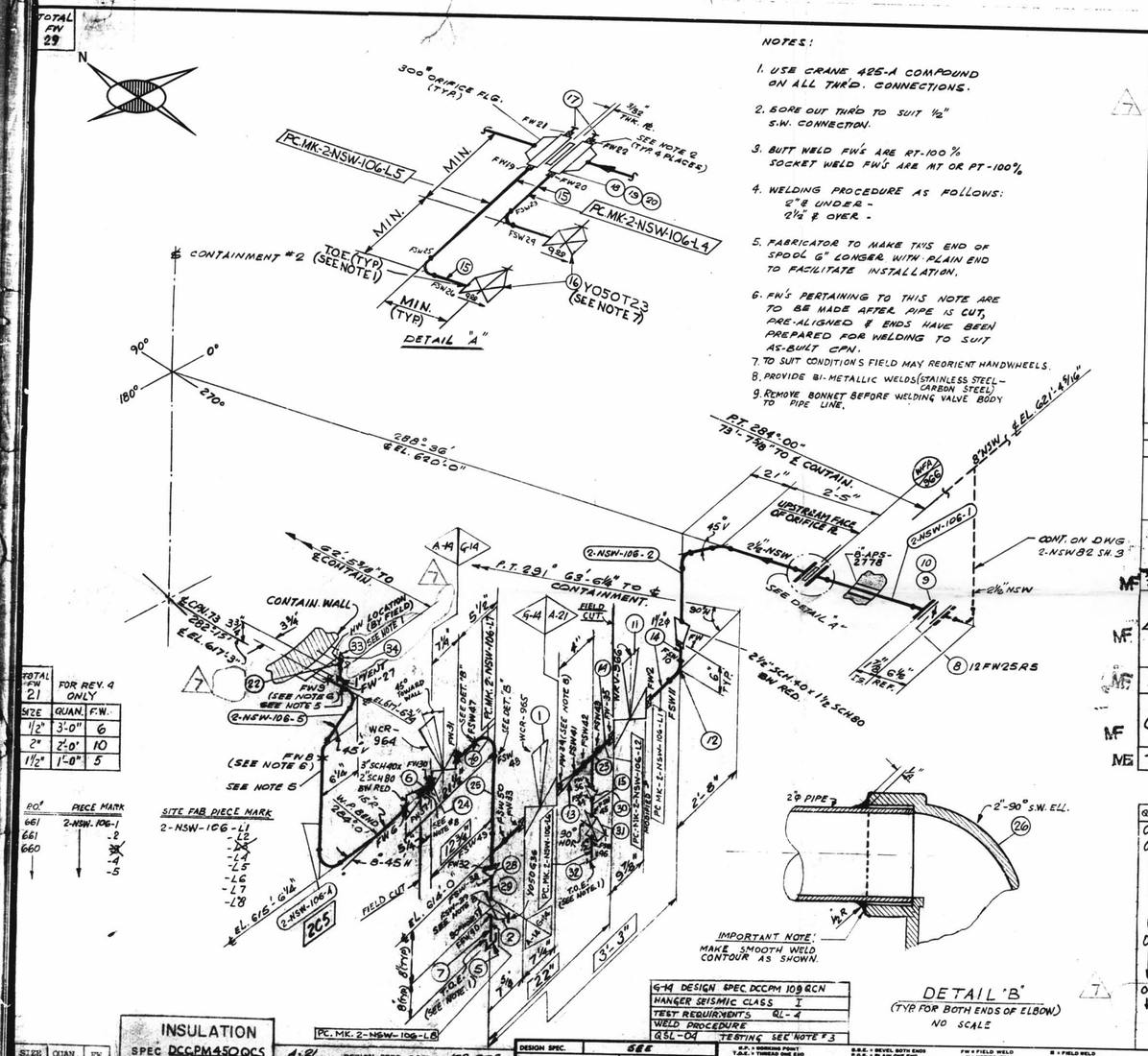

NOTES:

1. USE CRANE 425-A COMPOUND ON ALL THRD. CONNECTIONS.
2. BORE OUT THRD TO SUIT 1/2" S.W. CONNECTION.
3. BUTT WELD FW'S ARE RT-100% SOCKET WELD FW'S ARE MT OR PT-100%
4. WELDING PROCEDURE AS FOLLOWS: 2"& UNDER - 2 1/2" & OVER -
5. FABRICATOR TO MAKE THIS END OF SPOOL 6" LONGER WITH PLAIN END TO FACILITATE INSTALLATION.
6. FW'S PERTAINING TO THIS NOTE ARE TO BE MADE AFTER PIPE IS CUT, PRE-ALIGNED & ENDS HAVE BEEN PREPARED FOR WELDING TO SUIT AS-BUILT CPN.
7. TO SUIT CONDITION'S FIELD MAY REORIENT HANDWHEELS.
8. PROVIDE BI-METALLIC WELDS (STAINLESS STEEL - CARBON STEEL)
9. REMOVE BONNET BEFORE WELDING VALVE BODY TO PIPE LINE.

