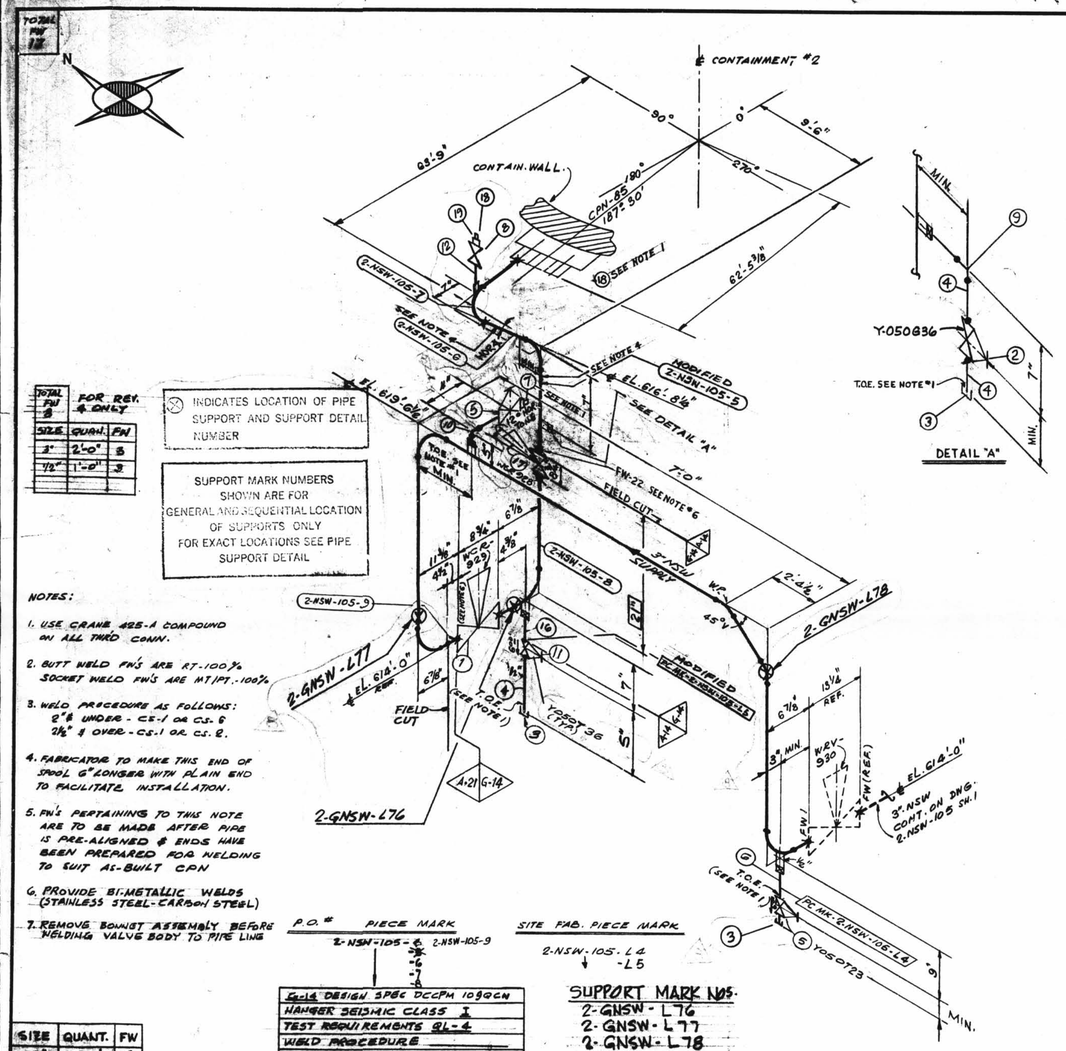

TOTAL FW 8	FOR REV. 4 ONLY	
SIZE	QUAN.	FW
3"	2'-0"	8
1/2"	1'-0"	3

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

NOTES:

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

P.O. #	PIECE MARK	SITE FAB. PIECE MARK
	2-NSW-105-℄ 2-NSW-105-9 -6 -7 -8	2-NSW-105-L4 -L5

SIZE	QUANT.	FW
3"	20'	8
1"	—	2
1/2"	4'	7

G-14 DESIGN SPEC DCCPM 109QCN	
HANGER SEISMIC CLASS I	
TEST REQUIREMENTS QL-4	
WELD PROCEDURE	
QSL-04 TESTING SEE NOTE #2	
A-14 DESIGN SPEC. DCCPM 109 QCN	
HANGAR SEISMIC CLASS I	
TEST REQUIREMENTS QL-4	
WELD PROCEDURE SEE NOTE 3	
QSL-04 TESTING SEE NOTE 2	
A-21 DESIGN SPEC. DCCPM 109QCS	
HANGAR SEISMIC CLASS II	
TEST REQUIREMENTS QL-1	
WELD PROCEDURE SEE NOTE 3	
QSL-01 TESTING N/A.	

SUPPORT MARK NOS.
2-GNSW-L76
2-GNSW-L77
2-GNSW-L78

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

S.P. = SOCKET POINT
T.P. = THREAD POINT
B.O.E. = BEVEL BOTH ENDS
B.O.E. = BEVEL ONE END
T.O.P. = TOP OF PIPE ELEV.
Q.S.L. = MATERIAL QUALITY REQUIREMENTS
T.L. = TRUE LENGTH
B.E.E. = BEVEL BOTH ENDS
P.O.E. = PLAIN ONE END
P.E.E. = PLAIN BOTH ENDS
S.O.E. = SNAPS ONE END
B.O.P. = BOTTOM OF PIPE ELEV.
FW = FIELD WELD
H = HORIZONTAL
V = VERTICAL
SW = SHOP WELD
FSW = FIELD SHOP WELD
B = FIELD WELD
O = AUTOMATIC SHOP WELD
X = MANUAL SHOP WELD
S = VERIFY DIMENSION IN FIELD

PIPE												
A-53		A-106		A-376		A-312						
		GR. B				GR TP 304						
STD.	XY	XXY	10	30	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. A15
REQUIRED COMPLETION DATE
FABRICATED BY 70/BECO

FLOW DIAGRAM 2-5114A
Q.S.L. SEE DESIGN
WELD PROCEDURE CODE STAMP

NPS DESIGNS INC.
NEW YORK, N.Y.

