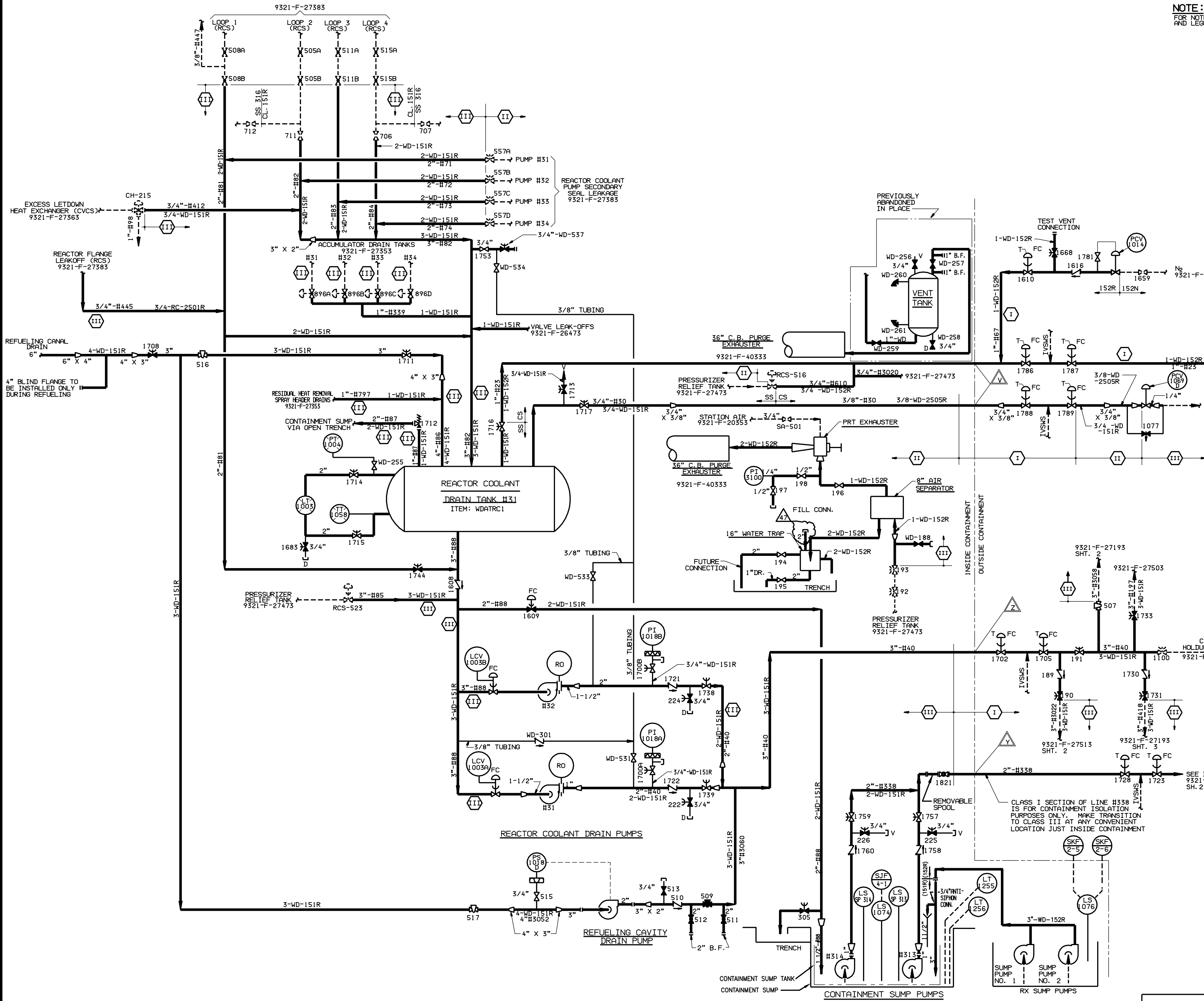


NOTE:
FOR NOTES, REFERENCES, REFERENCE DRAWINGS
AND LEGENDS, SEE 9321-F-27193, SH. 3.



THIS IS A COMPUTER AIDED DESIGN DRAWING. A RECORD OF THE REVISIONS OF THIS DRAWING WITH APPROVAL INITIALS/DATE IS MAINTAINED IN THE FILES OF ENTERTY NUCLEAR NORTHWEST CONFIGURATION MANAGEMENT & ENGINEERING PROGRAMS.