ISO SHT. NO. 2108

QSL	ITEM	QTY.	SIZE	MATERIAL DESCRIPTION	TAG No. OR ASTM MAT'L.	HEAT NO.
04	1	1	2"	S.W. DIAPH. CONTROL VA. S.S.	WCR-965	
	2	1	1/2"	600# S.W. C.S. GATE VALVE	Y050G36	
	5	1	1/2"	3000# C.S. THRD CAP	A-181 GR. I OR II	
	6	AS REQD	2"	PIPE (SCH. 80) SMLS. C.S.	A-106 GR. B	
	7	AS REQD	1/2"	PIPE (SCH. 80) SMLS. C.S.		
01	8	1	2 1/2"	125# C.I. WAFER BUTTERFLY VA.	12FW25RS.	
	9	4	5/8" ϕ	5" LG. HEX. HD. MACH. BOLT.	A-307 GR. B	
	10	4	5/8"	HEAVY HEX. NUT. CL. 2 TOL.		
	11	1	1 1/2"	S.W. REGULATING VALVE	NRV-966	
	12	1	1 1/2"	3000# C.S. S.W. 90° ELL.	A-181 GR. I OR II	
	13	1	2 x 1 1/2"	3000# C.S. S.W. RED. INSERT.		
	14	AS REQD	1 1/2"	PIPE (SCH. 80) SMLS C.S.	A-106 GR. B.	
	15	AS REQD	1/2"	PIPE (SCH. 80) SMLS C.S		
	16	2	1/2"	200# THRD. GLOBE VA. BRONZE OR BRASS	Y050T23	
	17	2	1/2"	3000# C.I. SW. PLUG	A-181 GR. I OR II	
	18	2	2 1/2"	1/8" THK. SPIRAL WOUND, STYLE CG. C.S. COMP. RING GASKET.	TYPE 304	
	19	8	3/4" ϕ	4" LG. STUD BOLT	A-193 GR. B7	
	20	16	3/4"	HEAVY HEX NUT	A-194 GR. 2H	
04	33	1	1"	600# S.W. GLOBE VA. CARB. STL.	Y-100T36	

REVISION RECORD

NO.	DATE	DRN CHK.	DESCRIPTION	REMARKS
1	7-8-74	JM.	REMOVED HOLDS ON PC.MK-2-NSW-106-L4 & L5 ADDED ITEM #21 ON B/M, INSULATION STAMP PO.#660 & 661, NOTE #7, & QUANTITY CHANGE ON ITEM #15 ON B/M. PER A.E.P. ARRG'T DWG. 2-5567C-1	FIELD ACTION REQ'D
2	12-20-76	P.G.A. B.R.	REVISED BY AEP DESIGN: PER RFC-12-671: REV'D: ITEM #2 Y-050G36 WAS CY-050G36. ADDED: 1" VENT - VALVE N2 Y-100T23, 2" CHECK VALVE Y-200C36	ACTION REQ'D.
3	12-7-78	D.W.K.	CHANGED VA. NO. TO Y200C36 WAS T36.	
4	7-19-81	K.A. D.R.	PER RFC#DC-12-2549 REPLACED ISOL. VA'S WCR-964 & WCR-965 WITH DIAPH. CONTROL VA'S WCR-964 & 965 ADDED: PIPE SPEC. G-14, DIM'S, WELD BOX, FW 30-37, FSW 38-50 ITEM N2'S 23 THRU 32 TO B/M NOTES 8 & 9 PC.MK.2-NSW-106-L6, 174 LB. DELETED ITEM N2 3, 4 & 21 FROM B/M, PC.MK.2-NSW-106-L3 & PC.MK.2-NSW-106-L3, REV. ITEM N21 IN B/M, MODIFIED PC.MK.2-NSW-106-L2.	FIELD ACTION REQ'D.
5	7-23-81	K.A. L.B.	PER RFC#DC-12-2549 ROTATED ACTUATOR OF VALVE WCR-964 TO 15° VERT. FROM CONTAINMENT WALL.	FIELD ACTION REQ'D
6	6/1/82	K.A. M.E. E.G.	PER RFC-DC-12-2549 REVISED ORIENTATION OF WCR-964, BOXED DIMENSION'S INDICATE FIELD INFO. DIMS. 3/8" WAS 7 7/16, 3/4" WAS 3 3/8 & 4" WAS 6 1/4. ITEMS 25 & 27 WERE SCH. 80 PIPE, ADDED DET. "B" & ADDED 1" PLUG TO ITEM 22 & 24.	FIELD ACTION REQ'D
7	4/26/84	WT J.M.	PER RFC-DC-12-2549 ADDED PLUG, ITEM 33, & RED. INSERT, ITEM 34, TO VALVE, ITEM 22, WHICH WAS Y-100T23.	NO ACTION REQ'D.

