



General Electric Company
175 Cambridge Avenue, San Jose, CA 95128

September 21, 1992

MFN No. 173-92
Docket No. STN 52-001
SLK-9293

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Robert C. Pierson, Director
Standardization and Non-Power Reactor Project Directorate

Subj: **Submittal of Amendment 22, 11" x 17" Foldout Drawings, to GE's
ABWR SSAR**

Reference: Reclassification of ABWR SSAR Proprietary Information, MFN
No. 158-92, dated August 18, 1992

Enclosed are thirty-four copies of selected sections of Chapter 8, *Electric Power*, Chapter 9, *Auxiliary Systems*, Chapter 12, *Radiation Protection*, Chapter 15, *Accident Analysis*, Chapter 18, *Human Factors Engineering*, of the Standard Safety Analysis Report (SSAR) for the Advanced Boiling Water Reactor (ABWR).

Changes to the above sections for 11" x 17" foldout drawings of the SSAR are the result of reclassification of proprietary information to non-proprietary. Pages identifying proprietary information will be updated and submitted in Amendment 23.

Sincerely,

P. W. Marriott, Manager
Regulatory and Analysis Services
MC-444, (408) 925-6948

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N. D. Fletcher	DOE
D. J. McGoff	DOE
F. A. Ross	DOE
K. E. Stahlkopf	EPRI

ABWR SSAR

Amendment 22 - Page change instruction

The following pages (11 x 17 foldout drawings) have been changed, please make the specified changes in your SSAR. Pages are listed as page pairs (front & back). *Italic page numbers represent those pages which identify proprietary information pages.* Holders of non-proprietary sections of the SSAR, remove Italic page(s) and add non-proprietary pages that are printed in bold.

REMOVE (Proprietary)	ADD (Non-Proprietary)
PAGE No.	PAGE No.

Chapter 8

<i>8.3-30 thru 37</i>	---
8.3-30 thru 37	8.3-30 thru 37

Chapter 9

9.3-21 thru 23	9.3-21 thru 23
<i>9.4-7a - 7a.4</i>	---
9.4-7a thru 7a.4	9.4-7a thru 7a.4
<i>9.4-7d - 7d.2</i>	---
9.4-7d thru 7d.2	9.4-7d thru 7d.2
<i>9.4-7e - 7e.2</i>	---
9.4-7e thru 7e.2	9.4-7e thru 7e.2
9.4-7f	9.4-7f
9A.4-240 thru 260	9A.4-240 thru 260

Chapter 12

<i>12.3-84 - 87</i>	---
12.3-84 thru 87	12.3-84 thru 87

Chapter 15

15B.2-20	15B.2-20
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Chapter 18

18.4-24,25	18.4-24,25
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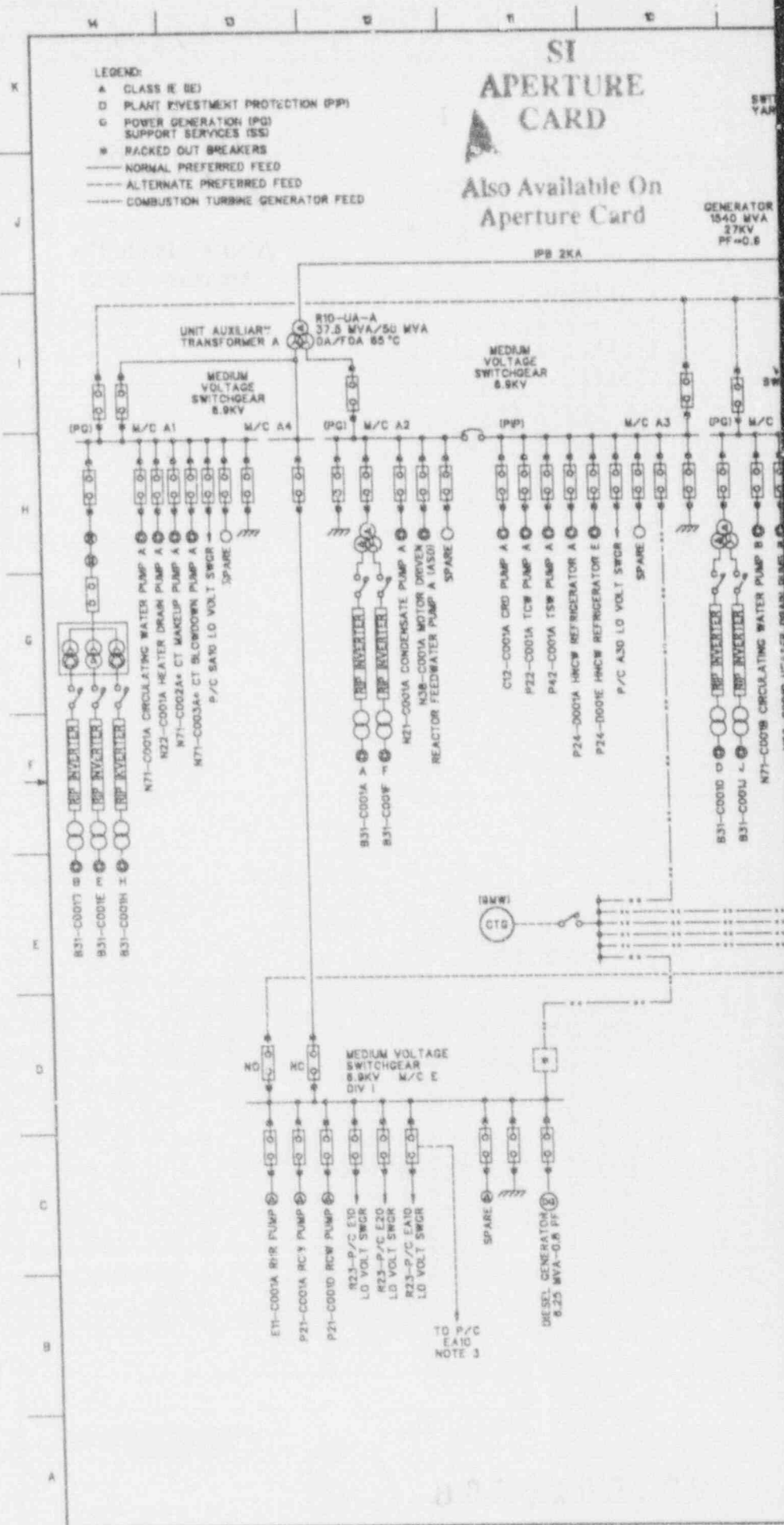
LEGEND:

- A CLASS R BEJ
- D PLANT INVESTMENT PROTECTION (PIP)
- G POWER GENERATION (PG)
- S SUPPORT SERVICES (SS)
- * RACKED OUT BREAKERS
- NORMAL PREFERRED FEED
- - - ALTERNATE PREFERRED FEED
- COMBUSTION TURBINE GENERATOR FEED

SI
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GENERATOR
1540 MVA
27KV
PF=0.8



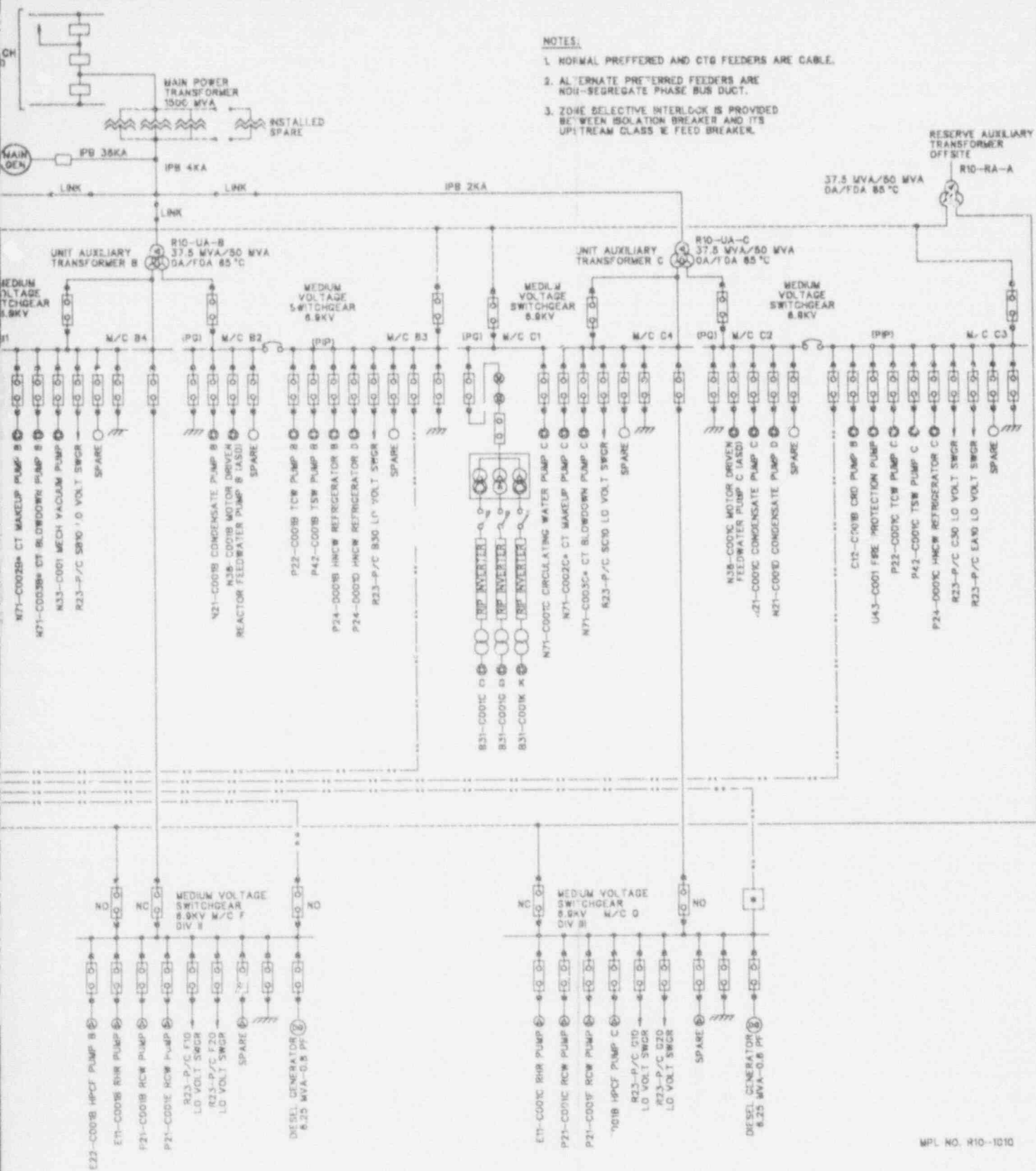
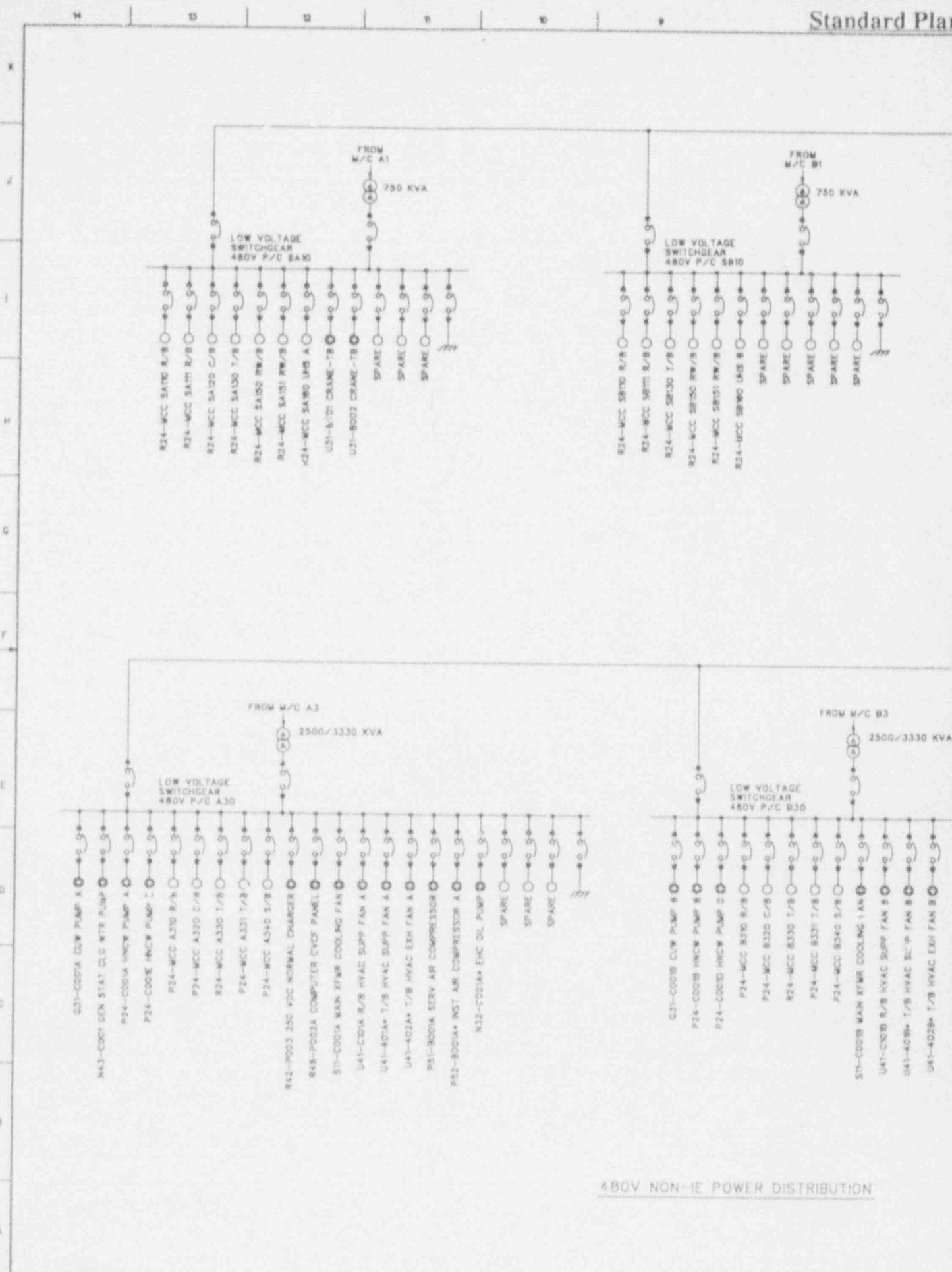


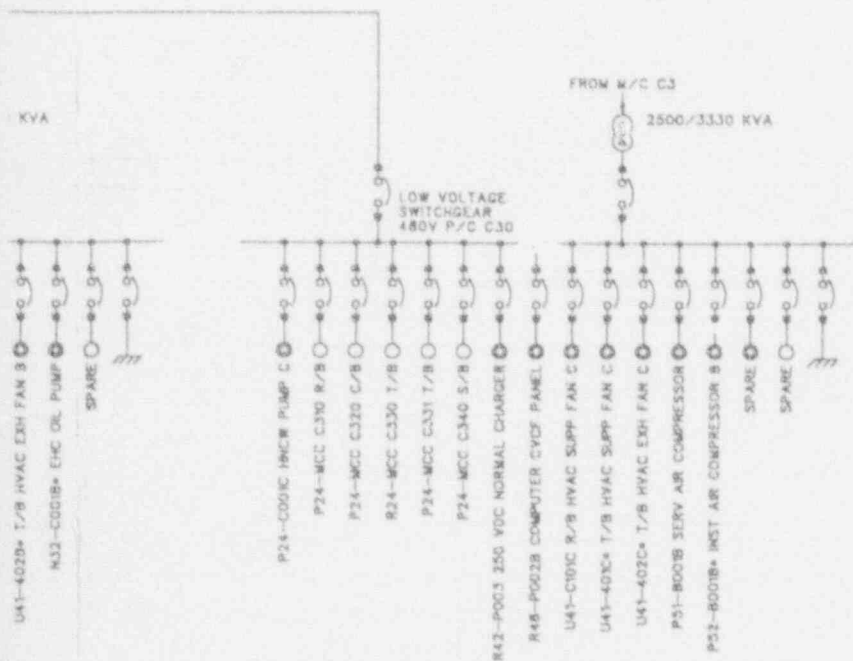
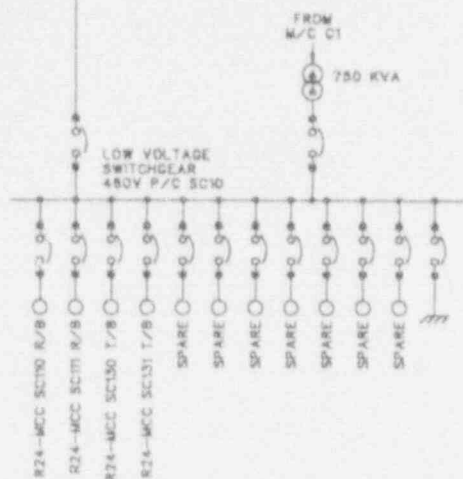
Figure 8.3-1 ELECTRICAL POWER DISTRIBUTION SYSTEM SLD (Sheet 1 of 3)



480V NON-IE POWER DISTRIBUTION

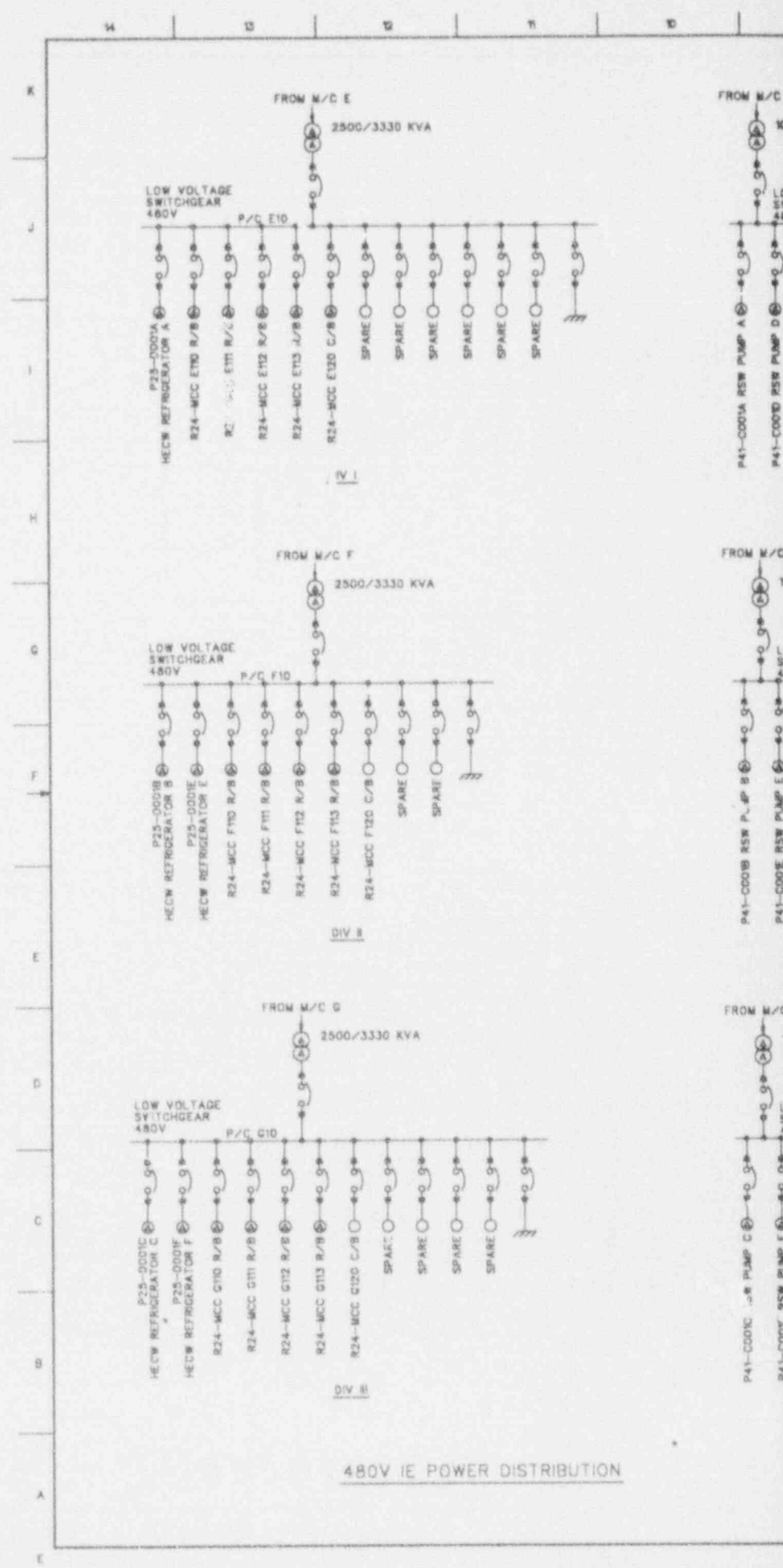
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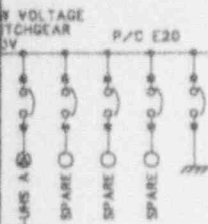
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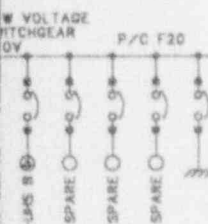
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00 KVA



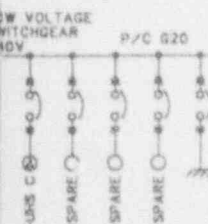
DIV I

00 KVA

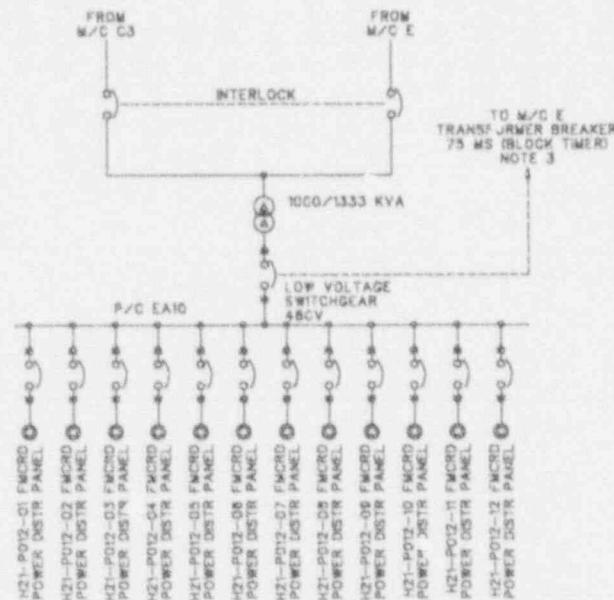


DIV II

00 KVA



DIV III



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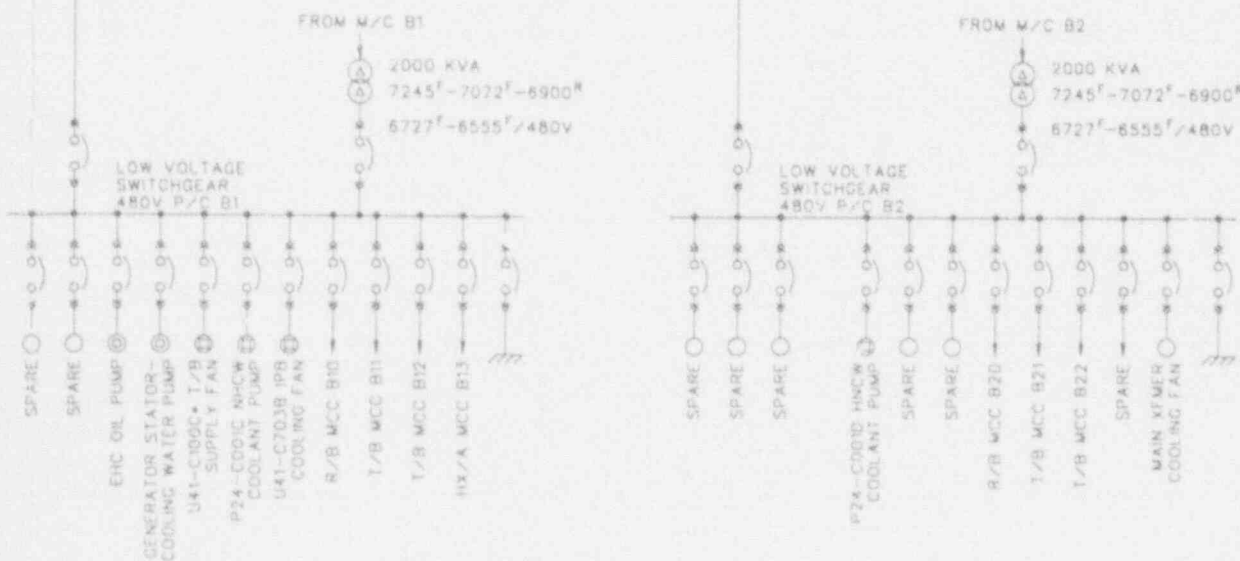
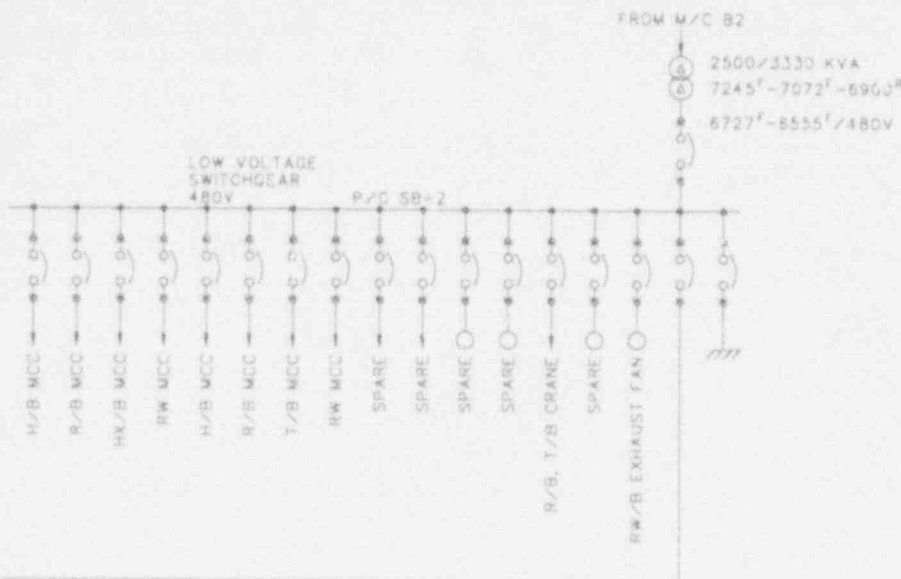
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Figure 8.3-1 ELECTRICAL POWER DISTRIBUTION SYSTEM SLD (Sheet 3 of 3)



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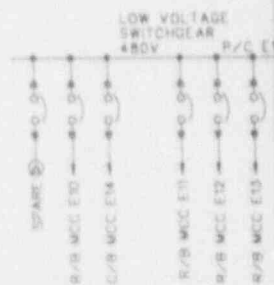
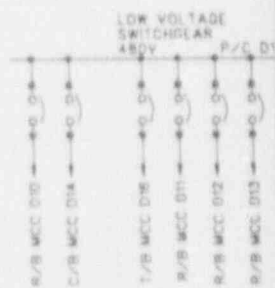
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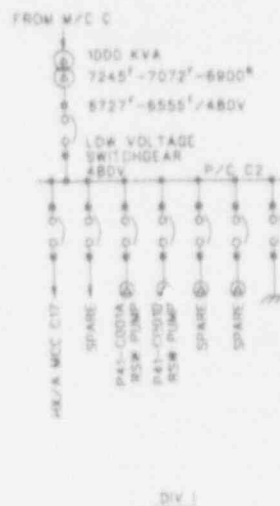
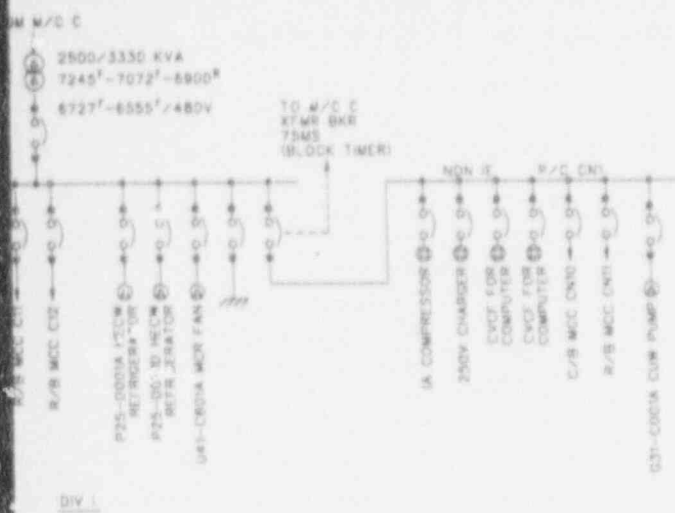
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90-040-09

Figure 8.3-2 480V NON-1E POWER DISTRIBUTION SYSTEM SLD

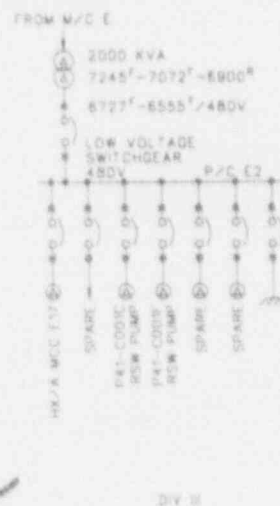
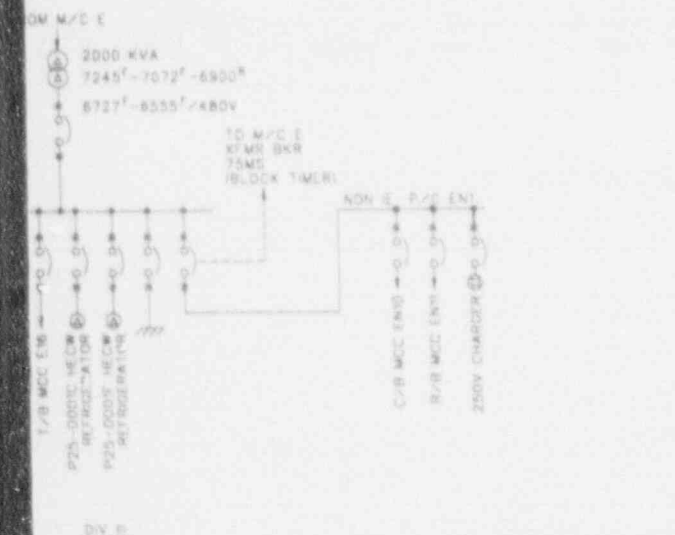
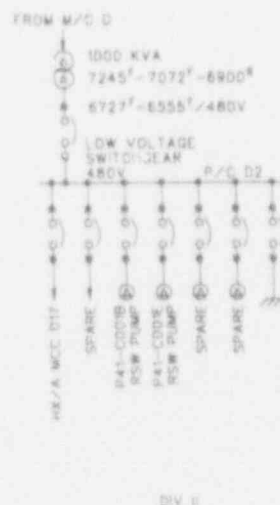
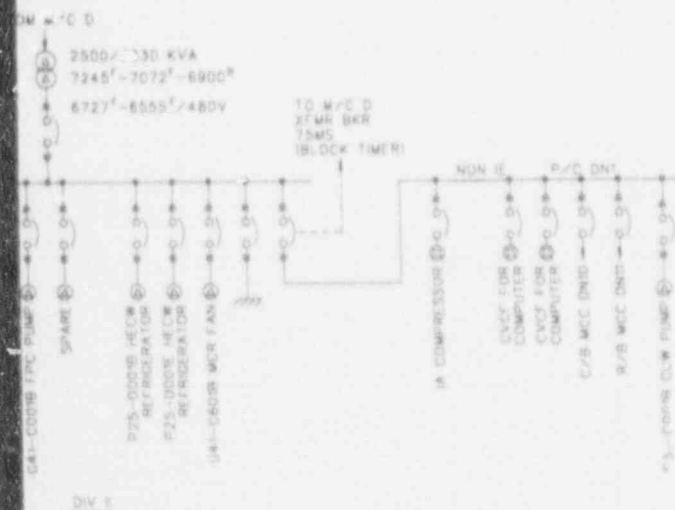


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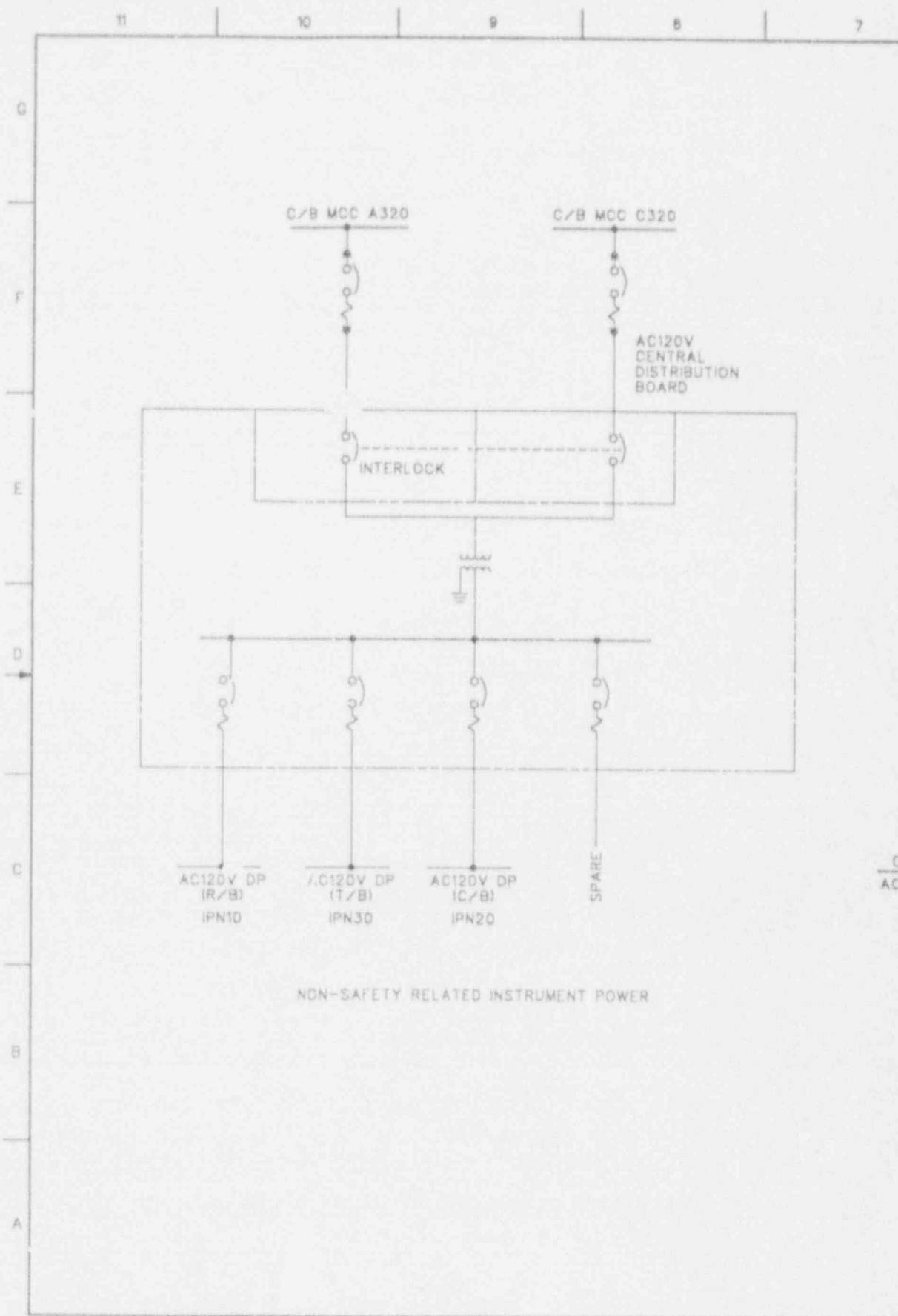
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Aperture Card



9210010066-05

90-040-10

Figure 8.3-3 480V E/NON-1E POWER DISTRIBUTION SYSTEM SLD



6

5

4

3

2

(DIV I)
C/B MCC E120

(DIV II)
C/B MCC F120

(DIV III)
C/B MCC G120

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CB RB
AC120V DP AC120V DP
1PA20 1PA10
(DIV I)

CB RB
AC120V DP AC120V DP
1PB20 1PB10
(DIV II)

CB RB
AC120V DP AC120V DP
1PC20 1PC10
(DIV III)

SAFETY RELATED INSTRUMENT POWER

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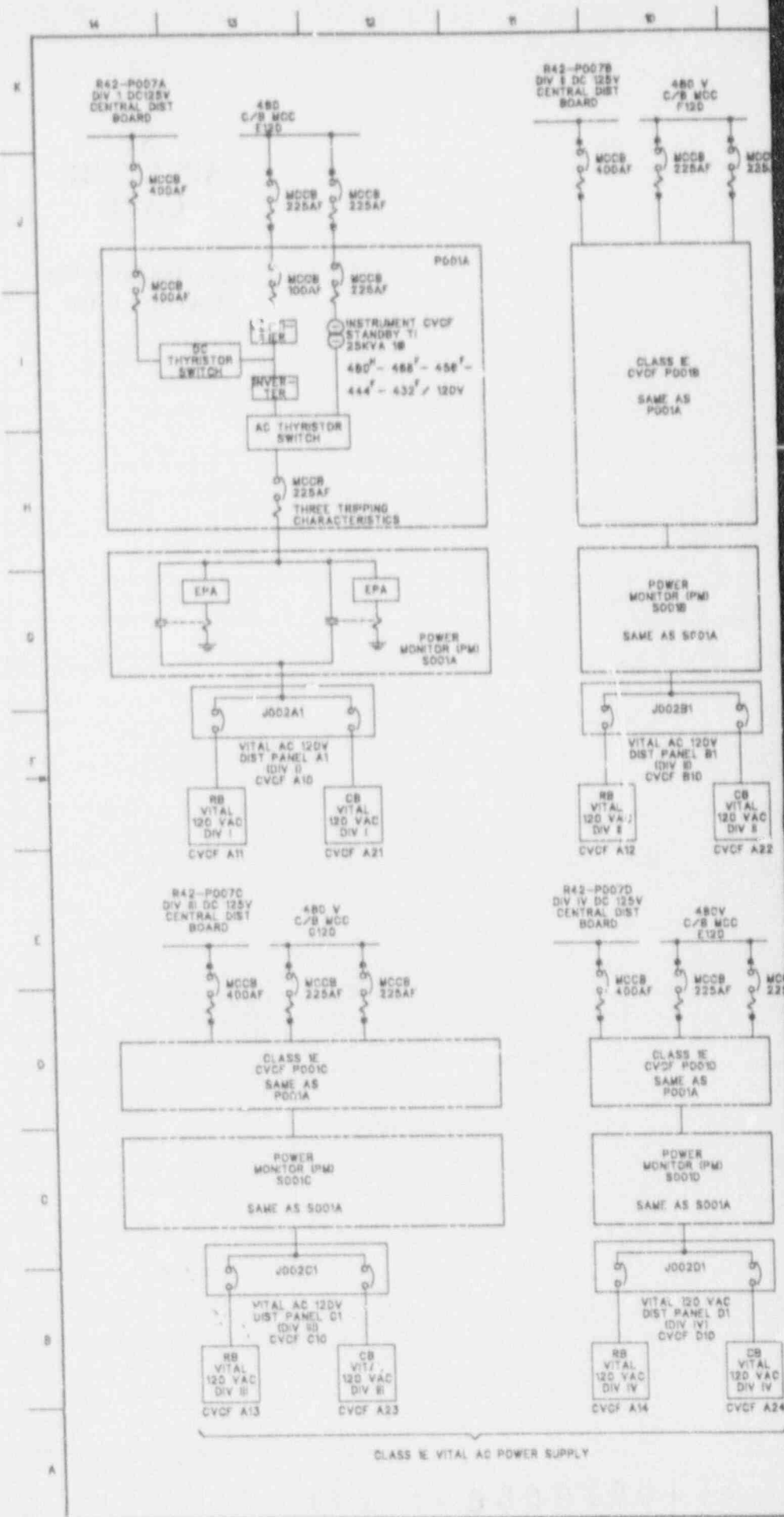
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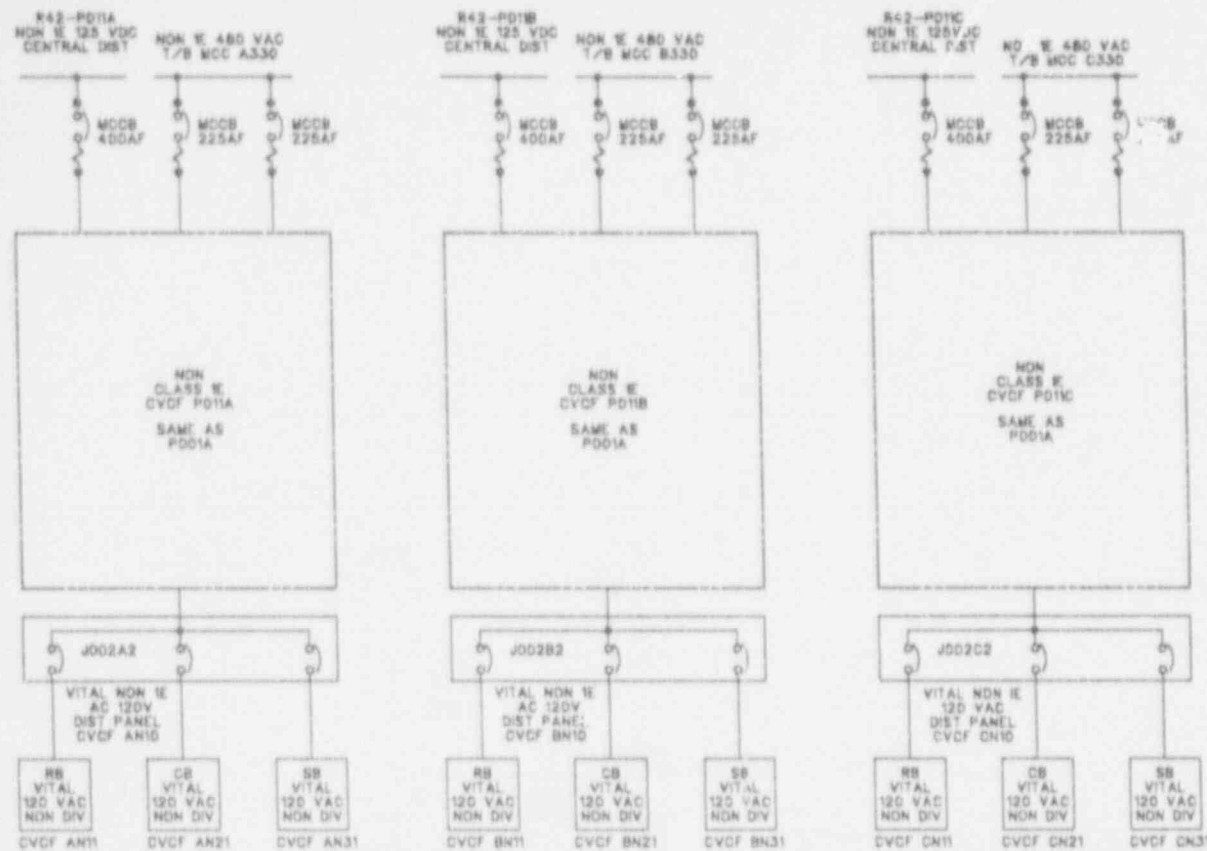
MPL NO. R47-1010

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Figure 8.3-4 INSTRUMENT AND CONTROL POWER SUPPLY SYSTEM SLD





NOTES:

1. ELECTRICAL PROTECTION ASSEMBLY (EPA) TO BE POWERED FROM CIRCUIT IT MONITORS OR 125 VDC.
2. EACH EPA TO BE COMPRISED OF OR THE EQUIVALENT OF A 27 RELAY (UNDER VOLTAGE), A 50 RELAY (OVER VOLTAGE), AND AN 81 RELAY (UNDER AND OVER FREQUENCY).
3. EPA OPERATING RANGE:
UNDER VOLTAGE - 110% VAC
OVER VOLTAGE - 140 VAC
UNDER FREQUENCY - 57 HZ
OVER FREQUENCY - 63 HZ
4. TRIP SETTINGS OF EPA TO BE $\pm 10\%$ OF THE NOMINAL VOLTAGE AND $\pm 5\%$ OF THE NOMINAL FREQUENCY FOR PERIOD OF BETWEEN 0.1 AND 3.0 SECONDS.
5. EACH EPA TO HAVE A "TEST" PUSHBUTTON.