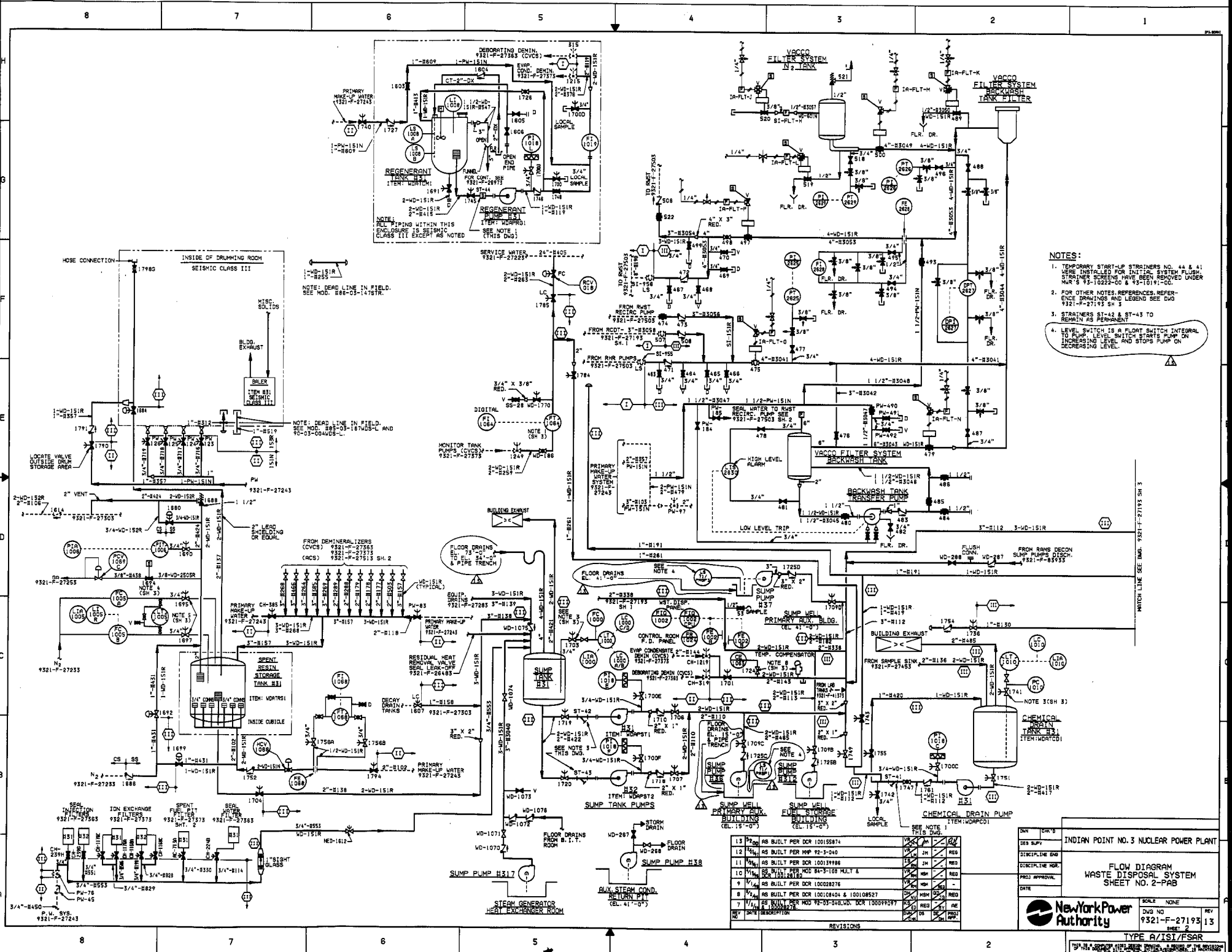
DESIGN	CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT
DES SUPV		
DISCIPLINE ENG		
DISCIPLINE DIR		
PROJ APPROVAL		
DATE		FLOW DIAGRAM WASTE DISPOSAL SYSTEM SHEET NO. 1-CONTAINMENT

