

INTERNAL DISTRIBUTION

THIS LETTER SATISFIES COMMITMENT NO. G02-78-106

THIS LETTER ~~DOES~~ (DOES NOT) ESTABLISH A NEW COMMITMENT.

WPPSS CORRESPONDENCE NO. G02-78-164

G02-78-164
June 26, 1978

RG Cockrell
WG Conn
OK Earle
PE Green
Holder
Kohler Docket No. 50-397
AN Kugler
DL Renberger/lb
GC Sorensen
DC Timmins Mr. S. A. Varga, Chief
OE Trapp Light Water Reactor Branch No. 4
WD Vaughn Division of Project Management
Docket File S. Nuclear Regulatory Commission
WNP-2 Files Washington, D. C. 20555
Com Control
DCT/lb Subject: WPPSS NUCLEAR PROJECT NO. 2
OKE/lb USE OF AUSTENITIC STAINLESS STEEL
CH McGilton

- Reference: 1) Letter, G12-78-108, SA Varga to NO Strand,
same subject, dated March 6, 1978
2) Letter, G02-78-106, DL Renberger to SA Varga,
same subject, dated March 27, 1978

Dear Mr. Varga:

Your reference (1) requested information documenting our conformance with positions stated in NUREG-0313, "Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping". Accordingly, forty copies of the requested information is provided as attachment I for your review and use. This satisfies our commitment to you made in reference (2).

Very truly yours,

DL Renberger
D. L. RENBERGER
Assistant Director
Generation and Technology

DLR:DCT/OKE:cph

Attachment: As stated

cc: I. Littman, WPPSS - NY
J. Ellwanger, B&R
E. Chang, GE
FA MacLean, GE
JJ Verderber, B&R
N Doo RDA

8109150483 810902
LADOCK 05000397
PDR

AUTHOR: DC Timmins/OK Earle		FOR SIGNATURE OF: DL Renberger			
SECTION					
FOR APPROVAL OF	AN Kugler	WG Conn	GC Sorensen	JE Holder	CH McGilton
APPROVED	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE	6/27/78	6/27/78	6/27/78	6/27/78	6/27/78

9/11

1946-

1947

1948

Conformance of WNP-2 to Positions in NUREG-0313

WNP-2 austenitic stainless steel pipe and fittings (Type 304) to which NUREG-0313 applies consist of the following:

- o the reactor recirculation (RRC) system loops,
- o the residual heat removal (RHR) system shutdown cooling suction and return lines from the RRC system loops to the inner containment isolation valve or check valves, and
- o the RRC to reactor water cleanup system interties.

Conformance to Parts II and III of NUREG-0313 is as follows:

Part II.1 Pipe and fittings conforming to the corrosion resistant guidelines in this part are the twelve (12) inch RRC return lines and the RRC bypass stubs. These components as-installed, with the exception of field welds, are in the solution annealed condition.

Part II.2 Field welds associated with the return lines and the stubs referred to above included corrosion resistant cladding, 308 material with a maximum carbon content of 0.028% and a minimum ferrite content of 8%, and standard 308 weld filler metal with a minimum of 8% ferrite. The weld preparation after cladding allowed only the cladding material to form the weld on the interior diameter, i.e., no material which may have become sensitized by the field weld and comes in contact with the reactor coolant has a carbon content greater than 0.028%.

Part III.1 See Parts II.1 and II.2 above for piping which conforms to Part II. The nonconforming RRC system piping is already installed. The nonconforming RHR system piping is presently being installed and scheduled for completion in September, 1978. As can be seen, WNP-2 conforms to Part II of NUREG-0313 to the extent practicable when considering schedule and the status of plant construction.

- Part III.2.A (1) The nonconforming, not servicesensitive, lines will be initially examined in accordance with ASME Section XI, Subsection IWB, at not more than 80 months after beginning commercial operation. The lines affected by this time interval are the RRC loops, excluding the twelve (12) inch return lines which conform to Parts II.1 and II.2.
- Part III.2.A (2) The reactor coolant leakage detection system is described in the FSAR in Sections 5.2.5 and 7.6.1.4.
- Part III.2.A (2a) The compliance with Reg. Guide 1.45 is discussed in Appendix C.2, pp C.2-39 through C.2-41 of the FSAR.
- Part III.2.A (2b) WNP-2 currently plans to comply with the BWR 5 Standard Technical Specification in this area as documented in NUREG-0123, Rev. 1, April 1, 1978, if practicable. These specifications reflect compliance with the position.
- Part III.2.A (2c) WNP-2 concurs with the definition of unidentified leakage. With respect to this and the current Rev. 1 of NUREG-0123, it should be noted that the drywell floor drain flow monitoring system does collect leakage from the drywell diaphragm floor seals. This leakage is not expected to be significant, however, and thus the floor drain system meets the intent of being the Primary Containment air cooler condensate flow rate monitoring system as stated in NUREG-0123.
- Part III.2.B The nonconforming, service sensitive, lines will be examined on a sampling basis (WNP-2 does not have RRC bypass lines) for three successive inspections, not exceeding the time duration between each of the first three refueling outages. Other convenient plant shutdowns may be used during this period for one or more of the examinations. The lines affected by this inspection interval are the austenitic stainless steel RHR shutdown cooling suction and return lines and the stagnated, short pipe spools that are associated with the RRC loops.

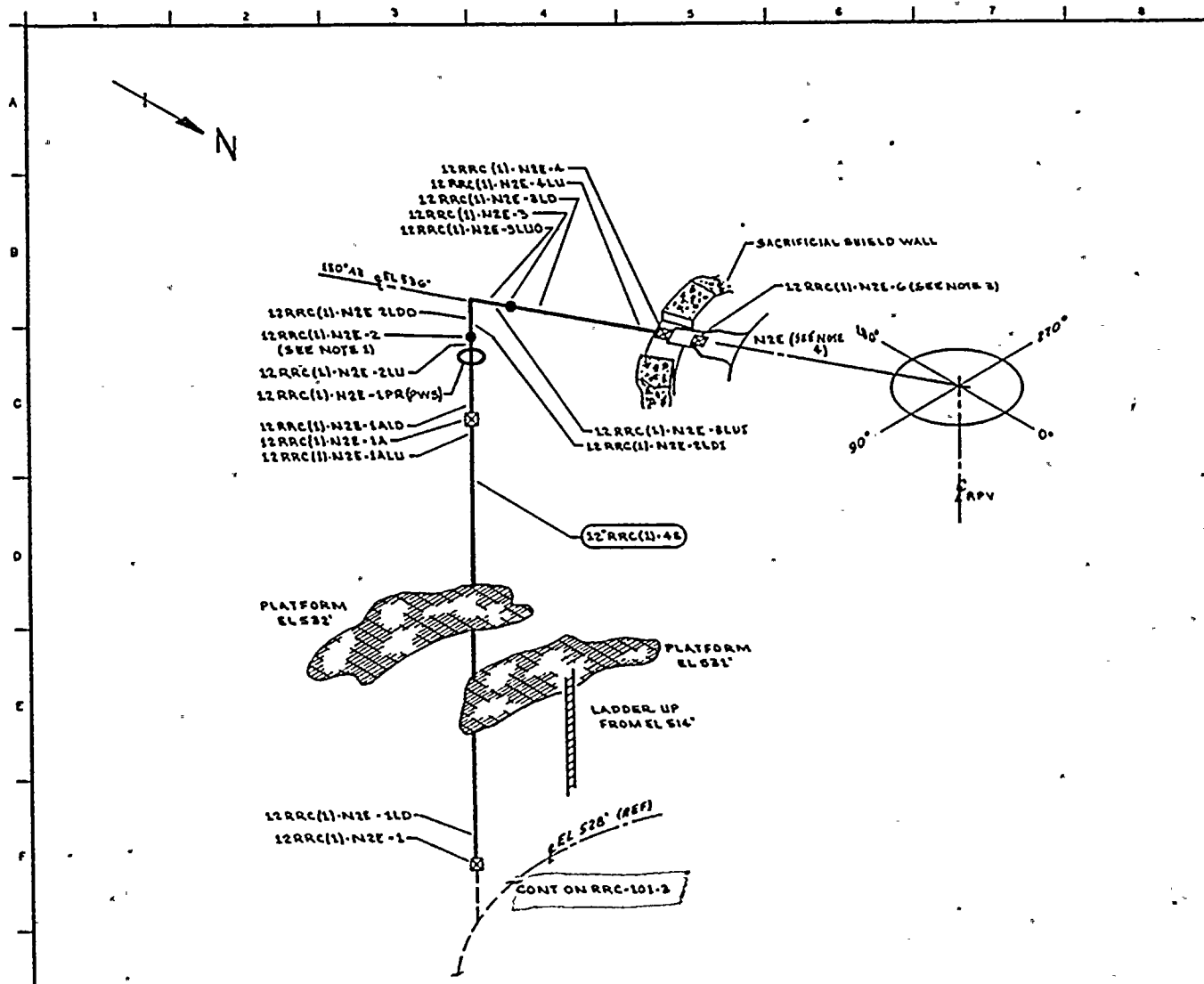
The reactor core spray piping is carbon steel and the RRC bypass stubs, as previously discussed, conform to Part II and therefore are not subject to this part: In the event no unacceptable indications are found in the three successive inspections for the service sensitive lines, the inspection interval shall revert to an 80 month period.

