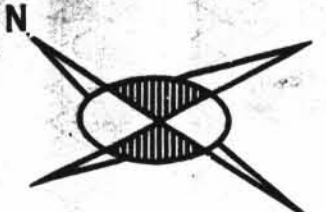


TOTAL  
FW  
8



INDICATES LOCATION OF PIPE  
SUPPORT AND SUPPORT DETAIL  
NUMBER

SUPPORT MARK NUMBERS  
SHOWN ARE FOR  
GENERAL AND SEQUENTIAL LOCATION  
OF SUPPORTS ONLY  
FOR EXACT LOCATIONS SEE PIPE  
SUPPORT DETAIL

DETAIL "A"

TOTAL  
FW  
8

SIZE	QUAN.	FW
3	2	5
1/2	1	3

NOTES:

1. FWS PERTAINING TO THIS NOTE ARE TO BE MADE AFTER PIPE IS CUT, PRE-ALIGNED & ENDS HAVE BEEN PREPARED FOR WELDING TO SUIT AS-BUILT CPM.
2. FABRICATOR TO MAKE THIS END OF SPOOL 6" LONGER WITH PLAIN END TO FACILITATE INSTALLATION.
3. USE CRANE 425-A COMPOUND ON ALL THRD. CONNECTION.
4. WELD PROCEDURE AS FOLLOWS:  
C/S 2" & UNDER  
C/S 2 1/2" & OVER
5. BUTTWELDS = RT-100% TESTING  
SOCKET WELDS = PT-100% TESTING
6. PROVIDE BI-METALLIC WELDS (STAINLESS STEEL - CARBON STEEL)
7. REMOVE BONNET ASSEMBLY BEFORE WELDING VALVE BODY TO PIPE LINE

SIZE	QUAN.	FW
3	25	2
1/2	2	13
1	1	3

A-18 DESIGN SPEC. DCCPM 103 QCN  
HANGER SEISMIC CLASS 2  
TEST REQUIREMENTS QL-4  
WELD PROCEDURE SEE NOTE 4  
QSL-22 TESTING RT-100%  
A-21 DESIGN SPEC. DCCPM 102 QCS  
HANGER SEISMIC CLASS 2  
TEST REQUIREMENTS QL-4  
WELD PROCEDURE SEE NOTE 4  
QSL-21 TESTING N/A.

DESIGN SPEC.	SEE
HANGER SEISMIC CLASS	DESIGN
TEST REQUIREMENTS	CODE
MATERIAL CLASS	STAMP
PIPE	
A-33	A-106
A-376	A-312
A-105	A-234
A-182	A-181
FITTINGS	
A-403	A-181
TESTING	
MT.	P.T.
RT.	UT.
ADDITIONAL	
PRESSURE TEST	
MED.	PRESS.
DURATION	

SUPPORT MARK NOS.  
2-GNSW-L72  
2-GNSW-L73  
2-ANSW-L930

QSL	ITEM	QTY	SIZE	MATERIAL DESCRIPTION	TAG NO. OR IDENTIF.	HEAT NO.
04	1	1	3"	B.W. DIAPH. CONTROL VA. SS.	WCR-930	
01	2	1	3"	125" C.I. WAFER BUTTERFLY VA.	12FW08RS	
	3	3	1/2"	200" SCR'D. GLOBE VA. BRASS	Y050T23	
	4	2	1/2"	3000" S.W. C.S. 90° ELL.	A-181	
	5	2	1/2"	3000" S.W. PLUG C.S.	GR. 2 OR 2	
	6	1	1/2"	3000" SCR'D. CAP C.S.		
	7	2	3"	SPR. WOUND FLEXITALLIC, GASKET STYLE CG TYPE 304		
	8	6	1/2"	STUD BOLT.	A-183	
	9	16	3/4"	HEAVY HEX. NUT	GR. 2	
	10	2	1/2"	HEX. HD. MACH. BOLT.	GR. 2H	
	11	2	1/2"	HEAVY HEX. NUT CL. 2 TOL.	GR. 2	
	12	1	1/2"	PIPE (SCH. 80) SMLS. C.S.	A-106	
	13	1	1"	BI-METAL THERM WELL	WTI-927	
04	15	2	1"	600" S.W. C.S. GLOBE VA.	Y-100T36	
01	16	1	1"	200" SCR'D. GLOBE VA. BRASS	Y-100T23	
04	17	AS REQ'D	1"	PIPE (SCH. 40) SMLS. C.S.		
01	18	1	1"	PIPE (SCH. 40) SMLS. C.S.		
01	19	1	1"	3000" C.S. THD. PLUG		
04	20	1	3/4"	THD. PLUG C.S.		