SCALE	NONE
DWG NO	9321-F-27193
REV	47
SHEET 1	



47	INCORPORATED EC-5000021973	9/02/10	DM	APPROVAL SIGNATURES ON FILE
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TYPE A/ISI/FSAR



- NOTES:**
1. TEMPORARY START-UP STRAINERS NO. 44 & 41 WERE INSTALLED FOR INITIAL SYSTEM FLUSH. 3 STRAINER SCREENS HAVE BEEN REMOVED UNDER MUR'S 93-10222-00 & 93-10191-00.
 2. FOR OTHER NOTES, REFERENCES, REFERENCE DRAWINGS AND LEGEND SEE DWG 9321-F-27193 SH 3.
 3. STRAINERS ST-42 & ST-43 TO REMAIN AS PERMANENT.
 4. LEVEL SWITCH IS A FLOAT SWITCH INTEGRAL TO PUMP. LEVEL SWITCH STARTS PUMP ON INCREASING LEVEL AND STOPS PUMP ON DECREASING LEVEL.

NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D
13	08/08/83	AS BUILT PER DCR 100155874	...	...	...
12	08/08/83	AS BUILT PER MFP 92-3-040	...	...	...
11	08/08/83	AS BUILT PER DCR 100137986	...	...	...
10	08/08/83	AS BUILT PER MFD 84-3-108 MULT & ...	...	...	...
9	08/08/83	AS BUILT PER DCR 100028276	...	...	...
8	08/08/83	AS BUILT PER DCR 100108404 & 100108527	...	...	...
7	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...
6	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...
5	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...
4	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...
3	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...
2	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...
1	08/08/83	AS BUILT PER DCR 100034040, DCR 100009297	...	...	...