APPENDIX C

Inservice Inspection Drawings for
RRC and RHR Systems








- NOTES:
1. ACCESS TO WELD 12 RRC (1)-NZE-2 REQUIRES REMOVAL OF 12RRC(1)-NZE-1PR.
 2. DELETED
 3. WELD 12 RRC(1)-NZE-6 UTILIZES CAL BLOCK UT-111.
 4. FOR NOZZLE ASSEMBLY DETAILS SEE RPY-106

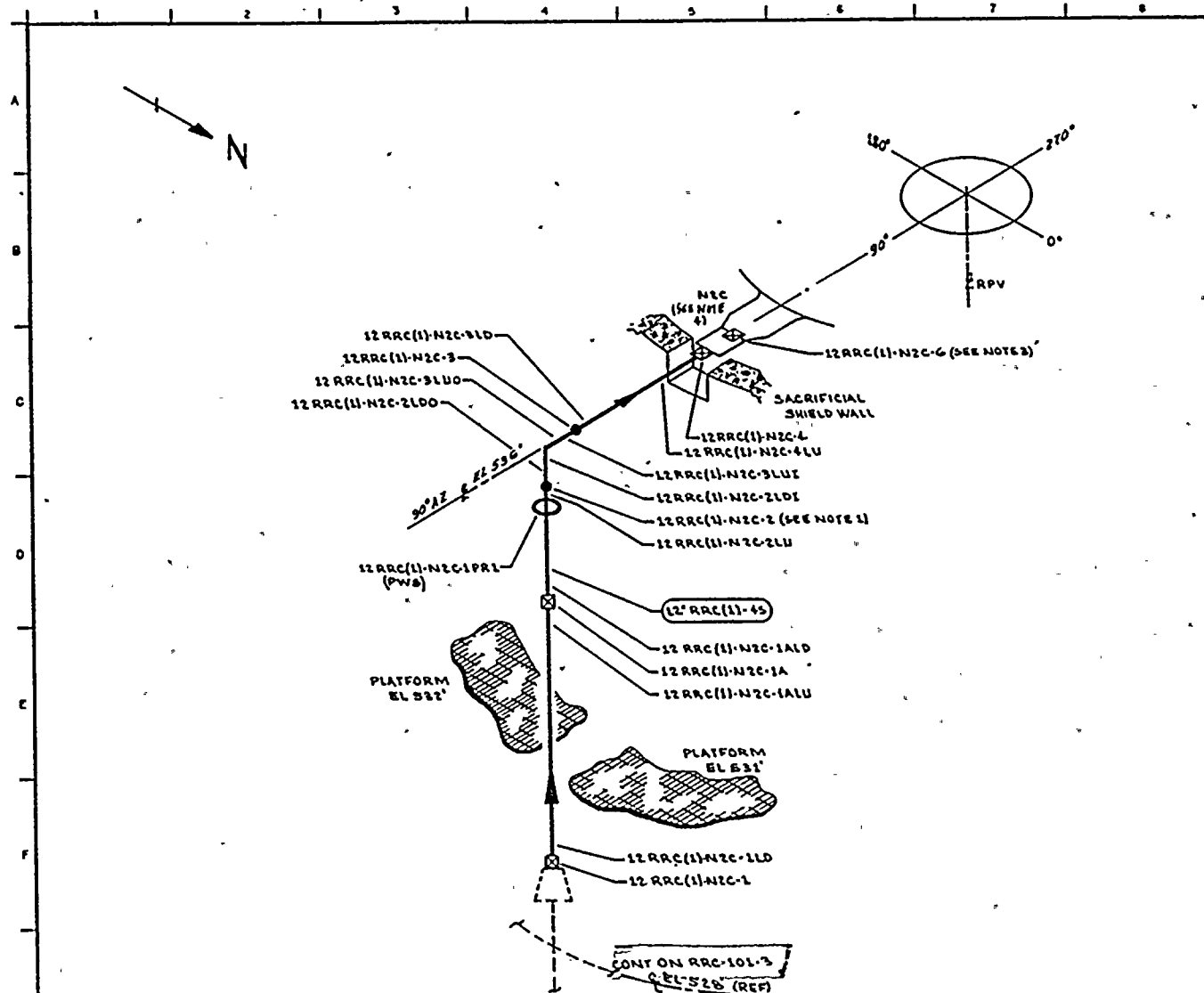
- REFERENCES:
- GENERAL ELECTRIC DRAWINGS
- 761 E 424 REV 2
 - 762 E 538 SH 1 REV 3
 - 762 E 838 SH 2 REV 3
 - 761 E 758 REV 6
- CBT NUCLEAR CO.
- 52, REV 10, N2 NOZZLE ASSEMBLY

QUALITY CLASS- 1		ASME CODE CLASS 1	
ENGR D TIMMINS	DRAWN X MCA	DATE: 4-4-78	
 WASHINGTON PUBLIC POWER SUPPLY SYSTEM BELLINGHAM, WASHINGTON 98222			
WNP-2 WELD 8 COMPONENT IDENTIFICATION DIAGRAM			
TITLE: REACTOR RECIRCULATION LOOP A			
DWG NO: RRC-101-4			REV 1

THIS DRAWING IS INTENDED FOR USE IN PRESERVICE AND INSERVICE INSPECTION PROGRAMS ONLY.

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12" RRC (1)-48	12	XXX	0.604	SA 358 QR 304 CLT	SL	UT-19

NO	DATE	REVISION	BY	CHKD	APPVD
1	7-17-79	REVISED RISE LITRADING FROM A TO E, ADDED NOTE 3, WELD 8, ADDED WELD 8 CAL BLOCK UT-111, PER ASME B31.1	VMA	JPB	JPB
0	11-27-78	ISSUED FOR USE	VMA	JPB	JPB
A	5-15-78	ISSUED FOR INFORMATION ONLY	VMA	JPB	JPB



NOTES:

1. ACCESS TO WELD 12 RRC(1)-N2C-2 REQUIRES REMOVAL OF 12 RRC(1)-N2C-1PR.
2. DELETED
3. WELD 12 RRC(1)-N2C-6 UTILIZES CAL BLOCK UT-111.
4. FOR NOZZLE ASSEMBLY DETAILS SEE RPV-106.

REFERENCES:

GENERAL ELECTRIC DRAWINGS

761 E 424 REV 2
762 E 538 SH1 REV 3
762 E 538 SH2 REV 3
761 E 785 REV 6

CBT NUCLEAR CO.
52, REV. 10, N2 NOZZLE ASSEMBLY

THIS DRAWING IS INTENDED FOR
USE IN PRESERVICE AND INSERVICE
INSPECTION PROGRAMS ONLY.

QUALITY CLASS: 1 ASME CODE CLASS 1
ENGR D TIMMINS DRAWN X-MCA DATE 4-4-78



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

PULMAN WASHINGTON 99122

WNP-2
WELD 8 COMPONENT
IDENTIFICATION DIAGRAM

TITLE:

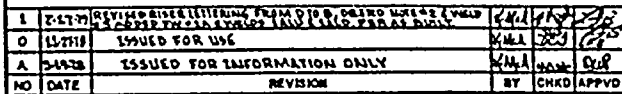
REACTOR RECIRCULATION LOOP A

DWG NO: RRC-101-G

REV 1

1	7-17-78	DELETED NOTE 2 & 3 WHICH WERE ADDED TO RRC-101-3	WNP-2	101-G	101-G
0	11-25-78	ISSUED FOR USE	WNP-2	101-G	101-G
A	4-4-78	ISSUED FOR INFORMATION ONLY	WNP-2	101-G	101-G
NO	DATE	REVISION	BY	CHKD	APPVD

