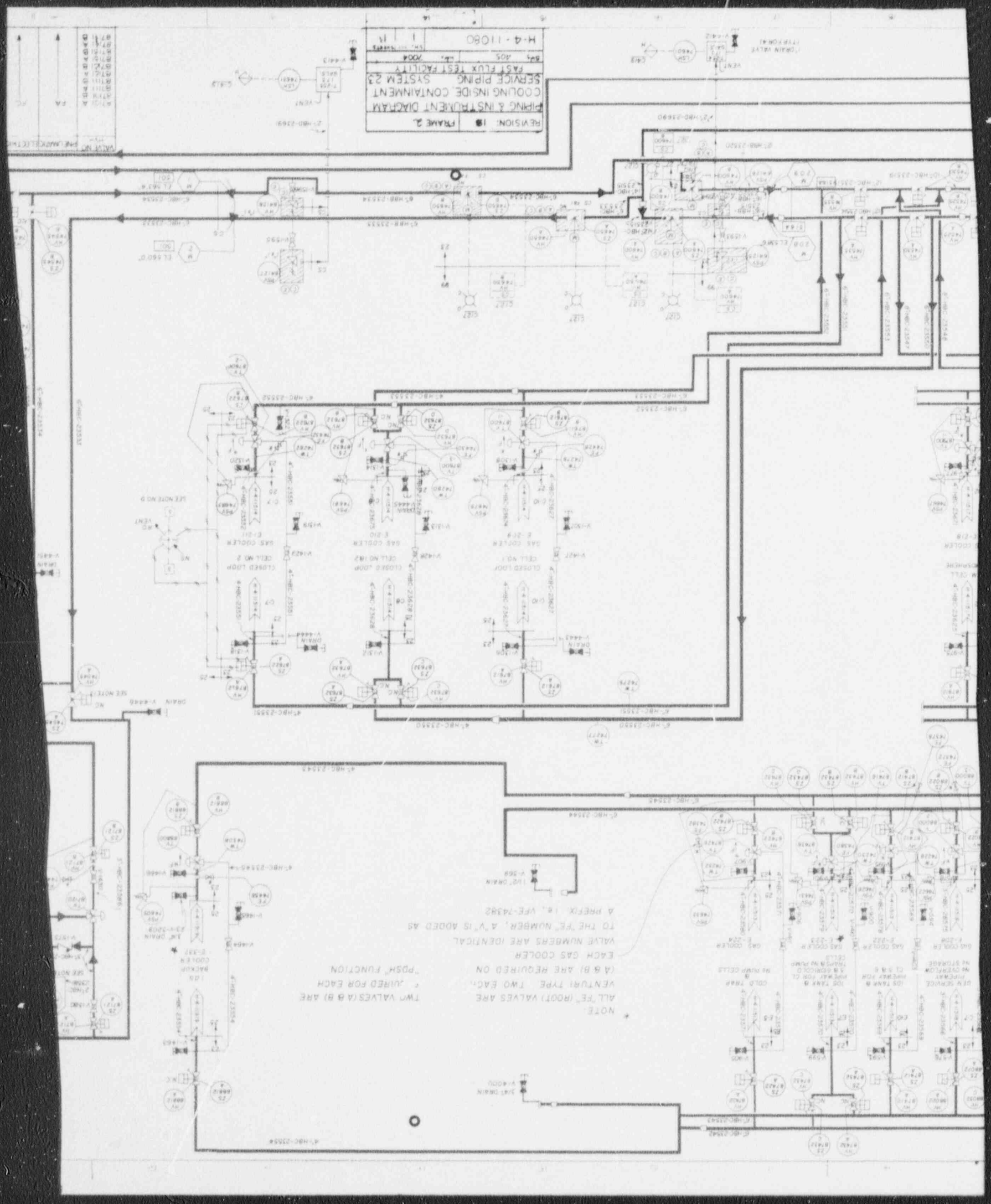


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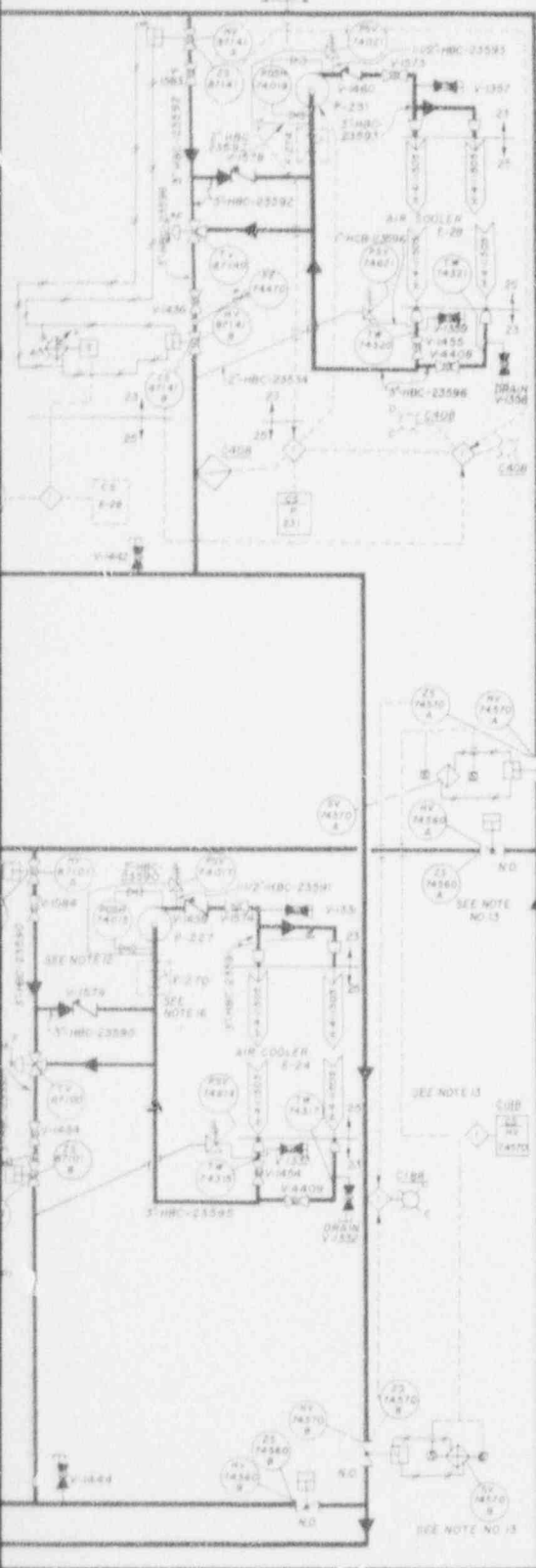
REVISION: 18
 FRAME 2
 PIPING & INSTRUMENT DIAGRAM
 COOLING INSIDE CONTAINMENT
 SERVICE PIPING SYSTEM 23
 FAST FLUX TEST FACILITY
 805 AOS
 H-4-11080



NOTE:
 ALL "FE" (ROOT) VALVES ARE
 VENTURI TYPE TWO EACH.
 (A & B) ARE REQUIRED ON
 EACH GAS COOLER
 TO THE "FE" NUMBER, A "V" IS ADDED AS
 A PREFIX, IE, VFE-74382

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- 14. ALL RELIEF VALVES SHOWN AT OUTLETS OF CHW GAS COOLERS/AIR COOLERS ARE 1/2" ZP RELIEF VALVES ON GAS COOLERS ARE LOCATED ON THE COOLER SHELL
- 15. IF HP ACROSS COOLERS WEBS DURING BALANCING A MECHANICAL STOP CAN BE ATTACHED TO THE HV ISOLATION VALVES TO PREVENT FURTHER FULL OPENING
- 16. SPRINGS: 6-210 TMR / 214 WILL HAVE 300 LB. TENSION



FAILURE MODES FOR
 PNEUMATICALLY OPERATED
 COOLANT ISOLATION VALVES
 FA - FAIL AS IS
 FC - FAIL CLOSED
 FO - FAIL OPEN

ENGINEERING RELEASE
BY HEDL
REV. DATE 5-1-76
FIG. 9-042A

REF ID: A66000

REFERENCE DRAWING

DATE

10/1/78

REV

1

DATE

10/1/78

REV

1

NO.

