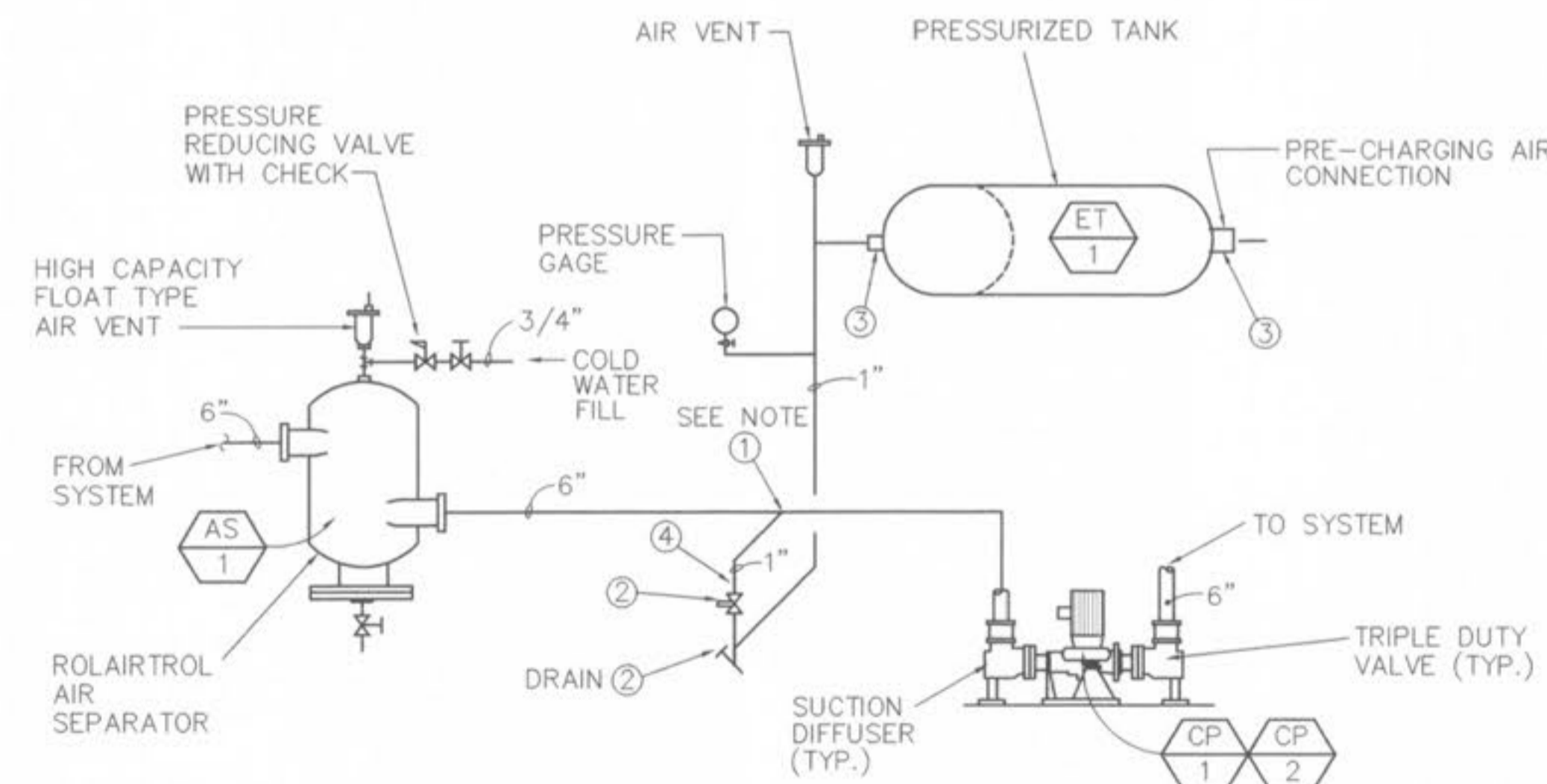
CHEMICAL POT FEEDER
NTS



**WATER-SOURCE HEAT-PUMP UTILITY MODULE
PIPING DIAGRAM**
NTS

KEYED NOTES (This sheet only)

