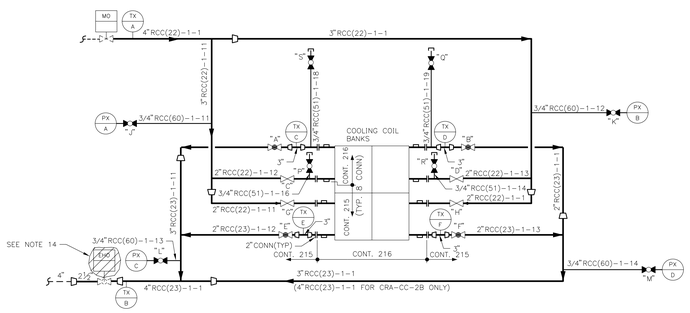
FOR INSTRUMENT & VALVE PREFIX LETTERS SEE DETAIL "A"																											
COOLING COIL BANK NUMBER	RCC-TX-						RCC-PX-				RCC-V-																
	A	B	C	D	E	F	A	B	C	D	A**	B**	C	D	E**	F**	G	H	J	K	L	M	N	P	Q	R	S	T
CRA-CC-1A	30A	31A	32A	33A	34A	35A	25A	26A	27A	28A	81A	82A	83A	84A	85A	86A	87A	88A	769A	770A	771A	772A		628(V)	630(V)	631(V)	629(V)	
CRA-CC-1B	30B	31B	32B	33B	34B	35B	25B	26B	27B	28B	81B	82B	83B	84B	85B	86B	87B	88B	769B	770B	771B	772B		624(V)	626(V)	623(V)	627(V)	
CRA-CC-1C	30C	31C	32C	33C	34C	35C	25C	26C	27C	28C	81C	82C	83C	84C	85C	86C	87C	88C	769C	770C	771C	772C		622(V)	621(V)	620(V)	625(V)	
CRA-CC-2A	30D	31D	34D	33D	32D	35D	25D	26D	27D	28D	85D	82D	87D	88D	81D	86D	83D	84D	769D	770D	771D	772D		636(V)		637(V)		
CRA-CC-2B	30E	31E	35E	34E	33E	32E	25E	26E	27E		86E	85E	84E	83E	82E	81E	88E	87E	769E	770E	771E							

**THROTTLED VALVES

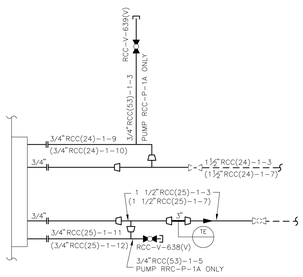


DETAIL "A"

TYPICAL DETAIL FOR COOLING COIL BANKS CRA-CC-1A, 1B, 1C, 2A, 2B.

NOTE:

FOR THE REMAINING UNITS, CHANGE THE INITIAL DIGIT OF THE UNIQUE LINE NUMBER TO CORRESPOND TO THE FOLLOWING: IF UNIT 1A (SHOWN). INDENTIFIES -1,-11,-12, ETC. THEN THE UNIT 1B WILL BE; -2,-21,-22, ETC; UNIT 1C: -3,-31,-33, ETC; UNIT 2A: -4,-41,-42, ETC; AND UNIT 2B: -5,-51,-52, ETC.