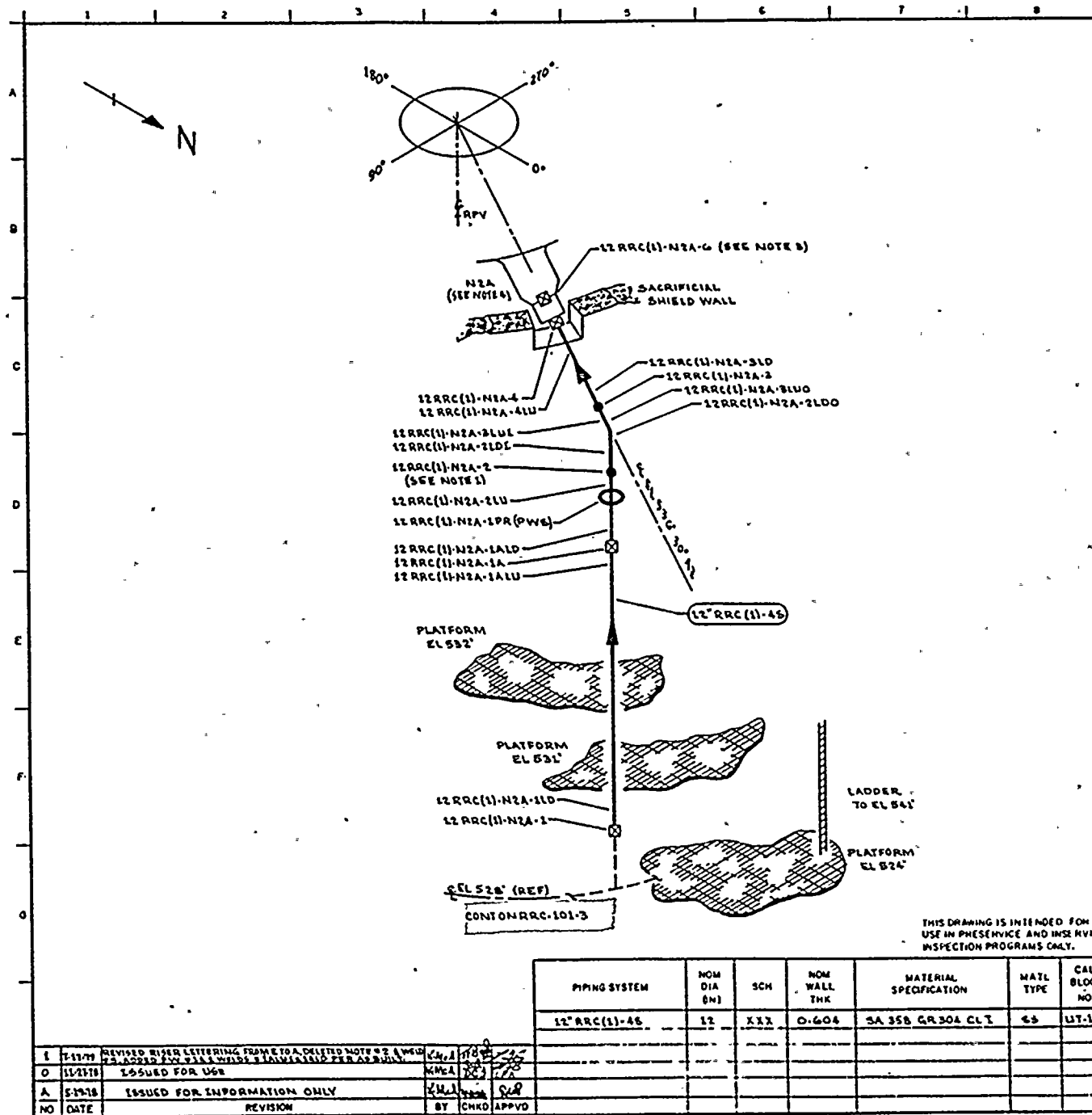
PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12 RRC(1)-45	12	XXX	0.604	SA 358 QR 304 CL1	2 1/2	UT-19



PIPING SYSTEM	NOM DIA (N)	SCM	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12" RRC(1)-45	12	XXX	0.604	SA358 GR304 CL1	S5	UT-19

REF ID: A62 645000.100 9102

REV 1



- NOTES:
1. ACCESS TO WELD 12RRC(1)-N2A-2 REQUIRES REMOVAL OF 12RRC(1)-N2A-1PR.
 2. DELETED
 3. WELD 12RRC(1)-N2A-6 UTILIZES CAL BLOCK UT-111.
 4. FOR NOZZLE ASSEMBLY DETAILS SEE RPV-106.

- REFERENCES:
- GENERAL ELECTRIC DRAWINGS
- 721 E 424 REV 2
 - 762 E 538 CH1 REV 3
 - 762 E 538 CH2 REV 3
 - 761 E 735 REV 6
- CDI NUCLEAR CO.
- 52, REV 10, N2 NOZZLE ASSEMBLY

QUALITY CLASS 1 ASME CODE CLASS 1

ENGR D TIMMING DRAWN K.M.A. DATE 4-4-78

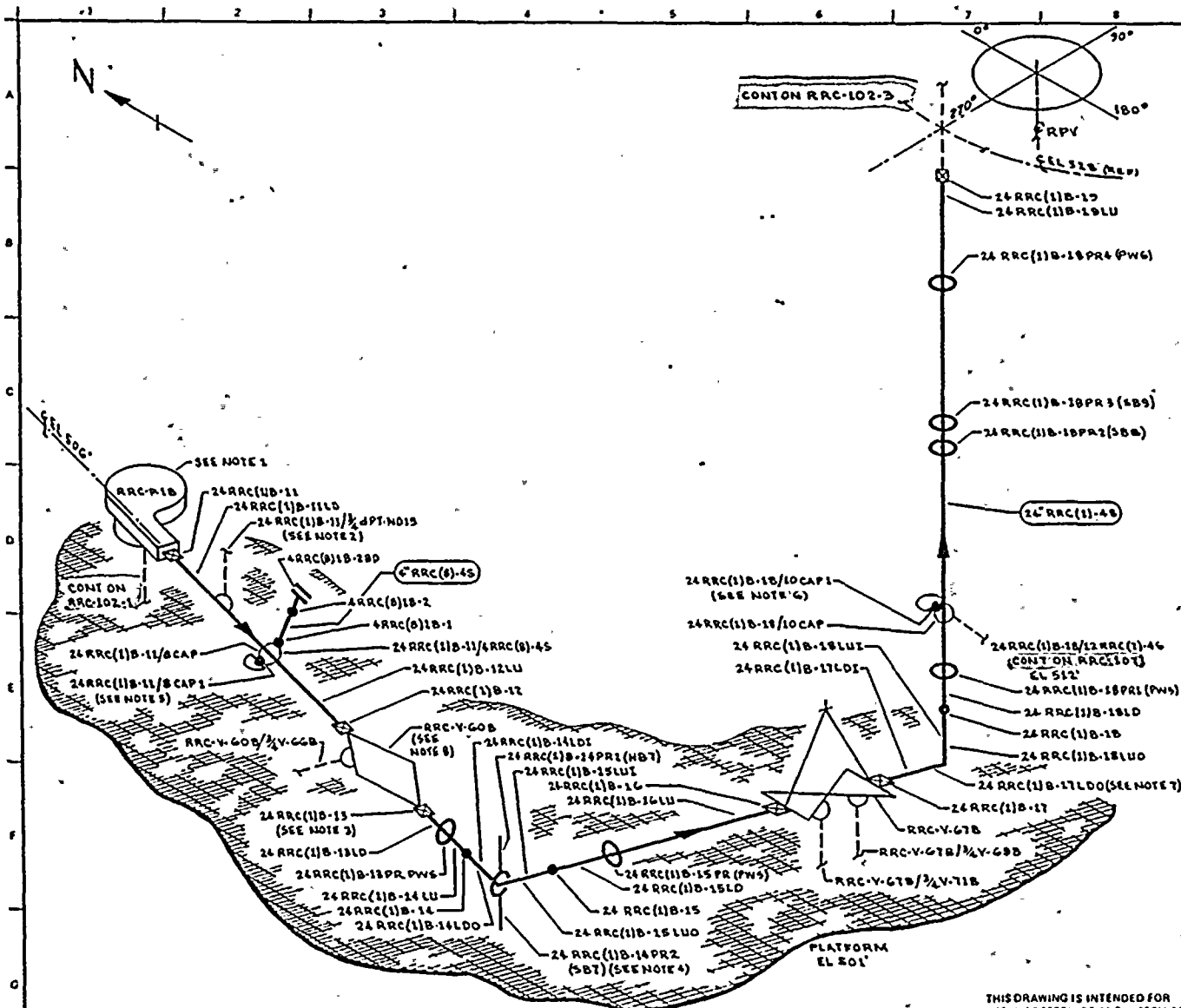
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

REACTOR RECIRCULATION LOOP A

WNP-2	
WELD COMPONENT IDENTIFICATION DIAGRAM	
TITLE:	
REACTOR RECIRCULATION LOOP A	
DWG NO: RRC-101-B	REV 1

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12" RRC(1)-45	12	XXX	0.604	SA 358 GR 304 CL 1	CS	UT-19

NO	DATE	REVISION	BY	CHKD	APPVD
1	7-17-77	REVISED RIVER LETTERING FROM ETOA DELETED NOTE #2 & WELD	CHJ	CHJ	CHJ
2	11-27-78	ISSUED FOR USE	CHJ	CHJ	CHJ
3	5-17-78	ISSUED FOR INFORMATION ONLY	CHJ	CHJ	CHJ



NOTES:

- SEE RRC-P-18 DETAIL DWG RRC-103 FOR PUMP SUPPORT DETAILS.
- EXTEND LEAKAGE EXAM THROUGH CONTAINMENT PENETRATION (X-41 d) THROUGH EXCESS FLOW CHECK VALVE TO INSTRUMENT TUBING CONNECTION.
- ACCESS TO WELD 24 RRC(1)B-13 REQUIRES REMOVAL OF 24 RRC(1)B-13 PR.
- SPECIAL CLAMP WITH HOT & CBT ATTACHMENTS.
- WELD 24 RRC(1)B-11/SCAP1 IS FITTING TO FITTING.
- WELD 24 RRC(1)B-18/LOCAP1 IS FITTING TO FITTING.
- WELD 24 RRC(1)B-17 IS FITTING TO FITTING.
- RRC-V-GOB HAS TWELVE (12) 2 1/2" X 15" BODY TO BONNET STUDS.

REFERENCES:

GENERAL ELECTRIC DRAWINGS

761 E 424	REV 2
762 E 538 BUL	REV 3
762 E 538 SH 2	REV 3
761 E 735	REV 6
131 C 7588	REV 3
131 C 7589	REV 5
131 C 7592	REV 3

QUALITY CLASS. 1

ASME CODE CLASS: 1

ENGR'D TIMMINGS

DRAWN: K. M. A.