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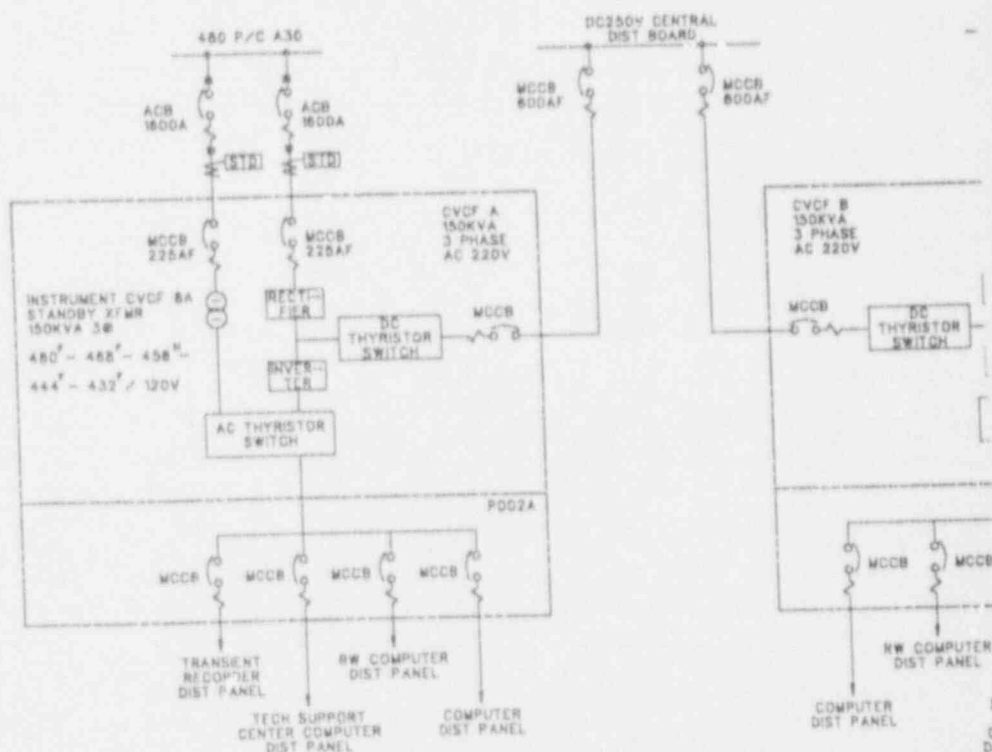
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CONSTANT VOLTAGE CONSTANT FREQUENCY POWER SUPPLY

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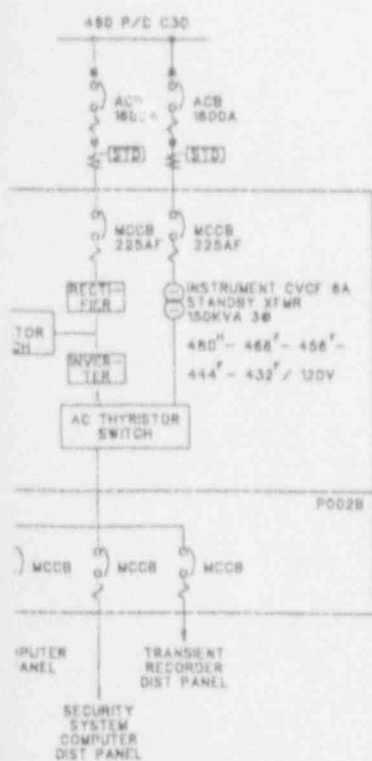
Figure 8.3-5 PLANT VITAL AC POWER SUPPLY SYSTEM SLD (Sheet 1 of 2)



COMPUTER VITAL AC POWER SUPPLY

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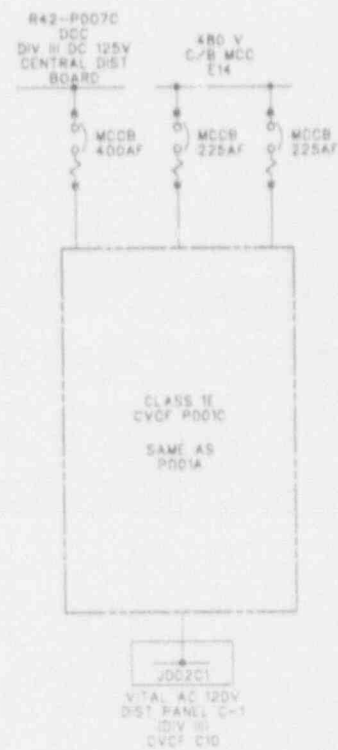
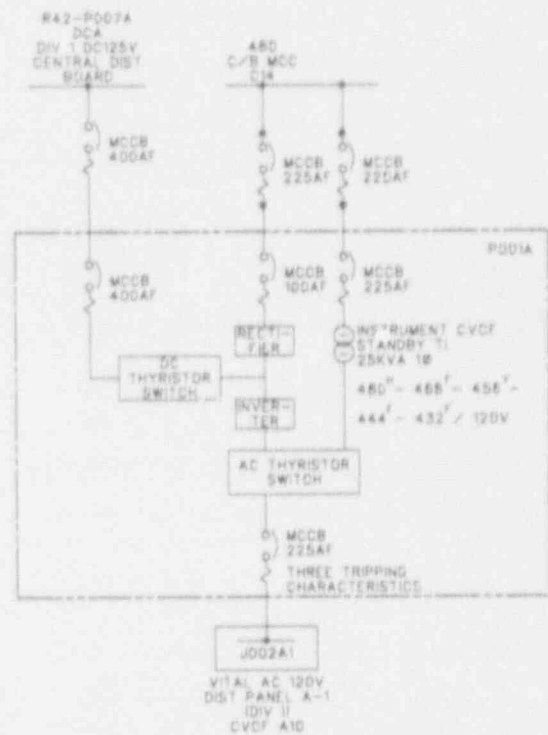
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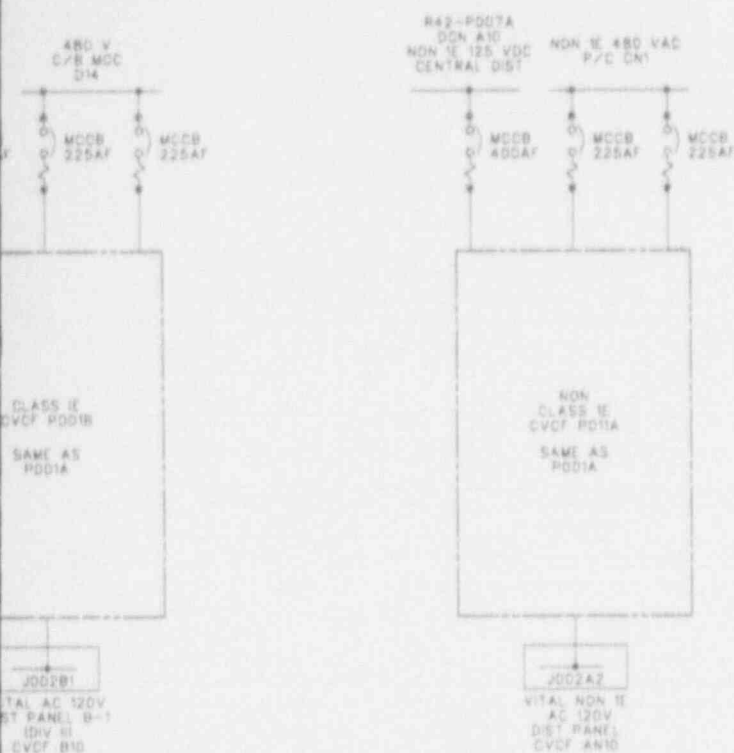
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Figure 8.3-5 PLANT VITAL AC POWER SUPPLY SYSTEM SLD (Sheet 2 of 2)



CLASS 1E VITAL CVCF

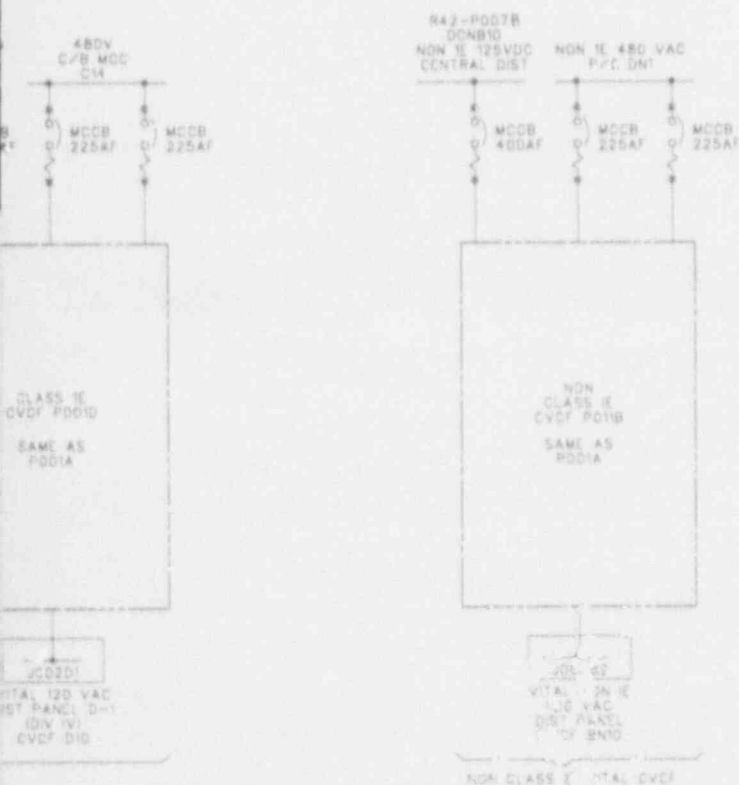


REFERENCE:

1. STATIC UNINTERRUPTIBLE POWER SUPPLY (CVCF) SPECIFICATION

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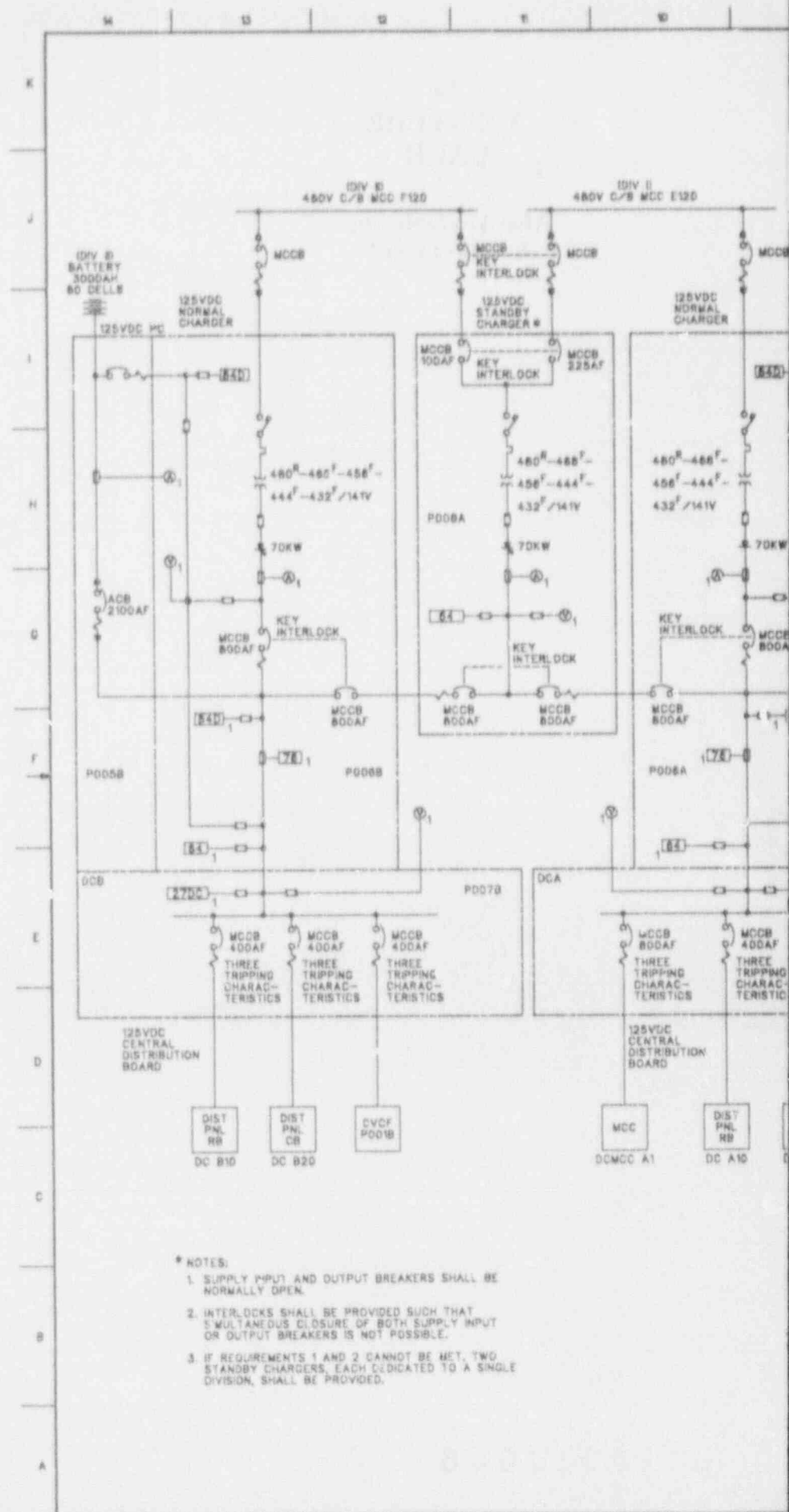
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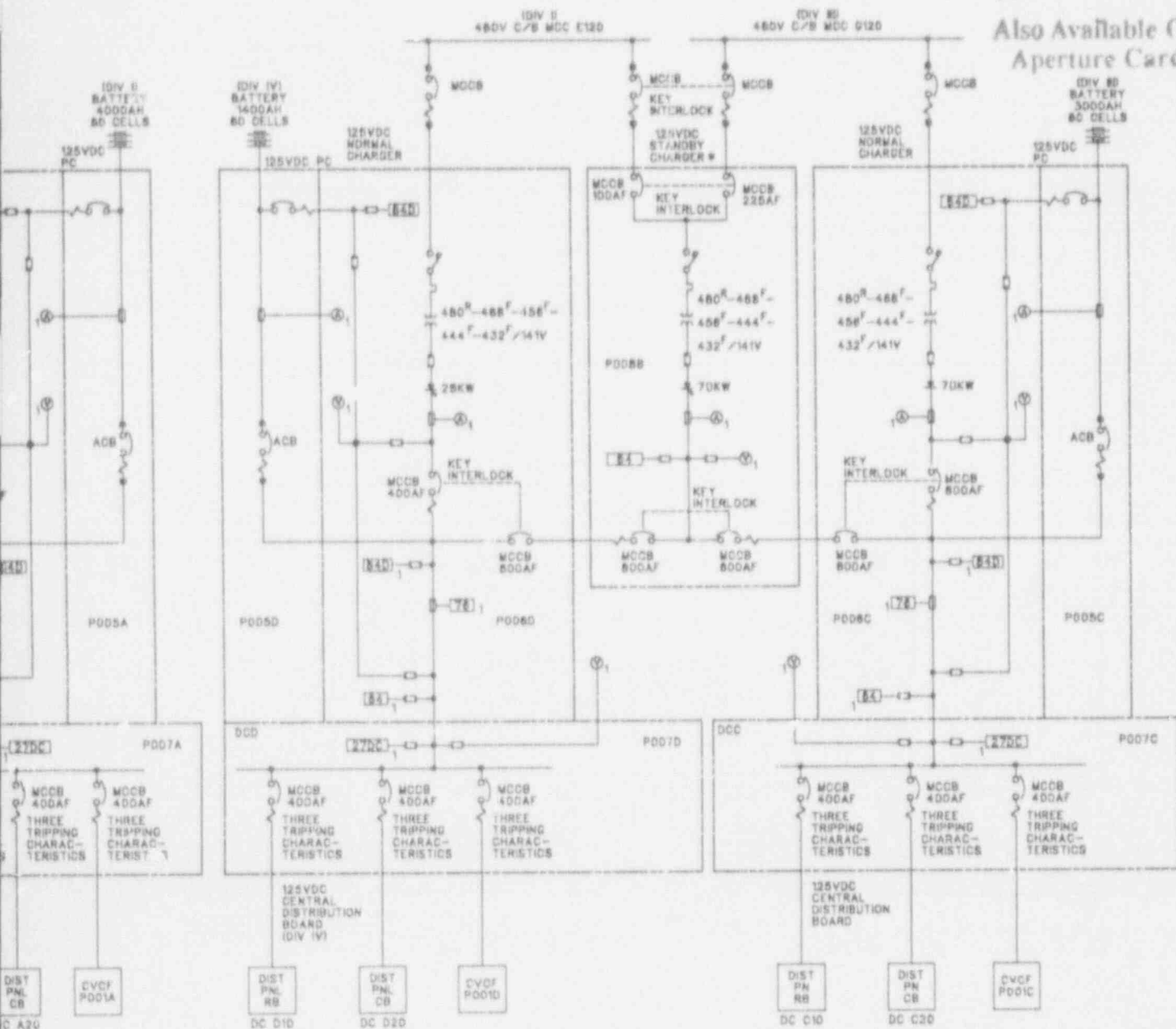
90-040-13

Figure 8.3-6 PLANT VITAL CONSTANT VOLTAGE, CONSTANT FREQUENCY POWER SLD



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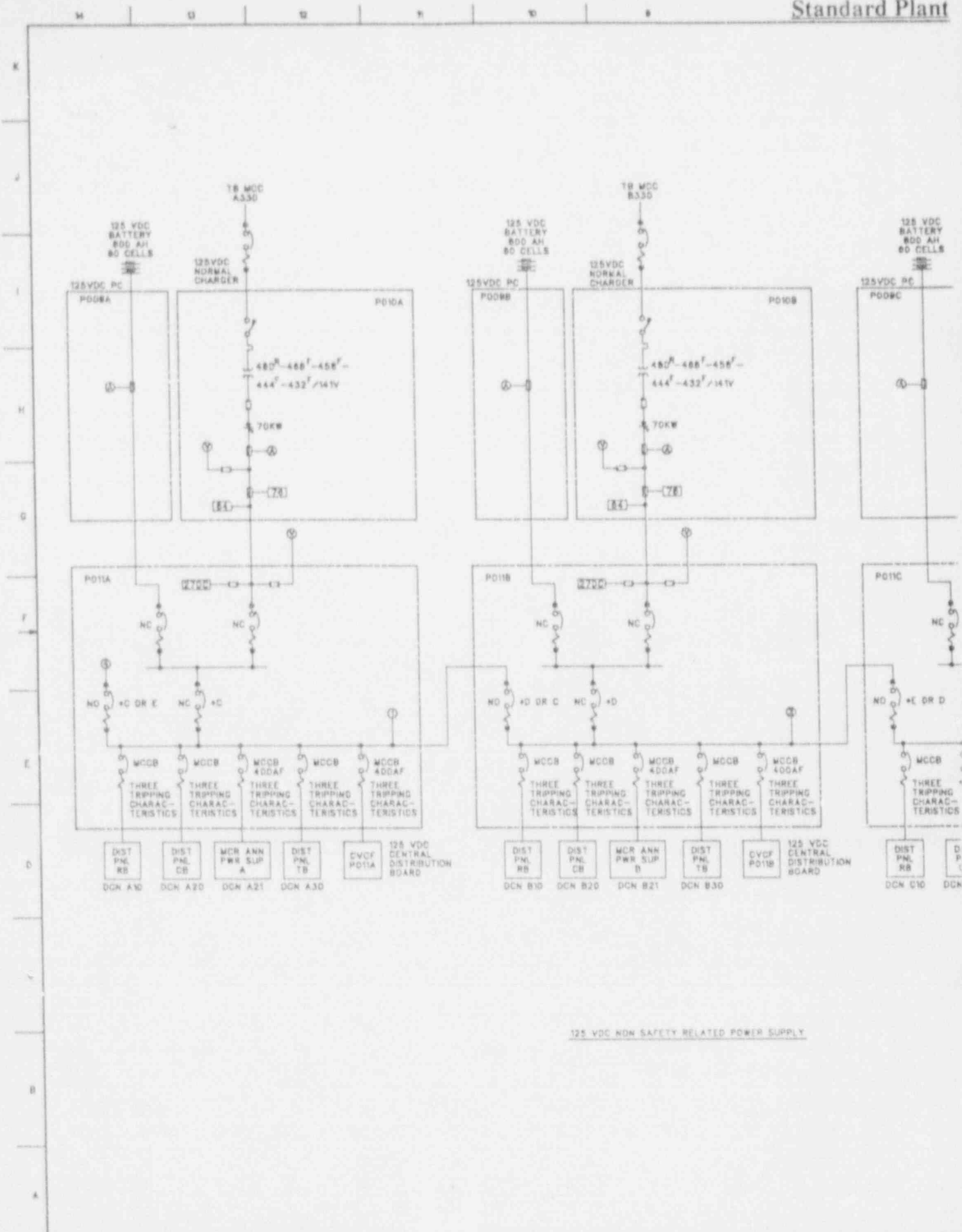
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125 VDC SAFETY RELATED POWER SUPPLY

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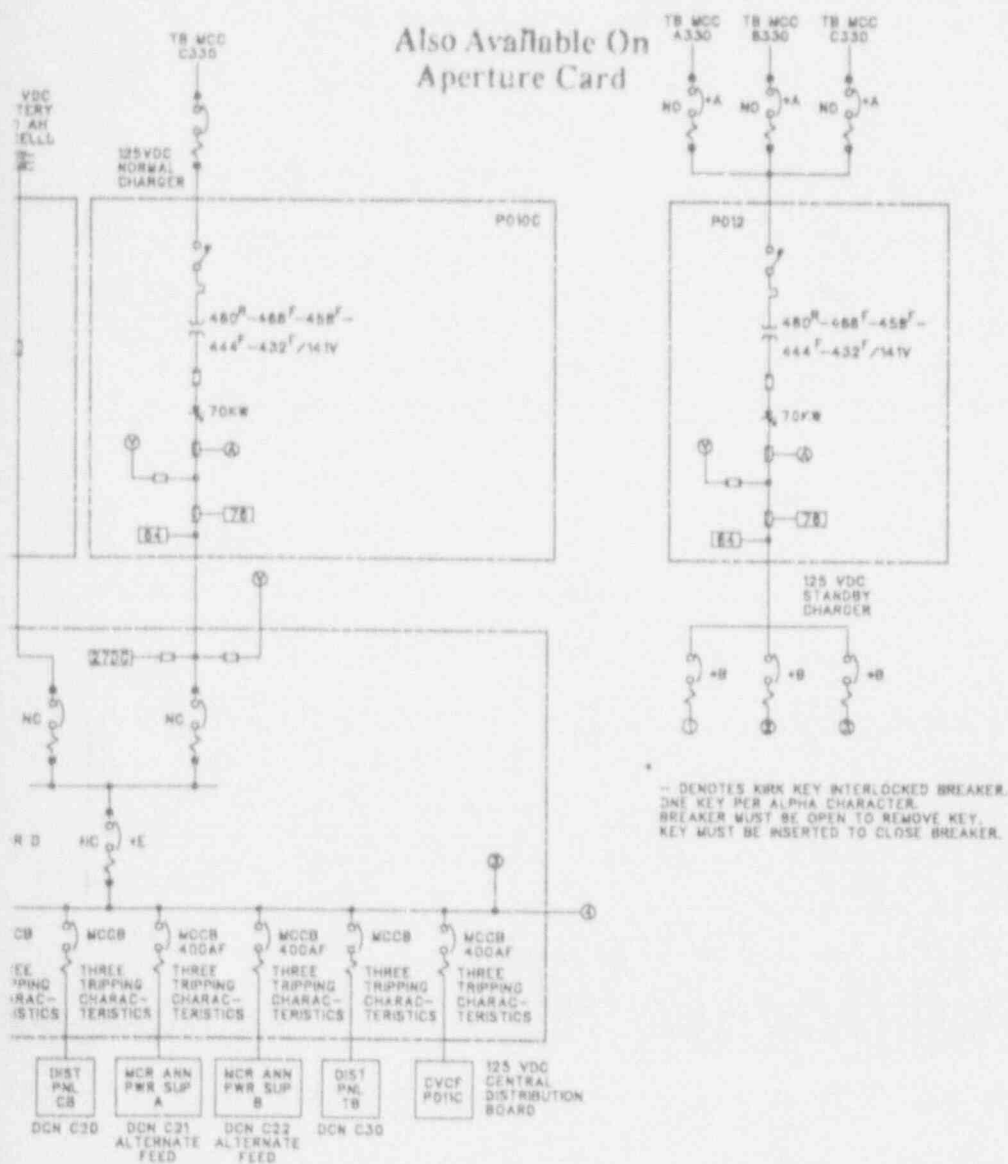
Figure 8.3-7 PLANT DC POWER SUPPLY SYSTEM SLD (Sheet 1 of 3)

ABWR Standard Plant



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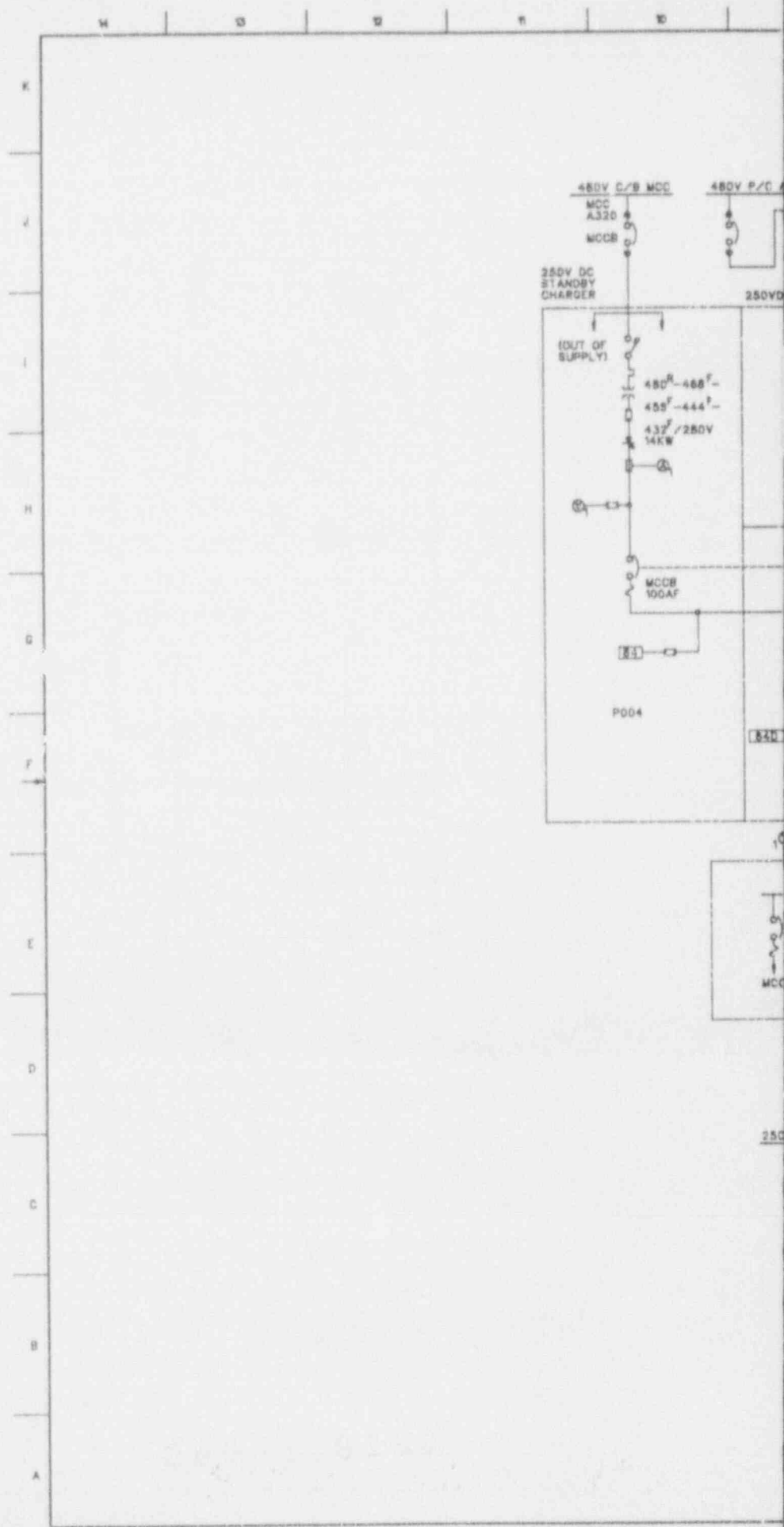


-- DENOTES KKK KEY INTERLOCKED BREAKER.
ONE KEY PER ALPHA CHARACTER.
BREAKER MUST BE OPEN TO REMOVE KEY.
KEY MUST BE INSERTED TO CLOSE BREAKER.

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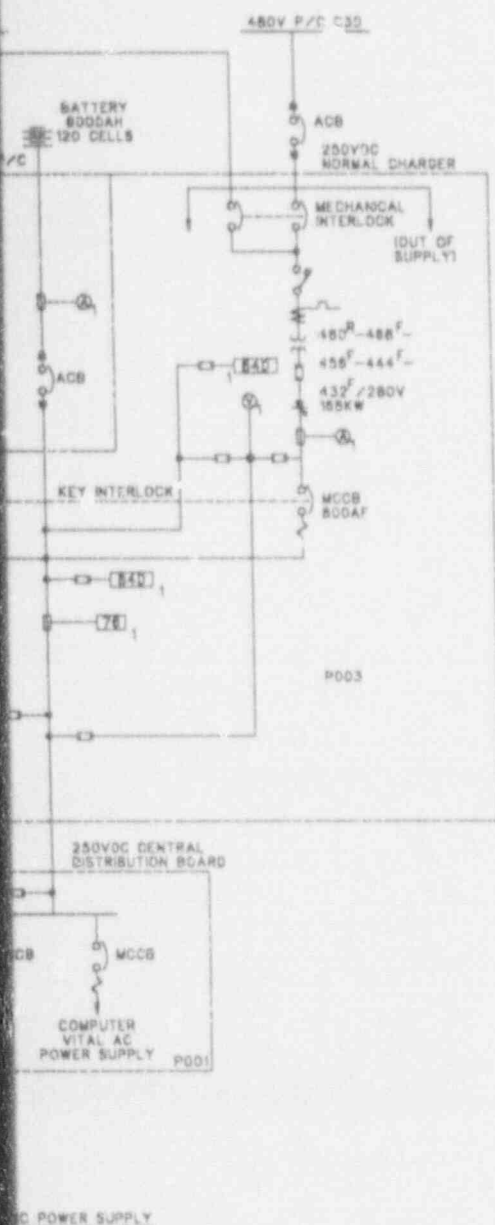
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Figure 8.3-7 PLANT DC POWER SUPPLY SYSTEM SLD (Sheet 2 of 3)



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Figure 8.3-7 PLANT DC POWER SUPPLY SYSTEM SLD (Sheet 3 of 3)

250V DC
STANDBY
CHARGER

(OUT C
SUPPLY



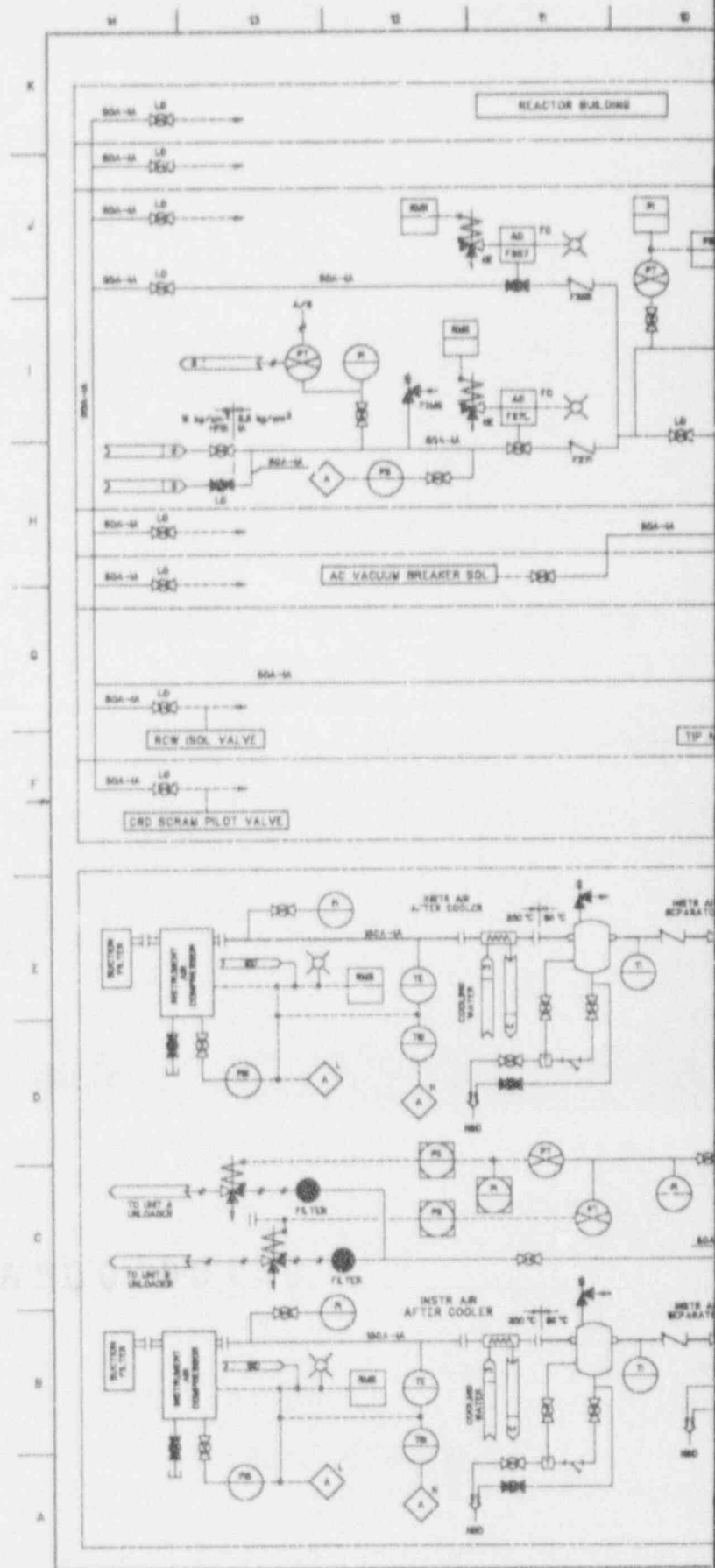
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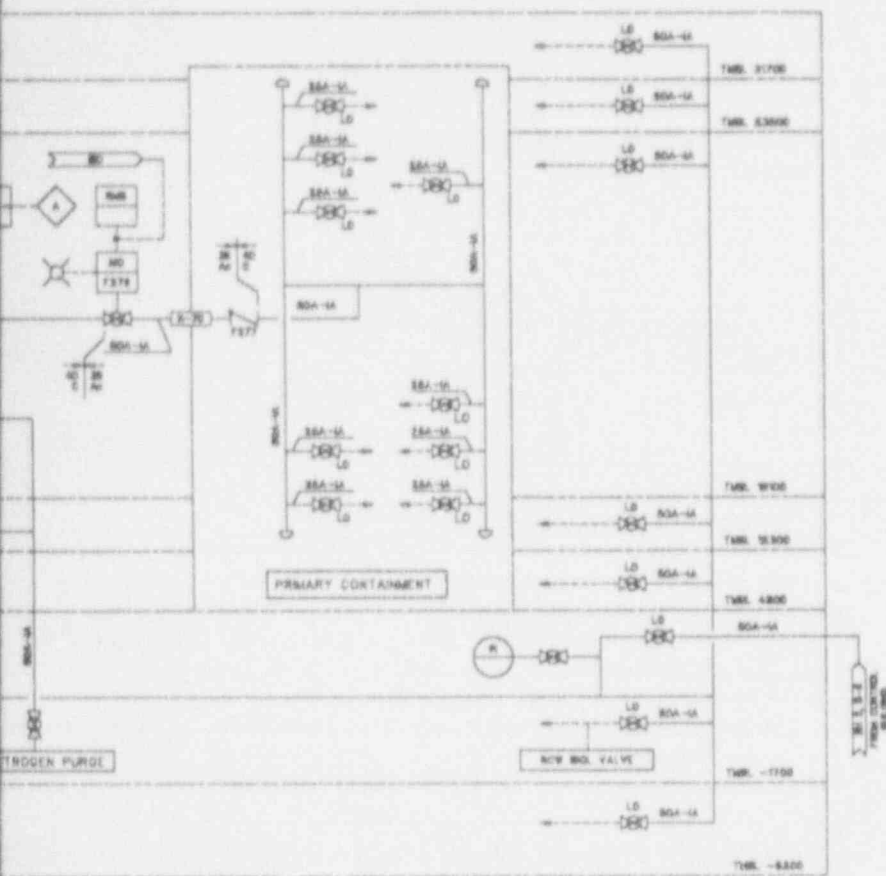
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435.8, 435.53

9210010066-13

Figure 8.3—8 250VDC POWER SYSTEM SLD





NOTES

- THE FOLLOWING GENERAL SPECIFICATIONS ARE APPLIED UNLESS OTHERWISE NOTED.

ITEM	APPLICATION
SYSTEM	SI
GROUP CLASSIFICATION	40
DESIGN OPERATING PRESSURE	8.0
DESIGN OPERATING TEMPERATURE	COMPRESSOR TO AFTER COOLER 350 OTHER 60
OPERATING TEMP	60
PIPE MATERIAL	304
PIPE WALL THICKNESS	304 AND 309S SCH 40 304 AND 309S SCH 80 SCH 40
DESIGN CATEGORY	PCV BOUNDARY 40 OTHER 60
FLUID	AIR/NITROGEN

- FOLLOWING ITEMS MAY BE CHANGED AT THE DETAIL DESIGN STAGE.

- ARRANGEMENT OF COMPONENTS
- CONFIGURATION OF PIPING
- IDENTIFICATION OF VALVES

REFERENCE DOCUMENTS

REFERENCE DOCUMENTS	REF. NO.
1. PIPING AND INSTRUMENT SYMBOLS	10-2030
2. SERVICE AIR SYSTEM	P81-1010
3. REACTOR BUILDING COOLING WATER SYSTEM	P21-1010
4. ATMOSPHERIC CONTROL SYSTEM	131-1010
5. HIGH PRESSURE NITROGEN GAS SUPPLY SYSTEM	P24-1010
6. INSTRUMENT AIR SYSTEM 80	P63-1010
7. KATHARTE SYSTEM	671-1010

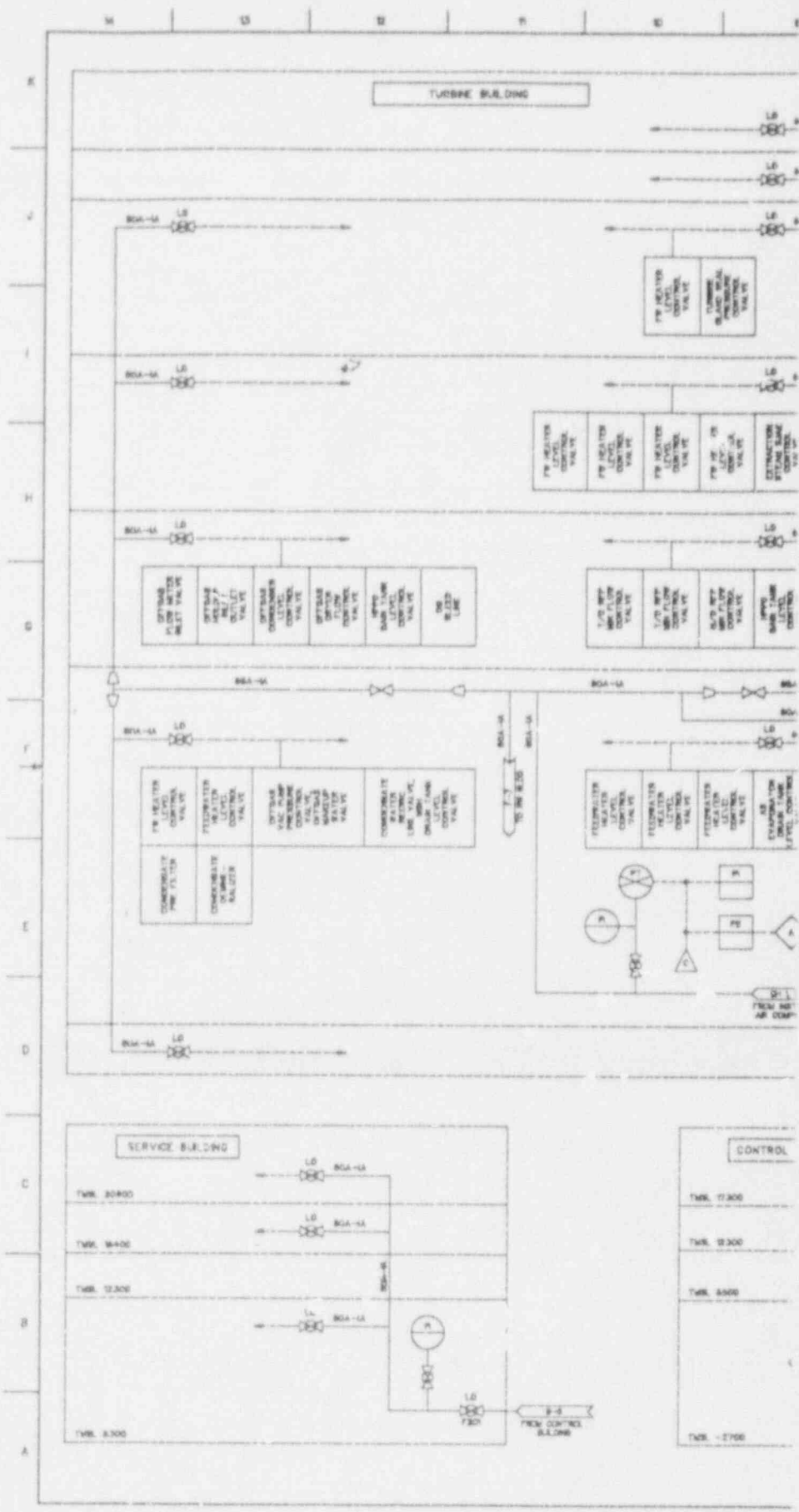
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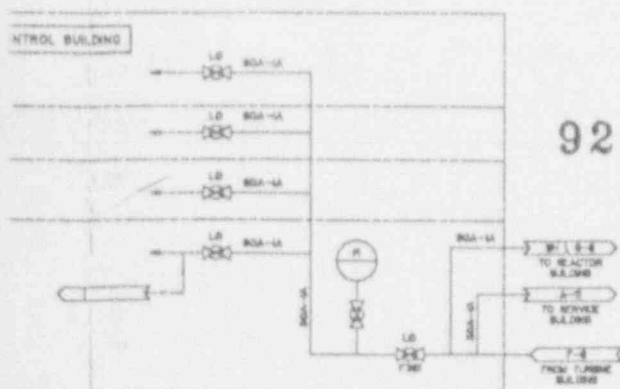
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Figure 9.3-6 INSTRUMENT AIR SYSTEM P&ID (Sheet 1 of 2)



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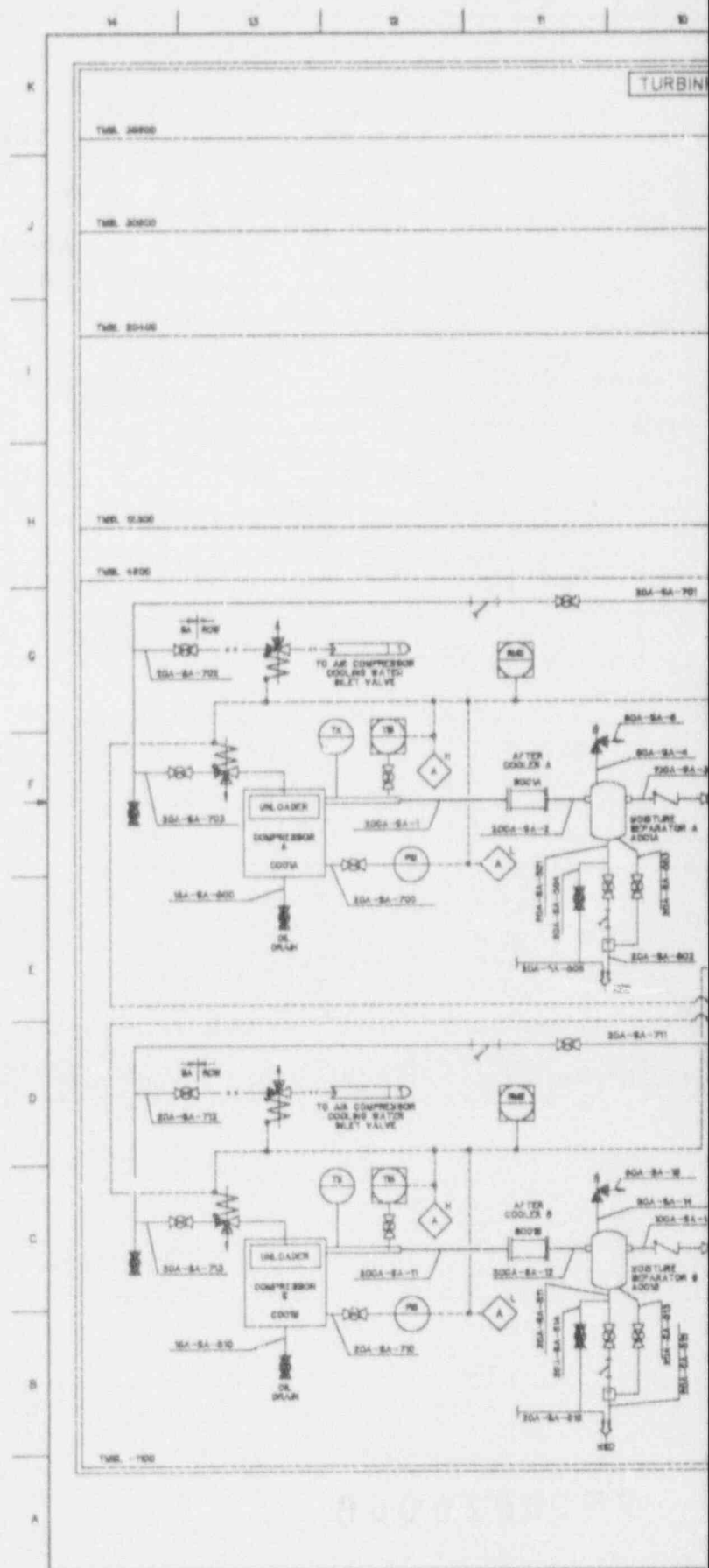


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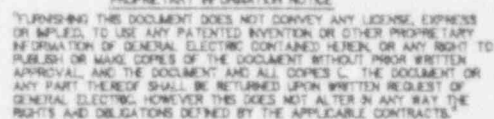
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Figure 9.3-6 INSTRUMENT AIR SYSTEM P&ID (Sheet 2 of 2)



REV B



9.3-22

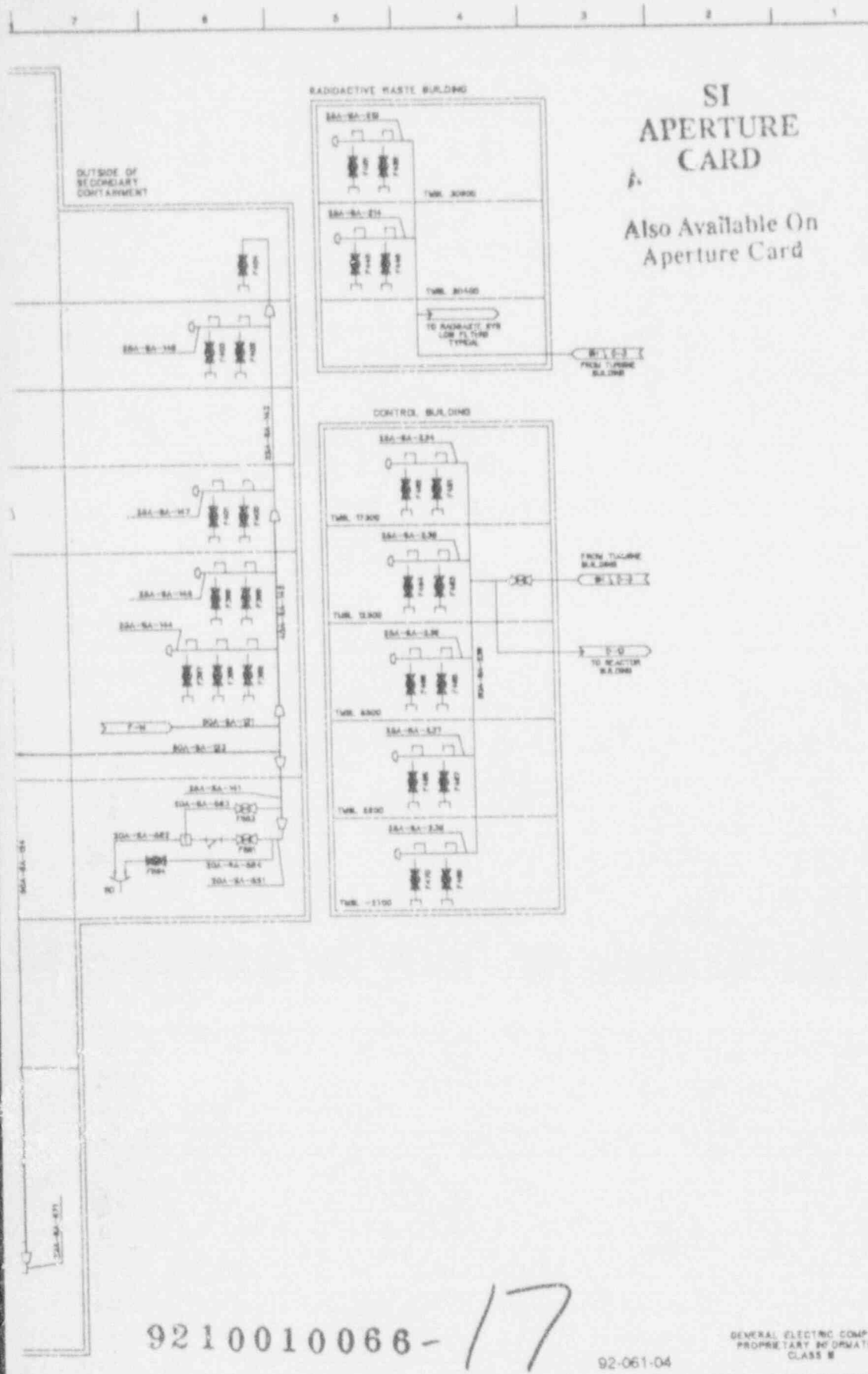
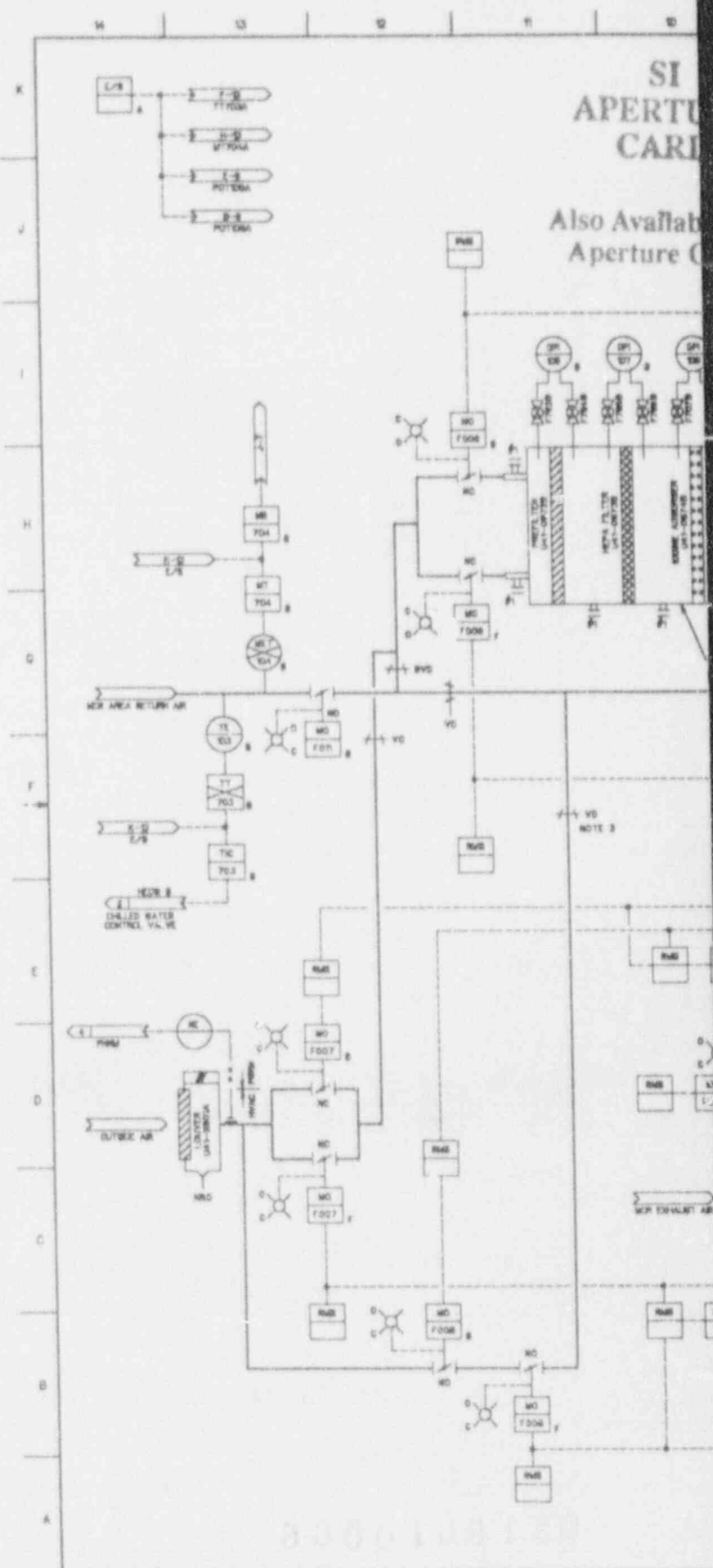