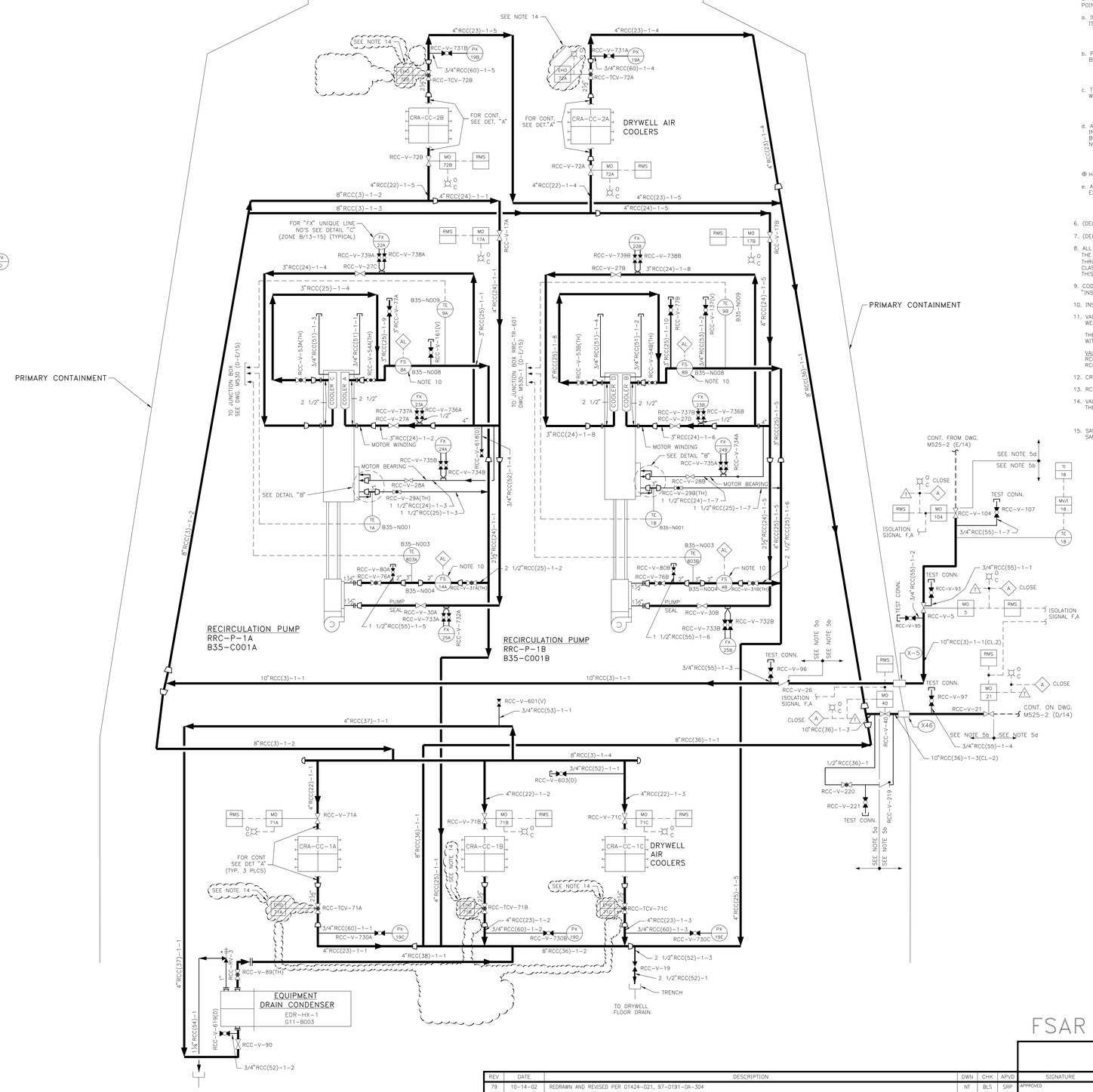
DETAIL "B"

(ZONE F/6,8)

LINE NUMBERS IN PARENTHESES DENOTE PUMP 1B SYSTEM IDENTIFICATION

DETAIL "C"				
INSTRUMENT NO.	LINE NO.			
	INLET FLOW	OUTLET FLOW	DRAWING	ZONE
RCC-FX-22A	1/2"RCC(60)-1-26	1/2"RCC(60)-1-27	M525-1	G/8
RCC-FX-22B	1/2"RCC(60)-1-28	1/2"RCC(60)-1-29	M525-1	G/6
RCC-FX-23A	1/2"RCC(60)-1-6	1/2"RCC(60)-1-7	M525-1	F/8
RCC-FX-23B	1/2"RCC(60)-1-16	1/2"RCC(60)-1-17	M525-1	F/5
RCC-FX-24A	1/2"RCC(60)-1-8	1/2"RCC(60)-1-9	M525-1	F/8
RCC-FX-24B	1/2"RCC(60)-1-18	1/2"RCC(60)-1-19	M525-1	F/5
RCC-FX-25A	1/2"RCC(60)-1-10	1/2"RCC(60)-1-15	M525-1	D/8
RCC-FX-25B	1/2"RCC(60)-1-20	1/2"RCC(60)-1-25	M525-1	D/5
RCC-FX-10A	1/2"RCC(60)-2-1	1/2"RCC(60)-2-2	M525-2	J/6
RCC-FX-10B	1/2"RCC(60)-2-6	1/2"RCC(60)-2-7	M525-2	G/6

DETAIL "C"



GENERAL NOTES:

1. ALL TEMPERATURE WELL CONNECTION TO BE 1 1/2" NPT UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL INSTRUMENTATION ON THIS DRAWING TO BE INDENTIFIED BY PREFIX "RCC" UNLESS SPECIFICALLY NOTED OTHERWISE.
3. ALL INSTRUMENT ROOT VALVES NOT LABELED WILL BE 3/4" GLOBE VALVES UNLESS SPECIFICALLY NOTED OTHERWISE.
4. ALL ITEMS MARKED • ARE FURNISHED WITH ASSOCIATED EQUIPMENT.
5. PIPING, VALVES, AND ASSOCIATED COMPONENTS ON THIS DRAWING SHALL BE CLASSIFIED AS FOLLOWS, EXCEPT AS STATED IN NOTE 8. (BREAK POINTS ARE INDICATED ON THE FLOW DIAGRAM):
   a. INSIDE PRIMARY CONTAINMENT BEYOND THE INNERMOST CONTAINMENT ISOLATION VALVES:
      SEISMIC CATEGORY II ⊕
      QUALITY CLASS II
      CODE GROUP C
   b. PRIMARY CONTAINMENT ISOLATION VALVES AND ALL PIPING AND VALVES BETWEEN THESE ISOLATION VALVES:
      SEISMIC CATEGORY I
      QUALITY CLASS I
      CODE GROUP B
   c. THE RADWASTE BLDG. STARTING FROM THE RADWASTE BUILDING EAST WALL:
      SEISMIC CATEGORY II
      QUALITY CLASS II
      CODE GROUP D
   d. ALL PIPING, VALVES, AND ASSOCIATED COMPONENTS ON THIS DRAWING IN THE RCC SYSTEM, IN THE REACTOR BUILDING, AND THE RADWASTE BUILDING CORRIDOR SHALL BE CLASSIFIED AS FOLLOWS, EXCEPT AS NOTED:
      SEISMIC CATEGORY II ⊕
      QUALITY CLASS II
      CODE GROUP D
   ⊕ HANGERS TO BE DESIGNED TO SEISMIC CATEGORY I LOADS.
   e. ALL PIPING, VALVES, AND ASSOCIATED COMPONENTS ON THIS DRAWING EXCEPT AS NOTED ABOVE:
      SEISMIC CATEGORY I
      QUALITY CLASS I
      CODE GROUP C
6. (DELETED)
7. (DELETED)
8. ALL PIPING DOWNSTREAM OF THE LAST ISOLATION VALVE AND OPEN TO THE ATMOSPHERE WITH THE SUBSYSTEM DESIGNATION "SYSTEM" (50) THRU (59) SHALL BE CLASSIFIED AS CODE GROUP D WITH QUALITY CLASS AND SEISMIC CATEGORY PROVIDED BY THE APPLICABLE NOTES ON THIS DRAWING.
9. CODE BREAK DEFINITIONS FOR THERMOWELLS ARE SHOWN ON M610, "INSTALLATION OF THERMOWELLS AND SAMPLE PROBES."
10. INSTRUMENTATION SO NOTED SHALL BE CODE GROUP E.
11. VALVE IS NOT ASME III CLASS 3, IT IS CONSIDERED SA105 MATERIAL WELDED TO THE SYSTEM.

    THE FOLLOWING WASHINGTON STATE SPECIAL NUMBERS ARE IDENTIFIED WITH THE CORRESPONDING VALVES:

VALVE TAG NUMBER	WASHINGTON STATE SPECIAL NUMBER
RCC-V-133A	WS-22-83W
RCC-V-133B	WS-25-83W

12. CROSS-HATCHED AND SCOPED EQUIPMENT IS NON-OPERATIONAL.
13. RCC-V-36A & RCC-V-36B HAVE BEEN GAGGED CLOSED.
14. VALVE OPERATOR (////////) HAS BEEN DEACTIVATED. VALVE IS IN THE OPEN POSITION AND FLUID DRAINED FROM OPERATOR.
15. SAMPLE POINT IS NO LONGER FUNCTIONAL. ALTERNATE METHOD OF SAMPLING IS DONE PER APPLICABLE PPM.

LEGEND:

1. ALL VALVES (EXCEPT THOSE ON INSTRUMENT LINES) SUFFIXED WITH A (V) DENOTE A 3/4" VENT VALVE, EXCEPT AS NOTED.
2. ALL VALVES (EXCEPT THOSE ON INSTRUMENT LINES) SUFFIXED WITH A (D) DENOTE A 3/4" DRAIN VALVE.
3. ALL VALVES SUFFIXED WITH A (TH) DENOTE A THROTTLED VALVE.

REFERENCES TO CONTRACT NUMBERS, SUCH AS 215, 206, 220, FOUND IN THE NOTES ON THIS DRAWING REFER TO ORIGINAL CONSTRUCTION DESIGN REQUIREMENTS.

CURRENT DESIGN REQUIREMENTS ARE DOCUMENTED IN THE STATION DESIGN SPECIFICATIONS AND ACTIVE CONTRACT SPECIFICATIONS WHICH STILL APPLY.

FSAR FIG.

REV	DATE	DESCRIPTION	DWN	CHK	APVD
79	10-14-02	REDRAWN AND REVISED PER 01424-021, 97-0191-0A-304	NT	BLS	SRP
80	2-3-03	REV PER 01321-206 (B-C/6-10; J/8-9; F/2).	NT	KB	DRJ

ENERGY NORTHWEST
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COLUMBIA GENERATING STATION

	SIGNATURE	DATE
APPROVED	SR PAYNE	10-14-02
CHECKED	B. STAFFORD	10-23-01
DRAWN	N. THEISEN	12-20-00

TITLE: FLOW DIAGRAM CLOSED COOLING WATER SYSTEM REACTOR BUILDING

SCALE: NTS | DWG NO. M525-1 | REV. 80

SERVER84\MECH\M500\M525-1.DWG

TOP TIER