DATE: 3-30-78



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

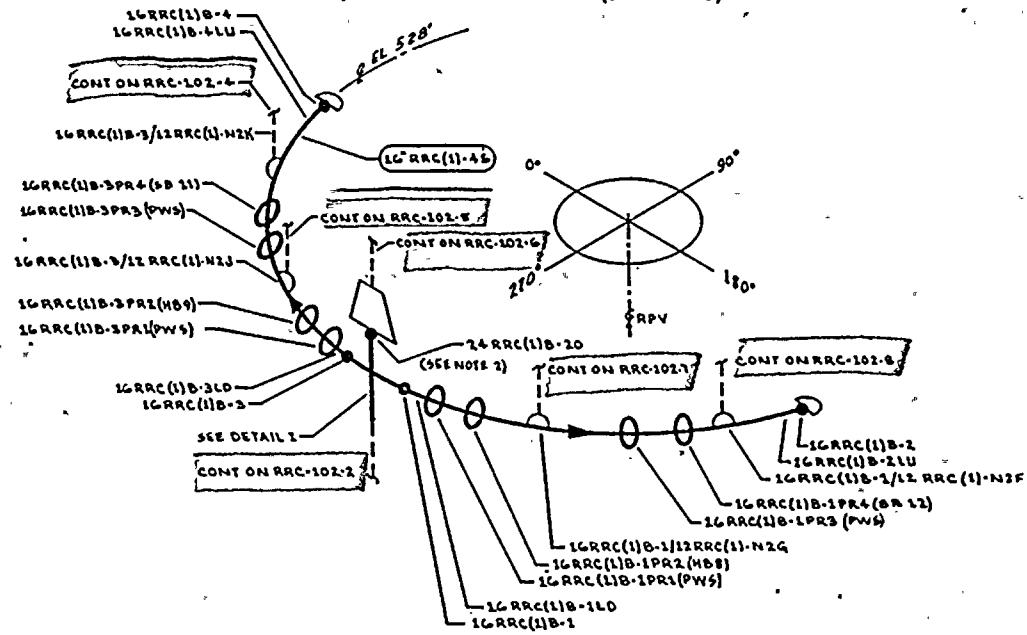
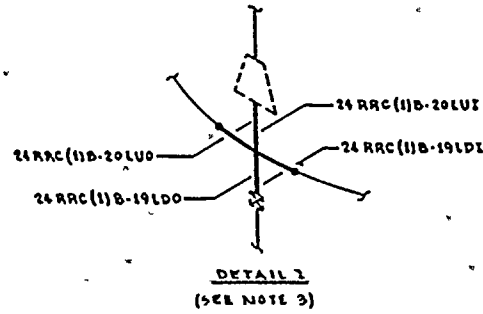
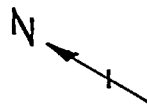
RELAND WASHINGTON 90382

THIS DRAWING IS INTENDED FOR
USE IN PRESERVICE AND INSERVICE
INSPECTION PROGRAMS ONLY

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
24 RRC(1)B-45	24	XXX	1.140	SA 358 GR 304 CL 1	54	UT-7
4 RRC(8)B-45	4	40	0.237	SA 376 TP 304	53	UT-21

WNP 2 WELD & COMPONENT IDENTIFICATION DIAGRAM
TITLE
REACTOR RECIRCULATION LOOP B
DWG NO: RRC-102.2
REV 1

1	7/17/79	RELOCATED ALTITUDE ORIENTATION FOR CLARITY, IN A-7	W. M. A.	24 87	7/17
0	11/21/78	ISSUED FOR USE	W. M. A.	24 87	11/21
A	5/14/78	ISSUED FOR INFORMATION ONLY	W. M. A.	24 87	5/14
NO	DATE	REVISION	BY	CHKD	APPRV



NOTES:

1. ACCESS TO WELDS 16 RRC (1)B-1 THRU 4 & 24 RRC (1)B-20 REQUIRES TEMPORARY SCAFFOLDING.
2. WELD 24 RRC (1)B-20 IS FITTING TO FITTING.
3. LONGITUDINAL WELDS ON CROSS LOCATED INBOARD & OUTBOARD, IN RESPECT TO THE RPV, ARE 90° FROM HEADER CONNECTIONS.

REFERENCES:

GENERAL ELECTRIC DRAWINGS		
761 E 424	REV 2	
762 E 538 SH 1	REV 3	
762 E 538 SH 2	REV 3	
761 E 735	REV 6	
131 C 7450	REV 1	

QUALITY CLASS 1	ASME CODE CLASS 1
ENGR D TIMMINS	DRAWN K/M/LA
	DATE 3-30-78

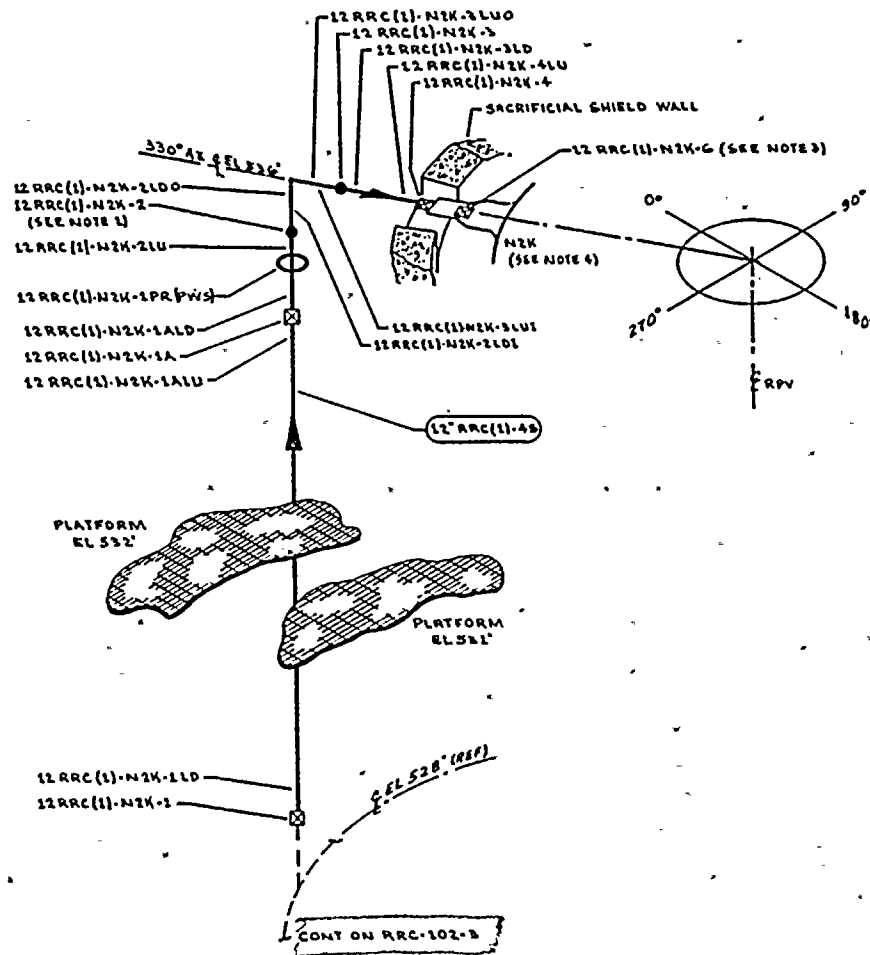
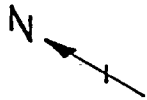


WNP-2 WELD & COMPONENT IDENTIFICATION DIAGRAM	
TITLE:	REACTOR RECIRCULATION LOOP B
DWG NO: RRC-102-3	REV 1

THIS DRAWING IS INTENDED FOR
USE IN PRESERVE AND INSERVICE
INSPECTION PROGRAMS ONLY.

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
24" RRC (1)B-45	24	XXX	1.140	SA 358 GR 304 CL1	SS	UT-7
16" RRC (1)B-45	16	XXX	0.758	SA 358 GR 304 CL1	SS	UT-13

NO	DATE	REVISION	BY	CHKD	APPVD
1	3-11-78	REVISED LETTERING TO REFLECT AS BUILT, REVISED CAP	K/M/LA	JH	
0	11-27-78	ISSUED FOR USE	K/M/LA	JH	
A	5-19-78	ISSUED FOR INFORMATION ONLY	K/M/LA	JH	



NOTES:

1. ACCESS TO WELD 12 RRC(1)-N2K-2 REQUIRES REMOVAL OF 12 RRC(1)-N2K-1PR.
2. DELETED
3. WELD 12 RRC(1)-N2K-6 UTILIZES CAL BLOCK UT-115.
4. FOR NOZZLE ASSEMBLY DETAILS SEE RPV-106.

REFERENCES:

GENERAL ELECTRIC DRAWINGS

761 E 424 REV 2
762 E 538 6H1 REV 3
762 E 538 6H2 REV 5
761 E 735 REV 6

CBT NUCLEAR CO.

