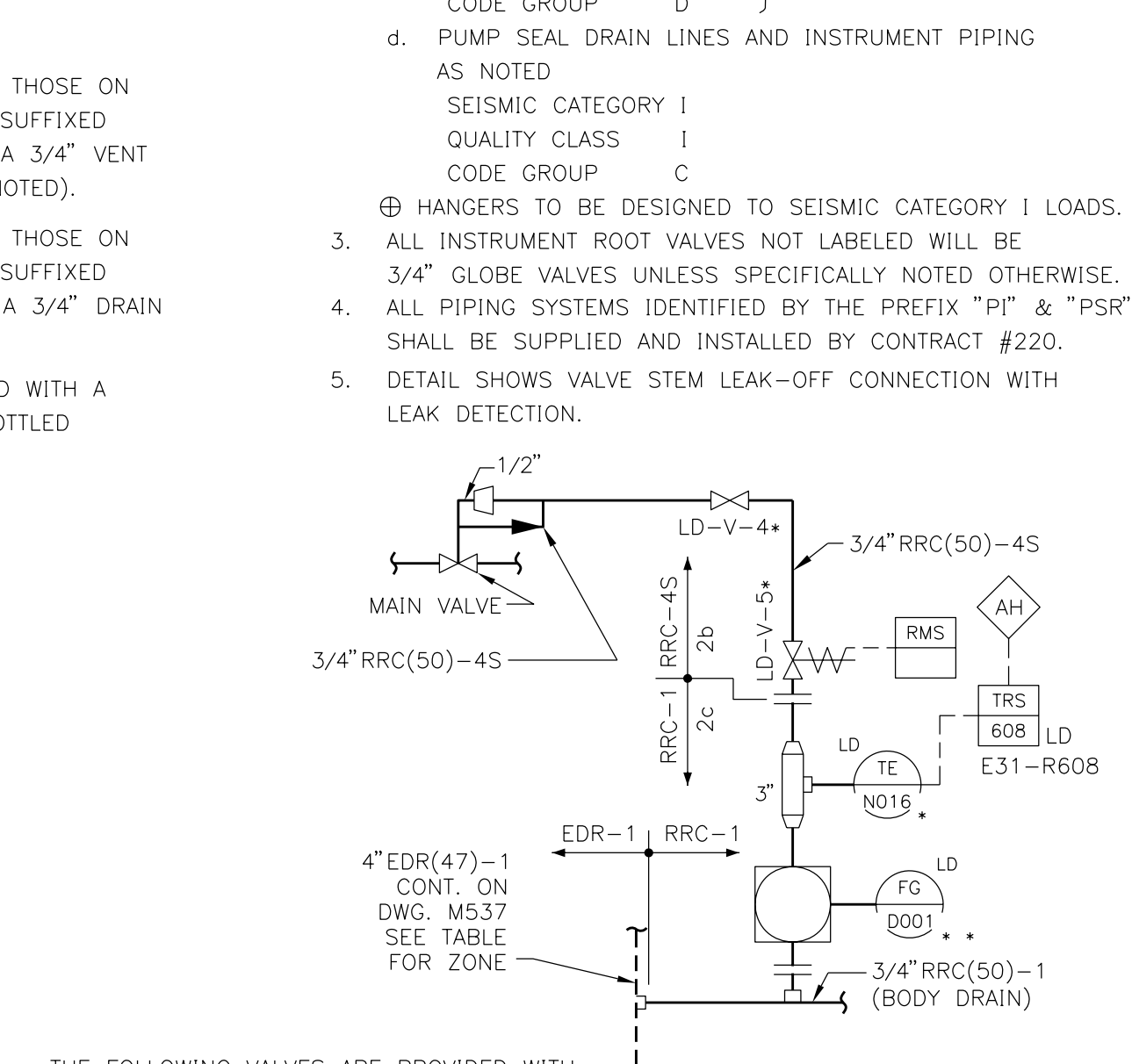


- NOTES:** CONT. FROM (B2)
12. CODE BREAK DEFINITIONS FOR THERMOWELLS ARE SHOWN ON M610, "INSTALLATION OF THERMOWELLS AND SAMPLE PROBES".
 13. INSTRUMENTATION SO NOTED SHALL BE CODE GROUP E.
 14. DELETED.
 15. SEE VENDOR DWG B1999-F-001 (CVI 02835-15.5) FOR INTERNALS INFORMATION & FLOW PATHS ON HY-HP-3A & 3B.
 16. DELETED.
 17. FOR SAMPLE FUNCTION & INSTRUMENTATION ASSOCIATED WITH THE SAMPLE POINTS SEE DWG. SERIES M607, STEAM & LIQUID SAMPLING FLOW DIAGRAMS AND DWG. SERIES 60A-00 SAMPLE RACKS DETAILS & FLOW DIAGRAMS. (NOTES CONTINUED ON DWG. M530-2)
- NOTES:**
1. ALL ITEMS MARKED * ARE FURNISHED WITH ASSOCIATED EQUIPMENT.
 2. PIPING, VALVES, AND ASSOCIATED COMPONENTS ON THIS DWG. SHALL BE CLASSIFIED AS FOLLOWS (BREAK POINTS ARE INDICATED ON FLOW DIAGRAMS):
 - 6. PIPING AND VALVES OF SUBSYSTEM RRC (1), (2) AND (7) AND INSTRUMENT AND PROCESS PIPING AND VALVES AS NOTED.
 - SEISMIC CATEGORY I
 - QUALITY CLASS I
 - CODE GROUP A
 3. ALL INSTRUMENT AND PROCESS PIPING AND VALVES AS NOTED.
 - SEISMIC CATEGORY I
 - QUALITY CLASS I
 - CODE GROUP B

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. (EXCEPT AS NOTED).
 3. ALL VALVES SUFFIXED WITH A (H) DENOTE A THROTTLED VALVE.