INDIAN POINT NO. 3 NUCLEAR POWER PLANT

FLOW DIAGRAM
WASTE DISPOSAL SYSTEM
SHEET NO. 2-PAB

SCALE: NONE

REV: 9321-F-27193 13

DATE: _____

APPROVAL: _____

DESIGN: _____

DISCIPLINE: _____

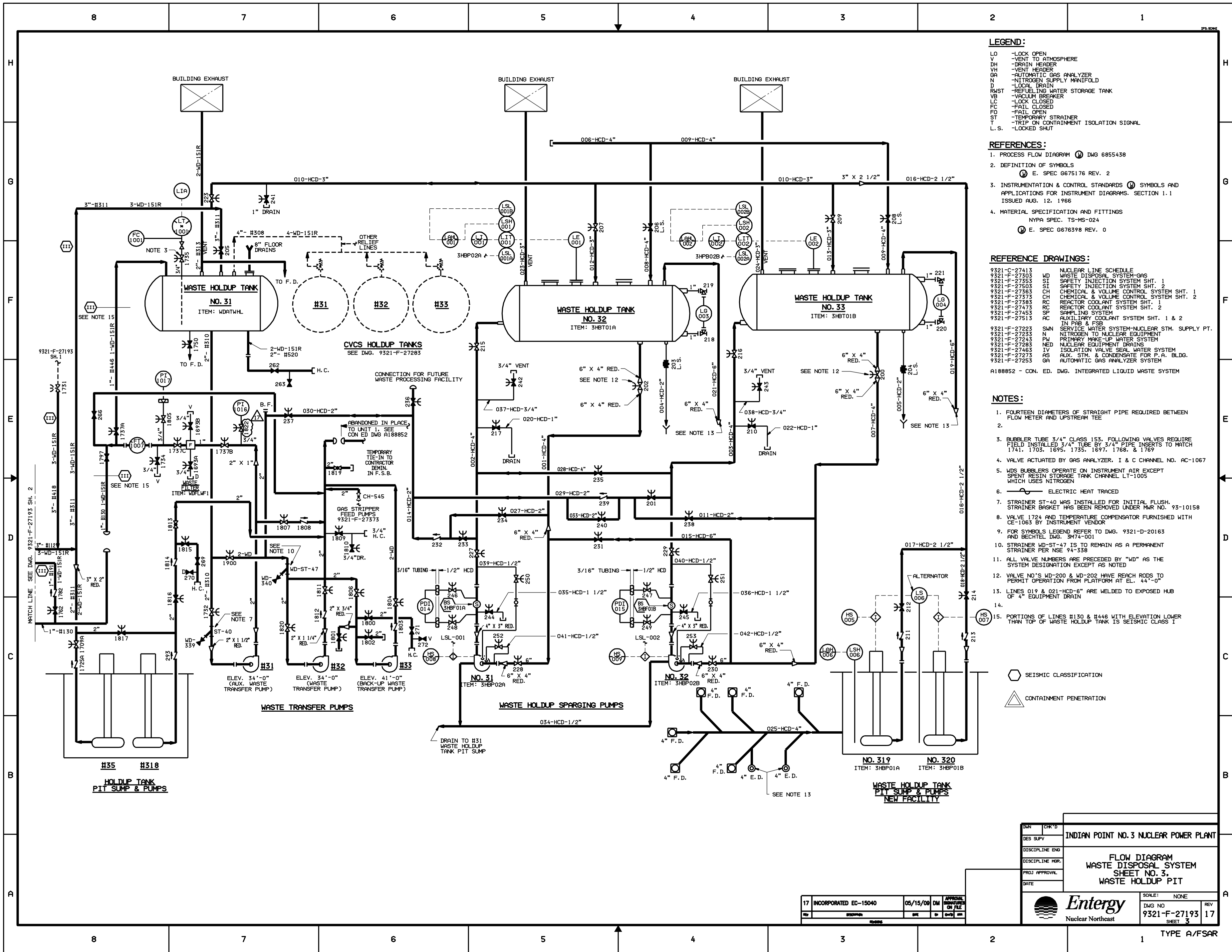
DISCIPLINE MGR: _____

PROJ APPROVAL: _____

DATE: _____

New York Power Authority

TYPE A/ISI/FSAR



LEGEND:

- LO - LOCK OPEN
- V - VENT TO ATMOSPHERE
- DH - DRAIN HEADER
- VH - VENT HEADER
- GA - AUTOMATIC GAS ANALYZER
- N - NITROGEN SUPPLY MANIFOLD
- D - LOCAL DRAIN
- RWST - REFUELING WATER STORAGE TANK
- VB - VACUUM BREAKER
- LC - LOCK CLOSED
- FC - FAIL CLOSED
- FO - FAIL OPEN
- ST - TEMPORARY STRAINER
- T - TRIP ON CONTAINMENT ISOLATION SIGNAL
- L.S. - LOCKED SHUT

REFERENCES:

1. PROCESS FLOW DIAGRAM DWG 6855438
2. DEFINITION OF SYMBOLS
E. SPEC G675176 REV. 2
3. INSTRUMENTATION & CONTROL STANDARDS SYMBOLS AND APPLICATIONS FOR INSTRUMENT DIAGRAMS. SECTION 1.1 ISSUED AUG. 12, 1966
4. MATERIAL SPECIFICATION AND FITTINGS
NYPA SPEC. TS-MS-024
E. SPEC G676398 REV. 0

REFERENCE DRAWINGS:

- 9321-C-27413 NUCLEAR LINE SCHEDULE
- 9321-F-27303 WD WASTE DISPOSAL SYSTEM-GAS
- 9321-F-27353 ST SAFETY INJECTION SYSTEM SHT. 1
- 9321-F-27503 ST SAFETY INJECTION SYSTEM SHT. 2
- 9321-F-27363 CH CHEMICAL & VOLUME CONTROL SYSTEM SHT. 1
- 9321-F-27373 CH CHEMICAL & VOLUME CONTROL SYSTEM SHT. 2
- 9321-F-27383 RC REACTOR COOLANT SYSTEM SHT. 1
- 9321-F-27473 RC REACTOR COOLANT SYSTEM SHT. 2
- 9321-F-27453 SP SAMPLING SYSTEM
- 9321-F-27513 RC AUXILIARY COOLANT SYSTEM SHT. 1 & 2
- 9321-F-27223 SWN SERVICE WATER SYSTEM-NUCLEAR STM. SUPPLY PT.
- 9321-F-27233 N NITROGEN TO NUCLEAR EQUIPMENT
- 9321-F-27243 PW PRIMARY MAKE-UP WATER SYSTEM
- 9321-F-27283 NED NUCLEAR EQUIPMENT DRAINS
- 9321-F-27483 IV ISOLATION VALVE SEAL WATER SYSTEM
- 9321-F-27273 AS AUX. STM. & CONDENSATE FOR P.A. BLDG.
- 9321-F-27253 GA AUTOMATIC GAS ANALYZER SYSTEM