Figure 9.3-7 SERVICE AIR SYSTEM P&ID (Sheet 2 of 2)

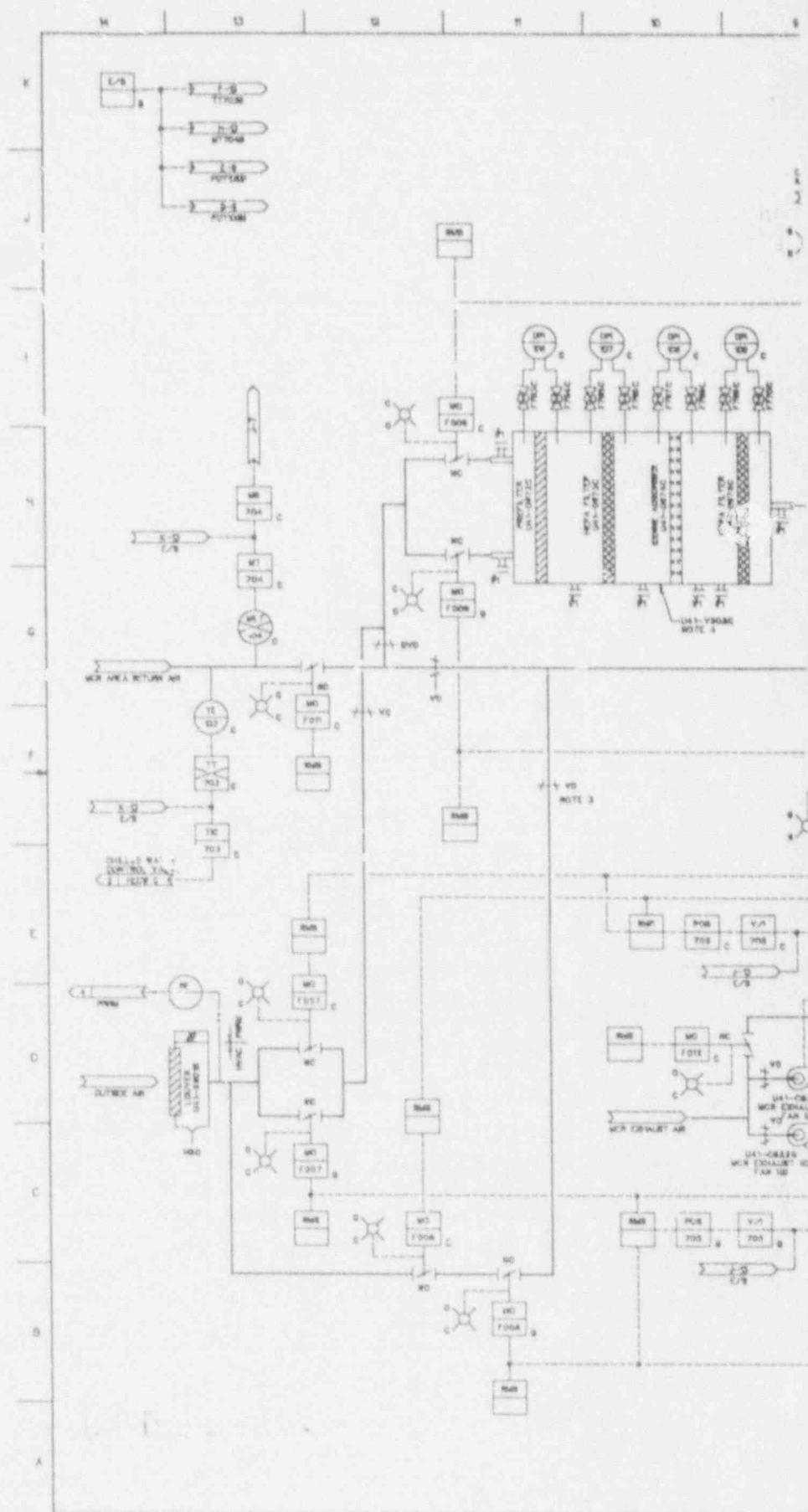
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Aperture C



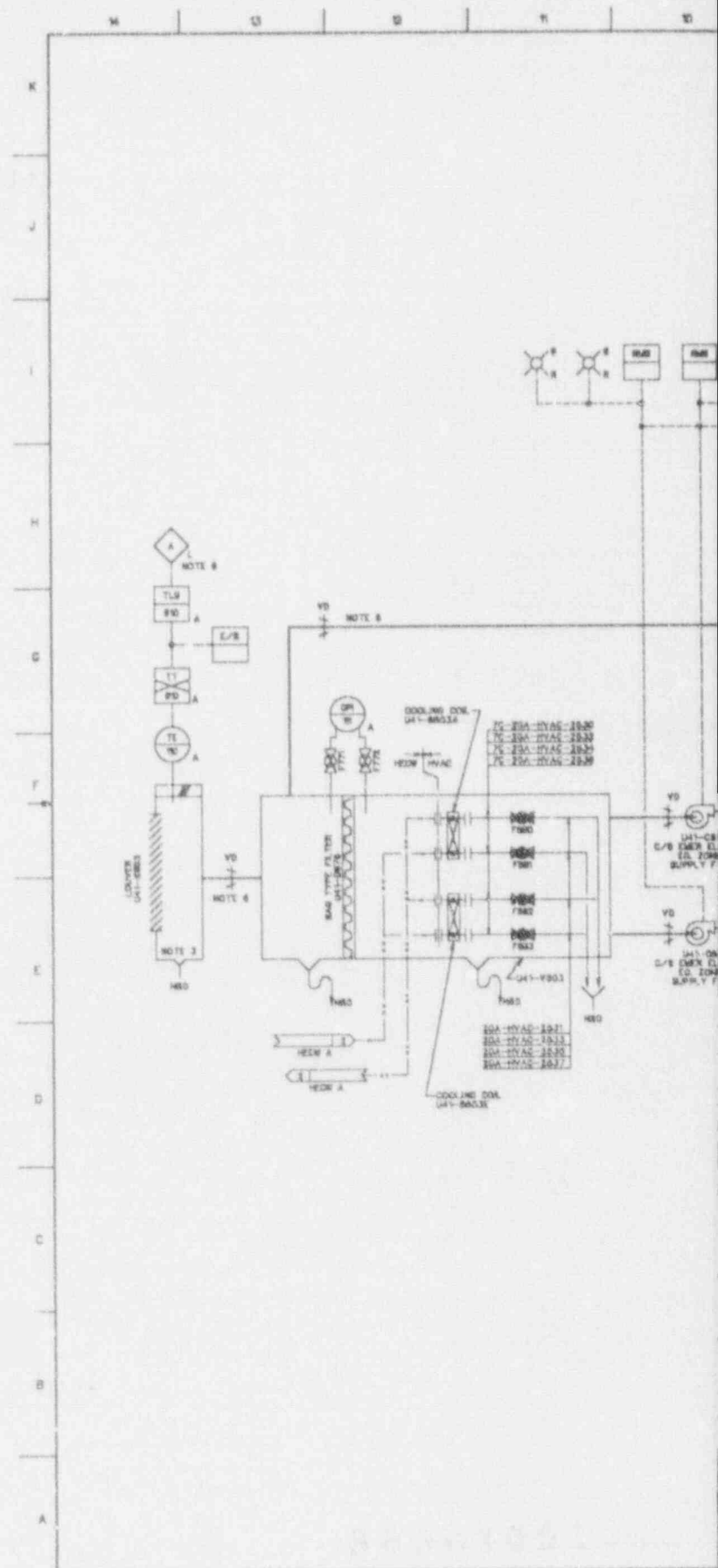
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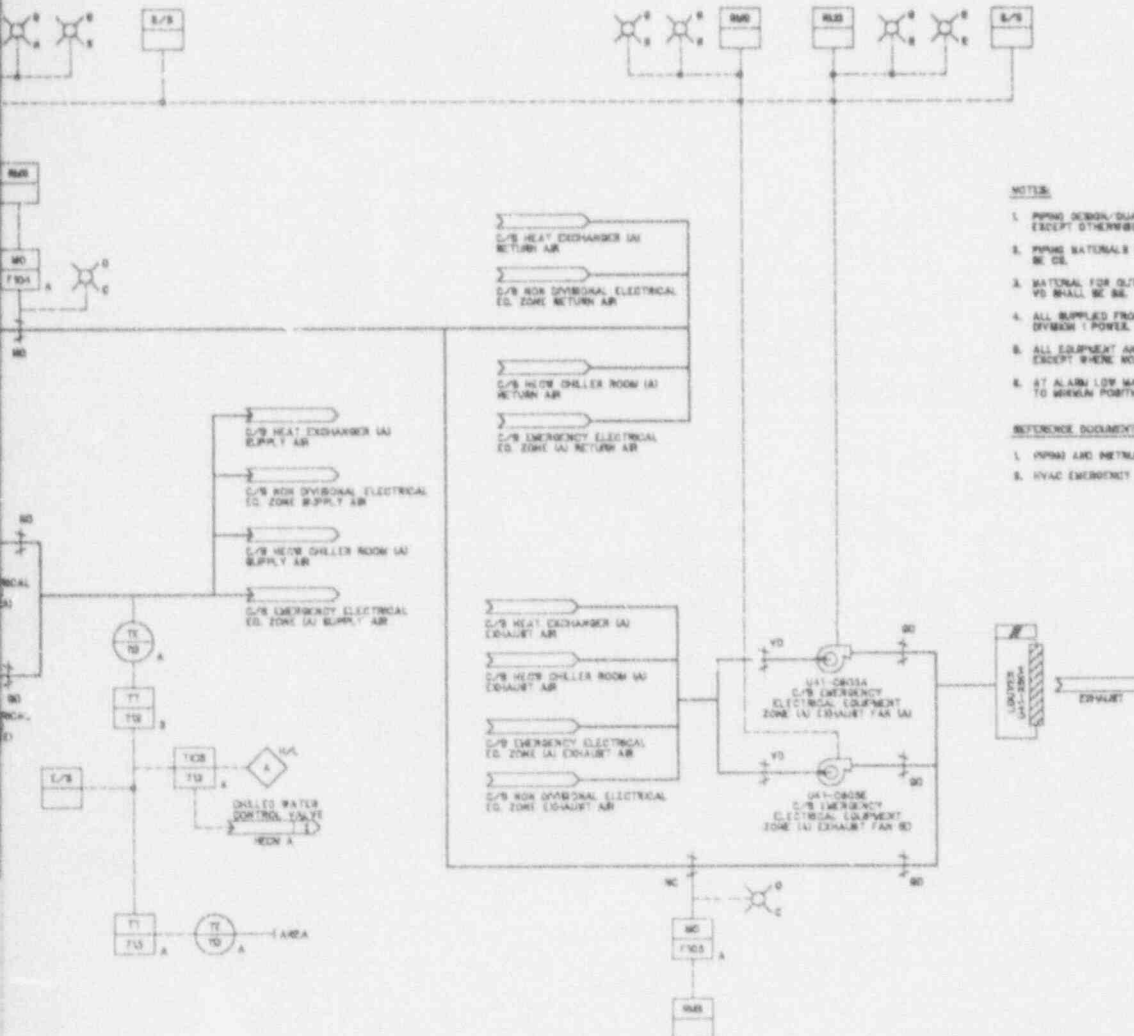


9.4-7a.1



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NOTES

1. PPMW DESIGN/QUALITY CLASSIFICATION SHALL BE 7B EXCEPT OTHERWISE SPECIFIED.
2. PPMW MATERIALS FOR VENT AND DRAIN SHALL BE CL.
3. MATERIAL FOR OUTSIDE AIR INTAKE VENT SHALL BE CL.
4. ALL SUPPLIES FROM DIVISION A WATER AND DIVISION I POWER.
5. ALL EQUIPMENT AND PPMW IS SAFETY RELATED EXCEPT WHERE NOTED.
6. AT ALARM LOW MANUALLY ADJUST OUTDOOR AIR DAMPER TO MINIMUM POSITION AND RETURN AIR TO MAXIMUM.

REFERENCE DOCUMENTS

1. PPMW AND INSTRUMENT SYMBOLS DIAGRAM STD-0030
2. HVAC EMERGENCY COOLING WATER SYS FMS PAS-005

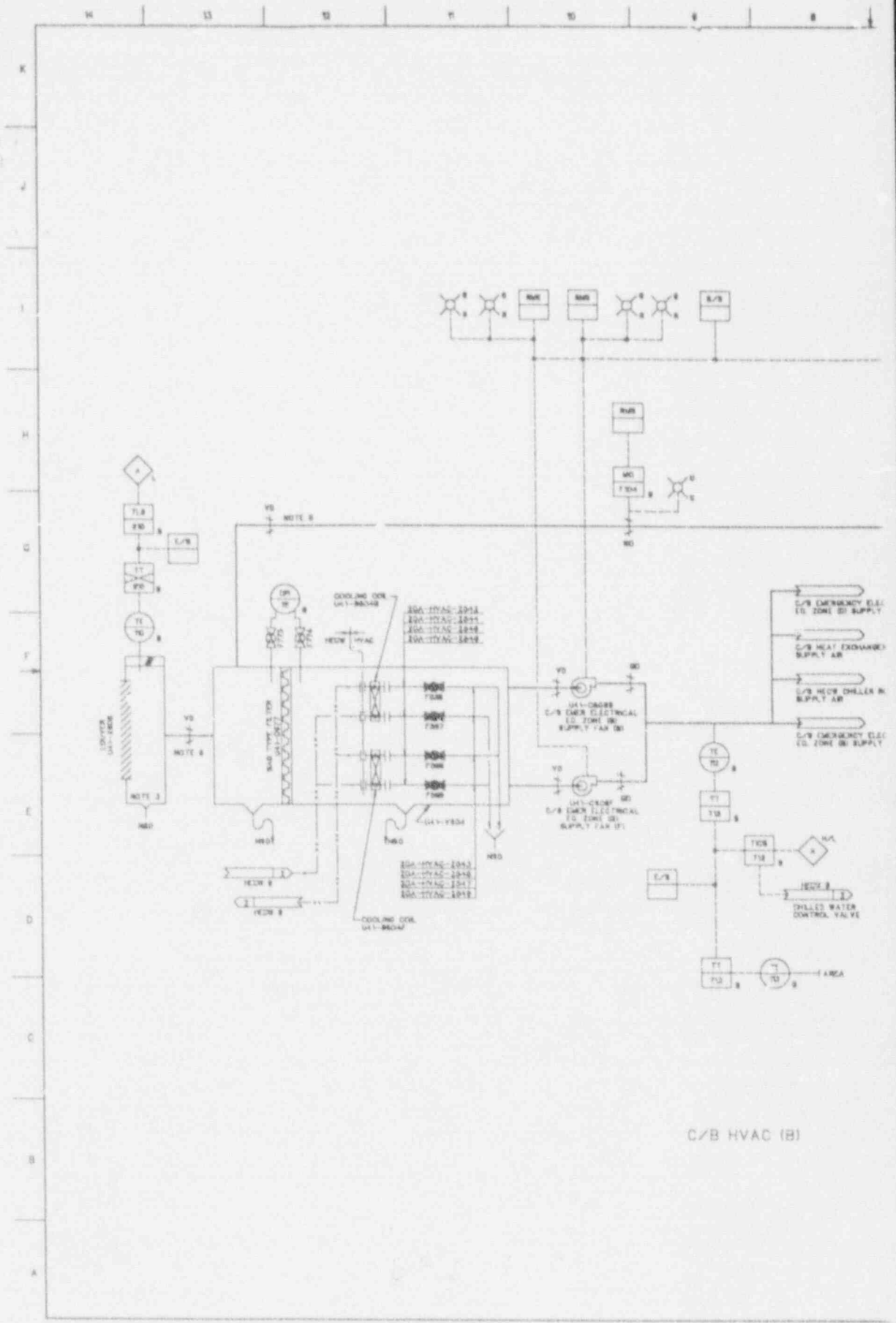
C/B HVAC (A)

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92-061-07

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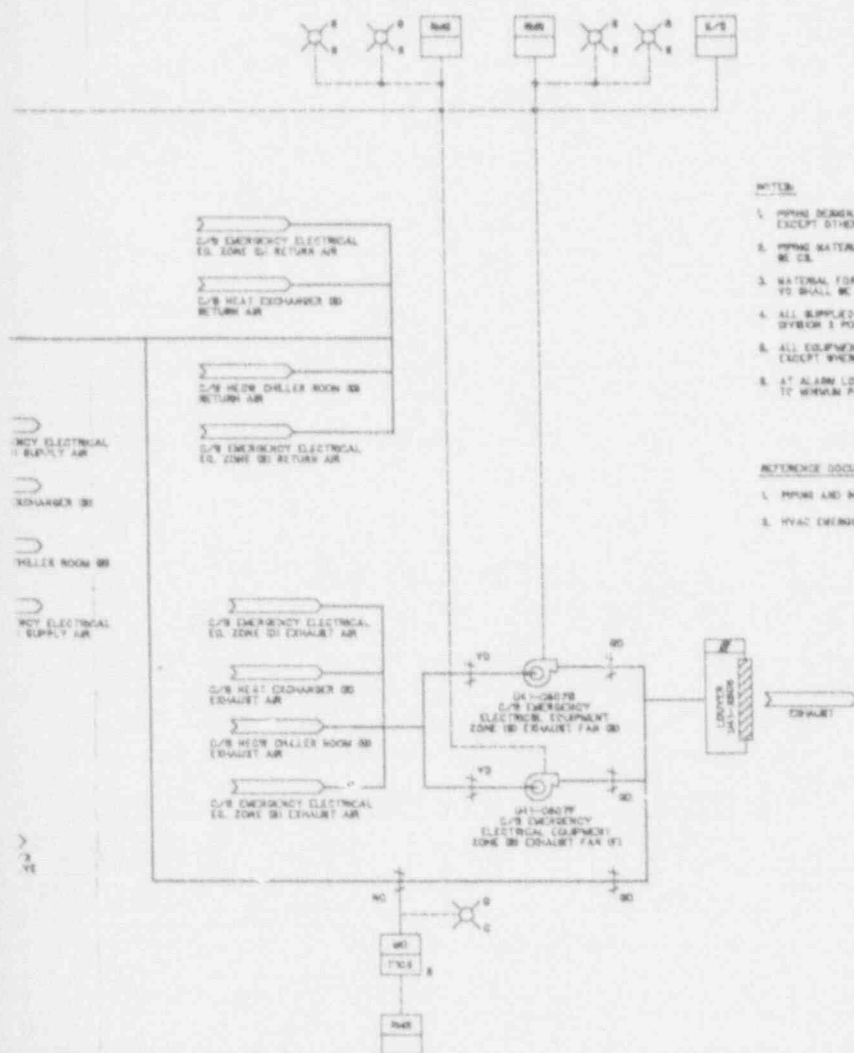
Figure 9.4-1 CONTROL BUILDING HVAC PROCESS FLOW DIAGRAM (Sheet 3 of 5)



Fig

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NOTES

1. PIPING DESIGN/QUALITY CLASSIFICATION SHALL BE AS EXCEPT OTHERWISE SPECIFIED.
2. PIPING MATERIALS FOR VENT AND DRAIN SHALL BE CS.
3. MATERIAL FOR OUTSIDE AIR INTAKE AND VENT SHALL BE SS.
4. ALL SUPPLIES FROM DIVISION 4 WATER AND DIVISION 3 POWER.
5. ALL EQUIPMENT AND PIPING IS SAFETY RELATED EXCEPT WHERE NOTED.
6. AT ALARM LOW MANUALLY ADJUST OUTDOOR AIR DAMPER TO MINIMUM POSITION AND RETURN AIR TO MAXIMUM.

REFERENCE DOCUMENTS

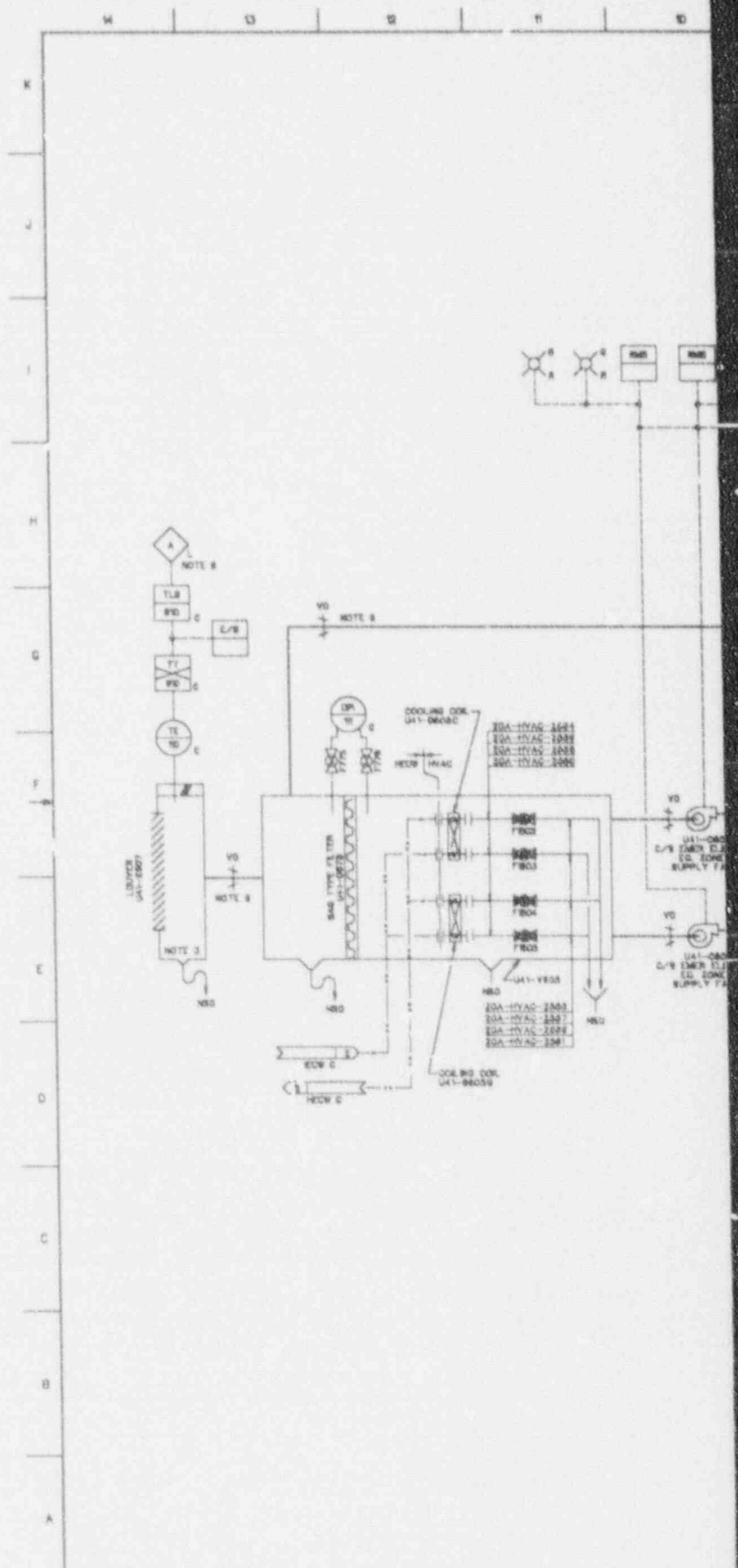
- | 1. | PIPING AND INSTRUMENT SYMBOLS DIAGRAM | WPL NO. |
|---|---|----------|
| 1. <td>PIPING AND INSTRUMENT SYMBOLS DIAGRAM</td> <td>A10-3030</td> | PIPING AND INSTRUMENT SYMBOLS DIAGRAM | A10-3030 |
| 2. <td>HVAC EMERGENCY COOLING WATER SYSTEM FAN</td> <td>P32-1010</td> | HVAC EMERGENCY COOLING WATER SYSTEM FAN | P32-1010 |

9210010066-21

92-061-08

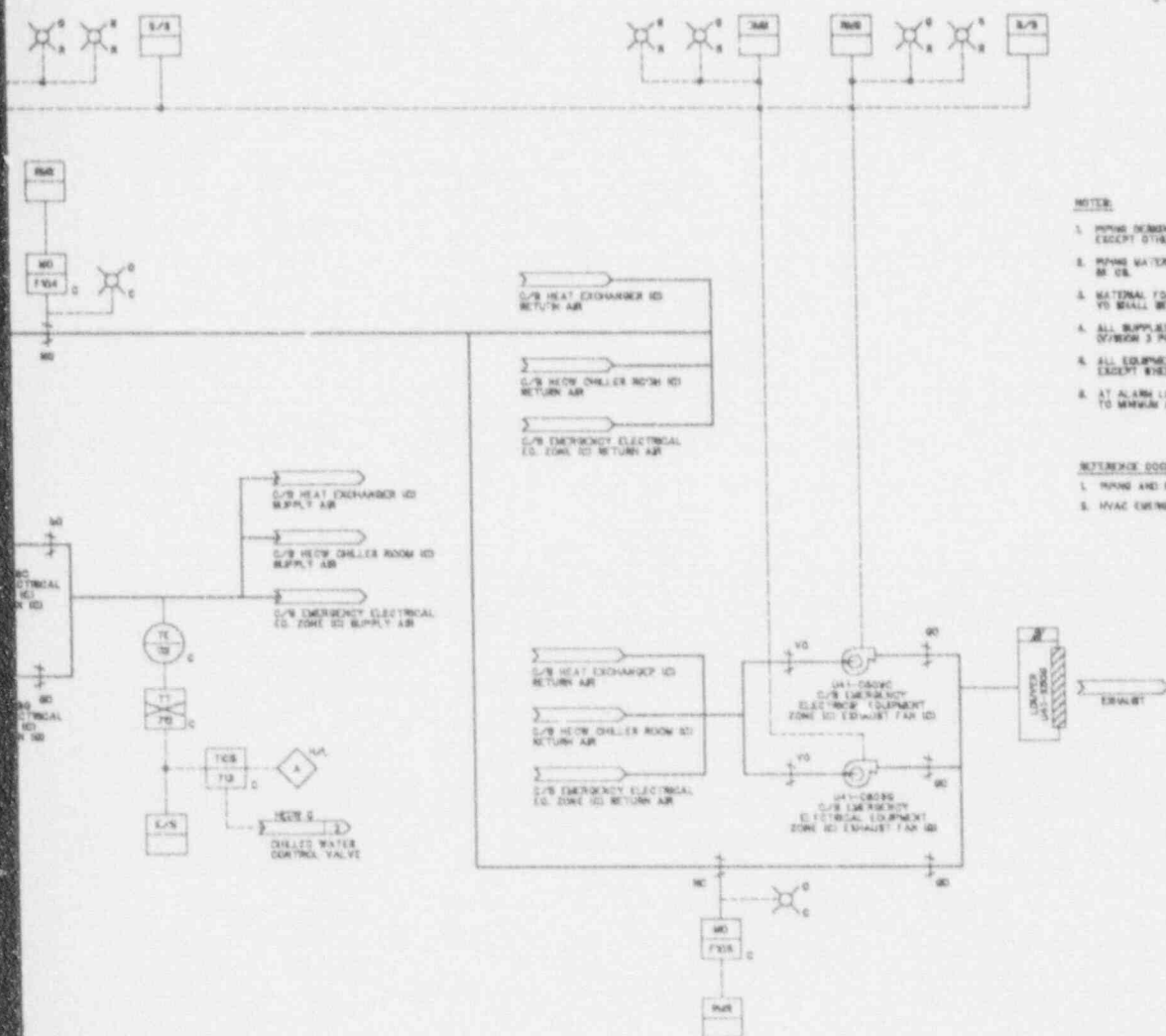
GENERAL ELECTRIC COMPANY
PROPRIETARY INFORMATION
CLASS B

Figure 9.4-1 CONTROL BUILDING HVAC PROCESS FLOW DIAGRAM (Sheet 4 of 5)



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NOTES

1. Piping dimension/quality designation shall be as specified except otherwise specified.
2. Piping materials for vent and drain shall be as specified.
3. MATERIAL FOR OUTSIDE AIR INTAKE SHALL BE AS SPECIFIED.
4. ALL SUPPLY FROM OUTSIDE AIR INTAKE SHALL BE AS SPECIFIED.
5. ALL EQUIPMENT AND PIPING IS SAFETY RELATED EXCEPT WHERE NOTED.
6. AT ALARM (C) MAN. Y ADJUST OUTDOOR AIR SAMPLER TO MINIMUM AND P. Y ADJUST OUTDOOR AIR SAMPLER TO MAXIMUM POSITION.

REFERENCE DOCUMENTS

1. PIPING AND INSTRUMENT SYMBOLS DIAGRAM 110-1000
2. HVAC EMERGENCY COOLING WATER SYS P&ID 110-1000

C/B HVAC (C)

9210010066-22

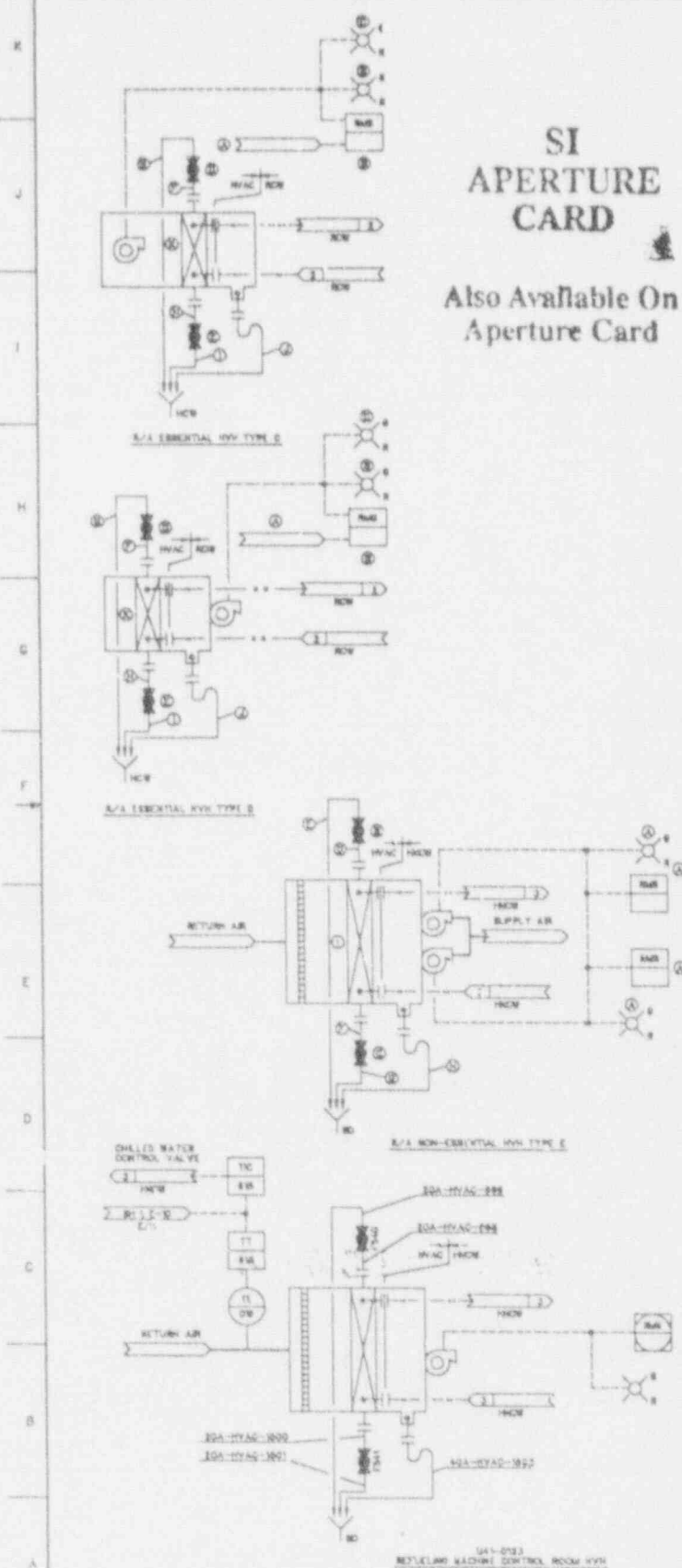
92-061-09

GENERAL ELECTRIC COMPANY
PROPRIETARY INFORMATION
CLASS 8

Figure 9.4-1 CONTROL BUILDING HVAC PROCESS FLOW DIAGRAM (Sheet 5 of 5)

23A6100AH
REV B



[illegible]

TYPE	ED. MOL.	
E	1445-0121A	2/2
E	1445-0121B	2/2
E	1445-0121C	2/2
E	1445-0121D	2/2

TYPE	ED. NO.
WY 504	U4-0738
WY 504	U4-0739
WY 504	U4-0740
WY 504	U4-0741
WY 504	U4-0742
WY 504	U4-0743
WY 504	U4-0744
WY 504	U4-0745

1 2 3 4 5 6 7 8 9

TABLE 100

ITEM NAME	ITEM DETECTION SIGNAL	1 VAL. NO. 1	2 VAL. NO. 2	3 VAL. NO. 3	4 VAL. NO. 4	5 VAL. NO. 5	6 VAL. NO. 6	7 VAL. NO. 7	8 VAL. NO. 8	9 VAL. NO. 9
1. REACTOR PUMP ROOM (RPR)	REACTOR PUMP START SIGNAL									
2. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
3. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
4. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
5. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
6. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
7. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
8. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
9. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
10. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
11. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
12. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
13. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
14. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
15. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
16. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
17. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
18. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
19. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
20. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
21. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
22. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
23. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									

TABLE 101

ITEM NAME	ITEM DETECTION SIGNAL	1 VAL. NO. 1	2 VAL. NO. 2	3 VAL. NO. 3	4 VAL. NO. 4	5 VAL. NO. 5	6 VAL. NO. 6	7 VAL. NO. 7	8 VAL. NO. 8	9 VAL. NO. 9
1. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
2. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
3. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
4. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
5. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
6. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
7. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
8. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
9. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
10. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
11. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
12. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
13. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
14. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
15. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
16. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
17. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
18. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
19. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
20. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
21. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
22. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
23. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									

- NOTE:
1. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 2. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 3. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 4. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 5. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 6. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 7. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 8. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 9. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 10. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 11. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 12. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 13. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 14. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 15. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 16. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 17. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 18. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 19. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 20. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 21. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 22. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.
 23. PUMP RATIONALS FOR VENT AND DRAIN SIGNALS.

TABLE 102

ITEM NAME	ITEM DETECTION SIGNAL	1 VAL. NO. 1	2 VAL. NO. 2	3 VAL. NO. 3	4 VAL. NO. 4	5 VAL. NO. 5	6 VAL. NO. 6	7 VAL. NO. 7	8 VAL. NO. 8	9 VAL. NO. 9
1. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
2. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
3. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
4. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
5. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
6. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
7. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
8. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
9. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
10. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
11. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
12. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
13. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
14. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
15. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
16. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
17. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
18. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
19. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
20. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
21. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
22. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									
23. RPR PUMP ROOM (RPR)	RPR PUMP START SIGNAL									

R/B AND C/B HVAC

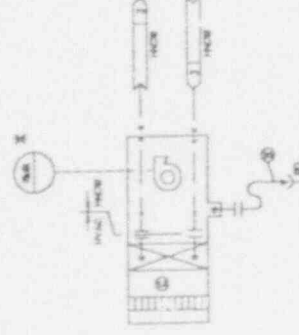


TABLE 103

TABLE 103

9210010066-24

92-001-11

GENERAL ELECTRIC COMPANY
PROPERTY INFORMATION
CLASS B

Figure 9.4-3 SECONDARY CONTAINMENT HVAC SYSTEM (Sheet 2 of 3)

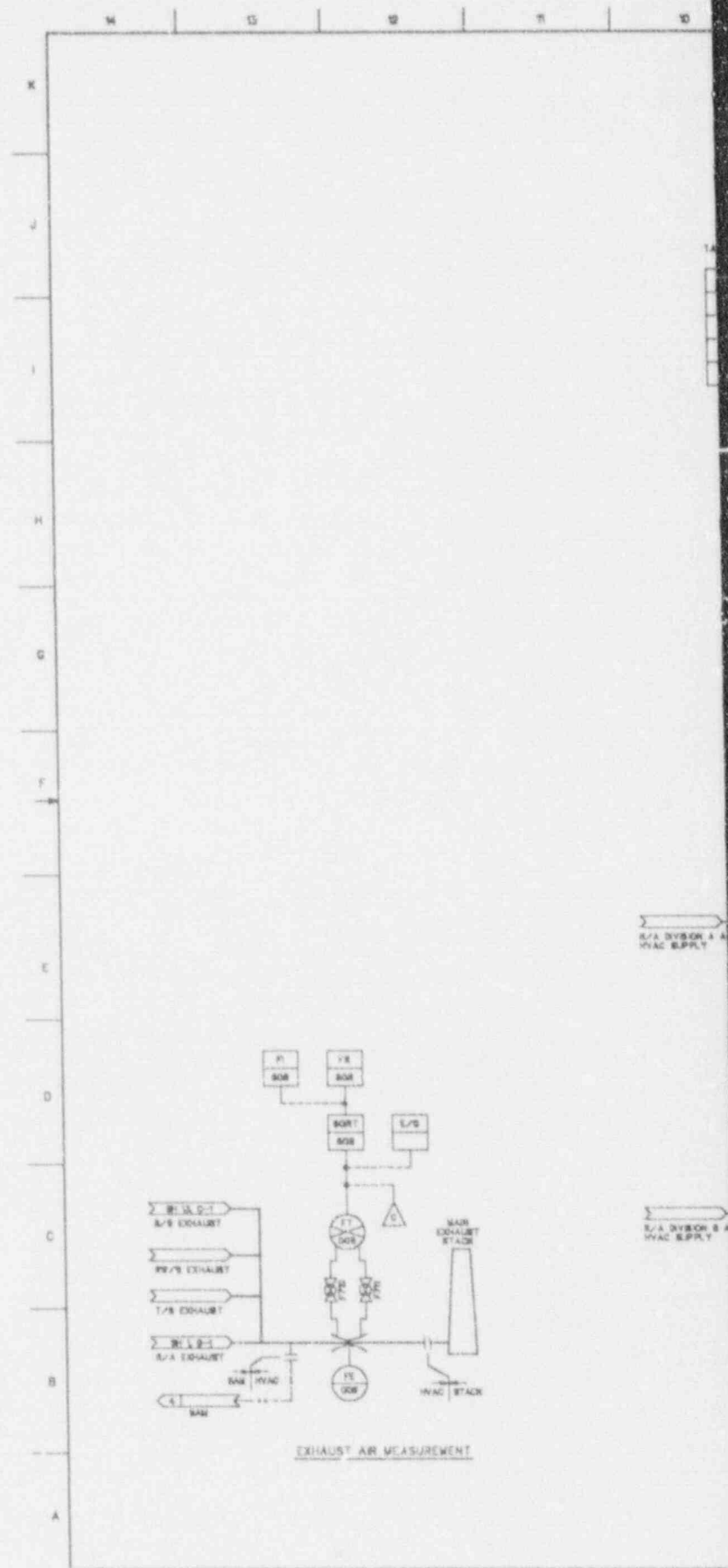


TABLE 9-1: SECONDARY CONTAINMENT DAMPER
SAFETY-RELATED

DAMPER NAME	DAMPER NO.
SECONDARY CONTAINMENT EXHAUST DAMPER	F000A
SECONDARY CONTAINMENT EXHAUST DAMPER	F000B
SECONDARY CONTAINMENT EXHAUST DAMPER	F000C
SECONDARY CONTAINMENT EXHAUST DAMPER	F000D
SECONDARY CONTAINMENT EXHAUST DAMPER	F000E
SECONDARY CONTAINMENT EXHAUST DAMPER	F000F

NOTES

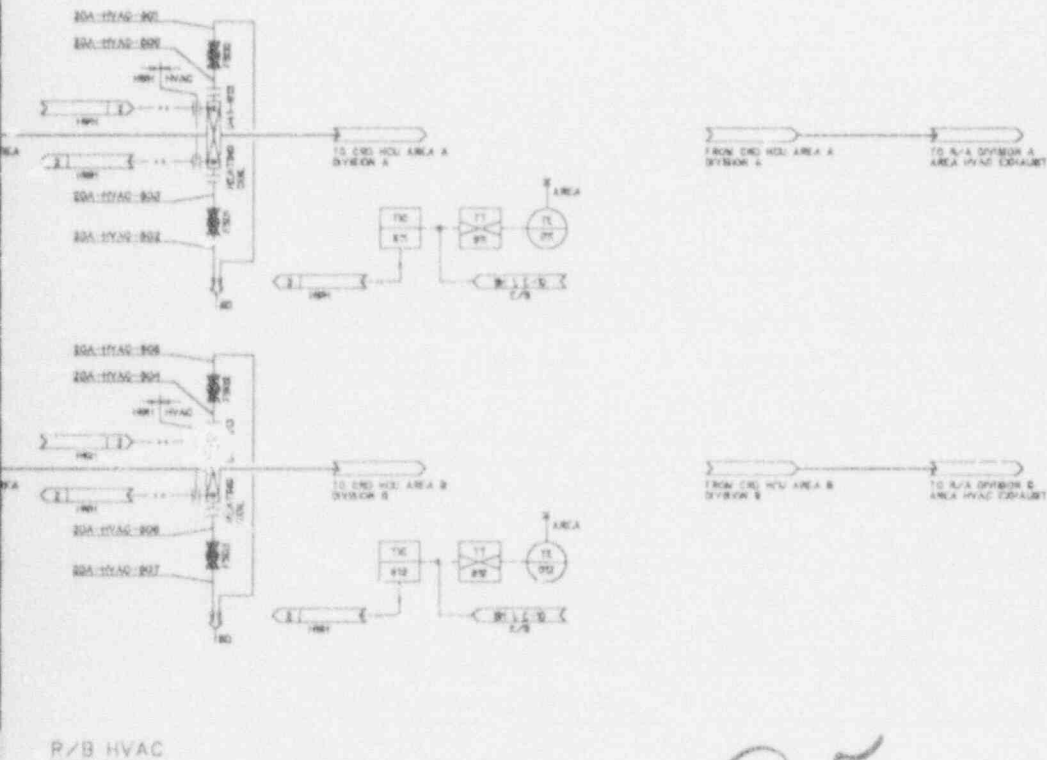
1. PIPING DESIGN/QUALITY CLASSIFICATION SHALL BE TO
EXCEPT OTHERWISE SPECIFIED.
2. PIPING MATERIALS FOR VENT AND DRAIN
SHALL BE CS.