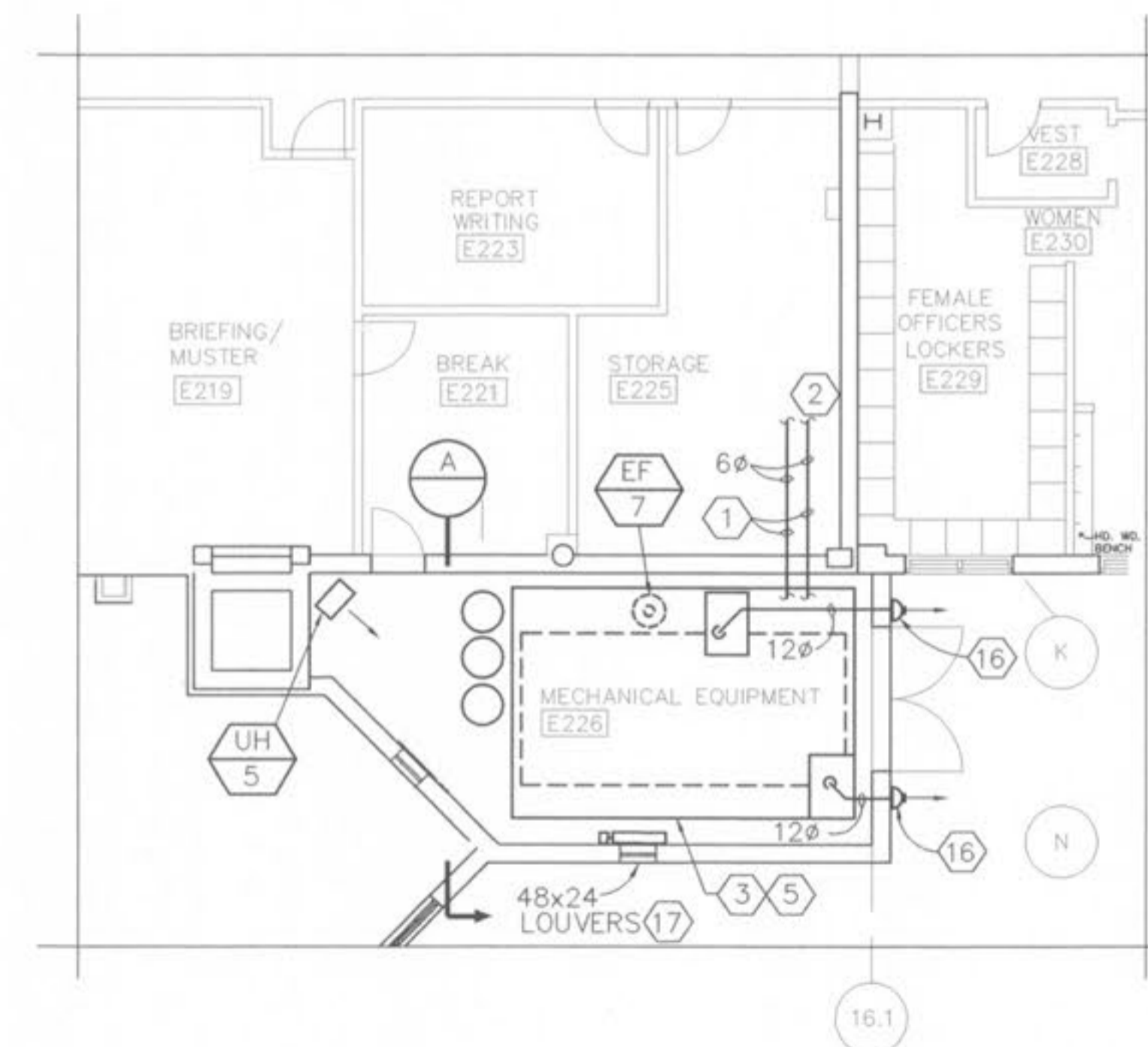
- ① FIELD INSULATED PIPING.
- ② TO AND FROM SYSTEM.
- ③ STEEL PLATFORM (6x6 METAL TUBE FRAME COVERED WITH 1/4" THICK CHECKER PLATE)
- ④ MODULE ELECTRICAL PANEL (ALL EQUIPMENT ON METAL FRAME SHALL BE PREWIRED AND TESTED. ELECTRICAL CONTRACTOR SHALL PROVIDE ONE ELECTRICAL CONNECTION TO MODULE ELECTRICAL PANEL.
- ⑤ ALL EQUIPMENT AND PIPING INSTALLED ON STEEL PLATFORM OR PREFABRICATED WATER-SOURCE HEAT PUMP UTILITY MODULE SHALL BE SEISMIC RESTRAINT.
- ⑥ CHEMICAL POT FEEDER ON PLATFORM. SEE DETAIL M-1 FOR PIPING.
- ⑦ HORIZONTAL PRESSURE EXPANSION TANK. SEE DETAIL M-2 FOR PIPING.
- ⑧ BOUNDARY LINE OF PREFABRICATED WATER-SOURCE HEAT PUMP UTILITY MODULE.
- ⑨ REMOTE SUMP WITH WATER MAKE-UP VALVE ASSEMBLY, AND ANTI-VORTEXING NON-CORROSIVE PVC STRAINERS. SUMP SIZE 8'-11" 7/8Lx 4'-0"Wx 3'-8"H
- ⑩ 3" GAS LINE FROM BELOW. SEE FIRST FLOOR EAST WING PLAN FOR CONTINUATION.
- ⑪ 1" MAKE-UP WATER FROM BELOW. SEE FIRST FLOOR EAST WING PLAN FOR CONTINUATION.
- ⑫ HUB DRAIN. 6" ABOVE PLATFORM. SEE FIRST FLOOR EAST WING PLUMBING PLAN FOR CONTINUATION.
- ⑬ FLOOR DRAIN. SEE FIRST FLOOR EAST WING PLUMBING PLAN FOR CONTINUATION.