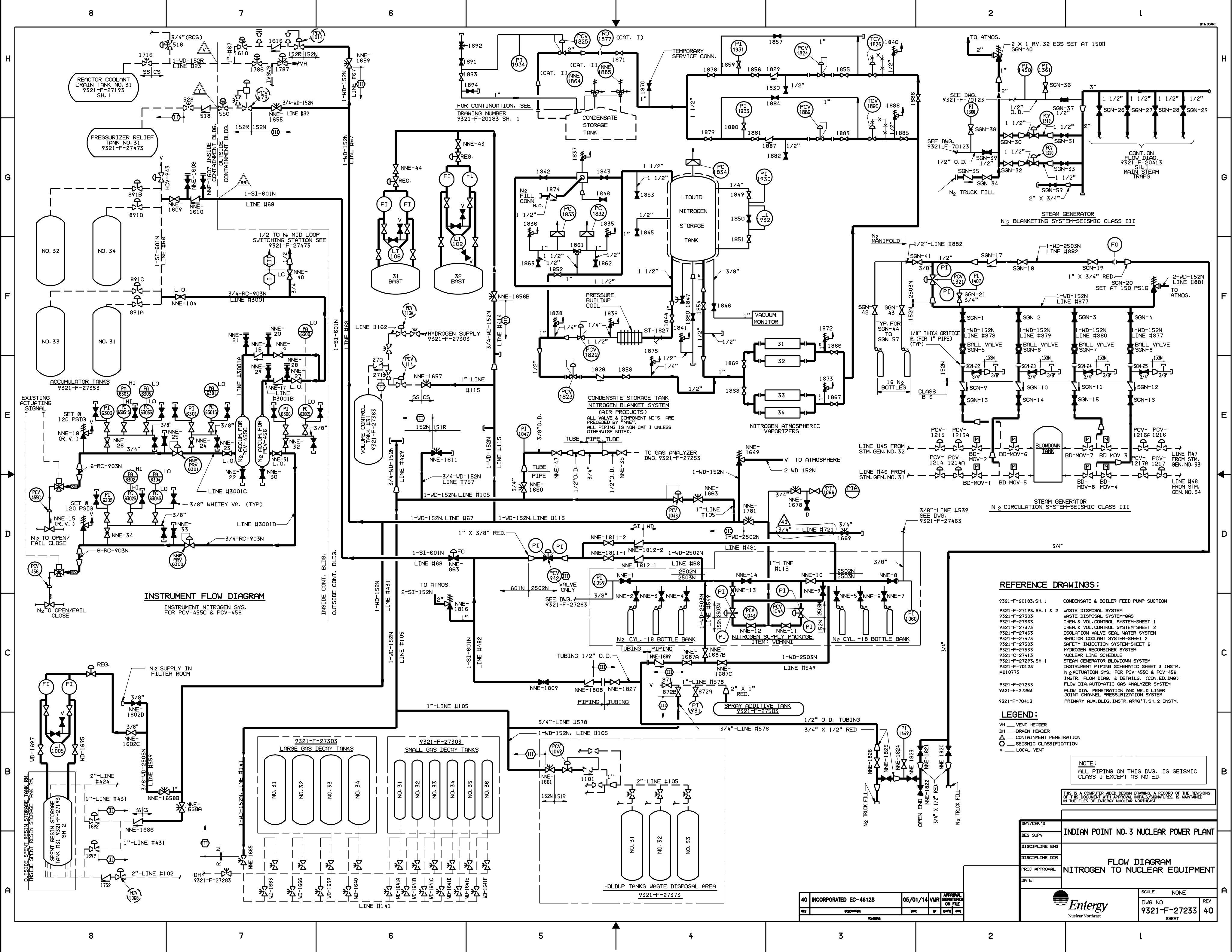
NOTES:

1. FOURTEEN DIAMETERS OF STRAIGHT PIPE REQUIRED BETWEEN FLOW METER AND UPSTREAM TEE
- 2.
3. BUBBLER TUBE 3/4" CLASS 153. FOLLOWING VALVES REQUIRE FIELD INSTALLED 3/4" TUBE BY 3/4" PIPE INSERTS TO MATCH 1741, 1705, 1695, 1735, 1697, 1768, & 1769
4. VALVE ACTUATED BY GAS ANALYZER. I & C CHANNEL NO. AC-1067
5. WDS BUBBLERS OPERATE ON INSTRUMENT AIR EXCEPT SPENT RESIN STORAGE TANK CHANNEL LT-1005 WHICH USES NITROGEN
6. ELECTRIC HEAT TRACED
7. STRAINER ST-40 WAS INSTALLED FOR INITIAL FLUSH. STRAINER BASKET HAS BEEN REMOVED UNDER MWR NO. 93-10158
8. VALVE 1724 AND TEMPERATURE COMPENSATOR FURNISHED WITH CE-1063 BY INSTRUMENT VENDOR
9. FOR SYMBOLS LEGEND REFER TO DWG. 9321-D-20163 AND BECHTEL DWG. 3474-001
10. STRAINER WD-ST-47 IS TO REMAIN AS A PERMANENT STRAINER PER NSE 94-338
11. ALL VALVE NUMBERS ARE PRECEDED BY "WD" AS THE SYSTEM DESIGNATION EXCEPT AS NOTED
12. VALVE NO'S WD-200 & WD-202 HAVE REACH RODS TO PERMIT OPERATION FROM PLATFORM AT EL. 44'-0"
13. LINES 019 & 021-HCD-6" ARE WELDED TO EXPOSED HUB OF 4" EQUIPMENT DRAIN
- 14.
15. PORTIONS OF LINES #130 & #446 WITH ELEVATION LOWER THAN TOP OF WASTE HOLDUP TANK IS SEISMIC CLASS I

- SEISMIC CLASSIFICATION
- CONTAINMENT PENETRATION

INDIAN POINT NO. 3 NUCLEAR POWER PLANT	
FLOW DIAGRAM WASTE DISPOSAL SYSTEM SHEET NO. 3 WASTE HOLDUP PIT	
SCALE: NONE	REV 17
DWG NO 9321-F-27193	SHEET 3
TYPE A/FSAR	

17 INCORPORATED EC-15040	05/15/09	DM	APPROVAL
BY	DATE	BY	DATE



FOR CONTINUATION, SEE DRAWING NUMBER 9321-F-20183 SH. 1

CONDENSATE STORAGE TANK NITROGEN BLANKET SYSTEM
(AIR PRODUCTS)
ALL VALVE & COMPONENT NO.'S. ARE PRECEDED BY "NNE".
ALL PIPING IS NON-CAT I UNLESS OTHERWISE NOTED.

- REFERENCE DRAWINGS:**
- 9321-F-20183, SH. 1 CONDENSATE & BOILER FEED PUMP SUCTION
 - 9321-F-27193, SH. 1 & 2 WASTE DISPOSAL SYSTEM
 - 9321-F-27303 WASTE DISPOSAL SYSTEM-GAS
 - 9321-F-27365 CHEM. & VOL. CONTROL SYSTEM-SHEET 1
 - 9321-F-27373 CHEM. & VOL. CONTROL SYSTEM-SHEET 2
 - 9321-F-27463 ISOLATION VALVE SEAL WATER SYSTEM
 - 9321-F-27473 REACTOR COOLANT SYSTEM-SHEET 2
 - 9321-F-27503 SAFETY INJECTION SYSTEM-SHEET 2
 - 9321-F-27533 HYDROGEN RECOMBINER SYSTEM
 - 9321-C-27413 NUCLEAR LINE SCHEDULE
 - 9321-F-27293, SH. 1 STEAM GENERATOR BLOWDOWN SYSTEM
 - 9321-F-70123 INSTRUMENT PIPING SCHEMATIC SHEET 3 INSTR.
 - 9321-F-70123 N2 ACTUATION SYS. FOR PCV-455C & PCV-456
 - A210773 INSTR. FLOW DIAG. & DETAILS. (CON. ED. DIAG)
 - 9321-F-27253 FLOW DIA. AUTOMATIC GAS ANALYZER SYSTEM
 - 9321-F-27263 FLOW DIA. PENETRATION AND WELD LINEER JOINT CHANNEL PRESSURIZATION SYSTEM
 - 9321-F-70413 PRIMARY AUX. BLDG. INSTR. ARRANG. T. SH. 2 INSTR.