REFERENCE DOCUMENTS

- | | |
|--|---------|
| 1. PIPING AND INSTRUMENT SYMBOLS DIAGRAM | AS-5030 |
| 2. HOT GAS HEATING SYSTEM P&ID | PG-1010 |
| 3. PROCESS VACUATION SYSTEMS P&ID | SV-1010 |
| 4. SAMPLING SYSTEM P&ID | PS-1010 |

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9210010066-25

92-061-12

GENERAL ELECTRIC COMPANY
PROPRIETARY INFORMATION
CLASS 1

Figure 9.4-3 SECONDARY CONTAINMENT HVAC SYSTEM (Sheet 3 of 3)

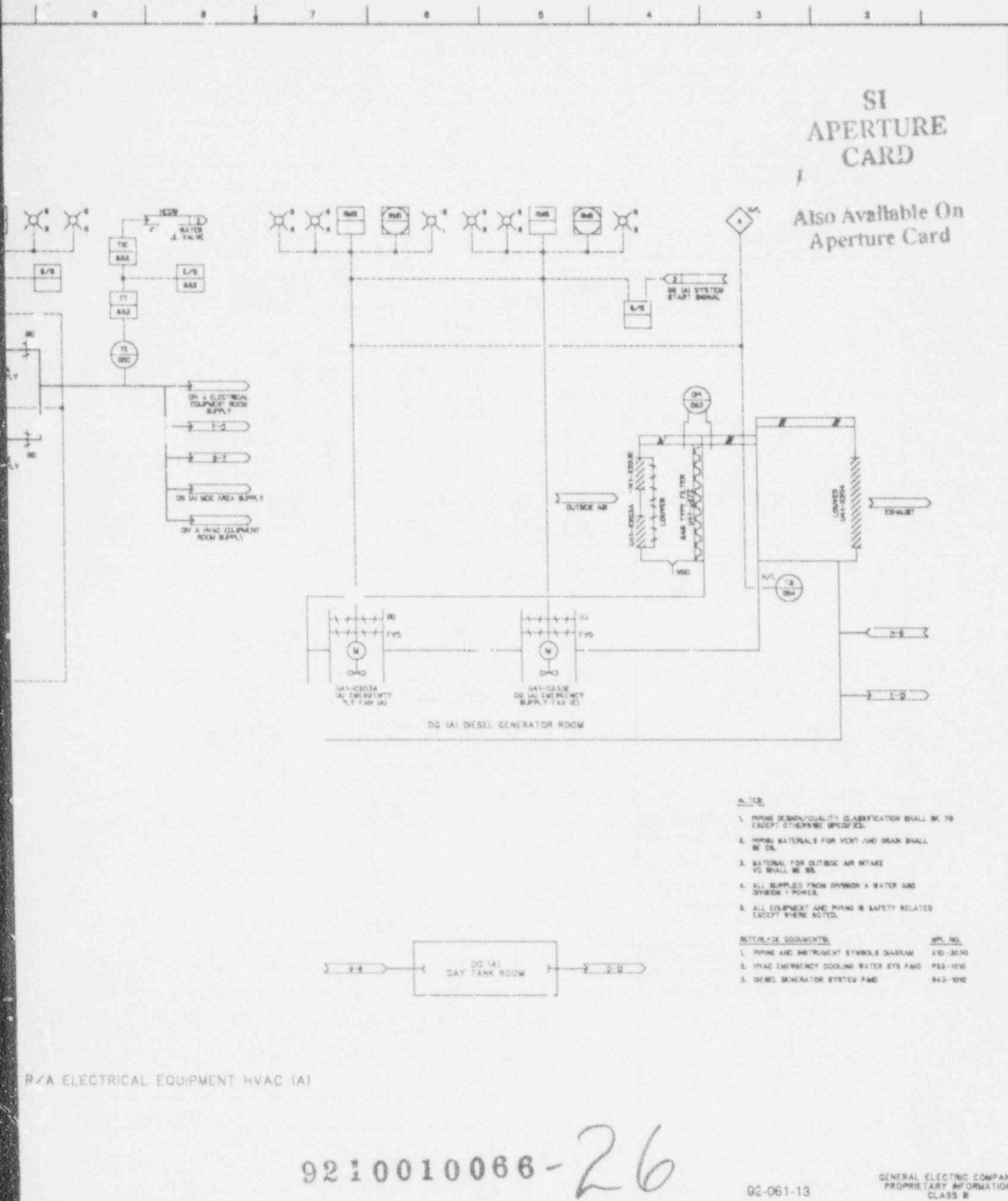
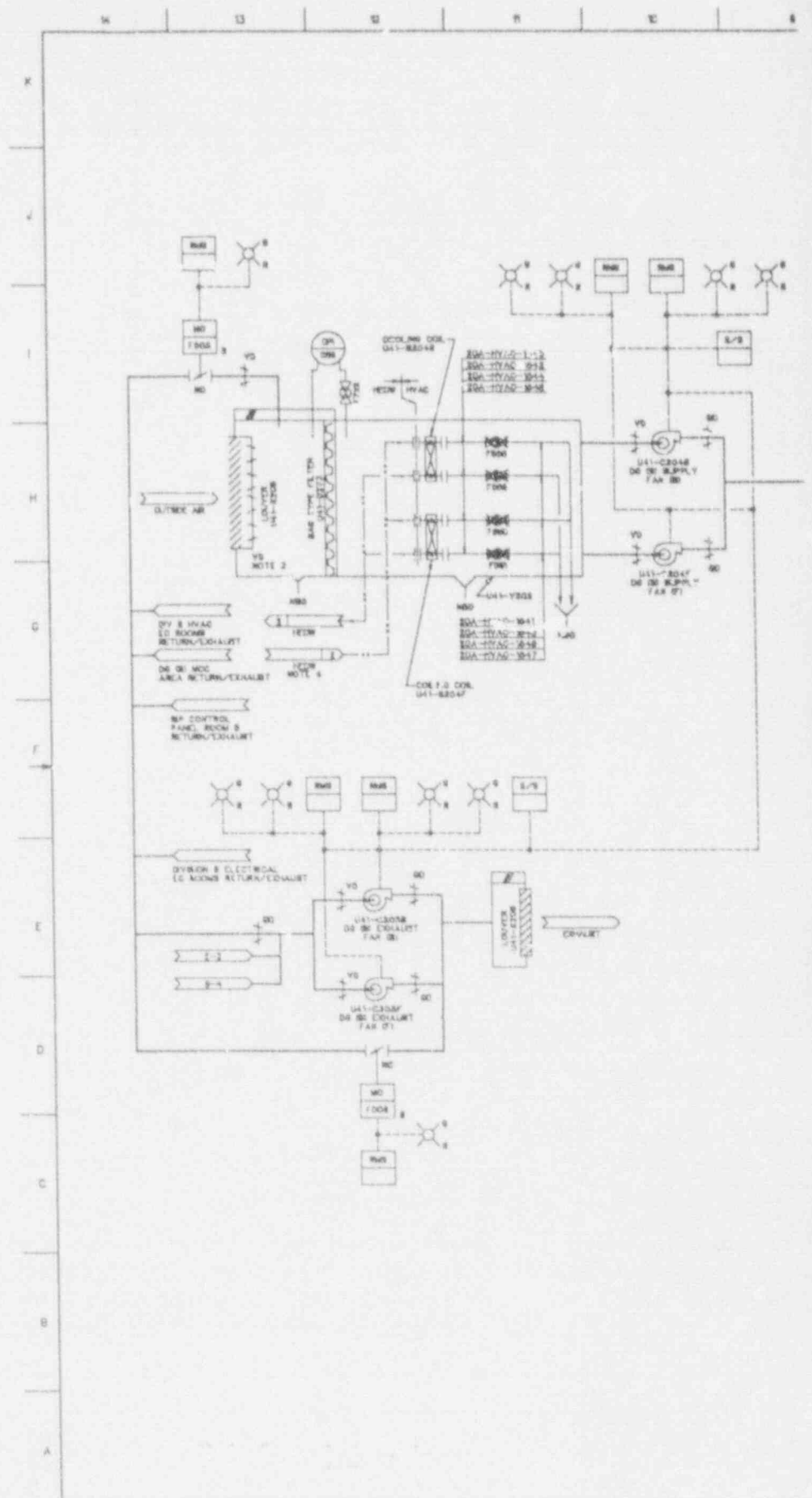
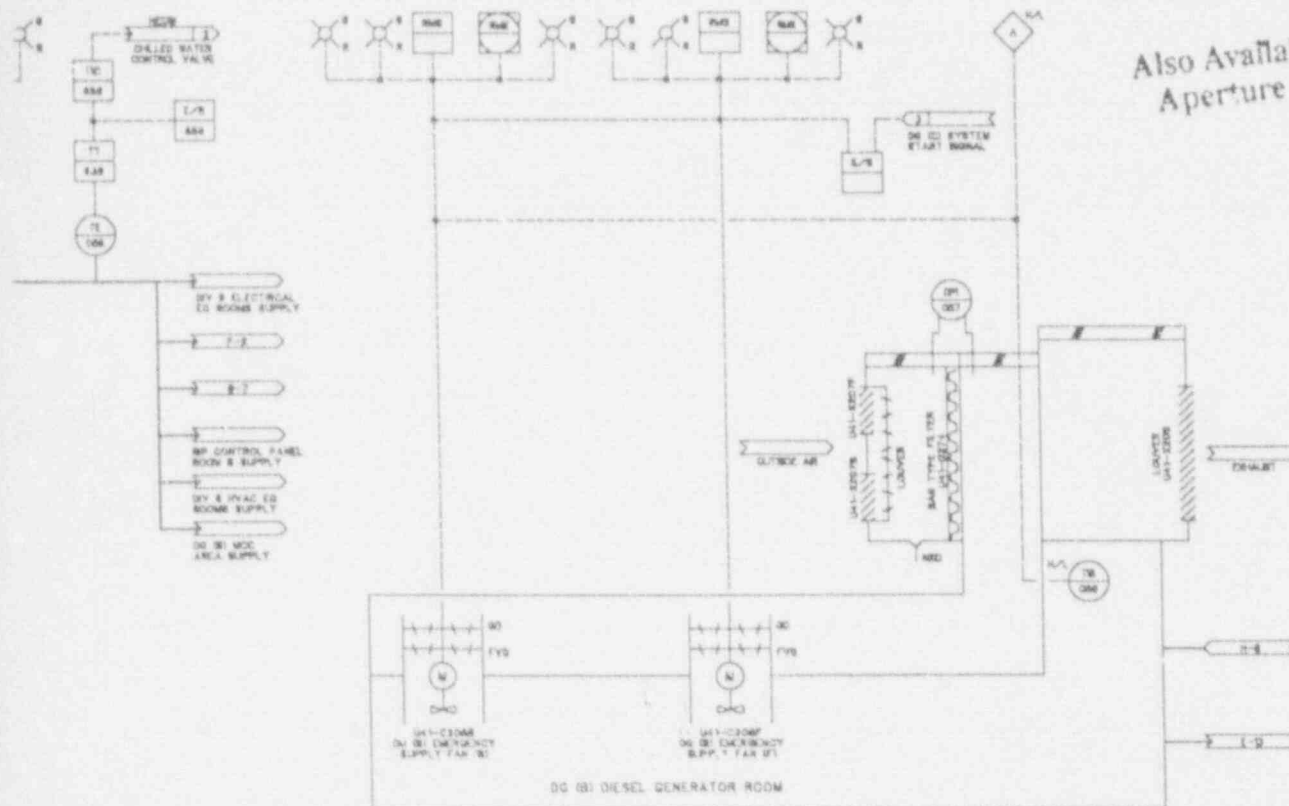


Figure 9.4-4 ESSENTIAL ELECTRICAL EQUIPMENT HVAC SYSTEM (Sheet 1 of 3)



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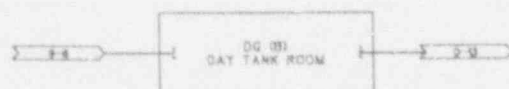


NOTES:

1. PIPING DESIGN/QUALITY CLASSIFICATION SHALL BE TO EXCEPT OTHER SPECIFICATIONS.
2. PIPING MATERIALS FOR VENT AND DRAIN SHALL BE CS.
3. MATERIAL FOR OUTSIDE AIR INTAKE VTS SHALL BE SS.
4. ALL SUPPLIES FROM DIVISION 8 WATER AND DIVISION 8 POWER.
5. ALL EQUIPMENT AND PIPING 8 SAFETY RELATED EXCEPT WHERE NOTED.

REFERENCE DOCUMENTS:

- | | |
|--|----------|
| 1. PIPING AND INSTRUMENT SYMBOLS DIAGRAM | 410-1030 |
| 2. HVAC EMERGENCY COOLING WATER SYS PAND | 755-1010 |
| 3. DIESEL GENERATOR SYSTEM PAND | 843-1010 |



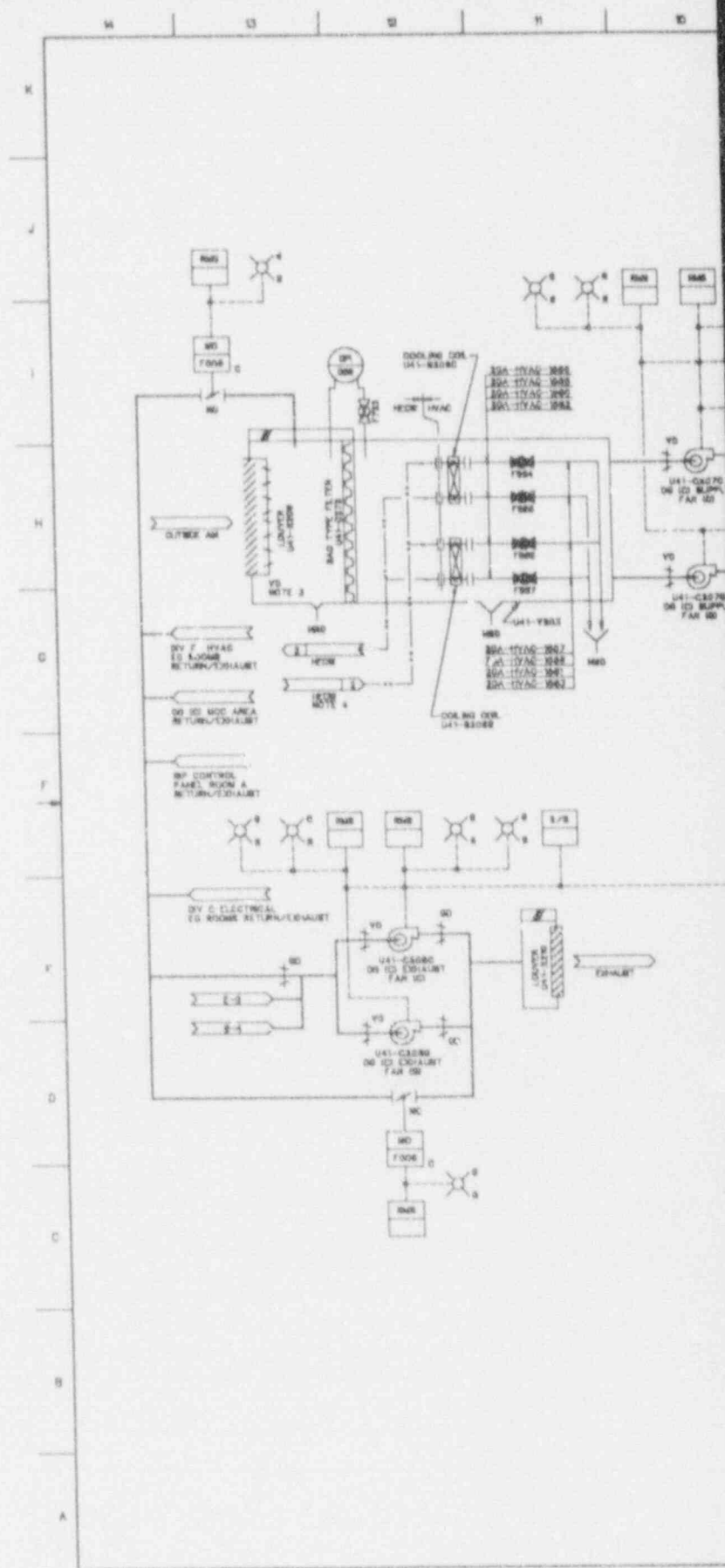
R/A ELECTRICAL EQUIPMENT HVAC (B)

9210010006-27

92-061-14

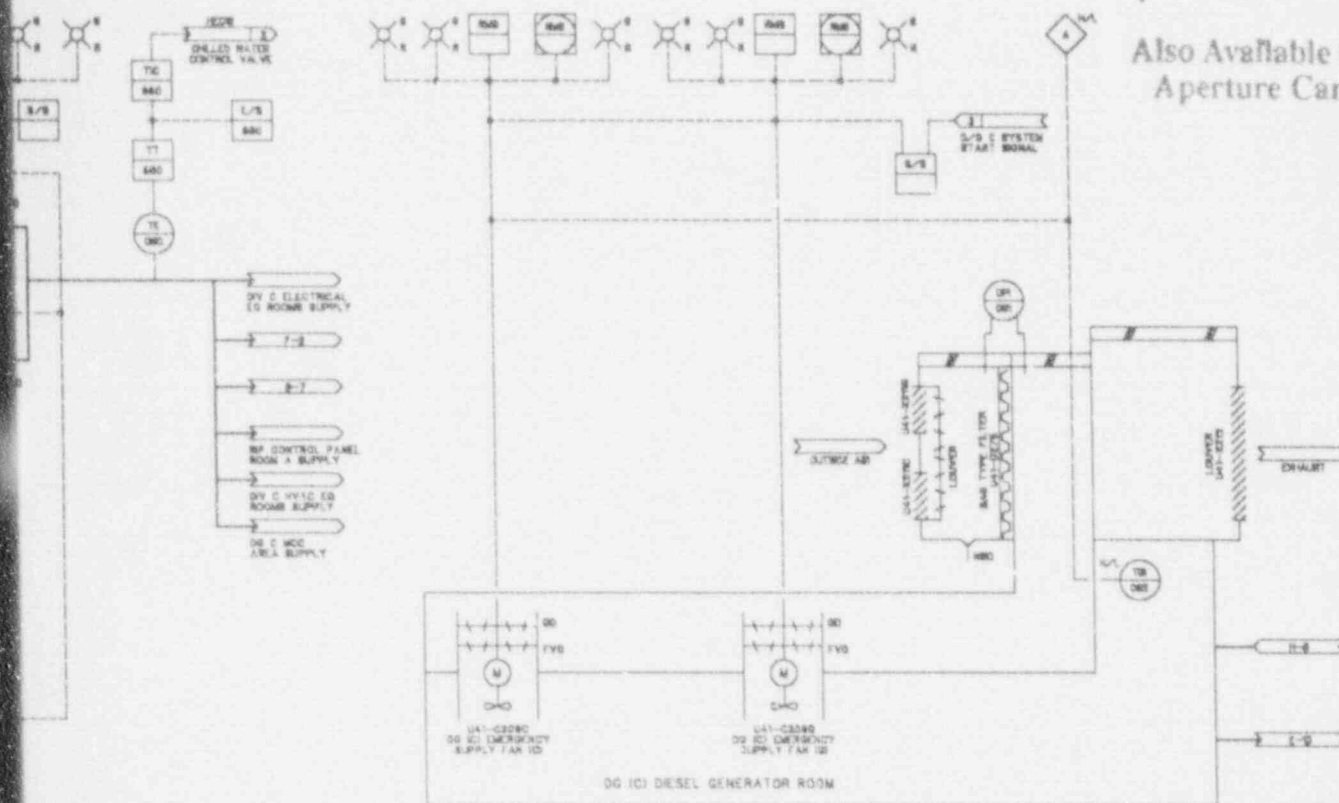
GENERAL ELECTRIC COMPANY
PROPRIETARY INFORMATION
CLASS 8

Figure 9.4-4 ESSENTIAL ELECTRICAL EQUIPMENT HVAC SYSTEM (Sheet 2 of 3)



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NOTES

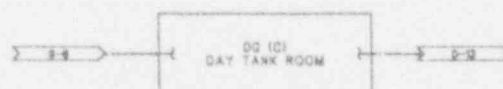
1. PIPING DESIGN/QUALITY CLASSIFICATION SHALL BE 7B EXCEPT OTHERWISE SPECIFIED.
2. PIPING MATERIALS FOR VENT AND DRAIN SHALL BE CS.
3. MATERIAL FOR OUTSIDE AIR INTAKE VD SHALL BE SS.
4. ALL SUPPLIES FROM DIVISION 6 WATER AND DIVISION 3 POWER.
5. ALL EQUIPMENT AND PIPING IS SAFETY RELATED EXCEPT WHERE NOTED.

REFERENCE DOCUMENTS

- | | |
|--|----------|
| 1. PIPING AND INSTRUMENT SYMBOLS DIAGRAM | 110-3030 |
| 2. HVAC EMERGENCY COOLING WATER SYS P&ID | P22-1010 |
| 3. DIESEL GENERATOR SYSTEM P&ID | 843-1010 |

W.P. NO.

- | |
|----------|
| 110-3030 |
| P22-1010 |
| 843-1010 |



R/A ELECTRICAL EQUIPMENT HVAC (C)

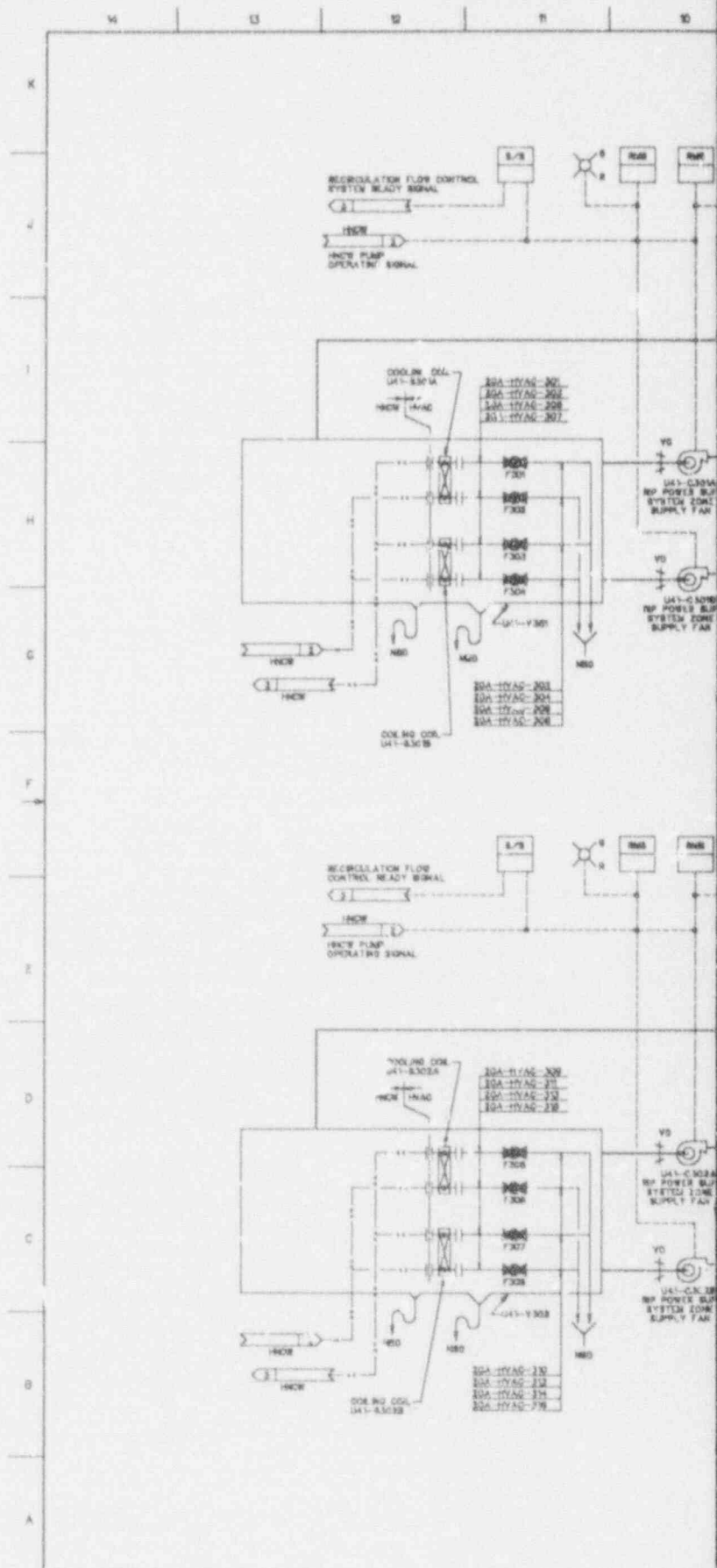
9210010066

28

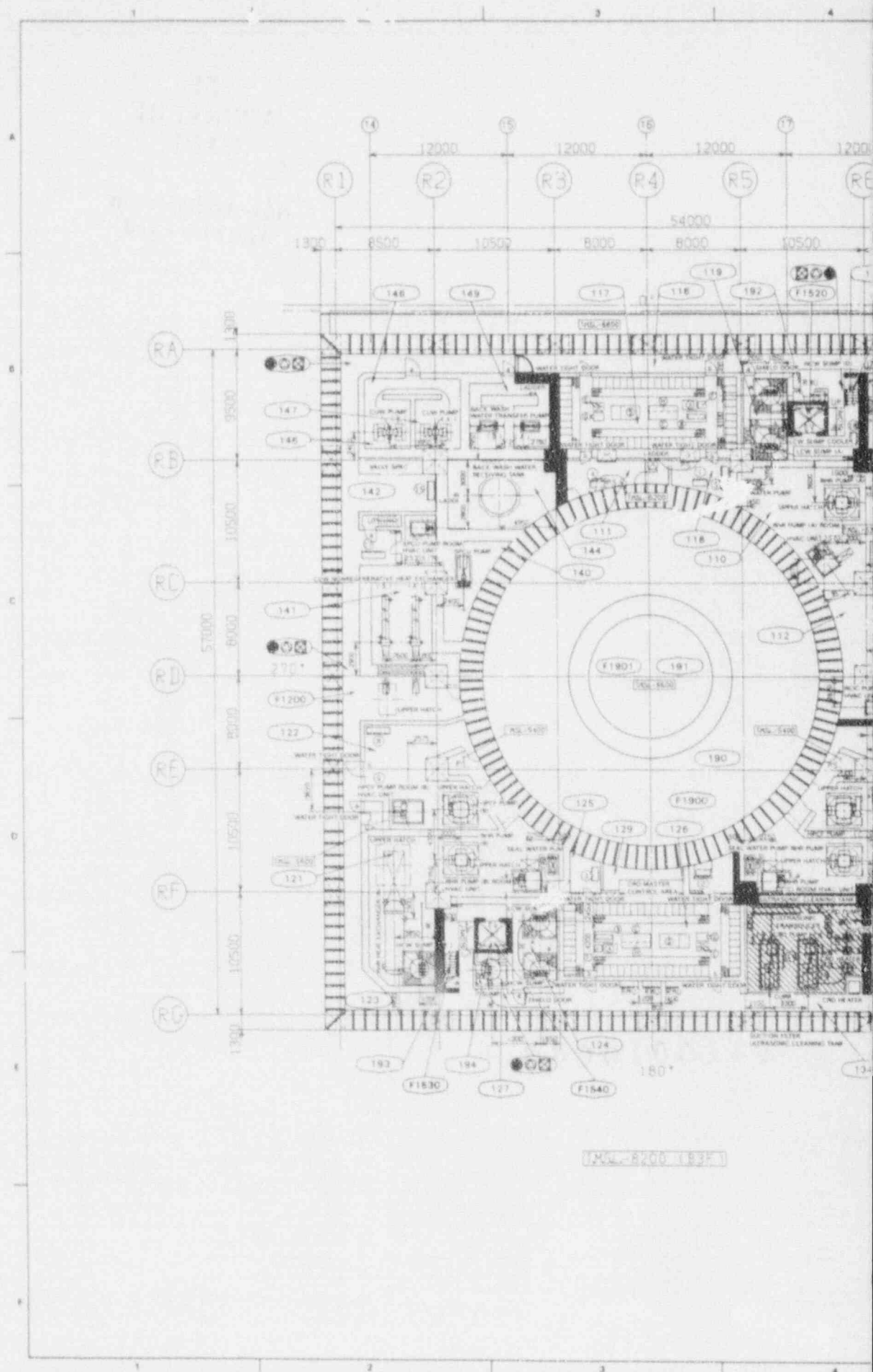
92-061-15

GENERAL ELECTRIC COMPANY
PROPRIETARY INFORMATION
CLASS B

Figure 9.4-4 ESSENTIAL ELECTRICAL EQUIPMENT HVAC SYSTEM (Sheet 3 of 3)

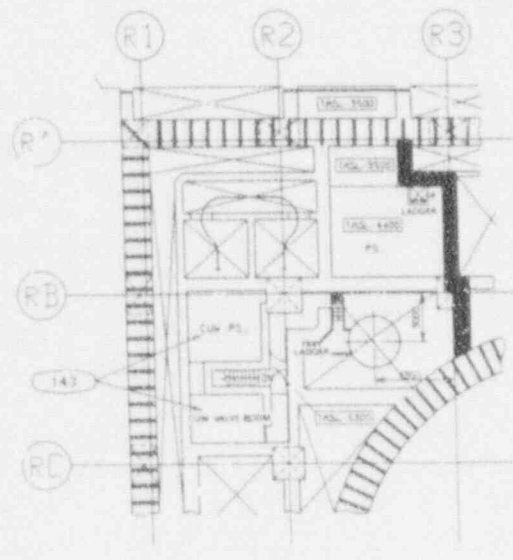
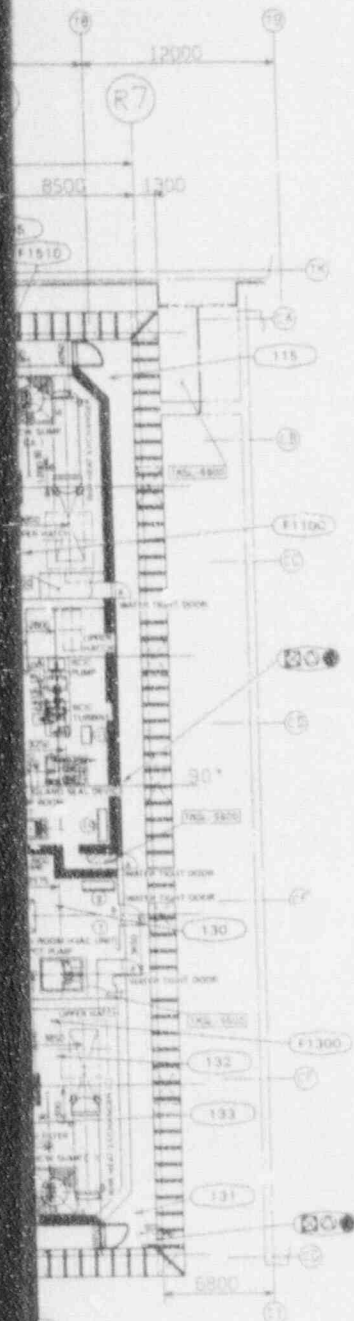






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NO.	RACK LIST	RACK NAME
H22-P001A	1. CORE FLOW (A) INSTRUMENT RACK	
	2. CORE FLOW (A) INSTRUMENT RACK	
	3. CORE FLOW (A) INSTRUMENT RACK	
	4. CORE FLOW (A) INSTRUMENT RACK	
H22-P002A	5. RHR SYSTEM (A) INSTRUMENT RACK	
	6. RHR SYSTEM (A) INSTRUMENT RACK	
	7. RHR SYSTEM (A) INSTRUMENT RACK	
H22-P003B	8. HIGH PRESSURE CORE SPRAY SYSTEM (B) INSTRUMENT RACK	
	9. HIGH PRESSURE CORE SPRAY SYSTEM (B) INSTRUMENT RACK	
H22-P004	10. REACTOR CORE ISOLATION COOLING SYSTEM INSTRUMENT RACK	
H22-P005	11. REACTOR CORE ISOLATION COOLING SYSTEM TURBINE INSTRUMENT RACK	
H22-P006	12. CONTROL ROD DRIVE HYDRAULIC SYSTEM INSTRUMENT RACK	
H22-P006A	13. CRD PUMP (A) INSTRUMENT RACK	
H22-P006B	14. CRD PUMP (B) INSTRUMENT RACK	
H22-P007	15. REACTOR COOLANT CLEAN-UP SYSTEM INSTRUMENT RACK	
	16. NOT USED	
H22-P008	17. SUPPRESSION POOL DISCHARGE SYSTEM SAMPLING RACK	
H22-P008	18. RHR HEAT EXCHANGER EXIT SAMPLING RACK	

- A. ACCUMULATOR INSTALLATION-REMOVAL TRANSPORTATION DOLLY
- B. ACCUMULATOR DISASSEMBLY-ASSEMBLY DOLLY
- C. ACCUMULATOR WORKING BENCH
- D. SCRAM VALVE-SCRAM PILOT VALVE WORKING BENCH
- E. SCRAM PILOT VALVE TEST FACILITY
- F. PUMP UNIT
- G. GENERAL PURPOSE WORKING BENCH
- H. TOOL BOX

- (REMARKS)
EQUIPMENT
- RHR PUMP (A)
 - RHR PUMP (B)
 - RHR PUMP (C)
 - RHR HX (A)
 - RHR HX (B)
 - RHR HX (C)
 - HPCE PUMP (B)
 - HPCE PUMP (C)
 - CUW NON-RE HX
 - CUW PUMP
 - CUW BACK WASH TRANSFER PUMP
 - CUW BACK WASH TANK
 - CRD PUMP
 - SUCTION FILTER
 - RCIC PUMP
 - RCIC TURBINE

FIRE PROTECTION SYMBOLS

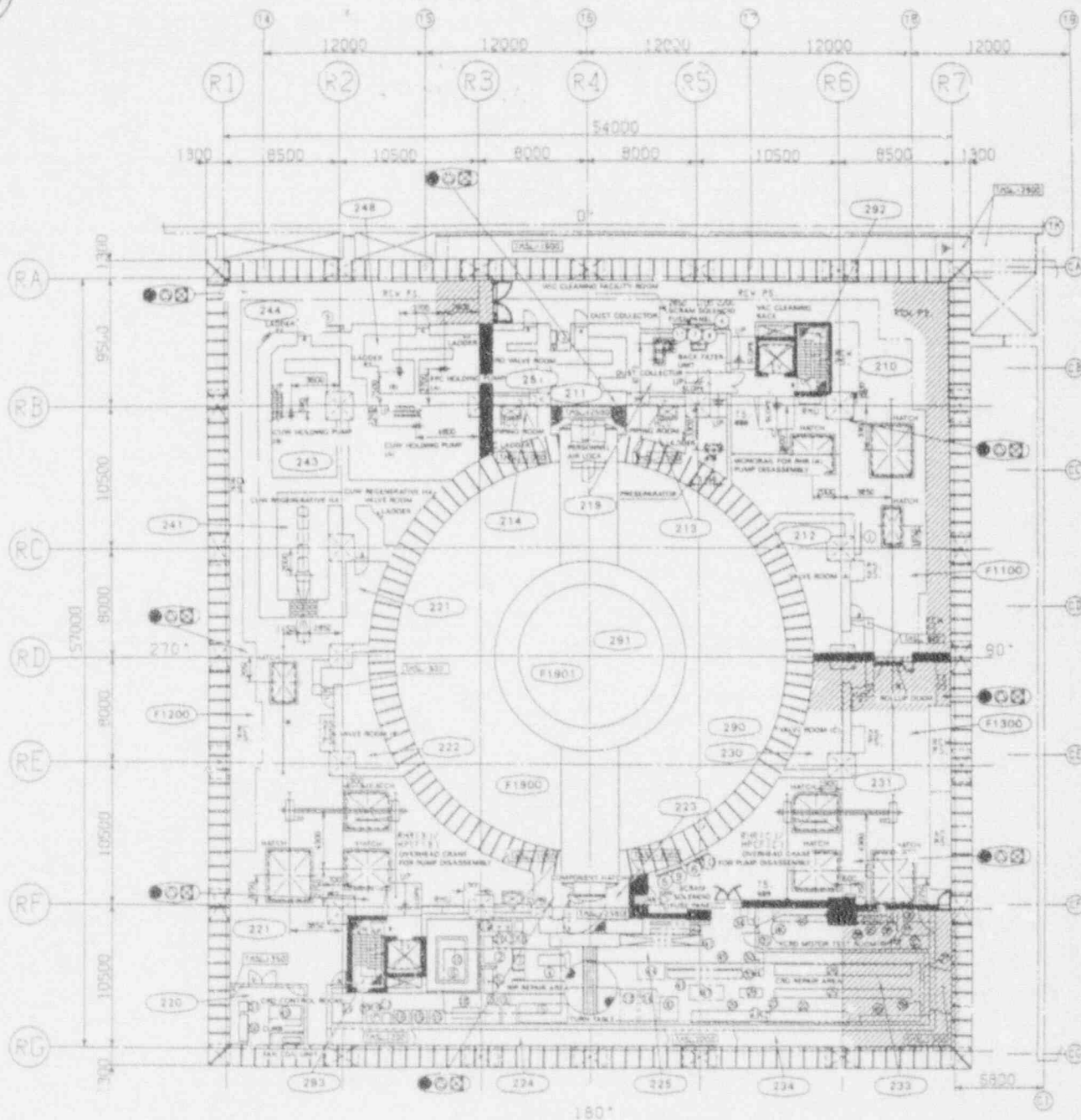
- F1901 FIRE XRL NUMBER
* LEFT HAND DIGIT IS BOTTOM FLOOR NUMBER STARTING WITH 1 - ELEVATION 1 - 8200
* SECOND DIGIT FROM LEFT IS THE ELECTRICAL DIVISION NUMBER
- 135 RD IN ALL APPT
- RD IN ALL APPT
- PORTABLE EXTINGUISHER
- STANDPIPE
- 3 HOUR RATED FIRE BARRIER (WALL)
- RATED FIRE BARRIER (FLOOR)
- 3 HOUR FIRE RATED DOOR
- SECONDARY CONTAINMENT BOUNDARIES (3 HOUR RATED FIRE BARRIER)
- SPRINKLER SYSTEM

REMARK (COMMON)

1. CURB HEIGHT IS H = 75, UNLESS OTHERWISE SPECIFIED. IF THEY ARE SPECIFIED, THE HEIGHTS ARE AS FOLLOWS:
(a) H IS H = 200
(b) H IS H = 100
(c) FOR OTHERS, REFER TO T a SHOWN ON DRAWINGS
2. EACH SYMBOL MARKS MEAN A1, HVS
(a) GRATING
(b) CHECKER PLATE
(c) CONCRETE BLOCK
(d) THIS SHOWS INSTRUMENTATION RACK NUMBER THAT CORRESPONDS TO RACK LIST
(e) FRONT OF PANEL AND RACK
(f) PULL SPACE FOR MAINTENANCE
(g) HANDRAIL
(h) MONORAIL
(i) EV ELEVATOR
(j) PS PIPE SPACE
(k) DS HVAC DUCT SPACE
(l) TS CABLE TRAY SPACE
(m) NL NORMAL LOCK DOOR
(n) STEEL SKIDDOOR
(o) CURB
(p) PHYSICAL PROTECTION
3. SOLID COLORED AREAS CONTAIN SAFETY-RELATED EQUIPMENT OF THE ELECTRICAL DIVISION ASSIGNMENT INDICATED BELOW:
DIVISION 1
DIVISION 2
DIVISION 3
DIVISION 4
4. AREAS CROSS HATCHED WITH COLORS PRIMARILY CONTAIN NON-SAFETY-RELATED EQUIPMENT BUT ARE NOT SEPARATED BY FIRE BARRIERS FROM AN ADJACENT AREA CONTAINING SAFETY-RELATED EQUIPMENT OF THE SAME DIVISION AS FOR THE COLOR OF THE CROSS HATCH

9210010066-30

Figure 9A.4-1 REACTOR BUILDING FIRE PROTECTION AT EL. -8200mm



FMSL-1700 (B2F)

(REMARKS)
EQUIPMENT
CUW RE HX
CUW F/D VALVE ROOM
RIP MAINTENANCE AREA
FMCRO MAINTENANCE AREA
CRD CONTROL ROOM

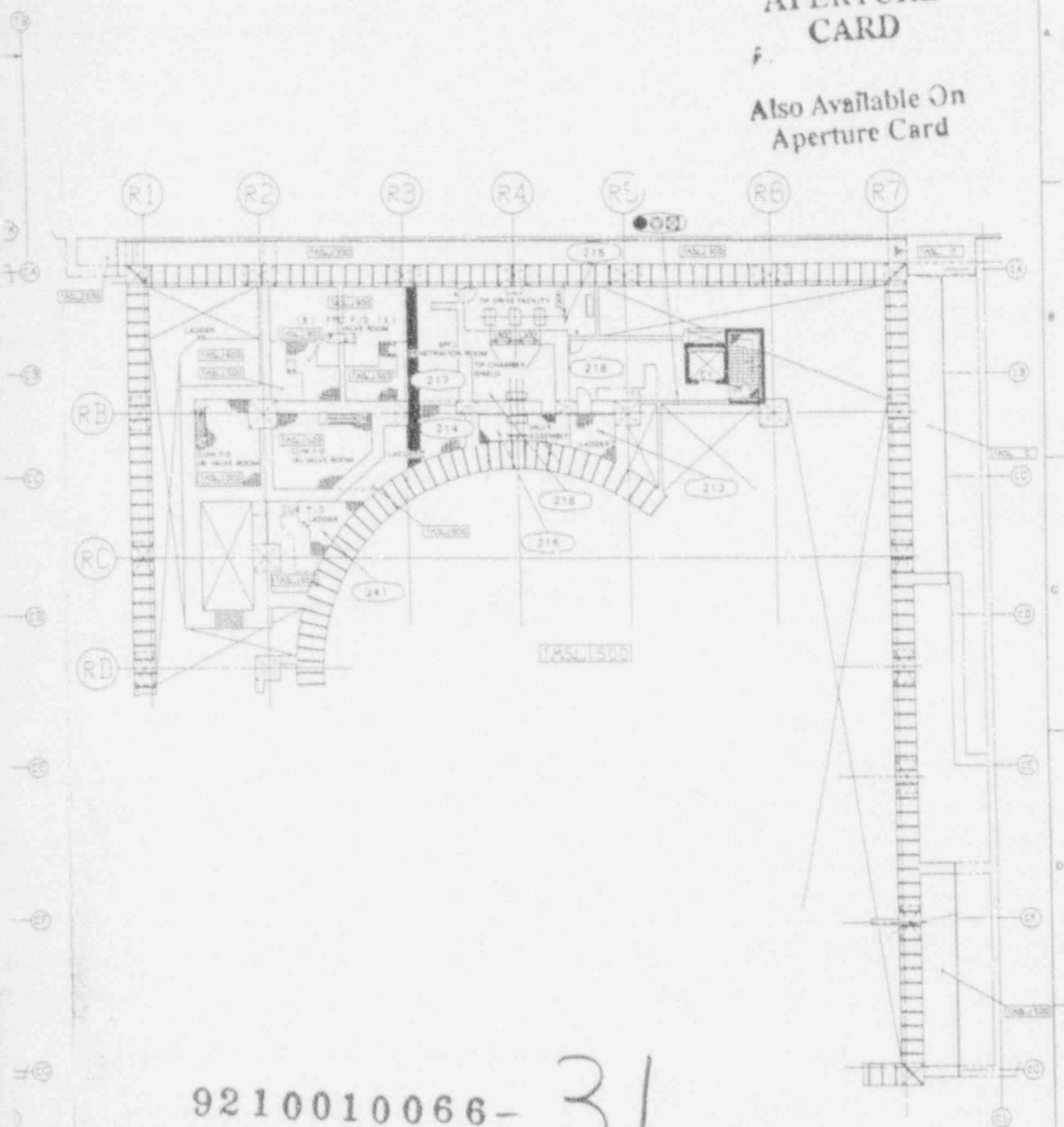
NO. RACK NAME
1. REACTOR CORE ISOLATION COOLING SYSTEM
(STEAM SYSTEM) INSTRUMENT RACK
2. R/C F/D SOLENOID OPERATED VALVE RACK
3. CUW F/D SOLENOID OPERATED VALVE RACK A
4. CUW F/D SOLENOID OPERATED VALVE RACK B
5. SCRAM SOLENOID FUSE PANEL
6. SCRAM SOLENOID FUSE PANEL
7. SCRAM SOLENOID FUSE PANEL
8. SCRAM SOLENOID FUSE PANEL
9. SCRAM SOLENOID FUSE PANEL
10. SCRAM SOLENOID FUSE PANEL
11. SCRAM SOLENOID FUSE PANEL

RACK LIST

1. MC
2. DU
3. MC
4. AR
5. SP
6. RA
7. MC
8. MC
9. DE
10. ELI
11. WL
12. MC
13. SP
14. OV
15. RE
16. CH
17. PU

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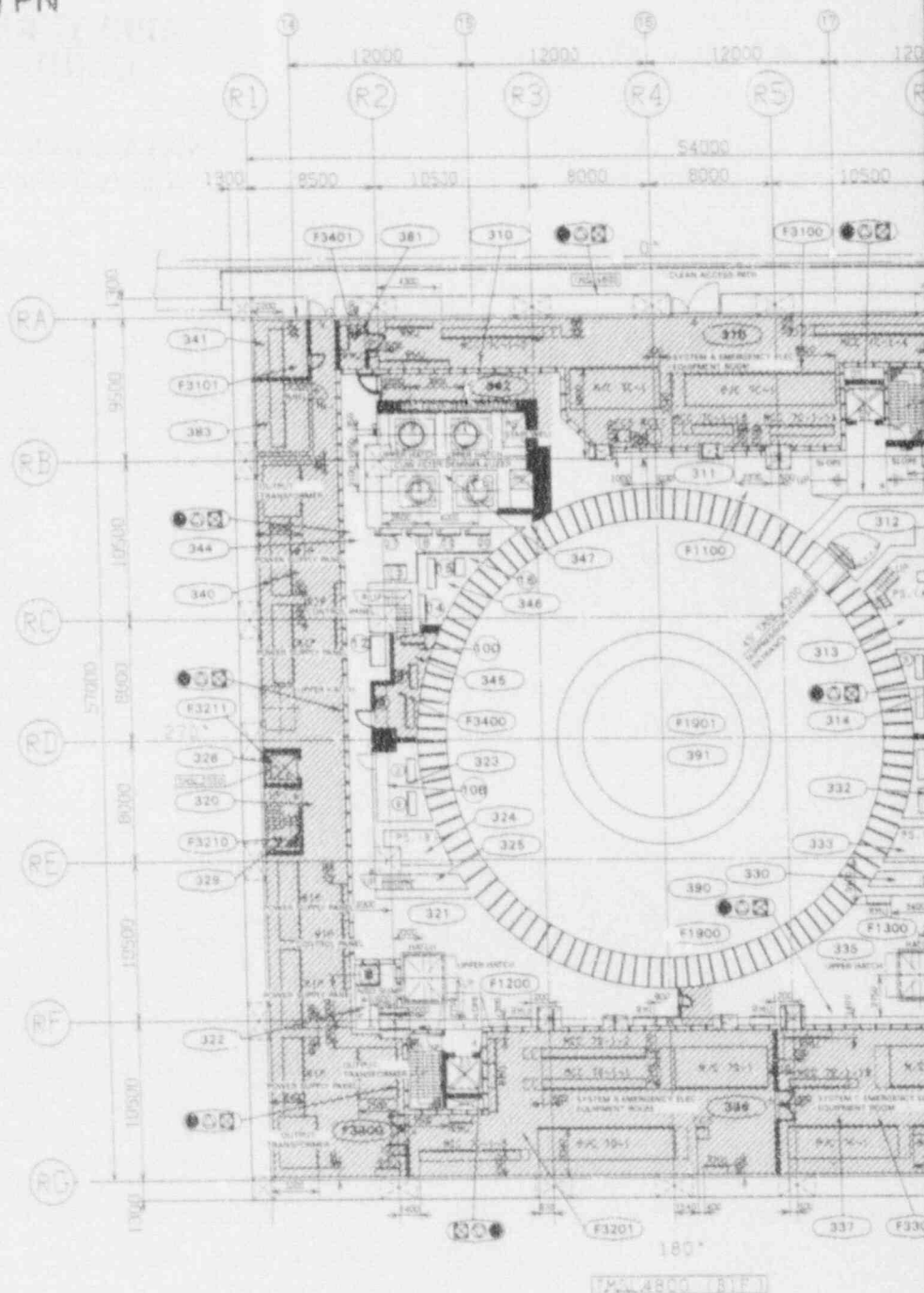
9210010066-31