S2, REV 10, N2 NOZZLE ASSEMBLY

QUALITY CLASS 1 ASME CODE CLASS 1
ENGR D TIMMINS DRAWN V. McLA DATE 3-31-78



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

WNP-2
WELD B COMPONENT
IDENTIFICATION DIAGRAM

TITLE:

REACTOR RECIRCULATION LOOP B

Doc No RRC-102-4

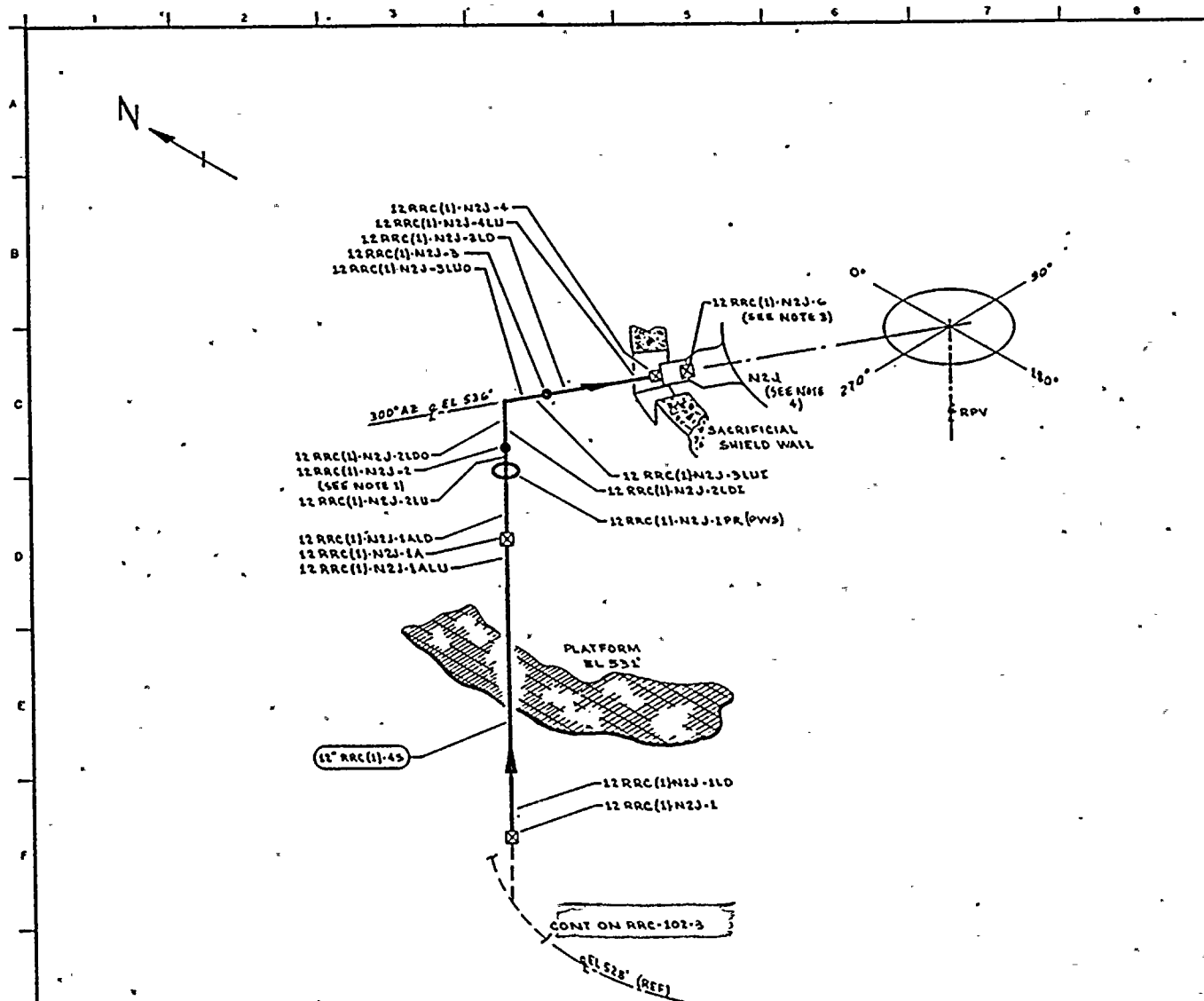
REV 1

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INSPECTION PROGRAMS ONLY.

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12 RRC(1)-45	12	XXX	0.604	SA 350, GR 304 CLT	CS	UT-19

1	7-17-79	REVISED AFTER CLIPPING FROM 10X, DELETED NOTE #1 & 2, ADDED #3, ADDED SW 12 RRC(1)-N2K-1ALD AS BUILT	KMLA	AB	275
0	11-7-78	ISSUED FOR USE	KMLA	64	236
A	5-19-78	ISSUED FOR INFORMATION ONLY	KMLA	255	216
NO	DATE	REVISION	BY	CHKD	APPVD





NOTES:

1. ACCESS TO WELD 12 RRC(1)-N2J-2 REQUIRES REMOVAL OF 12 RRC(1)-N2J-1PR.
2. DELETED
3. WELD 12 RRC(1)-N2J-6 UTILIZES CAL BLOCK UT-111.
4. FOR NOZZLE ASSEMBLY DETAILS SEE RPV-106.

REFERENCES:

GENERAL ELECTRIC DRAWINGS

- 761 E 424 REV 2
- 762 E 538 SH 1 REV 3
- 762 E 538 SH 2 REV 3
- 761 E 735 REV 6

CBI NUCLEAR CO.

52, REV 10, N2 NOZZLE ASSEMBLY.

QUALITY CLASS: 1

ASME CODE CLASS 1

ENGR D TIMMINS

DRAWN K MCA

DATE 3-31-78



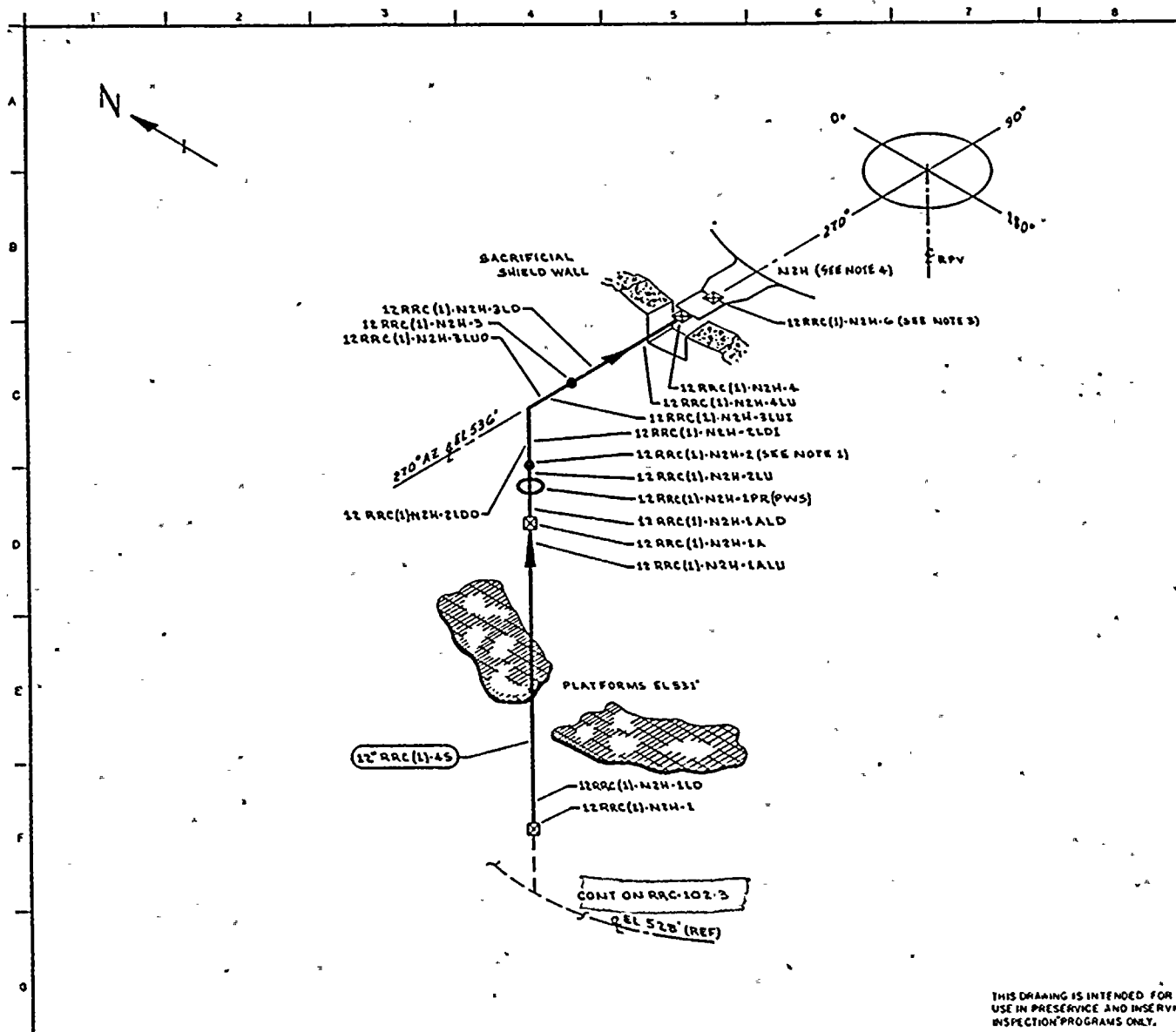
WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

REF: WPPSS WASHINGTON 79-02

THIS DRAWING IS INTENDED FOR
USE IN PRESERVICE AND INSERVICE
INSPECTION PROGRAMS ONLY

NO	DATE	REVISION	BY	CHKD	APPVD	PIPING SYSTEM	NOM DIA (IN)	SCM	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
1	7-17-79	REVISED RISK (ENTERING FROM C-101) DELETED NOTE #2	KML	RE	226	12" RRC(1)-45	12	XXX	0.604	SA 358 GR 304 CL 1	SS	UT-19
0	11-23-78	ISSUED FOR USE	KML	RE	226							
A	5-19-78	ISSUED FOR INFORMATION ONLY	KML	DCJ	800							

WNP-2 WELD 8 COMPONENT IDENTIFICATION DIAGRAM
TITLE: REACTOR RECIRCULATION LOOP B
DWG NO RRC-102-5



- NOTES:
1. ACCESS TO WELD 12 RRC (1) N2H-2 REQUIRES REMOVAL OF 12 RRC (1) N2H-1PR.
 2. DELETED
 3. WELD 12 RRC (1) N2H-6 UTILIZES CAL BLOCK UT-111.
 4. FOR NOZZLE ASSEMBLY DETAILS SEE RRV-106.