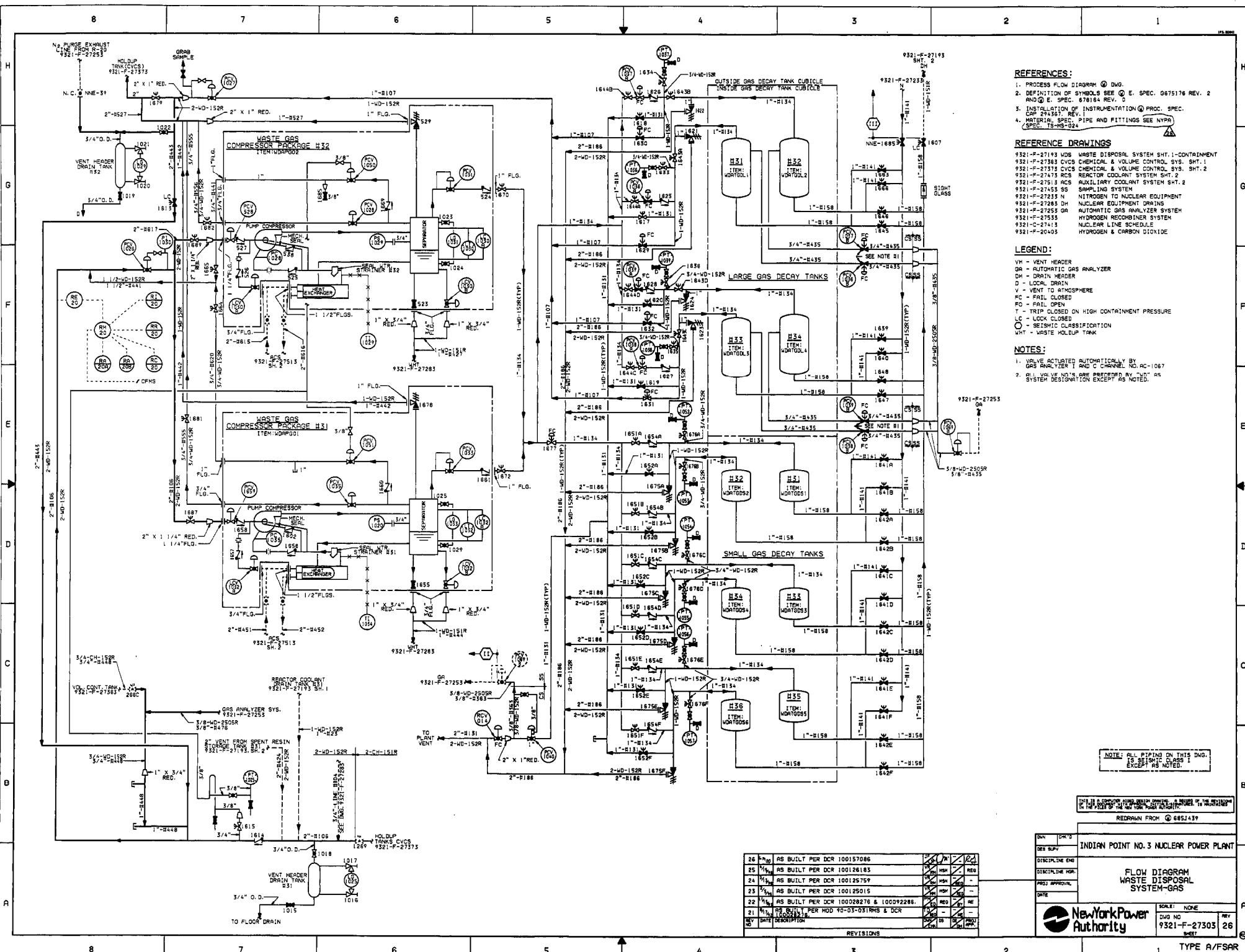
- LEGEND:**
- VH - VENT HEADER
 - DH - DRAIN HEADER
 - △ - CONTAINMENT PENETRATION
 - - SEISMIC CLASSIFICATION
 - V - LOCAL VENT

NOTE:
ALL PIPING ON THIS DNG. IS SEISMIC CLASS I EXCEPT AS NOTED.