- | | | | |
|---|---|-----------------------------------|--|
| 1. MOTOR ASSEMBLY/ DISASSEMBLY AREA | 13. STRETCH TUBE NUT HANDLING TOOL STORAGE AREA | 23. ULTRASONIC CLEANING TANK | 39. OVERHEAD CRANE RECH LIMIT |
| 2. MOTOR DISASSEMBLY PARTS AREA | 14. SECOND SEAL HANDLING TOOL STORAGE AREA | 24. ULTRASONIC TRANSDUCER | 40. MONORAIL |
| 3. SPARE PARTS TOOL STORAGE RACK | 15. BOTTOM CLOSE FLANGE STORAGE AREA | 25. CRD DISASSEMBLY CLEANING TANK | 41. RRP TEMPORARY PLACE |
| 4. MOTOR TEMPORARY PLACE | 16. MAIN FLANGE STAND TOOL STORAGE AREA | 26. CRD WORK TABLE | 42. MOTOR BRACKET TEMPORARY PLACE |
| 5. MOTOR CARRYING DOLLY AREA | 17. AUX COVER HANDLING TOOL STORAGE AREA | 27. BALL NUT DECENT TEST TABLE | 43. CRD CART STORAGE AREA |
| 6. DECONTAMINATION ELECTRICAL TEST TANK | 18. MOTOR CONTAINER TEMPORARY PLACE | 28. SPOOL PIECE WORK TABLE | 44. MOTOR UNIT SPOOL PIECE |
| 7. WORK BENCH | 19. HANDLING TOOL CONTROL BOX STORAGE AREA | 29. SPOOL PIECE STORAGE TANK | 45. DOLLY STORAGE AREA |
| 8. MOVABLE TOOL TABLE | 20. HANDLING TOOL HYDRAULIC UNIT STORAGE AREA | 30. SEAL HOUSING TEST FACILITY | 46. ATTACHMENT STORAGE AREA |
| 9. SPARE MOTOR STORAGE AREA | 21. COUPLING STAND HANDLING TOOL STORAGE AREA | 31. PARTS TEMPORARY PLACE | 47. CRD STORAGE AREA |
| 10. OVERHEAD CRANE HOOK REACH | 22. CRD STORAGE TANK | 32. TOOL RACK | 48. SPOOL PIECE STORAGE AREA |
| 11. CHANGING SPACE | | 33. STORAGE RACK | 49. MOTOR SPARE PARTS AREA |
| 12. PUMP TANK FOR WASHING | | 34. MOVABLE PARTS TABLE | 50. CRD REPLACEMENT FACILITY CONTROL PANEL |
| | | 35. MOTOR UNIT WORK TABLE | 51. CRD REPLACEMENT FACILITY DRIVE PANEL |
| | | 36. MOTOR TEST FACILITY | |
| | | 37. BRAKE SYNCHRO TEST FACILITY | |
| | | 38. MOTOR STORAGE RACK | |

92-049-02

Figure 9A.4-2 REACTOR BUILDING FIRE PROTECTION AT EL (-) 1700 mm

9A.4-241



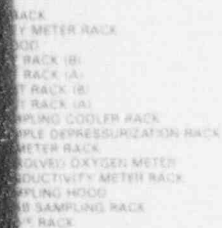
NO. RACK LIST

B31	H22-P013A	1	REACTOR SYSTEM (I) INSTRUMENT RACK
B31	H22-P013B	2	REACTOR SYSTEM (II) INSTRUMENT RACK
B31	H22-P013C	3	REACTOR SYSTEM (III) INSTRUMENT RACK
B31	H22-P013D	4	REACTOR SYSTEM (IV) INSTRUMENT RACK
B31	H22-P014A	5	MAIN STEAM FLOW (I) INSTRUMENT RACK
B31	H22-P014B	6	MAIN STEAM FLOW (II) INSTRUMENT RACK
B31	H22-P014C	7	MAIN STEAM FLOW (III) INSTRUMENT RACK
B31	H22-P014D	8	MAIN STEAM FLOW (IV) INSTRUMENT RACK
E31	H22-P015A	9A	LEAK DETECTION SYSTEM (IA) INSTRUMENT RACK
E31	H22-P015C	9C	LEAK DETECTION SYSTEM (IC) INSTRUMENT RACK
E31	H22-P015B	10B	LEAK DETECTION SYSTEM (IB) INSTRUMENT RACK
E31	H22-P015D	10D	LEAK DETECTION SYSTEM (ID) INSTRUMENT RACK
		12	REACTOR WATER SAMPLING TRANSMITTER PANEL
G41	H22-P016	13	EPC FD SAMPLING TRANSMITTER

NO. RACK LIST

G41	H22-P017	14	FPC FD MAIN
G41	H22-P018	15	FPC FD COND
G41	H22-P019	16	FPC FD SAMPL
G41	H22-P020	17	FPC FD INST
G41	H22-P021	18	FPC FD INST
G31	H22-P022	19	CUW F/D INST
G31	H22-P023	20	CUW F/D INST
P91	H22-P024	21	REACTOR WAT
P91	H22-P025	22	REACTOR WAT
P91	H22-P026	23	REACTOR WAT
P91	H22-P027	24	REACTOR WAT
P91	H22-P028	25	REACTOR WAT
P91	H22-P029	26	REACTOR WAT
P91	H22-P030	27	REACTOR WAT
P91	H22-P031	28	RAE RELATED

Also Available On
Aperture Card



REMARKS
EQUIPMENT
EMERGENCY ELECTRIC ROOM (A)
EMERGENCY ELECTRIC ROOM (B)
EMERGENCY ELECTRIC ROOM (C)
RSS PANEL
RIP PANEL

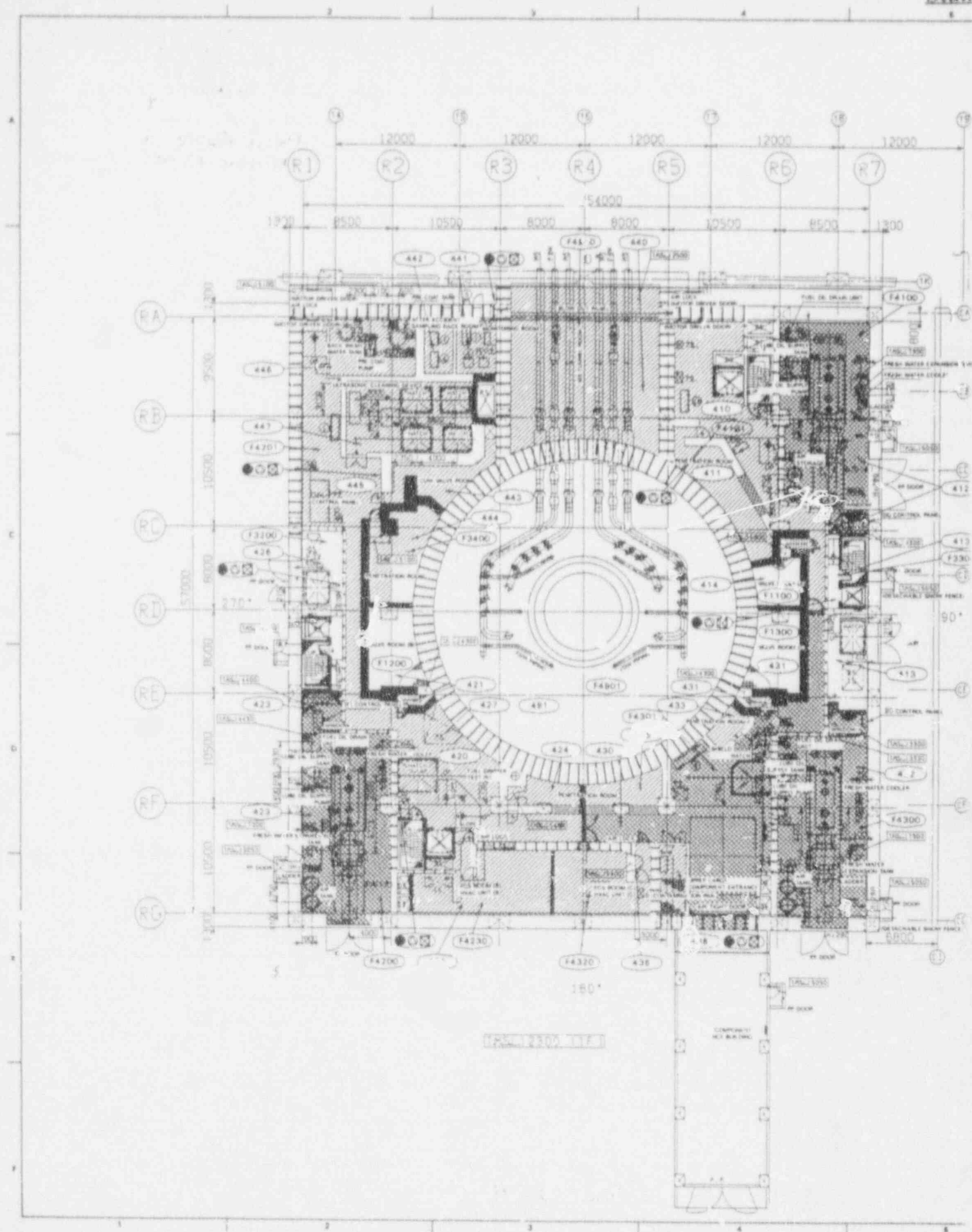
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32

92-049-03

Figure 9A.4-3 REACTOR BUILDING FIRE PROTECTION AT EL 4800 mm

9A.4-242



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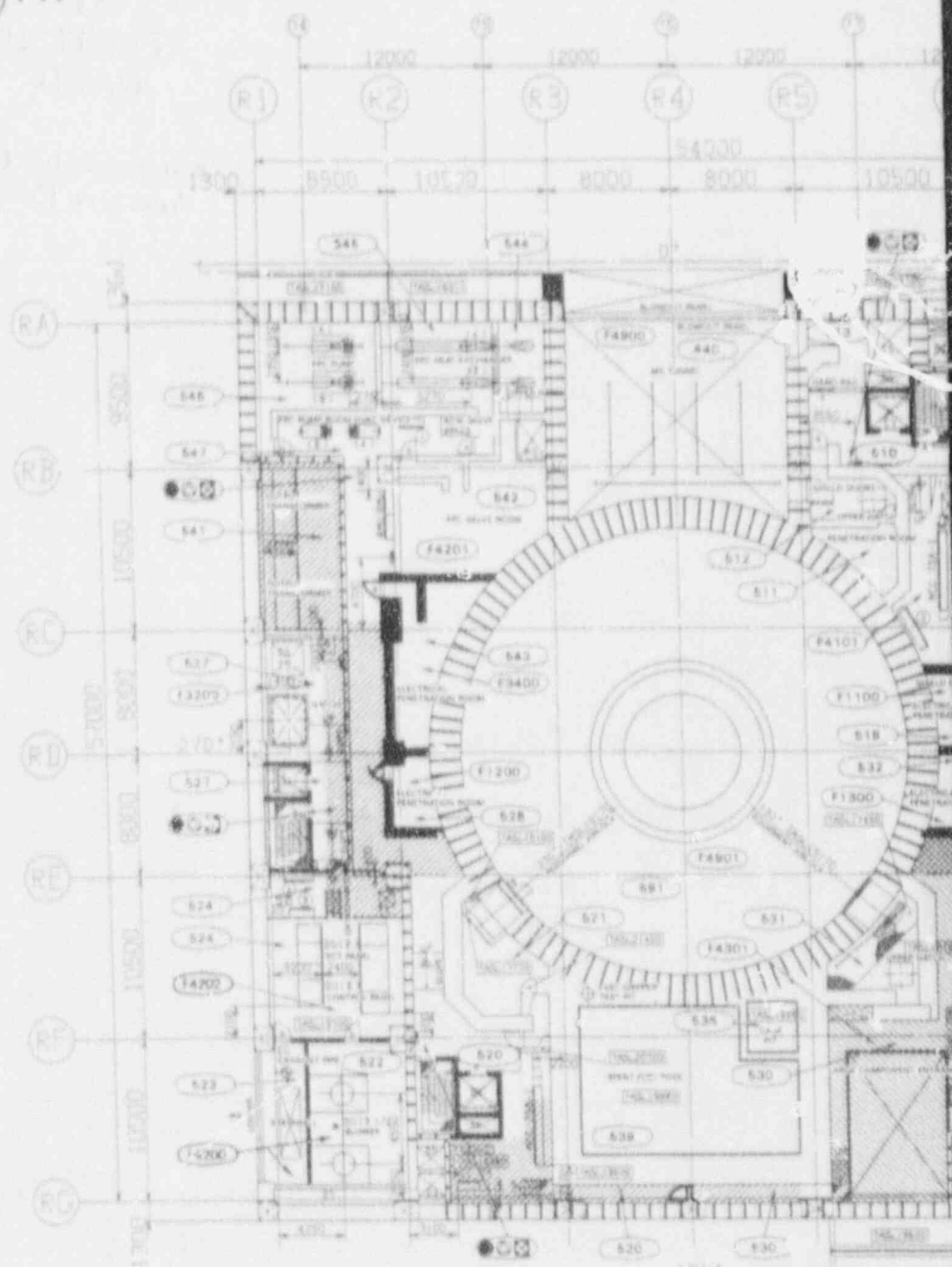
(REMARKS)
EQUIPMENT
FIRE COAT PUMP
FIRE HANDLING MACHINE TEST PIT

INSTRUMENT RACK LIST

NO.	NAME
H22-P031	1. POST ACCIDENT SAMPLE TRANSFER RACK
H22-P032	2. POST ACCIDENT SAMPLE RECOVERY RACK
H22-P033	3. POST ACCIDENT SAMPLING LOCAL OPERATING PANEL
H22-P034	4. STANDBY GAS TREATMENT SYSTEM OFF GAS RADIATION MONITOR SAMPLE RACK
H22-P035	5. STANDBY GAS TREATMENT SYSTEM OFF GAS RADIATION MONITOR GAS SAMPLER RACK (A)
H22-P036	6. STANDBY GAS TREATMENT SYSTEM OFF GAS RADIATION MONITOR GAS SAMPLER RACK (B)
H22-P037	7. STANDBY GAS TREATMENT SYSTEM OFF GAS RADIATION MONITOR PARTICULATE IODINE SAMPLE RACK
H22-P038	8. STANDBY GAS TREATMENT SYSTEM OFF GAS RADIATION MONITOR PARTICULATE IODINE SAMPLE RACK OPERATING PANEL
H22-P039	9. CONTAINMENT VESSEL PRESSURE LEAK TEST RACK
H22-P040	10. REACTOR CONTAINMENT VESSEL DEW POINT RECORDER RACK

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Figure 9A.4-4 REACTOR BUILDING FIRE PROTECTION AT EL. 12300mm

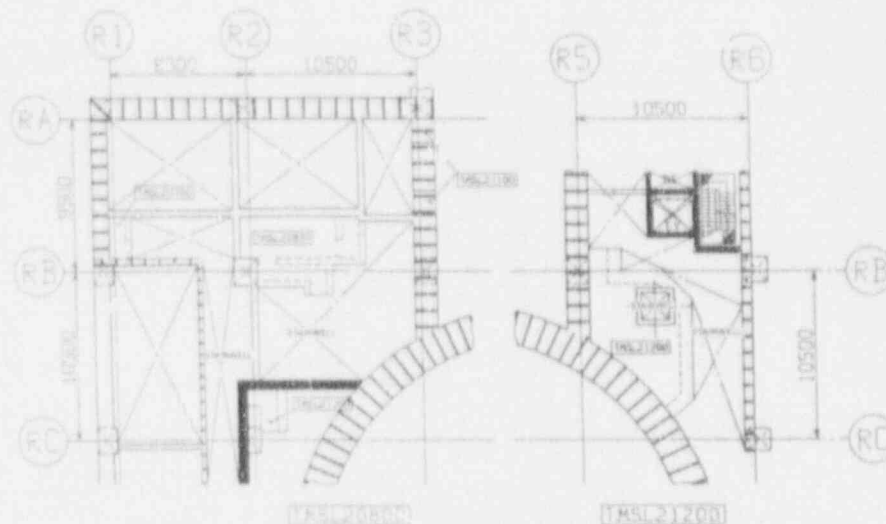
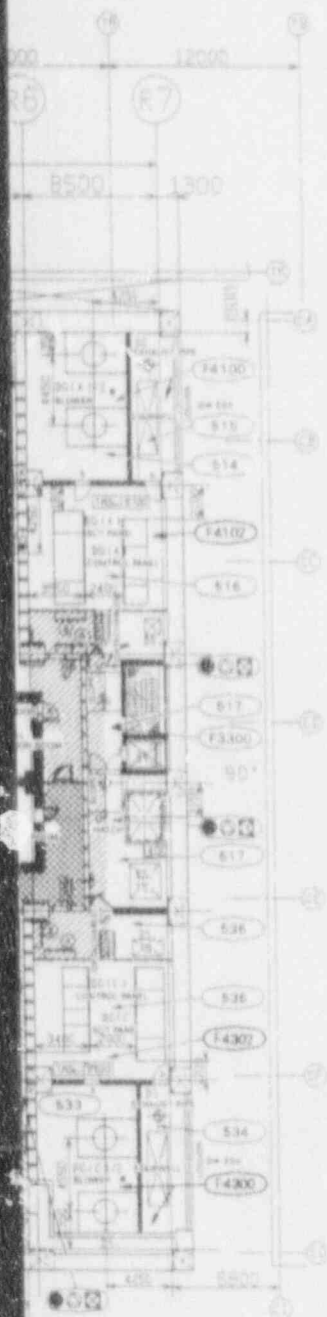


100' 0" 100' 0"

100' 0" 100' 0"

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CARD

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INSTRUMENT RACK LIST

NO.	RACK NAME
H22-PH43	1 FUEL POOL COOLING CLEANUP SYSTEM INSTRUMENT RACK
H22-PH41	2 MSIV LEAK TEST INSTRUMENT RACK

FOAM FIRE EXTINGUISHER LIST

NO.	RACK NAME
A	FOAM LIQUID TANK
B	FOAM INJECTION EQUIPMENT

REMARKS:
EQUIPMENT

FPC HX
FPC PUMP
FUEL HANDLING MACHINE TEST RT
SPENT FUEL STORAGE POOL
CASE PIT
D-DIG1 CONTROL PANEL
D-DIG2 CONTROL PANEL
D-DIG3 CONTROL PANEL
D-DIG4 CONTROL PANEL
D-DIG5 SUPPLY FAN
D-DIG6 SUPPLY FAN
D-DIG7 SUPPLY FAN

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92-049-05

Figure 9A.4-5 REACTOR BUILDING FIRE PROTECTION AT EL 18,100 mm

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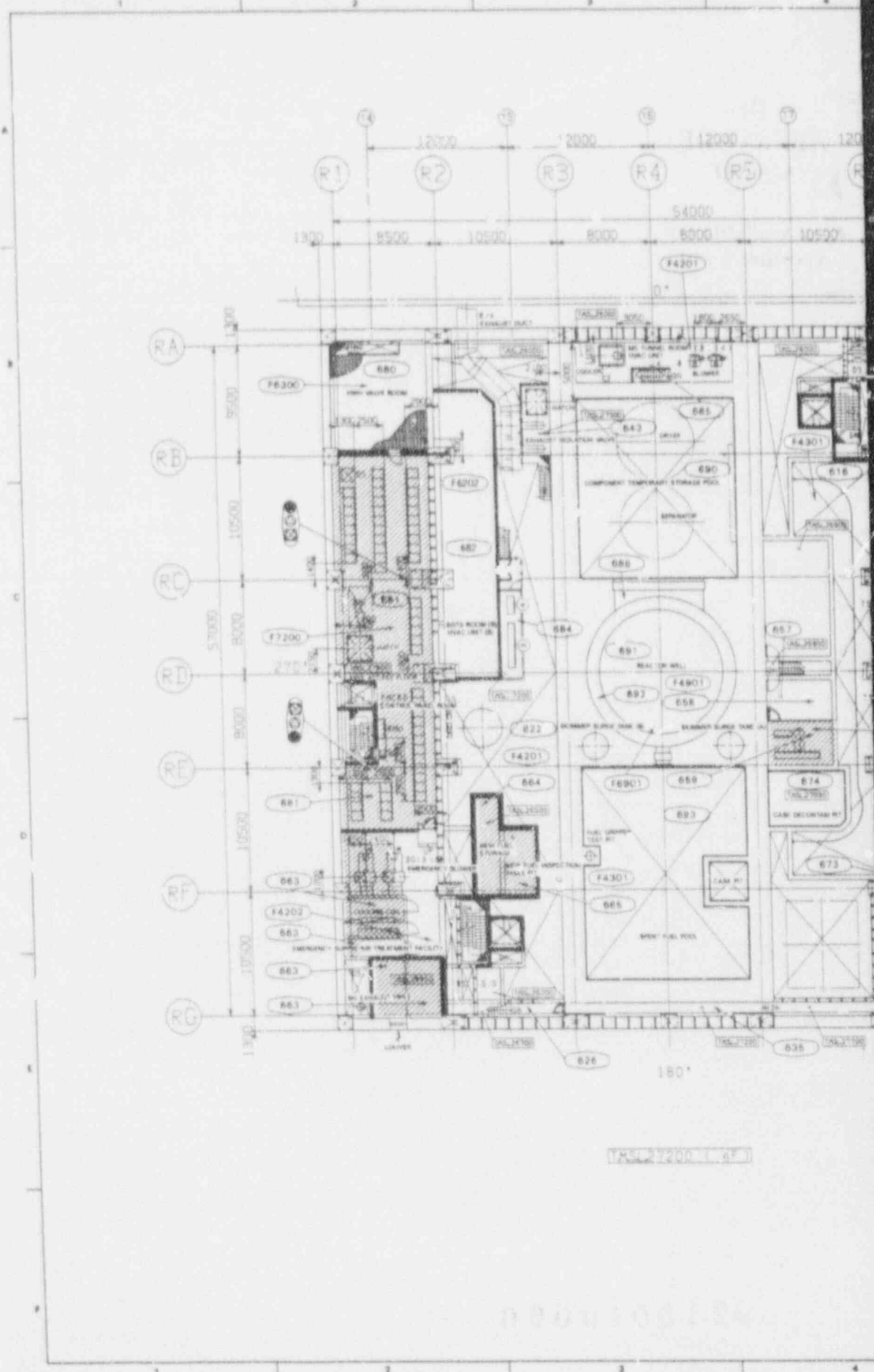
INSTRUMENT RACK		
NO.	RACK NAME	
041 H22-P043	1	STANDBY GAS TREATMENT SYSTEM INSTRUMENT RACK
020 H23-P044A	2	CONTAINMENT VESSEL ATMOSPHERE MONITOR CALIBRATION GAS CYLINDER RACK A
023 H23-P044B	3	CONTAINMENT VESSEL ATMOSPHERE MONITOR CALIBRATION GAS CYLINDER RACK B

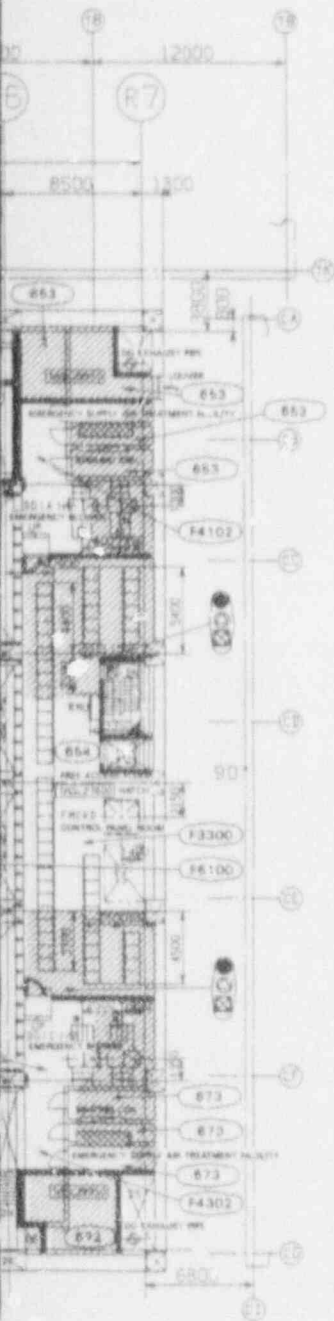
SI ROOM AND AUXILIARY FACILITIES

NO.	FACILITY NAME	QTY	REMARKS: EQUIPMENT
A	CONTROL DATA COLLECTION EQUIPMENT	6	D/S PIT
B	STABILIZED POWER SUPPLY SYSTEM	1	CASA PIT
C	DESK	3	
D	STORAGE	2	SPENT FUEL STORAGE POOL
E	CALIBRATION TEST PIECE FOR M/S NOZZLE CORNER	1	SI INSPECTION ROOM
F	CALIBRATION TEST PIECE FOR NOZZLE CORNER	1	SOTS FILTER TRAIN
G	CALIBRATION TEST PIECE FOR NOZZLE CORNER	1	SOTS FAN
H	CALIBRATION TEST PIECE FOR NOZZLE CORNER	1	SLC PUMP
I	RPV SHELL ADJUST TEST FACILITY	1	SLC TANK
J	RPV BOTTOM PLATE ADJUST TEST FACILITY	1	SLC TEST TANK
K	RPV NOZZLE ADJUST TEST FACILITY	1	DG (A) DAY TANK
L	RPV NOZZLE ADJUST TEST FACILITY	1	DG (B) DAY TANK
M	RPV NOZZLE ADJUST TEST FACILITY	1	DG (C) DAY TANK
N	SI DEVICE STORAGE	5	HHW PUMP
P	SI DEVICE STORAGE	3	HHW HX
Q	RPV CALIBRATION TEST PIECE STORAGE	1	
R	RPV CONSUMABLE MATERIALS AND CALIBRATION TEST PIECE STORAGE	2	
S	RPV CALIBRATION TEST PIECE STORAGE	2	

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35





RACK LIST	
NO.	RACK NAME
003 003-0003A	1. CONTAINMENT VESSEL ATMOSPHERE MONITOR RACK (A)
003 003-0004A	2. CONTAINMENT VESSEL ATMOSPHERE MONITOR CALIBRATION RACK (A)
003 003-0003B	3. CONTAINMENT VESSEL ATMOSPHERE MONITOR RACK (B)
003 003-0004B	4. CONTAINMENT VESSEL ATMOSPHERE MONITOR CALIBRATION RACK (B)

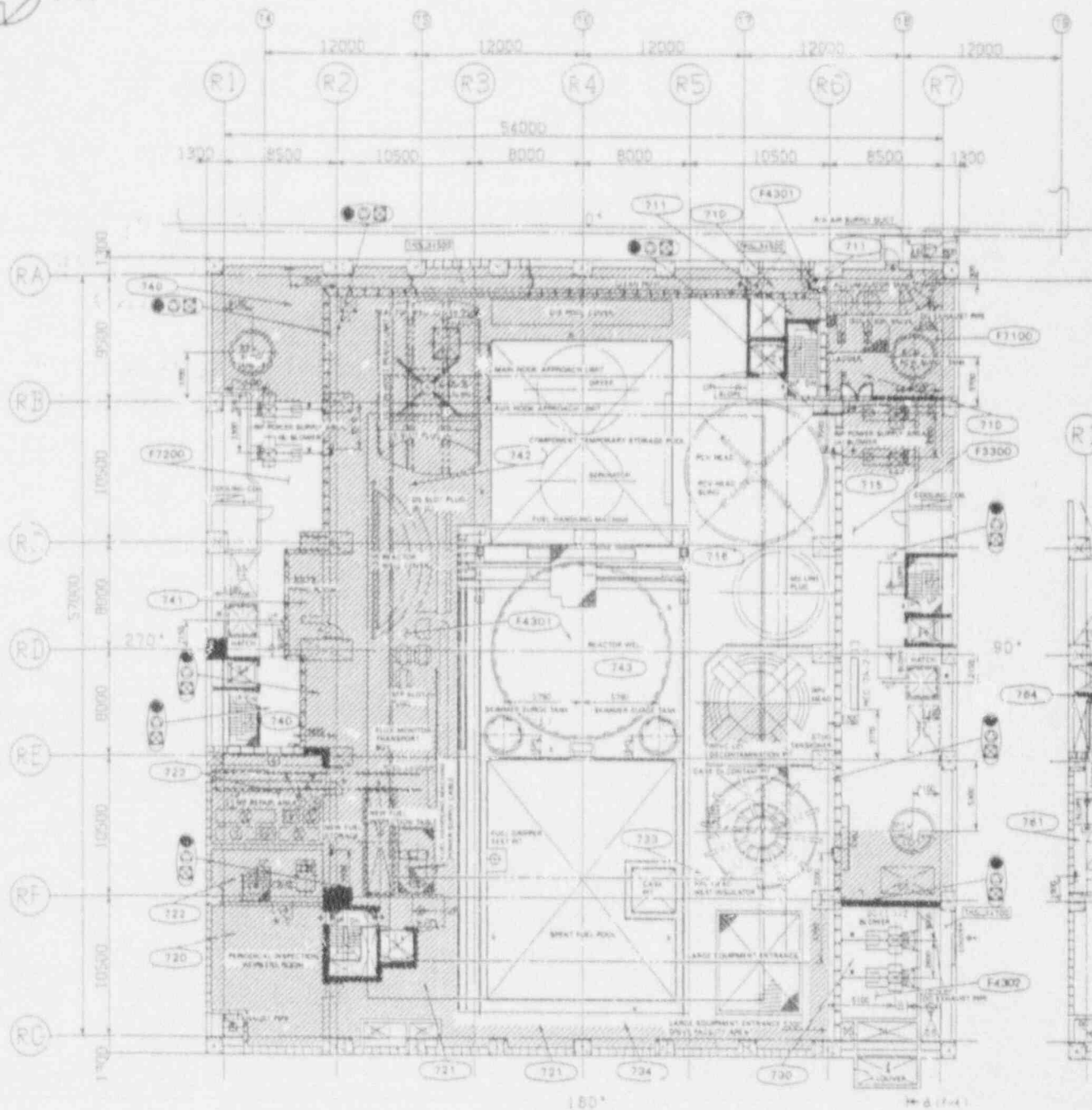
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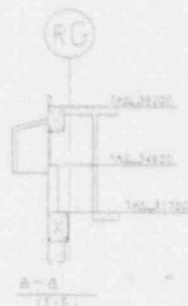
(REMARKS)
EQUIPMENT
D/S PIT
CASK PIT
SPENT FUEL STORAGE POOL
CASK WASHDOWN PIT
FUEL AD. PANEL ROOM
NEI / FUEL STORAGE PIT
NP / FUEL INSPECTION PIT

9210010066-36

Figure 9A.4-7 REACTOR BUILDING FIRE PROTECTION AT EL. 27200mm



NO	RACK NAME
1	INSPECTION POOL
2	TEMPORARY INSTALLED RAIL
3	MONO-RAIL
4	TEMPORARY INST RAIL STORAGE AREA
5	IMPELLER SHAFT GRIPPER STORAGE AREA
6	DIFFUSER WEAR RING GRIPPER STORAGE AREA
7	DIFFUSER STRETCH TUBE GRIPPER STORAGE AREA
8	UPPER PLUG STORAGE AREA
9	YIP UPPER PORTION HANDLING CONNECTOR ROD STORAGE AREA



(REMARKS)
EQUIPMENT
O/S PIT
SPENT FUEL STORAGE HOC

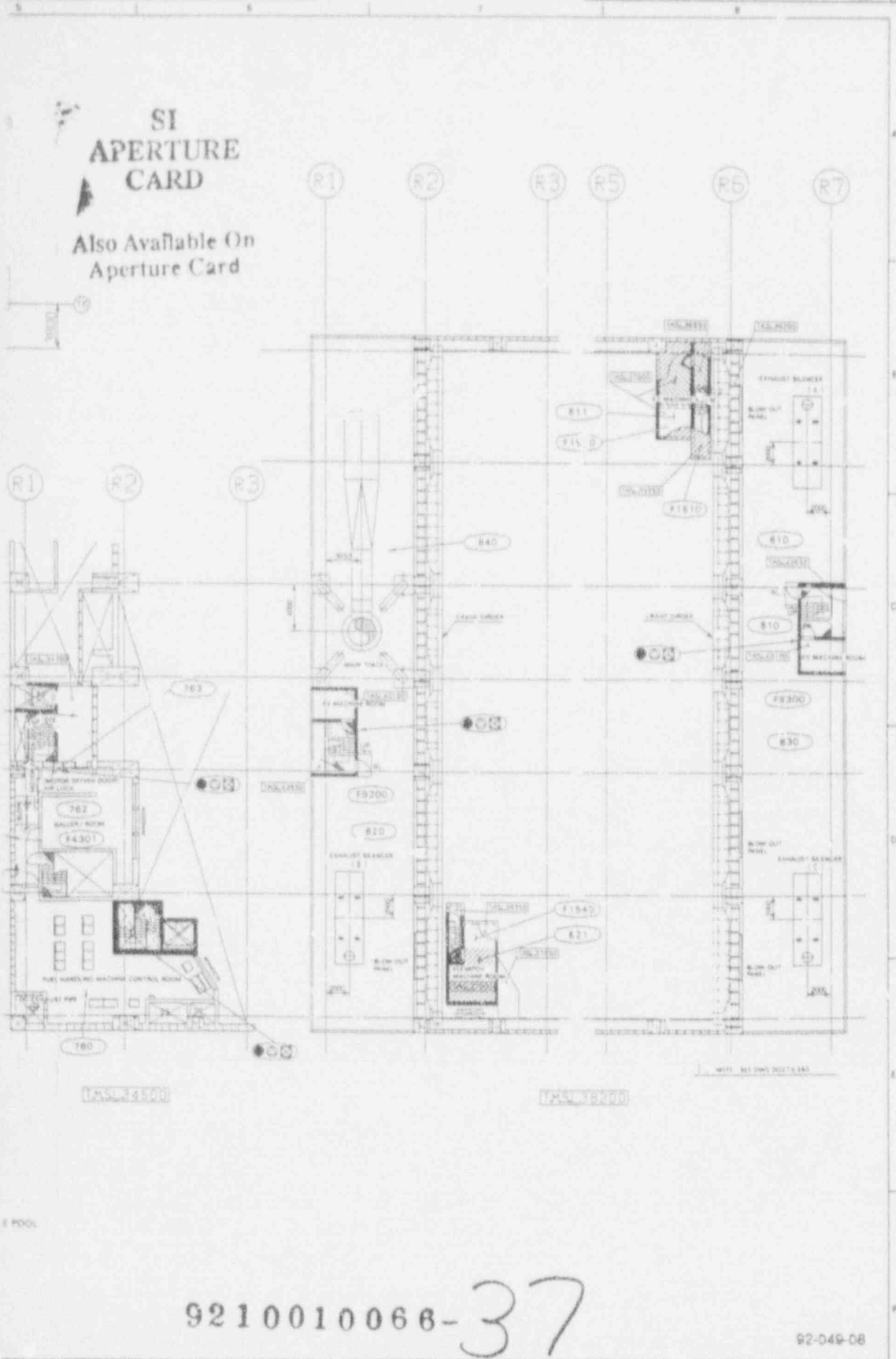
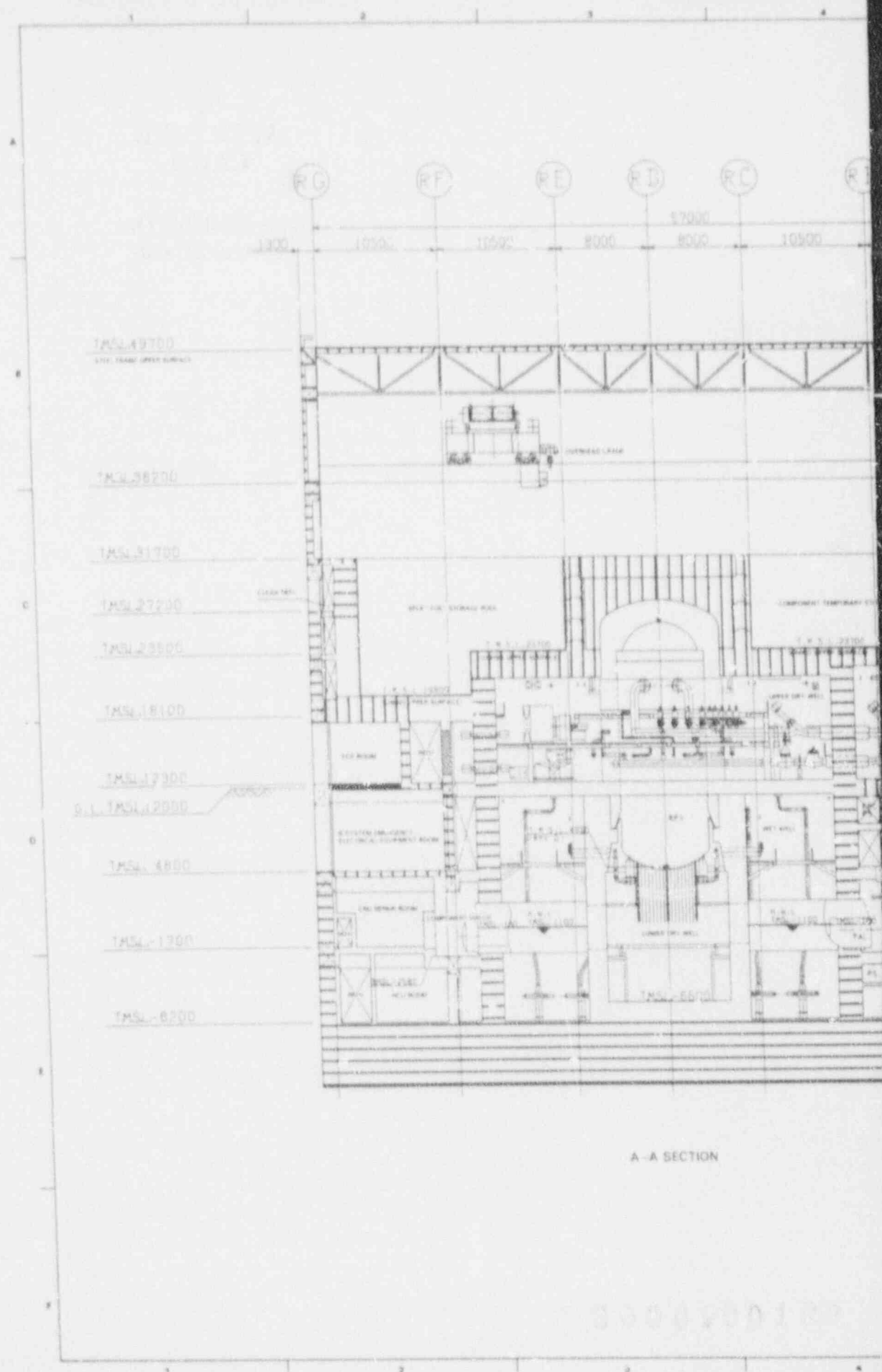


Figure 9A.4-8 REACTOR BUILDING FIRE PROTECTION AT EL 31,700 mm



A-A SECTION

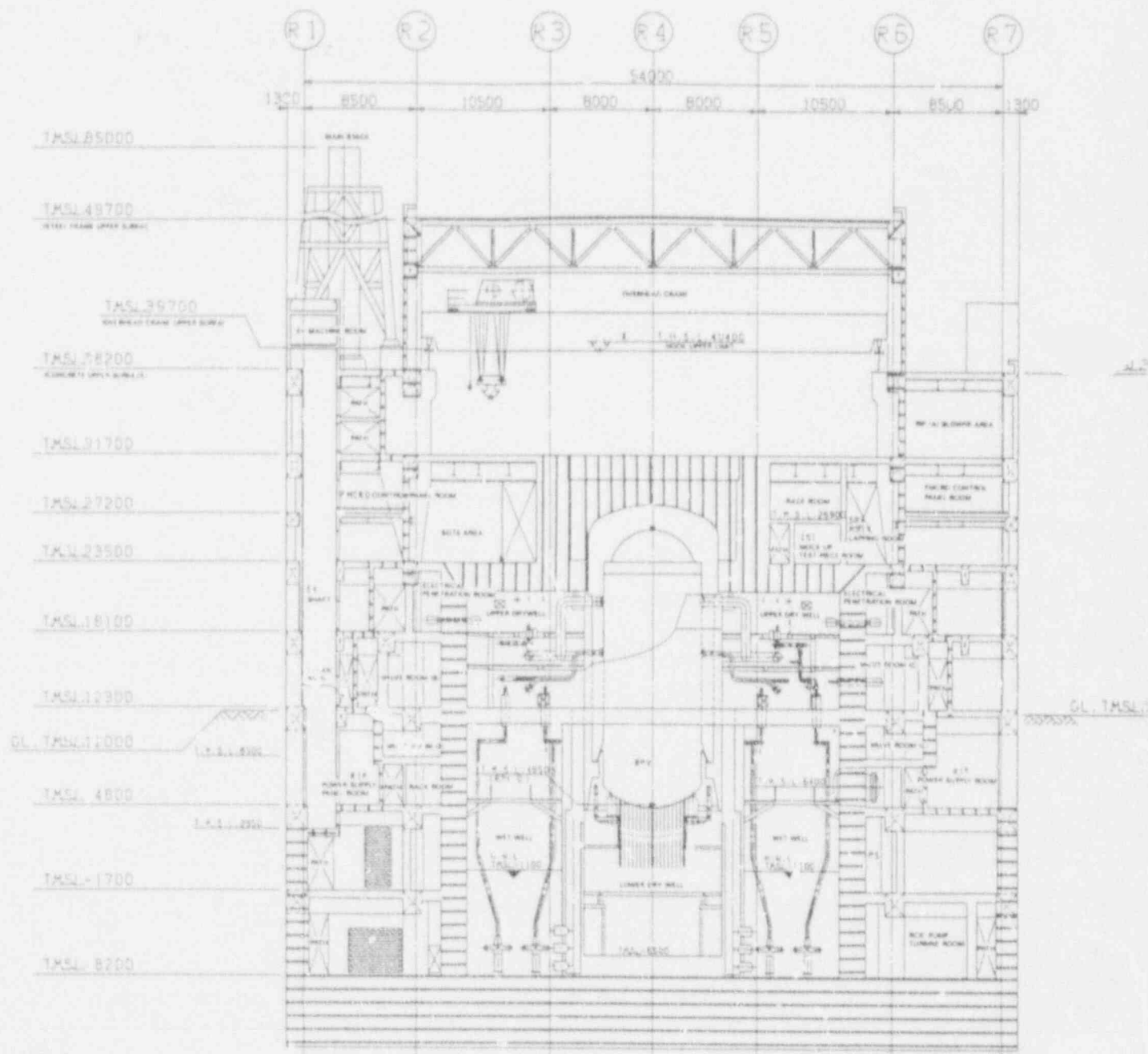
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7. www.spc.com.sg/eng/eng.htm

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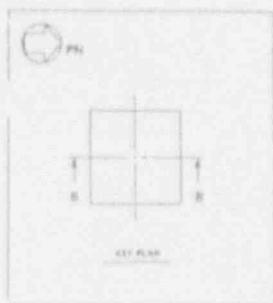
Amendment 22



B-B SECTION

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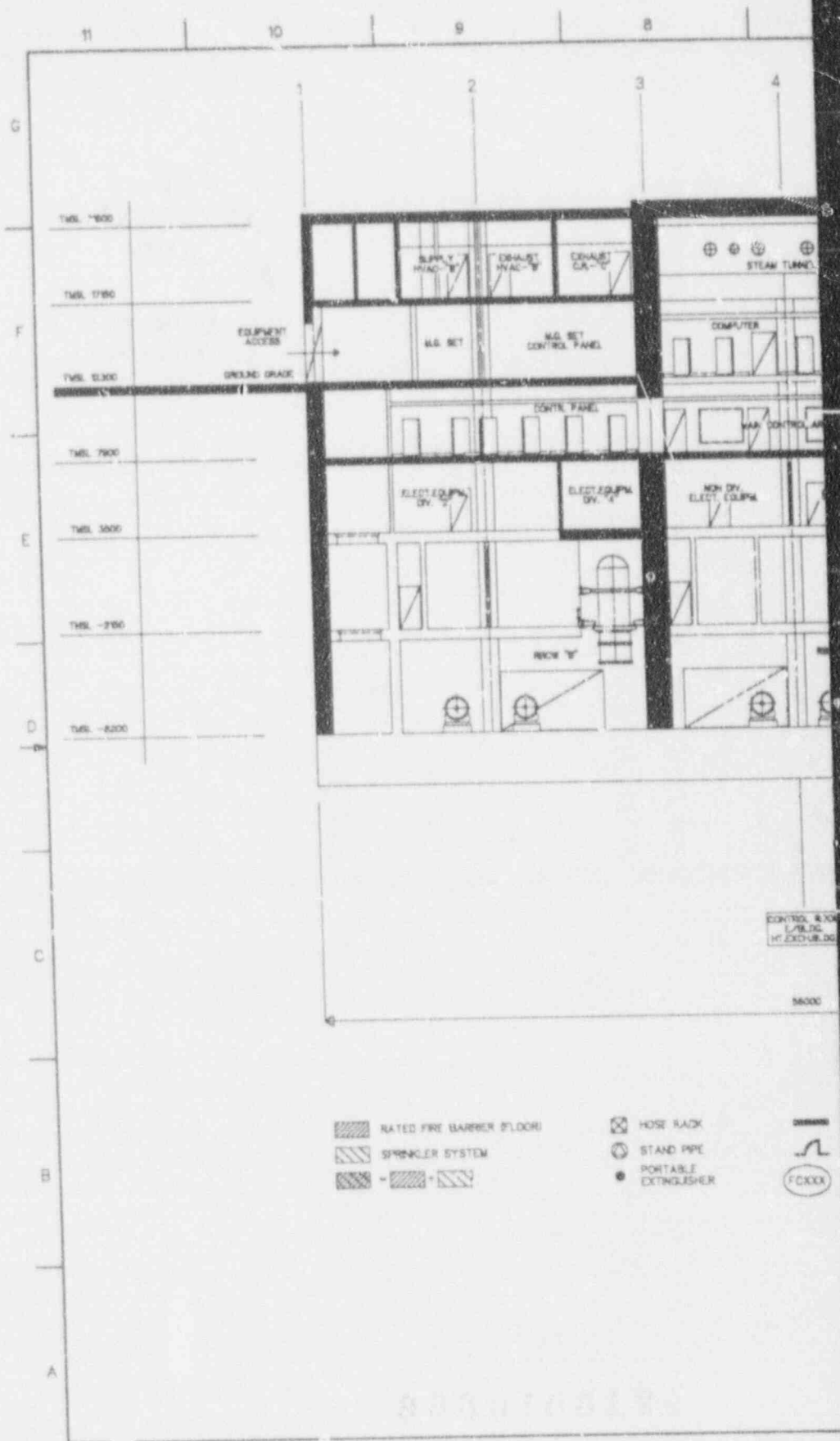