1

DESCRIPTION

FLOW DIAGRAM

NO.

2

DESCRIPTION

COOLING INSIDE CTMT

NO.

3

DESCRIPTION

PAID

NO.

4

DESCRIPTION

TCCWS

NO.

5

DESCRIPTION

CHILLERS SERVICE PIPING

NO.

6

DESCRIPTION

CHILLERS SERVICE PIPING

NOTES (CONT.)

1. ICGWS PIPING 3' ABOVE TO HAVE INSULATION AND 2' BELOW TO HAVE 72" INSULATION.

19. USE ROOT VALVE VEE-74480-A TAP FOR (9) MEASURING 5-2332P FOR FLOW BALANCING.

20. CONTROLS SHOWN FOR HV-74570A & HV-74570B ARE TYPICAL FOR HV-74550A & HV-74550B. HV-74550A & HV-74550B AND HV-74540A & HV-74540B, SV-74570A & SV-74570B ARE TYPICAL FOR SV-74550A & SV-74550B, SV-74540A & SV-74540B AND SV-74540A & SV-74540B.

21. FOR SYMBOLS AND USAGE SEE LEGEND SHEETS H-4-11072, H-4-11074, H-4-11075, H-4-11076, H-4-11078 AND H-4-11079.

2. ALL VALVE NUMBERS SHALL BE PRECEDED BY THE NUMBERS 23.

3. ★ DENOTES A REDUNDANT CONTROL

4. NOT USED

5. ALL PENETRATIONS ARE SIZED FOR 4.3 MICRONS REQUIREMENTS.

6. VALVE CONTROL INSTRUMENTATION IS SHOWN ON CORRESPONDING SYSTEM #23 AND SYSTEM #1 PIPING INTERFACE DRAWING.

7. FOR CONTROL OF PNEUMATIC OPERATED SOLENOID ISOLATION VALVES, SEE SYS. 23 P&ID.

8. CONTROL TYPICAL FOR ISOLATION VALVES ON COOLERS & 2332P & 2332B.

9. FOR VALVE MOUNTED ISOLATION VALVES ON COOLERS THAT ARE MANUALLY RESTARTED AFTER A POWER TAG RELEASE TO TABLE IN COLUMN A, SEE TABLE 1 FOR THE DRAWING.

10. FOR COOLERS THAT ARE AUTOMATICALLY RESTARTED AFTER A POWER TAG RELEASE ISOLATION VALVES FAIL TO BE ON PNEUMATIC AND ELECTRIC FAILURE MODES IN TABLE 1, SEE TABLE 1 OF THIS SYSTEM.

11. ALL 3-WAY TEMPERATURE CONTROLLED VALVES WILL FOR FLOW THROUGH THE COOLER.

12. CONTROLS FOR BOOSTER PUMPS P-2332P & P-2332B ARE TYPICAL CORRESPONDING AIR COOLER FAN ARE PROVIDED BY SYSTEM #1 CONTROL TOWN FOR P-2332P AND FAN FOR P-2332B ARE TYPICAL. CONTROLS FOR THESE PUMPS AND FAN ARE SHOWN ON THE CORRESPONDING P&ID.

NO.	DESCRIPTION	REVISION	DATE	BY	CHKD	APPD
1	REVISION 1	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
2	REVISION 2	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
3	REVISION 3	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
4	REVISION 4	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
5	REVISION 5	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
6	REVISION 6	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
7	REVISION 7	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
8	REVISION 8	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
9	REVISION 9	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
10	REVISION 10	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
11	REVISION 11	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
12	REVISION 12	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
13	REVISION 13	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
14	REVISION 14	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
15	REVISION 15	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
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18	REVISION 18	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
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29	REVISION 29	10/1/78	10/1/78	10/1/78	10/1/78	10/1/78
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