TOTAL FW 21	FOR REV. 4 ONLY	
SIZE	QUAN.	F.W.
1/2"	3'-0"	6
2"	2'-0"	10
1 1/2"	1'-0"	5

BO#	PIECE MARK
661	2-NSW-106-1
661	-2
660	~~-3~~
	-4
	-5

SITE FAB PIECE MARK
2-NSW-106-L1
-L2
-L3
-L4
-L5
-L6
-L7
-L8

QSL	ITEM	QTY	SIZE	MATERIAL DESCRIPTION	TAG NO. OR ASTM MAT'L	HEAT NO.
01	23	1	1 1/2	3000# C.S. S.W. TEE	A-181 GR. I OR II	
04	24	1	2"	S.W. DIAPH. CONTROL VA. S.S.	WCR-964	
	25	1	2"	PIPE SCH. 80 S SMLS S.S.	A-312 GR. TP-304	
	26	1	2"	3000# S.S. S.W. 90° ELL	A-182 GR. F-304	
	27	1	2"	3000# S.S. S.W. TEE		
	28	1	2 x 1/2	3000# S.S. S.W. RED INSERT		
	29	AS REQ'D.	1/2"	PIPE SCH 80 S SMLS S.S.	A-312 GR. TP-304	
01	30	1	1 1/2 x 1/2	3000# C.S. S.W. RED INSERT	A-181 GR. I OR II	
	31	1	1/2"	600# S.W. C.S. GATE VALVE	Y050G36	
	32	1	1/2"	3000# C.S. THR'D CAP	A-181 GR. I OR II	
04	33	1	3/4"	3000# THR'D. PLUG, C.S.		
	34	1	1 x 3/4	3000# I'S.M. x 3/4" THR'D. RED. INSERT, C.S.		

DETAIL "B"
(TYP FOR BOTH ENDS OF ELBOW)
NO SCALE

G-14 DESIGN SPEC. DCCPM 109 QCN	
HANGER SEISMIC CLASS	I
TEST REQUIREMENTS	QL-4
WELD PROCEDURE	
QSL-04	TESTING SEE NOTE #3

INSULATION
SPEC DCCPM450QCS
FOR REQUIREMENTS

SIZE	QUAN.	FW
3"	11'	3
2 1/2"	14'	—
2"	2'	18
1 1/2"	2'	6
1 1/4"	3'	11
1"	—	1

LINE SIZE	NOM THK. IN.	REMARKS
3"	1"	GLASS
2 1/2"	1"	GLASS

A-21 DESIGN SPEC. DCCPM 102 QCS
HANGAR SEISMIC CLASS #
TEST REQUIREMENTS QL- N/A
WELD PROCEDURE SEE NOTE 4
QSL-01 TESTING N.A.

A-14 DESIGN SPEC. DCCPM 103 QCN
HANGAR SEISMIC CLASS 4
TEST REQUIREMENTS QL- 4
WELD PROCEDURE SEE NOTE 4
QSL-04 TESTING SEE NOTE 3

DESIGN SPEC.	SEE
HANGER SEISMIC CLASS	DESIGN
TEST REQUIREMENTS	CODE
MATERIAL CLASS	STAMP

B.P. = BORING POINT
T.&S. = THREAD ONE END
T.&E. = THREAD BOTH ENDS
B.&E. = BEVEL ONE END
T.O.P. = TOP OF PIPE ELEV.
B.S.L. = MATERIAL QUALITY REQUIREMENTS
T.L. = TRUE LENGTH

B.&E. = BEVEL BOTH ENDS
P.&S. = PLAIN ONE END
P.&E. = PLAIN BOTH ENDS
S.&E. = SHAPE ONE END
B.O.P. = BOTTOM OF PIPE ELEV.

FW = FIELD WELD
H = HORIZONTAL
V = VERTICAL
SW = SHOP WELD
FSW = FIELD SHOP WELD

■ = FIELD WELD
Ⓐ = AUTOMATIC SHOP WELD
Ⓜ = MANUAL SHOP WELD
● = VERIFY DIMENSION IN FIELD

PIPE

A-53	A-106 GR. B.	A-376	A-312 GR TP-304										
STD.	XY	XXY	10	20	30	40	60	80	100	120	140	160
SMLS	WLDD												

FITTINGS

A-105	A-234	A-182
A-403	A-181	

TESTING

N.D.T. SEE DESIGN CODE STAMP			
M.T.	P.T.	R.T.	U.T.
PRESSURE TEST			
MED.	PRESS.	DURATION	

ADDITIONAL

POUR/ZONE No. 265
REQUIRED COMPLETION DATE
FABRICATED BY TUBECO
FLOW DIAGRAM 2-5114A
Q.S.L. SEE DESIGN
WELD PROCEDURE CODE STAMP

NPS DESIGNS INC.
NEW YORK N.Y.

2NSW-106
Instrument Room Ventilation
Unit 3 Supply Line

INDIANA & MICHIGAN ELECTRIC CO.
DONALD C. COOK NUCLEAR PLANT

DWN: S.G. DATE: 12-26-71
CHKD. LdB DATE: 2-25-72
ISSUED
REF. DWG. 2-5457A

CONTAIN. VICINITY
DWG. NO. 2-NSW-106
REV. 7