- ⑭ 2" OPENING IN SUMP LID FOR CHEMICAL TREATMENT PLASTIC PIPING.
- ⑮ 3/4" TREADED COUPLING FOR CHEMICAL TREATMENT SYSTEM.
- ⑯ 12"Ø FIELD INSTALLED FLUE FROM B-1 AND B-2 WITH WALL MOUNTED DRAFT INDUSER BY TJERLUND MODULE # HS-5 WITH VH1-10 ADAPTER.
- ⑰ 48 X 24 LOUVER 50% FREE AREA WITH SHEET METAL COLLAR AND MOTORIZED DAMPER. ONE LOUVER 12" ABOVE FLOOR, ONE LOUVER 12" BELOW CEILING. BOTH MOTORIZED DAMPERS SHALL BE INTERLOCKED WITH B-1, B-2 IN WINTER MODE AND WITH EF-7 IN SUMMER MODE.



KEYED NOTES:

- ① CONNECT TO SIDE OF MAIN. AVOID TOP OR BOTTOM CONNECTION TO PREVENT AIR OR DEBRIS FROM ENTERING PIPE TO TANK.
- ② SHUT-OFF VALVE DRAIN VALVE ALSO REQUIRED TO PROPERTY PRECHARGE TANK.
- ③ TANK CONNECTION LOCATIONS MAY VARY DEPENDING ON TANK SIZE AND MODEL.
- ④ PROVIDE ANTI-THERMO-SYPHON LOOP TO PREVENT GRAVITY HEATING OF TANK 12" MIN. DROP.

**HORIZONTAL TANK INSTALLATION
WITH ROLAIRTROL AIR SEPARATOR**
NTS



PARTIAL SECOND FLOOR PLAN-EAST WING
SCALE: 1/8"=1'-0"



Revisions

CONSTRUCTION ISSUE	DECEMBER 5, 1997
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Project No.	96036
Date	SEPT. 4, 1997
Designed	
Drawn	MAG3
Drawing No.	H-15