NOTE
1. SEE DIMS 1000 TO 1005

MSL 36200

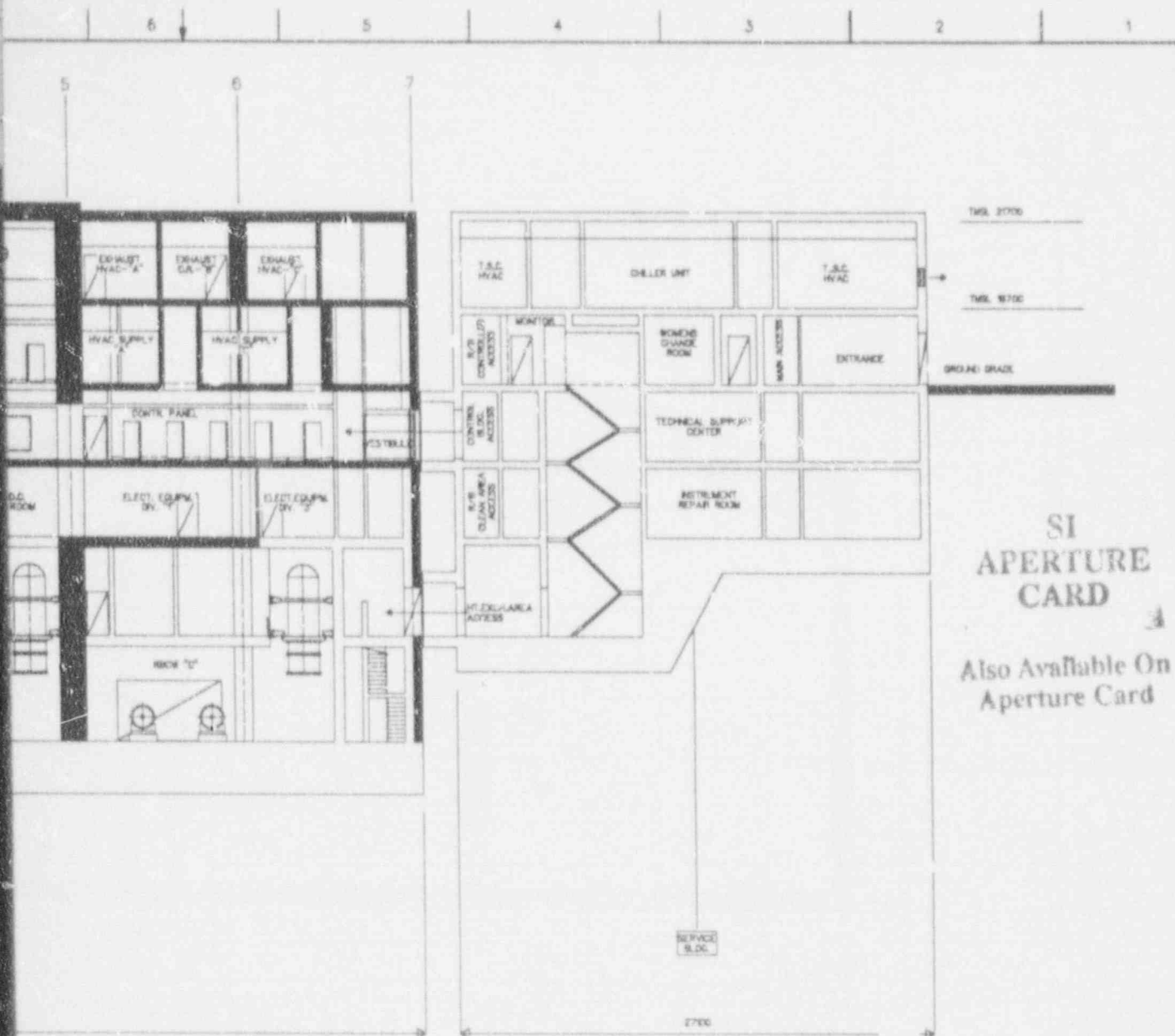
MSL 12000

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ABWR Standard Plant

23A6106AH
REV B



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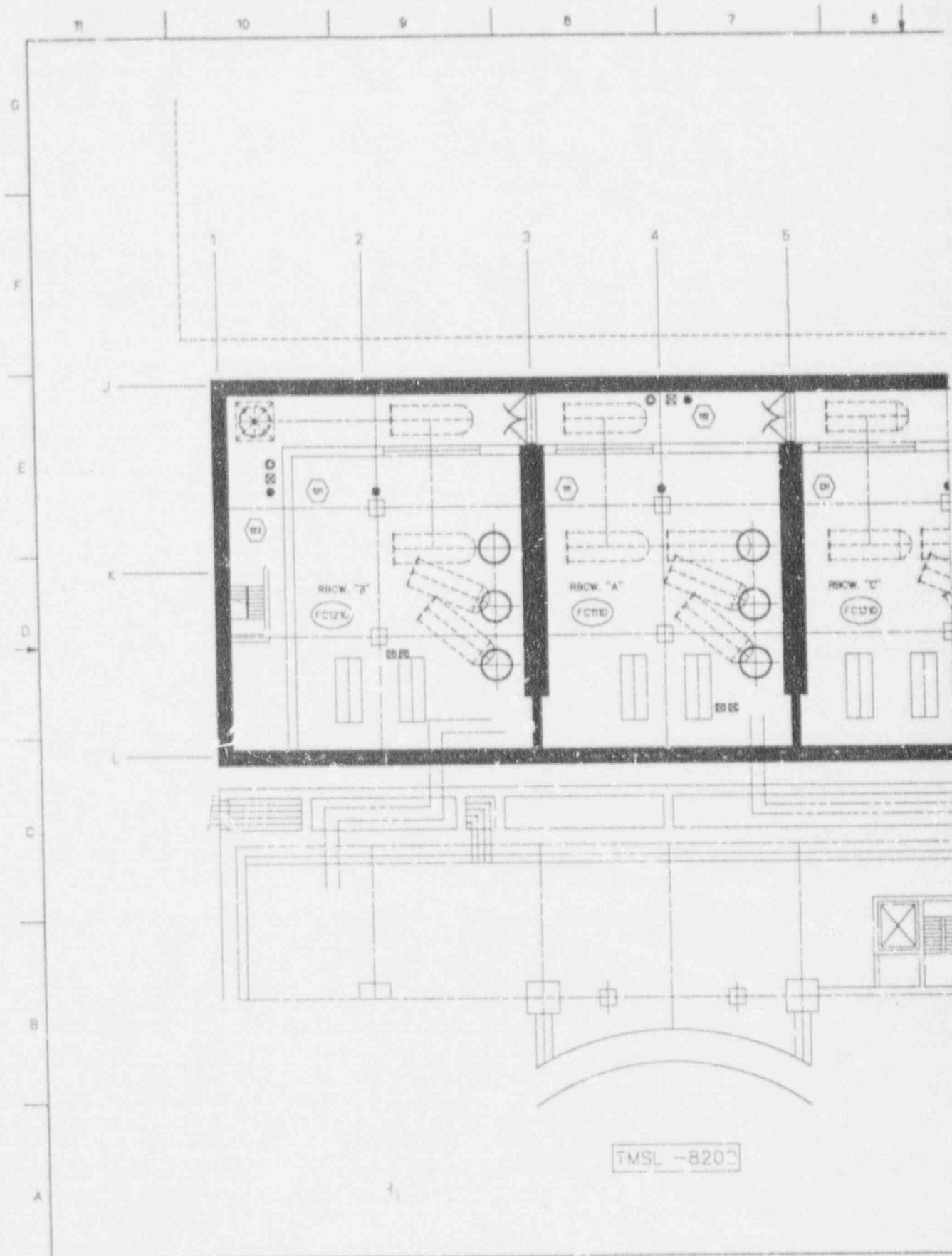
Also Available On
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TYPE BARRIER (WALL)
FIRE DOOR
ROOM NUMBER

9210010066-40

91-472-02

Figure 9A.4-11 CONTROL BUILDING FIRE PROTECTION, SECTION A-A



5

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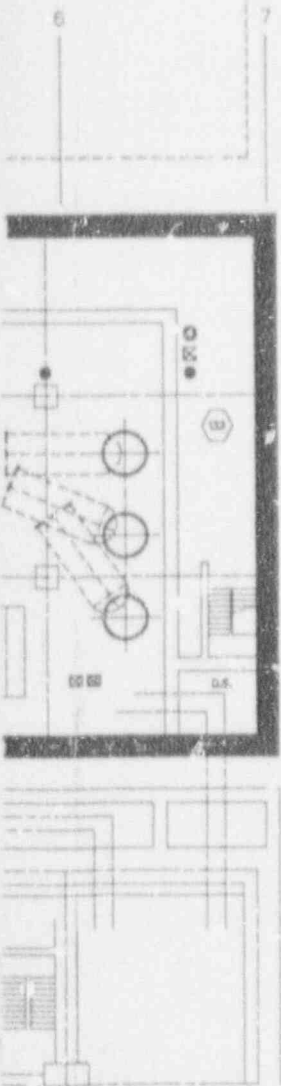
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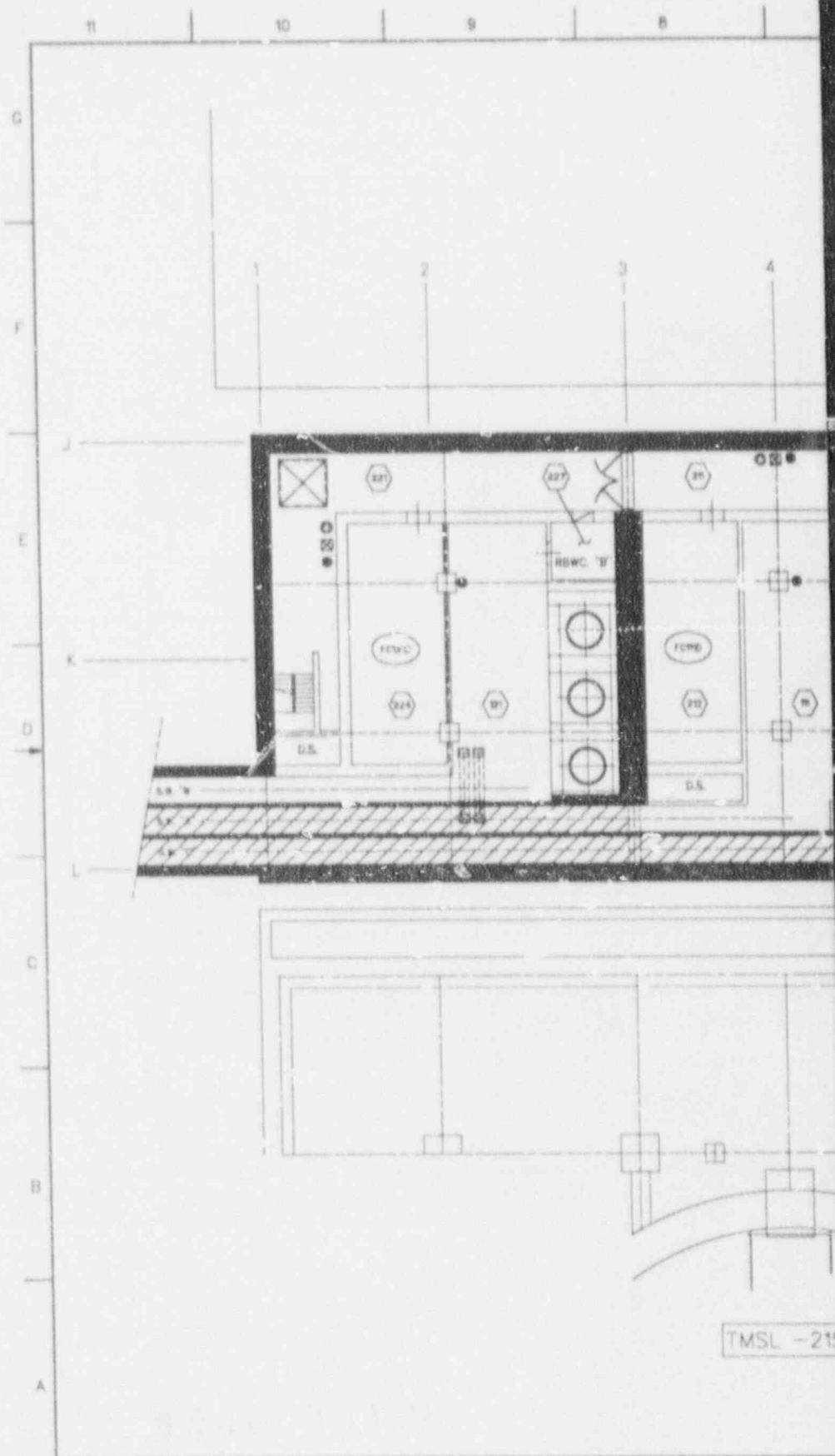
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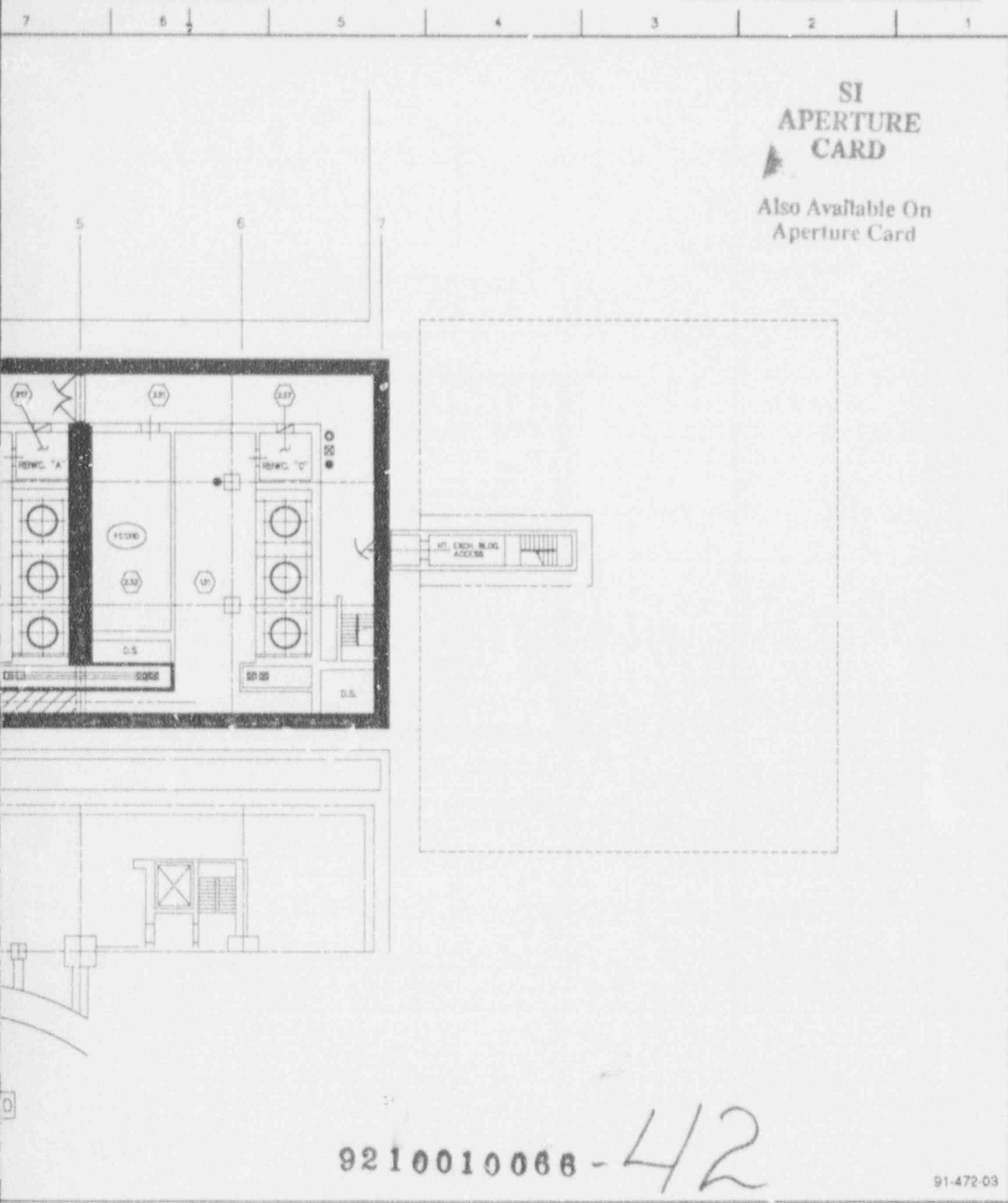


9210010066 - 41

91-471-01

Figure 9A.4-12 CONTROL BUILDING FIRE PROTECTION AT ELEVATION (--) 8200mm

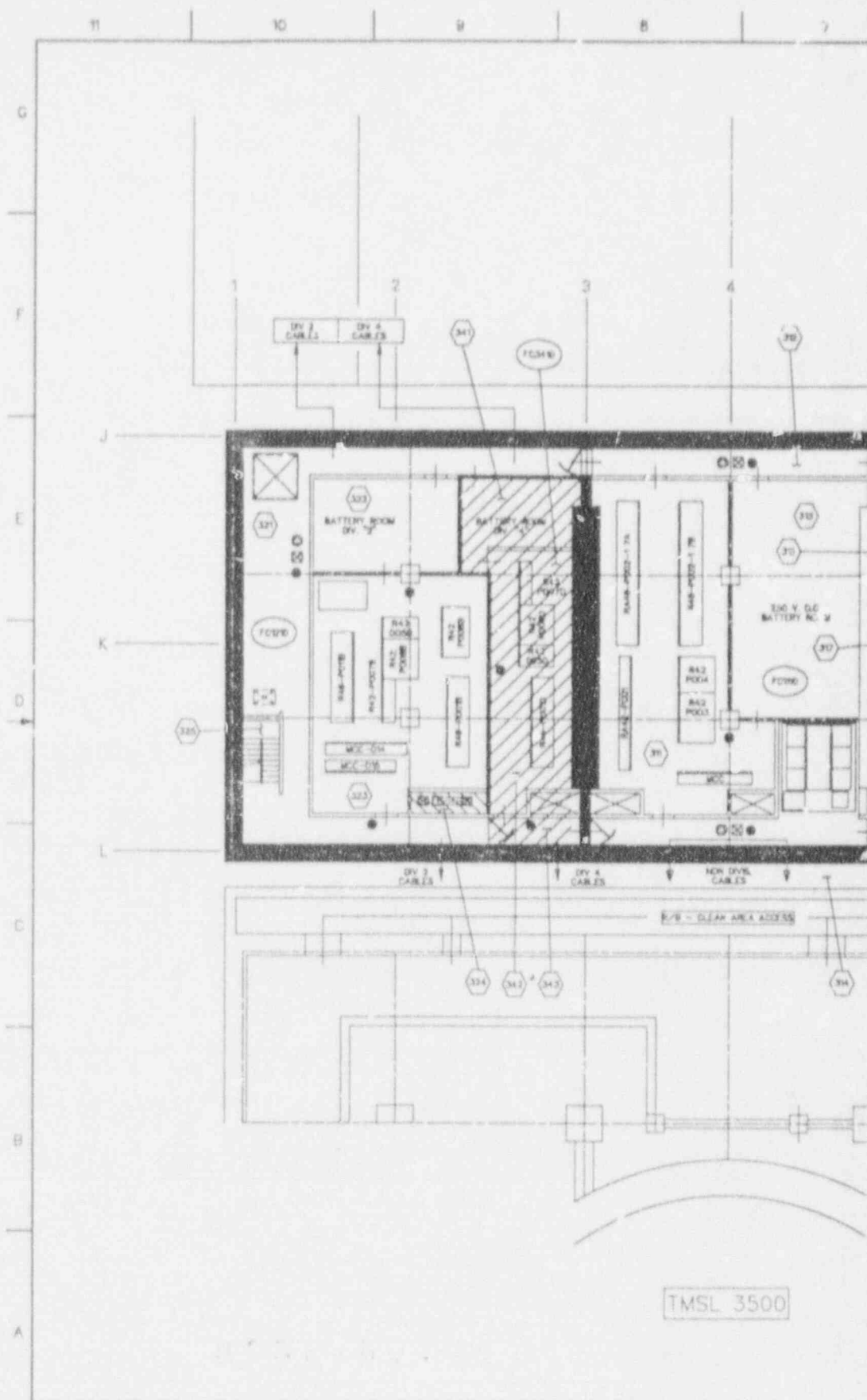




9210010066-42

91-472-03

Figure 9A.4-13 CONTROL BUILDING FIRE PROTECTION AT ELEVATION (--) 2150mm



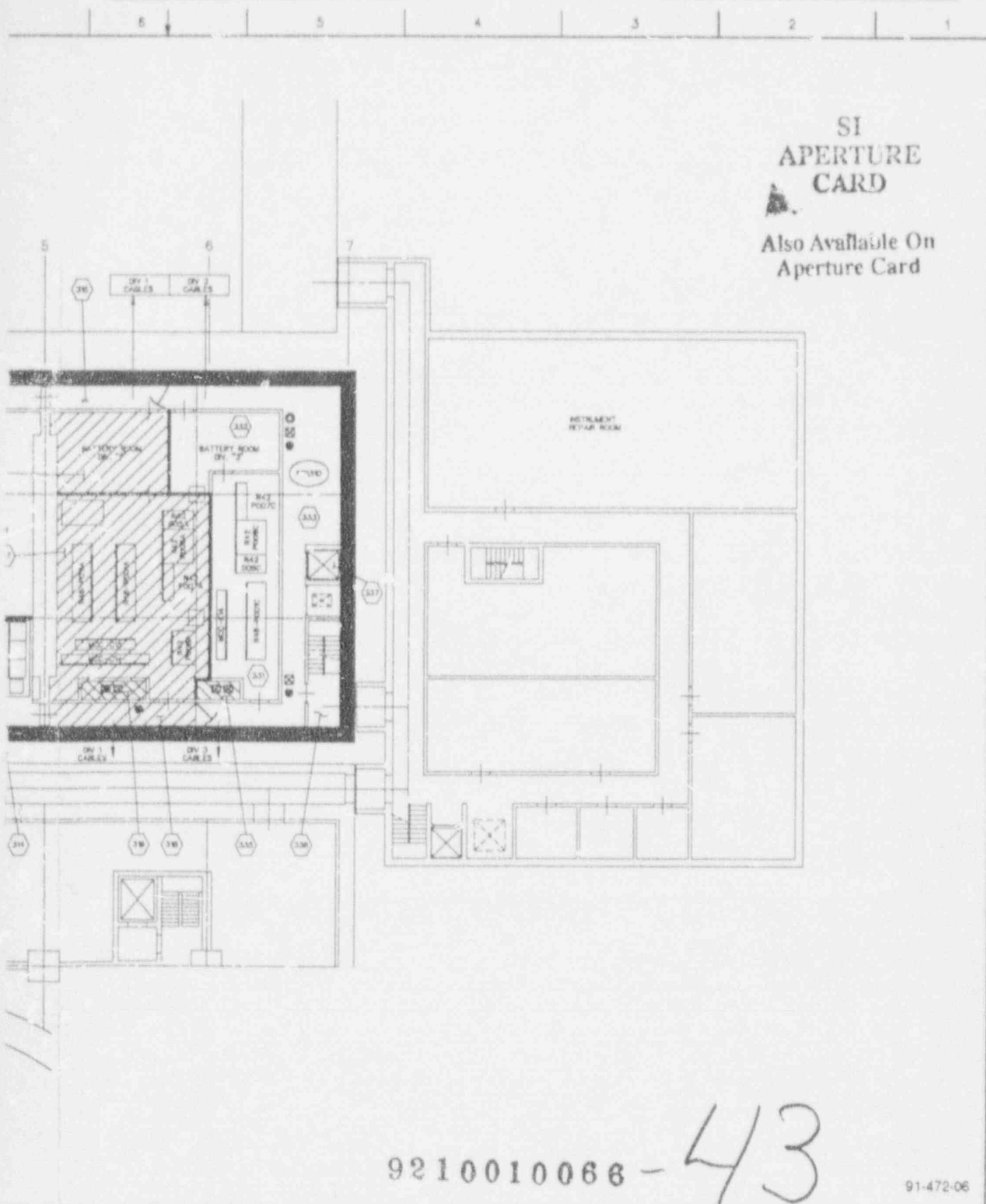
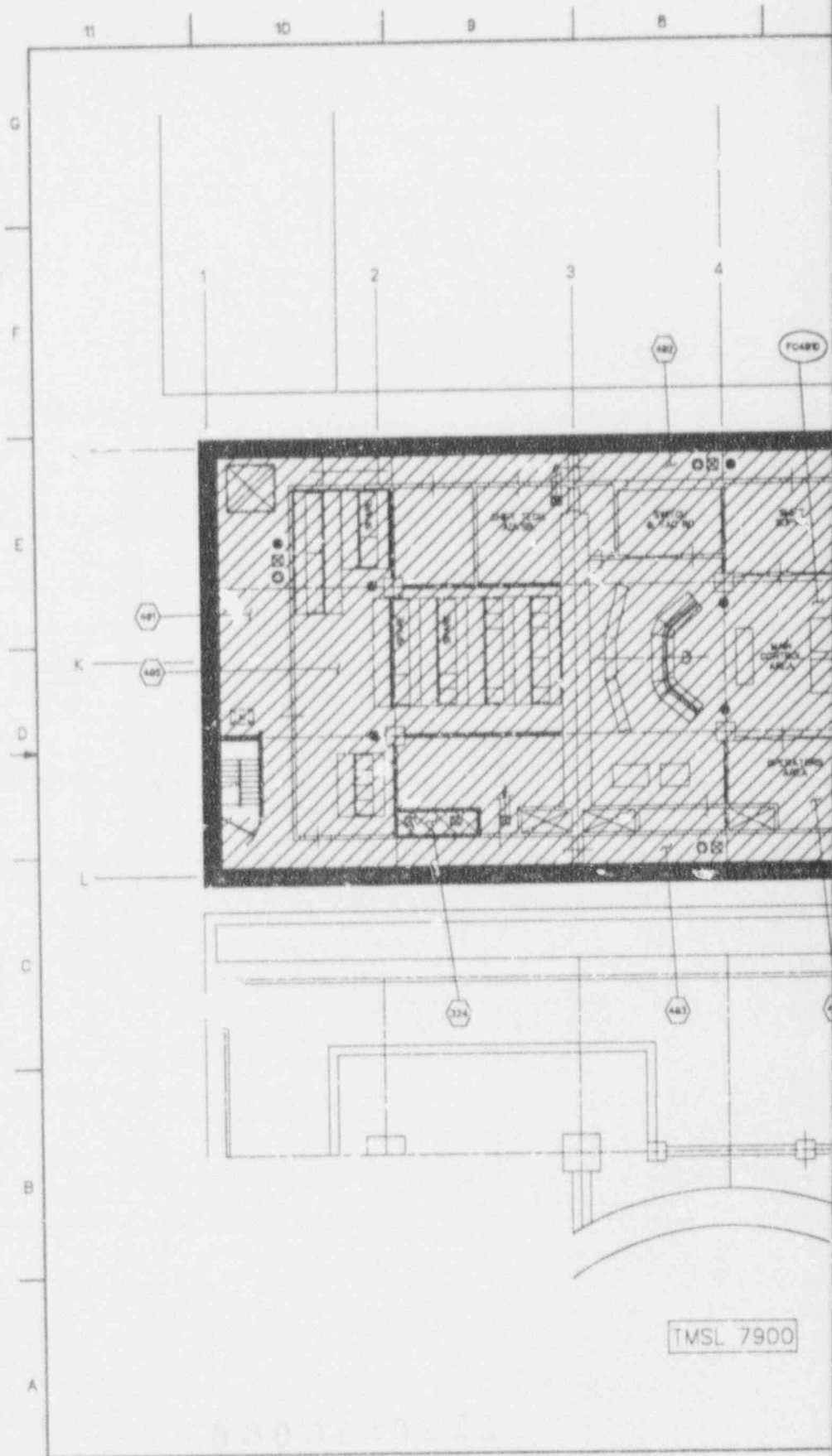
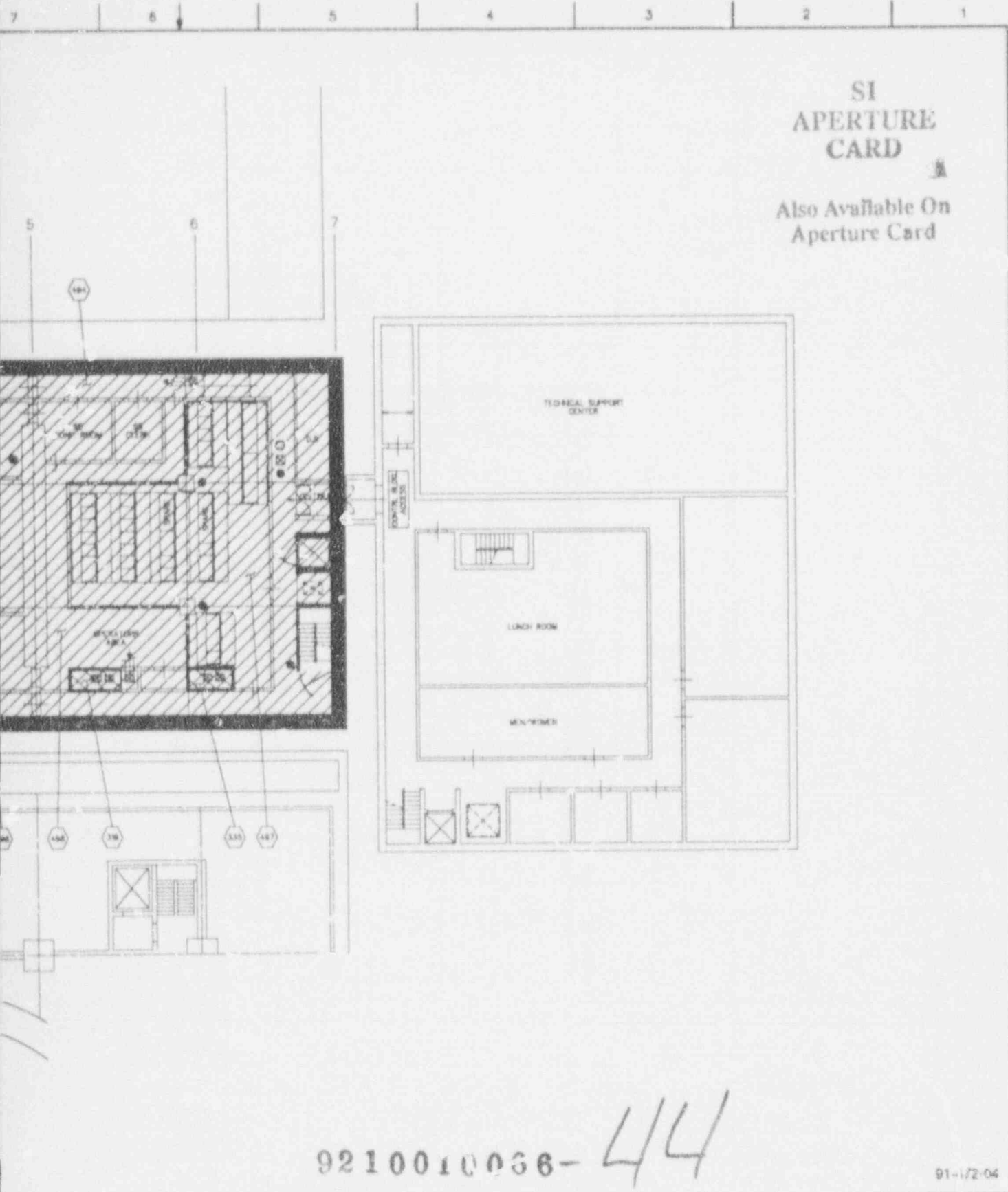


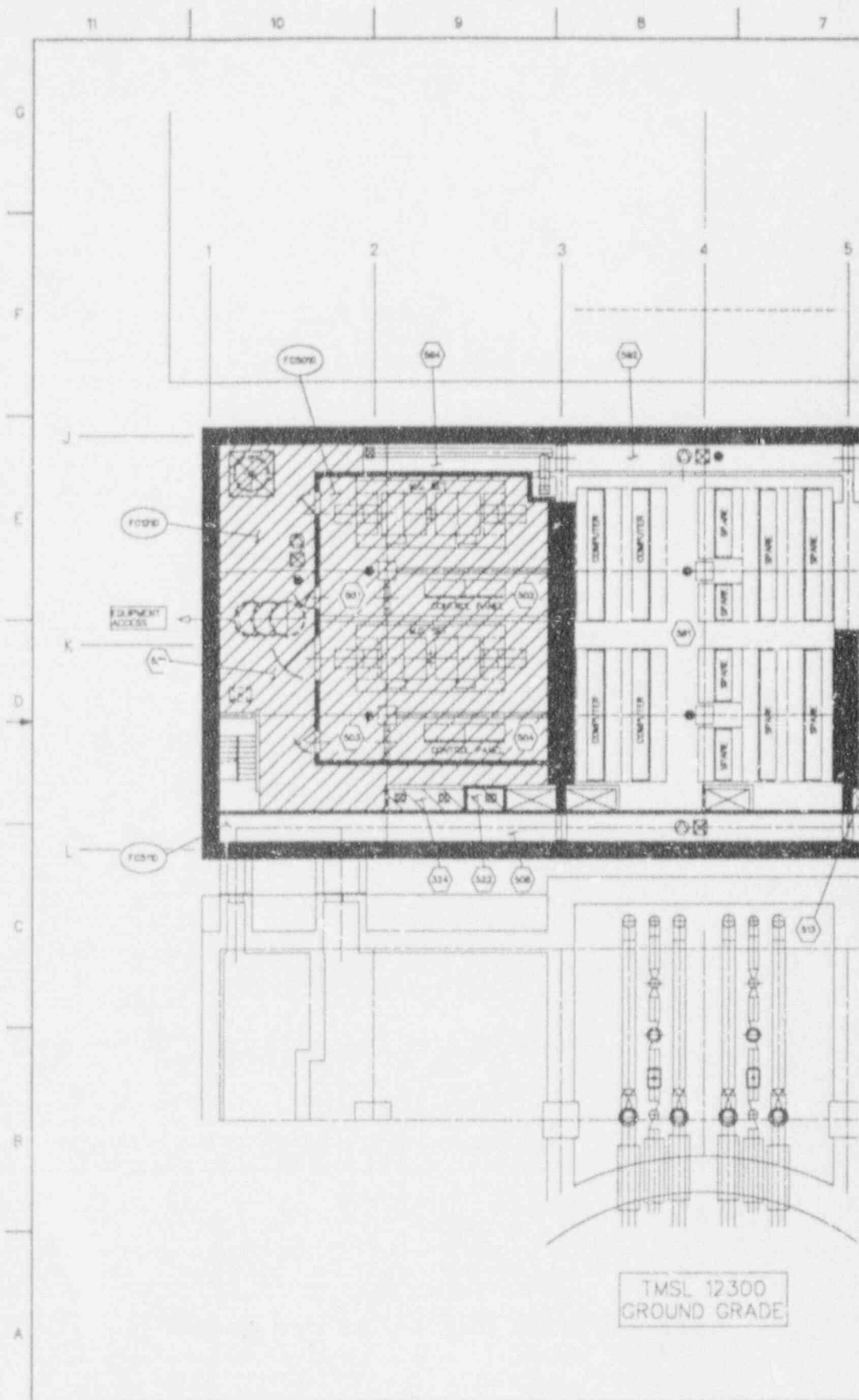
Figure 9A.4-14 CONTROL BUILDING FIRE PROTECTION AT ELEVATION 3500mm





91-1/2-04

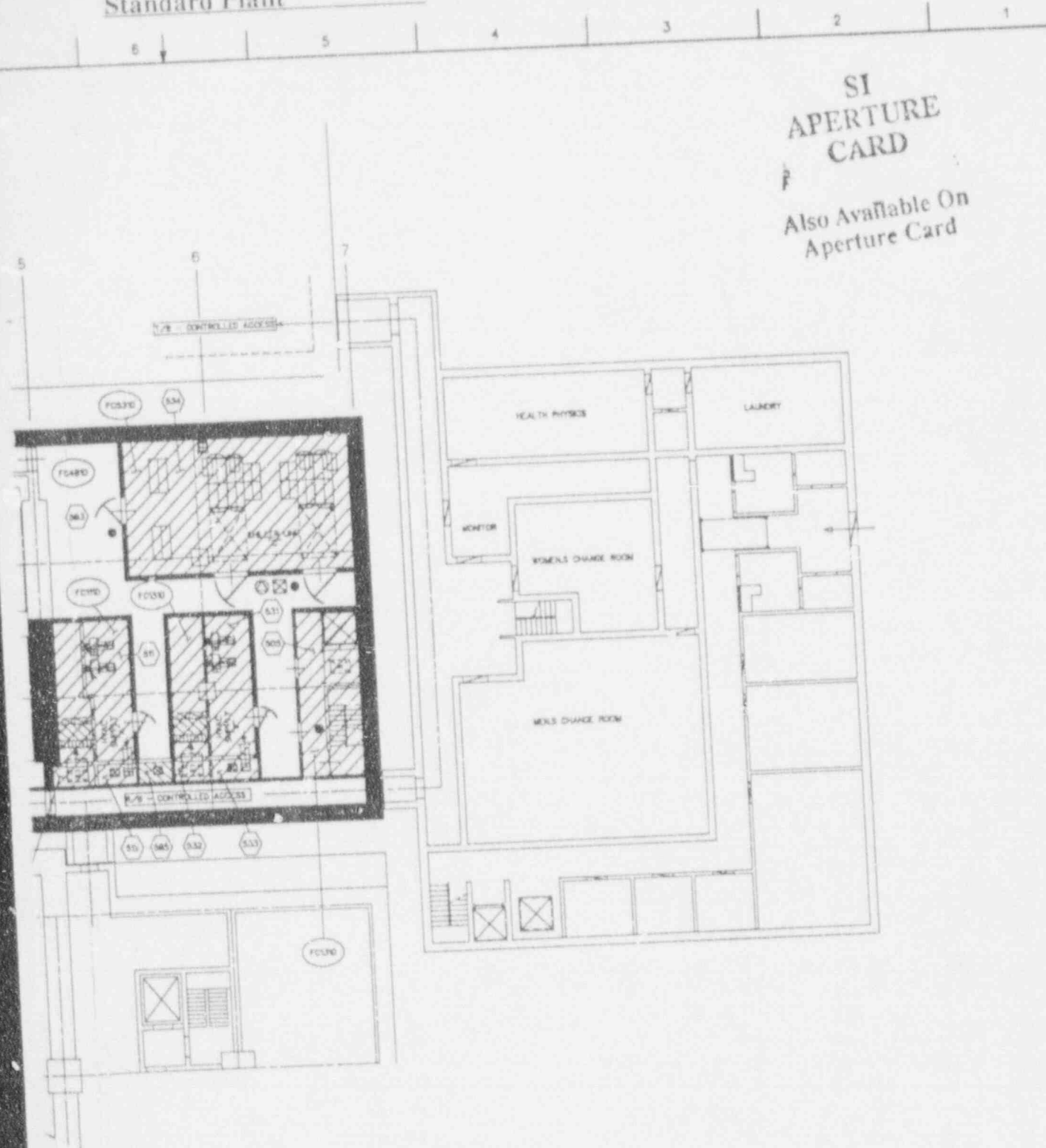
Figure 9A.4-15 CONTROL BUILDING FIRE PROTECTION AT ELEVATION 7'00mm



ABWR Standard Plant

23A6100AH

REV B



9210010066-45

91-472-05

Figure 9A.4-16 CONTROL BUILDING FIRE PROTECTION AT ELEVATION 12300mm

9A.4-255

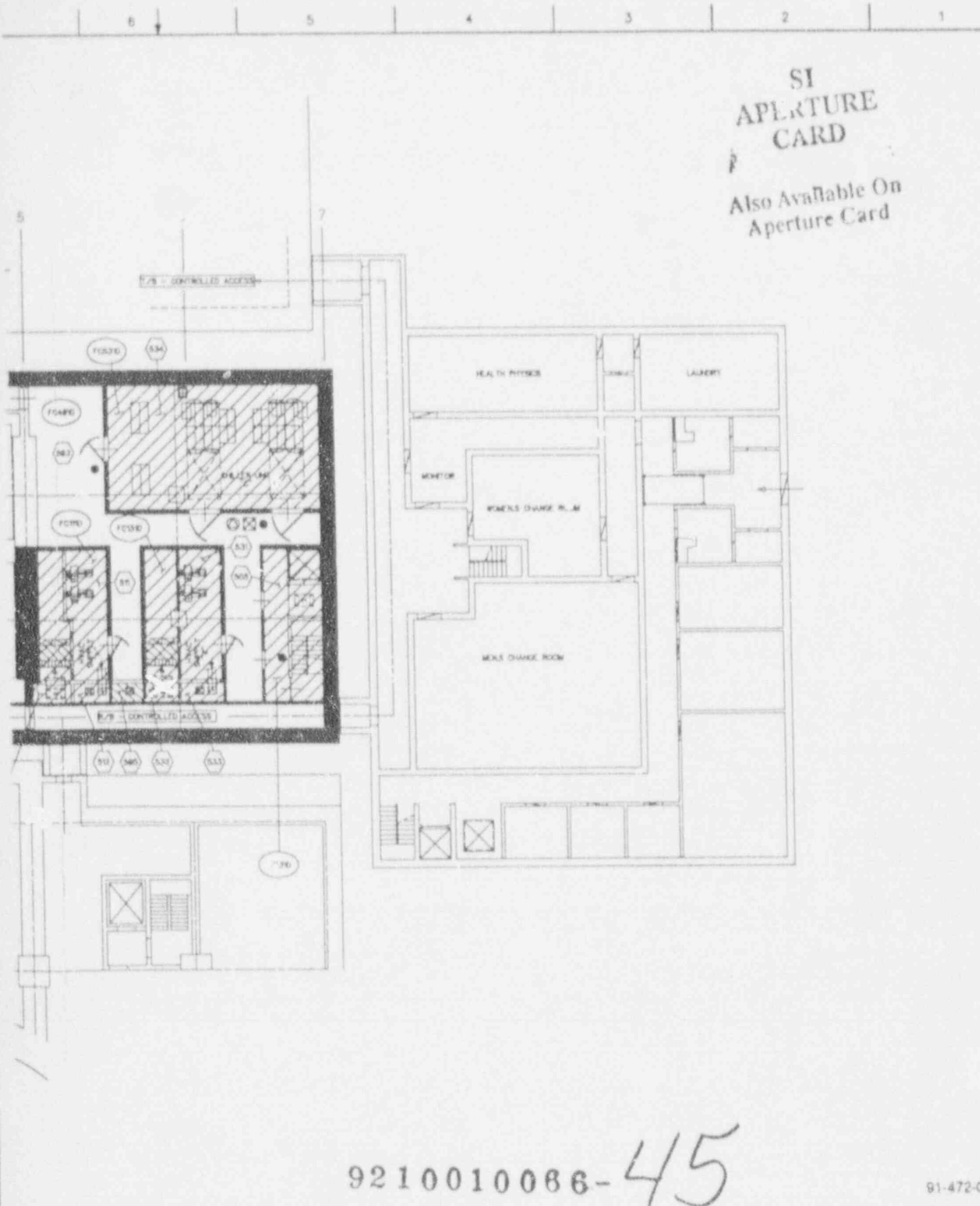
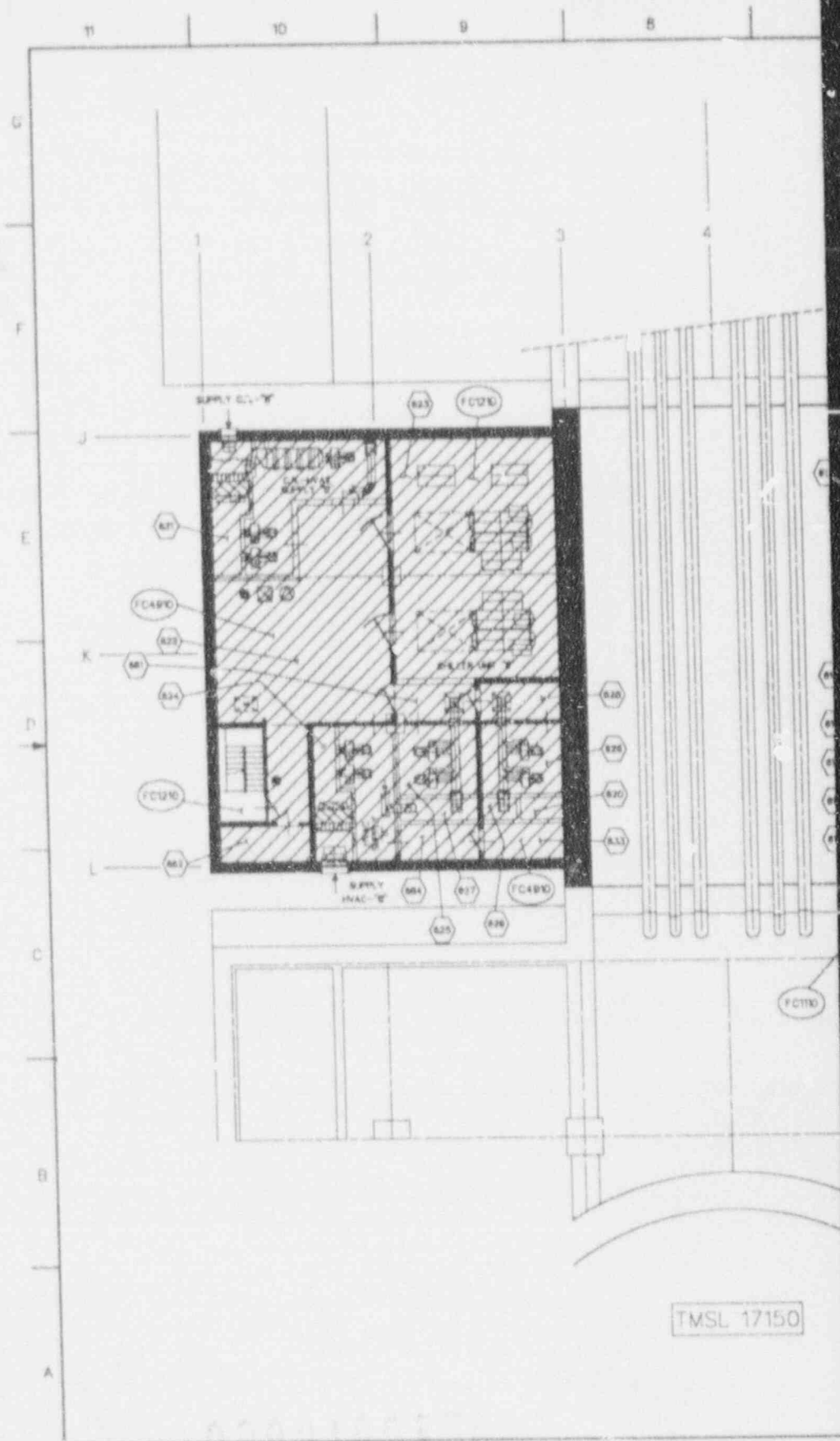
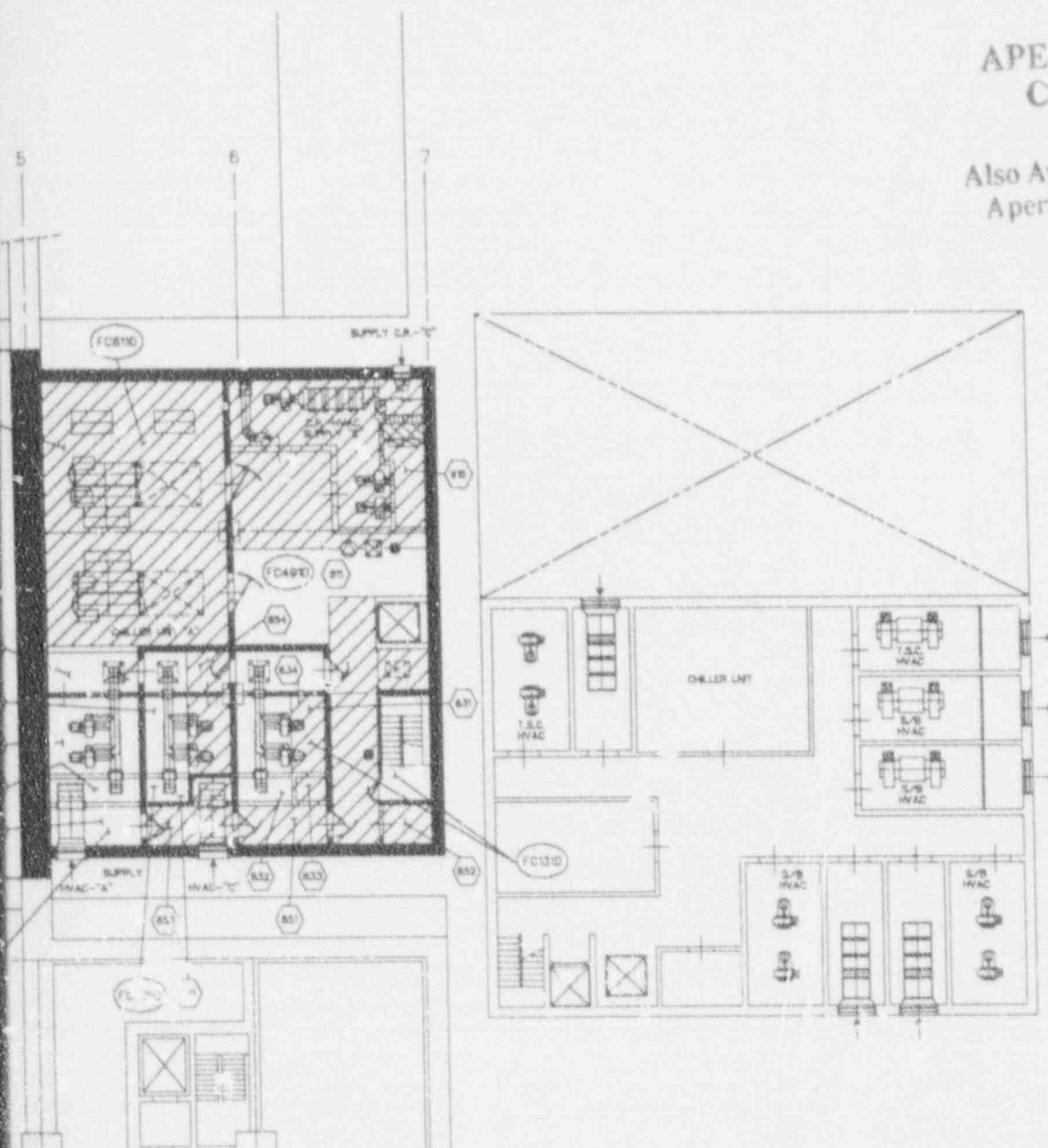