REVISION RECORD				REMARKS
NO.	DATE	BY	DESCRIPTION	
1	10/76	DR.	REVISED BY A.E.P. DESIGN: PER AFC-DC-12-671: ADDED 3" BW CONTROL VALVE WCR-930, (2) VENTS-VALVE NR. Y-100T23, 1/2" DRAIN-VALVE NR. Y-050T23. MOVED SPEC BREAK FROM WCR-931 TO HAC-980	ACTION REQ'D.
2	12/76	DR.	REVISED PIPING AT EL. 614'-0" & EL. 618'-8"	ACTION REQ'D.
3	12/76	W.R.	ADDED: WPX-931, REVISED ITEM 15, 4 VENT PIPING. ADDED ITEM 17, 18, 19, NTI-931 WAS 927.	
4	1/77	W.R.	PER RDM-MC-0162 ITEM 15 WAS Y-100T25, ADDED ITEMS 20, 21, 22.	
5	1/77	D.L.	PER AFC-DC-12-2549 ADDED PIPE SPEC. G-14, DIM'S, 2-NSW-117-6, 2-PC-MK-L4. WELD BOX, NOTES 5, 6 & 7, FIELD WELDS 23 TO 28, FSW 29 & 30. ITEM N.B.S. 23 TO 27 TO B/M. REVISED ITEM N.B. 1 & 6 IN B/M. DELETED ITEM NO. 14 FROM B/M.	FIELD ACTION REQ'D.
6	1/77	KA	PER REC-DC-12-2549 REVISED PIPING TO CONFORM FIELD DIM'S. ROTATED ACTUATOR OF VALVE WCR-930 TO BE TOWARD NORTH.	FIELD ACTION REQ'D.
7	1/77	LB	PER AFC-DC-12-2549 REVISED DIM'S: DIM'S DIM. 2-2 1/4"	NO FIELD ACTION REQ'D.
8	2/77	LB	TO REFLECT AS-FOUND CONDITIONS FOR REC-DC-12-3010 PER FWR#759 REV. 1: ADDED: DIM'S: REVISED: DIM'S: ADDED: SUPPORT MARK NOS. & SUPERSEDES HGR. ISO #2-GNSW-117	NO FIELD ACTION REQ'D.

QSL	ITEM	QTY	SIZE	MATERIAL DESCRIPTION	TAG NO. OR IDENTIF.	HEAT NO.
04	21	1	1"	1"x1/2" THD. RED. INSERT		
	22	1	1/2"	THD. PLUG C.S.		
	23	1	3"	B.W. DIAPH. CONTROL VA. SS	WCR-931	
	24	AS REQ'D	1/2"	PIPE (SCH. 40S) SMLS	A-312	
	25	1	1/2"	600" S.W. C.S. GLOBE VALVE	GR-TP-304	
	26	1	1/2"	3000" SCR'D. CAP C.S.	Y-050T36	
	27	1	1/2"	PIPE (SCH. 80) SMLS. C.S.	GR. 2 OR 2	

POUR/ZONE No. 4-15 FLOW DIAGRAM 2-51/4A  
REQUIRED COMPLETION DATE 2-5-77  
FABRICATED BY TUBES  
NPS DESIGNS INC.  
2NSW-117  
Upper Containment Ventilation  
Unit 3 Return Line  
LIVSEY & COMPANY, INC.  
INDIANA & MICHIGAN ELECTRIC CO.  
DONALD C. COOK NUCLEAR PLANT  
DWG. 2-51/4A  
DATE 2/77  
REV. 1  
2NSW-117 8