THIS IS A COMPUTER AIDED DESIGN DRAWING. A RECORD OF THE REVISIONS OF THIS DOCUMENT WITH APPROVAL INITIALS, SIGNATURES, IS MAINTAINED IN THE FILES OF EXTERDY NUCLEAR NORTH EAST.

DESIGN/CHK'D	INDIAN POINT NO. 3 NUCLEAR POWER PLANT		
DISCIPLINE ENG	FLOW DIAGRAM		
DISCIPLINE DIR	NITROGEN TO NUCLEAR EQUIPMENT		
PROJ APPROVAL	DATE		
DATE	SCALE NONE		
	DNG NO 9321-F-27233		REV 40
40 INCORPORATED EC-46128		05/01/14 VMR	APPROVAL SIGNATURES ON FILE
ENTERTY		Nuclear Northeast	

40	INCORPORATED EC-46128	05/01/14	VMR	APPROVAL SIGNATURES ON FILE
REV	DESCRIPTION	DATE	BY	CHK'D



- REFERENCES:**
1. PROCESS FLOW DIAGRAM (PFD) DWG.
 2. DEFINITION OF SYMBOLS SEE E. SPEC. 0675176 REV. 2 AND G. SPEC. 67816 REV. 3
 3. INSTALLATION OF INSTRUMENTATION (I) PROC. SPEC. CAP 29361 REV. 1
 4. MATERIAL SPEC. PIPE AND FITTINGS SEE NYNPI SPEC. IS-35-324

- REFERENCE DRAWINGS**
- 9321-F-27193 WDS WASTE DISPOSAL SYSTEM SHT. 1-CONTAINMENT
 - 9321-F-27363 CVCS CHEMICAL & VOLUME CONTROL SYS. SHT. 1
 - 9321-F-27375 CVCS CHEMICAL & VOLUME CONTROL SYS. SHT. 2
 - 9321-F-27475 RCS REACTOR COOLANT SYSTEM SHT. 2
 - 9321-F-27535 SS SAMPLING SYSTEM
 - 9321-F-27535 N NITROGEN TO NUCLEAR EQUIPMENT
 - 9321-F-27285 DH AUXILIARY COOLANT SYSTEM SHT. 2
 - 9321-F-27255 SA AUTOMATIC GAS ANALYZER SYSTEM
 - 9321-F-27555 OR HYDROGEN RECOMBINER SYSTEM
 - 9321-C-27415 NUCLEAR LINE SCHEDULE
 - 9321-F-20405 HYDROGEN & CARBON DIOXIDE

- LEGEND:**
- VH - VENT HEADER
 - GA - AUTOMATIC GAS ANALYZER
 - DH - DRAIN HEADER
 - D - LOCAL DRAIN
 - V - VENT TO ATMOSPHERE
 - FC - FAIL CLOSED
 - FO - FAIL OPEN
 - T - TRIP CLOSED ON HIGH CONTAINMENT PRESSURE
 - LC - LOCK CLOSED
 - SC - SEISMIC CLASSIFICATION
 - WHT - WASTE HOLDUP TANK

- NOTES:**
1. VALVE ACTUATED AUTOMATICALLY BY GAS ANALYZER I AND C CHANNEL NO. AC-1067
 2. ALL VALVE NO.'S ARE PREFIXED BY "WD" AS SYSTEM DESIGNATION EXCEPT AS NOTED.

NOTE: ALL PIPING IN THIS DWG. IS SEISMIC CLASS. EXCEPT AS NOTED.

INDIAN POINT NO. 3 NUCLEAR POWER PLANT
REDRAWN FROM 6852439

NO.	DATE	DESCRIPTION	BY	CHKD	APP'D
26	10/15/78	AS BUILT PER DCR 100157086			
25	10/15/78	AS BUILT PER DCR 100126183			
24	10/15/78	AS BUILT PER DCR 100126759			
23	10/15/78	AS BUILT PER DCR 100125015			
22	10/15/78	AS BUILT PER DCR 100028276 & 100092286			
21	10/15/78	AS BUILT PER DCR 90-03-0318MS & DCR 100028276			
20	10/15/78	AS BUILT PER DCR 100028276			

New York Power Authority

SCALE: NONE
DWG NO: 9321-F-27305
REV: 26
SHEET