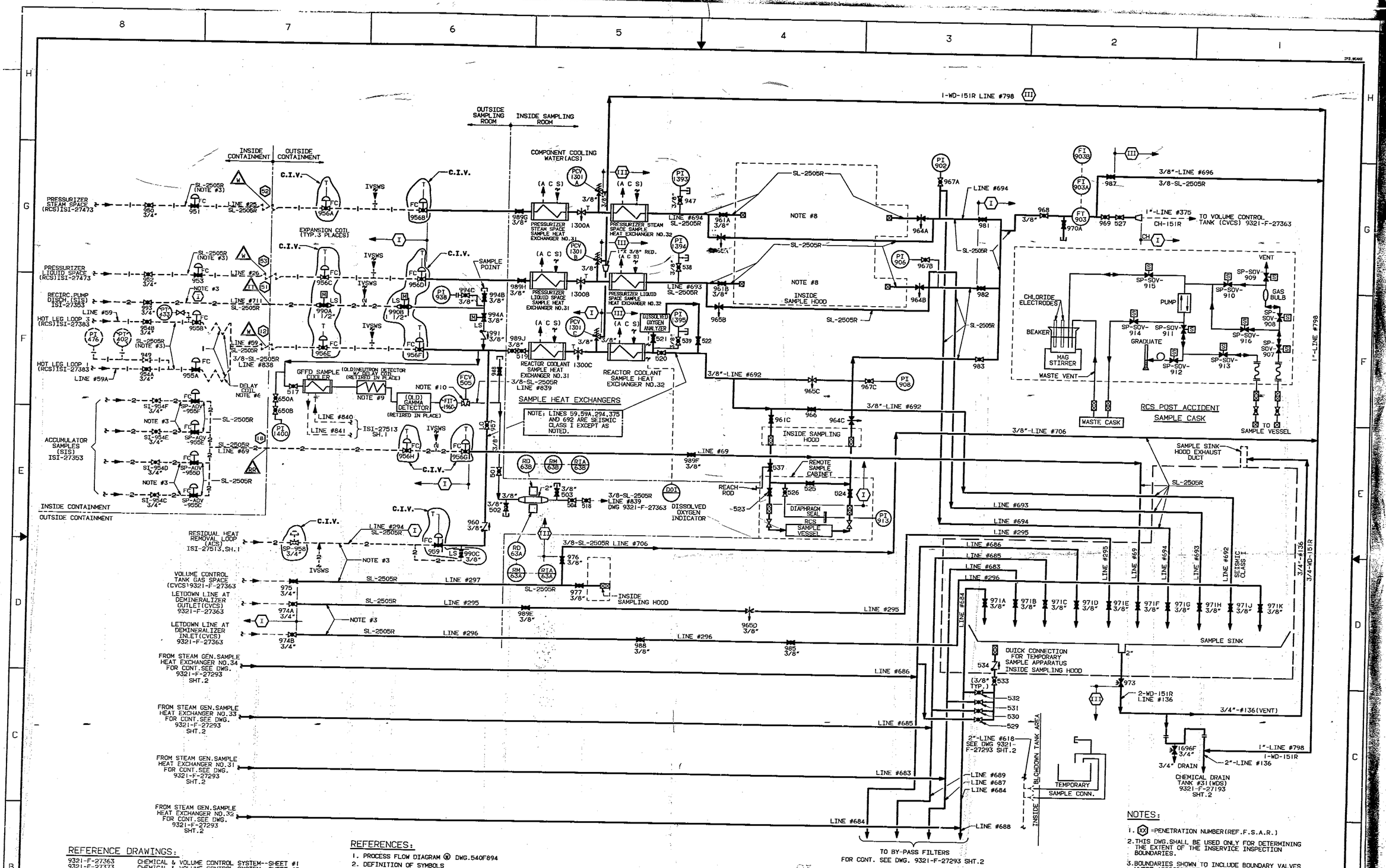

REFERENCE DRAWINGS:

9321-F-27363	CHEMICAL & VOLUME CONTROL SYSTEM--SHEET #1
9321-F-27373	CHEMICAL & VOLUME CONTROL SYSTEM--SHEET #2
9321-F-27383	REACTOR COOLANT SYSTEM--SHEET #1
9321-F-27293 SH.2	STEAM GENERATOR BLOWDOWN SYSTEM
9321-F-27513 SH.1	AUXILIARY COOLANT SYSTEM--SHEET #1
9321-F-27193 SH.2	WASTE DISPOSAL SYSTEM--SHEET #2
9321-F-27303	WASTE DISPOSAL SYSTEM-GAS
9321-F-27353	SAFETY INJECTION SYSTEM--SHEET #1
9321-F-27463	ISOLATION VALVE SEAL WATER SYSTEM
9321-F-27243	PRIMARY WATER SYSTEM NUCLEAR STEAM SUPPLY PLANT
9321-C-27413	NUCLEAR LINE SCHEDULE

REFERENCES:

1. PROCESS FLOW DIAGRAM (W) DWG.540F894
2. DEFINITION OF SYMBOLS
   (W) E.SPEC.G675176 REV.2 AND
   (W) E.SPEC.G675164 REV.0
3. INSTALLATION OF INSTRUMENTATION
   (W) PROC.SPEC.CAP-294367 REV.1
4. MATERIAL SPEC.PIPE AND FITTINGS
   (W) E.SPEC.3569866 REV.2 AND
   (W) E.SPEC.G676398 REV.0

LEGEND:

FC-FAIL CLOSED
O-SEISMIC CLASSIFICATION
T-THROTTLED
LS-LOCKED SHUT

NOTES:

1. ALL TUBING IS 3/8" O.D. EXCEPT AS DETAILED.
2. ALL VALVES INSTALLED WITH FLOW UNDER SEAT EXCEPT VALVE NUMBERS 968, 970A.
3. 3/4"STD PIPE X 3/8"TUBING INSERT AT 3/4" VALVES.
4. ADDITIONAL VENTS AND DRAINS MAY BE INSTALLED BASED ON PIPE LAYOUT.
5. ALL CHECK VALVES ARE "Y" TYPE LIFT CHECK.
6. DELAY COIL-125 FT. X 3/8" O.D. TUBING X 0.245" I.D. INSIDE CONT.BLDG.
7. ALL VALVE NO.S ARE PRECEDED BY "SP" EXCEPT AS NOTED.
8. SAMPLE VESSEL HAS BEEN RETIRED.
9. DELAY COIL IS 3/8" O.D. TUBING X 0.245" I.D.
10. FCV-505 IS SELF REGULATING FLOW CONTROLLER (DWG.IP3V-439-0652).

NOTES:

1. (XX) =PENETRATION NUMBER (REF.F.S.A.R.)
2. THIS DWG.SHALL BE USED ONLY FOR DETERMINING THE EXTENT OF THE INSERVICE INSPECTION BOUNDARIES.
3. BOUNDARIES SHOWN TO INCLUDE BOUNDARY VALVES WHERE APPROPRIATE. THE ACTUAL PRESSURE RETAINING I.S.I. BOUNDARIES FOR LEAKAGE AND HYDROSTATIC TESTING EXTEND ONLY TO VALVE INTERNALS THAT COMPRISE THE EFFECTIVE OBTURATOR ASSEMBLY.

ISI LEGEND:

- -1- -1- - ISI CLASS I
- -2- -2- - ISI CLASS II
- -3- -3- - ISI CLASS III

C.I.V. - CONTAINMENT ISOLATION VALVE

SI APERTURE CARD

Docket # 50-286
Accession # 9311170210
Date 11/9/93 of Ltr
Regulatory Docket File

INFORMATION ONLY

REV No.	DATE	DESCRIPTION	DWN	CHK	DES	DP	PROJ MGR
5	1/4/93	UPDATED TO 9321-F-27453, REV.22.	PH				
4	4/7/92	UPDATED TO 9321-F-27453, REV.18 THRU 21.	RZ		REG		KJ
3	5/1/90	UPDATED TO 9321-F-27453, REV.17.	PH		MM		KJ

REVISIONS

DWN | CHK'D
DES SUPV
DISCIPLINE ENG
DISCIPLINE DIR
PROJ APPROVAL
DATE

INDIAN POINT NO.3 NUCLEAR POWER PLANT

FLOW DIAGRAM
SAMPLING SYSTEM

NewYorkPower Authority

SCALE: NONE
DWG NO ISI-27453
REV 5
SHEET

9311170221-07