- REFERENCES
- GENERAL ELECTRIC DRAWINGS
- 761 E 424 REV 2
 - 762 E 558 SH1 REV 2
 - 762 E 558 SH2 REV 3
 - 761 E 735 REV 6
- CB&I NUCLEAR CO.
- 52, REV 10, N2 NOZZLE ASSEMBLY

QUALITY CLASS 1 ASME CODE CLASS 1

ENGR: D. TIMMINS DRAWN: V. McLA DATE: 3-31-78

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

THIS DRAWING IS INTENDED FOR USE IN PRESERVICE AND INSERVICE INSPECTION PROGRAMS ONLY.

				PIPE SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO	WNP-2 WELD & COMPONENT IDENTIFICATION DIAGRAM	
				12" RRC (1) 45	12	XXX	0.604	SA 358 GR 304 CL1	SS	UT-19		
1	7-17-79	DELETED NOTE #2 & WELD #3. ADDED TYPED WELD #1 & WELD #4. WELD #4 IS A 1/2" DIA. TYPED AS QUANTITY NOTE 1.	W. McLA	FOR							TITLE:	
0	11-17-78	ISSUED FOR USE	W. McLA	FOR							REACTOR RECIRCULATION LOOP B	
A	5-15-78	ISSUED FOR INFORMATION ONLY	W. McLA	FOR							DWG NO. RRC-102-G	
NO	DATE	REVISION	BY	CHKD	APPRD	REV						

TITLE:

REACTOR RECIRCULATION LOOP B

DWG NO: RRC-102-6

REV:



1. ACCESS TO WELD 12RRC(1)-N2G-2 REQUIRES REMOVAL OF 12RRC(1)-N2G-1PR.
2. DELETED
3. WELD 12RRC(1)-N2G-6 UTILIZES CAL BLOCK UT-111.
4. FOR NOZZLE ASSEMBLY DETAILS SEE RPV-106.

REFERENCES:

GENERAL ELECTRIC DRAWINGS

761 E 424 REV 2
762 E 538 SH 1 REV 3
762 E 538 SH 2 REV 3
761 E 735 REV 6

CBI NUCLEAR CO.

52, REV 10, N2 NOZZLE ASSEMBLY

QUALITY CLASS. 1		ASME CODE CLASS 1	
ENGR'D TIMMINS	DRAWN K. M. A.	DATE: 3-31-78	



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

આચાર્યશ્રીના આગ્રહથી આ પુસ્તક લખવામાં આવ્યું છે.

WNP-2
WELD & COMPONENT
IDENTIFICATION DIAGRAM

TITLE

REACTOR RECIRCULATION LOOP B

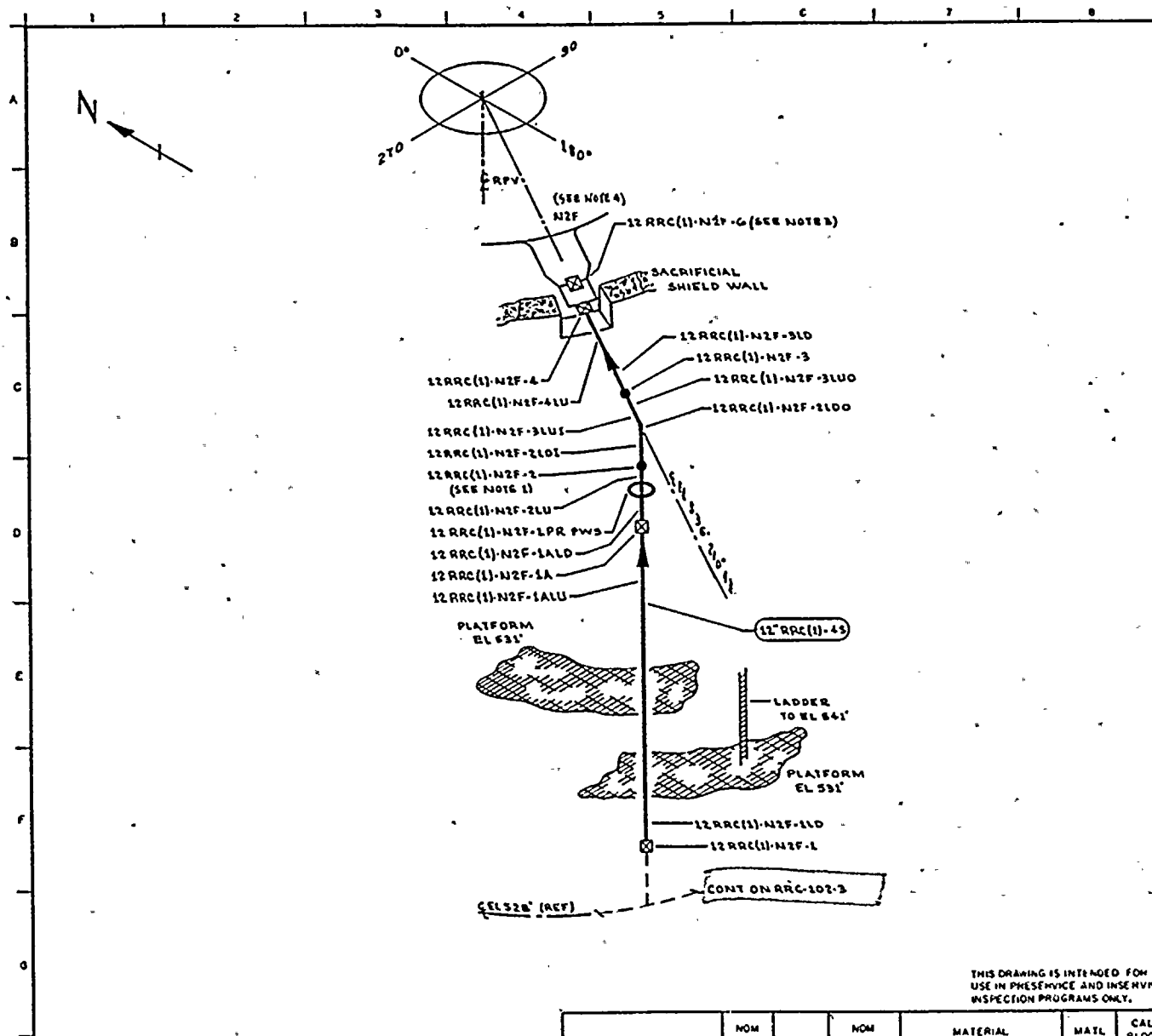
DWG NO RRC-102-7

MEY I

THIS DRAWING IS INTENDED FOR
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INSPECTION PROGRAMS ONLY.

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12" PRC (LI-48)	12	XXX	0.604	SA 358 GR 304 CL 1	SS	UT-19

I	17179	REVISED LETTERING FROM 1104, DISTED WELD P.S. (NOTE P.S. REVERSED & S.A. S.W.D.S. IS ALMA TIAID P.S.G. UNIT.	K/M	168	15
O	17178	ISSUED FOR USE	K/M	168	36
A	51918	ISSUED FOR INFORMATION ONLY	K/M	168	Dub
NO	DATE	REVISION	BY	CHKD APPV	



NOTES:

1. ACCESS TO WELD 12RRC(1)-N2F-2 REQUIRES REMOVAL OF 12RRC(1)-N2F-1PR.
2. DELETED
3. WELD 12RRC(1)-N2F-6 UTILIZES CAL BLOCK UT-111.
4. FOR NOZZLE ASSEMBLY DETAILS SEE RRV-106.

REFERENCES:

GENERAL ELECTRIC DRAWINGS

761 E 424 REV 2
762 E 538 SH 1 REV 3
762 E 538 SH 2 REV 3
761 E 135 REV 6

CEI NUCLEAR CO

S2, REV 10, N2 NOZZLE ASSEMBLY

THIS DRAWING IS INTENDED FOR
USE IN PRESENCE AND INSERVICE
INSPECTION PROGRAMS ONLY.