Figure 9A.4-16 CONTROL BUILDING FIRE PROTECTION AT ELEVATION 12300mm



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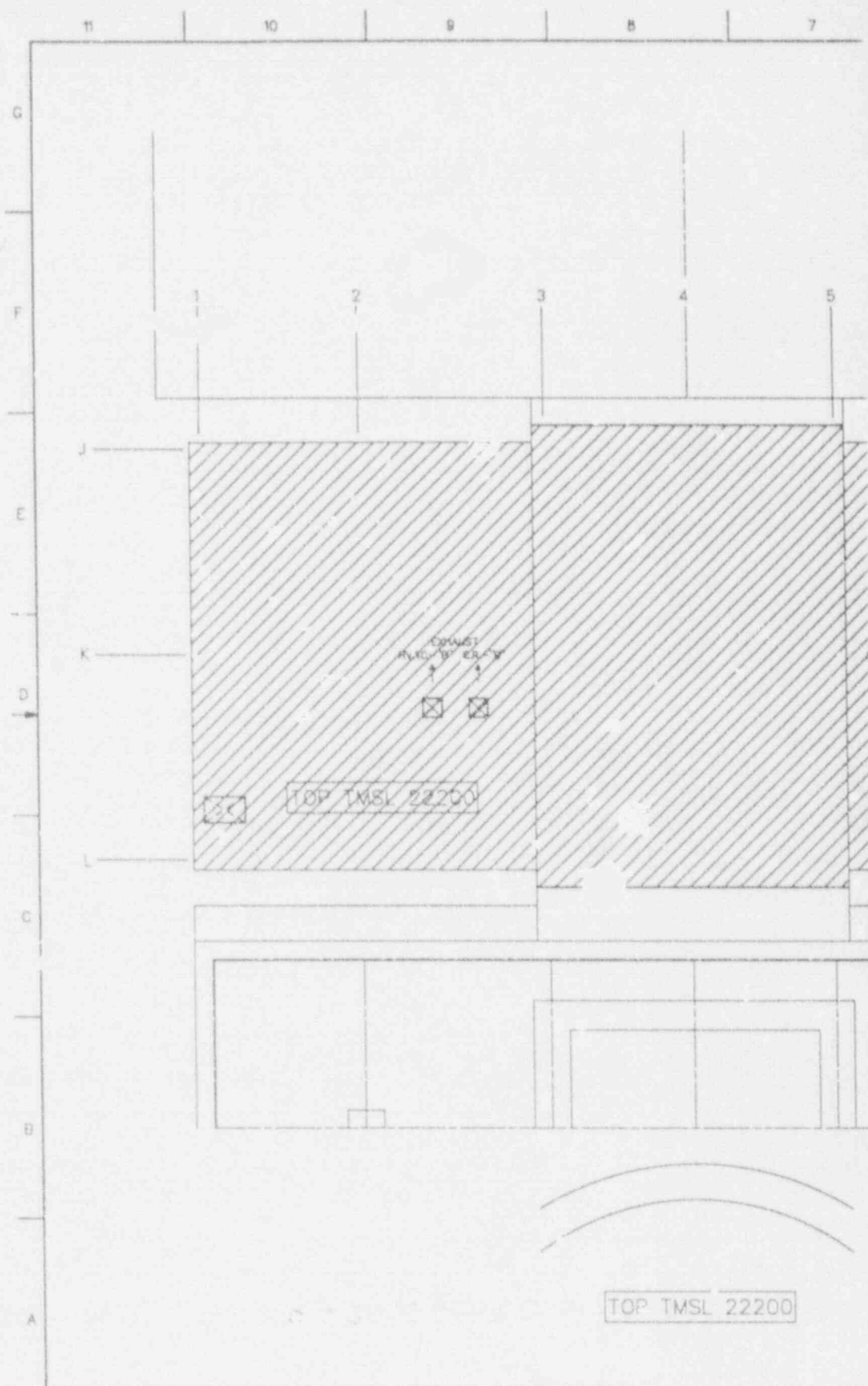
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91-472-07

Figure 9A.4-16A CONTROL BUILDING FIRE PROTECTION AT ELEVATION 17150mm



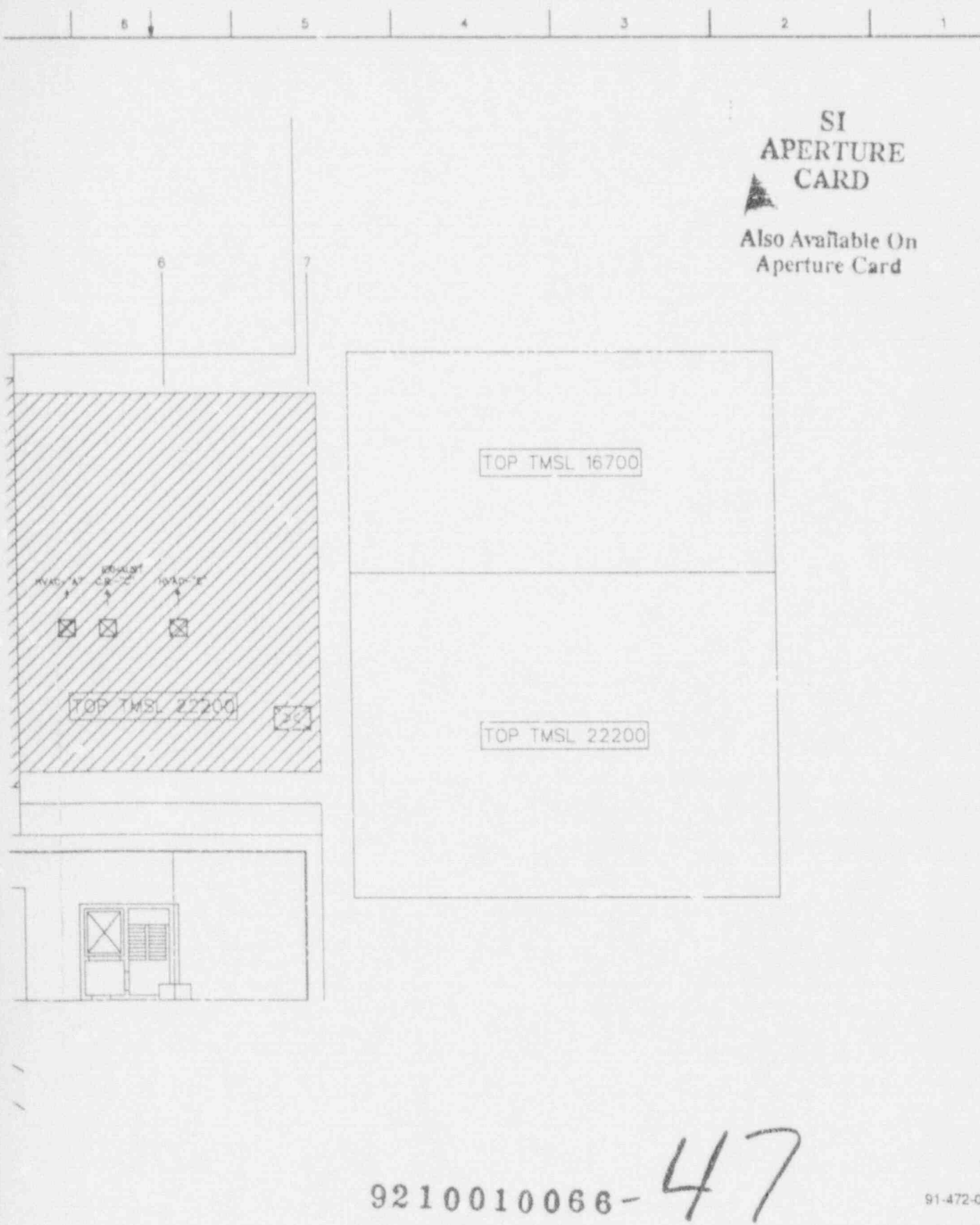


Figure 9A.4-16B CONTROL BUILDING FIRE PROTECTION AT ELEVATION 22200mm

TA

TB

TC

TD

TE

GENERATOR

LP TUR.

LP TUR.

LP HTRS

LP HTRS

TRUCK
ACCESS

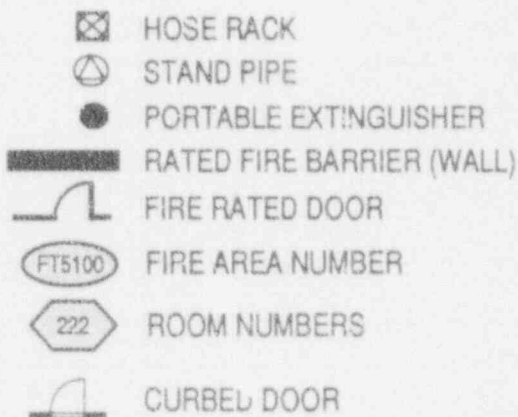
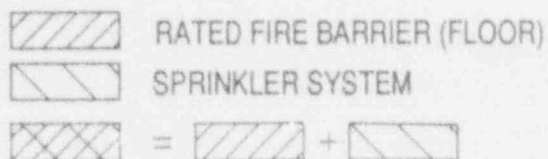
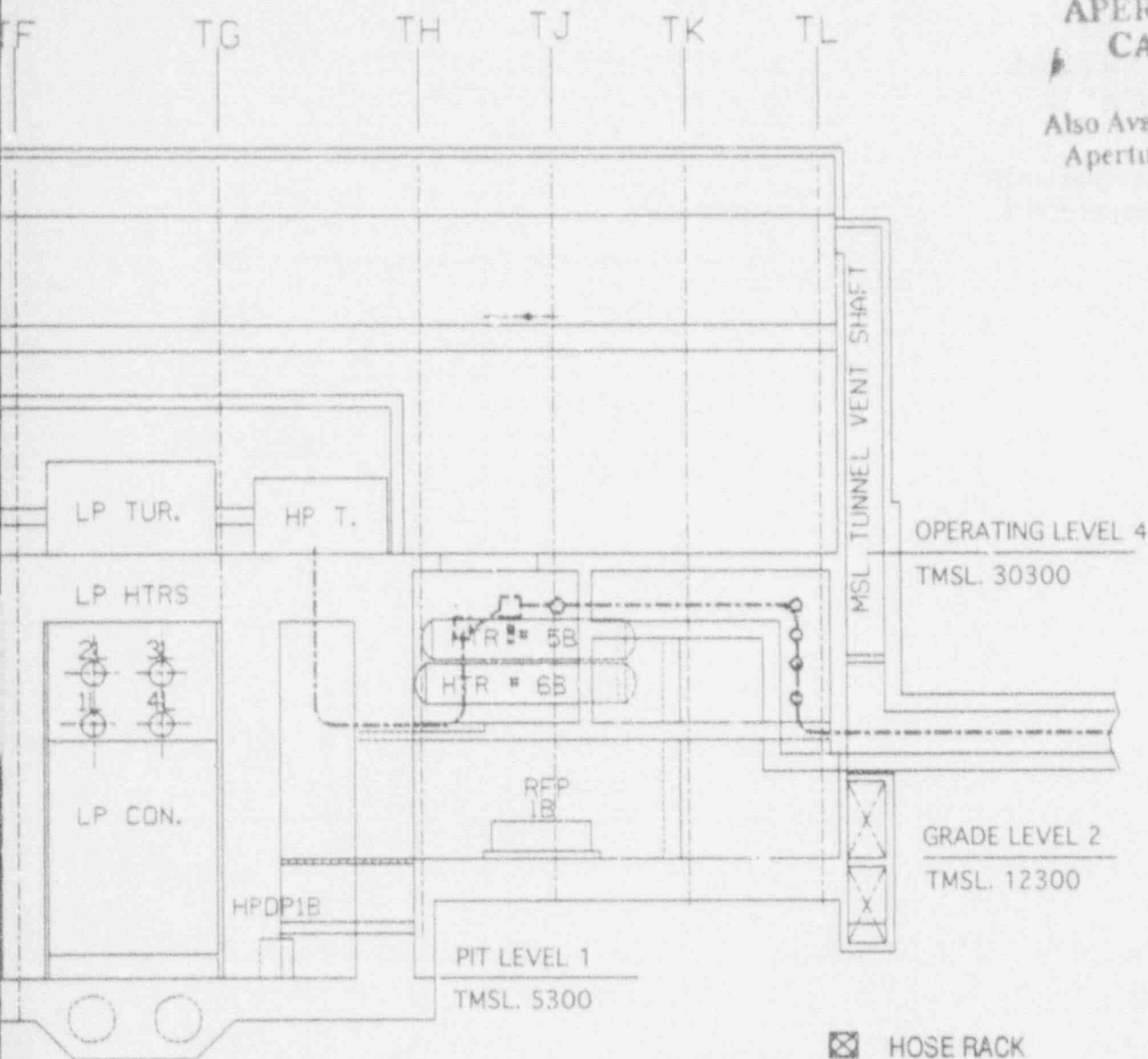
HP CON.

IP CON.

RADWASTE
TUNNEL

SI
APERTURE
CARD

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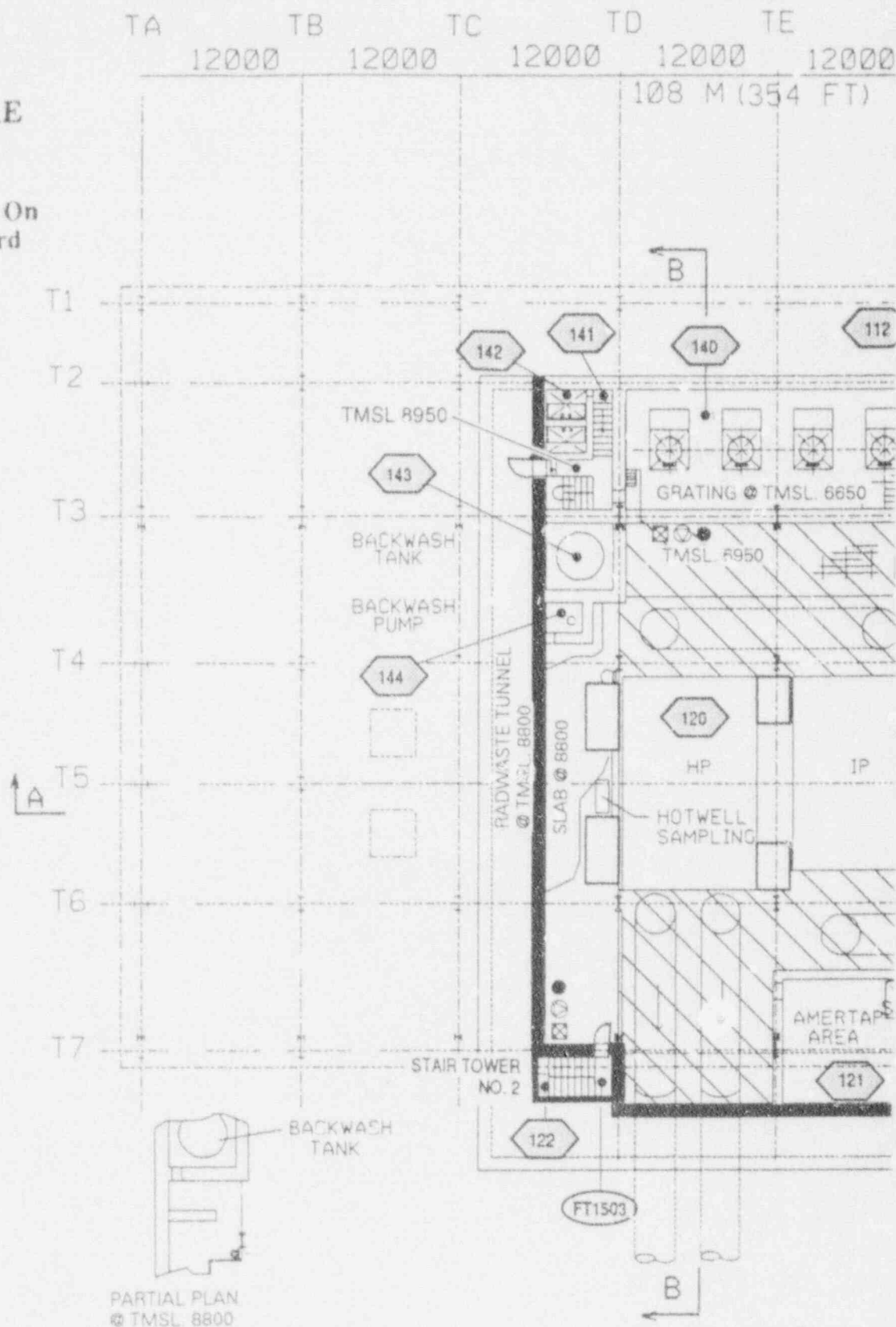
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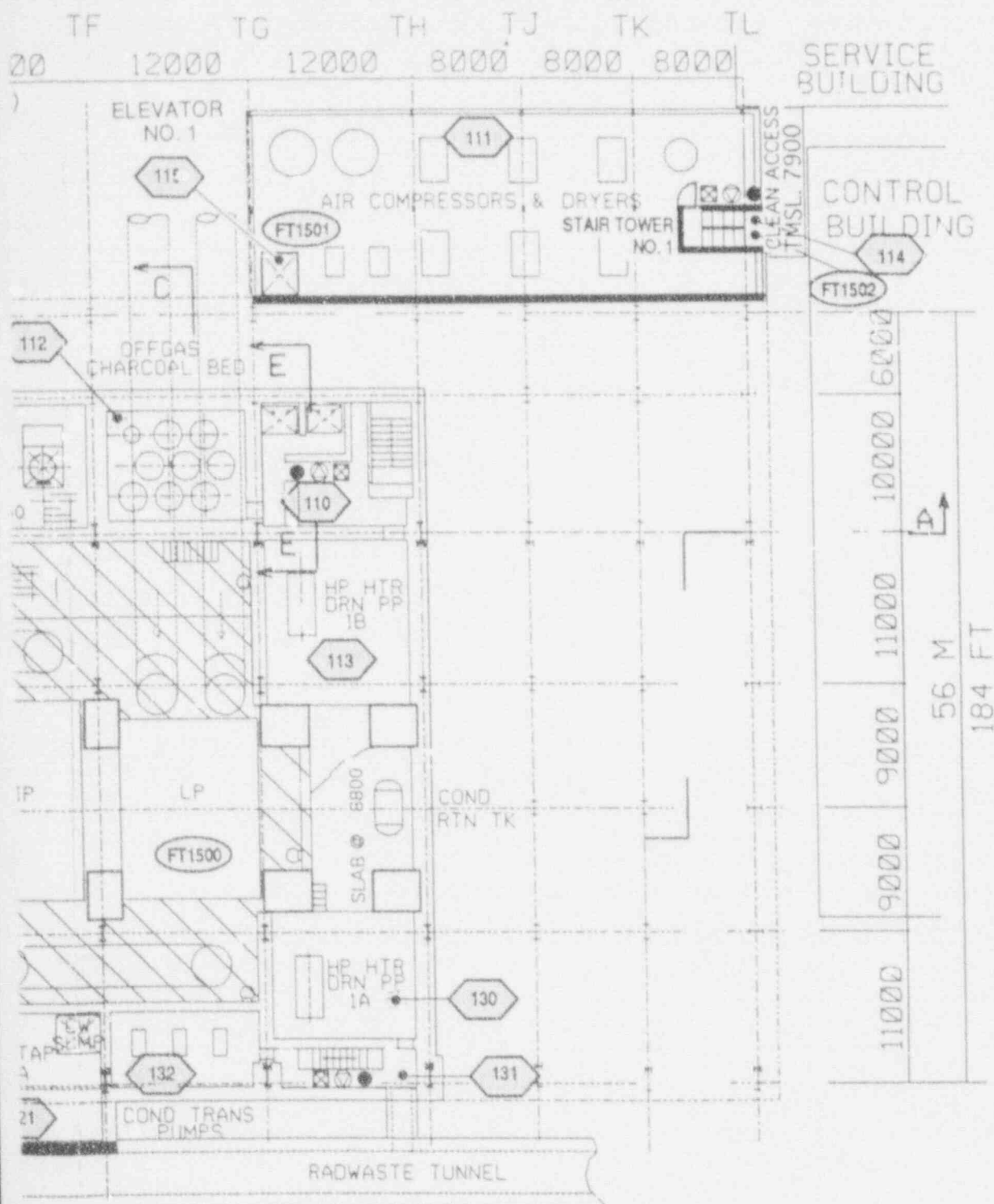
92-195-10

Figure 9A.4-17 TURBINE BUILDING FIRE PROTECTION, SECTION A-A

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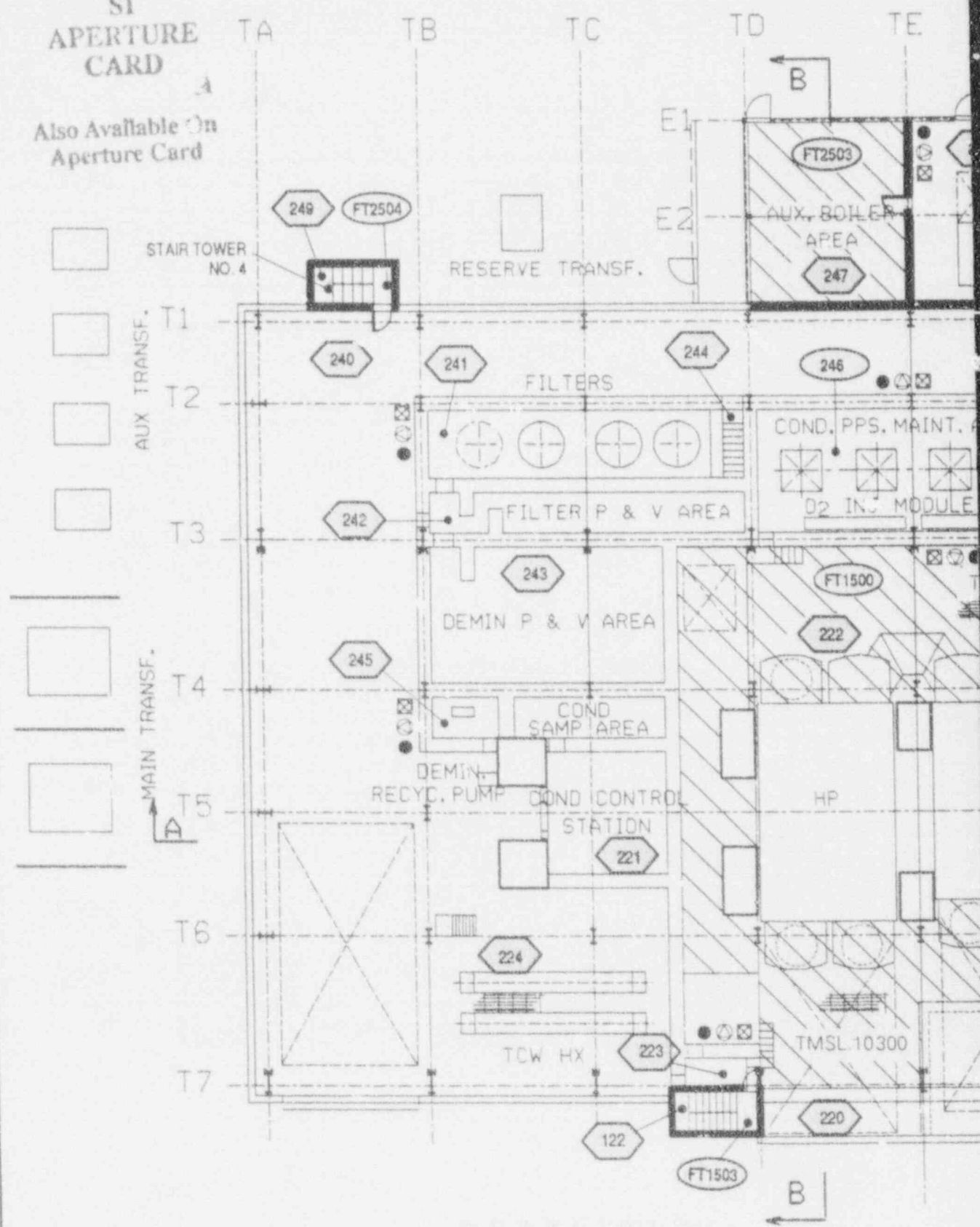
9210010066 - 4/9

92-195-11

Figure 9A.4-18 TURBINE BUILDING FIRE PROTECTION AT ELEVATION 5300mm

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Also Available On
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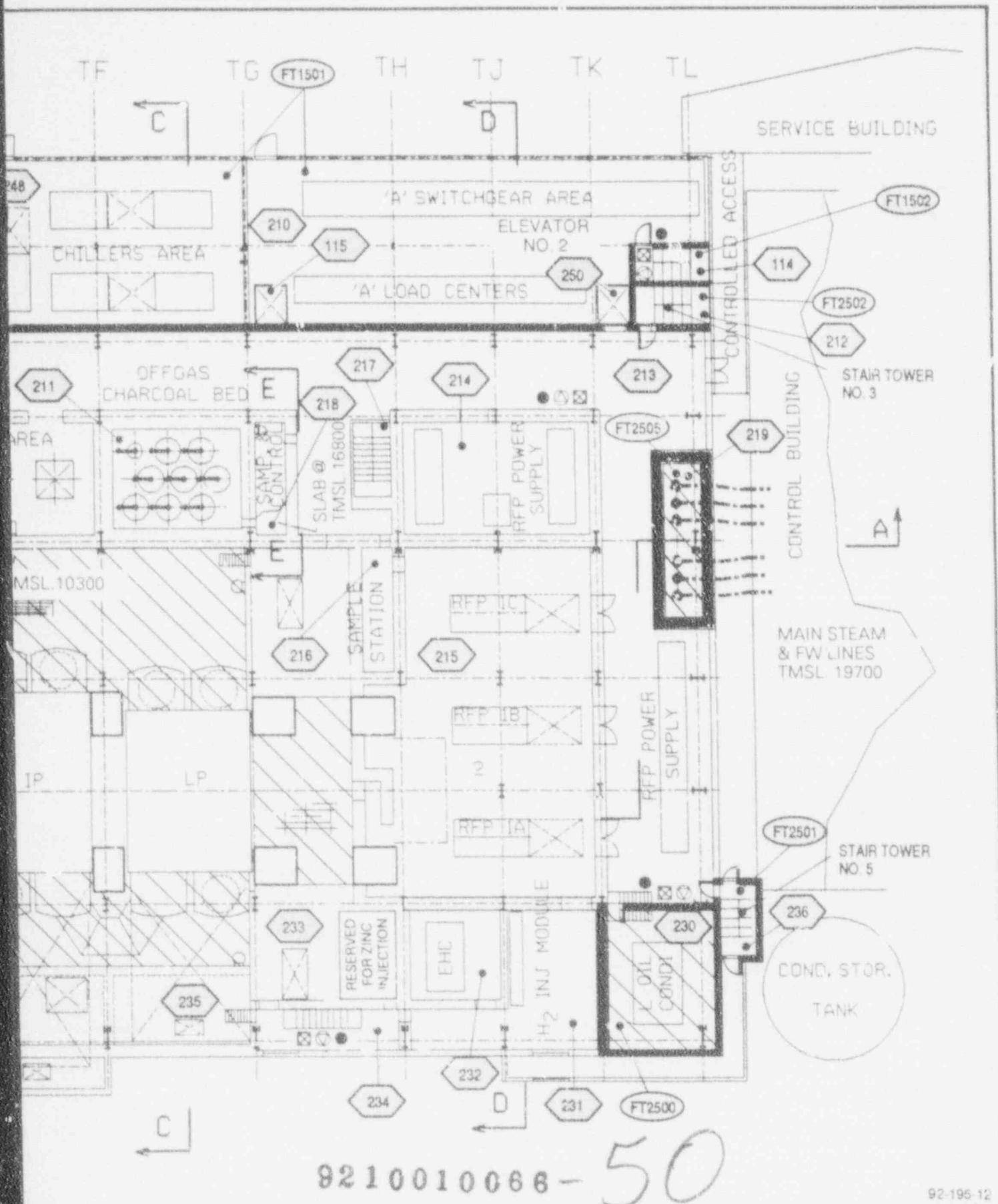
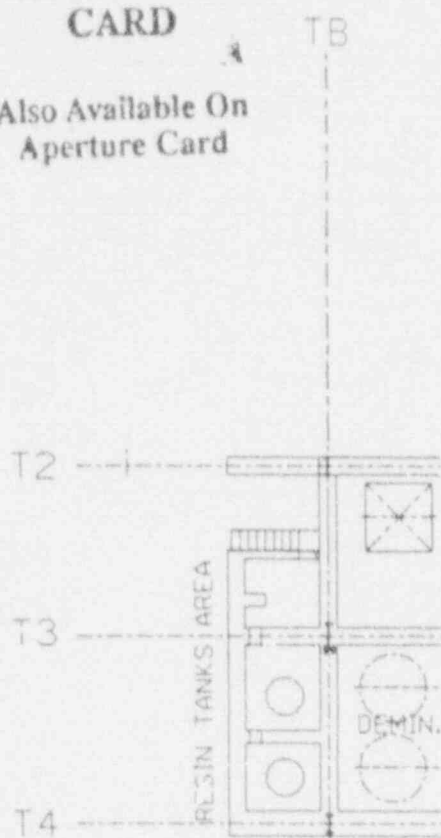


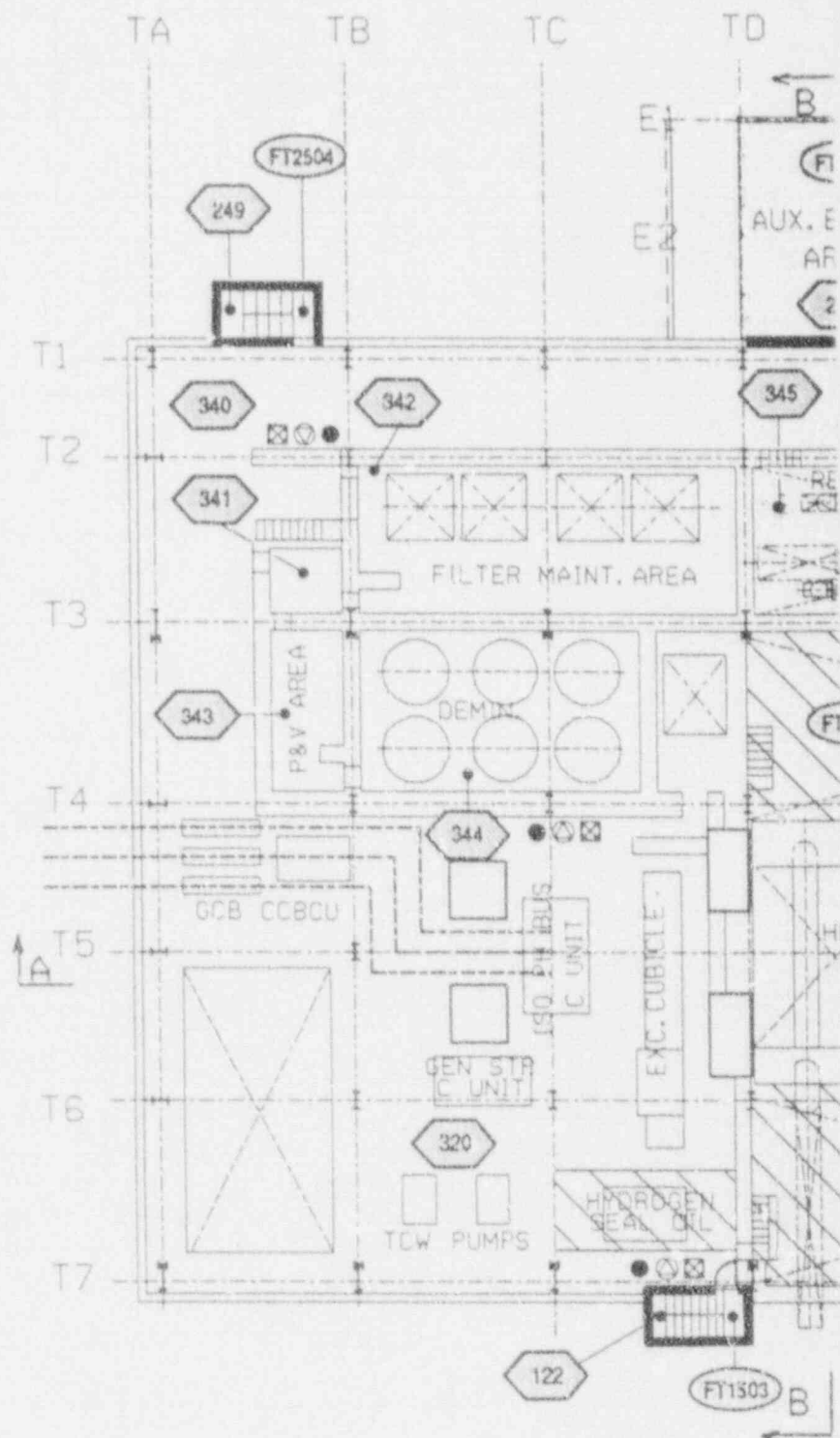
Figure 9A.4-19 TURBINE BUILDING FIRE PROTECTION AT ELEVATION 12300mm

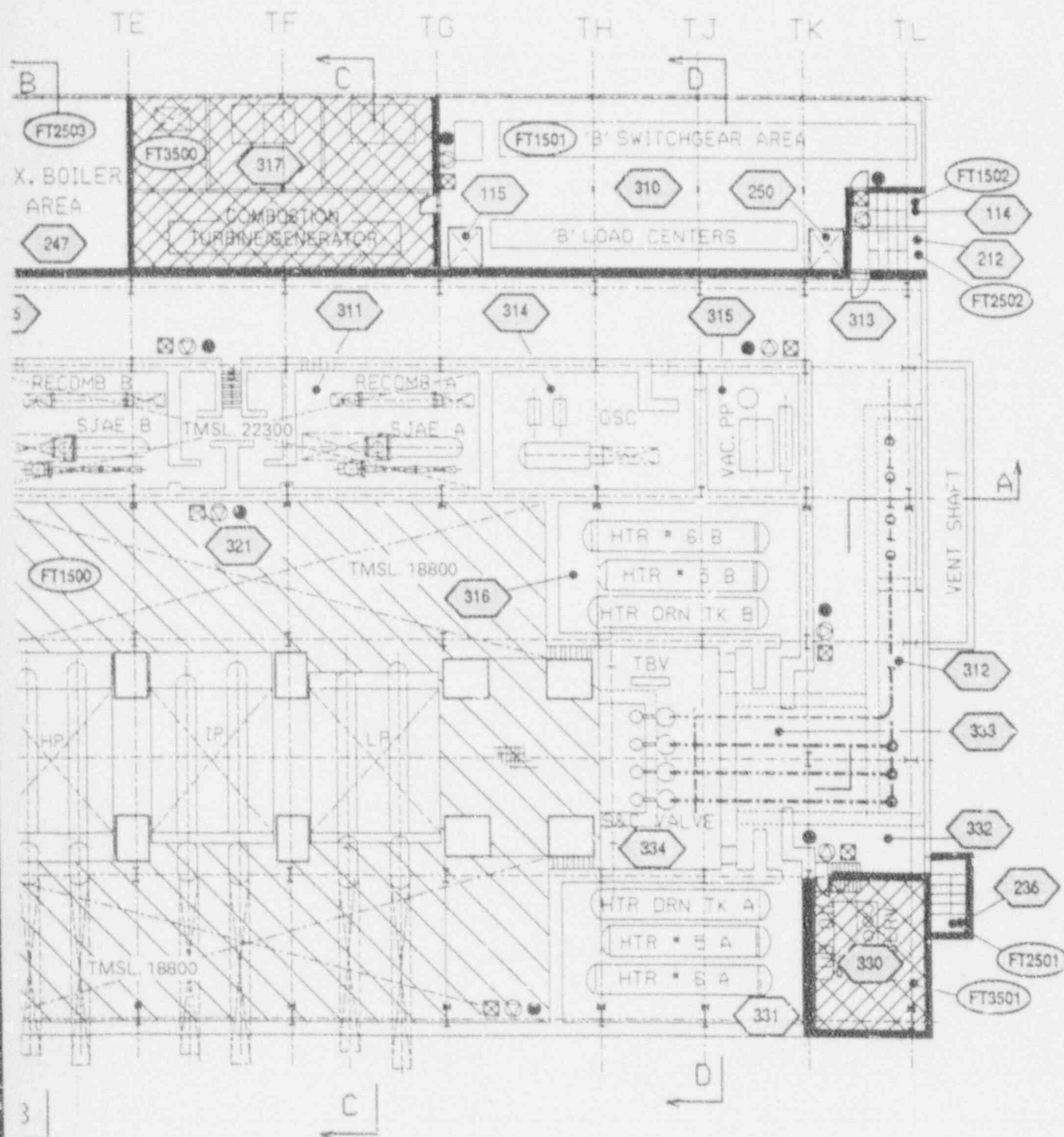
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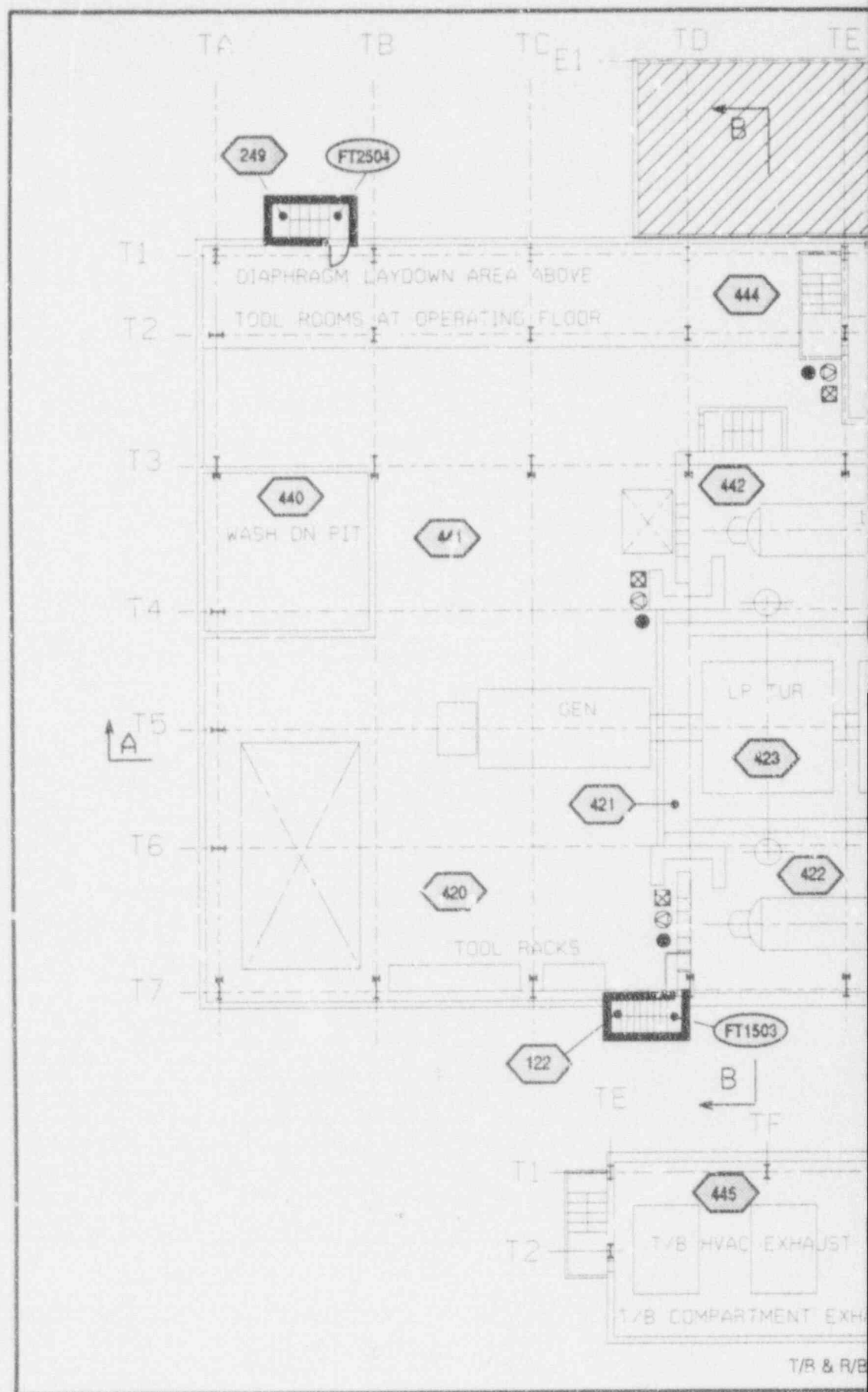


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92-195-13

Figure 9A.4-20 TURBINE BUILDING FIRE PROTECTION AT ELEVATION 20300mm



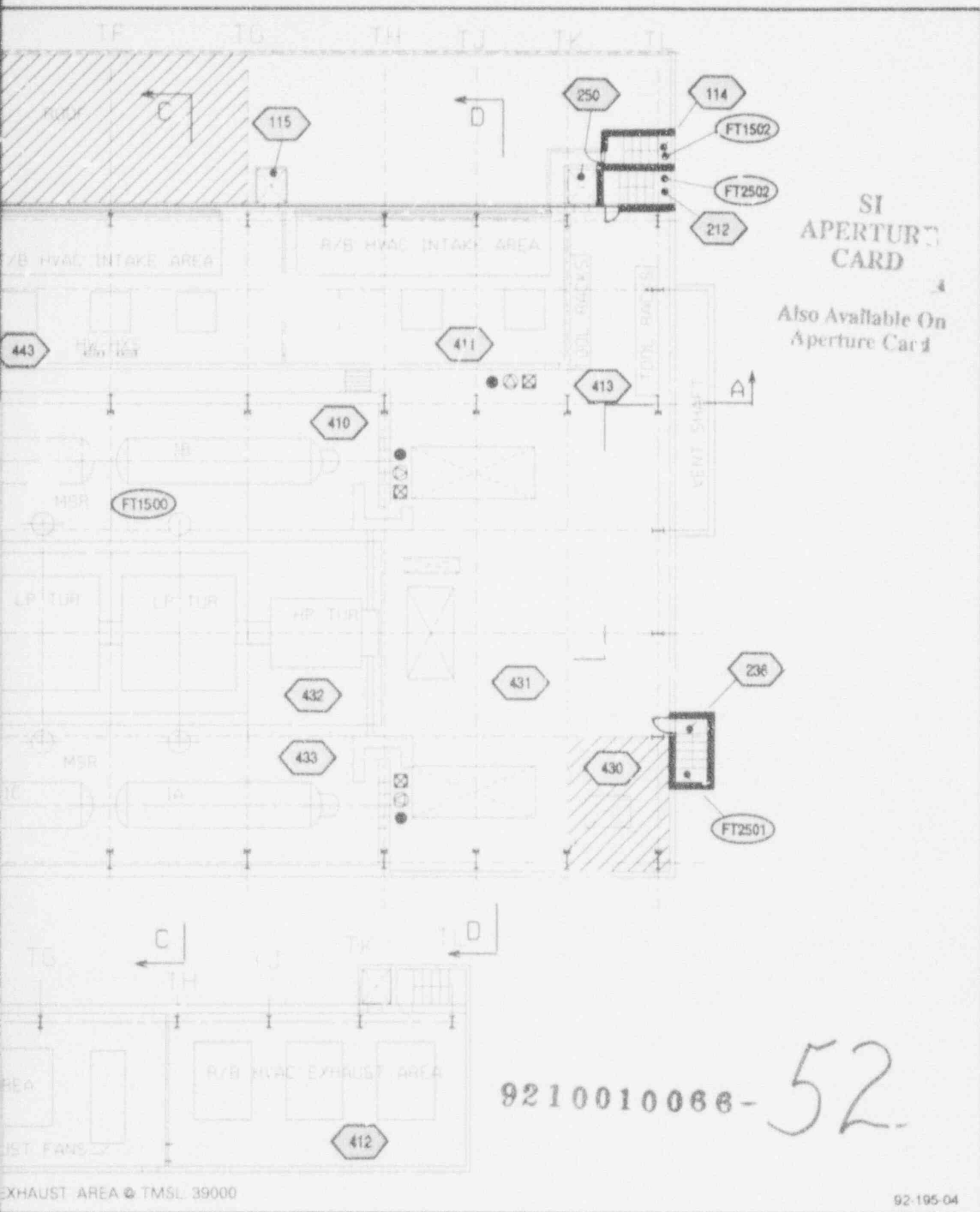
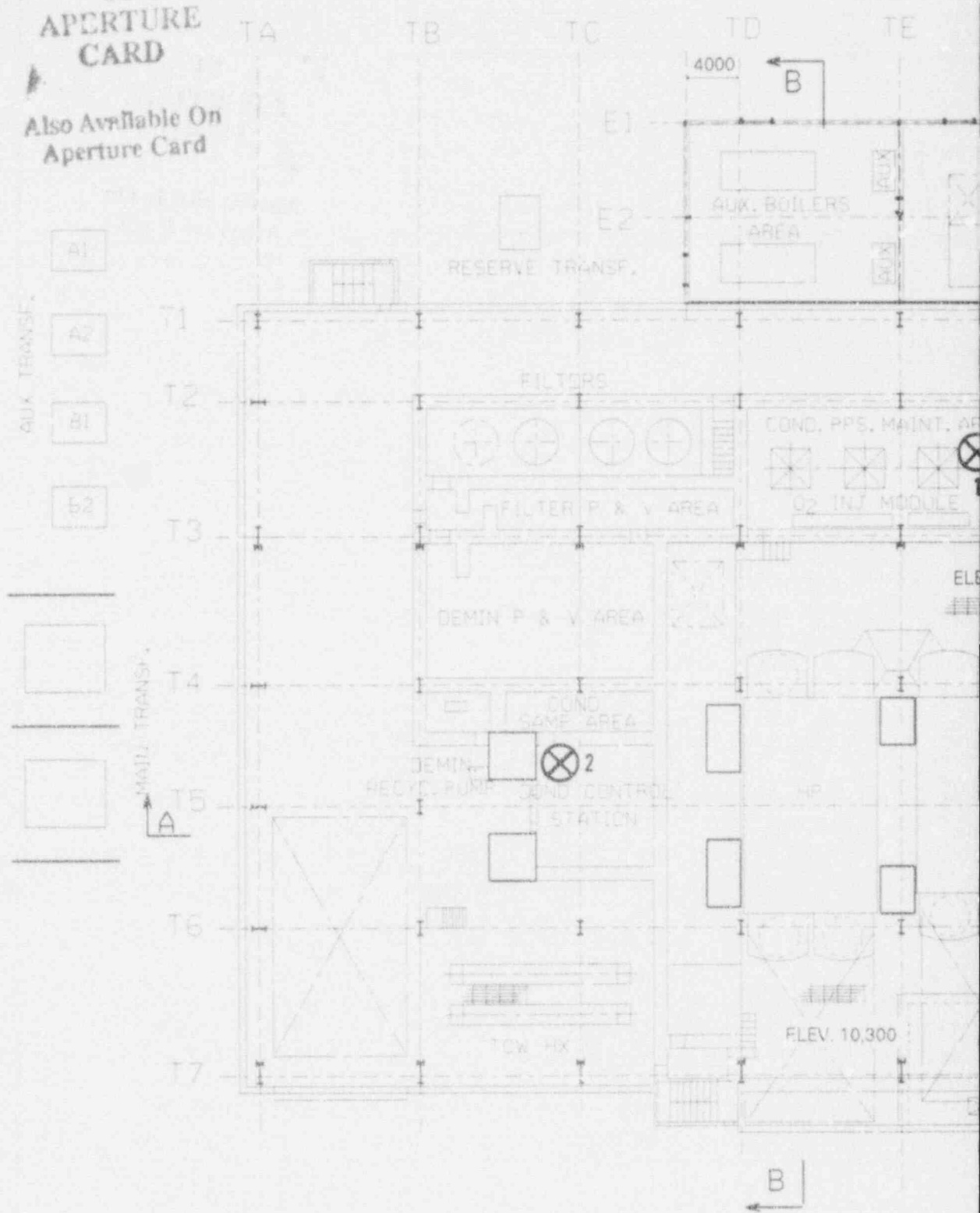
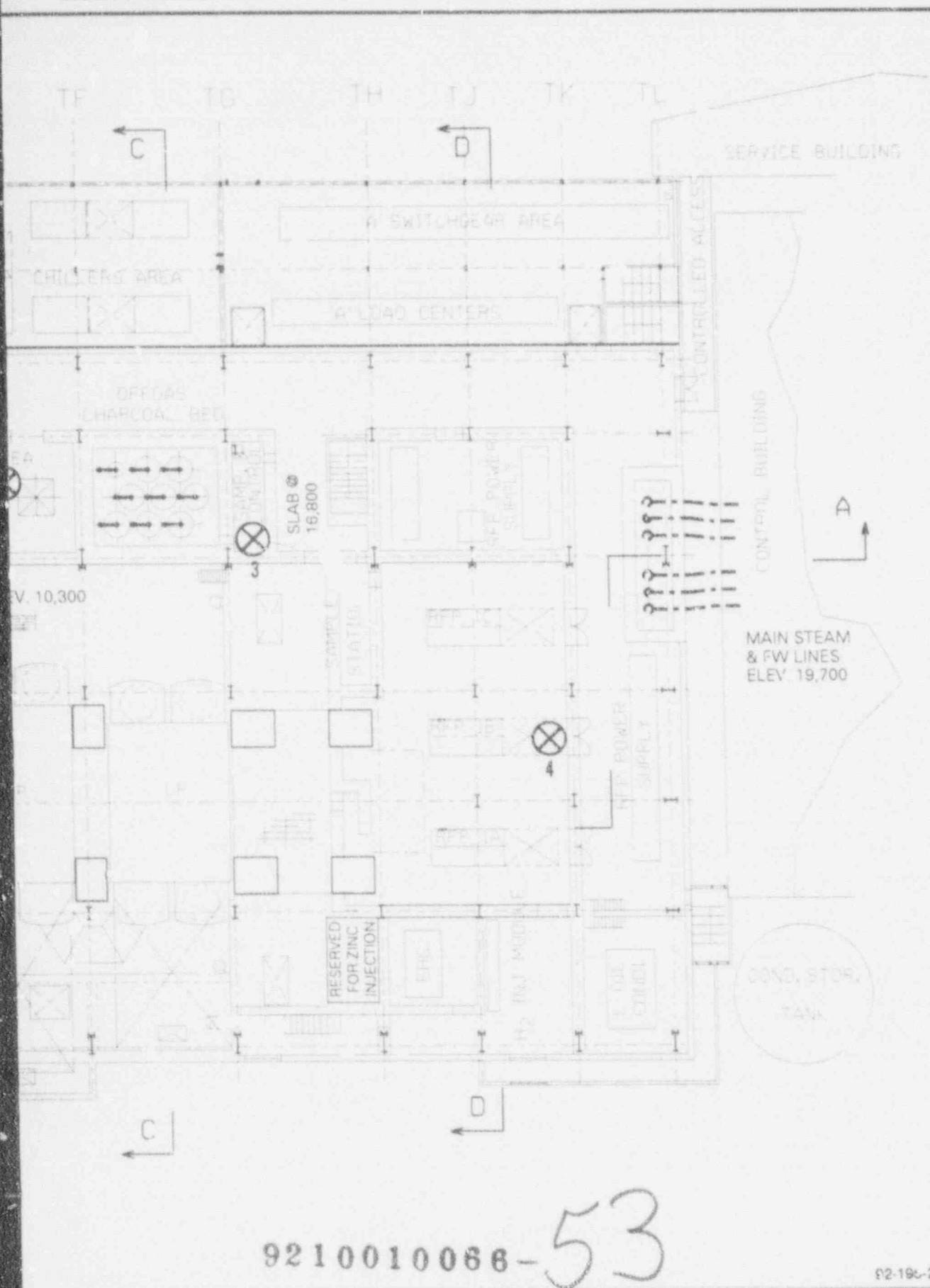