FABRICATOR NOTE:
FABRICATION MUST CONFORM TO LATEST A.E.P. ARRGT. DWGS.

LIVSEY & COMPANY, INC.
INDIANA & MICHIGAN ELECTRIC CO.
DONALD C. COOK NUCLEAR PLANT

DWN. SG DATE: 12-19-71 AUXILIARY BLDG
CKD. GN DATE: 1-6-72 DWG. NO. 2-NSW-105 SH. 2 of 2 REV. 8
ISSUED
REF. DWG. 2-5437.

ISO SHT. NO. 2007

QSL	ITEM	QTY.	SIZE	MATERIAL DESCRIPTION	TAG No. OR ASTM MAT'L.	HEAT NO.
04	1	1	3"	B.W. DIAPH. CONTROL VA. S.S.	WCR-929	
	2	1	1/2"	600# C.S.S.W. GATE VALVE	Y060G3G	
	3	3	1/2"	3000# C.S. THRD CAP	A-181 GR. I OR II	
	4	AS REQ'D	1/2"	PIPE (SCH. 80) SMLS C.S.	A-106 GR. B	
01	5	2	1/2"	200# THRD GLOBE VA. BRASS BONNETLESS	Y050T23	✓
	6	AS REQ'D	1/2"	PIPE (SCH. 80) SMLS C.S.	A-106 GR. B	
04	7	1	1/2"	3000# THRD. PLUG, C.S.	A-181 GR. I OR II	✓
	8	1	1"	600# S.W. GLOBE VA., CARB. STL.	Y-100T36	
	9	1	1/2	90° ELL, 3000# S.W., C.S.	A-181 GR. I OR II	
01	10	1	1"			
	11	1	1/2"	600# GLOBE VA., S.W. C.S.	Y050T36	
	12	AS REQ'D.	1"	PIPE (SCH. 40) SMLS., C.S.	A-106 GR. B	
04	16	AS REQ'D	1/2"	PIPE SCH 40S SMLS	A-312 GR. TP 304	
	17	1	3"	B.W. DIAPH. CONTROL VA. S.S.	WCR-928	
	18	1	3/4"	3000# THRD. PLUG, C.S.	A-181 GR. I OR II	
	19	1	1"x3/4"	3000# 1" S.W. x 3/4" THRD. RED. INSERT, C.S.		

REVISION RECORD

NO.	DATE	DR. CHKD	DESCRIPTION	REMARKS
1	1-20-76	DR BR	REVISED BY AEP DESIGN: PER RFC-12-671: REV'D; ITEM #2 Y-050G36 WAS CY-050G36; ADDED; 3" CHECK VALVE C15CE03A; (2) 1" VENTS - VALVE No Y-100T23, 1/2" DRAIN VALVE No Y-050G36.	ACTION REQ'D.
2	12-3-76	DR	ADDED: ITEMS 9, 10 & 11 TO B/M.	
3	3/1/78	GP LB	AS PER NRR-12-1930 DELETED VALVE TAG NO. C15CE03A, ADDED VALVE TAG NO. C15CW03A & ITEMS 12 THRU 15 AND REVISED RELATED PIPING	FIELD ACTION REQ'D
4	7/19/78	AG DR	PER RFC DC-12-2549 ADDED PIPE SPEC. G-16, DIM'S, PC MK 929, FIELD WELD BOM, NOTES 6 & 7, FW 18 TO 23, FSW 24 & 25, ITEMS 16 & 17 TO B/M. DELETED ITEMS No 7 & 12 TO 15 FROM B/M. REVISED ITEM No. 1 IN B/M MODIFIED, ADD K.L.S. 2-NSW-105-5.	FIELD ACTION REQ'D
5	10/14/78	RA JM	PER RFC DC-12-2549 ROTATED ACTUATOR OF VALVE WCR-928 TO 18° HOR. TOWARD NORTH-EAST, REVISED ITEM 5 IN B/M; Y-050T36 WAS Y-050T22.	FIELD ACTION REQ'D.
6	8/2/79	SG GG PF	PER RFC-DC-12-2549 RELOCATED TEST CONN. BOXED DIMENSION INDICATES FIELD INFO. ADDED PLUG TO ITEM 5 & 9M.	FIELD ACTION REQ'D.
7	10/1/79	WF JM	PER RFC-DC-12-2549 ADDED RED. INSERT, ITEM 19 & PLUG, ITEM 18, TO VALVE, ITEM 8. ITEM 8 WAS Y-100T23 & ITEM 18 WAS 1".	NO ACTION REQ'D.
8	7/12/80	EBB GSW LB	TO REFLECT AS-FOUND CONDITIONS FOR RFC-DC-12-3010 PER FWR # 759 REV. 1; ADDED: DIMS. REVISED: LOCATION OF 1" VENT, 1/2" DRAIN FROM PLUG TO CAP & B/M TO SUIT. ADDED: SUPPORT MARK NOS. & SUPERSEDES HGR. ISO. NO. 2-GNSW-105 SH. # 2.	NO FIELD ACTION REQ'D.

2NSW-105 (sheet 2 of 2)
Upper Containment Ventilation
Unit 3 Supply Line

16X 12X 12X D-19B 16X