QUALITY CLASS 1 ASME CODE CLASS 1
ENGR D TIMMINS DRAWN K.M.A DATE 4-3-76



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

WNP 2
WELD 8 COMPONENT
IDENTIFICATION DIAGRAM

TITLE

REACTOR RECIRCULATION LOOP B

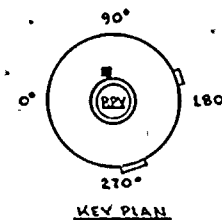
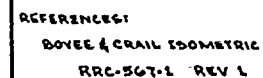
DWG NO. RRC-102-B

REV 1

NO	DATE	REVISION	BY	CHKD	APPVD	PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
1	1-15-76	ISSUED FOR USE	K.M.A.	W.A.	W.A.	12" RRC(1)-43	12	XXX	0.604	SA 358 GR 304 CL 1	SS	UT-19
2	1-15-76	ISSUED FOR USE	K.M.A.	W.A.	W.A.							
3	1-15-76	ISSUED FOR INFORMATION ONLY	K.M.A.	W.A.	W.A.							
4	1-15-76	ISSUED FOR INFORMATION ONLY	K.M.A.	W.A.	W.A.							
5	1-15-76	ISSUED FOR INFORMATION ONLY	K.M.A.	W.A.	W.A.							







QUALITY CLASS 2	ASME CODE CLASS 2
ENGR D TIMMING	DRAWN K. McH
	DATE 9-15-78



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

Math. Proc. Camb. Phil. Soc. 100 (1986), 101-110.

WNP-2
WILD & COMPONENT
IDENTIFICATION DIAGRAM

TITLE. - RHR SHUTDOWN COOLING RETURN
TO RRC LOOP A

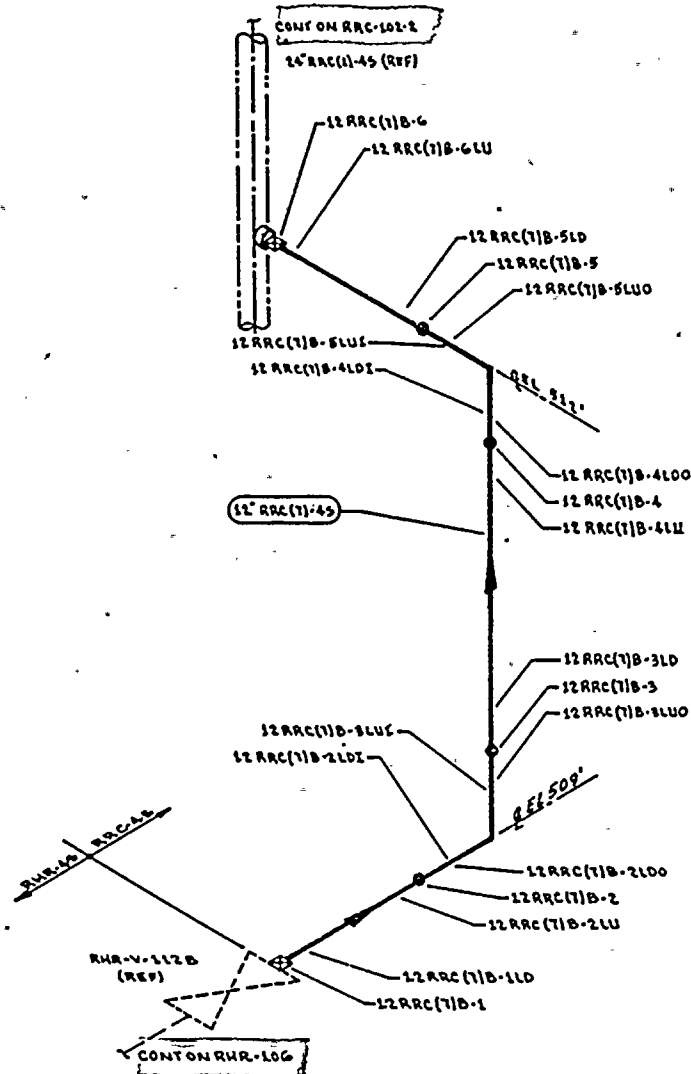
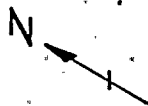
DWG NO RRC-LOG

THIS DRAWING IS INTENDED FOR
USE IN PRESERVICE AND INSERVICE
INSPECTION PROGRAMS ONLY.

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	WELL TYPE	CAL BLOCK NO
12" RAC (TJ)-45	12	80	0.687	SA 258 GR 204	SS	UT-19

0	11-27-11	ISSUED FOR USE	AKA	DR	LAG
A	10-24-10	ISSUED FOR INFORMATION ONLY	AKA	RU	WIK
NO	DATE	REVISION	BY	CHKD	APPROV





THIS DRAWING IS INTENDED FOR
USE IN PRESEVICE AND INSEVICE
INSPECTION PROGRAMS ONLY.

REFERENCES:
BOYER & CHAIL ISOMETRIC
RRC-8GB-1 REV 1

QUALITY CLASS 1 ASME CODE CLASS 1
ENGR D WARRING DRAWN V. M. L. DATE 9-13-78



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM
AN INDEPENDENT CORPORATION

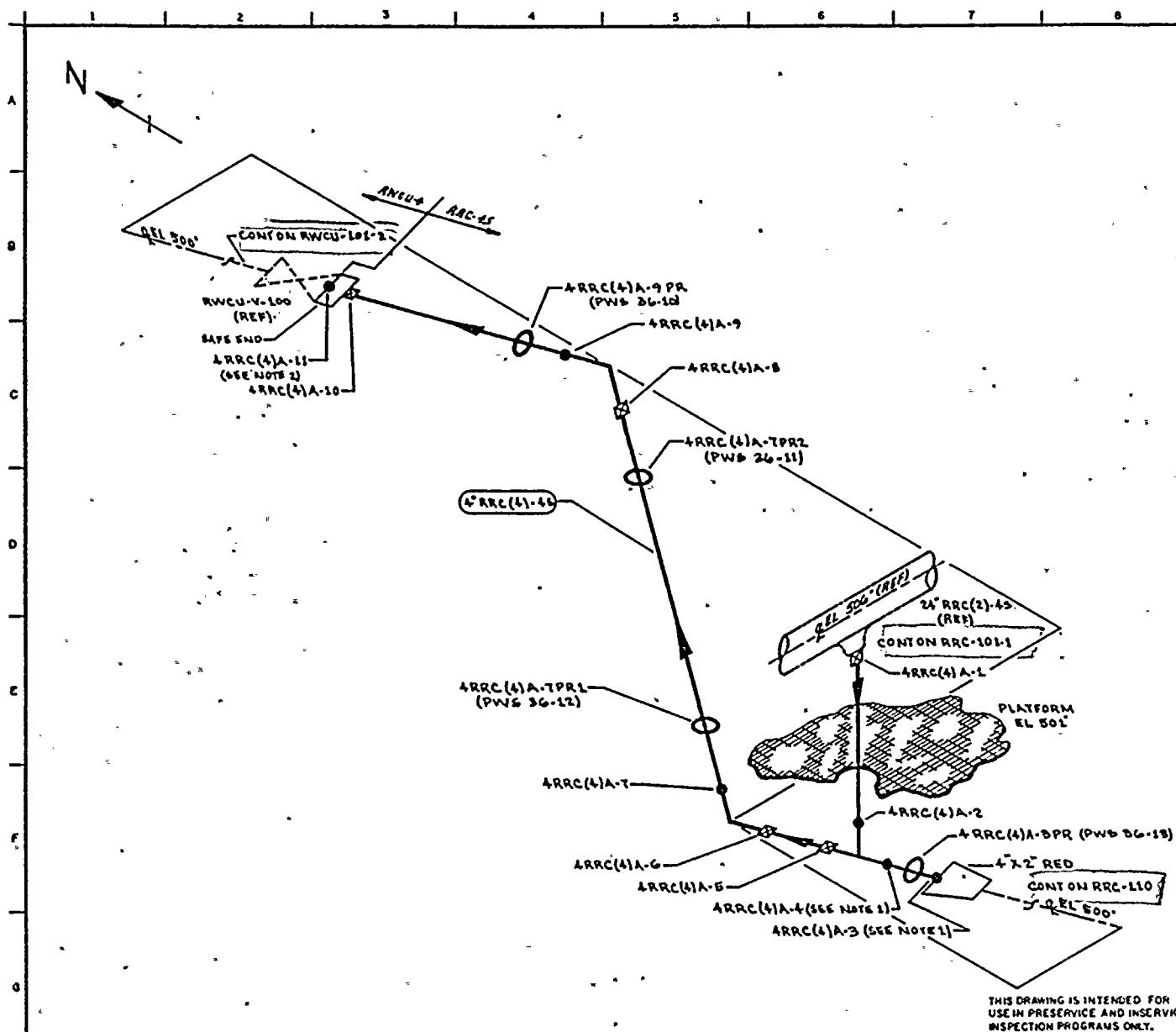
WNP-2
WELD 8 COMPONENT
IDENTIFICATION DIAGRAM

TITLE:
RHR SHUTDOWN COOLING RETURN
TO RRC LOOP B

DWG: RRC-107

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
12 RRC(1)B-45	12	80	0.687	SA 358 GR 304	SS	UT-19

0	11/15/78	ISSUED FOR USE	CMH	OK	1/26
1	10/28/78	ISSUED FOR INFORMATION ONLY	CMH	OK	2/28
NO	DATE	REVISION	BY	CHKD	APPROV



NOTES:

1. ACCESS TO WELDS 4RRC(4)A-3 & 4RRC(4)A-4 REQUIRES REMOVAL OF 4RRC(4)A-3PR.
2. DISSIMILAR METAL WELD, CS TO SS, USE CAL BLOCK UT-29.