Figure 9A.4-21 TURBINE BUILDING FIRE PROTECTION AT ELEVATION 30300mm

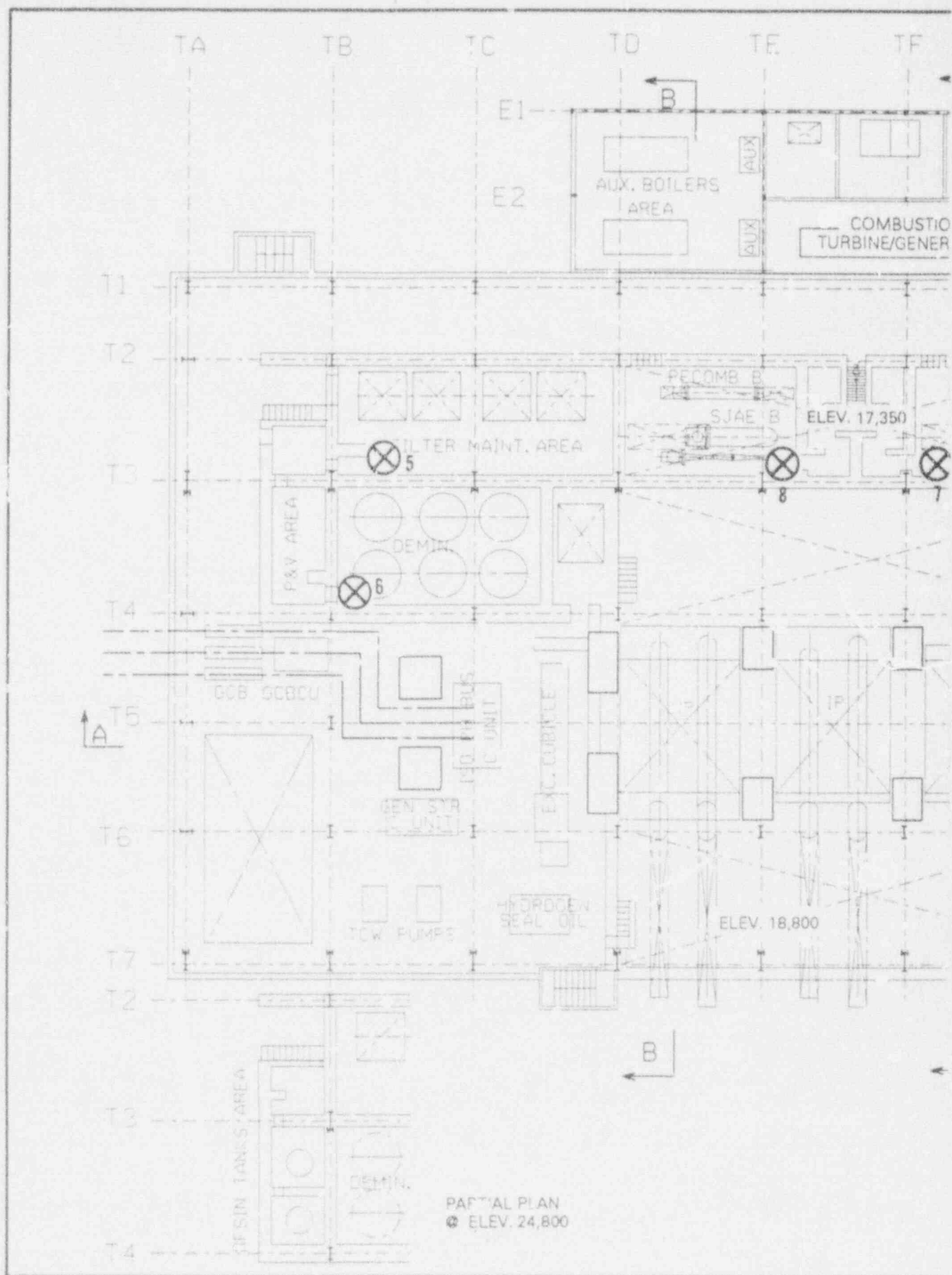
SI APERTURE CARD

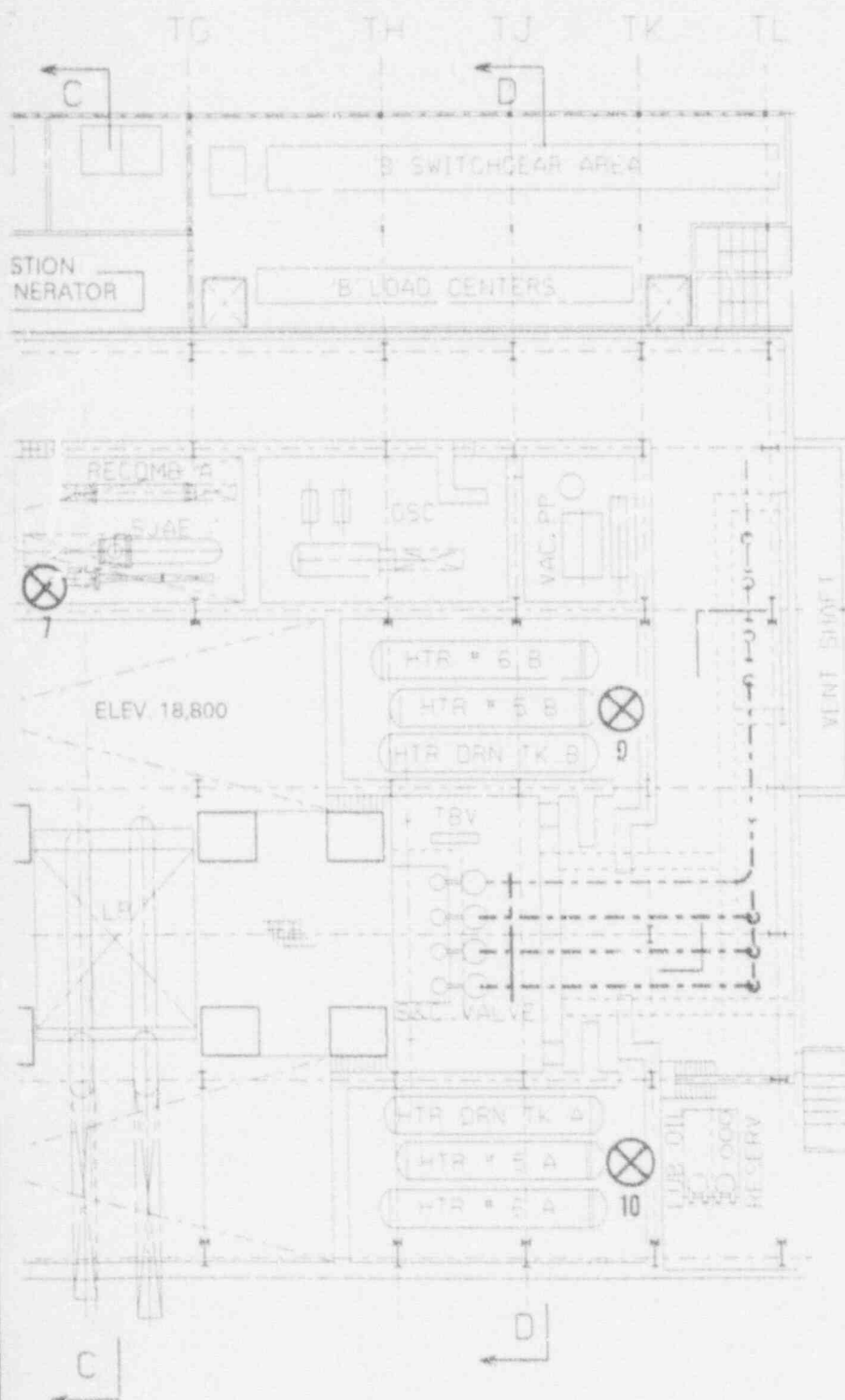
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Aperture Card





Figur. 12.3-70 TURBINE BUILDING, GRADE LEVEL 2, AREA RADIATION MONITOR, ELEVATION 12300mm



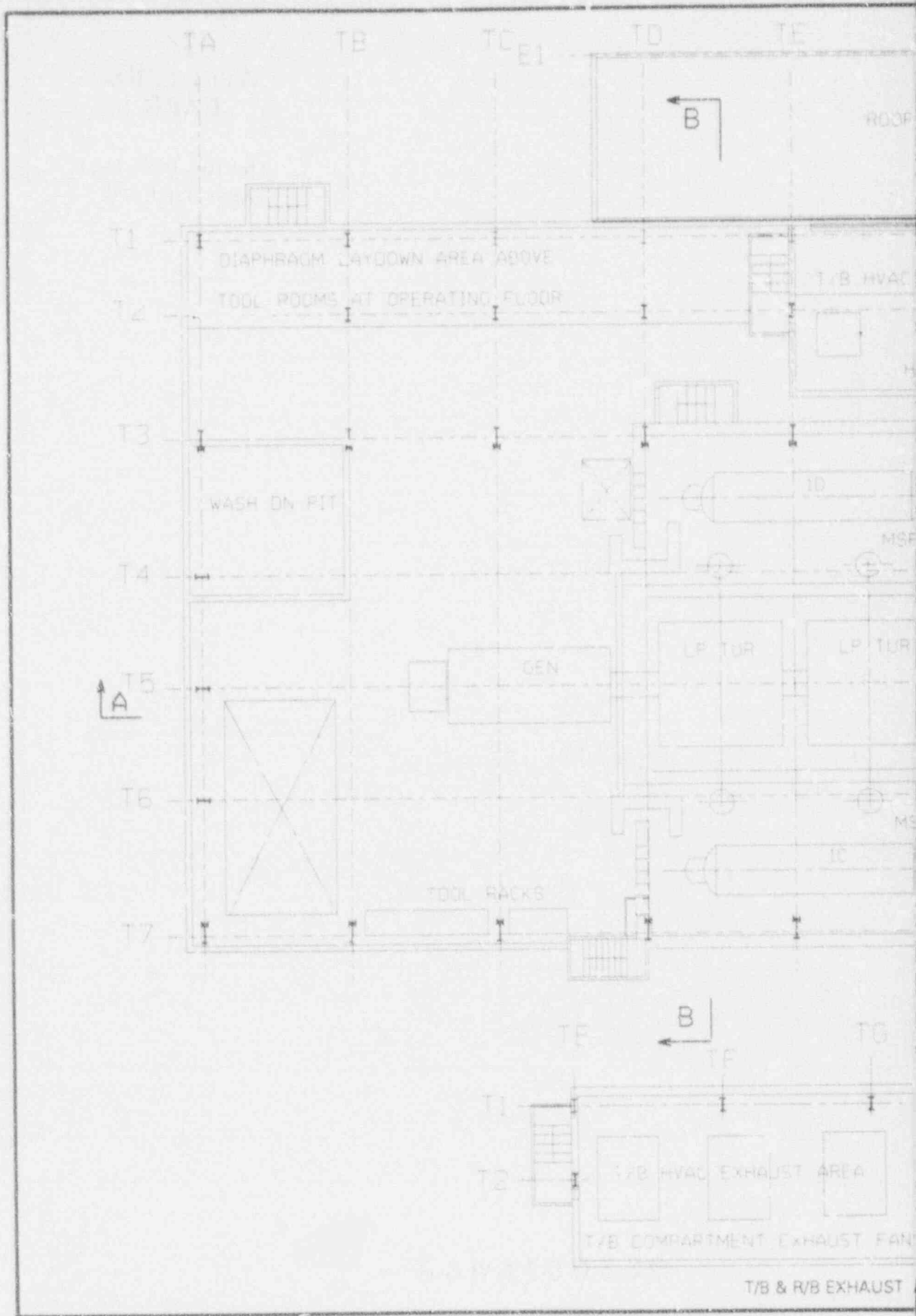


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CARD
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92-195-21

Figure 12.3-7: TURBINE BUILDING, LEVEL 3, AREA RADIATION MONITOR, ELEVATION 20300mm



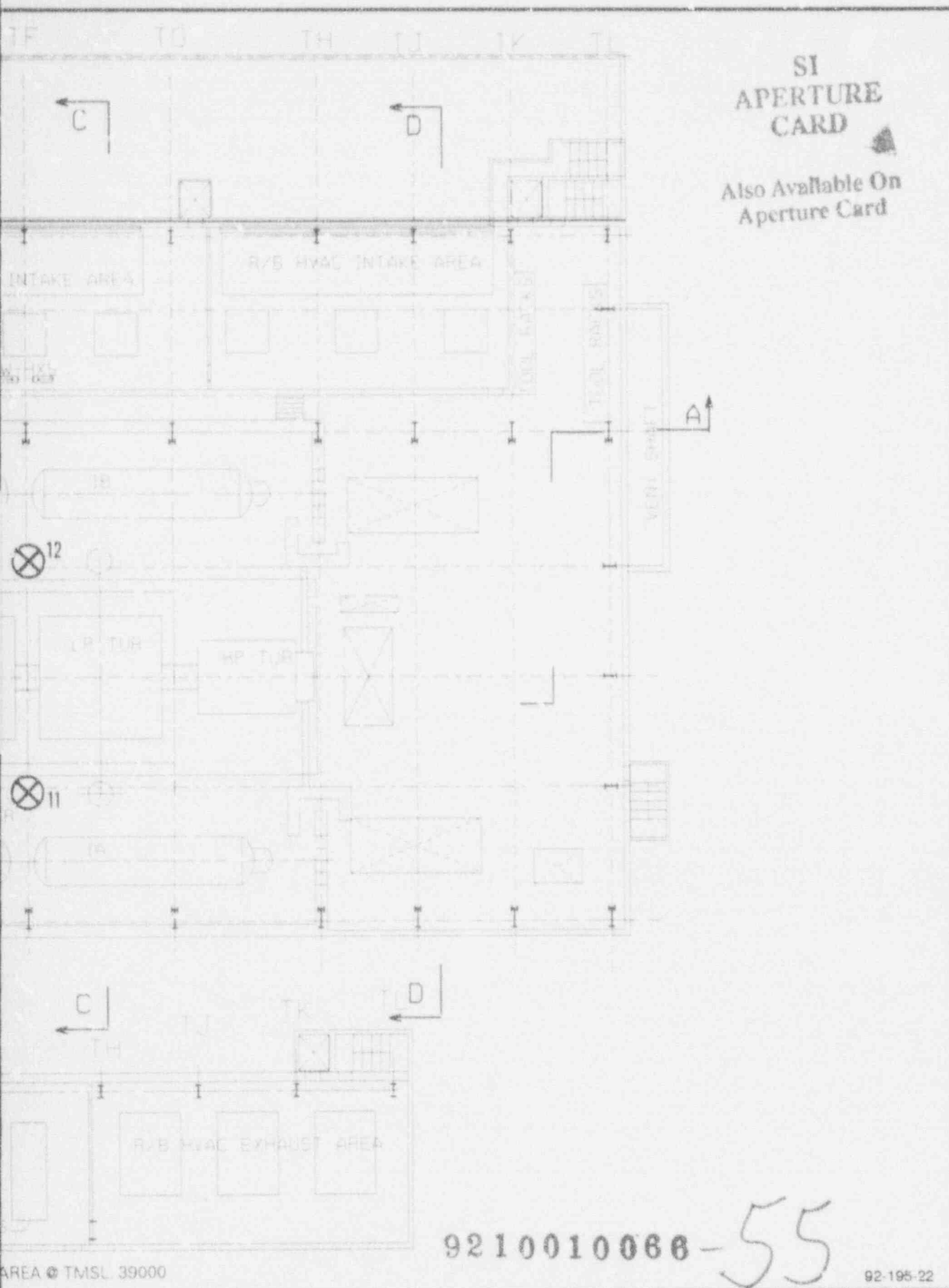
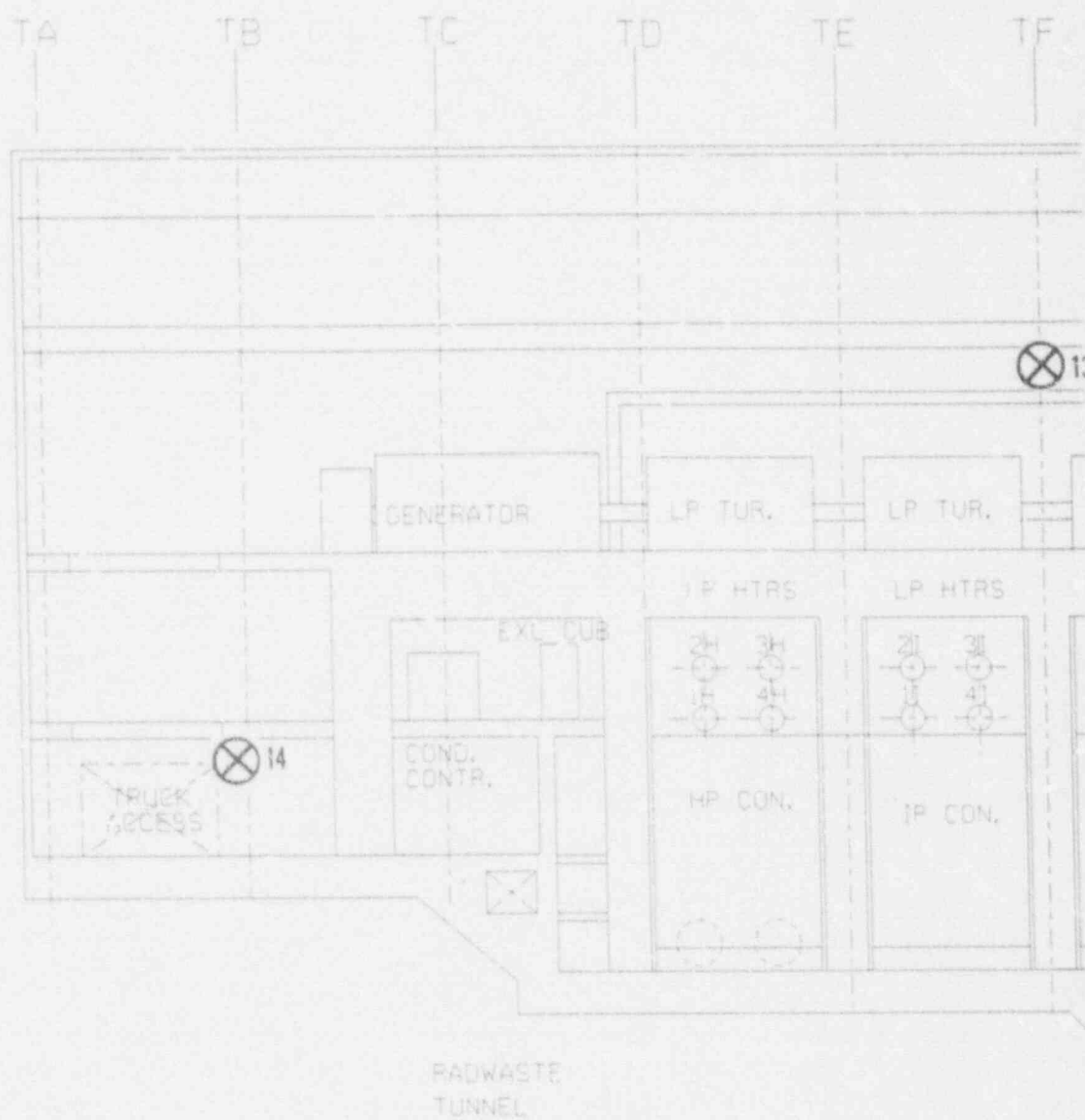
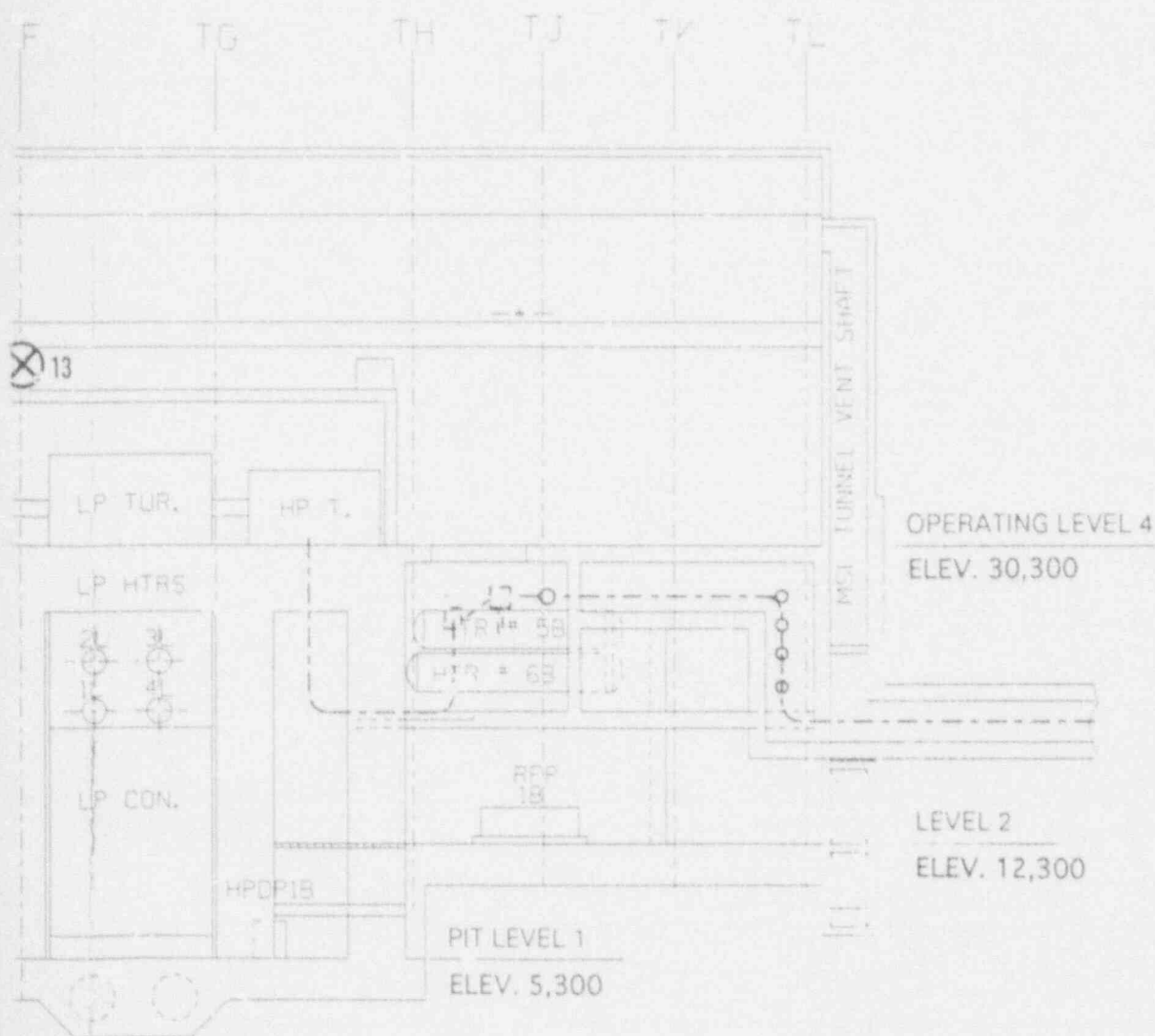


Figure 12.3-72 TURBINE BUILDING, LEVEL 4, AREA RADIATION MONITOR,
ELEVATION 30300mm



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CARD

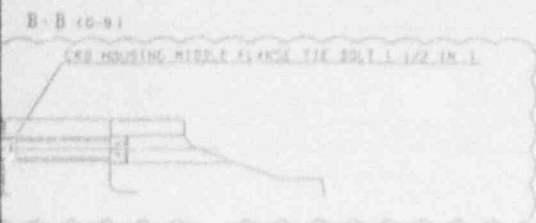
Also Available On
Aperture Card



9210010066-56

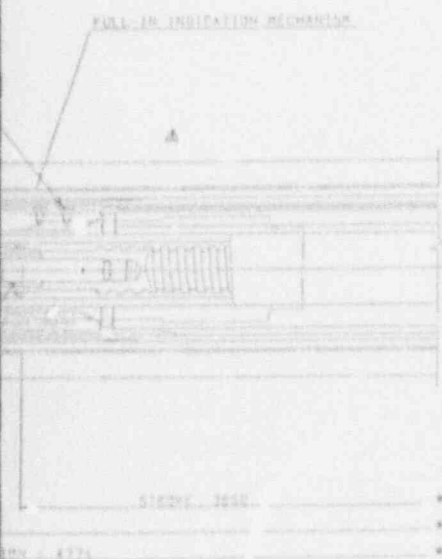
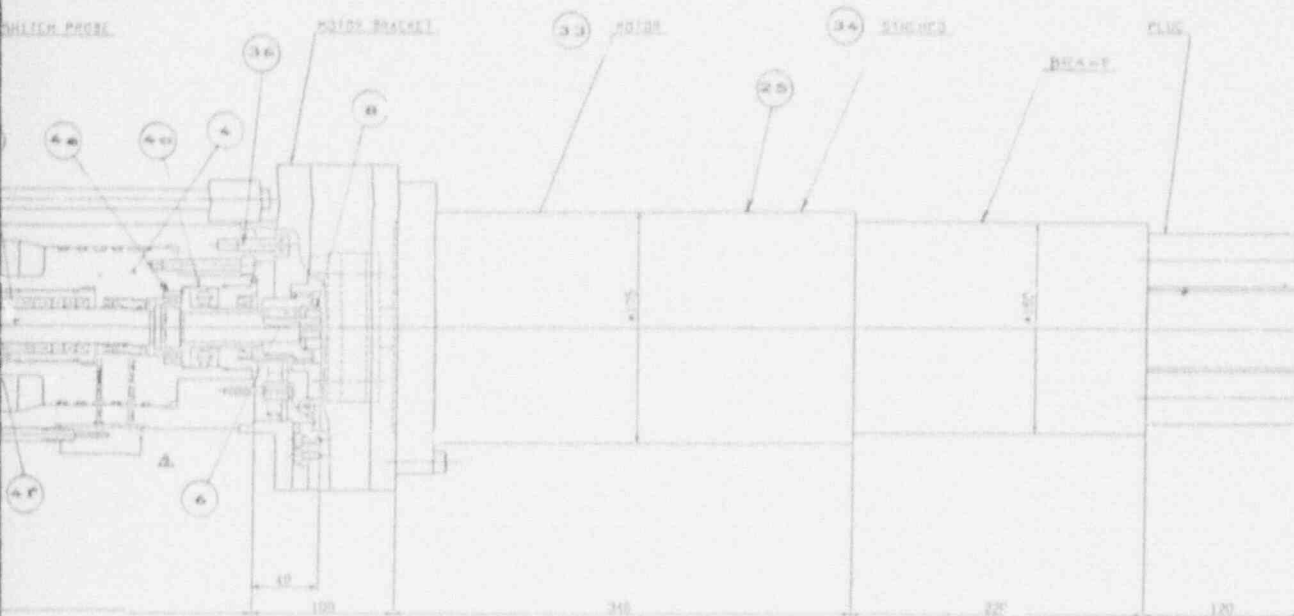
62-196-23

Figure 12.3-73 TURBINE BUILDING, AREA RADIATION MONITOR,
LONGITUDINAL SECTION A-A

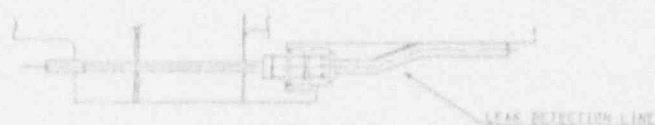


SI APERTURE CARD

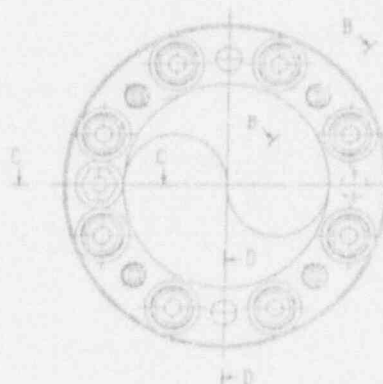
Also Available On
Aperture Card



C-C (10-81)



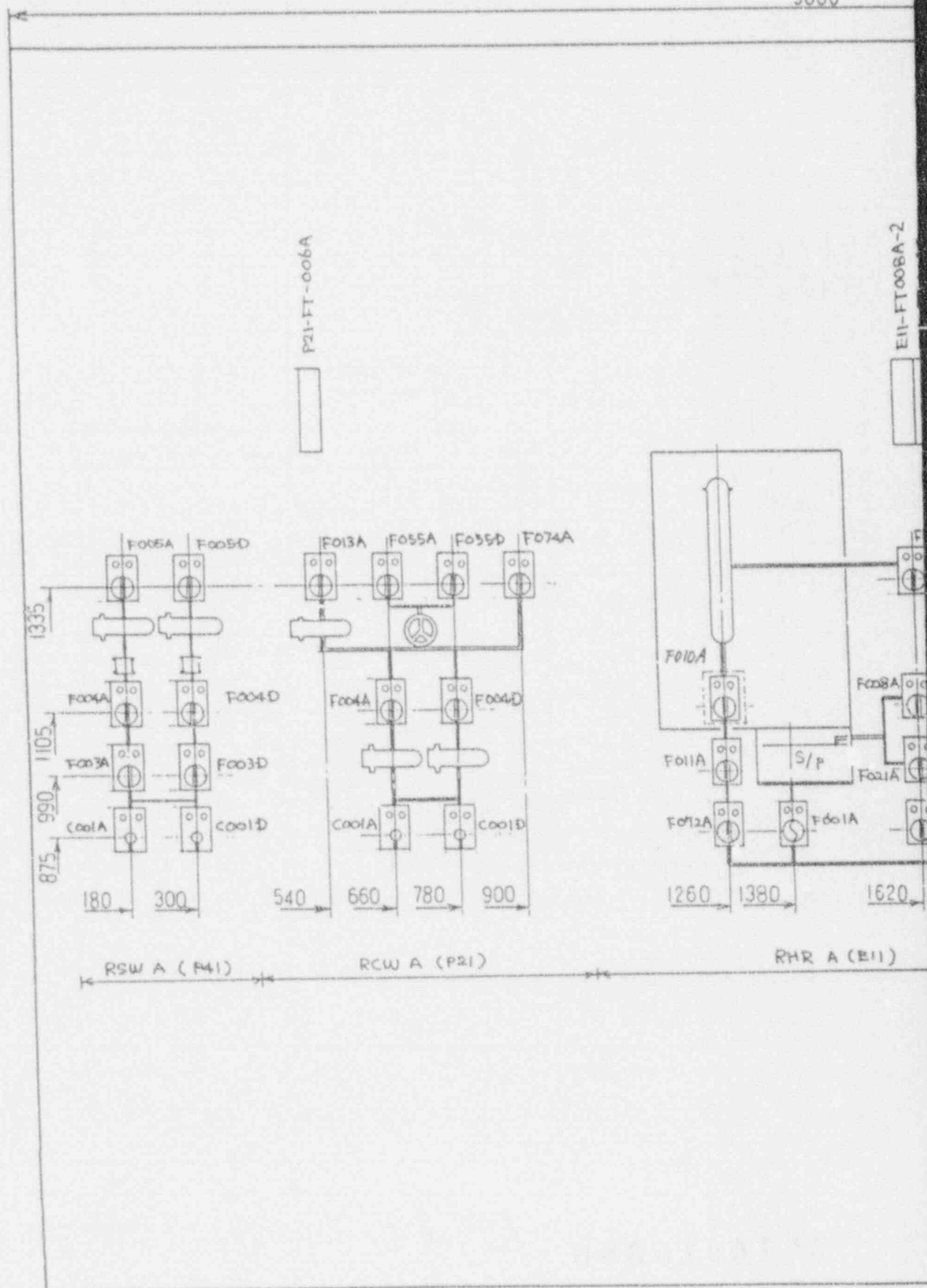
A-A (10-81)



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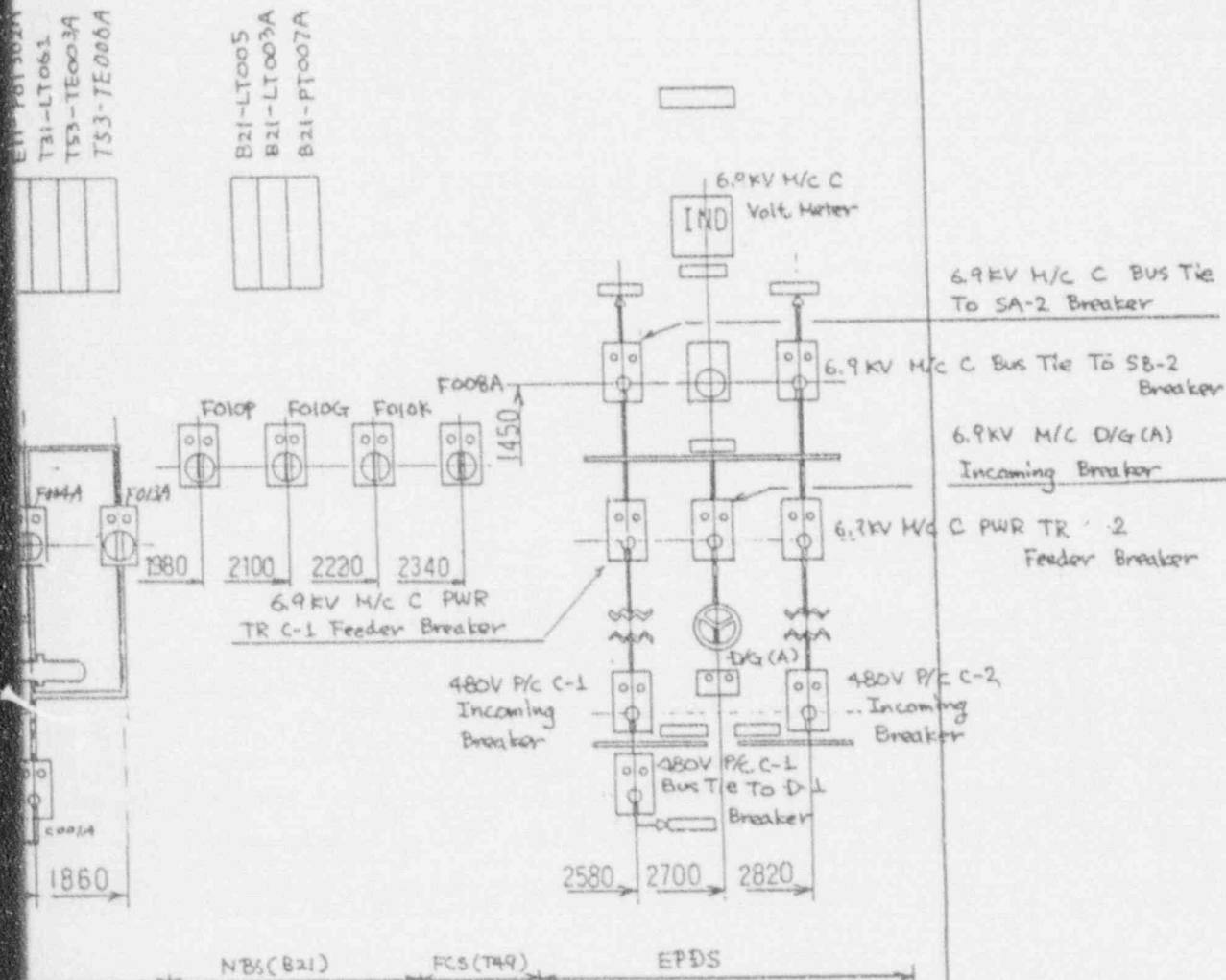
89-140-47

Figure 15B.2-3 FINE MOTION CONTROL ROD DRIVE



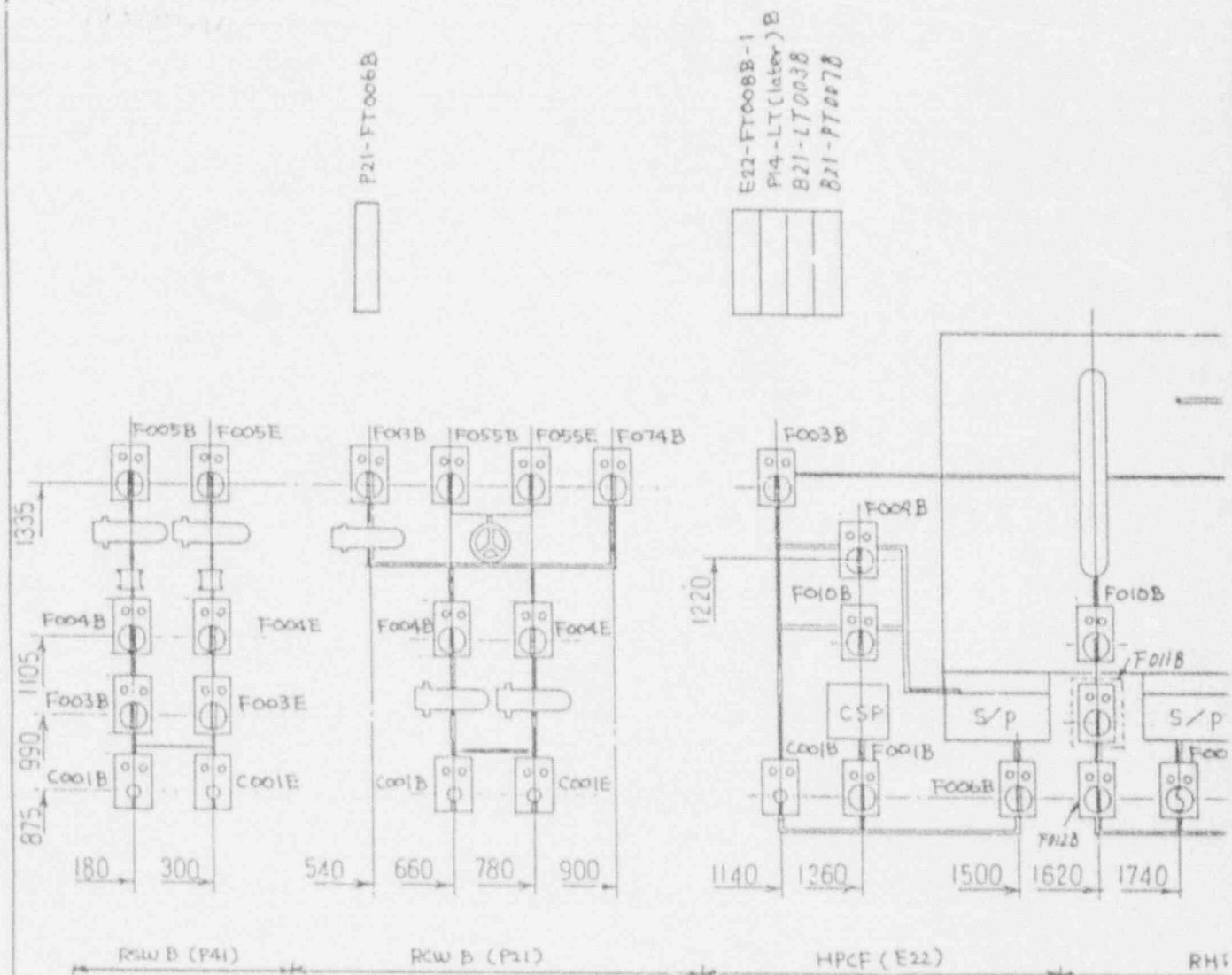
SI
APERTURE
CARD

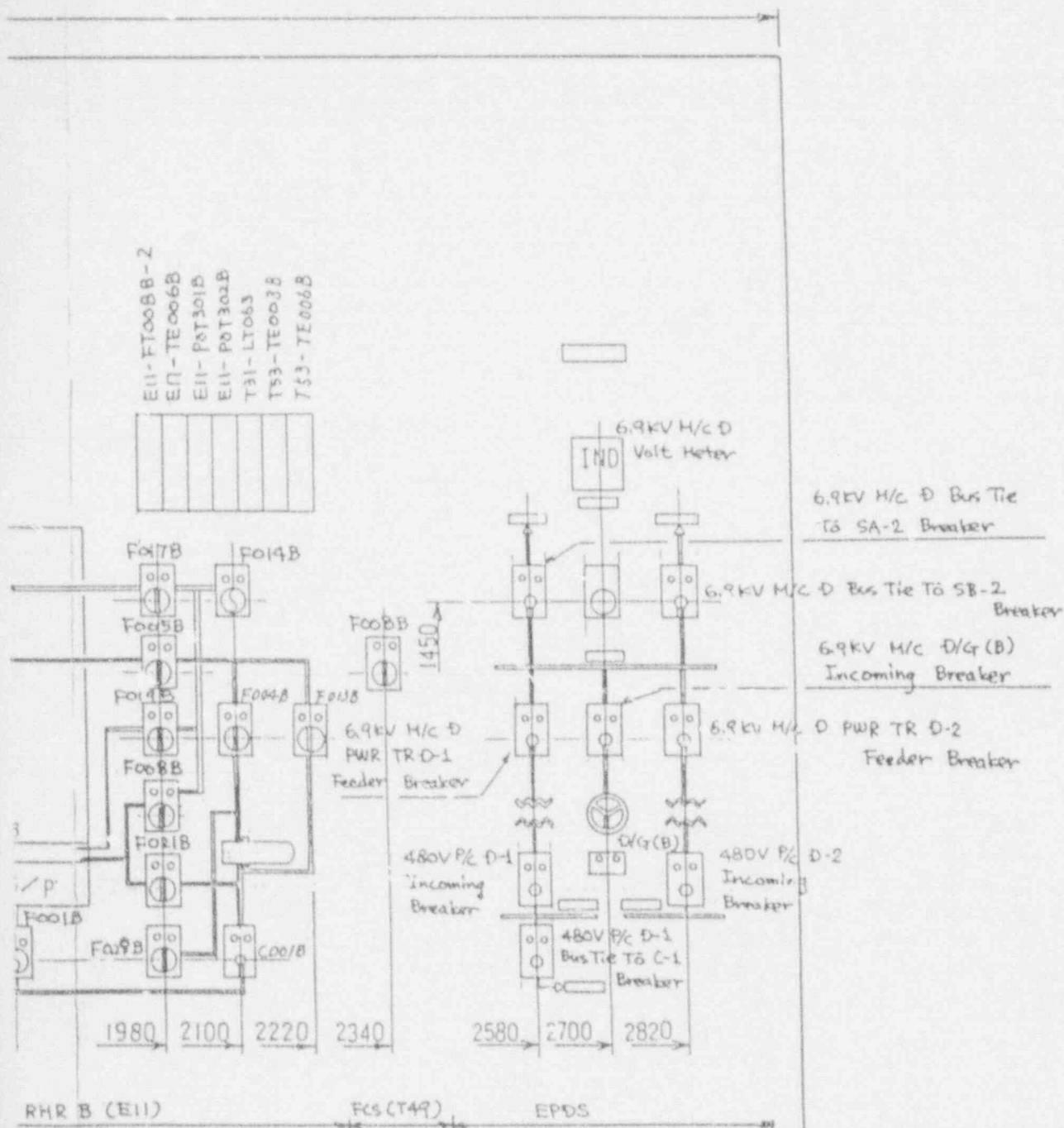
Also Available On
Aperture Card



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Figure 18.4-9 REMOTE SHUTDOWN PANEL ARRANGEMENT (Sheet 1)





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Figure 18.4-9 REMOTE SHUTDOWN PANEL ARRANGEMENT (Sheet 2)