THE FOLLOWING VALVES ARE PROVIDED WITH THIS ARRANGEMENT.

MAIN VALVE	TE AND LEAK-OFF VALVE SUFFIX	+FG SUFFIX	ZONE	UNIQUE LINE No.
RRC-V-60A	G	B-3	(D/10)	3/4"RRC(50)-45-5
RRC-V-60B	H	B-4	(D/8)	3/4"RRC(50)-45-7 3/4"RRC(50)-45-6 3/4"RRC(50)-45-8

JET PUMP TRANSMITTER LINE PENETRATION TABLE

UNIQUE LINE No.	PUMP No.	INSTR. PENETR. No.	FT-No.	FT-No.
PI(1)-45-X448a	MS-JP-1	X-448a	MS-FT-34A	-
PI(1)-45-X448b	MS-JP-2	X-448b	MS-FT-34C	-
PI(1)-45-X448c	MS-JP-3	X-448c	MS-FT-34E	-
PI(1)-45-X448d	MS-JP-4	X-448d	MS-FT-34G	-
SEE (J/11)				
PI(1)-45-X448f	MS-JP-6	X-448f	MS-FT-34I	MS-FT-33A
PI(1)-45-X448g	MS-JP-7	X-448g	MS-FT-34K	-
PI(1)-45-X448h	MS-JP-8	X-448h	MS-FT-34L	-
PI(1)-45-X448i	MS-JP-9	X-448i	MS-FT-34F	-
SEE (J/11)				
PI(1)-45-X448j	MS-JP-10	X-448j	MS-FT-34M	MS-FT-33C
PI(1)-45-X448k	MS-JP-11	X-448k	MS-FT-34B	-
PI(1)-45-X448l	MS-JP-12	X-448l	MS-FT-34D	-
PI(1)-45-X448m	MS-JP-13	X-448m	MS-FT-34H	-
PI(1)-45-X448n	MS-JP-14	X-448n	MS-FT-34J	-
SEE (J/7)				
PI(1)-45-X448p	MS-JP-15	X-448p	MS-FT-34K	MS-FT-33B
PI(1)-45-X448q	MS-JP-16	X-448q	MS-FT-34N	-
PI(1)-45-X448r	MS-JP-17	X-448r	MS-FT-34P	-
PI(1)-45-X448s	MS-JP-18	X-448s	MS-FT-34S	-
PI(1)-45-X448t	MS-JP-19	X-448t	MS-FT-34Q	-
SEE (J/7)				
MS-JP-20	X-448u	MS-FT-34W	MS-FT-33D	

6. THIS EQUIPMENT IS NORMALLY CONTROLLED FROM THE MAIN CONTROL ROOM. IF THE MAIN CONTROL ROOM MUST BE VACATED, THIS CONTROL POINT MAY BE ISOLATED AND CONTROL TRANSFERRED TO THE REMOTE SHUT-DOWN PANEL C61-P001.
 7. SEE DWG. M530-2 FOR RRC MISCELLANEOUS SYSTEMS.
 8. EXCESS FLOW CHECK VALVES SHALL BE TAGGED AS FOLLOWS:
 - PI-ERC-(PENETRATION NO.)
 - PI-V-(PENETRATION NO.)
 *EXCEPT AS NOTED ON M619, INSTRUMENT CONNECTION DIAGRAMS.
 9. ALL INSTRUMENTATION ON THIS DRAWING TO BE IDENTIFIED BY PREFIX "RRC" UNLESS SPECIFICALLY NOTED OTHERWISE.
 10. ALL INSTR. LINES ARE DESIGNATED BY CODE & LINE #
 - A. EXAMPLE: LINES ORIGINATING INSIDE CONTAINMENT 1/2" P(1)-45-X106
 - CODE DESIGNATION
 - LINE NUMBER
 11. EXAMPLE: CONTINUATION OF THE ABOVE LINE OUTSIDE CONTAINMENT IS DESIGNATED AS FOLLOWS. WITH LINE NUMBERS NOT SHOWN.
 - 1/2" P(1)-ST-X106 - (H22-P021)
 - CODE DESIGNATION
 - LINE NUMBER
- NOTES CONT. AT ZONE (K/4)

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.

ENERGY NORTHWEST
People-Vision-Solutions

COLUMBIA GENERATING STATION

REV	DATE	DESCRIPTION	BY	CHK	APPV	SIGNATURE	DATE	TITLE
79	4-19-02	REDRAWN AND REVISED PER 01424-013, 01488-004, 01533-015	HW/BSL	KL	DRJ	DONALD R. JACOBSEN	4-19-02	
80	6-27-03	REVISED PER 01288-130 (H/8-9)	OMG	KB	DRJ			

SCALE: NTS

DWG NO: M530-1

REV: 80