REFERENCED:

BOVEE & CRAIG ISOMETRIC
RRC-506-1 REV B

QUALITY CLASS: 1 ASME CODE CLASS 1
ENGR D TIMMING DRAWN: K. MCA DATE: 7-25-78



WASHINGTON PUBLIC POWER
SUPPLY SYSTEM

RICHMOND WASHINGTON 98074

WNP-2
WELD & COMPONENT
IDENTIFICATION DIAGRAM

TITLE:
RWCU INTER-TIE TO RRC LOOP A

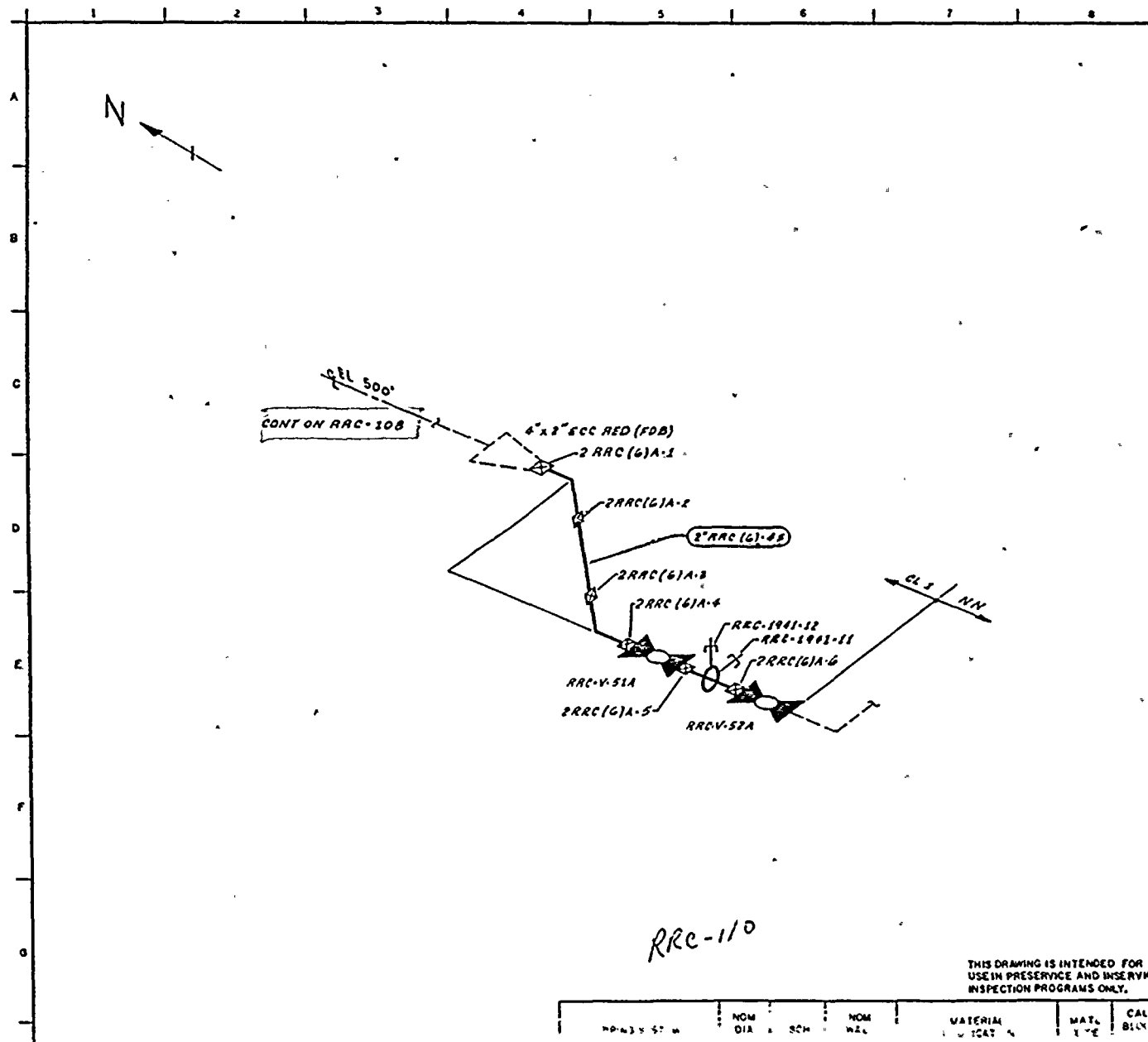
DWG NO RRC-108

0	11-14-78	ISSUED FOR USE	K. MCA	W. J. D.	J. L. D.
A	9-22-78	ISSUED FOR INFORMATION ONLY	V. L. D.	D. J. D.	D. J. D.
NO	DATE	REVISION	BY	CHKD	APPRO

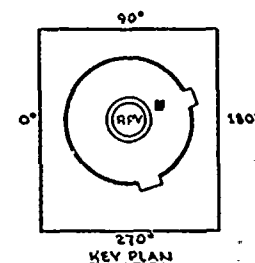
PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
4\" RRC(4)A-5	4	80S	0.337	SA 312 TP 304	SS	UT-29

THIS DRAWING IS INTENDED FOR
USE IN PRESERVICE AND INSERVICE
INSPECTION PROGRAMS ONLY.





REFERENCES:
 WSH/BOCON/QPRT ISOMETRIC
 RRC-1966-1 REV 3



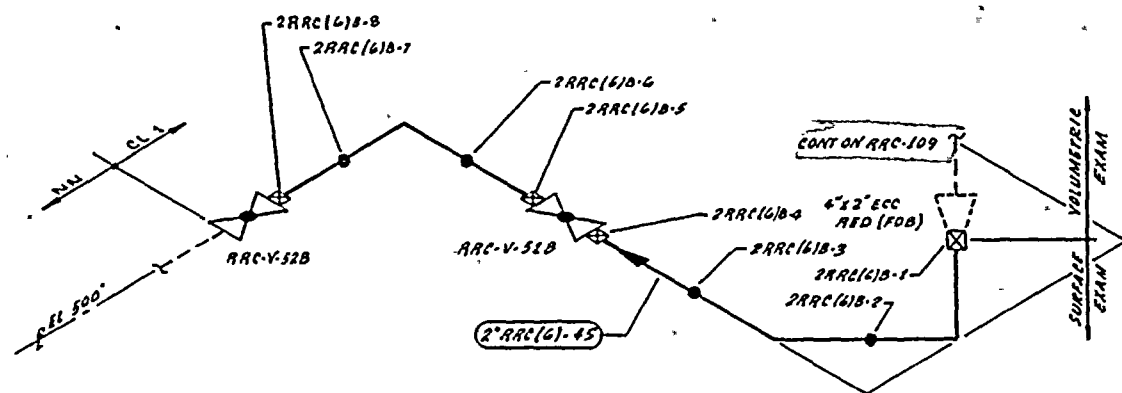
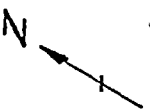
QUALITY CLASS: 1	ASME CODE CLASS: 1
ENGR: D. JIMMINS	DRAWN: K. McR DATE: 2-27-79

**WASHINGTON PUBLIC POWER
 SUPPLY SYSTEM**
 RICHMOND WASHINGTON 98302

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 INSPECTION PROGRAMS ONLY.

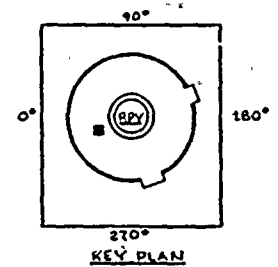
NO.	DATE	NOM.	NOM.	MATERIAL	MATL.	CAL.
1	10-13-77	DIA	SCM	WEL	TYPE	BLK





REFERENCES:

WSH/DOCON/GERI ISOMETRIC
RRC-4470-3 REV 2



QUALITY CLASS: CL 1 ASME CODE CLASS: CL 1
ENGR: D. TIMMONS DRAWN: K. H. A. DATE: 8-27-79



**WASHINGTON PUBLIC POWER
SUPPLY SYSTEM**
RICHLAND, WASHINGTON 99362

THIS DRAWING IS INTENDED FOR
USE IN PRESERVICE AND INSERVICE
INSPECTION PROGRAMS ONLY.

PIPING SYSTEM	NOM DIA (IN)	SCH	NOM WALL THK	MATERIAL SPECIFICATION	MATL TYPE	CAL BLOCK NO
2" RRC (6) 45	2	80S	0.218	SA 312 TP 304	SS	NA

WNP-2
WELD & COMPONENT
IDENTIFICATION DIAGRAM

TITLE:
RRC LOOP B DRAIN

NO	DATE	ISSUED FOR USE	REVISION	BY	CHKD	APPROV
1	7/1/79	ISSUED FOR USE				

DWG NO: **RRC-511** REV 0

